

Golden AGE

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The Golden Age

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The Golden Age

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The Golden Age

Vol. I

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No. 1

SALUTATORY

WISDOM of the right order is essential to the welfare and happiness of mankind. During the few years recently past the world, through fiery experiences, has acquired a vast amount of knowledge; but to properly apply that knowledge is now the important question. There is a perfect standard of application and when that standard is known and followed the result is certain to be satisfying. It is the privilege and duty of every one who can do so to render aid to his fellow in the wise application of acquired knowledge and to aid him to increase knowledge and wisdom. Such aid, to accomplish a good result, should be rendered unselfishly. "The wise man will hear and increase in learning."

This magazine enters the field, therefore, with a mission which is peculiar and unique. It has no rivals because it has no competitors. Every one joining in a similar effort to do good will be welcomed by us.

Its policy is and shall be not to array the rich against the poor, nor the poor against the rich, the classes against the masses, nor the masses against the classes but it will seek to do good unto all mankind.

It is not published in the interest of any religious denomination, nor is it the advocate of any political party or organization. It is no respecter of persons because of race, color or condition of servitude.

Nor is this magazine published for pecuniary profit or gain to anyone. All the money realized from its publication above the operating expenses will be used for the further dissemination of such knowledge amongst the people as will be beneficial to them. It is backed by some of the best and ablest men in the world and shall be maintained as an educational medium for the purpose of teaching the true relationship between science, agriculture, labor and pure religion.

Its publication is for the benefit of the people, advising them of perils and pointing them to a better and nobler life.

Its purpose is to explain in the light of Divine wisdom the true meaning of the great phenomena of the present day and to prove to thinking minds by evidence incontrovertible and convincing that the time of a greater blessing of mankind is now at

THE GOLDEN AGE

Behold! Time's gateway open swings,
And Peace is poised on outspread wings;
And joy stands tiptoe while she sings:
 Good-bye old years!
 Good-bye old tears!
For angels wait to bar this gate
On moaning Misery and Hate.
 Love holds the key
 Of things to be;
And Hope holds out a fair white page,
And bids you write,
 With deep delight,
The glory of THE GOLDEN AGE.

S. Agnes Nourse.

hand. Like a voice in the wilderness of confusion, its mission is to announce the incoming of the Golden Age.

There are more sad hearts in the world to-day than at any time of its history. A devastating war has afflicted the nations until they are torn and bleeding to death. Accompanying the war came the great pestilential influenza, claiming double the number of victims that fell as a result of the war. In the past few years, millions have gone down into death and other millions bemoan the loss of their loved ones.

Everywhere the cost of living mounts higher and higher and conditions of real want and famine stare many people in the face. In practically all the trades of the world the laborers are on strike or threatening to strike and thereby stop the wheels of commerce. There is a general unrest everywhere.

The financiers are no less in perplexity. They have yielded somewhat to the demands of labor, only to be convinced in their own minds that further yielding would mean disaster; and the tension is becoming such that the industries of the land are threatening to close down, all of which would bring greater distress both to producer and consumer. The *Chicago Herald and Examiner* in its financial columns recently said:

"If, declare the corporation heads and their backers, walk-outs in the Crane and Harvester works are rehearsed for more serious and extensive industrial interruptions; if the building workers prove to take their responsibility as lightly as their fellows in the Crane and Harvester shops; if the street railway employees are uncompromisingly insistent upon a seventy-seven per cent. increase in the wage scale, then, say employers and their financial backers, let it come to an extreme issue. Financial men do not mince words. They state pointedly they will back employers to the limit; will permit every important industry in Chicago and the Middle West territory to be strike stricken rather than submit to an unreasonable wage or unjust condition. If it must come to a drastic condition between employer and employee, well and good; they, the representatives of capital declare, will not avoid the test; let the thing be settled now and definitely; they are ready to meet and combat it to a final conclusion is the assertion."

The nations are in distress politically, financially and socially. Daily problems are arising, the solving of which seems beyond the power of human ingenuity. Seeing all these things coming to pass before our very eyes, who can lightly pass over the words of the Great Master foretelling these times when there would be "upon earth distress of nations, with perplexity, the sea and the waves roaring, men's hearts failing them for fear and for looking to the things coming upon the earth!"

These distressing times have come at the very climax of the development of inventive genius—at

the very time of the greatest increase of knowledge. And why? There is a reason, and that reason we must ascertain and govern ourselves accordingly. There is a wide diversity of knowledge, which, if properly applied, would result in great and beneficial wisdom to the people. What, then, is the real meaning of the present conditions, and is there a supreme remedy that will bring order out of chaos and establish a lasting peace, prosperity and happiness to the people? *THE GOLDEN AGE* enters the field for the very purpose of answering these questions and confidently expects to answer them to the satisfaction of all thinking minds.

THE GOLDEN AGE will carry into the homes of the people the desired message which will tend to restore calmness to the disturbed minds and comfort to the saddened hearts. We do not expect to accomplish this by human wisdom, because that has been tried and failed and such wisdom is foolishness in the sight of Jehovah. But we will point the people to the clear and indisputable evidence in the light of present-day events, disclosing the divinely expressed remedy for the reconstruction of human affairs that will bring the desire of all nations, assuring to the people life, liberty and happiness. We invite all order-loving, law-abiding, God-fearing persons to aid in passing this message of comfort on to those who desire to be comforted.

The troublesome times upon the earth have awakened the people to a realization that they have neglected Bible study and have not provided their children with sufficient teaching concerning the great truths in the Bible. Our Religious Department will carry in each issue a carefully arranged Bible study in such simple form that it can be readily understood by any one. This will enable the people to remain at home and quietly study their Bibles and increase in knowledge and in Divine wisdom. Every parent owes it as a duty to his child to see that the child is provided with proper Biblical instruction. *THE GOLDEN AGE* will supply this long-felt want.

LABOR and ECONOMICS

THE "PLUMB PLAN"

THE "PLUMB PLAN" for solving the railroad problem is engaging the attention of the American people as few propositions have ever done. This plan, evolved by the railroad brotherhoods, is based upon the constantly rising cost of living to the consumer; the knowledge that the repeated increases in wages have brought no real benefit to the workers, but have greatly enriched the owners of capital; the conviction that further advances in wages at the expense of a cost of living exceeding that of the wage increase, are wholly futile; the knowledge that increase in the productive power of human effort should be reflected equally in increased wages and decreased cost of living, not increased cost of living; the knowledge that increased cost of transportation results in an increase in the cost of living while decreased cost of transportation results in reduced cost of living, and the assurance that the rights of all railroads are based entirely on grants which the public made to the present owners.

The remedy proposed is that private capital be eliminated from the railroads by requiring the private owners of railroad stocks and bonds to surrender their securities for Government bonds with a fixed interest return based upon the money actually invested, and that the roads be managed by corporations in which the public, the operating managements and labor shall be equally represented. One-half the net savings would go to the public by increasing service without adding costs or by reducing costs, the other half would be divided between the operators and the wage earners.

The railroads would be placed in control of a board selected one-third by the President, one-third by the operating officials and one-third by the employees; and are to divide any surplus between the nation and the employees, or to meet any deficit by taxation.

No matter how the railroads are operated, there are three partners in the industry, capital, labor and the public. It is a self-evident fact that until management is wholly efficient, the rate the public pays is excessive. It is labor's proposal to readjust the interests in the railroads to a new balance. It is labor's claim that skill is the prime force in the railroad industry; and that beyond giving to capital a reasonable return on the money honestly invested, the public owes it nothing.

Operating the roads as a unit, centralizing purchases and discontinuing competition wherever it is wasteful and unnecessary could hardly fail to result in great ultimate savings. And it is the public, in the end, that has to foot the bill, however the roads are operated. As to the government's operation of the railroads, this has not been such a total failure, as many would like to think. A large part of the apparent losses are due to decreased business since the war and greatly increased wages. The total wage bill of January, 1919, was 66 per cent. higher than the corresponding figure for the last month of private operation.

Government operation without the active and willing cooperation of the employes tends toward stagnation and bureaucracy, and does not satisfy the legitimate aspirations of the railroad workers; hence there must be a considerable participation of employes and officers in railway management. As long as the brotherhoods are in opposition, with capital and Government against them, they will not feel the responsibility which they must feel if the interests of the public are to be preserved.

As a matter of fact, it has been a long time since the executive heads of the railroad companies were in control of the properties over which they presided. Railroad presidents have said repeatedly that it was becoming impossible to manage the railroads under a system of Federal control plus the interference of forty-eight separate states. The rate-making power was lost long ago, and so was the control of wages. The roads were being held up by the Government on one hand and the employes on the other. And it has not always been true that the executive heads of the railroads have managed those properties in the interests of their stockholders. Sometimes they have managed them with an eye on the stock market, sometimes with a view of completing mergers in which the bankers were interested. Was not the New Haven wrecked by a man selected by a leading banker?

It is claimed that there are now 12,000,000 stockholders of the railroads. Their holdings would not be disturbed by being exchanged for Government bonds. They would have a larger actual voice in the management of the railroad properties as voters of the United States Government than they ever had as stockholders. It is well known that the officials of the railroads have been selected by the bankers, and their selections have not always been good ones.

In financial circles there is much talk that the roads should be returned to the owners and that when they are returned there must be a dividend guaranteed by the United States treasury or else a marked increase in rates. But this is not a good time to increase rates.

As for the guarantee of dividends, if the Government is to guarantee the securities of private corporations it will not be long, and ought not to be, before complete and direct control over the affairs of those corporations is placed in the hands of the Government. Transportation by rail is a public business which the Government could as properly take under its control as the schools, highways, water supply, postal facilities, irrigation and fire protection already administered by it.

Under any system of private ownership it is and will always be a real problem to know what to do with the weak roads. Obviously, the best thing to do with them is to merge them with the systems they would most benefit, so that they might have the advantage of common terminals, through trains and such other advantages as come from unification.

It is believed that if the Plumb Plan is adopted the President's appointees to represent the public on the board of directors should be chosen much as the members of the Supreme Court are chosen—for life, or during good behavior. They should not be selected because of the prominent place they occupy in the councils and activities of the political party in power.

It is claimed by bankers that if private capital is to enter freely upon the venture of further developing the railroads, and if railroad credit is to be reestablished on a solid basis of genuine confidence, 6 per cent. on the final valuation, plus a modest share in earnings in excess of this percentage, would constitute the minimum required. This, it is believed, it will be impossible to guarantee.

If the railroads under public regulation cannot finance themselves, and if the Government will not finance them as long as they are run for private profit, it necessarily follows that the Government must take over the ownership and ultimate control of the railroads. The plans for a partnership of capital and the Government do not work. They are out of date. The railroad brotherhoods have learned that in an ultimate test of strength they have the power to enforce their demands upon both capital and Government. Compulsory arbitration is out of the question.

The railroad employes constitute a large part of the citizenship of the country, and they will be interested as citizens, will they not, in seeing that the railroads are efficiently managed? And how about the public?

If they are the actual owners and have to pay the interest on the bonds, won't they be as much interested as they are now?

Railroading is the only business that has every industry and every individual in the country for its client, and every person in the country ought to know the invaluable service the roads perform. The railroads comprise 275,000 miles of line, the average line being 95 miles long and employing about 7 men to the mile, or 1,800,000 in all, for the 2,905 lines. These lines carry the meat-calves born in Texas, fed in Oklahoma, fattened in Iowa, slaughtered in Chicago and shipped in iced cars to your home town. They bring your cantaloupes from the Imperial Valley in California, your other melons from Colorado or Southern Indiana, your strawberries from Missouri or Mississippi, your oranges from Florida, California, Louisiana and Texas, your bananas from the seaboard; they bring you everything you eat or wear or use. Every year our railroads carry 650 tons for every man, woman and child in the land, which is about three times what the railroads of any other land carry.

Under the Plumb Plan the division of dividends is so arranged as to make it to the personal advantage of the operating employes to get their additional compensation in the form of dividends rather than increase of wages. It is hoped that this will provide an offset to an indolent policy on the part of the employes, who, instead of exerting more effort to create new business, could decide merely to raise wages, and so impose a selfish tax upon the public.

Some objections offered to the Plumb Plan are that labor itself promises nothing, but apparently anticipates relatively high wages as compared with other industries, and might use its voting strength in ways that would not be for the best interests of the rest of the country. It is feared that more attention would be devoted to increasing wages than to increasing efficiency and that many men would be retained in service who would not be able to make good under private operation. It is feared, too, that as new railroads would have to be built out of Government funds, there would be political rivalry among different sections for such new lines, and new "pork bills" that would put the notorious river and harbor appropriations far in the shade.

When the Prophet Nahum in his vision in chapter 2:3-6 foresaw the railroads with the locomotives running "like the lightning," "with flaming torches in the day of his preparation," he little imagined that these wonderful "chariots" were destined to become the property, not of kings, nor of the rich, but of the common people, like himself.

SOCIAL and INDUSTRIAL

THE POWER OF THE PRESS

IT may be true, as some claim, that if there were no crimes, scandals, riots, accidents, etc., there would be many less newspapers, but it would seem as if we could spare a few newspapers that now make a living entirely out of the garbage can. The influence of the press is remarkable. An indiscreet statement or an untrue statement at a critical time has not infrequently produced disastrous results. It has been claimed that the race riots in Washington and Chicago in July were largely due to two items, which we reproduce herewith.

On the morning of the worst day of the race riots in Washington, D. C., a Washington paper printed this on its first page:

"MOBILIZATION FOR TO-NIGHT"

"It was learned that a mobilization of every available service man stationed in or near Washington or on leave here has been ordered for to-morrow evening near the KNIGHTS OF COLUMBUS hut on Pennsylvania Avenue between Seventh and Eighth Streets. The hour of assembly is 9 o'clock, and the purpose is a clean-up that will cause the events of the past two evenings to pale into insignificance. Whether official cognizance of this assemblage and its intent will bring about its forestalling cannot be told."

Two days before the riot in Chicago a Chicago paper said:

"Not only is Chicago a receiving-station and port of refuge for colored people who are anxious to be free from the jurisdiction of lynch law, but there has been built here a publicity or propaganda-machine that directs its appeals or carries on an agitation that every week reaches hundreds of thousands of people of the colored race in the Southern States. The State Street blocks south of Thirty-first Street are a 'newspaper row' with *The Defender*, *The Search-Light*, *The Guide*, *The Advocate*, *The Whip*, as weekly publications, and there are also illustrated monthly magazines such as *The Half-Century* and *The Favorite*."

In Washington an individual crime was made a race issue. Marines, soldiers and sailors took up the issue which had been suggested to them. Unoffending negroes were assaulted upon the streets and were even dragged from street cars for the purpose.

The trouble in Chicago a week later amounted to a small sized civil war. In one instance in the latter city a negro woman and the child in her arms were beaten to death by whites without provocation. Scores of other deaths resulted among both

blacks and whites as a result of the reign of terror.

During the war a large influx of negroes into Chicago overcrowded the negro section and negroes of means were being gradually forced out of it into outlying white sections. This caused a strained situation. The actual beginning in Chicago was in a clash among bathers at an amusement resort.

Negroes are intolerant of the indignities to which they were subjected before the war and claim with considerable force that having done their full share in making the world safe for democracy they are not to be deprived without protest of the liberties which they fought to enjoy.

The large packers of Chicago have announced that they will dismiss all negro employes, possibly hoping thus to effect the removal of some thousands of negroes back to the South, where they are needed for farm work and where they are more appreciated.

A newspaper is the smallest thing a man purchases, but it is like the tongue: "The tongue is a little member; the tongue is a fire, and setteth on fire the course of nature; behold how great a matter a little fire kindleth!"—James 3:5, 6.

FECUNDITY OF JAPANESE WOMEN

IT is part of the scheme of Japanese civilization for mothers to rent their daughters to foreigners or others as temporary wives, and there are brokers in Japan who make a business of supplying such wives, sometimes showing a dozen or more to the prospective purchaser before the final choice is made by signing a register and unmade by signing off.

Japanese bride-merchants in America do business entirely by photograph, and of course, according to American laws the brides thus selected by their future husbands become permanent additions to the family.

While with our Western ways of looking at things we may find fault with the Japanese women for the view they take of the marriage relation, we can not find fault with them for any failure to act as mothers. So many children are being born to the Japanese women of California as to cause some anxiety to the people of that state.

Ten years ago the number of children born of Japanese parents in California was 246. During the years 1918 this number had increased to 4,920 for

the one year and in one northern California county during that year there were 176 children born of Japanese parents and but 86 born of white parents. There are now more than 30,000 Japanese children in California who are native-born and possess all the rights of leasing and ownership held by white children. Statistics show that intermarriage between whites and Japanese is almost unknown. The children of such marriages are excluded from white society and they and their parents are compelled to live in the Japanese quarters. These conditions do not augur well for the amalgamation of the Japanese and white races.

Here we have a very literal fulfilment of the Lord's promised punishment of Mother Eve and her daughters: "Unto the woman he said, I will greatly multiply thy sorrow and thy conception."—Genesis 3: 16.

THE WOMAN SPELL-BINDER

AS THE PEOPLE draw near to the better age, a leveling process is observable. The worker seeks to act on the plane of the captain of industry, and to manage the business. The laity perceive that the gulf between them and the clergy is an illusion. The average citizen demands his share in the actual governing. The powerful and influential are correspondingly reduced. Mountains are trimmed down and valleys raised up.

Woman seeks her place by the side of man, and if possible a little above. Having secured the vote, she becomes a voter, and some of her enter politics. They say that in the older woman-suffrage states, the woman politicians are the equal of their male predecessors anywhere.

In the newer woman-voting commonwealths the evolution of the woman in politics is going on. The first stage is the zealot, enthusiastic, with a burning zeal for the uplift of womankind. She is developed into or is succeeded by the crafty self-seeker. The woman politician steps from the chrysalis; and finally the female grafter and corruptionist completes the cycle.

In many states the woman voter is at the zealot stage. The opportunity for doing good, of reforming, of correcting abuses, appeals to the best instincts of the high-minded. Consequently the door opens, and forthwith appears in the approaching political campaign the woman political speaker. It is the Republican orator first. It remains to be seen whether she will equal her male predecessor, who from his soapbox so deftly threw a spell over his audience and bound them with his webs as to

earn the name of spell-binder. Surely here the spell of woman's magnetism should help the new orators-to-be to become the real thing.

Anyway, at the suggestion of Mrs. Medill McCormick, Chairman of the Woman's National Executive Republican Committee, schools of public speaking for women are to be the thing: for the women must be qualified as campaign speakers. Who knows but that the binding of the feminine spell might put into power the right parties, whoever they may be?

Woman's struggle to escape from economic, industrial, civic and social bondage is one of the interesting signs of the day. There is coming the day when woman will forever cease to be man's serf, bound to the home, but as a boon companion be with him in a mutual helpfulness which will mean much for the rise of the race to the place and power intended for all the people.

Throughout all the years of human history which precede the promised kingdom of God upon earth woman's position, Scripturally and historically, has been second to that of man. "The head of the woman is the man." (1 Corinthians 11:3). The fact that we see this headship now questioned is evidence that the long-promised kingdom is near. At its close the Scriptures show sex distinctions will have entirely vanished. "They that enter into the kingdom shall be as the angels."—Matt. 22:30.

NEGRO EDUCATION IN CINCINNATI

ONE of the most successful educational enterprises in the United States is the Douglass High School of Cincinnati. Blacks from all over the city go to this school by preference. They feel that they get the best chance by staying in their own crowd, and they are probably right. In the main entrance of the Douglass School are four placards reading: "Self-Control, Self-Reliance, Self-Respect, Race Pride." The teachers are of high-class, and largely drawn from the South. The school has every feature calculated to make it an attractive rendezvous for colored boys and girls until the closing hour, which is 9:00 P. M. Its play rooms, libraries, medical attention, open-air rooms for tuberculous children, special classes for defectives, and courses in manual training and domestic science, all have proven that the best way to deal with the colored boy or girl to make for contentment and order is to give them a chance, and to give them that chance by themselves.

While it is true that "of one blood God hath made all nations of men," nevertheless under present imperfect conditions a wise segregation is probably an advantage to all concerned.

MANUFACTURING and MINING

MAKING THE WORKER A PARTNER

DISCUSSION proceeds widely as to the best way to meet the increasingly insistent demand of the worker that he be permitted to have a voice in the management of the business. All employers now know that they must deal with their employees by collective bargaining and it would seem the part of wisdom for them to spend some time now in considering how they can make the best solution of the new situation which is bound to arise when the employee demands a voice in the management.

It is a curious thing that while the average man will admit that he knows nothing about most subjects he has never studied, such as music, geology, botany, astronomy, etc., he is fully convinced of his ability to govern or help to govern business or political institutions of any kind without ever having studied the subject or without having ever had the least experience. This makes the coming business partner a liability for a time until he has learned something of his new duties, but not as much of a liability, perhaps, as some people would like to think.

It not infrequently happens that a night watchman or railroad conductor or other unskilled or semi-skilled worker is thoroughly successful in controlling the politics of a ward, the operations of a lodge or the conduct of a labor organization. They control such affairs because they know men and how to deal with them. While, therefore, a great many mistakes will be made in the transfer of a certain amount of power to the workers in an industrial organization, nevertheless it is highly probable that the manufacturer will discover qualities of leadership where he has not been accustomed to look for them, and where they will be of value in the business.

When a suspicion exists between a manufacturer and customer, as a result of a supposed injustice or grievance, the man who is called upon to settle that grievance and remove the injustice is a man who has made a study of human nature, and at the same time is capable of seeing both sides of a problem. Such men are to be found in the marketing end of a business, either in the sales or advertising departments.

The laborer is just as necessary to the manufac-

turer as the customer. His opinions exercise a considerable influence in labor ranks and his vote counts for just as much as the president of his company. The suspicion in which he holds his employer may be and probably is many times deeper than that of any customer and may affect the efficiency of his work and his whole attitude toward the business. This suspicion must be cleared away not by a mere statement of intent but by interesting and truthful statements regarding the necessities of the company, its policies and what it hopes to do. It would seem, therefore, that the marketing end of a business is the end best fitted with this new problem which is here and here to stay. The best thing to do with a pressing problem is to solve it and not try to dodge it or postpone it, especially if it is a problem that will not be dodged or postponed.

"A wise man will hear, and will increase learning; and a man of understanding shall attain unto wise counsels." (Proverbs 1:5). This is as good advice to the managers of labor to-day as it was thousands of years ago, when it was written.

HOW LONG WILL THE OIL LAST?

THE production of petroleum in the United States has averaged about 950,000 barrels per day for the past year and a half, with a consumption somewhat in excess of production. From January, 1918, to January, 1919, the stock on hand decreased from 150,000,000 barrels to 128,000,000 barrels, but had risen to 132,165,000 barrels by the end of May, 1919.

When the Standard Oil Company begins to sell oil stock in the open market it is a pretty good sign that those on the inside see the beginning of the end and are trying to place their money where it will be safer.

There are several distinct oil fields in the United States: the upper reaches of the Ohio River, Northwestern Ohio, Southeastern Illinois, Northeastern Oklahoma, North Texas, Northwestern Louisiana, Southeastern Texas, Southern California and Wyoming. Some of these fields are now 85% exhausted.

The average investor in oil stocks, especially in new companies, never seems to know that most wells decline in production very rapidly, which makes necessary constant drilling to maintain production. The average decline of flowing wells in some fields

approximate 15% a month. Pools in Oklahoma which three years ago provided 500,000 barrels per day now produce only 30,000 barrels and on one property where at that time thirteen wells were producing 13,000 barrels of oil per day one hundred wells are now producing only one tenth as much.

The Bureau of Mines of the Federal Government stated recently, in effect, that the country is now facing a serious shortage of petroleum. While this country has produced 57% of the world's supply of petroleum it has done so by a depletion of the national reserve supply.

Oil wells, like mining properties, are obviously self-liquidating. Every barrel of oil or pound of metal removed correspondingly reduces the amount recoverable and consequently reduces the value of the property. Hence, the absolute necessity of oil producers being continually on the lookout for new sources of supply to serve as a production supply against their declining wells.

Few, if any, producing companies ever show on their balance sheets any reserve for oil depletion. It frequently happens that a new company will begin to pay dividends prematurely, with the result that it soon requires more capital with which to continue operations. It is generally unwise to purchase stock in companies which pay immediate dividends.

All of the oil companies—the most prosperous as well as the most wheezy—would be glad if they could find some way of maintaining a permanent supply of oil, such as was miraculously provided for the widow by the old Hebrew Prophet Elisha. The story is brief and very interesting:

"Now there cried a certain woman of the wives of the sons of the prophets unto Elisha, saying, Thy servant my husband is dead; and thou knowest that thy servant did fear the Lord: and the creditor is come to take unto him my two sons to be bondmen. And Elisha said unto her, What shall I do for thee? tell me: what hast thou in the house? And she said, Thine handmaid hath not anything in the house, save a pot of oil. Then he said, Go, borrow thee vessels abroad of all thy neighbors, even empty vessels; borrow not a few. And when thou art come in thou shalt shut the door upon thee and upon thy sons, and shalt pour out into all those vessels, and thou shalt set aside that which is full. So she went from him, and shut the door upon her and upon her sons, who brought the vessels to her; and she poured out. And it came to pass, when the vessels were full, that she said unto her son, Bring me yet a vessel: and he said unto her, There is not a vessel more. And the oil stayed. Then she came and told the man of God: and he said, Go, sell the oil, and pay thy debt, and live thou and thy children of the rest."—2 Kings 4:1-7.

THE PHOSPHATE MINES OF FLORIDA

FLORIDA produces about 52 per cent. of the entire world's supply of phosphate and about 82 per cent. of the supply of the United States. These phosphate beds, underlying almost the entire state, are one of the great reasons for the productivity of Florida soil. The greatest and richest beds of phosphate are in the vicinity of Tampa, which has the distinction of being the largest shipper of phosphate rock in the world.

The phosphorus employed in the manufacture of matches and for medicinal purposes is obtained from phosphate rock by mixing it with coke and sand and heating it in an electric furnace. It is marketed in the form of sticks, which are made by conducting the phosphorus from the melting pot through a pipe surrounded by cold water. The phosphorus solidifies in the pipe and can be removed as a continuous rod. The phosphorus sticks are packed in jars covered with water, to avoid spontaneous combustion.

Acid phosphate, for years one of our most popular soft drinks, could not be manufactured or sold at the soda counter, if it were not for the output of the Florida mines. Owing to its remarkable influence on the growth of bone in young animals, it has been used in the treatment of bone affections. It is also most effective in pulmonary troubles and skin diseases and as a nerve tonic.

It has been well known for many years that a trace of phosphorus in the manufacture of bronze adds greatly to the tenacity of the metal and to its value. It is an essential of calcium phosphide used for distress signals at sea and was widely employed during the Great War in the manufacture of smoke screens for hiding vessels from submarines.

Phosphate mines, strictly speaking, are not mines at all, but merely open pits. The deposits are of all sizes and shapes, hard-rock, soft-rock and pebbles, and frequently occur in pockets of limestone, from which they are scooped with the naked hand. The work is all done by negro labor, principally with pick and shovel, but sometimes by dredges or other hydraulic apparatus. After mining it requires to be washed, dried, pulverized and sacked.

The human family needs these phosphate deposits at the present time for food and medicinal purposes, and it strikes us that a fatherly Being who had the foresight and beneficence to lay up stores of food and medicine for an uncreated race is a God the human family can trust, and a God they will love when they know him. "And God saw everything that he had made, and behold it was very good."—Genesis 1:31.

FINANCE, COMMERCE and TRANSPORTATION

AMERICAN EXPORTS AND INFLATION

IN the end Europe must pay for our goods in their own goods or in gold. Meantime we can and should lend them all of our savings that we can spare, but if we go further and inflate our credit position in order to lend them more we cannot fail to cause a further rise in the cost of living. The proposition to accept European notes, backed by European mortgages, in payment for American goods, is all right, but not if those notes are to be used as a basis for the further inflation of our currency. The temporary and illusory gain that would follow such an inflation would be more than offset by the unrest of labor and all the other evils which accompany inflation.

It was in August, 1915, that the quantity of money in the United States began its rapid increase. One month later prices began to shoot upward, keeping almost exact pace with the quantity of money. In February, 1916, money suddenly stopped increasing, and two or three months later prices stopped likewise. The money in circulation in the United States rose from three and one-third billions in 1913 to five and a half billions in 1918, corresponding to the rise in prices.

The money in circulation in the world outside of Russia increased during the war from fifteen billions to forty-five billions and the bank deposits in fifteen principal countries from twenty-seven billions to seventy-five billions. Prices have trebled also.

The main cause for the present extension in bank credit is the Liberty Loan. Subscribers for the loans have not paid their bonds in full. These bonds are unrivalled security for borrowings and will continue to be so until the Government which issues them redeems them. Until they are paid there is little chance that prices will fall materially from their present high level. Prices in Europe since the war began have risen more than they have in the United States, and for the same reason—too much money. In Russia the Bolsheviki have issued eighty billion dollars of paper money, or more than all the rest of the world put together.

The poor world is suffering from something that only a few individuals experience—too much money. They are finding out that money "maketh not rich," without corresponding increase in the things that

money will buy. So vast is the seeming inflation of business that business men everywhere are enlarging their businesses, like the man in the parable whose ground "brought forth plentifully: and he thought within himself, saying, What shall I do, because I have no room where to bestow my fruits? And he said, This will I do: I will pull down my barns, and build greater; and there will I bestow all my fruits, and my goods. And I will say to my soul, Soul, thou hast much goods laid up for many years."—Luke 12:18-20.

SUNSHINY DAYS FOR BIG BANKERS

THE only man in the world with a full bank account is the American, and he will have plenty of foreign friends as long as he has money to lend.

Representatives of many foreign governments and municipalities have been rushing to America to secure great loans here. Some of the amounts are:

The Swiss Republic,	\$30,000,000
Denmark,	15,000,000
Czecho-Slovakia,	25,000,000
Belgium,	50,000,000
Canada,	75,000,000
Finland,	Several millions
Poland,	Several millions
Argentina,	Several millions
Brazil,	Several millions
Germany,	A large loan
France,	An important bond issue

In addition, the most powerful financial syndicate ever formed in this country, if not in the world, will undertake to loan from one to five billion dollars in credits to thousands of foreign buyers with which in turn to purchase American foodstuffs, raw materials and other supplies.

As much of these vast sums will never leave the country but be expended here for American products, a great circulation of money will result and a large volume of business will be done by American concerns, linked up with the international financiers. There will be plenty of work until these amounts are spent, and at good wages, for American labor will not permit its net return for a day's work to decrease, whatever figures the cost of living may reach.

The time is coming, of course, when Europe will

have placed all the orders needed to reestablish her shattered industries, and also be able to ship goods into the American market; and then a reaction may be expected in America, with the usual phenomena of less work, lower wages and falling prices. But for a time this country is safe from the difficulties incident to business depression.

The time is coming, however, when a perplexing situation must be met; for borrowings have the unfortunate faculty of the limitation imposed by the ability of the borrower paying interest. But it looks as though America was safe for another year of good times.

RESTORATION OF OUR MERCHANT MARINE

THERE has been no American merchant marine worth while since Commodore Vanderbilt sold his line of trans-Atlantic steamers to his English competitors. The necessity of building ships to transport our soldiers to France has again placed a great fleet of merchant ships under the American flag. The Shipping Board has announced the opening of 62 regular cargo liner services, twenty-five of which start from New York. They cover South America, Africa, the Pacific, Italy, France, the North Sea states and England. Besides this it has been announced that over \$200,000,000 worth of merchant ships have been ordered, which indicates that the magnificent ship-building facilities put up during the war for military needs will not be allowed to go to ruin.

The plan of sale announced for Government ships is very generous. It allows the purchaser to charter for three years, paying from his profits. At the end of the three years he has the option of buying the ships outright at \$110 a ton or returning them to the Board.

It is not clear just how the American buyers of American ships expect to make money out of the purchases, because it is quite well known that American-operated ships are the most expensive to run in the world; and often fail in competition on equal terms with the shipping of other nations.

IMMENSE EXPORTS OF AMERICAN FOODSTUFF

IN 1918 the quantity of fresh beef exported was 540,000,000 pounds, or 86 times as much as in 1914. The quantity of bacon exported was 1,000,000,000 pounds, or five times the amount exported in 1913. The amount of condensed milk was 553,000,000 pounds or 26 times as much as in 1913. Of this amount 25,000,000 pounds went to India or four times as much as was shipped to India the previous

year. Taking all kinds of foodstuffs into consideration the United States is now exporting four times as much as before the war. The money value is six times as great. It is now estimated at \$3,000,000,000 per year while then it was \$500,000,000 per year.

Many a man is deceived by such figures into thinking that it represents the increasing wealth of the country, whereas it represents the opposite. Every ton of raw material taken out of the land impoverishes the real wealth by that much. It seems all right to the thoughtless, but it is like what the Bible speaks of when it says, "There is a way that seemeth good to a man, but the end thereof is destruction." A country which enlarges its exports by sending away its actual wealth would come to nothing if the process were continued long enough.

THE DEMAND FOR AUTOMOBILES

OWING to the unprecedented prosperity of the farmers, the demand for automobiles is now estimated at 60 per cent. ahead of the supply; and orders, both by dealers and the consuming public, are being booked for months ahead. The growth in popularity of the motor car is shown by the registration figures for the year of 5,500,000, over a million cars better than the best previous figures. In California there is one automobile in use for every seven adults in the state.

No family purchases an automobile without the families next door desiring also to fulfil the ancient Bible prophecy to the effect that "many shall run to and fro" (Daniel 12:4). In order to fulfil this divine prediction, men that are wholly unable to afford it mortgage their houses and sell everything they have, as though an automobile were a "pearl of great price." All over the country the American people are beating their chicken houses into garages.

TANK CARS FOR TRANSPORTATION

MORE than 100 commodities are now transported in tank cars. Kerosene, gasoline, sulphuric, muritic, nitric and picric acids, ammonia, alcohol, benzol, ether, coal-tar, chlorine for bleaching, tannic acid for tanning, turpentine and rosin for paints, vegetable oils for soaps and butterine, linseed oil for paint makers, soya bean oil, castor bean oil, peanut oil, cocoanut oil, olive oil, corn oil, whale and fish oils, fats and oil from the meat packers, asphalt for roofing and roads, caustic soda for soap, silicate of soda and potash for soaps and fertilizers, molasses, glucose, vinegar, pickles, skimmed milk and wine are all shipped in tank cars of large capacity.

POLITICAL, DOMESTIC and FOREIGN

TO HASTEN THE COMING OF DEMOCRACY

THE NATIONAL SOCIAL UNIT ORGANIZATION is the name of a corporation whose inception was recently approved by Supreme Court Justice Lydon of New York. The charter purpose is to "hasten the coming of a democracy, both genuine and efficient, by building upon a basis of population units an organization through which the people can get a clear idea of their common needs, and can utilize the technical knowledge of skilled groups in formulating and carrying out programs to meet these needs."

A similar social unit system in Cincinnati is reported to have successfully developed a quite genuine democracy in small groups of the population, who by the unfavorable conditions of tenement city life had been unable to "find themselves" sociologically. The groups by a direct process of practical education in the social and economic needs of the people cultivated in a mixed population a spirit of independence quite comparable to that which has been the pride of American tradition. Incidentally the social unit incurred the cordial opposition of the local politicians who found their grip increasingly impaired as the knowledge of their former subjects grew.

Knowledge is power. It is independence. It is the foundation of true democracy, which in essence is the actual direction of the people's affairs by the people themselves.

The time for general enlightenment on all topics is not merely coming—it is here. The chains of ignorance and superstition are about to be forever broken. The common people are about to enter into a greater and greater freedom which will soon—and to the people, unexpectedly—blossom out into that which Paul promised, when he foresaw the better age just now ahead, and said: "The creation [all created beings] itself also shall be delivered from the bondage of corruption [the chains of ignorance, superstition, disease and ultimately death] into the glorious liberty of the [perfect earthly] children of God."

The coming of that which has not yet come—genuine democracy—is just around the future's corner. It draws very near. All humanity will soon go forth to meet it, but it will not come through any of the well-meant plans which are now

being experimented with. Certainly no one could have any better purpose than the backers of the social unit system, but they are dealing with a situation too complicated for them to save it. The world will be saved for democracy, but it will be through the agency of the coming kingdom of Messiah.

FREEDOM EXISTS WHERE WEAK ARE FREE

THE degree of civilization of a community may be measured by the liberty accorded to the weaker members of the community. Where the defenseless are defended and the individually weak are backed up by the power of all, liberty exists in tangible form.

Those classes which are without a voice and without a vote are most likely to be imposed upon by the strong and unscrupulous. One such class consists of those who under the law are classified as infants and minors. It is a promising sign when the rights of such classes are defended as in a recent instance in an Eastern city.

A boy is not supposed to exercise any particular legal rights, but when a property owner in Dobbs Ferry, N. Y., chased nine-year-old Roland White so that the boy fell down and hurt himself, because the lad was scooting past the house on a pushmobile, it was apparent that in Dobbs Ferry at least a boy has some rights.

The man had asked the children why they could not scoot on the other side of the street; his wife was nervous and the noise annoyed her. One of the neighbors was not surprised that the boy might have suffered from the kind of pain that gains plaintiffs substantial amounts from damage suits, for she said that when the man was chasing the boy he had such a terrible look on his face that it frightened even her; but the magistrate merely imposed a sentence and then mercifully suspended it. He made it plain that the majesty of the law protected even boys on scooters, because "there is no law that prevents boys from scooting or roller-skating on the side-walks," and that "a man must remember that he was a boy once himself."

If judges and big people generally remembered that they like to have liberty themselves, and would allow others the same liberties they insist on, and if they would protect and help and be a big brother

to those less able to look out for themselves, civilization would take a step upward and there would be real liberty for grown-ups as well as for children.

In the Golden Age, which is fast approaching, the rights of every person will be safeguarded, even those of little boys and girls. "I will make a man more precious than fine gold; even a man than the golden wedge of Ophir" (Isaiah 13:12). The people are promised a better time than they have ever even dreamed of, as evidenced by these words: "Eye hath not seen, nor ear heard, neither have entered into the heart of man, the things which God hath prepared for them that love him" (1 Corinthians 2:9); and liberty for the weakest, even the boys and the girls, will characterize the greatness and majesty of the coming better order of things.

JEWISH PERSECUTION IN POLAND

UNDER the charge that all Jews are Bolsheviks the ruling party in Poland is engaged in a shameless persecution of Jews, with a view to making their political hold on the country stronger. Ugly illustrated posters, depicting the Jew as a serpent or vampire, appear in the newspapers and are doing everything possible to fan the fanaticism of the ignorant masses into a brutal massacre.

The Jews are blamed for the high cost of living, despite the fact that this phenomenon is world wide and has been caused by the fiscal policies of the warring countries.

As high as eighty Jews have been killed in a single pogrom in Poland, and they are of frequent occurrence; sometimes whole streets of Jewish homes are burned down, accompanied by brutalities in which the Roman Catholic Polish Christians seem to equal the Turks in their attacks against the Armenians.

Some of the factories in Poland belong to Jews, but in them no Jewish operatives can be employed, despite the fact that one-third of the populace are Jews. Polish workmen will not work with Jews and they can only work in small home industries of their own. They can not enter the civil service.

The Poles, politically and culturally a backward people, have won the power to make their land a hell for its three million Jews by no merit of their own, but simply by the victory of the Germans over the Russian and of the Allies over the Germans.

The Poles understand well what their rôle in Europe is. Their rôle is to keep a strong conscript army on the Vistula, while the French keep watch on the Rhine. They know very well if they fill this rôle, they may treat Jews, Germans and other minorities as they please.

That the Jews would have a very hard time for many centuries was not unknown to the Jewish prophets. And even these pogroms were foretold; for the Prophet Jeremiah says: "I will send for many hunters, and they shall hunt them from every mountain [kingdom], and from every hill [lesser nation], and out of the holes (protected places) of the rocks [strongholds of society]." (Jeremiah 16:16.) This dreadful hunting of the Jews, however, is prelude to the regathering of as many of them as desire back to their home country. The Messianic kingdom will come after enough of the Jews are reestablished, and through them will flow the greatest benefit to all the people of the whole world.

DO MORE BALKANS MEAN MORE TROUBLE?

THE break-up of the Austrian empire has created four new Balkan states, Hungary, Jugo-Slavia, Czecho-Slovakia and Poland, besides old Austria.

The civilization of the world broke down because the Great Powers played the Balkan states against each other for their own purposes. The Russian Empire and the plans of Germany for a Mittel-Europa collided. Now the whole of Central Europe has been Balkanized. From the Baltic to the Aegean the whole territory is now filled with small, ambitious, indefinitely bounded states. Will they keep the peace? Will their larger and more ambitious neighbors help them to keep the peace, or will they, in pursuance of their own ambitious designs, contrive to keep these small states quarreling among themselves in the hope of themselves profiting by the melee?

Europe must get to work. Will she get to work better with a large number of petty states or a small number of large states? Are customs barriers a help to commerce or a hindrance? If there are many boundaries to cross will trade be facilitated or hindered? If Europe does not get to work boundaries or no boundaries, what will happen?

Practically all the people of Europe, at least an overwhelming majority, profess obedience to the commands of Jesus Christ, but evidently they have two things more to learn. One of them is suggested by Paul, that "if any would not work, neither should he eat" (2 Thessalonians 3:10); for unless Europe gets to work she will not have enough to eat except by borrowing money from the United States and paying for food with the same money. The other thing that these Christians require is to realize that there is no permanent relationship possible among them except that based upon this ancient principle: "Thou shalt love thy neighbor as thyself."

AGRICULTURE *and* HUSBANDRY

WHAT ROTATION OF CROPS ACCOMPLISHES

IT HAD probably been discovered elsewhere by other farmers that corn always does well when it follows a crop of clover, but it was discovered anew in a section of North Carolina by a young farmer who purchased an abandoned farm and who noticed that his first crop of corn did best in a part of the field that had grown up to wild clover. The next spring he seeded all his wheat in clover and has been doing it ever since. His farm is now one of the show-places of the state. Other farmers in the neighborhood have followed his example and from a poor farming country have built up the best Corn-Belt in that part of the South.

Many years ago a great potato-producing industry developed in Aroostook County, Maine. The potatoes were grown in rotation with oats and clover; two years of potatoes, one of oats and one of clover, with as heavy an application of fertilizer as the potatoes would pay for. Wonderful results were obtained by this rotation and enrichment of the soil, and now it has been discovered that this same rotation, with equally good results, can be obtained in any potato-growing country.

In the so-called Black Belt of Alabama and Mississippi many lands had been cropped to cotton without change or rest for a hundred years. The yield of cotton had fallen so low as to make the land practically worthless until somebody discovered that it was naturally adapted to alfalfa. Now it is producing great crops of alfalfa, three or four tons to the acre, and after a few years produces corn rivaling the yield in the Corn-Belt states.

Twenty years ago the sand-hill country of North Carolina was regarded as worthless. Fifty cents an acre was a good average for the land. The soil is little but sand for 20 feet or more down. A hotel-keeper undertook to raise vegetables for his table. He found that cowpeas and fertilizer worked a revolution in the soil. After turning under a few crops of pea vines he was able to produce 60 to 70 bushels of corn per acre. The system spread gradually until now the sand-hill region is one of the most prosperous in the state. Now land is selling at \$200 to \$250 per acre and the yield of cotton runs to a bale or more per acre.

By these and similar methods the Lord will surely

fulfil his promise, "Behold, I make all things new" (Revelation 21:5). The earth is being made new before our very eyes and the land is yielding its increase.

DYNAMITING THE EARTH INTO A PARADISE

THE USE OF ELECTRICITY and dynamite in the Great War has developed methods for dealing with rocks, stumps and water courses which will alter the face of the earth. In digging ditches the holes are drilled two feet apart and two feet deep, the number of rows depending upon the width desired for the bed of the stream. As soon as about 10 holes are drilled and loaded they are exploded by electricity. The blast lifts the soil 200 feet in the air and scatters it out over the adjoining land for a distance of 150 feet, leaving a clean ditch. If a deeper bed is desired the first bed of the stream can be blasted out by another layer of holes, or a third.

One of the principal uses of dynamite in clearing up large areas is that of blasting out stumps. Three holes are drilled on opposite sides of the stump, all slanting in toward the center, and reaching down to the subsoil beneath the stump. Crow-bars are generally used for making the holes, but portable electric and compressed air drills are also used.

Another great use of dynamite is in clearing land of boulders. This is done by three methods, *mudcapping*, which consists in removing the dynamite from the shell and packing it in a compact conical heap on the boulder, and then covering it with several inches of thick heavy mud; *blockholing*, which consists of drilling a hole into the boulder and charging it with a small amount of dynamite; and *snakeholing*, which consists in rolling the boulder out of its bed by placing a hole under it similar to one of the holes used to remove a stump. If a sufficient charge of dynamite is used the boulder will be broken into fragments. Boulders should always be snakeholed before attempts at mudcapping or blockholing are made. The mud used for mudcapping must be free from stones. If stones are present in the mud they will be thrown like bullets. Blockholing requires more labor but is the simplest method for breaking very hard boulders, and the only method for breaking boulders over 3 feet in diameter. It requires much less dynamite than either snakeholing or mudcapping.

Who should have supposed when the Prophet said, "The desert shall rejoice and blossom as the rose" (Isaiah 35:1), that one of the instruments the Lord will use for accomplishing the fulfilment of that prophecy is a force (dynamite) which has been largely used by man for the slaughter of men?

CONSERVATION OF SOIL FERTILITY

THE VERY FOUNDATION of soil fertility and soil conservation is carbonate of lime. Carbonate of lime in the soil takes out its acid humors and toxic poisons and brings in useful bacteria. It brings clover and alfalfa and brings nitrogen out of the air. Sowing it abroad over the fields makes a vast difference in the fertility and permanence of the soil. When a million tons a year of carbonate of lime are used along the Atlantic seaboard that part of the United States will turn into a veritable Garden of Eden.

Every great and enduring civilization in the world has grown up on a soil that was alkaline with lime, not acid. Babylon, Palestine, Egypt, Greece, Italy and France are all lands rich in carbonate of lime. The great west beyond the Missouri river has often as much as four per cent. of carbonate of lime.

The primary cause of decay in farming along the Atlantic seaboard is the fact that the soils are deficient in carbonate of lime. On that one fact, so long forgotten or never learned, rests all the discouragement and decay that is found from Florida to Nova Scotia. The eastern farmer has one of the best climates and the very best markets in the world. The only difficulty is that the land is lime-hungry. A land hungry for lime is insatiable. Manures will not remain in it, phosphorus unites with silica, iron, or alumina and becomes unavailable; the soil becomes acid, useful bacteria won't grow in it, nor the clovers nor alfalfa.

There are vast stores of carbonate of lime all along the foothills bordering on the Atlantic coastal plain, unnumbered millions of tons are ready for the farmer's use. Machinery is ready, capital is ready, and the railways. All that is needed is education.

Here in the east is the population, here are the homes, farms, schools, roads, villages and the impoverished, half-abandoned fields lying within driving distance of Philadelphia, Baltimore, Washington and New York. All, that is needed is to educate the farmer to understand that he must have carbonate of lime on his soil and a prosperity will follow that will amaze those who have grown to maturity in the belief that the one-time fertility can never be restored. How true it is that the "people perish for lack of knowledge"—Hosea 4:6.

TURNING FLORIDA'S SWAMPS INTO FARMS

LAKE OKECHOBEE, the second largest lake wholly within the United States, lies in the center of the everglades of Florida, with its surface thirty feet above the sea. The discovery of this fact made possible a vast reclamation work now under way, by which a very large part of what was once supposed to be waste land is finding purchasers who see for it a great future.

Four canals have been completed from Lake Okechobee to the sea, and a fifth is under way. Four of these are to the Atlantic Ocean and one to the Gulf of Mexico. Supplementing these there is also to be a canal 200 feet wide and 12 feet deep, fitted with locks, which will be suitable for navigation, and can be used to control the water levels in the other canals and hence in the whole district.

The drained lands are already producing large crops without the use of fertilizers of any kind and a town of 2,000 inhabitants, Moore Haven, is now standing at the junction of Lake Okechobee with the canal leading to the Gulf where but two years ago all was covered with water. There is no question but that this country will shortly be producing great quantities of sugar, for which it seems eminently fitted. It also has great possibilities for a great variety of other crops, including cattle raising. The country is level and free from large timber, and tractods can be used in clearing it and working it.

Branches of the Florida East Coast Line and Atlantic Coast Line have been built to points on the lake and other lines are projected. The area in process of reclamation is larger than the combined states of Rhode Island and Connecticut.

One of the commissions to man at the time of his creation by the Almighty was to subdue the earth. (Genesis 1:3.) Which is the nobler work for man? subduing the earth and drawing from it its bounties for the blessing of his fellow men? or subduing and exploiting his fellow men?

HAULING MILK WITH TRUCKS

FARMERS a few years ago got up at unearthly hours of the night to get their milk to market, and even then sometimes get the lacteal fluid in too late for the babies. Hauls of ten to thirty miles were too much for horses, but to-day the farmer gets up early, but at a reasonable hour, and with an auto truck gets the milk in from long distances and on time. Truck transportation tends to stabilize the quantity and to increase it by making a sure market for all the milk the farmer can bring.

SCIENCE and INVENTION

THE FUTURE OF WIRELESS

THE FUTURE OF WIRELESS lies in part in its use in the direction of aviation, for it is obvious that there is no other way in which aviators can be apprised of their own whereabouts in fog or darkness. With this idea in view a new transmitter has been devised which will project into the air beams of wireless somewhat like the searchlight but without the light, capable of expanding or contracting in area covered. Through the aid of these beams it is hoped that some day the flying aeronaut in time of fog can be guided from one part of the country to another.

Arrangements are now in effect by which navigators at the Brooklyn Navy Yard are enabled to give bearings to ships lost in the fog off the Atlantic Coast. The vessels wire when they want assistance and then, with the aid of several stations; the office fixes the ships' locations and they can proceed without waiting for clear weather.

It does not appear that it will ever be any too safe to fly rapidly or fly at all in a fog. In Canada an aviator went head on into a barn in a fog killing him instantly and completely wrecking his machine. How many have been killed by running into trees and other obstructions in fogs will probably never be known. But the wireless will at least help to make it safer.

There are wireless instruments now available which provide for taking bearings under any weather conditions. When signals are heard strongest in the operator's head telephone a movable pointer indicates the direction of the incoming signal. The geographical direction is then secured by a glance at the compass. Therefore, if signals can be heard from two wireless stations offering a wide angle the aircraft operator has merely to make a simple triangulation to get his exact bearings. The densest fog is no obstacle to the receipt of these signals.

In the course of normal development it is to be expected that very soon wireless telephone conversation will be held between aircraft and ships at sea. It then becomes a simple matter for the aviator lost in the fog to get his exact position almost instantly by this method.

It is said that in Captain Alcock's remarkable flight across the Atlantic direction-finding coils were built into the wings of his machine, so that when

the machine was pointed toward the great wireless station at Clifden, Ireland, the machine continually recorded the fact. When the machine veered to the right or left the signals immediately ceased recording on the receiving apparatus. This was so simple that the pilot did not need to understand the signals being sent out. As long as he could hear the signals in his telephone head-gear he knew he was heading directly toward the wireless station where he subsequently landed. The Clifden station is in constant communication with the wireless station at Glace Bay, Canada, so that Captain Alcock was able to hear the station throughout his voyage and keep his machine pointed toward it, thus overcoming the effect of the side drift caused by the winds.

As the aviator, apparently lost in a trackless sea of fog, may know whither he is bound, so the child of God, in a world that is filled with darkness and confusion, may know that he is guided by the eye of him that never sleeps. "I will guide thee with mine eye."—Psalms 32:8.

COMETS—THE TRAMPS OF THE HEAVENS

COMETs, along with shooting stars and meteors, are the tramps of the heavens. They are supposed to consist of gases which escaped being swept up by the planets and moons of the solar system at the time the system was formed by the separation of these planets from the sun. Their orbits are very irregular and are inclined at all angles to each other, whereas the orbits of all the planets lie very nearly in the same plane. The planets revolve from west to east around the sun, while comets not infrequently back around the sun in the opposite direction, from east to west. The orbits of the planets are almost perfect circles, while the orbits of the comets are ellipses.

All the comets which visit our sun are supposed to belong to our solar system, although the visits of some of them about the sun are separated by hundreds of thousands of years. Donati's comet has a known orbit of more than two thousand years, and its aphelion (point in its orbit farthest away from the sun) is five times more distant than the orbit of the planet Neptune. Halley's comet has an orbit of seventy-five years, and Encke's comet of three and a third years.

Stars shine undimmed in lustre even through the heads of comets. The earth has on a number of occasions passed directly through the tails of comets with-

out experiencing the least visible effects. If it should encounter a comet head-on it is doubtful if it would experience anything more serious than a shower of meteors.

A great many comets have been swerved from their original orbits by coming in close proximity to the larger planets. About forty have been thus captured by Jupiter, Saturn, Uranus and Neptune, although Jupiter possesses the lion's share. They have been captured in the sense that their aphelia are now in the vicinity of these planets, and this fact has suggested the thought that each of the comets has its aphelia near some planet, the farthest aphelia being about planets that are so remote from our sun that they can not be seen by the most powerful telescope.

The most interesting feature of a comet is its tail, which develops and increases in brilliancy as the comet approaches the sun. The tail is always turned away from the sun, so that while the comet rushes around the sun the tail gradually changes place from being behind the comet to being in front of it. Hydrogen tails are long and straight, hydrocarbon tails are long and curved. Tails of iron or other metallic vapors are short and bushy. At times the same comet will have two or more tails of different types. Comets are continually disintegrating. Sometimes they come too close to the sun at their perihelion passage and become split into two or more comets, each with its own tail. Sometimes the tails become twisted or brushed aside as if they had encountered some unknown force. Sometimes they disintegrate entirely into periodic swarms of meteors. It is supposed that the great star shower in 1833 was caused by the passage of the earth through the nucleus of what had once been a great comet.

Comets travel at a leisurely speed through the frigid outer regions of the solar system. This speed is gradually accelerated as the comet draws nearer and nearer the sun, until it has acquired, near the time of its perihelion passage, a velocity that occasionally exceeds two hundred and fifty miles a second.

In one respect comets bear a close resemblance to the "wandering stars to whom is reserved the blackness of darkness forever," of Jude 13, in that both amount to as nearly nothing as anything possibly can.

THE MANUFACTURE OF LIGHTNING

THUNDERCLOUD is the most stupendous and powerful generator of electricity of which we know. A single lightning flash may carry twenty thousand amperes at a pressure of millions of volts. During the war lightning and thunder-storms proved a serious

menace to balloonists and aviators, and on this account they were made the subject of special study.

Thunderclouds are columns of heated air which have risen from the earth's surface, due to the heating effects of the sun, and have carried moisture up with them. This moisture does not condense in the form of drops until it comes in contact with dust particles or electrically charged particles which act as centers of condensation. The water condenses much more quickly about particles charged with negative electricity than with particles charged with positive electricity. The negatively charged drops being smaller and lighter are carried to the top of the cloud, very often forming a heavy negative charge, while the heavier positively charged drops fall to the bottom of the cloud, forming a strong positive charge. The effect of wind on raindrops is to break them up and change them from positively charged drops to negatively charged droplets. Thus every thundercloud is seen to be really a huge electrical generator. The earth itself is a great storage battery of negative electricity, estimated at 600,000,000 volts.

When a charge of electricity in a cloud gets sufficiently great the lightning flash takes place. This may take place from the top to the base of a cloud, or between the base of the cloud and the earth, or between one cloud and another, sometimes over distances of twenty miles.

A flash of lightning always produces a powerful inductive effect, which may cause flashes to occur in rapid succession. It frequently happens that a negatively charged cloud approaches the earth, and in doing so the inductive effect changes its charge to positive, and a thunderstorm follows.

One of the most beautiful of the Psalms of David is David's description of a thunderstorm. He says poetically, describing both the thunder and the lightning, "The voice of the Lord divideth the flames of fire."—Psalm 20:7.

WOOD MORE DURABLE THAN IRON

GREENHEART TREES grow in dense jungles of South America and require great labor and expense to cut and ship. They are so heavy that they will sink instantly alone and when placed in the water will outlast iron or steel. For this reason, and because they are impervious to the attacks of insects, they are used for the sills of drydocks and canal locks. This wood has been known to stand under water for over a hundred years and remain in perfectly sound condition. The wood used in the gates of the Canada Dock, built in 1856, was so perfectly preserved that it was used again in 1894.

HOUSEWIFERY and HYGIENE

NERVOUS AND STUPID CHILDREN

TO ACHIEVE MARKED SUCCESS, a man needs brains plus physical endurance, and every ambitious father wants his boys to have that surplus of physical vitality which spells courage, initiative and persistence. No amount of mere intellectual keenness or useful information can make up for the loss of vitality which enables men and women to enjoy the struggle of life and get on well with other people.

It is the delicate, finely attuned instrument which is most easily thrown off the key, and it is the sensitive, high-strung child whose nerves are most easily injured by overstrain. Such children should be checked rather than spurred, and their eager desire to please should not be exploited to tickle the vanity or ambition of parents and teachers. Many a nervous breakdown at thirty or forty is due to overstimulation and overactivity when the child should have been laying up a store of energy and forming habits of physical and emotional thrift.

It is of great importance that a child should have the normal weight for his age and height. If a child is seriously underweight this is an indication that something is wrong. It means that he is using up his energy more rapidly than he should, and that some day he will have to pay for it.

Stupid children require attention for a different reason. It has been estimated that from 3,000,000 to 5,000,000 American school children have adenoids, diseased tonsils and other glandular defects, which are making them appear stupid and are causing them to be backward in school. The child troubled with adenoids breathes through his mouth, and a lax lower jaw and vacant, sleepy eyes give an unmistakable expression of stupidity and dullness. The transformation in such children when the adenoids, by a slight operation, are removed, is often very rapid. The child with adenoids is stupid and sleepy, because he is not getting enough oxygen, and his blood is consequently laden with impurities and the cells of his brain are not properly nourished.

It is also estimated that one-fifth of all the school children in the country, or 5,000,000, are malnourished. Undernourishment is the soil of diminished resistance upon which all sorts of physical and mental diseases grow. Malnourished children, having little reserve energy, fatigue easily. A healthy child recuperates quickly. Overfatigue lessens a child's abil-

ity to digest his food. Malnourished children should especially be guarded against getting too tired.

Children require about a pint and a half of milk per day apiece in order to keep in the best condition; if they dislike it as a beverage it may be disguised in the form of cocoa, milk soup, custard or cream sauce for vegetables. Well-cooked cereals, especially oatmeal, should form one of the mainstays of the breakfast. Green vegetables contain substances which stimulate growth and are helpful to the intestines because of their bulk.

The question of sleep is especially important for malnourished or nervous children. American children, as a rule, get too little sleep. They should retire early, and take a noon nap, preferably before lunch.

A nervous, sleepless child can often be put to sleep by having him spend a quarter of an hour in a bath of ninety degrees. When a nervous child flies into a temper or tantrum, scolding and punishment will usually only increase the nervous tension. A warm bath and a quiet rest time in bed are more likely to meet his needs.

Practically all the children found suffering from malnutrition were found to be accustomed to having either tea or coffee at breakfast.

In the matter of food and all other matters of the physical and mental health of children, no better philosophy has ever been devised than that which puts the responsibility upon the parents. "Train up a child in the way that he should go, and when he is old he will not depart from it."—Proverbs 11:11.

TEETH EXTRACTION A CURE FOR DISEASE

DR. COTTON, of the New Jersey Hospital, at Trenton, discovered that many of the patients suffering from mental disease had also serious chronic infections of the teeth, tonsils and stomach, and that by removing the infected teeth he was able to restore many patients who, with former methods of treatment, became chronic patients and remained in the hospital until the time of their death. As a result of the extraction of infected teeth Dr. Cotton was able to increase the proportion of discharges to admissions from 43% to 87%; in other words to double the number of patients who left the hospital.

The X-ray photographs of teeth show that many people have infected teeth who have no knowledge of it. The failure of the dentist to recognize the exist-

ance of root infection and the practise of putting in pivots, gold crowns and bridge work without first taking radiographs to be sure that there are no infected roots has caused more rheumatism, pernicious anemia, heart disease, Bright's disease and mental diseases than we can measure. Bacteria at the roots of infected teeth must have an outlet, especially if the tooth has been crowned and all means of drainage from the upper part of the tooth is thereby cut off. Then the bacteria filter through the bone in which the teeth are embedded, migrate to other organs and set up secondary foci of infection. The only known prevention of the effects of this infection is to have all teeth removed in which the nerves have been destroyed, as well as the teeth known to be infected. No one should attempt to preserve teeth by having the nerves killed. Such teeth should be extracted.

These death-dealing germs, hidden away out of sight about the roots of the teeth, suggest those secret faults which undermine and destroy character. "Cleanse thou me from secret faults."—Psalm 19:12.

WASHING MADE EASY

THERE is no dodging the family wash. It has to be done. It is done. The weekly expense for an average family in moderate circumstances is calculated at \$3.00. Of this amount \$2.00 goes to the laundress, 10c. for her carfare, 35c. for her lunch, 25c. for soaps and powders used, and 30c. for electricity consumed.

The electric washer has made a great change in many households. One woman reports that it takes her one and one-half hours to do the week's wash, fifteen minutes to get the water ready and put the machine away, and one and one-quarter hours to do the actual washing. Her machine runs with a quarter horse-power motor, consuming about 15c. worth of current per month, and the soap and washing powder run the total monthly bill up to 40c. She calculates that in three and one-third years she has paid for her machine, paid the interest on the investment at 6%, and cleared over \$50.00 in cash, besides not being bothered by having a laundress around.

Another woman reports that it costs her one and one-half cents an hour to run the machine, another that previous to the purchase of a machine she employed a laundress for two days each week and now that she does her own wash in three hours per week with no help whatever. Another, with a family of eight reports that four hours a week suffices for the wash, and another that in 142 washes she used 200 cakes of soap with the electric washer. Another, a mother with a large family of small children, reported that she did the family washing every Monday morn-

ing between 5.30 and 7.00 o'clock, while her husband cared for the children.

The method of washing by an electric washer is very simple. The tub of the machine is filled with lukewarm water into which a solution of one-half cup of soda crystals and one-half jar of soap jelly, made from any kind of soap, is placed. The motor is started and when it gets humming the clutch is thrown in and the solution churned for two minutes until sudsy; then the machine is stopped and the clothes put in. The machine is then run 15 minutes for ordinary washes or longer for clothes badly soiled. The clothes are rinsed in the machine in scalding water, all of one kind being rinsed together. In rinsing, the machine is run another five minutes and the clothes are then wrung out into cold bluing water ready to be hung out to dry. The cost of the electric washer is \$100 for the preferred designs.

Probably no part of the Bible has thus far had a more significant fulfilment than the statement, "In the sweat of thy face shalt thou eat bread till thou return unto the ground; for out of it wast thou taken: for dust thou art, and unto dust shalt thou return." (Genesis 3:19.) The fact that we see in every direction the elimination of the arduous work of mankind is in itself a happy augury of the coming approach of Messiah's kingdom, the dawn of the Golden Age.

"FAMINE AND PESTILENCE"

WARNINGS are issued by the medical profession to get ready for a recurrence of Influenza. The history of epidemics shows a recurrence in the succeeding year, and the black plague—alias "Influenza"—is expected to stalk through the land again this fall. Public Health Departments are in receipt of many anxious letters of inquiry, and in answer the warning is going out to prepare for what is coming.

The good advice is given to build up strength to meet a possible Influenza attack. As a preventive, exercise and good food are recommended.

Health Departments express themselves that the expected epidemic will be less serious than that of 1918, because many of the population are immune through having had the disease once.)

Brotherly love among men would banish influenza. It would see that all had the vitality builders of good food, good air, plenty of light and outdoor exercise. Lack of love among men is destined, in the near future, to bring the further fulfilment of the word of Jehovah: "in divers places pestilences" (Luke, 21:11); "before him [preceding his Kingdom presence] went the pestilence" (Habakkuk, 3:5); "I have sent among you the pestilence."—Amos, 4:10.

RELIGION and PHILOSOPHY

NEGLECT OF THE BIBLE

THE PURPOSE OF THIS MAGAZINE in providing a Religious Department is that the common people at little cost and inconvenience to themselves may carry on a systematic course of Bible study in their homes. In this department will be found discussion of Bible questions and explanation of Scripture passages of the deepest interest to all students without regard to creed or denomination. It is not our purpose or desire to induce any one to join anything. Our purpose here is purely educational.

No nation or people can afford to neglect Bible study. It will be conceded on every hand that the rush and hurry of the twentieth century has greatly retarded Bible study. The people are feeling the result thereof. We hope to turn their minds back to a sober, candid consideration of the great truths contained in the Scriptures.

The Bible is the torch of civilization and liberty. Its influence for good in society has been recognized by the greatest statesmen of all times. Aside from being a masterpiece of literature, science and poetry, it contains a statement of God's purposes concerning the human race. In times past it was not possible to be understood for the reason that it was not God's time for it to be understood. The Bible itself assures us that a period of time would come in which the people would understand and appreciate the Bible teachings and profit from these teachings.

The prophecies of the Scriptures are in fact the history of the world written in advance. It must be evident to every reasonable person that no human mind could have foretold centuries ago the happening of present-day events. The Scriptures declare that holy men of old wrote the Bible as their minds were moved to act by the invisible influence and power of Jehovah. In harmony with this expressed thought, Jehovah caused the Prophet Daniel to give a brief outline of the world's history from the time of Nebuchadnezzar until the present day. Although Daniel had a mental vision of things that should come to pass, yet he could not understand them and he records this fact, saying, "I heard but I understood not. Then said I, O my Lord, what shall be the end of these things? And he [Jehovah] said, Go thy way, Daniel, for the words are closed up and sealed until the time of the end. Many shall be purified and made white and tried, but the wicked shall do wickedly and none of the

wicked shall understand but the wise shall understand." (Daniel 12:8-10.) The wise mentioned here is not necessarily one who is learned after the manner of earthly wisdom, but is the one who possesses a reverential desire to know Jehovah's purpose concerning man. The Scriptures referring to such say, "The reverence of the Lord is the beginning of wisdom." "The secret of the Lord is with them that reverence Him and He will show them His plan."

The Bible is a great treasure house of knowledge and wisdom. It claims to be a revelation from Jehovah concerning man, his origin, his course and what will lead to his final happiness, peace and joy. It is the oldest book in existence. It was given to the Israelites, the chosen people of the Lord, and handed down from one generation to another, and has been miraculously preserved by Divine intervention. It has outlived the storms of centuries. Men have endeavored by every possible means to destroy it. They have hidden it, burned it and attempted to compel the people to refrain from studying it; yet the book still lives and more and more is mankind realizing the need of understanding it. If all the peoples of the world to-day understood the Scriptures and diligently sought to abide by their teachings, there would not be a strike known in the land; there would be no labor troubles; there would be no serious conflict between labor and capital; there would be no suffering of the people from the unrighteous conduct of the profiteers; there would not be the present distress of nations with perplexity. It is equally true that the Bible contains a clear statement of the Divine remedy provided for the rectification of all these difficulties.

It is quite probable that very few are aware of the fact that the world's great systems of transportation by steam, electricity, gas engines, flying machines, and the general great increase of knowledge was foretold centuries ago and that Jehovah caused His Prophet Daniel to make record of it. In the light of present-day events we can see that this record was made for the very purpose of calling the student's attention to the fact that we have reached a great change in the social order of things. Daniel had been told that in the time of the end the Scriptures would be unfolded and understood by the student who was wise after God's order of wisdom. Then Jehovah caused him to record that which would constitute proof that the desired time had been reached. "But thou, O Daniel,

shut up the words and seal the book until the time of the end. Many shall run to and fro and knowledge shall be increased." (Daniel 12:4.) The "time of the end" here mentioned clearly does not mean the end of time, because time will never end; nor does it mean the end of the earth and its destruction; but it does mean the end of the world, i. e., the end of a certain long-established social order of things—the end of a period of time. We may confidently know, then, that the great inventions and increase of knowledge which have reached a climax in the day in which we are living is one of the strongest proofs of the authenticity of the Scriptures as the Divine word and a further proof that we have reached the end of the old order and the beginning of a new, a different and better order.

And this is the time in which the Scriptures are to be understood. This is the time in which the people have greater need to understand them; and the sufferings and trials, distress and disturbances that have come upon the peoples of earth will cause them to turn their minds and hearts to searching the Scriptures as they have not done before.

That the nations are in distress and the people perplexed is evidenced upon every hand. What the people really want to know is how they can extricate themselves from the present dilemma. If Divine wisdom foreknew and foretold the present dilemma, then we may reasonably expect to find in the Bible a Divinely provided remedy for relieving the people; and this we do find.

In subsequent issues of this magazine it is our purpose to show the progressive development of Jehovah's plan from the time of creation of the earth down to the present day, and by placing the prophecies alongside of current history—the things which we daily see coming to pass—to produce the incontrovertible proof that we are standing at the very portals of the Golden Age.

The Golden Age has been the great desire of men and nations for many centuries. Jehovah established a model government amongst the Israelites and gave to them a perfect code of laws. Had they been able to keep those laws perfectly the Golden Age would have come in their day. The Lord dealt with that people, as shown both by sacred and profane history, for a period of 1800 years and then cast them off because of their unfaithfulness. He used their experience, however, to teach other nations a great lesson which has been profitable for Christians throughout the Gospel Age and which will now be profitable for all the world. The inability of the Israelites to keep the perfect law proved

that man without the aid of the Lord cannot bring in the Golden Age, and further shows that when man has reached his extremity it will be God's opportunity to establish the very things that man desires. The prophetic proof is that shortly following the end of the Gentile Times (which, in fact, ended in 1914) the Lord will make a new covenant arrangement with the people through the medium or intervention of the great Messiah, and by and through this means establish a perfect condition on the earth. Under such an arrangement profiteering will be impossible. The oppression of the masses by the classes will be impossible. The people will be taught righteousness and in order that they might profit thereby evil influences will be restrained. They will be taught just what to eat and how to eat it, how to exercise, what is correct and proper conduct, the proper things to read and study, how to keep the law perfectly; and this much-needed aid ministered by and through the Messiah will open the way for the blessing of all the nations and peoples of the earth in harmony with the promise made by Jehovah four thousand years ago.

Concerning the order of things under the wise and perfect ruler and the beneficent influence of the government during that time, the prophet of the Lord wrote: "And the government shall be upon his [Messiah's] shoulder; and his name shall be called Wonderful, Counsellor, the Mighty God, the Everlasting Father, the Prince of Peace; and of the increase of his government and peace there shall be no end" (Isaiah 9:6, 7). Furthermore, the prophet says concerning the righteousness of His reign: "With righteousness shall he judge the poor, and reprove with equity for the meek of the earth: and he shall smite the earth with the rod of his mouth, and with the breath of his lips shall he slay the wicked. And righteousness shall be the girdle of his loins and faithfulness the girdle of his reins. The wolf also shall dwell with the lamb, and the leopard shall lie down with the kid; and the calf and the young lion and the fatling together; and a little child shall lead them. And the cow and the bear shall feed; their young ones shall lie down together: and the lion shall eat straw like the ox. And the sucking child shall play on the hole of the asp, and the weaned child shall put his hand on the cockatrice' den. They shall not hurt nor destroy in all my holy mountain [kingdom]: for the earth shall be full of the knowledge of the Lord, as the waters cover the sea."—Isaiah 11:4-9.

Some of the blessings that will come to the people during the Messianic reign are described by the

prophet thus: "Then the eyes of the blind shall be opened, and the ears of the deaf shall be unstopped. Then shall the lame man leap as an hart, and the tongue of the dumb sing: for in the wilderness shall water break out, and streams in the desert. And the ransomed of the Lord shall return, and come to Zion with songs and everlasting joy upon their heads: they shall obtain joy and gladness, and sorrow and sighing shall flee away."—Isaiah 35:5, 6, 10.

That these promises to mankind may be more clearly understood and better appreciated, we will, beginning with a subsequent number of this magazine, publish a series of articles showing the progressive steps of Jehovah's arrangements from the time of the creation of earth up to the glorious cul-

mination of the lasting blessings of mankind, which Jehovah promises shall constitute the desire of all nations.

To the people now we say, Be not discouraged because of the stress of the times in which we are living, but be brave and very courageous. Avail yourselves of opportunity of acquiring more knowledge of the Divine revelation concerning the coming blessings of the world that you may be able to more fully profit by these blessings when they do come. Avoid strife and contention; be calm and considerate of all, rendering righteousness unto every one and patiently waiting the Lord's good time to establish complete righteousness in the earth.

TALKING WITH THE DEAD (?)

(By a Member of the New York Bar)

MAN'S greatest desire is to live forever in a state of happiness. Nothing has been so certain as death. Truly the proverb says, "The living know that they shall die." Nearly every living person has lost some friend, relative or loved one in death. The present condition of the dead ones is of great interest to the living for two reasons: (1) because the living are keenly interested in their friends and loved ones; and (2) because the living contemplate that they may soon go to the same place. Naturally, the living examine anything that purports to teach that they can talk with their departed friends. This desire to communicate with the departed ones has been greatly augmented by conditions produced by the war, because so many have died as a result of the war and many more have died from the pestilence that came in the time of the war.

Recently the public press has printed much concerning the dead and the ability of certain living ones to communicate with the dead. These published experiences are attracting wide attention throughout the world and should not be passed by lightly. If the living can talk with the dead, then all the people should know it. On the other hand, if from a fair consideration of all the evidence we should find that the living cannot talk with the dead, but that the testimony produced in support of the contention is deceptive and misleading, then, of course, the people should be acquainted with these facts.

It is interesting to note the class of men who are producing and publishing this evidence. They are not of the superstitious, ignorant or uneducated. On the contrary, from the world's viewpoint, they are men of great learning, of high moral and social standing,

and of strictest integrity. As such matters are usually considered, they are strictly competent witnesses, whose testimony should be candidly weighed and considered. We introduce a few of these witnesses and give excerpts from their testimony as published in the public press by the Metropolitan Newspaper Service.

Prof. James H. Hyslop, Ph.D., LL.D., Secretary of the American Society for Psychical Research, testifies that interest in psychic phenomena has greatly increased since the war; that such was predicted before the war through Mrs. Piper in a message quoted by Sir Arthur Conan Doyle. Prof. Hyslop further states that the present wide interest is due to a combination of influences: first, the wholesale loss of life; and second, the materialistic state of the age; that by far the largest number of persons who became interested in psychic research had their interest aroused by the death of some friend or relative; that finding the clergymen knew no more about the matter than themselves, or could offer only faith as an escape from doubt, they sought the psychic research for help; that *it is doubtful if the same interest would have been aroused by the same war in the Middle Ages.*

Many ask, Why should the recent world war create such an increased interest in psychic phenomena? We expect to show herein that it is *due time* for such increased interest and that the war is merely incidental to it.

Sir Arthur Conan Doyle, a positive witness that the living communicate with the dead(?), has written much on the subject. It will be noticed that the messages which purport to come from the dead come through a medium. A few excerpts from his testimony follow:

"I think that the presumption is very clear that in the case of some mediums, like Eusapia Paladino, they may be guilty of trickery when their powers fail them; and yet at other times have genuine gifts.

"When the war came it brought earnestness into our souls and made us look more closely at our own beliefs and reassess their value.

"The religious side of it I saw to be of infinitely greater importance and it is this of which I will presently speak. It seemed to me that all these phenomena large and small have been the telephone bells which said to the human race, 'Rouse yourselves, stand by, be at attention! Here are signs for you. They will lead you up to the message which God wishes to send.' Physical phenomena make religion a very real thing; no longer a matter of faith, but a matter of actual experience and fact.

"I have spoken of a body of fresh doctrine. Whence does this come? It comes in the main through automatic writing where the hand of the human medium is controlled either by an alleged dead human being or by an alleged angel. . . . These written communications are supplemented by a vast number of utterances and by the verbal message of spirits given through the lips of mediums. Sometimes it has even come by direct voices. It has come through the family circle and table tilting.

"The lessons we may learn teach us of the continued life of the soul; of the nature of that life and how it is influenced by our conduct here. If this is distinct from religion, I must confess that I do not understand the distinction. To me it is religion, the very essence of it.

"As to other creeds, it must be admitted that an acceptance of the teachings brought to us from beyond would greatly modify conventional Christianity.

"Most vital of all, it would confirm and make absolutely certain the fact of life after death, the basis of all religion. It would confirm the unhappy results of sin, although it would show that these results are never permanent. It would confirm the idea of heaven and a temporary penal taste which corresponds to purgatory rather than to hell. Christianity must change or must perish. She has deferred it until her churches are half empty, until women are her chief supporters and until both the learned part of the community on the one side and the poorest class on the other are largely alienated from her. The people are alienated because they frankly do not believe the facts presented to them to be true. Their reason and their sense of justice is equally offended. One can see no justice in the vicarious sacrifice nor in the God who would be placated by such means. Above all, many cannot understand such expressions as, the redemption from sin.

"Never was there any evidence of a fall of man; but if there were no fall, then what became of the atonement, of the redemption, of original sin, of a large part of Christian mystical philosophy? Too much seems to have been made of Christ's death. Men die continually for their convictions. Thousands of our lads did in France. Therefore the death of Christ, beautiful as it is in the Gospel narrative, has seemed to assume undue importance. Too much stress has been laid upon Christ's death and far too little upon His life. That was where the true grandeur and the true lesson lay. Never had any one such a robust common sense or such a sympathy for weakness. It was this most wonderful and uncommon life and not His (Christ's) death which is the true center of the Christian religion.

"He (Christ) came down at a time of great earthly depravity, a time when the world was almost as wicked as it is now; in order to give the people an example and teaching of an ideal life. Then He returned to His own high station, having left an example which is still occasionally followed.

"If such a view of Christianity were generally accepted, then I think we should have a creed which might unite the churches, which might be reconciled with science, which might defy all attacks, which might carry the Christian faith on for an indefinite period.

"Messages from the dead have been received in many lands at various times, mixed with a good deal about this world which we could verify. The messages upon these points seem to me to be infinitely reassuring, whether we regard our own fate or that of our friends. The departed agree that passing is usually easy and painless and followed by an enormous reaction of peace and ease.

"The spirit is not a glorified angel or a goblin, but it is simply the person himself, retaining all his strength and weaknesses, his wisdom and his folly, exactly as he has retained his personal appearance.

"Communications usually come from those who have not long passed over and tend to grow fainter as one would expect. There is in Mr. Dawson Rogers' life a very good case of a spirit who called himself Manton and claimed to have been born at Lawrence, Lydiard, and buried in Stokke, Newington, in 1677. It was clearly shown afterward that there was such a man and that he was Oliver Cromwell's chaplain. So far as my own reading goes this is the oldest spirit on record as returning. All agree that life beyond is for a limited period, after which they pass on to yet other places, but apparently there is more communication between these phases than between us and the spirit land."

Other witnesses of the same character as Sir Conan Doyle are Prof. Crawford, Prof. Lodge, Prof. Barrett, Gerald Balfour, Bishop Fallows, Rev. Fielding Ould, Archdeacon Wilberforce, and many others of more or less prominence.

The distinguished witnesses above mentioned claim to believe in Jehovah God as the great First Cause, the all-wise and eternal One. They admit that Jesus Christ came down from heaven, was a man, lived on earth; that He died, was resurrected and returned to heaven.

They quote from the Bible and thereby admit the authenticity of the Scriptures—that the Bible is the Word of God.

With these admissions from the wise and distinguished witnesses we have a basis from which to reason and a rule by which their testimony may be weighed and considered. Just here we are reminded of the words of the Prophet Isaiah speaking as the mouthpiece of Jehovah, relating to the very question under consideration: "And when they shall say unto you, Seek unto them that have familiar spirits, and unto wizards [mediums] that peep and that mutter [say unto them]: should not a people seek unto their

God? the living on behalf of the dead? To the law and the testimony: if they speak not according to this word, it is because there is no light in them." (Isaiah 8:19, 20.) In other phrase, the Lord's prophet here says that all the testimony offered with reference to communication with the dead, if not in harmony with and supported by the Word of God is conclusively proved untrue. God is His own interpreter and He will explain His Word to those who seek to understand it. The Bible is the Word of Truth. "For prophecy came not in old time by the will of man; but holy men of God spake as they were moved by the Holy Spirit." (2 Peter 1:21.) It was Jesus Christ who said, "Thy word is truth." (John 17:17.) "All Scripture divinely inspired is indeed profitable for teaching, for instruction, for correction, for that discipline which is in righteousness, so that the man of God may be complete, thoroughly fitted for every good work." (2 Timothy 3:16, 17, *Diaglott*.) Then by the testimony of the Bible let us examine these questions and settle them accordingly.

It must be conceded in the outset that if the dead can communicate with the living then the dead are conscious after death and know everything that is transpiring. The first important question, then, to determine by the Scriptures is—

ARE THE DEAD CONSCIOUS?

We quote some pertinent Scriptures bearing directly on the point: "In death there is no remembrance of thee; in the grave who shall give thee thanks?" (Psalm 6:5). "Wilt thou show wonders to the dead? Shall the dead arise and praise thee? Shall thy loving kindness be declared in the grave? or thy faithfulness in destruction?" (Psalm 88:10, 11). "Thou turnest man to destruction" (Psalm 90:3). "The dead praise not the Lord, neither any that go down into silence."—Psalm 115:17.

The Scriptures clearly show that one who dies stops breathing, does not think, has no feeling; therefore could not be conscious. "His breath goeth forth, he returneth to his earth; in that very day his thoughts perish."—Psalm 146:4.

"For the living know that they shall die, but the dead know not anything."—Ecclesiastes 9:5.

"Whatever thy hand findeth to do, do it with thy might, for there is no work, nor device, nor knowledge, nor wisdom in the grave whither thou goest."—Ecclesiastes 9:10.

"Nevertheless, man being in honor abideth not; he is like the beasts that perish."—Psalm 49:12.

Jesus declared that all the dead are in their graves and asleep—unconscious, knowing nothing (John

5:28, 29). The Apostle Paul speaks of the dead being 'asleep, unconscious, knowing nothing.—1 Corinthians 15:18; 1 Thessalonians 4:13-18.

But, it will be insisted, the above Scriptures have reference to the body being dead and unconscious, but the soul continues to live. As above quoted, Sir Conan Doyle says: "The results of psychic research, the deductions which we may draw and the lessons we may learn teach us of the continued life of the soul." We quote from Bishop Fallows as follows: "In recent years great strides have been made in the explanation of psychic phenomena and in the years to come the science of communication with the dead will be made a part of the curriculum of great educational institutions. I have called the new science Immortalism because it depends for its existence on the immortality of the soul, in which we all believe, and the preservation of identity beyond the grave."

From the two eminent witnesses above quoted, it is seen that the theory of communication with the dead rests strictly upon the old doctrine of inherent immortality of the soul. Is the immortality of the soul supported by the Bible? Our answer is, there is just one Scripture in the Bible that supports it and that Scripture Jesus declares is a lie and the first lie ever told, and Satan told it. It is found in Genesis 3:5. The occasion was Satan using the serpent as a medium through which to speak to Mother Eve and thereby deceive her with reference to eating of the forbidden fruit. The woman said, "We may not eat of the fruit in the midst of the garden of Eden, for God hath said, Ye shall not eat of it, neither shall ye touch it, lest ye die." And to this Satan replied, "Ye shall not surely die; for God doth know that in the day ye eat thereof, then your eyes shall be opened and ye shall be as gods, knowing good and evil." This statement of Satan, "Ye shall not surely die," has been the foundation of every false doctrine from then until now and it is the one to which Jesus referred when speaking of Satan as the father of lies.

Subsequent to the violation of God's law, Adam and his wife Eve were sentenced to death and driven from Eden and in due course of time they died. Was it merely the body or the soul that died? Let us first determine what is the soul. Man is a soul; he does not possess a soul. Every living creature is a soul. We say a man *has* a cow; he possesses a cow. But we would not say a man *is* a cow. "And the Lord God formed man out of the dust of the earth and breathed into his nostrils the breath of lives, and man *became* a living soul."—Genesis 2:7.

Clearly, then, we see that Jehovah formed from the elements of the earth the body of man and then breathed into his nostrils the breath which living creatures breathe. This breath animated the body, started the circulation, and the result was a moving, sentient being, which God designated a soul. God in His Word applied the term living soul to the lower order of animals long before the creation of man. (See Genesis 1:20, 30, marginal reading.) He also used the word soul as applicable to beasts, saying, "Levy a tribute unto the Lord of the men of war which went out to battle: one soul of five hundred, both of the persons, and of the beeves, and of the asses, and of the sheep."—Numbers 31:28.

When one dies, then, it means a separation of the breath of life from the body, which means extinction of the soul, just as the beasts die. "For that which befalleth the sons of men befalleth beasts; even one thing befalleth them: as the one dieth, so dieth the other; yea, they have all one breath; so that a man hath no preeminence above a beast: for all is vanity. All go unto one place; are all of the dust, and all turn to dust again" (Ecclesiastes 3:19, 20). To settle all question about the soul being subject to death or not, the Psalmist says, "What man is he that liveth and shall not see death? shall he deliver his soul from the hand of the grave?" (Psalm 89:48.) But even more explicit are these words, "The soul that sinneth it shall die" (Ezekiel 18:4). If the soul were immortal, it would not be subject to death; not even God would be able to destroy it. Jesus plainly said that Jehovah has the power to destroy the soul.—Matthew 10:28.

Who then is immortal? The Scriptures answer, "The blessed and only potentate, the king of kings and lord of lords, who only hath immortality" (1 Timothy 6:15, 16). Immortality means that which is not subject to death and is offered as a great prize to the faithful follower of Jesus unto death. "Who will render to every man according to his deeds: to them who by patient continuance in well doing seek for glory, honor and immortality, eternal life."—Romans 2:6, 7.

This prize of immortality is offered to none except the Christian, who having made a consecration to do God's will, continues faithfully unto death. To such Jesus said, "Be thou faithful unto death and I will give thee a crown of life" (Revelation 2:10). Again the Scriptures say, "This mortal must put on immortality" (1 Corinthians 15:53). And here the words are addressed only to the faithful unto death. The Bible plainly teaches that "man is of the earth, earthy"; he is not spiritual (1 Corinthians 15:45-47).

Man is a human being; he is not a spirit being. "A spirit [being] hath not flesh and bones" (Luke 24:39). The Apostle in his argument in 1 Corinthians 15 plainly shows that human or natural beings have human or natural bodies; that Adam was a human and not a spiritual being; that none are given spiritual bodies except the faithful followers of Christ Jesus and they receive such only at the resurrection.

These Scriptures, then, prove conclusively (and there is none to contradict them) that man has not an immortal soul; that man is not a spirit being but a human; that man when he dies is dead and is not conscious; therefore could not possibly communicate with any who are living.

The testimony of the eminent witnesses above cited is in direct contradiction of the Bible. First, they deny that man was created a perfect human being and fell. On the contrary, they teach the doctrine of evolution; namely, that man evolved from a much lower order and has been progressing since. The Bible says that God created man in His own image and likeness (Genesis 1:26, 27) and we are certain that God never was an ape nor in the form of one. In addition to this, the Scriptures plainly declare, "His work is perfect" (Deuteronomy 32:4). The Scriptural account plainly shows that man violated God's law and was driven from Eden, his perfect home, sentenced to death, and died; that this sentence was in process of execution covering a period of 930 years; that the perfect man begot no children, but only the imperfect man under the sentence of death exercised his power of transmitting life. It reasonably follows, then, that the imperfect man could not beget a perfect child. Hence God's prophet wrote, "Behold, I was shapen in iniquity and in sin did my mother conceive me" (Psalm 51:5). Again, "Wherefore, as by one man [Adam] sin entered the world and death by sin, so death passed upon all men for that all have sinned" (Romans 5:12). Human experience corroborates the teaching of the Bible, as it is well known by all careful observers that the human race is degenerating and has been for centuries; and no evolutionist has ever yet been able to prove any progress of the lower order of animals to a higher order, nor has any connecting link been found between animals and men.

The testimony of the eminent witnesses above mentioned in substance denies the ransom sacrifice and one of them in particular expressly denies it. While the death of Christ is admitted, the value of His death is positively denied.

The Scriptures plainly teach that there is no other name given under heaven whereby we must be saved. (Acts 4:12) "I determined not to know anything among you save Jesus Christ and him crucified."—1 Corinthians 2:2.

The whole race was under the condemnation of death through Adam's disobedience. The only way for them to get out from under that burden is by a ransom price being provided and paid. A ransom means a corresponding price. Adam was a perfect man and there was no man on earth who could redeem the race or give God a ransom for him. (Psalm 4:7.) God promised that He would ransom man from the power of the grave and redeem him from death. (Hosea 13:14.) The life of Jesus was transferred from the spirit to the human plane. He was begotten by the power of Jehovah, was born holy, harmless, separate from sinners, without defilement. Concerning Him we read, "We see Jesus, who was made a little lower than the angels for the suffering of death, crowned with glory and honor; that he by the grace of God should taste death for every man."—Hebrews 2:9.

Sir Conan Doyle says, "He (Jesus) came down upon the earth to give the people the example and teaching of an ideal life." Of Himself Jesus says, "I am come that they [the people] might have life and that they might have it more abundantly." We believe that Jesus is a better witness than Sir Conan Doyle because He was the son of God and spoke with authority and knew more about His mission to earth than any man. Again Jesus said, "Even as the Son of Man came not to be ministered unto but to minister and to give his life a ransom for many." (Matthew 20:28.) Again Jesus said, "God so loved the world that he gave his only begotten son, that whosoever believeth in him should not perish, but have everlasting life." (John 3:16.) Sir Conan Doyle and his corroborative witnesses see the absolute necessity for denying the fall of man, the great atonement sacrifice and the paying of the ransom price in order to sustain their theory that the dead are alive, because the consciousness of the dead absolutely denies the necessity for a redeemer.

There is no teaching in the Scripture that has brought more comfort and consolation to the heart of the real thinker than that of the resurrection of the dead. If the theory that the dead are alive and can communicate with the living is correct, then the doctrine of the resurrection of the dead is absolutely false. Resurrection means a restanding to life, which would be impossible if the dead were already alive. Since these eminent witnesses admit

the authenticity of the Scriptures, let their case stand or fall by them.

The testimony quoted from Sir Conan Doyle admits that Jesus died and rose from the dead and ascended on high. St. Paul, the inspired witness of Jehovah and whose testimony we believe to be more reliable than that of the eminent scholars of our present time, concerning the dead said: "Now if Christ be preached that he rose from the dead how say some among you that there is no resurrection of the dead? But if there be no resurrection of the dead, then is Christ not risen: and if Christ be not risen, then is our preaching vain, and your faith is also vain. Yea, and we are found false witnesses of God; because we have testified of God that he raised up Christ: whom he raised not up, if so be that the dead rise not. For if the dead rise not, then is not Christ raised: and if Christ be not raised, your faith is vain; ye are yet in your sins. Then they also which are fallen asleep in Christ are perished."

The Apostle then proceeds to prove conclusively that Christ did rise from the dead and then positively states: "For since by man came death, by man came also the resurrection of the dead. For as all in Adam die, even so all in Christ shall be made alive. But every man in his own order: Christ the firstfruits; afterward they that are Christ's at his appearing." Again St. Paul states, "There shall be a resurrection of the dead, both just and unjust." (Acts 24:15). Jesus testified, "Marvel not at this: for the hour is coming in which all that are in the graves shall hear his voice and shall come forth." (John 5:28.) Jesus gave an illustration when he awakened Lazarus as to how the dead shall be awakened. (John 11:6-44.) It will be noticed in this last instance that Lazarus had been dead four days and Jesus did not call him back from the spirit world, but he caused the stone to be rolled away from the tomb and then "cried with a loud voice, Lazarus, come forth; and he that was dead came forth, bound hand and foot with grave clothes." The record is absolutely silent on the matter of his consciousness while he was dead.

Thus it will be seen that the testimony of the eminent witnesses above cited, who have recently startled the world with their statements, is flatly contradicted by the Scriptures.

Sir Conan Doyle in his testimony says, "My point is that psychical phenomena must, when properly understood and digested, make religion a very real thing and no longer a matter of faith, but a matter of actual experience." Jesus said, "Nevertheless,

when the son of man cometh, shall he find faith on the earth?" (Luke 18:8.) These eminent gentlemen would destroy faith in God's Word as a veritable fulfillment of the Master's prophecy.

But, some will say, can it be possible that these eminent scholars are telling falsehoods and trying to deceive the people by making them believe that the spirits of dead men can tip tables and make them walk, can cause the hand to write, can speak through mediums and can even make their voices heard direct? How these things impress the mind of another is illustrated by the following incident: The father of Mr. A had been dead a number of years. He was met by a spiritist, who said to him, "Mr. A, would you like to talk to your father?" Mr. A replied, "Why my father is dead." "Yes," replied his questioner, "but you can communicate with the dead." Mr. A expressed his unbelief. Then his questioner said, "Mr. A, are you willing to give the matter a trial and let me demonstrate to you that you can talk to your father? If you will go to a certain number on a certain street and call for Mrs. ——— and say to her you have come to communicate with one of your dead friends, but do not tell her whom; and then put her to the test and see if she can call up your dead father." Mr. A assents. He calls on the woman, who is known as a spiritualistic medium. He says to her, "I came here for the purpose of communicating with a dead friend. I am a skeptic, but I came at the instance of my friend and I want you to prove to me whether or not I can talk to some one who is dead." The medium replies, "If you will do what I tell you, I will make an effort to put you into communication with the one with whom you would like to talk. The conditions I impose upon you are these: First, you must sit quietly in that chair. You must not resist me with the power of your will, but be entirely submissive and willing to be convinced. You must then center your mind upon the person with whom you would like to talk." Mr. A agrees to the conditions and carries them out, sitting quietly, being willing to be convinced and, therefore, submitting his will. In a short time the medium announces the presence of some one who wishes to talk to him. Mr. A listens and presently he hears a voice speaking to him and he recognizes it as the voice of his father, long since dead. The father then relates to him certain events that transpired in Mr. A's boyhood and also tells him other things which Mr. A subsequently proves from other evidence is correct. A has been a Christian up to this time, thoroughly believing in the Bible. Now he goes away, however,

convinced that his father is alive and not dead and is able to talk with him.

The question is, Did Mr. A hear his father's voice? We answer, No, because his father was dead and the Scriptures conclusively prove that dead men do not talk. Experience proves the same thing. But can it be denied that he heard a voice? And we answer, No; nor will there be any attempt to deny it. We admit that he heard a voice. We admit that Sir Conan Doyle and all of his eminent associates who testify to communicating with the dead are testifying to what they believe to be the truth and that they have heard voices, seen writing and observed tables walk. But instead of this being the work or voices of the spirits of departed men, we answer that the voices and works are those of demons who never were men, and this we will prove by the Scriptures; and proving this assertion by the Scriptures ought to be sufficient to satisfy every one, in the light of other Scriptures heretofore cited, that the dead are not conscious and cannot communicate with the living.

Lucifer, who afterward became Satan, was in Ederas the overseer of man. He deceived Mother Eve and caused the death sentence to come upon her and Adam. In pronouncing this sentence, Jehovah said, "I will put enmity between thee and the woman and between thy seed and her seed. And it shall bruise thy head and thou shalt bruise his heel." —Genesis 3:15.

Satan was deprived of his position as overseer of man. Adam having lost his dominion, there was none in the earth in authority. Horrified at the results of Lucifer's wrongful course, the angels of heaven (sons of God) desired to uplift man and God permitted certain ones of them to undertake the task. (Hebrews 2:5; Genesis 6:1-5.) These angels were granted the power to materialize in human form and to assume dominion over the affairs of earth. They likewise had power to dematerialize. Satan determined that he would not be thwarted in his purpose of opposing Jehovah. He had become a liar and the father of lies and now, with a malignant heart, he set about to seduce these angels, his former companions in glory, and through them to retain control over man. He injected into the minds of these spirit beings the thought to take wives from amongst the daughters of men, which they did, thereby leaving their own loftier estate. Thus Satan caused the angels to sin and fall. The offspring resulting from this unholy alliance filled the earth with violence and God announced His determination to destroy all flesh in the earth. He

so advised Noah and then brought on the deluge.

Noah and his family, eight in all, not having been contaminated by these evil ones, received favor in God's sight and were saved in the ark which Noah had builded at the direction of Jehovah. The great flood destroyed all fishly beings save those that were in the ark. The angelic beings, however, exercising their power to dematerialize, were not destroyed. What became of them? The Bible answers that they were restrained of their liberty and confined in the darkness of the atmosphere near the earth. "God spared not the angels that sinned, but cast them down to tartarus [mistranslated hell] and delivered them into chains of darkness to be reserved unto judgment." (2 Peter 2:4.) "The angels which kept not their first estate, but left their own habitation, he hath reserved in everlasting chains under darkness unto the judgment of the great day." (Jude 6.) In this condition they were to be restrained until the judgment day, the inference being that at the judgment day they would exercise greater power than at any time since the flood. At no time since the flood have they been permitted to materialize in human form. We here assert that the judgment of the fallen angels is at hand and therefore this explains why they exercise so much more power now than at any other time. Of this we will speak later. Since the time of the deluge they have had power to communicate with the human race only through the instrumentality of willing mediums.

The Scriptures designate Satan as the prince of devils or demons. (Matthew 12:24.) In some manner Satan has dominated the other demons or devils. He is spoken of as "the prince of the power of the air" and "the god of this world." (Ephesians 2:2; 2 Corinthians 4:4.) The first lie was the word spoken by Satan to Mother Eve, "Ye shall not surely die"; and ever since he has kept before the minds of humanity the falsehood "There is no death." The theory that every man has an immortal soul finds proof only in Satan's lie. To sustain his false position Satan has ever kept before man's mind that the dead are alive, even more so than before death. The evil spirits otherwise spoken of as demons, under the control of Satan, have aided him in carrying out this great lie. Many times the Scriptures refer to them as "lying spirits."

The communication of man with these evil spirits impersonating the dead is not a new thing. It has persisted since the flood. When God made the Law Covenant with the nation of Israel, as a safeguard against these demons He provided in the Law that any one who would consult a medium concerning

the dead should be put to death. (Exodus 22:18; Leviticus 19:31; 20:6, 27.) An attempt to communicate with them was declared by Jehovah as an abomination in His sight. "There shall not be found among you a witch or a charmer or a consulter with familiar spirits, or a medium or a necromancer, for all that do these things are an abomination unto the Lord."—Deuteronomy 18:10, 12.

Saul, the first king of Israel, had a seance with a medium who pretended to call up Samuel similar to what the eminent witnesses above mentioned have related in modern times. (See 1 Samuel 28:7-20.) Samuel was a good prophet. He died. Saul, the king of Israel, became evil and God withdrew His favor from him. The king then directed his servants to find him a witch or spiritualistic medium with whom to consult. He was directed to the witch living in the cave at Endor. Knowing that it was his duty to put to death all such mediums, as provided by the Law; and knowing that if she recognized him as the king of Israel she would not operate for him, he disguised himself and then went to the cave to see her. Evidently the demons revealed to this medium that the man who stood before her was the king of Israel, and horrified, she exclaimed, "Why hast thou come to take my life?" Saul then admitted to her that he was the king but promised to preserve her life if she would obey him and call up Samuel, the dead prophet. The seance then took place. The demons caused to pass before her mind a vision of a man rising from the earth and the witch cried out; and being inquired of by Saul as to what she saw, she said she beheld an old man rising, wearing a mantle, the description being like that of Samuel the prophet. Saul fell prone upon the earth and then the medium proceeded to tell him that the message from Samuel was that on the morrow he should engage in battle with the Philistines, that he would be defeated and that the king and his sons would be killed.

Sir Conan Doyle in his testimony states, "Some mediums like Eusapia Palladino may be guilty of trickery." The demons played a trick on the witch of Endor and on Saul on this occasion and lied to both of them. Samuel was dead and therefore could not arise. History discloses the fact that the battle between Saul and the Philistines did not take place the next day but several days afterward and that all of his sons were not killed, but that two of them survived and lived for years.

From the days of the flood until now these evil spirits or demons have been unable to communicate with any one who was unwilling to submit to their

influence; and this explains why, in the incident above recorded, Mr. A was requested to remain quiet, not to resist with his will, but be willing to be taught and to concentrate his mind upon the one with whom he would like to speak.

When Jesus was on earth these demons possessed human beings, operated through mediums, and Jesus cast them out.—See Matthews 9:32, 33; 10:8; 12:22; Mark 5:1-20; 9:17-27; Luke 9:38-42.

These demons have minds superior to human minds and doubtless are perfect in memory. Having existed since the time of the flood, they are familiar with the events of earth and, this explains why one such could impersonate a human being who has been dead a long while. Sir Conan Doyle cites the instance of one who named himself Manton and who is said to have died in 1677 and who was Oliver Cromwell's chaplain. It is an easy matter for a demon familiar with the life of Cromwell and those living at his time to come forward and produce such evidence and thus overreach a mind that is willing to be convinced.

Mr. A above mentioned did not hear the voice of his father but he heard the voice of one of these demons, who being familiar with his father's life and history was able to produce facts having a tendency to convince the son that his father was still living; and the son, being ignorant of who these demons are, fell a ready victim to the delusion that his father yet lives.

But why, one asks, should such eminent professors as Sir Conan Doyle, Sir Oliver Lodge, Prof. Hyslop and other great and wise men be overreached by these demons. It might seem probable, says such a one, that a weak-minded person would be overreached, but it seems rather unreasonable that such great men should be mistaken. We answer that the greatest man that has lived is not equal intellectually to these spirit beings who are restrained in darkness. God foreknew and through His prophets foretold that these men, wise in their own conceits and in the eyes of others, would advance such argument in the times in which we are living, deceiving others and being deceived. Long ago He caused His holy prophet to record the words which subsequently St. Paul quoted: "For it is written [Isaiah 29:14], I will destroy the wisdom of the wise and I will bring to nothing the understanding of the prudent. Where is the wise? Where is the scribe? Where is the disputer of this world? Hath not God made foolish the wisdom of this world? For after that in the wisdom of God the world knew not God." (1 Corinthians 1:19-21.) Does it not really seem

foolish to sensible men who believe in the Scriptures for these great wise men to say, "Christianity must change or must perish?" In other words, they are stating that the great plan of redemption provided by Jehovah must yield to their increased wisdom and if it does not so yield then it must perish.

But, asks another, why should we attempt to deny the power to communicate with the dead when we get much consolation from the fact of talking with our dead friends? And if your contention is correct that it is the demons communicating, what purpose or motive would they have in impersonating people who had been dead for some time?

The answer to these questions is the real kernel of the nut, so to speak. There never was a crime committed except there was a motive back of it. The so-called communication of dead people with the living is a crime upon humanity because it blinds them to God's great purpose. The real motive is to keep the people in ignorance and in darkness concerning the provision that God has made for the salvation and blessing of mankind.

God said to man, "Ye shall surely die"; and Satan said, "Ye shall not surely die." Satan lied. Satan has ever opposed Jehovah's purposes and Jehovah has permitted him to do this for the purpose of teaching mankind a great lesson and magnifying His own (Jehovah's) power in due time. The great plan of redemption provided by Jehovah will become operative through Christ and His chosen bride. To Abraham Jehovah said, "In thy seed shall all the families of the earth be blessed." This was the seed of promise and it is the seed against which Satan has warred at all times. St. Paul plainly points out that the seed of promise is the Christ—Jesus the head and the faithful members of His body who continue to follow Him even unto death and participate in the first resurrection. When this promise was made to Abraham, Satan sought to have Sarah, his wife, debauched that the seed would be destroyed. When the promise was passed down to David, Satan attempted to have David killed.

When Jesus came to earth, recognizing that He was the promised seed, Satan sought to kill him and ultimately succeeded, through his agencies; but God raised Him from the dead and exalted Him above all others, making Him head over the Church, His body. Satan and the demons have warred against the Church and against Christ Jesus all through the Age. They have sought to destroy true Christianity and now the wise men boldly say, "Christianity must yield to the further deception of Satan or be destroyed. How many will be fooled? Jesus said

all except the elect, and if it were possible he would deceive the very elect.

Above we quoted the Scripture that there is no other name given under heaven whereby we must be saved except the name of Christ Jesus. The testimony of the eminent witness Sir Conan Doyle is to the effect that too much stress is laid on the death of Christ Jesus. He is a very prominent man and he and the other professors named have a wide influence over the people and the public press is open to these influential men now to influence the people; and thus Satan is blinding these great men and is blinding those who yield to them, including a large number of clergymen, just as the Apostle said it would be (2 Corinthians 4:3, 4). If the people can be thoroughly convinced that their dead friends are alive and not dead, then they will believe that man did not fall; that there was no necessity for a redeemer; that Jesus Christ did not die to save them; that there is no resurrection of the dead; and thus Satan and the demons would succeed in destroying the faith of the people in God's great plan of redemption. It is easy, therefore, to be seen that one of the greatest menaces to the human race to-day, the strongest delusion, and that which threatens to destroy the very foundation of faith in God's Word and plan, is the deception held before the people that the living can communicate with the dead.

From the Scriptures above cited (2 Peter 2:4; Jude 6) we have seen that these demons were to be restrained in darkness until the judgment day. The clear inference to be drawn from this is that when the judgment day is reached they would be able to exercise greater power than ever before because they would be in a measure at least released from their restraint. Other Scriptures clearly and conclusively prove that we are in the time of the judgment upon the nations and upon Christendom, and that this is also the time of the judgment of the evil spirits, the demons. This explains why the great war which has just ended was used as a means of inducing more people to turn to spiritism. The great war was foretold by the Lord Jesus as the time when "nation shall rise against nation and kingdom against kingdom," and that this would be one of the evidences of the end of the old order of things just preceding the inauguration of the new order, which is the Golden Age. The Great Master stated that a further evidence of that time would be that this war would be followed by general social disturbance, revolutions and like trouble throughout the earth; and we now see that in progress. As an additional evidence that we are at the end of the old

order and the time for the beginning of the new, which will bring in the Golden Age, Jesus said, "But as the days of Noah were, so shall also the coming of the Son of man be" (Matthew 24:37). It will be remembered, referring to the Scriptural account of Noah's day, that the demons then had overreached and debauched practically all of the human race and the people were indifferent to the preachings of Noah and they were going about pursuing that which would gratify their desires. They had disregarded God and His Word and we see exactly the same thing now prevailing; and it is being brought about chiefly through the ministration of the demons who did it in Noah's day. We warn the people, therefore, to be not deceived by the testimony of wise men, but to turn their attention to a careful and faithful study of the Bible, which only contains the pure doctrine with reference to God's provision for the salvation and blessing of mankind.

The above Scriptural proof adduced, therefore, conclusively shows that the dead are dead and are not conscious; that the living cannot communicate with the dead; and the testimony of the eminent wise men is fully and conclusively explained by the Scriptures, which show that in the time in which we are now living the demons would exercise greater power, deceiving the minds of many, inducing them to believe that their dead friends are alive and by thus pretending fraudulently to bring them a measure of comfort are in fact deceiving them and driving them away from God's great arrangement for their own salvation.

The result of this delusion will be in a short time still greater confusion, in fulfillment of Jesus' prophecy, "For then shall be great tribulation, such as was not since the beginning of the world to this time; no, nor ever shall be."—Matthew 24:21.

This time of great stress, however, will be followed by the reign of Christ, introducing the Golden Age, during which all blindness of mind and confusion will be removed and during which time the knowledge of the Lord shall fill the whole earth as the waters fill the deep, and every one will be brought to a knowledge of the Truth and in that time all the dead shall be awakened out of death and being brought to an accurate knowledge of the Truth (1 Timothy 2:3-6), will learn that Jesus Christ gave His life a ransom for all and that in due time the testimony will be given to all, and all will understand. And those who do understand and obey the Lord will be blessed by being lifted up to perfection of body and mind and united with their friends to enjoy everlastingly peace, prosperity and happiness.

ZIONISM

Its Origin

Its Import

What It Will Accomplish

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The Golden Age

Vol. I

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No. 2

CURRENT EVENTS—THEIR MEANING

A CUSTOM has long obtained throughout Great Britain of celebrating the first week of August as "bank holidays." In the summer of 1914 the Irish question was engaging the attention of England and causing much concern. At the same time there was a great deal of agitation among the laboring elements, and it was generally understood throughout Great Britain that the beginning of the bank holidays that year (August 1st) would mark the beginning of a great strike, which would not only tie up commerce but would stop every wheel in the United Kingdom—the very thing that has just come to pass. Necessarily the tension was high in Great Britain at that time and every one was in an attitude of expectancy. But just before the time for calling the strike, the great international war began. The labor agitation ceased and the labor elements joined hands with the other elements of the social order of Great Britain and went out to fight Great Britain's enemies.

But the war did not serve to permanently appease the wrath of the discontented of the labor and radical elements. Shortly after the war these elements in the social order began an agitation, and for the past few weeks Great Britain has been in the throes of not only a disturbed labor and financial condition, but what the public press terms a bloodless revolution. A metropolitan paper recently said:

"Great Britain's bloodless revolution is gaining fast and the Lords and Commons in daily session are progressing with proposals designed to equalize opportunities in every phase of life.

"The coal nationalization plan is gaining adherence in high places, despite the vigorous and virile attacks by the plutocratic holders and agents of coal tracts. It is contended by the government's witnesses and experts that the titles to these areas are invalid and have been unjustly and illegally held for centuries.

"The government is having its hands full with the unemployment question, and cool heads alone will avert a clash. Americans may have a better idea of conditions when they learn that whereas in the United States, according to Mr. Gompers, less than fifteen per cent. of wage earners are organized, in

the British Isles less than fifteen per cent. are not. In other words, labor is making tremendous efforts to gain entire control of the government. Lloyd George has been driven to radical extremes to conciliate labor."

We frequently hear the expression, "History repeats itself." We are forcibly reminded of the parallelism between conditions prevailing in Great Britain and those which once prevailed in Palestine. For centuries Jehovah dealt with the Jewish people, and Jerusalem was the ecclesiastical center of the world. English scholars have long contended that England occupies a position relative to the world similar to that occupied by Jerusalem in the closing years of the national history of Israel. The Prophet Jeremiah, who was specially sent to Israel between the years 646 and 606 B. C., describes the enemies of Jerusalem as "the people from the north country," a rash, radical element. This radical element from the north had come down and laid siege to Jerusalem. When word was brought that the armies of Egypt were marching toward Jerusalem, these peoples of the north, otherwise known as the Chaldeans, withdrew from the siege of Jerusalem to war against the armies of Egypt, and having defeated them, returned and again laid siege to Jerusalem with the well known result recorded both in sacred and profane history.

The peoples from the north described by the Prophet very fitly picture or represent the labor and radical elements of Great Britain that laid siege to the government of England in 1914; and hearing of the oncoming of the Germans they withdrew and fought the enemy until their defeat, only to return and renew their siege against the government of Great Britain.

In this connection we are reminded that according to Bible chronology the old social order of things reached an end with 1914. In other words, there the period granted to the Gentiles as a lease of undisturbed rulership of the earth ended. When Jesus was asked what would be some of the evidences of the end of the world (the old order) and the beginning of the new, he answered, "Nation shall rise against nation and kingdom

against kingdom," and this shall be followed by famine, pestilence and revolution. All of this trouble, he set forth, would immediately precede the inauguration of his reign of righteousness, which would bring in the Golden Age. It is a matter of history that the international war began exactly on time, 1914; and that this war has been followed by the great pestilence of influenza, which claimed more victims by far than fell in the war; and also by revolutions and general food shortage, which might be described as a famine. These evidences indicate that the Golden Age is at hand.

Every sane person who believes in the existence of Jehovah as the all-wise Creator must know that all the events which are transpiring in the world are occurring in harmony with his foreknowledge. The Bible records, "Known unto God are all his ways from the beginning" (Acts 15:18). Jehovah, then, must have foreknown the conditions prevailing in the world, including all the strikes, labor troubles, revolutions, etc. We have but to refer to the Scriptures to know that he foreknew such. His prophet was directed to record these words: "For, behold, the day cometh, that shall burn as an oven; and all the proud, yea, and all that do wickedly, shall be stubble; and the day that cometh shall burn them up, saith the Lord of hosts, that it shall leave them neither root nor branch" (Malachi 4:1). Fire is used in the Scriptures as a symbol of destruction and fitly represents the destruction of the old and unrighteous order to make preparation for the new incoming better order of things.

The public press fully recognizes the disintegration of the present order; that the fire is burning away the old structure, but the reason for it has seemingly been entirely overlooked. The Los Angeles Times recently said:

"One-half of the world is ablaze, the other half smoldering. The half capable of saving the property already on fire is just now over-occupied checking the spread of the conflagration to its own home buildings. A *sauve qui peut* spirit is at present the dominant incentive to most human action.

"For humanity is only just emerging, somewhat fearfully, somewhat recklessly, from the shadow of a great crime. The dawn of peace is obscured in the cloud-rack that follows the wake of the war tempest.

"For the time being the tendency of social forces is toward discord and disintegration. Almost every newspaper dispatch, foreign and domestic, affords evidence of this dangerous trend. England, France, Germany Redivivus, the three balance-wheels of Europe, are running out of true.

"Our people at home are fretting under new laws and new obligations; restless and irritated, they are turning away from the wisdom of the ages. These psychological causes are manifest in violent disturbances. The whole world is mutinous.

"In such sporadic outbreaks as the Winnipeg revolt, the Chicago riots, the promiscuous bomb-throwing at leading

citizens in the United States, the Saturnalia of the drags of the human race in unpoliced Liverpool, the general strike situation that threatens to paralyze England, we see the economic peril that springs from this general world-spirit of unrest, dissatisfaction and dislikes for all former restraints. As the cost of living goes up the price of human life goes down. The same spirit permeates not only popular tastes, but even popular decencies and morals.

"The horrors of the vilest war ever inflicted on suffering humanity have tried the world's soul to the limit of endurance. The reaction has been violent. Human nature is passing through a spasm of protest. Hence, riots and extravagance and immodesty and jazz music and shimie dances are a seething wash of unrest.

"Is humanity going on the rocks? It seems to be—the margin of safety at times appears to be cut down to a recklessly fine line. The ship is passing through stormy seas, steering closer than caution warrants to the reefs. And malcontents in the *fo'c'sle* are trying to unsteady the hand of the pilot."

Of course the writer of the above does not use "fire" in a literal sense, but uses it symbolically to represent the destructive elements of society, one warring against the other; and this fire that is destroying the present unrighteous order has come because individual and national selfishness has gone to seed, and the time of God's judgment is upon all such and the fire of his jealousy is burning away all the dross, preparatory for a better order. He foretold this long ago, saying, "Therefore wait ye upon me, saith the Lord, until the day that I rise up to the prey: for my determination is to gather the nations, that I may assemble the kingdoms, to pour upon them mine indignation, even all my fierce anger; for all the earth shall be devoured with the fire of my jealousy" (Zephaniah 3:8). In harmony with the foreknowledge of Jehovah thus recorded, the secular press of the world is recording the happening of the events. While passing through this fiery time it is not enjoyable to any one, but the one who really appreciates what it means and what shall follow after will take courage and rejoice. It really means the passing away of a system of selfishness and unrighteousness to be followed by a time of blessing.

The Lord's prophet, after using the above language applicable to the present time of burning, then says, "For then [after this fiery time of distress and trouble ends] will I turn to the people a pure message [a message that they can all understand and appreciate], that they may all call upon the name of the Lord, to serve him with one consent." There is real comfort in the thought that all of these troubles will but prepare the world to realize the blessings that God has in store for them. All these experiences are part of the Divine method of instructing mankind that the only feasible way of correcting the difficulties existing is by and

through the agency of Messiah's kingdom, the inauguration of the Golden Age. Before these blessings long hoped for and promised can begin, the present imperfect and unrighteous systems must end.

Part of the people for centuries have been in an exalted position, while the greater number of them have been far below them. The exalted ones, then, would be represented by the hills or high places, while the valleys would picture those of the lower walks of life. And looking to that blessed time of the Golden Age, the prophet of the Lord says, "Every valley [low place, low people] shall be exalted, and every mountain and hill [high people] shall be made low; and the crooked [unrighteous, profiteers, etc.] shall be made straight and the rough places [the courses difficult to understand or pass over] shall be made plain." This does not mean that the poor will ultimately dominate the rich, nor the rich be brought down to a low condition; but it does mean a general leveling process in which every one will have a fair opportunity for life, liberty and happiness under the righteous reign of the Messiah. It is, therefore, profitable for the people to appreciate the real meaning of this present disturbed condition and to prepare themselves to receive the blessings that must follow.

Among the present or old order of things there are various elements; namely, the rich and the poor elements, the high and the low elements, the radical and conservative elements. The public press daily records the heated expression of these elements one toward another. The strike of the laborers is a protest against the capitalists. They give utterance to heated words and it is not uncommon to speak of affairs between these elements as growing "hot." This trouble is not confined to one part of the world, but is everywhere, in practically every nation. We append some appropriate excerpts from the daily press as evidence of the fervent heat that is prevailing among these various elements. The Philadelphia Public Ledger says:

"What have the people of Italy been rioting about? High prices. To read the recent cablegrams from that land of long history and magic beauty one would have expected the rioting to be over Fiume or the Adriatic Islands or the exclusion of Italy from the French alliance. But the source of the trouble was more commonplace and unsentimental. It was simply that the grocer charged too much for 'cats' and the tailor for clothes.

"Europe is thinking of its stomach and its back, not its political rights or its national boundaries.

"And Europe has no monopoly on this line of thought. The plain people of America are more interested to-day in the steadily mounting prices of most of the necessities of life and the constant warnings that things will be worse before

they are better than they are about 'Article X' or the true story of Shantung or the status of the Monroe Doctrine in relation to the League covenant. This is not selfishness or insularity, but the same mental process which causes a cinder in a man's eye to engross more of his attention than does a new moon discovered in the neighborhood of Jupiter."

The London *Daily Herald* records conditions of unrest existing in France in the following paragraph:

"The reactionary papers like the *Action Française* and the *Democratique Nouvelle* are, of course, in a condition of hysteria, crying that it is all a Bolshevik plot, a German plot, a plot to ruin victorious France. Leon Daudet, in the *Action Française*, says he cannot express his disgust and horror. In point of fact, the movement is not organized at all. But this makes it perhaps only the more significant, for it is a spontaneous manifestation of the deep discontent among the whole mass of the workers.

"The main immediate cause is of course 'la vie chère,' the high cost of living, which people in England cannot possibly appreciate. But apart from that there is a general sense of disillusionment and disappointment. Victory has turned into dust and ashes, and the workers of France are realizing that for them four years' struggle has brought nothing."

From Paris comes the word that the following trades are (or were at the time of the correspondence) on strike: metal workers, tailors, milliners, bootmakers, mechanical modellers, saw-mill workers, printers, plumbers, butchers, carpenters, glove makers, builders, newspaper employees, subway men, transport workers, bronze workers, taxi drivers, electrical workers at Bourget Company, employees of Maison Brassert, Maison Breguet, Maison Dufagel, and aeroplane workers at Courtevoie. In France outside of Paris builders are on strike at Valenciennes, timber workers at Sainte-Tulle, tramway workers at Caen, gas workers at Nevers, metal workers at Grenoble, electrical workers in Lorraine, miners in Pas-de-Calais.

As further proof of the spirit of discontent and the heat prevailing among the elements, we quote from the *Portland Oregon Journal*:

"When has there been such a tumult?

"A hundred thousand strikers in the building trades in Chicago!

"A hundred and fifty thousand railroad shopmen on strike in America!

"A Los Angeles lawyer's house dynamited and burned because he assisted in prosecuting radicals!

"Whites and colored in near civil war in Chicago!

"Strikes in full swing or incubating in many American cities; labor unrest all over the world!

"A night of riot in Liverpool described by a newspaper as 'the most distressing night ever passed in a civilized city'!

"Strikes of policemen, street car workers, railway operatives and mine workers in various parts of England!

"Where are we headed for?"

The *San Francisco Call and Post*, referring to similar conditions prevailing in different parts of the earth, speaks of it as "a general breakdown of civilized restraints throughout a large part of Central and Eastern Europe. . . . The devil is let loose in the world and the hearts of men are full of cruelty." We quote:

"Often of late the atrocities with which the world still echoes seem less like the crimes of individual men than an obscene disease which has seized upon humanity. The course of this disease may even be mapped out. It began, so far as this generation is concerned, in Armenia, where the Turks killed the Christians without provoking the so-called Christian nations to anything more than mild protests. It spread to the Balkans, where the second Balkan war was preceded and accompanied by the most appalling massacres. The official report upon these massacres, in which no one's hands were clean, was a sensation early in 1914.

"With the outbreak of the war between Serbia and Austria the disease blazed up with renewed fury, and when the little war became a great one the germs were carried into France and Belgium on the one side and into Russia on the other. The Germans and Russians committed atrocities upon each other in the east, and in Poland both sides persecuted the Jews.

"The Bolshevik revolution introduced a new element of hatred—envy and desire for revenge on the one hand, fear on the other. The number of killings by the Bolsheviks has been exaggerated, but though it is claimed Lenin has not killed wantonly, it is admitted he spared no life that stood in the way of his success. On the outskirts of the revolution hovered a barbaric fringe, the offspring of poverty and oppression, who killed like beasts and were in turn killed, even by the revolutionists.

"The enemies of the revolution were from the first as bloodthirsty as the worst of the terrorists. In Finland, Mannerheim is reported to have killed about nine thousand. Kolchak is known to hold down his 'liberated' districts with a bloody hand and has executed hundreds, including several members of the Constituent Assembly who took refuge with him from the Bolsheviks; the Japanese hold large parts of Siberia under a reign of terror, and Petlura's forces are charged with the almost incredible crime of killing or instigating the killing of 84,000 Jews in the Ukraine.

"Spontaneous as well as organized cruelty has been rampant everywhere. The forces of order and of disorder are almost equally savage. What is going on seems to be a general breakdown of civilized restraints throughout a large part of central and eastern Europe. It is just such a breakdown, apparently, as preceded the destruction of the old Roman civilization fifteen hundred years ago. The devil is let loose in the world, the hearts of men are full of cruelty. Such a degeneration can drag great masses of men down toward the beast just as it can individuals. Conceivably the whole world may be attacked by it. Neither western Europe nor America is safe. We do not know what tempests may sweep over us.

"There is no antidote except a clinging to a few old standards which have proven good. We can not tell what of our institutions will survive, or if any will survive unimpaired, but we can be sure that the more tolerant we are, the more kindly, the more willing to study the other man's point of

view, the more chance we shall have of holding on to what we most value in civilization. This is no time for the cultivation of hate. It is no time to denounce or vilify even the worst and weakest of mankind. It is a time for understanding. Only that and its fruits can save us—only Christianity."

Capitalists have become convinced that the more they yield to the demands of the labor and radical elements, the more will be demanded of them, and there is a growing antagonism between the two elements. There is a threat to withdraw capital from public and private enterprises, which, of course, would depress business and financial interests to the detriment of all. With both capital and labor idle, the two elements would disintegrate or melt. With a constant warfare between the two the result would be the same.

Recently a bill was introduced in Congress that is known as the Plumb plan for the control and operation of the railroads. Its chief provisions are these:

1. Purchase by the Government of all the railroad systems on valuations determined finally by the courts.
2. Operation by a directorate of fifteen, five to be chosen by the President to represent the public, five to be elected by the operating officials and five by the classified employees.
3. Equal division of surplus, after paying fixed charges and operating costs between the public and the employees.
4. Automatic reduction of rates when the employees' share of the surplus is more than five per cent. of the gross operating revenue.
5. Regional operation of the lines as a unified system.
6. Building of extensions at expense of the communities benefited, in proportion to the benefit.
7. Payment for the roads made through Government bonds bearing four per cent. interest.

It is claimed there are six million members of labor organizations advocating this bill. The *New York World* commenting upon the bill says: "The difference between the Wall Street looting system and the Brotherhood looting system is that Wall Street provides the original investment for its operations, while the Brotherhoods insist that the United States must furnish the money."

A labor paper, speaking for the labor element on the same subject, says: "The American labor unions and the national farmers are not going to permit the return of the railroads to private hands. The robbery of the people by the alleged owners of the railroads has been stopped, and the bandits are not going to be restored to their plunder by any means. Let every one take notice. The unions are out for national ownership of both the railroads and the coal mines. Congress will

find out that any attempt to return the roads will precipitate a great conflict which will be won by the unions."

Another paper, the mouthpiece of another branch of the radical element, says: "Nothing less than the foundations of private ownership of every public industry are menaced by the Plumb plan bill now in the lists against the old system of railroad control, which has run its course and amply proved its inefficiency and worthlessness." Continuing, this writer points out that "the working class" has in its favor "the menacing unrest due to the soaring cost of living, the ability of the workers to counterbalance capitalist control of Congress by the general strike if aggression should force the use of this weapon, and the plain fact that the Plumb plan is the only workable way out of the railroad *impasse*, something which no amount of slander regarding it can disprove."

Another great daily, speaking for the financial side of the question and which shows how the two elements are increasing in fervent heat one toward the other, says:

"Financial men do not mince words; they state pointedly they will back employers to the limit; will permit every important industry in Chicago and in the Middle West territory to be strike-stricken rather than submit to an unreasonable wage or unjust conditions. If it must come to a drastic issue between employer and employee, well and good; they, the representatives of capital declare, will not evade the contest; let the thing be settled now and definitely; they are ready to meet and combat it to a final conclusion, is the assertion."

There is an ecclesiastical element which is described in the Scriptures by the symbolic term "heavens," and it is well known to all that this element is melting and disintegrating. The Rev. Dr. Graham is reported recently to have said:

"World-rocking social upheavals, threatening to destroy all religion, are due to come in the next few years. America, in the meantime, is in peril of becoming drunk with a sense of its power and of being destroyed, therefore, as have other nations in the past."

The Rev. Dr. J. R. Stratton of New York City is reported by the New York *American* as saying:

"We see churches inviting opera 'stars' to sing at their services and securing 'movie artists' in the frantic effort to attract the crowd, and very recently we had the announcement in our papers of one pastor who introduced the jazz band into his services.

"I believe, my friends, that these new church methods are a shameless surrender to the worst tendencies of the times.

"And the next stage—what shall it be? More pronounced vaudeville features? Tight-rope walking across the heads of the congregation from the gallery to the choir loft? Consecrated clog dancing and the 'religious ballet' between the preacher's 'stunts'? Are we to have this?"

The condition recorded by the public press as above quoted is not one that has come suddenly upon the world but has crept in gradually as a thief in the night. It is impossible to read this record of present-day events without having in mind the prophetic words recorded nineteen centuries ago by the inspired apostle and prophet of the Lord who said: "But the day of the Lord will come as a thief in the night; in the which the heavens shall pass away with a great noise, and the elements shall melt with fervent heat, the earth also and the works that are therein shall be burned up. . . . Looking for and hasting unto the coming of the day of God, wherein the heavens being on fire shall be dissolved, and the elements shall melt with fervent heat." —2 Peter 3:10-12.

It should be remembered that St. Peter was a prophet as well as an apostle; that he, as other prophets, was a mouthpiece of God, to expound or give utterance concerning things that would come to pass. As were other of God's prophets, he was moved to write of things which, not being due in his time or day and therefore not appreciated then, are now due to be fulfilled and can be appreciated by those who observe the events transpiring in the light of the testimony recorded in Holy Writ.

Throughout the Scriptures "earth" when used symbolically, represents society, or the prevailing social order. "Heavens" used in the symbolical sense means powers of spiritual control or ecclesiastical elements prevailing at a stated time. "Fire" used in a figurative sense, as in the Scriptures quoted above, represents or pictures destruction. With prophetic vision, this apostle, looking to the end of the age, the time through which the world is now passing, refers to the period as "the day of the Lord" and states that it will come upon the world "as a thief in the night," that is to say, unobserved except by those who are watching; and during that time the heavens (meaning the present powers of spiritual control) shall pass away with a great, hissing, troublesome noise. And so we see the present ecclesiastical elements mixing up with the worldly elements and disregarding the teachings of Jesus and the apostles and melting away or disintegrating. Continuing, the apostle says: "And the elements [clearly meaning the rich and poor elements, the financial and labor elements, the radical and conservative elements, etc.] shall melt with fervent heat;" that is to say, they will become so hot one toward another that the result will be a withdrawal of capital and a suspension of labor through strikes, causing the elements to melt or disintegrate.

It would be distressing indeed if the present order should pass into a chaotic condition, and there would be no basis for our hope of a better condition to come. But the Lord, through his prophetic Witness, the Bible, records a sure basis for our hope of a better condition to follow immediately after the present disturbed conditions. St. Peter further says: "Nevertheless we, according to his promise, look for new heavens and a new earth, wherein dwelleth righteousness" (2 Peter 3:13). Those here referred to as "we" of necessity must be the class to which St. Peter himself belonged; and since he was a fully consecrated Christian, following in the footsteps of his Master, Christ Jesus, he must have meant all who come into this covenant relationship with God through Jesus Christ and who strive to be obedient to the Lord's arrangement, who have full faith and confidence in the promises of God and who look for, as well as hope and pray for, the coming of Messiah's kingdom—that class who have learned to sincerely pray as Jesus taught them to pray: "Thy kingdom come; thy will be done on earth as it is done in heaven." Looking for these things, they confidently expect them, and they base their expectancy or hope upon the sure Word of prophecy.

The Apostle Paul tells us that the god of the present world is Satan (2 Corinthians 4:4), who rules in the hearts of the children of disobedience, and that he has blinded the minds of the people to God's real purposes. The old order of things is the outgrowth of the best efforts of selfish man; and it is clearly demonstrated that where selfishness prevails and the order of society is directed by selfish agents the best results cannot be attained for the people in general. The "promise" mentioned by the Apostle in the above quotation evidently means the great promise which God made to Abraham, assuring him that "in thy seed shall all the families of the earth be blessed." St. Paul clearly defines what is meant by this seed, saying, "Now to Abraham and his seed were the promises made. He saith not, And to seeds, as of many; but as of one, And to thy seed, which is Christ" (Galatians 3:16). The term Christ means Messiah. For centuries the Jewish people have been looking for the Messiah. The Apostle then describes who shall constitute this Messiah—the Christ, the seed of Abraham—saying, "As many of you as have been baptized into Christ have put on Christ. And if ye be Christ's, then are ye Abraham's seed, and heirs according to the promise."

This class, then, relying upon the Scriptural assurances, have confidently looked for the time coming when Messiah would constitute the new, invisible ruling power—the "new heavens;" and by the establishment of his rule in the earth through his perfect human

agencies would institute the "new earth," otherwise described as the Lord's Kingdom, which would fully establish and bring in the Golden Age. In that age righteousness will prevail and blessing will be administered unto all the people who yield themselves in obedience to the righteous government.

St. Paul referred to the suffering of humanity, the distress amongst the people, and the coming blessings when he said, "The whole creation groaneth and travaileth in pain together until now, waiting for the manifestation of the sons of God" (Romans 8:19, 22). The word travail here used has application to the spasmodic pains of a woman in child birth and pictures the incoming of the new order. Truly the human race everywhere is groaning and travailling now in a condition of pain. It is longing for deliverance and a better time, but knows not how it is coming. The apostle says men are waiting for "the manifestation of the sons of God;" that is to say, for the kingdom of Messiah, the inauguration of the Golden Age. All this unrest and confusion, therefore, is but a sign, evidence or proof, to the thoughtful and reverent person that we are approaching the day of general blessings.

An unanswerable argument proving that this is God's due time for the introduction of the new order of things is that he is lifting the veil of ignorance and gradually letting in the light of intelligence and invention upon mankind, exactly as his prophets foretold. (See Daniel 12:1, 4.) Great enlightenment has come gradually to the people. Had knowledge come sooner the trouble would have come sooner; and though society might have reorganized itself after the storm, it would not have been "a new earth [social arrangement], wherein dwelleth righteousness," but a new earth or arrangement in which sin and vice would have abounded much more than before.

It is the privilege and duty of the Christian at this important hour in the world's history to aid and comfort his fellow men. The Christian cannot engage in the strife that breeds more discontent. Rather should he strive to point the world to the sure Word of prophecy now in course of fulfilment and to the sure promises that a better day is coming. The poor world groans, not only under its real, but also under its fancied ills, and especially under the discontent, selfishness, pride and ambition which fret and worry men because they cannot fully satisfy themselves or be satisfied. The Christian can see both sides of the question, and it is his privilege and duty to counsel those willing to hear to be content, avoid strife and patiently wait until God's due time and way for bringing in the blessings so long promised to mankind.

LABOR and ECONOMICS

THE CHALLENGE TO STEEL

THE little David of the newly-organized-into-union employes of the steel industry in his challenge to the steel Goliath makes demands that are interesting and typical of the wants of workers affiliated with the trades unions. Whether the reasonableness of the unionmen's position can find its way into the reactionary philosophy which Goliath has assumed since Andrew Carnegie's Homestead battle remains to be seen, for the unionized employes are said to be few and the employers belittle their efforts.

In the long-ago the relationship between employer and employe used to be that of a relatively well-to-do friend to his working friend who was good at carpentering, or something else. As an employer hired more men he knew each man less, and finally he knows the worker not at all, save as a producing unit in a cost record. The human element gradually vanished, and employers cultivated political economists to think out justifying reasons for the unsentimental treatment of workers. The economists devised the theory that labor, that resultant of human effort and emotion often unto death, was a "commodity" to be traded in like hides or copper. This is the accepted economic theory, and the workers in compact groups have adopted it to force from employers the price for their "commodity" that will enable the worker to have a good home for wife and children, with plenty to eat and wear, and enough education besides so that the coming generation may get out of the evil conditions forced upon labor and excused by the "commodity" theory. So labor demands the right to turn the employer's theory against him and to sell him in one big bargain the labor of all the workers, instead of continuing to give the employers the right to force undesired prices for labor upon the men individually. Employers do not like this "collective bargaining" for it does away with some of the profits they have secured on under-paid work, but it stabilizes labor prices, and all hands know what to figure on as long as the uniform price scale is in force.

No one likes the man that compels another to do something he objects to doing, particularly if it cuts down one's personal purchasing ability. So the employer does not like to keep in his employ workers that strive to force the employers to pay a price agreeable to the workers for their "commodity." Such men are marked for future reference, and at a con-

venient moment are quietly dropped from the pay roll. The steel trades union seeks to have such men reinstated, so that the workers may be represented by men of adequate ability to cope in bargaining with the employers; and they ask that such representatives of labor as may have been discharged be paid for the time lost from work since their discharge.

In the dawn of the industrial age, when water wheel and steam engine was first hitched up to a string of machines, employers hired men on the theory that the longer hours a man worked the greater his aggregate production. Men, women and even little children were worked such long hours that they seldom saw the sunlight outside of factory walls; for seven days a week was none too much for "Christian" employers to exact of workers who were poor and couldn't wear good clothes and who sometimes swore or lost their tempers, to the scandalization of refined and "noble" ladies and gentlemen. But by hard battles and the assistance of philanthropic friends-of-humanity in high places, the fourteen and sixteen-hour days were cut to twelve, then to ten, to nine and to eight, and there is considerable unbiased opinion among efficiency men that the hours might drop to six without diminution in production. So the steel workers ask for a universal eight-hour day throughout the industry.

The galley slave chained to the immense oar of an ancient ship, used to work day in and day out till he dropped down sick at his post and was neatly dispatched and fed to the sharks of the deep. In pagan countries men drag themselves to work in a hopeless every-day grind. In a revolutionary France, insanely doing away with everything savoring of a dreadful past, they had one day without work in ten. In America we have what is scientifically conceded to be the most efficient arrangement, viz., one resting day to six working days. But in our steel industry thousands work every day without respite, for what can one man do against Goliath, even though conscience and a weary body demand the needed ration of rest to work? So labor asks the steel chiefs for "one day's rest in seven."

It seems inconceivable that in a day when stores close evenings at five and Wednesday afternoons, and women workers are not permitted to work more than so many hours a week, that there should be straight twenty-four hour shifts of work anywhere in America. Yet there are shifts in the steel industry when

the worker goes on say at five, and afternoon follows morning, and evening to midnight succeeds the day, and then the wee small hours run on to another five A. M. before the worker rests from his labor. Men work like this not because they want to but because an impersonal industry forces them to do so or suffer a dismissal which may keep them from getting work anywhere in the country such as they are fitted for. Labor is eager to work, but it wants to work like a human being, and so it asks Goliath for the abolition of the twenty-four hour shift.

A man's wage in the ultimate consists not of money but of the things obtainable through the day's labor. If anything happens, designedly by the employer, or otherwise, whereby he gets less for his money, he suffers an actual cut in wages. Rising prices are another name for diminishing wages. If the wage before the price raise was scarcely enough for subsistence, the actual wage reduced by the high cost of living places the worker in a plight. For America to remain the America that was a good place for the common people, the worker must receive a real wage enough to keep up his health and his family's health, buy good clothing, food and other necessities for all, give the children an education to make life worth while, and lay by for rainy days and old age. Therefore the steel worker asks for "increases in wages sufficient to guarantee American standards of living."

If the same wage is paid in all branches of an industry for the same kind of work, it places the buyer on a basis where he knows where he stands in his own competitive affairs. With the present varying wage scales, the highly paid employes in one plant may be kept partly idle while work is diverted to plants paying less for the same kind of work, thus increasing the number of low-paid employes at the expense of the high-wage ones, and decreasing the chance of the low-paid workers securing suitable raises in pay. The workers are seeking "standard scales of wages for all crafts and classification of workers."

Any man expects to work a reasonable number of hours. That time is sold to his employer. The rest of the day and of the night is his own time, as much as the clothes on his back or the watch in his pocket. To devote personal time to an employer's use is like loaning the employer one's overcoat or shoes, and for such service he should receive a return added to the regular wage rate. The question of loyalty to an employer might enter in with an employer who had personal relations with the employe, but where an employer deals with labor as a "commodity" the suggestion of loyalty in connection therewith is a contradiction of terms, for steel, sugar or a typewriter

have no sentiment of loyalty for anyone. Labor is not unreasonable in requesting "double rates of pay for all overtime and for work on Sundays and holidays."

On the impersonal "commodity" theory of wages the relations of employer and employe are theoretically like those of two machines handling parts of a product. Labor reasons that in the long past employers have compelled labor to do a great many things that it did not do willingly, and why should not the employer be compelled to do some things unwillingly himself? Labor finds some difficulty in keeping the union men paying their dues when the pinch of bad conditions is not felt and there is no strike on.

In the interests of efficiency, which signifies the obtaining of the last grain of product per wage unit, employers favor having only the most nearly physically perfect men working for them. This is bad for the men who are a bit old or not very well or very strong, but who are as well qualified as the stronger men to do not an excessive but a good day's work. The employer can handle the younger men better, and they work harder for the advancement which several years of experience will teach them comes to few, and to obtain which the young men are willing to sacrifice all the rest of the workers on the altar of personal ambition. So, to take from the employer another instrument giving him undue advantage in bargaining for the great industrial "commodity," the workers demand "abolition of physical examination of applicants for employment."

No matter what concessions labor may obtain from its employer, or vice versa, neither party will be fully satisfied. If the employers should own the whole thing bodily, including the plants and the workers as slaves, they would possess no real satisfaction, for their good would be at the expense of their fellow men. Men are not a commodity, the economic fiction notwithstanding. And even if labor should reach the extreme of taking over the ownership and management of the plant, there would be no contentment therewith. Both parties are operating from the point of self-interest, whereas happiness and contentment reside at the other pole of unselfish interest, by each in all and by all in each. At no very distant day all parties will attain that happiness which they seek, and then labor troubles will cease forever. THE GOLDEN AGE solvent of labor difficulties is the golden rule. Before long the oft-repeated prayer will be answered and God's will will be done on earth as it is done in heaven. The steel industry will become a vast brotherhood with the union motto realized of "One for all and all for one."

SOCIAL and INDUSTRIAL

REBUILDING THE WORLD

ACCORDING to Lloyd George the world is about to be rebuilt into a world of sunshine for all. Of the old world the British Premier paints a sombre picture: "What was the old world like? It was a world scarred by slums, disgraced by 'sweating' where unemployment through the vicissitudes of industry brought despair to multitudes of humble homes; a world where, side by side with want, there was waste of the inexhaustible riches of the earth, partly through ignorance and want of foresight, partly through entrenched selfishness."

Lloyd George has lined up with the inevitable, and set his face against further existence of the order that has "waxed old," and which by 1914 had begun to pass away. He says, "If we renew the lease of that world, we shall betray the heroic dead. We shall store up retribution for ourselves and for our children."

Among millions of others the great Welshman sees the futility of seeking to perpetuate that which is worn-out: "If any are inclined to maintain this old world, let them beware, lest it fall and overwhelm them and their households in ruin. The old world must and will come to an end. No effort can shore it up much longer."

The Golden Age is coming and Lloyd George may be among the billions to hail its glory and in some little way help to extend its beneficent influence, for he professes willingness to help: "It should be the sublime duty of all without thought of partisanship to assist in building a new world where labor shall have its just reward and indolence alone shall suffer want."

Much as the great ones of the present order prate about "rebuilding," they will be permitted to play but an insignificant part in that work, for their very contact with present evil methods disqualifies them from constructing the pure edifice for restored humanity. Their stewardship has about come to its end, and into their place will step men whose unswerving loyalty to God has qualified them to carry out the divine purposes for the restoration of a distracted and crushed world.

Concerning the sequence of coming events the Biblical prediction is, first, concerning this worn-out world: "They shall take away his dominion, to consume and destroy it unto the end." Of the "rebuilding" the Great Book says, "And the kingdom and

dominion, and the greatness of the kingdom under the whole heaven shall be given to the people [the truly faithful Jewish and Christian people] of the saints [the prophets and apostles] of the most High, and all dominions [rulers] shall serve and obey him. Hitherto is the end of the matter." (Daniel 7:26-28.) In due time even the Lloyd Georges will turn to God alone for divine aid in remedying conditions too hard for human wisdom to control.

HOW PROHIBITION WORKS

IN practice, prohibition works better than some thought it would. There were some who looked upon the closing of saloons, breweries, distilleries, malt houses and bottling works with alarm, lest the army employed in these places should be without employment and a considerable burden be added to an already heavily-burdened people.

Now it appears that the matter is rapidly adjusting itself. The buildings are being turned into factories and salesrooms for the production and distribution of all kinds of things that men and women need and use, and which many are now able to get instead of the liquor that once consumed their surplus earnings.

It is no loss to a community when the money once spent for liquor goes for ice cream, soft drinks, movies and other frivolities; it is a gain, for the worker is entertained, and without his injury. And if the money once spent for liquors goes for better food for the family, better clothing, better furnishings, music, books and the thousand and one other things that improve health and comfort of mind and body all can rejoice in the change, even including those who once had profitable work in the liquor business, but who could never take satisfaction in it because their fellows were cursed and cursed only by the work they did.

The Lord used the war as the deciding factor for bringing the liquor traffic to an end. We do not believe that it is the will of the Lord that the American people should ever have in their midst again a means whereby some can rob others of reason and health and bring misery to their wives and children by pandering to their diseased appetites. Nor do we believe that the American Government would ever wish again to license it.

"Wine is a mocker, strong drink is raging." (Prov. 20:1) Before the prohibition era statistics showed that 72 per cent. of all criminals were made so by strong drink.

PROHIBITION FOR THE POOR

ON the physiological effects of alcohol the school books leave but one answer, for mentally, morally and physically the total abstainer always has the best of every user of alcohol. From a criminal viewpoint the desirability of sobering the southern negro speaks volumes for national prohibition. From an economic point of view efficiency men are quite unanimous in preferring the non-drinker. The voice of science concurs that the drug alcohol should be placed with other habit-forming drugs beyond the pale.

Thoughtful men, however, felt that there might arise from prohibition consequences easily as serious as the continued use of the drug. The prohibition leaders are well meaning persons, but largely men and women of the zealot type, rather narrow-minded, unacquainted with the broader aspects of public or private administration, and particularly inept in the foreseeing and weighing of psychological results which to the sophisticated politician are his hourly stock in trade. The prohibition "fans" either did not understand the psychology of a prohibition forced upon an unwilling population, or they regarded it a negligible factor.

Some would-be managers of other people conceive of the handling of human beings as like the moving of insensate raw materials—just get them in a legal steam shovel and put them somewhere, and there they stay put. But people have minds, while things have not; and if they are to be made to go, they have to go first with their minds, and afterwards they make their bodies go. There is no permanence in an arrangement where bodies are put somewhere first without minds being put there also. Physical force fails; it puts bodies without putting minds. Unless extreme coercion makes the minds think it is wiser to go along with the bodies, the minds sooner or later try to put bodies back; and then not merely is the trouble for nothing, but perhaps brute force stupidly outrages mind by putting the bodies back again.

It is claimed that the putting of drink away from the people was accomplished without first converting the minds of the people. If the many had been accorded the chance to vote, it is not quite certain that prohibition would have come. Pressure was brought to bear upon a few—the legislators. Legislators are peculiarly susceptible to the methods of the zealot reformer; their political stability depends on the voters' state of mind; and if a moral-reform zealot happened along in war time, when no one dared to be suspected of hindering the Great Crusade, the legislator went docilely along with the reformer rather

than have the voters all worked up over him. So war prohibition went through, with little thought about it by the common people as something for peace times also, in the most difficult form to change back again—an amendment to the federal constitution.

The popular mind not having assented to the peace prohibition proposition it is at work to get back where it started from. All kinds of arguments are being suggested to the people why the prohibition which is, ought not to be. There is dissatisfaction, and there are not lacking powerful financial interests to spend money to see that anti-prohibition thoughts get into the disturbed minds of the people.

Thoughts of discontent travel in flocks; and, not because the people care so much for beer, but because they have a grievance over a sumptuary law, they conjure up the whole family of grievances, real and imaginary.

First is the personal-rights grievance. The man who wants to get tipsy likes to assert his personal right to abuse his health, his mind, his job, his reputation and his wife and family, and is able to build up a plausible argument covering an extensive field of personal rights versus civil rights.

A curious phenomenon of the war-prohibition situation is that the saloons remain open. In this is an astute psychology. Users of liquor find that taking away drink signifies taking away a method of life. The bar across which the soft drink now finds its way was once a center of good-natured discussion. Now every bar is a protracted indignation meeting.

Prohibition appeals to a large number as a wrong, because many consider that it was inflicted on them "dishonestly," slipped over when it was unsafe for one to assert a right, because some one else could vociferate that said assertions might be inimicable to the war.

The news is out through waiters, servants and merchants that the wealthy have stocked their cellars with drinkables and that there is no prohibition for the man who had a few hundreds or thousands of dollars to invest in liquid refreshments. Most drinkers are poor, and they object that what puts them under the prohibition law and others not under it is the distinction between poverty and wealth. This the brewery interests find no difficulty in magnifying into a national scandal.

Cultivated discontent is now a specialty of the liquor interests and may be expected to come to the surface through devious channels. The unclosed saloon becomes the center of strike propaganda. The saloon-keeper is a pastmaster in politics, and he who has been able to control votes can now control cur-

rents of discontent. Struggles over wages may be more numerous and show a vicious spirit because of the class propaganda which is quietly going on in corner saloons. And it is easy to imagine that strikes may not be the only methods employed to harass and annoy those whom they are led to regard as the privileged classes.

There is no human cause better than temperance in general, but it is questionable whether at this particular critical time the interests of temperance have not been somewhat hindered by what is essentially a wartime measure.

The Good Book says, "Be not among wine-bibbers for the drunkard shall come to poverty" (Proverbs 23:20), and "Who hath woe? who hath sorrow? who hath contentions? who hath wounds without cause? They that tarry long at the wine; they that go to seek mixed wine" (Proverbs 23:29-30); but it also says, "To everything there is a season, and a time to every purpose under the heaven; a time to rend, and a time to sew; a time to keep silence and a time to speak." (Ecclesiastes 3:1-7) In due time under Golden Age conditions the people will be elevated enough not to want any drug stimulation, alcoholic or otherwise.

SIDE ISSUES OF PROHIBITION

THERE is no reform without unexpected minor results. One of the outcrops of prohibition is the effect on the vineyard industry. California is hard hit. Investors have \$200,000,000 in the grape-growing industry and some 50,000 men, women and children work in the vineyards and allied interests. The 400,000 ton 1920 crop worth \$12,000,000 is at stake; it is too much to be eaten, and is a loss, it is feared, if not crushed and converted into wine.

At great cost of time, labor and money 170,000 acres of practically useless land, some of it almost a desert, has been transformed into vineyards by some 8,000 grape growers. One of the tragedies of prohibition is that hundreds of families, aggregating perhaps 40,000 persons, may lose their all should these wine-grape vineyards lapse back to sagebrush or desert land.

Another by-product of prohibition is the mental exercise it is giving jurists and lexicographers in trying to find a definition for "intoxicating." The new constitutional amendment forbids "intoxicating" beverages, and it is necessary now to know what this means. There is a grave difference among men and women of high purpose on this point. The brightest minds of the country have applied themselves to supply the definition. It is said that the Honorable Elihu Root

took enough of his valuable time to go through numberless judicial decisions and to compile from thirty-five of them the following definitions:

"Intoxicating liquors are those liquors which are intended for use as a beverage and which contain alcohol in such proportion or percent. that when consumed in any quantity that can practically be drunk by an ordinary man, or in any quantity that the human stomach can ordinarily hold, will produce a condition commonly known as intoxication or drunkenness."

This is an ideal definition from a legal viewpoint, because it contains so many words that would require legal construction or interpretation. The words "intended," "practically," "ordinary," "ordinarily," and "commonly" are sufficiently indefinite to give employment to courts and lawyers for a total of many months or even years. Of course, lawyers must live.

The other learned definition is: "Drunkenness or intoxication is a materially abnormal mental or physical condition manifesting itself in the loss of the ordinary control of the mental faculties or bodily functions to a substantial extent." This definition also contains four good words for the courts to wrangle over, namely, materially, abnormal, ordinary and substantial.

If many states follow New York State, another by-product of prohibition may be laws impinging somewhat on personal liberty. Home brewed root beer with "any trace of alcohol" may incur liability to a fine of \$100, \$500 or \$1,000 and imprisonment for six months. The ailing person who needs wine "for his stomach's sake" is under the same liability, except when protected by a physician's prescription. The farmer's cider is a menace to his pocketbook and liberty, unless made unfit to drink or de-alcoholized. The man who never would "snitch" at school will have to find new principles of honor, for he can be compelled to tell where he got his liquor or be jailed in contempt of court. The great question of the old English common law will probably come again to the front on account of armies of professional and amateur spies bent on tracing down the scent of alcohol and incidentally turning up anything else. That old question was "whose home is safe?"

TENS OF MILLIONS FOR COLLEGES

THE cause of "higher" education receives a distinct advancement in the twenty million dollars recently given to Yale University. This sum will be expended for a memorial building and for fellowships, professorships, scholarships and prizes.

Another institution of higher education is combing

the nation for a ten million dollar increase in its endowment fund. Before the drive was a day old four million dollars were subscribed by a donor who had already given seven million dollars to the institute. Whoever it is that has put up this eleven million dollars he is a fairy godfather, for no one knows what his name is.

The high cost of living has invaded college precincts and among the low-paid workers of the nation are college professors, and particularly the instructors who do most of the direct teaching.

The same high cost has struck a hard blow to the college man. The tuition fee at New England's greatest technical institution has been raised from \$250 to \$300. While this is a large sum to a poor young man, it does not represent nearly all of the cost of the education of the students. The actual expense to the institution of one of its courses in technology approaches \$800 or \$900. When the student has paid his \$300, he is the beneficiary of charity to the extent of \$500 or \$600 more. The average college student rather prides himself on his independence; yet he is as much an object of charity as the inmate of an almshouse.

The cost of supplying education in the colleges has gone up with the general cost of living, and every educational institution which has not received a liberal increase in interest-bearing donations is "hard up."

EVERYBODY INSANE!

THAT everyone else has a screw loose except ourselves is a truism. George Bernard Shaw says that "the longer I live, the more I am inclined to the belief that this earth is used by other planets as a lunatic asylum." A "scientist" has calculated the number of years until, at the present rate of increase, the entire population will be "off" enough under alienist standards to be fit for the asylum.

Some figures are available for estimating this, if American standards are representative of world conditions. In the fourteen years from 1890 to 1904 the percentage of the United States population in insane institutions rose from 0.17 per cent. to 0.183 per cent. The populace then had not begun to go to movies and were not living at the present dizzy rate, but in the six years from 1904 to 1910 the rate rose to 0.2042 per cent. and in the seven years to 1917 to 0.2276 per cent. Statistics are not available for the war year of 1918 and the high-cost-living year of 1919, but institutions for the insane must be increasing their borders.

The relation between industrialism and insanity appears by grouping the states which are largely industrial, in which group the percentage of insane is 0.2715 per cent. The group next worse off is

the Pacific Coast states, which are the mecca of the ambitious, idle and restless, and which show a percentage of 0.2695 per cent. The northern central group, devoted largely to farming, has 0.2202 per cent. insane. The western mountain group is said to have the most representatively American population, with quite a low proportion of foreign born, and they rank low in insanity, with 0.1506 per cent. The colored people are not so subject to insanity as the white race, as the southern group of states comes lowest with but 0.14595 per cent. insane. Religion may have a bearing, for the groups having a predominant Roman Catholic population are high in insanity, and the Pacific Coast group with a considerable population devoted to theosophy and other forms of spiritism shows a strain of insanity, while the south, the stronghold of Protestantism, is lowest in proportion of the insane. Romanism and spiritism play upon the emotions, cultivate superstition and demand the absolute surrender of the will to the religion, without fortifying the mind with knowledge and building up a strong character based upon reason and faith combined.

In the last score of years it has been found easy to get rid of relatives by medical affidavits as to their sanity, and it is considered that there is a considerable number of persons incarcerated in insane institutions who are as sane as anyone outside. A periodic investigation of the inmates of all such institutions is recommended in order to stop this abuse and give liberty to thousands wrongfully shut up in these "gilded hells," and that in such instances the parties to this worse-than-murder crime should be liable to exemplary punishment.

A further large proportion of inmates of these institutions are the victims of spiritism—persons that have dabbled with demons until "obsessed" and finally periodically "possessed" by them. It was to this class that Jesus brought relief in the many instances where he "cast out devils" or, as described in Biblical language, "He went about doing good and healing all that were oppressed [through spiritism] of the devil." (Acts 10:38.) These unfortunate insane need not keepers and straightjackets, but the power of One stronger than man to break the hold acquired by devils through the surrender of the will in superstition and spiritism. Such a power is about to be manifested and under the healing influences of the Golden Age "the whole creation, which groaneth and travaileth in pain together until now, shall be delivered from the bondage of corruption (physical, religious, moral and mental degeneration) into the glorious liberty

MANUFACTURING *and* MINING

STRENGTH OF PLYWOOD

IT has been discovered that a piece of wood cut by a machine into thin panels and glued together in such a manner that the grain of one panel runs at right angles to the grain of the two adjacent panels is stronger, weight for weight, than a steel bar. This wood, called plywood because of the way it is built up, layer by layer, has been found of great value in the airplane industry. Ribs made of plywood are more than two and one-half times as strong as those made of other woods, and work has now begun on making the wings themselves of this material, thus eliminating the flap of the cloth entirely.

A serious difficulty which has been overcome in the use of plywood for airplanes construction was the making from blood of a glue that will stand any quantity of moisture without letting go. An equally satisfactory one has been made from casein, obtained from milk. These new glues will be a valuable addition to cabinet makers and builders. Furniture made with them will not come apart, nor veneers warp or peel. Plywood can be made from the finest walnut at a total cost of less than 3c. per square foot, can be put on over ordinary wall paper, and will last a life time.

In this plywood, stronger than steel, we have an illustration of how the Lord can take characters, weak in themselves, and surround them with such influences and so fortify them by his promises as to make them "mighty through God to the pulling down of strong holds" of error and sin.—2 Cor. 10:4.

MANUFACTURE OF WINDOW GLASS

WINDOW GLASS is made by two methods. Plate glass is made by a process similar to the rolling out of dough, but window glass in general is made by blowing glass into the form of cylinders, either by hand-blowing or machine-blowing. A machine-blower is an apparatus which automatically dips a big pipe into a kettle of molten glass, and then gradually raises it, pulling all the molten glass upward as the pipe rises. A constant stream of air kept flowing in through the pipe causes the glass to assume the form of a cylinder. Hand-blowing is substantially the same in principle as machine-blowing, except that the glass which is partially blown must be redipped four or five times into the molten glass to procure more and yet more material, to make the cylinder of the re-

quired size, and require reheating of the hardened lower end to make the cylinder of proper length and thickness. The ends of the cylinders are cut square by first running a hot thread of glass about the proposed line of cleavage, following it with the passage of a bar of cold iron over the same place.

Experience has shown that the best way to store the glass in quantities is to let it remain in the cylindrical form until about the time for shipment. Hence, in glass warehouses, the storage space is filled with these cylinders, each six or more feet tall and about two feet in diameter. The tubes are cut by running a hot iron over the desired line of cleavage, following it with a cold iron, when the big roll breaks open as easily as if it were cut with a diamond. The roll is then heated sufficiently to permit it to be flattened and is ready for the market.

Apparently, in Bible times, the art of making transparent glass had not been perfected. The apostle said, "Now we see through a glass darkly" (1 Cor. 13:12) as though to imply that glass in those days was more or less opaque. How thankful we ought to be, living at the dawn of the Golden Age when even the poorest homes have plenty of windows and clear glass in all of them. It is not so long ago, in England, since the lords of some of the old castles had their windows taken out and stored during the winter time to protect them from possible damage by the elements. Glass was a very precious thing then. Now it is cheap and seen everywhere.

PRACTICAL HELPFULNESS IN BUSINESS

AT the New York Edison Company last summer there was an exhibit of practical helpfulness for the workers, designed however, not for altruistic purposes, but to teach employes the uses of electric current so that they might talk it up among their neighbors. Any employe might bring in his beans or blackberries, with the jars and sugar, and have his canning done free of charge, so that when the man brought home those jars all done the wife might tell her friends how it was all done in an electric fireless cooker. Last spring employes brought in their fine curtains and had them done in an electric washing machine. The boyscout flags and caps were washed in the same machine, and the boys talked about it everywhere. Someday the heads of

industries will do things for employes and probably others from a genuine desire to "do good to all."

The day is long past when an employer might curse his employes with impunity. Now the idea is for an executive to give his men the same treatment he wants them to pass on to the public. The average customer, on account of the experience of somebody he has heard of, imagines that an electric light company, for example, is always trying to "put something over" on him. Too little attention has been paid to the way public service employes, excepting street railway men and telephone operators, treat the public, but now that is being changed for the better, not however because it is right but because it pays.

CREATIVE POWER IS SCARCE

THE man with great natural gifts is the one who is always needed in the occupation where such gifts count. For example, no one is more useful to human society than the research man. Speaking of his characteristics the *London Electrician* says: "He is born, not made. He has the creative gift, the faculty of seeing new combinations and possibilities where the most accomplished technician without the gifts sees only known ones. He retains so incurable an interest in experimenting that he is willing to sacrifice to it the joys and emoluments of managerial power. A man of proved creative power is sought after, you might almost say courted." Such men are scarce enough now, but the day is not far distant in the better age when there will be thousands of creative minds better able to work out the world's problems than any one yet seen.

COMMERCIAL CANNIBALISM

A WRITER on industrial topics, Philip Cabot, in *Electrical World*, speaks thus of business conditions prior to the war: "We had not competition but industrial war. The unsuccessful competitor was killed and eaten by his adversary." The *World* comments: "The weakness of competition lay in the fact that there was not—and there is not yet—any proper criminal code against this murder and cannibalism. Until a corporation can be ruthlessly extinguished for industrial murder, through receivership and a complete ousting of the criminals forever, competition will remain practically non-existent." Many business men are evidently doing a little forward-looking toward the approaching better day when a man will not have to be a crook to be in big business.

CANADA'S GREAT WATER POWER SYSTEM

ONE of the greatest engineering feats of history is now being carried out by Canada. She needs at least three hundred thousand horsepower a second in order to supply Ontario with light, heat and power, and in order to get it she is widening and deepening the Welland river and forcing it to flow the wrong way; building a great mill-race from the river to a point near Queenstown; erecting at that point a great power-house through which ten thousand cubic feet of water will rush every second.

Just before the water reaches the power house it will drop through the air a distance of three hundred feet. The immense quantity and the speed at which it comes will easily generate the power required. The artificial 300-foot fall combines the 150-foot fall of Niagara with the rapids above and below the falls. The mill-race is really a great canal.

The canal will be eight and a half miles long and involves the digging of fifteen million cubic yards of rock and earth. The earth sections of the canal will have sloping sides, the bottom being thirty-four feet wide and the top one hundred and sixty-two feet wide. The rock sections will have vertical sides forty-eight feet wide and thirty-five feet deep.

The electric shovels used in digging up the dirt are the largest in the world. They pick up eight cubic yards of dirt, carry it to a dump car eighty feet above, and go back for another load, all in less than a minute. Each shovel weighs three hundred and seventy-five tons.

The channelling machines are the most powerful made; they cut to a depth of twenty feet. For drilling, hollow drills are used, the advantage being that the cuttings are blown out of the hole as rapidly as they are made. The holes are made 12 feet deep and 7 feet apart and at times as many as a thousand of these holes are shot at once, breaking fifty thousand tons of rock to fragments. Much of this rock is afterward broken up for use in making concrete for the bridges which cross the canal.

There are 1500 men at work on the job and it is hoped to finish it by 1921, at a cost of approximately \$25,000,000.

What a blessing the Lord has stored up for mankind in the rivers and streams that ceaselessly pour their torrents from the higher to the lower levels of the land, and to the bosom of the sea! No doubt the time will come when the water powers of the world will do a major part of its work. How gracious the arrangement of God by which he "sendeth rain on the just and on the unjust"—Matthew 5:45.

FINANCE, COMMERCE *and* TRANSPORTATION

PARCEL POST AND THE EXPORT TRADE

PARCEL post is the quickest and most economical method of transporting light weight merchandise between the nations of North, Central and South America. At present there are four different limits of weight, depending on the country of destination, 11, 20 and 22 lbs. to most countries. Cuba is the exception with a limit of 4 lbs. 6 oz. Shippers must learn the limit of weight of the country to which they make shipment so as to avoid unnecessary division of goods.

It is surprising how goods can be divided into great numbers of packages and yet arrive safely at destination when sent by parcel post. A Chicago mail order house sent 300 11-lb. packages to a small town in the eastern part of Bolivia, thousands of miles over water routes and mountain trails, and the goods arrived in perfect condition, not an item missing or damaged.

Ordinarily the customs duty is collected according to the weight and valuation shown on the tag attached to the parcel, but consular invoices are necessary to certain countries when the value of the shipment is above a certain amount.

The English arrangement with reference to parcel post is to charge one rate of postage for packages less than 3 lbs. in weight, another for packages from 3 to 7 lbs. in weight, another for packages over 7 lbs. The heavier the package, the less the rate of postage. This is an incentive to buyers to increase the size of their parcels and orders.

There are some barriers to the full use of the parcel post that should be removed. The limit of weight to each country should be the same, 22 lbs. It should be allowable in all countries, as is the case in some, to pack all kinds of mailable articles in the one package, instead of requiring articles of different customs classifications to be packed and shipped separately. Arrangements should be perfected for sending parcels C. O. D. Customs should be levied in all countries on the net weight, so as not to encourage the shipment of parcels insufficiently wrapped.

In countries where duty is collected on the gross weight of packages the exporter is at a loss to know what to do. His customer demands that the goods shall be so packed as to reach him safely, but wishes to pay duty on the least amount possible. This often results in a dissatisfied customer and a skeptical exporter.

We sometimes wonder how Daniel and his three fellow-Presidents managed to control the 120 provinces of the then known world, when there was neither telegraph, telephone, railway, steamship, automobile nor bicycle. The courier seemed to be the fastest thing known in those days. What would Daniel have thought of a courier service which could handle 300 11-lb. packages from Chicago to the interior of Bolivia and think nothing of it!

SCIENTIFIC DESTRUCTION OF RAILROADS

SUCH complete destruction of railroad property was never before known as was visited upon the railroads of Western Belgium and Northeastern France during the Great War. During the American Civil War the bridges were burned and the tracks torn up. The rails were heated in the middle and then wrapped around tree trunks, defying all efforts to dislodge them, or a great pile of ties and other combustibles were set afire and the rails for a distance were piled criss-cross on the top of the pile and allowed to all melt together in the center. But these achievements of the American War pale beside what the Germans did in France during their retreat.

A V-shaped device drawn by a locomotive first ripped the rails from the ties; the joints were torpedoed; embankments were blown away, clear down to the natural soil; cuts were blown in from the sides; tunnels were blown up with such lavishness as to pulverize the soil clear to the surface above the arch; culverts, abutments, piers, and the earthworks leading to them were blown to atoms; bridges, telegraph lines, signals, stations, switch-towers, cranes, nothing was spared. At bridge sites mines were planted with delayed action fuses calculated to explode a dozen days later, after temporary bridges had been put in position, and secondary mines were also placed calculated to explode months later, after the permanent bridges had been put in place.

As they face the ruins of their once beautiful land we can imagine that the French people may well feel like Jeremiah of old when he said, "Thou hast heard, O my soul, the sound of the trumpet, the alarm of war. Destruction upon destruction is cried; for the whole land is spoiled." (Jer. 4:19, 20) We are glad for the French people, and for the world, that the era in which such destruction is possible, is near an end.

THE VEGETABLE OIL SITUATION

THE VEGETABLE OILS have become an important item in the food supply of mankind. They come into direct competition with butter, lard and lard substitutes. The vegetable oils are substitutes for cotton seed oil and that in its turn is a substitute for lard. Lard and other animal fats come into competition with butter in the manufacture of butter substitutes. Thus the supply of vegetable oils has a direct effect upon the market price of all the edible fats.

Prominent among the vegetable oils is that of the soy-bean, which comes mainly from Manchuria. The port of Dairen alone, during the calendar year of 1918, shipped direct to the United States more than 128,000 tons of this oil. The customary milling ratio of soy-beans to beancake is 24 to 23, so that the vegetable oil shipment from this one port to the United States in one year represents a crop of 3,072,000 tons of soy-beans.

The great packers, who make most of the butter substitutes, are now developing a trade in tinned milk with the Orient and with South America. They will naturally wish to bring back the vegetable oils of these countries as it means cheaper raw products for butterines and eventually lower prices for milk through the fall in price of butter.

The soap and paint manufacturing concerns, and the consuming public that is on the hunt for lower living costs, will be interested in the importation of these vegetable oils, as well as the packers, while the dairy interests will wish to see their importation stopped at once.

This illustrates the marked difference between the commerce of to-day and commerce of Bible times. In those ancient days international trade consisted almost entirely of highly valuable silks, spices, and metals, and necesarily so because of the meager means of transportation; but to-day the whole world is ransacked for the every-day food of mankind.

HIGHWAY MOTOR TRANSPORT

RAILROAD managers complain that their business is being cut into by truck transportation. The new system serves the people satisfactorily and the business is yet in small enough units not to dominate the communities it works for. Highway transport between Chicago and Milwaukee has become an established fact by the United Motor Transport Lines which connect various warehouses and terminals in each city with those in the other. Similar transport lines are in successful operation in the East, as between New York and Boston.

ANOTHER BURDEN FOR THE TROLLEYS

THE country's street railways have been having a hard time, and the automobile has added to their burden. If those who have automobiles—and their friends—prefer them to trolley cars, or if small shippers prefer trucks for cost and convenience, to interurban express, it will seem that the trolley men should find ways and means of improving their service to meet modern competition. The trolley men have long had their own way in utter disregard of the common people, and the man on the street cannot be blamed if he feels a little secret satisfaction at seeing rural transportation shaping up a little toward the coming ideal when the people will wisely control all such service.

ELECTRICITY IN TRANSPORTATION

ACCORDING to C. Townley, the business experience of the electrical men has been the retarding cause of the slower extension of electricity in practical transportation. They have not known enough about either the science or the art of rail-roading. Their professional pride, their belief in and zeal for the electrical profession, has led the electrical experts to overestimate their claims of what they could do, and underestimate the cost of doing it.

INDIA RUBBER FIGURES

IMPORTS of India rubber are larger than ever before, the figures in millions of pounds being in 1919, 398; 1918, 389; 1917, 333; 1916, 267; and 1914, 131. The cost per pound dropped from 52 cents in 1918 to 39 cents in 1919, owing to slackening of war demand.

AUTOMOBILE ITEMS

A \$2,000,000 land purchase in Detroit, by the makers of the Dodge automobile, is an index of current progress in the automobile industry.

Automobile prices are following the general upward trend of prices, with a dozen or so manufacturers announcing advances.

The "ship-by-truck" movement recently ran a caravan of eighteen trucks across country to demonstrate their value to Middle West farmers.

AERO INSURANCE

AERO enthusiasts should have aeroplane insurance. The Automobile Insurance Company has decided to insure aircraft. "Many shall fly to and fro."

POLITICAL, DOMESTIC *and* FOREIGN

WHO IS TO RULE THE WORLD?

THE British Empire dominated the League of Nations, and she will continue to dominate it. Several parts of the Empire, each with a population less than that of New York City, have as great a representation in certain matters as the whole United States.

Before the war Britain held about one-fourth of the habitable area of the world and governed one-fourth of the world's population. Now, as a result of taking over the German colonies, Persia and Mesopotamia, it has about one-third of the world and its inhabitants under its control, and with the passing of Germany from the stage it is in effect and in fact the mistress of the world. Between 1871 and 1914 there was added to the British Empire over 4,000,000 square miles of territory, and a population of more than 60,000,000.

The British bankers have found the spread of the Empire valuable to them. The field for their investments has widened, and they have always realized that the British navy was back of their bonds. And they have been none too generous to the natives of the conquered lands.

In Egypt a labor day lasts 12 to 15 hours and the wages are equivalent to 25c. per day for adults, and 12c. per day for children. The difference between these wages and the wages that must be paid in Great Britain represents profit for the banker and therefore British money naturally seeks investment abroad. But some of the bankers so manage things that they get back, in one form or another, a good part of even the pittance that the native laborer receives. An illustration of this occurred in connection with the present Khedive.

He was loaned 82,000,000 pounds at 7% with 1% for amortization. The bankers gave him, however, only 20,700,000 pounds in cash, and 9,000,000 pounds in his own notes at par, which they had bought at 65% of their face value. The remaining 52,000,000 pounds they kept as security for the amount actually loaned, but the Khedive is to pay the interest on the whole 82,000,000. At this rate the Khedive will pay 31% for his money, besides losing over 3,000,000 pounds the first year on the 9,000,000 pounds of his own notes. The Khedive, of course, gets the money to pay this interest and to refund the principal by taxing heavily his 25c. per day subjects. The sad part of it is that even under this thinly-disguised slavery the lot of the

common people is better than under native rulers who are not in some sense responsible to the British crown.

The Egyptian people, feeling the burden, were led by some to hope and believe that the deliberations at Paris would give them self-determination, the right of self-government, but although the British Government has officially stated several times in past years that it has no right in Egypt, it nevertheless does not let go its hold, because Egypt is the key to the Suez canal, and the Suez canal is the key to the Far East. It cannot be denied that the British have greatly improved the condition of the people of Egypt. They have given them honest courts and clean government, which is something they never had before and would not have if left to themselves. Yet the Egyptian people are not satisfied and want to govern themselves in their own way, possibly in hope that they can keep for their own use a larger part of that daily wage of 25c.

It is not at all likely that the Egyptian people will get greater liberties by any movement of their own. They tried it by starting an insurrection, and before it was quelled eight hundred of them were killed, sixteen hundred wounded, thirty-nine sentenced to death, twenty-seven to imprisonment for life and two thousand to other terms in prison. Sixty British soldiers and civilians were also killed and one hundred and forty-nine wounded. We regret that in quelling the Egyptian insurrection the British bombed the villages of the natives, thus killing innocent women and children and noncombatants.

If the Egyptian people, and all the other African and Asiatic peoples under British rule, gain greater liberties they are likely to get it first by an old force now manifesting itself in a new way. Some seven hundred years ago, in 1215 A.D., the British people took away from King John his right to manage the British Government. In 1911 they shelved the House of Lords. Now the papers are full of stories of what the great labor unions of England have in view. Practically all the workers of the British Isles are in these unions, and since the war they are interesting themselves actively in the domestic and foreign policies of the Empire in a way they never did before. It is not clear how any political party can resist the demands of these laborites and remain in power, and if they get what they demand they will be the real masters of the greatest Empire that ever dominated the world. How long will it be before they get it?

The real right to the rulership of the world, however, rests in the One who bought it with his own precious blood. It is of this One, the Lord Jesus, that the prophet exultingly says, "The government shall be upon his shoulder" and "Of the increase of his government and peace there shall be no end." (Isa. 9:6, 7) It is for that long-promised rule, now near at hand, that we pray when we say, "Thy kingdom come, thy will be done on earth as it is done in heaven."—Matthew 6:10.

GAMBLING IN BERLIN

Almost everybody in Berlin is gambling. The crowds around the baccarat tables never diminish and the money changes hands in large sums, 20,000 and 30,000 marks at a turn of the hand. The constant round of gaming, eating and drinking goes on all night. Scarcely anyone thinks of leaving before dawn, and many remain for breakfast. The people admit that the war was a great gamble, a game in which everything was staked and lost.

Along with the gambling and eating and drinking in these clubs a craze for dancing has broken out, and thousands of young girls are there nightly in gowns which would cause their arrest in New York. During the March riots when blood flowed in the streets the bands jazzed in the halls and the girls screamed with laughter as they whirled around the may pole. The sacrifices of the war have given way to a disregard of all conventionalities.

The course of the German people since they started in the great war and until now reminds one of that of the prodigal son, who wasted his patrimony in riotous living. Many of those now feverishly gambling with one another are liable to discover that "the riches of wickedness profit nothing," and that the Lord "casteth away the substance of the wicked."—Proverbs 10: 1-3.

THE FINNISH REPUBLIC

A NEW republic has been born, Finland. It has taken a long time for the Finnish people to decide what form of government they will have. For seventeen months they have been independent of Russia, and during all that time the debate has gone on furiously as to whether the country should be a republic or a monarchy. The decision was finally made. The new Finland will be governed by a president elected for six years, on the first occasion by the existing one-chamber legislature, which remains unchanged, but ever afterward by a special Elective Assembly of 300 members, chosen by the people. No bill which the president vetoes

will become a law until it is approved by a newly-elected Riksdag, as the legislature is called.

All over the world a trumpet message is sounding forth. It is the same that was cast upon the Liberty Bell of 1776. Finland is one of the latest to respond to the divine call uttered thousands of years ago: "Proclaim liberty throughout all the land unto all the inhabitants thereof."—Leviticus 25:10.

"THE KINGS HAVE HAD THEIR DAY"

WHERE kings are best known and have the longest time to popularize their beneficence, they are the least wanted. While America is welcoming the scions of royalty, scraping and bowing before them, and the "best people" are vying with one another as prince's messenger boys and pack-horses, the kings and princes are being chased out of European countries and are meeting with demonstrations on the other side of the ledger.

The soldiery who should be the direct beneficiaries of a plundering nobility and kingdom, are reported in Austria as with one voice protesting against recent alleged efforts to establish a monarchy. The entire armed force of the nation are reported active in the protest.

With all its defects the republican form of government is best liked by the people because it gives the would-be kings the least chance to meddle with the people and affords the common people the largest opportunity to look after their own affairs. At any rate the Austrian soldiers, representing the common people, showed that "the kings have had their day," by urging in a demonstration before the Parliament building that the republican form of government be retained. Similar demonstrations were reported from the country districts of Austria.

Humanity is drawing near the ideal social order long promised in the Word of God. In the better world about to take form upon the earth the divine principle will be established that it is not designed that most men should be autocratically ruled by a few men, or that man should, without full and free consent and cooperation, exercise authority over man. Man was given dominion over the earth and over the lower order of creatures to be their beneficent autocrat, but the relationship of man to man will ultimately be that of a regal brotherhood, the full realization of that republicanism in which each man is the kingly equal of all other men and each woman a beautiful queen in a world of equals.

The Austrian soldiery dimly sense the future order and are reaching out for the things of Messiah's Kingdom.

AGRICULTURE and HUSBANDRY

THE FARMER AND THE MOTOR TRUCK

THE farmer is independent of the rest of the world, but the world is not independent of him. He is nearest to the food supply and can find food for himself and family with less difficulty than others. Supplies of clothing are at his hand also; wool, hides, flax, cotton, etc., requiring only his industry, and that of his family. He can make his own shelter, of logs if necessary.

If transportation facilities are poor he can get along with almost no assistance from the outside world. There are men now living in certain districts of the United States who can remember when the annual store bill of the family was less than two dollars. A little salt and a little iron was all that was purchased, and the man and his family did the rest.

But the farmer wants more than food, clothing and shelter, and his wife and family want more. They want education; teachers, books, stationery and school supplies. They want information; mail facilities, telephones, telegraph, wireless. They want music; pianos, organs, phonographs, records. They want amusement; games, toys, novelties. They want furnishings; carpets, furniture, draperies. They want conveniences; kitchen utensils, tinware, crockery. They want sanitation; plumbing, heating, ventilation. They want art; pictures, wall paper, statues. They want hardware; locks, hinges, cutlery. The farmer wants all these and more. He wants implements of all kinds to help him in his work; reapers, threshers, mowers, plows, cultivators, seeders, tools of all kinds. He wants harness, fertilizers, seed. His wants are legion.

It is these and a thousand other natural and proper wants of the farmer that have made the complex thing we call civilization, with all its factories, warehouses, stores, banks and trade and transportation facilities. We all live on the things produced on the farm.

It follows then that transportation to and from the farm is the thing we all need, and need badly. And this thing is here at last. The ox team was a step, the dirt road was a step, the canal was a step, the farm wagon was a step, the railroad was a step and a great one, but the automobile was the thing that brought results. Since the advent of the automobile there has been more agitation for good roads, and with better results, than in all the years that preceded its advent. Everybody wants good roads now because everybody has an automobile and wants to go everywhere in com-

fort and with speed. Good roads are spreading in every direction and in some sections the horse has practically disappeared.

Many farmers now have passenger cars for personal travel, tractors for farm work and motor trucks for hauling produce to market. This is all moving in the right direction, in the line of better roads, and the bringing of the food producer nearer to the consumer, nearer to the man who supplies the farmer with the things he must have if he is to do the great work of feeding and clothing the swarming millions who depend upon his fields for a livelihood.

The ebb tide of the sale of tractors to farmers is passed, and the trend toward a large volume of sales has set in. The farm tractor has not yet been the popular thing with the farmer who could not yet see the use of investing the price of several horses in a machine that in a recent degree of development racked itself to pieces in a couple of years. Intelligent experience is being built into the tractor now, and the implement has been developed more nearly to do its work.

The Great War did much for the development of motor trucks. Hundreds of trucks, bearing the U.S.A. stamp on engines and radiators, went through heavy shell fire that shot tops and bodies away, the trucks continuing to run, and hauling loads over open fields and torn, muddy roads near the front.

The capacity of any truck can be increased by the use of a trailer. It is better to get a small truck and buy a trailer later if you must. There is danger of loading motor trucks too heavily. Sometimes the platform scales that will be used to weigh the load were installed before the day of motor trucks, and have insufficient capacity to weigh very large trucks heavily loaded.

Some states demand exceptionally large fees for heavy trucks, because of the damage they do the roads; only \$50 is charged for a five-ton truck, but anything heavier calls for a license fee of \$250 to \$500.

For a ton truck the cost will average 10c per mile. If the truck replaces horses the principal saving will be in feed, harness, shoeing and veterinary service, less care, less space, saving of driver's time, wider radius of marketing, less shrinkage in hauling live stock, better market condition of perishable products, livery charges and safety without hitching. Double-decked motor-truck bodies are desirable where two or more classes of products are handled, such as live poultry and eggs.

God's Word is full of promises respecting the glorious epoch, the Golden Age, when "the earth shall be full of the knowledge of the Lord" (Isa. 11:9; Hab. 2:14); when "every man shall sit under his vine and under his fig tree; and none shall make them afraid" (Micah 4:4); when "they shall not build and another inhabit," but when home ownership shall be general (Isa. 65: 21-23). Thus a time is anticipated when every man in the summer season will be interested in the production of the things that come to his own table. And this is the natural inclination of healthy, normal men. This does not mean, however, that there will not always be great fields for the production of the world's staple crops. The farmer will long continue to be a great factor in feeding the world, and the motor truck will enable him to deliver that food when and where it will be most needed.

THE VALUE OF THE MULCH

THIRTY years ago it was solemnly and officially declared that the Great Plains country would never be of any value agriculturally except as a sparse grazing country, but the mulch system of dry farming has made it one vast wheat field, furnishing food for millions of people.

Soil that does not have a mulch will crack when it gets dry, and these cracks are the lines on which clods form. A mulch on the surface will prevent clod formation, and the labor of seed-bed preparation after plowing is less. Land that has a good surface mulch before it is plowed is mellow and loose, and it is easy to prepare the field in ideal shape to receive the seed.

To see how capillary attraction works in pumping water out of the soil, take a cube of sugar and dip a corner of it in your coffee and see how quickly the liquid climbs up. It is being moved by capillary attraction. Put some loose sugar on top and you will see that the liquid does not climb through it so rapidly. The reason is that the grains are so far apart that capillarity has been destroyed. This is the philosophy of the mulch. In soil which has been thoroughly mulched the evaporation of the much-needed soil moisture is checked.

When one considers the great amount of moisture necessary to mature a crop properly, it is easy to understand the great need for conserving the supply. It takes more than 500 lbs. of water to make every pound of dry matter found in the oats plant, and it takes about 400 lbs. with wheat. Corn will do with a little less. Unless great attention is given to storing the rainfall in the soil, and putting the land in condition so that it is not lost by capillary attraction, there is apt to be a deficiency at just the time it is most needed.

What a lesson the Lord taught in His story about the seed that "As soon as it was sprung up, it withered away, because it lacked moisture" (Luke 8:6). How like the human heart is to soil, as the Lord compared it, and how needful for it, under present conditions, to be continually plowed and harrowed to keep it from becoming hard and selfish and unsuited to the character growths the Lord desires.

THE SNAKE AN UNWELCOME VISITOR

ONE of the greatest friends of the farmer is the toad, which makes a living on the insects which are so injurious to crops. The toad's worst enemy is the snake, and for this reason the snake is a poor addition to the farmer's live stock. Besides killing toads the snake kills young birds, which also live on insects, and destroys eggs not only of the small birds but of hens as well. There seems to be an instinctive dislike to snakes on the part of the human family, which leads the average person to kill them on sight. This aversion seems to be proper enough.

The story is an old one, and a sad one, of how Satan in deceiving Mother Eve acted through a serpent which he had obsessed for the purpose, and how, because of this use of the serpent against one created in God's likeness, the serpent was "Cursed above all cattle, and above every beast of the field."—Genesis 3:14.

ELECTRICALLY REVIVED PLANTS

THE EFFECT of electrical currents upon plant life has been long known and is gradually being utilized more and more. A Connecticut florist now utilizes it for reviving almost lifeless plants which have been shipped to him from long distances and arrive in an almost dead condition. Two or more cells are connected up with fine copper wire, the positive pole being connected to a nail placed in the soil of the flower pot, while the negative pole is secured delicately around an upper branch. In a week or two the plant is fully revived and growing in a flourishing fashion. In some sections market gardeners have been caught stealing electricity from power wires or third rails which pass their premises.

How little we know about the invisible forces which God has made for the controlling of his universe. Here is an unseen force which has an almost miraculous power over life. And what is life? It also is an unseen force, and, in the words of one of the greatest of earth's philosophers, "life is incomprehensible." The Prophet Ezekiel says of dead nations and dead human beings, "I will put my spirit [breath] within you, and ye shall live."—Ezekiel 37:6.

SCIENCE and INVENTION

TWO THOUSAND MILES IN A NIGHT

CAPTAIN ALCOCK'S great flight from Newfoundland to Clifden, Ireland; 1990 miles in 16 hours, was made under conditions calculated to strike terror to the stoutest heart. The cold was so extreme that ice had to be chipped from the gages and instruments and the air-speed indicator was so clogged with ice that it refused to work at all. During the last four hours of the flight the radiator shutters and thermometers were almost completely incrustated with ice.

On account of fog the sense of verticality was destroyed, and for part of the trip the aviator was flying upside down, but had no knowledge of the fact until he came down within fifty feet of the water. Not until he saw the mountainous billows ready to engulf him did he realize his predicament and shoot up again.

The speed of 124 miles per hour was made up partly of the actual machine speed of 90 miles per hour and partly of the breeze that always blows from West to East at the high altitudes of one to two miles in which the greater part of the flight occurred.

The landing was nose down in a bog which crumpled up the forward end of the airplane like a sheet of paper and left it a complete wreck. It is hard to see in Captain Alcock's achievement anything that will tend to make ocean travel by airplane popular with those who have found this world a pretty good place in which to live.

There is an interesting harmony of thought, however, between these wonderful flights of human beings and the statement of the prophet regarding those that wait upon the Lord. It is true of both that "They shall mount up with wings as eagles" (Isa. 40:31). In the one case the wings are literal wings, even though made of wood and canvas. In the other case the wings are the Old and New Testaments of the sacred Scriptures.

THE MAGNIFYING OF SOUNDS

IT WAS THE MAGNIFYING of sounds that beat the U-boat. During the last years of the war the U-boats and destroyers kept almost perfect track of one another's whereabouts. Every move was closely checked up, all by means of the microphones mounted in the vessels. At first the advantage was with the U-boats, which could detect the merchantman one to two hours' sail away. Later the Allies had the better microphones and the U-boat was doomed. Its every move was known and the dropping of a depth bomb at the

right time and place finished it. Toward the last the U-boats could be trailed just as accurately as if they had been maneuvering on the surface of the sea.

Attacks by aeroplane were also frustrated by the magnifying of sounds. Great reflectors were employed to catch the sound of approaching hostile aircraft at night. When the approximate location of the approaching aircraft was determined by this sound-wave catcher, then powerful searchlights were suddenly flashed on, and their beams pointed in the direction previously indicated by the sound detector. The anti-aircraft guns and the Allied aeroplanes did the rest.

A man's voice can now be magnified until it can be heard twenty miles. The ticking of a watch can be amplified until it can be heard above the roar of a crowd. A wireless station recently received a telephone message from Europe and, through its amplifier, startled hunters in the marshes eight miles away. It is quite possible that by means of this apparatus a means will yet be found for persons to converse with one another between any points on the face of the globe.

With miracles such as this transpiring before our eyes, what will the critics of God's Word say who have ridiculed the thought that "the Father seeth [and heareth] in secret" the prayers of his saints, uttered in the privacy of their closets?—Matthew 6:6

JOINT USES OF AIRPLANES AND WIRELESS

A WONDERFUL supervision over certain earthly affairs is possible through the combined use of two great inventions, the airplane and wireless telephone. The latter invention has now reached a stage where practically any one can be instructed in handling the talking and receiving apparatus.

At Hardin, Mont., an aviator has been engaged to carry the manager of a 100,000 acre wheat ranch from one part of the field to another, and by the wireless telephone he is able to report back to the ranch headquarters or give local orders to gang or section foremen while in flight.

The same principle is made use of in California. There, in the dry season, forest fires frequently do great damage. The Government has now laid out four airplane routes of 150 miles each over forest areas; these routes to be covered every day, and experience has shown that forest fires are easily detected anywhere

within the areas covered. For this purpose the aviator flies at an elevation of from 6,000 to 10,000 feet.

Wonderful as are these things that men can do, and are now prepared to do on a vaster scale than ever before, in viewing the landscape o'er with a view to its better administration, how much more wonderful is our God, of whom it is written, "The eyes of the Lord are in every place, beholding the evil and the good" (Prov. 15:3), and "Neither is there any creature that is not manifest in his sight: but all things are naked and opened unto the eyes of him with whom we have to do!"—Hebrews 4:13.

OUR PLANETS AND THE FIXED STARS

THE only planets which can be seen from the earth are those that belong to our own sun. Venus is a near neighbor. At times it comes within 26,000,000 miles of us, while Neptune is 100 times as far away. Venus and Jupiter shine with a brilliancy surpassing that of the brightest fixed stars, but unlike the fixed stars they have no light or heat of their own but borrow it all from the sun.

Venus shines with a clear sparkling white because it has a cloudy atmosphere. Jupiter glows with a yellowish tinge, because it is in a gaseous condition. Mars glows with a deep red tinge, due to his snow-covered surface, while Saturn is a dull lead color. Mercury is so near the horizon, i. e., so near the sun, that he can be seen only in spring or fall, and then only at twilight. Neptune is so far away that it cannot be seen with the naked eye.

Because they are so close to us, the planets appear to wander through the sky from day to day. The nearer the planet is to the earth the greater the rate at which it appears to move through the sky. Once Saturn is located it is easier to keep track of him than other planets, as it takes him 30 years to make his trip around the sun.

The fixed stars are all suns, emitting light and heat of their own. The nearest one of these is 10,000 times as far distant as Neptune, or 26,000,000,000 miles away. There are very few railway trains that can make 712 miles in 24 hours, and keep it up, but a train that could do that could make the journey in an even 100,000,000 years, provided the fuel lasted, and nothing wore out, and the train crew and passengers did not get tired in the meantime.

"When I consider thy heavens, the work of thy fingers, the moon, and the stars, which thou hast ordained; what is man, that thou art mindful of him! and the son of man, that thou visitest him [plannest for his recovery of perfect human life and earthly dominion in The Golden Age]?"—Psa. 8:4, 5.

DISTRIBUTION OF INSANE

THE distribution of the insane is interesting. Of course, the location of the sanest of the country must be the capital city, but the District of Columbia leads in the number of insane, with a percentage of 0.8406 per cent., over twice that of the next competitor, which is Roman Catholic Massachusetts with 0.3761 per cent. The Federal Hospital for the insane is at Washington, but no such excuse can be offered for Massachusetts. What foreign birth and religion may have to do with this may appear from the fact that the percentage of insane in Wyoming is 0.1207 per cent. Massachusetts has between three and four times the best of Wyoming both in insane and in foreign born.

NEW SOURCE OF POWER

LEADERS in the electrical industry see possibility of the discovery and development of other and better sources of power than any yet known. In discussing the slow development of water powers, Mr. L. C. Reynolds of Geneva, N. Y., says that "Contrary to the general belief the depletion of the world's coal supply to date is but a small nick out of the immense deposits still untouched. Long before such deposits are exhausted power from some undeveloped source, possibly direct from the sun, will be available." Evidently there will be plenty of power even for a world population ten times that of to-day.

ULTRA-VIOLET FOR CONSUMPTIVES

AN inventor in Germany has devised an electric treatment for consumptives in a room where the patient can walk around. Quartz electric bulbs are suspended from the ceiling and the walls are covered with a material which reflects the healing ultra-violet rays in which the patient is completely bathed.

POWDERED COAL

IN England progress is being made in the complete combustion of coal, by pulverizing it so that it can be blown into the furnace. The advantages are higher temperature, smokeless combustion and no loss of heat units via the ash pile.

CHEAP WIRELESS PHONES COMING

GOVERNMENT red-tape permitting, the Marconi wireless experts expect in a very few years, at most, to see wireless telephone systems making long-distance conversation possible to any part of the world at nominal cost.

HOUSEWIFERY and HYGIENE

UNDERNOURISHMENT INVITES PESTILENCE

GOOD food is a builder of strength and a preventive. But some light is thrown on the likelihood of the common people being able to obtain more nourishing food this year than in 1918, by some information from the New York Department of Health.

The high cost of living has a bearing on the "flu" pestilence, by diminishing vital powers as follows: Sickness has been increased by the cost of food; families which never appealed for charity are now doing so; women are being driven into industry; children under sixteen are giving up education to enter factories as unskilled labor; meat, eggs, sugar and milk are no longer seen on many tables; the birth rate is decreasing; infant mortality is increasing; malnutrition is prevalent among adults as well as children; in 1918 21 per cent. were undernourished, against 33 per cent. now; New York has already had 100 more infant deaths than by this time last year; out of over 2,000 families investigated 51 per cent. had annual earnings of less than \$900, and 28 per cent. less than \$1,200; 21 per cent. earned under \$600; cheap coffees and teas are replacing milk; 18 per cent. are in debt to food dealers and landlords; 37 per cent. have no meat; 54 per cent. are using much less than formerly; 33 per cent. use no eggs; 30 per cent. no butter and 10 per cent. no sugar. In most of these families the economic balance, which used to be precariously maintained, may be overthrown by the slightest change in living conditions. Wage losses cause illness, which in turn decreases income, and things grow more hopeless.

If some of the people get the "flu," they spread infection, and all may contract it. The disease finds a fertile soil in the undernourished bodies of the poor. It is too much to expect that all will yet make the health of each the concern of all, but the sickness of one is of vital importance to many, for death steals indiscriminately into the windows of all, rich and poor, when malnutrition in a tenement affords a nest for the black plague.

FOOD AND HEALTH

A PROPERLY nutritious diet produces a natural immunity to disease, especially to those diseases propagated by germs. A properly nourished body is much more resistant to the attacks of disease-bearing germs than an improperly nourished body. Overfeed-

ing is as dangerous as underfeeding; those who are overfed become fat and lazy, and the liver and kidneys become overworked and break down.

Certain foods are almost specifics for certain symptoms of disease. In diabetes, the principal symptom is sugar in the urine, and benefit is obtained at once by excluding from the diet articles which contain an excess of sugar and starch. There can be no great amount of sugar excreted through the kidneys if there is none entering the blood.

Because it is an ideal heat former, the fat stored naturally in the body in time of health becomes the first base of supply in case of sickness, and that is the reason why people get thin when they get sick. Foods which have no value in keeping up the heat supply of the body have no value in sickness, and for that reason meat broths, tea, alcohol, delicacies, cakes, ices and confections are useless or worse than useless as a diet in time of sickness. Milk, which is a necessity in childhood, and a wholesome food for adults, is a necessity in illness.

The Prophet Job's description of a sick man is brief and to the point. He says: "He is chastened also with pain upon his bed, and the multitude of his bones with strong pain: so that his soul abhorreth bread, and his soul dainty meat. His flesh is consumed away, that it cannot be seen; and his bones that were not seen stick out. Yea, his soul draweth near unto the grave, and his life to the destroyers. If there be a messenger with him [if the Messenger of the Covenant, the Lord at his second advent, who has come to establish his kingdom on earth], an interpreter, one among a thousand, to show man his [the Messenger's] uprightness: then he is gracious unto him, and saith, Deliver him from going down to the pit: I have found a ransom. His flesh shall be fresher than a child's: he shall return to the days of his youth" (Job 33:19-25). When the incoming Golden Age is fully established, "The inhabitant shall not say I am sick" (Isa. 33-24). Death came originally because the first pair were excluded from the trees of life in Eden. Their food since then has been imperfect; in the new age perfection of diet is reassured, in the Lord's due time and way. Meantime let us eat as wisely as we can.

USEFUL RECIPES

THE following recipes will be of interest to every housewife:

Cottage Cheese

1 gallon skimmed milk, 1 cup buttermilk or thick, sour milk, $\frac{1}{8}$ junket tablet dissolved in 2 tablespoonfuls water. Stir thoroughly together. Warm to 75 degrees by placing the pail in a vessel of warm water. Set aside over night. In the morning, without heating, pour the curd, without breaking it, upon a piece of heavy muslin. Drain until dry. Season with cream and salt.

Cottage Cheese Sauce

Dissolve $\frac{1}{4}$ to $\frac{3}{4}$ level teaspoon of soda in a little milk or hot water to each cup of cottage cheese to neutralize the acid flavor. Use the soda carefully, as too much is as bad as too little. For a thin sauce use 1 cup milk, $\frac{1}{2}$ tablespoonful butter, $\frac{1}{2}$ tablespoonful flour, $\frac{1}{3}$ teaspoonful salt, dash pepper, $\frac{1}{4}$ cup cheese. For thicker sauces add more flour, up to 2 tablespoonfuls for the thickest sauce. Cook the milk, butter, flour, salt and pepper thoroughly and cool it slightly before adding to the cheese. Stir the sauce gradually into the cheese till well blended, then reheat carefully. After adding the cheese avoid boiling the sauce, for it toughens the cheese. Use the sauce for creaming potatoes, eggs, toast, and leftover vegetables.

Scrambled Eggs With Cottage Cheese

For each egg use $\frac{1}{3}$ teaspoon salt, plenty of pepper, 1 heaping tablespoonful of cheese, the acid of which has been neutralized by soda as above, and fat to grease the pan. Stir the cheese directly into the beaten egg and scramble.

Cottage Cheese Cutlets

1 cup cottage cheese, 1 cup dry bread crumbs, 2 tablespoons dripping, $\frac{1}{4}$ cup coarsely chopped peanut meats, $\frac{1}{2}$ teaspoon powdered sage, $\frac{1}{2}$ teaspoon thyme, 1 tablespoon milk, 1 teaspoon salt, $\frac{1}{4}$ teaspoon pepper, $\frac{1}{3}$ teaspoon soda, 1 to 2 tablespoons finely chopped onion. Cook the onion in the drippings until tender but not brown. Dissolve the soda in the milk and work in the cheese. Mix all other dry ingredients thoroughly with the bread crumbs. Blend peanut butter and onion with the cheese and mix the bread crumbs with them. Form into flat cakes, dust with bread crumbs, or corn meal, and fry a delicate brown in a little fat in a hot frying pan.

Cottage Cheese Loaf With Beans

1 cup cottage cheese, $\frac{1}{4}$ teaspoon soda to neutralize acid, 2 cups cooked and mashed beans or peas, 1 cup boiled rice (dry), 1 cup dry bread crumbs, 2 tablespoons chopped onion, 2 tablespoons drippings, chopped celery or celery salt. Mix beans, cheese, bread crumbs and seasoning together well and form into a roll. The roll should be mixed very stiff, as the cheese

softens when heated. Bake in a moderate oven, basting occasionally with a well-flavored fat.

Hashed Brown Potatoes With Cottage Cheese

Chop cold boiled potatoes fine and season them well with salt, pepper and onion juice. Turn upon a hot frying pan lightly greased with drippings, and cook the potatoes slowly without stirring till they are browned next the pan. Meanwhile soften a generous quantity of cottage cheese with cream or milk till it will spread easily. Mix with it any desired seasoning, such as chopped parsley or pimentos, a little leftover ham or bacon, chili sauce or picalilli, and spread it over the potatoes. Let the mixture stand long enough to warm and soften the cheese; then fold over the potatoes like an omelet, turn it upon a hot platter, and serve at once. Many persons enjoy the slight acid flavor of the cheese with this dish. If desired, however, the acid of the cheese may be neutralized by adding $\frac{1}{4}$ teaspoon or more of soda for each cup of cheese.

Cottage Cheese Pudding

2 slices stale bread, 2 eggs, $\frac{1}{2}$ teaspoon salt, 1 cup milk, 1 cup cottage cheese, $\frac{1}{4}$ teaspoon soda, $\frac{1}{4}$ cup sugar, $\frac{1}{4}$ cup seeded raisins, $\frac{1}{2}$ teaspoon allspice, $\frac{1}{4}$ teaspoon mace, $\frac{1}{4}$ teaspoon cloves. Cut the bread into cubes and place in a buttered baking dish. Beat the yolks and whites of the eggs separately. Blend with yolks the milk, salt and sugar, and cheese, to which the soda has been added. Add the spice and chopped raisins and lastly fold in the stiffly beaten whites. Pour this mixture over the cubes of bread and bake like a custard in a moderate oven. If desired, the white of 1 egg may be beaten separately, sweetened with 1 tablespoon of sugar, and spread over the top of the pudding just before removing it from the oven.

Cottage Cheese Pie

1 cup cottage cheese, $\frac{2}{3}$ cup sugar, $\frac{1}{3}$ cup milk into which one tablespoon cornstarch has been smoothly stirred, 2 beaten egg yolks, 1 tablespoon melted fat, $\frac{1}{4}$ teaspoon vanilla. Mix the ingredients in the order given. Bake the pie in one crust. Cool it slightly and cover with meringue made by adding 2 tablespoons sugar and $\frac{1}{4}$ teaspoon vanilla to the whites of 2 eggs and brown in a slow oven.

Cottage Cheese Cake

1 cup cottage cheese, $\frac{2}{3}$ cup sugar, $\frac{1}{3}$ cup milk, 2 eggs, 2 tablespoons cornstarch, 1 tablespoon melted fat, salt, $\frac{1}{4}$ teaspoon lemon juice. Mix the ingredients in the order given. Mace or nutmeg may be used for flavoring. Bake 25 minutes in a moderate oven until brown. This makes a very firm custard.

TRAVEL and MISCELLANY

SARAJEVO—WORLD STORM CENTER

THE city of Sarajevo, where the Servian student Princep killed the Austrian archduke Franz Ferdinand and started the world war, is about one-third Mohammedan. It has ninety mosques. A familiar sight in the streets are the Mohammedan men gorgeously attired in richly embroidered jackets of bright cloth or velvet, striped shirts, many-colored sashes and dark blue trousers. The married men wear turbans, the boys and bachelors wear the red fez. The Mohammedan women, if aristocrats, appear in the streets clothed with a full-length cloak, a long veil and two muslin masks. The middle class Mohammedan woman conceals herself in an outside garment gathered in at the waist-line and is permitted to use only a single mask veil.

The Orthodox Greek Bosnian women dress in white skirts and fancy striped aprons, their belts attached with huge silver buckles. They wear embroidered sleeveless jackets and all the jewelry obtainable, with a red cap or bright handkerchief draped over the hair. The Bosnian men wear short coats decorated with solid silver bars, long trousers and white shirts, with the bottom of the trousers and the collar and sleeves of the shirts often edged with narrow hand-made lace.

Every year on Easter Monday in the courtyard of the Greek Orthodox church in Sarajevo is held what is known as the marriage market. All the marriageable youths and maidens of the Greek Orthodox families dressed in their Sunday best meet together and marriage engagements result.

Mohammedans are forbidden to drink wine and find a substitute in lime water which is sold from pigskin casks by travelling venders at less than a cent a glass. A faithful Moslem must say his prayers at sunrise, noon, sunset and in the middle of the forenoon and afternoon. The Islamite prayers never vary. So many prostrations touching the forehead to the floor, so many times rising to a sitting posture with closed eyes and hands on the knees while repeating verses of the Koran, so many times standing and murmuring so many prayers. Not a prayer or position can be omitted. Women and girls are never seen at the services. Their salvation must be provided in some other way.

Each Mohammedan is allowed four wives, but the Bosnian rarely has more than two; the women of

the harems are not educated. In the surrounding fields the women work in the fields with the men and dress like them. In the Mohammedan cemetery the stones are pointed at the top for the graves of women, round for men and turban-capped for men of rank. The bodies of women are put in coffins but those of men are swathed in cloth and borne through the streets on the shoulders of friends.

About seven thousand of the population of Sarajevo descended from those who fled from Spain during the Inquisition. They continue the Spanish language and customs and are superior in looks and manner to other European Jews.

The remainder of the population consists of Slavs, some of whom converted to Catholicism by missionaries from Rome, prefer to be called Croats. The Slavs who remain loyal to the Greek Catholic church prefer to be called Serbs. The family quarrel is deep and bitter, but the mutual hatred of the Austrian has drawn them somewhat together.

How strange it will seem when the words of the Prophet are fulfilled, "I will turn to the people a pure language (unadulterated truth), that they may all call upon the name of the Lord to serve him with one consent" (Zephaniah 3:9). How strange it will be when Mohammedans, Croats, Serbs, and all mankind are of one heart and one mind toward the Lord, and when "they shall all know me [the Lord] from the least of them unto the greatest of them."—Jeremiah 31:34.

GRAND CANYON—NATIONAL PARK

THE Grand Canyon is the most tremendous gash in earth's surface. It is 217 miles in length, over a mile in depth and in places is fifteen miles from rim to rim. In its hidden depths there flows the treacherous and little known Colorado river. The Canyon can not be portrayed by pictures. It must be seen to be appreciated. The government has just included its area, with portions of its rim on either side, in a new National Park. The Grand Canyon is the geologist's paradise, for here the strata of thousands of years lies open before him. Most stupendous of all our natural wonders, this grandest canyon of canyons is yet practically unknown in many of its finest sections. The northern rim is as yet reached with only the greatest diffi-

culty, and from this rim many of the finest views of its temples, buttes, canyons and mountains are to be obtained.

The Prophet speaks of a time when "there shall be a very great valley: and half of the mountain shall remove toward the north, and half of it toward the south" (Zechariah 14:4). This great valley, elsewhere designated in the Scriptures as the Valley of Blessings, is God's kingdom, the Golden Age. Beautiful and wonderful as is the Grand Canyon, it is as nothing compared to the glories God will reveal to an eager world with the inauguration of the promised kingdom of life, peace, and divine blessing.

ANDREW CARNEGIE—MONEY MAKER

ANDREW CARNEGIE, just deceased at the age of 84 began business in Pittsburgh as a bobbin boy at \$1.20 a week. This was at the age of 12. At 13 he was running the steam engine of a small factory. At 14 he was a telegraph boy at \$3 per week. At 15 he was an operator and shortly afterward entered the employ of the Pennsylvania Railroad Company, rising rapidly to an important position. He saved his money and trebled it by wise investments.

At an early age he started the Keystone Bridge Company for the manufacture of iron bridges, realizing that these would soon take the place of the wooden ones then generally in use. This was successful from the start and led to the erection of rail mills, the purchase of vast tracts of ore in the shores of the Great Lakes, and the purchase of a fleet of steamers to bring the ore to the dock of his own railway from Lake Erie to Pittsburgh.

He retired from business with the purchase of his holdings by the United States Steel Corporation at a price which staggered the world. It was claimed at the time that the price which he asked for his properties was four times their value, but that Morgan paid it rather than have Carnegie disrupt the railroad business by building a new double track line from Pittsburgh to New York as he had threatened to do.

During his lifetime Carnegie gave away \$300,000,000, of which sum \$70,000,000 went to the founding of free libraries and the balance to the great Carnegie Foundation at Pittsburgh, Washington and New York, devoted to education, peace, the rewarding of heroes, etc. His fortune at the time of his death was still huge.

Andrew Carnegie was not a Jew, and we may not assume that he was blessed in basket and in store for that reason (Deuteronomy 28:5). Indeed, we

may not assume that even the Jews themselves are, since the days of Christ, especially the recipient of God's blessing, and yet it has been marvelously true of them as was prophesied: "Thou shalt lend unto many nations, and thou shalt not borrow."—Deu. 28:12.

PRISON FARM NO. 2

THE four officers in charge of Prison Farm No. 2 in France, where American soldiers were imprisoned who had been guilty of being absent without leave, have established a reputation for cruelty that will linger long. These men were found guilty of kicking, striking and slapping prisoners, using abusive language to prisoners, making provoking speeches against enlisted men under their charge, fraudulently converting money and private property of prisoners under their charge, threatening prisoners, taking the private property of prisoners and failing to return the same, ordering the burning of private property of prisoners, gross neglect in furnishing food to prisoners, being drunk and disorderly in uniform, and perjury.

It was brought out that prisoners were rolled in the mud for smiling, were knocked down for looking around, were knocked down and had their teeth knocked out for refusing to surrender their money belts, ate dirty potato peelings and even ate from the swill-barrel in order to get enough to keep alive, were punched in the face for being slightly out of line, were knocked down and beaten upon the slightest provocation, while one man for crying out against these outrages had his throat cut.

Four men were beaten with blackjacks until blood was streaming from their faces, and when one of them became weak and lagged behind he was hit from the back and kicked into line. The prisoners were drilled in front of the muzzles of machine guns, and while these things were going on they were cut off from the outside world and not allowed to communicate with home, friends or their superior officers. Men were forced to sleep on cobblestones, and one man was put down a twenty-five-foot hole thirteen days on one can of corned beef and a box of hard tack. On the fourteenth day he died.

Our Lord said of John the Baptist that among all the prophets there had not arisen a greater than he. This great mouthpiece of the Lord when approached by soldiers with the demand that he tell them what their proper duties were said to them, "Do violence to no man." (Luke 3:14) Surely, if these officers who had their helpless fellow-soldiers under their care had heard and heeded these words they could never have visited upon them such terrible cruelties.

RELIGION and PHILOSOPHY

WHY BE A SPIRITIST?

THE people's proclivity for being fooled and liking it, made success both for P. T. Barnum's circus and for modern spiritism. To the "spirits" it must be a "circus" to see people paying to be fooled in the ring and side shows of the mystic delusion of occultism. Not that the people do not see, hear and feel things uncanny, but that the uncanny amounts to little or is fit consumption for mental defectives.

For years back the "spirits" communicated with the gullible in brief utterances through ouija boards, slate writings, rapping and mediums. The communications were so unintelligible they were called "mystic," but common people would have called them plain foolishness. To-day a more intelligent class is taken in by the new mysticism by interesting and fascinating magazine articles which are alleged to come from invisible spirit authors.

The "noted novelist," Basil King, has a series of articles in the *Cosmopolitan*, which according to the headline is made up of "interesting messages which have come to him from the dead." He says, "In writing these articles I am little more than an amanuensis, and I am at liberty to take a detached and appraising view of a great topic for the sheer reason that the presentation is not mine." Mr. King has been led to think that the articles come from the "spirits of dead people." He was never more mistaken, for according to the Bible, which some real Christians still believe to be the Word of God, "The dead know not anything" (Ecclesiastes 9:5), and when a man dies, "in that very day his thoughts perish" (Psalms 146:4). If dead people "know nothing" and "have no thoughts," the communications of which Basil King is the "amanuensis" originate from some one else—from some spirit, according to Paul "a seducing spirit" (1 Timothy 4:1), in plain words, a demon, a devil, one of the fallen angels confined since the Flood to the atmosphere of the earth.—2 Peter 2:4, Jude 6.

This author receives his messages, not direct, but through a female spirit medium. It will be recalled how often good women have been utilized by evil spirits in this way—Ann Lee of spiritualist Shakerism, Mrs. Eddy of Christian Science, Mrs. White of Adventism and innumerable common mediums, not to forget Mother Eve whose following the suggestions of the devil Biblically brought disaster to her children.

It may not disturb some "Christians," but if they

are to become spirits they must drop from the Bible things held for ages as essential to Christianity; for, Biblically, being a Christian is based upon whole-hearted belief in basic doctrines. The spiritist has "outgrown" clear-cut teaching, and prefers to have his mind smothered in a fog of generalities. If the mind can be filled with vague and conflicting ideas, the problem is solved for the demons of how to "obsess" and finally "possess" the personality. The power of thought is sapped, and the mentally spineless person becomes easy prey for whatever follows.

Basil King's "spirit" teaches only a partial survival of personality; good persists, evil disappears: "no evil endures, because it has not life; whatever a man brings over with him is good." This sounds nice, but the would-be spiritist must discard those parts of the Bible about future accountability, such as, "Be not deceived [by spiritism or otherwise]; God is not mocked [fooled]; for whatsoever a man soweth [in this life], that shall he also reap [in the life to come]."—Galatians 6:7.

But a spiritist does not mind giving up unpleasant Bible truths when Mr. Demon promises that "here is a system that takes every man at his best, however much or little that best may include, making his own achievement (and not the merit of Christ, which to the spiritist is anathema) the measure of his reward." In other words, every man his own saviour!

One of Basil King's devils calls himself "Henry Talbot" and modestly assumes a function Biblically reserved for Jesus Christ and the members of "his body, the church." "My special function," says this devil, "is to regenerate the world"; he and the others of his kin "are eager to give us knowledge, while speaking with hesitation and sometimes with reluctance of circumstances closest to us." How tactful! How refined, for a thug to cut one's throat, to do it with a gold-plated razor!

According to the spiritist, one need not rely particularly on Jesus Christ or on God. No more praying to "Our Father," for are not evil spirits ever ready to come to one's succor? As "Henry Talbot" puts it, "We can always reach you, if you need and are willing to listen. Some of us [devils] can penetrate your problems more easily than can others; but there is always some one here [in devildom] to help you in your troubles."

These are accommodating evil spirits, for they are prepared to pitch in and help, "whether or not you ask for counsel, or are aware of it after it has been given." And how holy these devils are! for "we cannot perceive evil, and are conscious only of blanks when it is present." And so ready with "helpful" wisdom like "the serpent" in Eden assisting Mother Eve "to make one wise"; as "Henry" says, "We see so clearly the road of safety and wisdom, on which no evil can be met with." This is bait to get a suggestible person to surrender the citadel of his will, and unresistingly heed suggestions of the demons: "Cultivation of the spiritual ear [the faculty of receiving audible demonic suggestions] is of utmost importance, for through this organ [the 'inner' ear] you can apprehend the words of life." Rather, the words of death! St. Paul says, "The works of the flesh are manifest, *witchcraft*, strife, murders and such like; of which I have also told you that they which do such things shall not inherit the Kingdom of God."

God Biblically declares uncompromising hostility to demons; but to catch the unwary, untutored, honest and simple, how close, forsooth, do these spiritual outlaws represent themselves to be to the great Judge: "Your interest in us must never be allowed to stand between you and your consciousness of God. We are expressions of him (!) but do not forget that it is he who speaks through us (!!) and that we [devils] are the reflection of his glory." (!!!) But faithful St. Paul warns: "I would not that ye should have fellowship with devils; ye cannot drink [participate in] the cup [of doctrines, teachings and fellowship in the life] of the Lord, and the cup [of doctrines, teachings and fellowship] of devils."—1 Corinthians 10:20-21.

"Surrender the will," is the plea of demonism; become limp, pliable, putty-like in the hands of devils; this is their victory, for the battle is won or lost in the mind. So "Henry" wants to entice you to give in to him: "I like to help in everything I can. Ask and I will tell you all I can. You use your mind too actively in your effort to hear, and I cannot overcome your thoughts [the impassable barrier of the will] at times. Relax, and lay your head on my shoulder. Give me your hands, and I will lead you on." Of course. "Henry" will lead you on; but who wants to be led on by a devil?

Mr. Demon, alias "Henry" claims intimacy with the Deity, who on Biblical authority expelled him from heaven ages ago. Through "Henry's" cooperation a spiritist becomes qualified to say, "I reexpress the Father, who expresses himself in me. Things get their value, not because they are mine alone, but because they are both mine and his. His is the first cre-

ative force, and mine the secondary." A spiritist knows for sure this is so, for has not "Henry" told him, "We are the prismatic colors of his glory," and "each prismatic color gives back the rays of light with its special refraction." And when the spiritist gets the proper slant, he "falls" for all sorts of aesthetic gush such as "Beauty is infinite, or it would not be beauty; beauty can never be exhausted," which is all right, because "these are among our teacher's [the devil's, "Henry's"] favorite thoughts."

When Jesus was alive, the "spirits" trembled at his rebuke; they dreaded him; but now, according to "Henry," they and Jesus are on excellent terms: "We [devils] who are speaking to you now are trying to express in modern terms and to meet in modern conditions the same fundamental truths Jesus taught." However, they shy at the doctrines of Christianity: "We generally avoid direct reference to Christian teachings and influence." But they cannot escape belief in the truths of the Bible, for they belong to the class mentioned by the martyr James, "The devils believe and tremble" (James 2:29). It is at the doctrines of Christ the Judge that they tremble; nothing is more natural than that they should "avoid direct reference to Christian teachings."

Evidently the same sinister influences which recently made the peacemaker anathema, now purpose to lead men to an opposite extreme and to substitute the *ignis fatuus* of "mundanism," or "world-ism" for nationalism. Does not "Henry" make this plain in prudently guarded words? "The purpose of nationality is the same as that of individuals. There is fundamentally no more reason for wars between nations than for combats between men of one gift and men of another. It is as ludicrous an exhibition of coordinate egotism for race to fight race as for all musicians to join in a war against all painters." Fortunately, "Henry" is in the spirit world and cannot be landed in jail for talking like this.

The lure of demonism, alias spiritism, is one of the strongest and subtlest enticements to take Christians away from Christ. Spiritism is a reality. The phenomena are actualities, and the source is evil beyond description. It is folly to deny the reality of the proven occurrences of spiritism when their actuality is attested by scientists under rigid tests. The evil is a real one. It is here in growing power, and the safe plan is to follow the tested Biblical recipe, "Resist the devil, and he will flee from thee" (James 4:7). A good course is to determine to resist everything that savors of the occult as being of evil. In the twentieth century this may seem old-fashioned, but it pays to be old-fashioned in matters where caution is the way of safety.

THE MESSIAH—WHO IS HE?

FOR twenty-five hundred years or more Freemasons have waited for the returning of one Hiram Abiff, the great Master Mason. They claim he died a violent death because of his loyalty to the divine secrets typified in Solomon's temple; that he must reappear in order that that great antitypical temple may be completed and its grand service be accomplished.

The Mohammedans, are also expecting a great messenger, a prophet, through whom they and all people will be blessed. For many centuries they have waited his coming. They believe his kingdom is near at hand.

For thirty-five hundred years or more Jews have waited for the coming of the great prophet who was typified by Moses and whom Moses foretold, and who was also foreshadowed by Kings David and Solomon and by the glorious priest, Melchizedek. They expect him to establish his kingdom and restore Israel in Palestine, and with this hope thousands of Jews are now hurrying to Palestine, believing the time of Messiah's appearance is at hand.

Christians of every shade who are conversant with the Bible look for the coming of the Messiah, and they believe that His appearing is near at hand.

In fact, "the whole creation groaneth and travaileth in pain," waiting for they know not what, but desiring some relief that will bring to them peace and happiness and life.

Who is this great and mighty one expected? The Scriptures answer he is the great Messiah, the King of Glory, the one who will bring the desire of all nations. More than four thousand years ago Jehovah promised Abraham, saying, "In thy seed shall all the nations of the earth be blessed" (Genesis 22:18). And thus he assured all that his promise would be fulfilled. The same inspired witness plainly states that this long promised one, the "seed," is the Christ. The word Christ translated from the Greek has the same meaning as the Hebrew word Messiah, both terms meaning the "anointed one," the one given authority to rule.

Jehovah organized Israel into a sample nation or government. He gave to them a code of perfect laws. He dealt with them for upwards of eighteen hundred years, and used that nation to make pictures or types of the coming Messiah, through whom he would bring blessings to all mankind.

Thereafter Jehovah permitted the Gentiles to attempt to establish an ideal government in the earth, and granted to them a period of 2,520 years

in which to make an effort. Zedekiah was overthrown in 606 B. C. The 2,520 years of the Gentile period ended in the autumn of 1914.

The mission of the Messiah is to fulfil God's promise to bless all the nations of earth—to give to all the opportunity of life. He said, "I am come that they [the people] might have life and have it more abundantly." He will establish on earth the will of God for which he taught his followers to pray. "And the government shall be upon his shoulder; and his name shall be called Wonderful, Counsellor, The mighty God, the Everlasting Father [lifegiver], The Prince of Peace. Of the increase of his government and peace there shall be no end, upon the throne of David, and upon his kingdom, to order it and to establish it with judgment and with justice from henceforth even for ever."—Isaiah 9:6, 7.

All peoples, nations, kindreds and tongues desire life and happiness. "There is none other name under heaven given among men, whereby we must be saved" (Acts 4:12). The Messiah will save the people from their sins and give them the blessings of life, but this must be immediately preceded by a great time of trouble, such as the world is now experiencing. "I will shake all nations, and the desire of all nations shall come" (Haggai 2:7). Freemason, Mohammedan, Jew, or Christian, all must look to the Messiah as the only hope for the blessings of mankind. Under his beneficent reign the influence will be uplifting, and the result will be glorious and God's will shall be done on earth as completely as it is done in heaven. "All the wicked will God destroy" (Psalm 145:20). "He must reign till he hath put all enemies under his feet. The last enemy that shall be destroyed is death" (I Corinthians 15:25, 26). "And there shall be no more death, neither sorrow, nor crying, neither shall there be any more pain: for the former things are passed away. And he that sat upon the throne said, Behold, I make all things new. And he said unto me, Write, for these words are true and faithful" (Revelation 21:4, 5). He will make the earth a fit habitation for man. All the desert and waste places shall become habitable (Isaiah 35). "And the desolate land shall be tilled, whereas it lay desolate in the sight of all that passed by. And they shall say, This land that was desolate is become like the garden of Eden."—Ezek. 36:34, 35.

The reign of the Messiah is the Golden Age, for which all peoples have longed, hoped, prayed and waited. Behold, it is at the door!

GOLDEN AGE CALENDAR

October 15 to 28

YEAR— 1919 A. D.; 6048 since Creation; 7427-8 Byzantine Era; 4639 Jewish Era; 2672 of Rome; 3896 of Greek Olympiad Era; 2579 Japanese Era; 1338 Mohammedan Era.

STARS— Morning, Venus, Mars, Jupiter, Saturn; Evening, Mercury.

October 15— Sun rises 6:10 a. m.; sets 5:21 p. m.; moon rises 10:51 a. m.; twilight begins 4:35 a. m., ends 6:57 p. m.; high tide 12:19 a. m. and 12:45 p. m. (New York); Assumption Day, Belgium. 1813—Carlyle, an En-fish publisher, tried for treason for publishing Tom Paine's "Age of Reason."

October 16— Feast of Eighth Day (22nd day of Jewish month Tisri); 1913, Tidal wave and earthquake in Porto Rico.

October 17— Rejoicing with the Law (23rd day of Jewish month Tisri); Kan-nam-sai (Harvest Thanksgiving Day), Japan; 1777, Battle of Saratoga; 1913, Motorless Sunday order rescinded; ordered that no theater, school, hotel, hospital or church be built in New York City during the war.

October 18— Alaska Day, Alaska; 1918, Congress passes Deficiency Appropriation Bill of \$5,345,755,666.

October 19— Dinawali Festival, India; 1781, Battle of Yorktown; 1913, Fourth Liberty Loan Drive ends.

October 21— 1918, U. S. Food Administration issues 12 rules for public eating places.

October 22— 1st day of French Revolution, Month Brumaire (Foggy).

October 24— End of Buddhist Lent; 1912, Wilson appeals to people to elect a Democratic Congress.

October 25— 1st day of Jewish Month Heshvan; Divali Day, India; 1413, Battle of Agincourt.

October 26— Clocks turned back one hour at 1 a. m.; Fraternal Day, Alabama; 1st day of Mohammedan Month Saphar; Divali Day, India.

October 27— Thanksgiving Day, Canada; Fiesta de Minerva Day, Guatemala; Divali Day, India; Labor Day, New Zealand.

October 28— Fiesta de Minerva Day, Guatemala; Bolivar Day, Venezuela; 1776, Battle of White Plains; 1836, Statue of Liberty unveiled, New York.

The Golden Age

Vol. I

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No. 3

LABOR and ECONOMICS

SIXTY CENTS AN HOUR

IN various sections of the country a wage of sixty cents an hour for unskilled labor is looked for. This looks like a small fortune, compared with the fifteen or twenty cents an hour that was the ruling figure only a few years ago.

This increase in wages represents more than a rise due solely to high cost of living. The unskilled labor has multiplied three or four times where living costs have doubled. The laborer is better off than before because his day's pay will buy him more.

In the wheat belt in the 1919 harvest season as high as a dollar an hour was paid for farm help, and in some sections there were three jobs to every competent man.

The extra rise in the labor wage is due to the current scarcity of labor. This class of workers has been recruited largely from immigration, but the war cut down immigration to a fraction of its former figure, and the outgoing stream of laborers made the net immigration very small, a situation now aggravated by the great exodus of foreigners returning to their European homes.

The wage of common labor has responded in part to the scarcity of labor. The law of supply and demand at last enables the day laborer to come into his own.

Some employment experts declare that the country is facing a serious labor shortage, owing to the home-visits of the thousands who have been over here longer than usual, and to the revival of business. The estimate is made that by next New Year the country will be short of common labor to the extent of a million and a half workers. What this may do to the price by hour that a laborer can command may be estimated by the wage experts, but even higher than sixty cents may reasonably be looked for.

Labor's wage is considered the basic wage of all industry. For example, where common labor gets a given wage, the wage of skilled labor will be roughly speaking a certain number of times that of the common

labor. This is because common labor constitutes a high percentage of production costs in the basic industries. Any increase in the labor wage adds materially to the cost of doing business. With labor getting more money and the living cost rising to match, there must be looked for demands for increases in the wages of skilled workers who cannot be expected to acquiesce in any retrograde in the purchase power of the day's pay.

Where the top in wages may be, no one ventures to predict; but, with all the apparent rise the worker is not happy, as he sees the cost-of-living figures always a little beyond his own buying capacity.

The retailers have been lining their pockets during this carnival of high prices. Instead of the 5c profit that they should be making on a pound of leg of lamb some meat dealers have been making 10c; instead of clearing 7c on lamb chops they have been clearing 25c, and the same with veal. Cantaloupes costing the retailer 6c have been retailing at 18c to 25c and tomatoes costing him 5c a pound have been selling at 30c per pound. The wholesalers and jobbers have all participated too. Another contributory cause is reckless buying on the part of many.

A House subcommittee investigating War Department expenditures has discovered that almost 400,000,000 cans of vegetables, salmon and pork and beans were withheld from the market at the request of the canners until after the present canning season, but the total value of this is only about \$1 per head, for the population of the United States, and not enough to affect the situation materially.

But no matter what may be the cause, according to the Children's Bureau connected with the United States Department of Labor 6,000,000 American children are actually at this moment underfed and the New York City Board of Health finds numerous poor families that have been obliged to give up meat, butter and eggs. Efforts to locate the trouble persist.

A MILLION HOMES NEEDED

FOR several years the American people have been "doubling up" two or more families in houses made over into apartments or tenements. The country is short \$4,000,000,000 worth of houses and there is an annual need of \$3,000,000,000 for building purposes, two thirds of which is for homes.

In New York there is an almost total stoppage of work on new houses. Prices and labor are so high that those desiring to build are waiting until they can put up apartments or houses which will not depreciate a quarter in value when the tide of prices has receded.

Some of the percentages of increase in the wholesale prices of building materials since July 1915 according to the *American Contractor*, are as follows, average 119; lime 116; cement 99; brick 170; sand 150; gravel 123; crushed stone 106; linseed oil 240; white lead 86; structural steel 86; hemlock 78; yellow pine timber 87; yellow pine 127; spruce timber 71; window glass 136; plate glass 113.

The percentage increase of wages has been about one-third that of materials, as follows from July 1915 to July 1919; carpenters, shop work 50; carpenters, outside 30; brick layers 20; cement masons 30; composition roofers 50; electrical workers 25; engineers, hoisting 17; marble workers 18; metallic lathers 13; painters 50; plasterers 30; plumbers 27; roofers and sheet metal workers 20; slate and tile roofers 18; steam fitters 27; stone cutters 50; stone masons 35; stone setters 17; tile layers 30; wood workers 53; hod carriers 69.

An important incident of these figures is that building workers, with a thirty-nine per cent wage increase and facing a one-hundred per cent cost of living increase, are not getting a fair share of the goods for their day's work. This condition is attributable to slack business, and is likely to be remedied when building increases. With an increased demand for skilled labor the workers may be expected to apply pressure through strikes to increase their wages to correspond with the advanced cost of living. The practical result to the builder of homes will be that the labor-cost increase should ultimately be in keeping with the 119 per cent increase in material prices.

Further price increases may be looked for in lumber, which may rise from its present average increase of only eighty per cent to a higher figure, and there is a scarcity of some materials. This is the burden under which the home builder of 1920 staggers. It accounts for the fact that in New York the number of apartment houses, tenements and houses has dropped from hundreds five years ago to practically nothing the first half of this year.

A temporary favorable feature is that building

should not only not be cheaper, but should cost more. For a time at least, the discouraged home builder may not expect to find himself in a falling market. For those taking immediate advantage of present prices and wage scales the law of supply and demand is operating favorably and they may be able, for a while, to sell their buildings at a profit. With population increasing two to three per cent a year and the number of homes not increasing by any such rate, there should be a rising price for home properties.

These conditions are the result partly of the abolition during the war of the economic law of competition. In its place was built up a beneficent system of cooperation whereby each party concerned was assured a fair percentage of profit. The cost-plus-a-per-cent system discouraged competition and enabled unscrupulous contractors to put at work unheard-of numbers of men who worked more or less as they pleased and produced buildings of unprecedented cost.

There are numberless houses built under pre-war conditions, and almost as good as new houses, which the home seeker can buy for less than anything of equal quality the builder of today can offer. As long as this class of buildings is in the market there is no reason why an economical home seeker should buy a new house.

Under existing conditions there is a constantly widening margin of the population approaching the homeless state. Scarcity of houses, high rents and extortionate landlords are driving thousands to the point where they find it difficult to avoid having no roof over their heads. They require homes, but the homes are scarcely to be had at a figure which their daily wage will afford. With building at a standstill, or progressing on high-cost lines what are these unfortunate poor to do?

Certainly they may look forward with anticipation to the Golden Age when it shall not be true that the men that build houses build them for other people to live in and they themselves go homeless. Rather the promise is made that soon "they shall long enjoy the work of their hands"—Isaiah 65:21-22.

WILL FOOD ADMINISTRATION BE REVIVED?

THEY HAD TO revive the Food Administration in England and we may have to do so in this country. There is talk now of placing warehouse owners and cold storage men and wholesalers and large retailers under license. We had them under license during the war. There is talk of enforcing regulations against hoarding. We did it during the war. There is talk of laying down rules governing the profit which is fair. We did that during the war. There is talk of cutting the cost of living by using a zone system for shipments of live stock and fruits. This was done during the war.

Who was benefitted, then, by the abolition of the Food Administration? Who raised the cost of living since it was abolished, and who suffered as a result? If the Food Administration was a good thing to help the people save during the war, would it not be a good thing to help save the people now?

There is a hint in Joseph's experiences in Egypt that in times of world scarcity one of the most useful offices of the Government is to see that the people's food supply is cared for, so that they may not come to want. Joseph's whole purpose in buying and storing the food, and doling it out as needed was "To save much people alive."—Gen. 41:1-57; 47:13-26; 50:20.

IS THERE LEATHER SHORTAGE?

IT IS hard to get at the truth of some of the statements that appear in the daily press. We can not be sure that some of the things that look plausible were not fixed up on purpose to make them look so. But it does appear reasonable that there is really somewhat of a shortage in leather. Leather is a by-product of cattle raising. Cattle are not raised or slaughtered for their hides merely. The hides result naturally from the sale of beef, and the sales of beef per capita are much less than they used to be, because the people cannot afford to eat much meat at the prices which have recently prevailed.

During the Great War the number of European cattle was greatly reduced and it will be a long time before the leather stocks in those countries will be as great as it once was. There are large stocks of leather at ports in South America, India, China and Siberia, but the shipping of the world is not yet sufficient to transport it.

There has been talk that shoes are selling in Europe for \$20 to \$25 per pair, but thousands of shoes were recently advertised for export at prices ranging from \$1.80 to \$5.75 per pair, or about one tenth the alleged European prices. Somebody must be getting the difference and it looks as if somebody is getting too much. There are quite a good many people in the United States today who can not understand why shoes that cost \$6.75 at the factory should cost the consumer \$12. The retail shoe men claim that they are making less money than formerly because of the loss of business due to high prices.

The Golden Rule, "Whatsoever ye would that men should do to you, do you even so to them" (Matt. 7:12), is a rule of business none too often followed, but is nevertheless the acme of wisdom as well as justice, and in the Golden Age will be enforced upon all by the unseen spiritual powers that will then be in control. The Golden Rule does not spread lies and half-truths in the effort to maintain fictitious prices.

THE DEMANDS OF LABOR

THE demands of labor to a voice in the management of the businesses with which they are connected are of a nature that will not be set aside. Labor has been moving steadily forward in its attempts to secure a larger share of the profits of industry ever since the inauguration of the factory system, which began in England in the year 1800.

At that time it was a criminal act for workmen even to meet in an attempt to improve their wages and condition of labor, and for more than fifty years the employing class in Great Britain, through its control of legislation, was able to attach to trade unions the taint of lawlessness. The workmen felt this injustice long before the employers admitted it and made their indignation felt at various times in acts of violence in which thousands of dollars worth of property was destroyed.

The workmen were not alone in their resort to violence. More than one employer has been guilty of resorting to violence by hiring ruffians armed with rifles to act as strikebreakers. This practice has now been almost entirely given up, as the experience of many years has shown that collective bargaining has come to stay, and there is no more reason why workers should not organize than there is why bankers, manufacturers, publishers, etc., should be forbidden to do so.

The high cost of living is made higher still by every strike, for it is the people, the whole people, that in the end must pay for every interruption of the business of producing and distributing the necessities of life. Every intelligent workman knows this and every intelligent workman wants steady employment. To be sure he wants the best wages he can get, but he can not really want the impossible and must not have the unreasonable. He will be satisfied, and must be satisfied, with a reasonable share in the profits, but wants his own representatives on the board of directors to make sure that figures are not juggled. With less he will not be content.

In these times, with labor realizing its importance in the defence of the country and the maintenance of the country, instead of an employer trying to regulate wages by imposing his will upon his employees, the best way for him to maintain a permanent labor supply is to sit around the council table with representatives of his men and endeavor to work out the problem on a basis that is just to all concerned.

No one can accurately compute the value of another's labor. We all know that it is to the interest of the country, to employers and employees alike, that the largest production should be obtained with a given amount

of labor, having due regard to the health, safety, rest, recreation and improvement of the workers. These being safeguarded, the larger the amount that is produced the more there is to divide.

The time was when a Pharaoh could say to a people that he acknowledged was mightier than his own people (Ex. 1:9), "Go ye, get you straw where you can find it: yet not ought of your work shall be diminished" (Ex. 5:11) and he expected and for a time received implicit obedience. But now the workers know their strength better than they once did, and the modern Pharaoh knows better than to send out a foreman to his men with such a message as Pharaoh of Egypt sent to the Israelites. The nearer approach of master and workmen to the common level is a happy augury of the actual dawning of a better age.

SALVAGING BROKEN RICE GRAINS

THE 1918 crop of rice in Louisiana, Texas, Arkansas and the Carolinas was 38,000,000 bushels. Ordinarily some 2,350,000 bushels of this would have been converted into beer. The part thus used is made up to the tiniest particles of milled rice, broken pieces of less than one-third of a grain in size. America is not a large rice-using nation and a problem now presents itself as to the best use to make of these broken rice-grains. They can be made into rice-flakes which look and taste like corn flakes, or they can be puffed and made into puffed rice even though the grains are broken. Rice flour can also be used as a part substitute for wheat flour in baking but at the prevailing price of 12c per lb., or \$24.00 per bbl. could not be considered a very good investment.

In America scarcely six pounds of rice per capita is consumed in a year; whereas the per capita consumption in foreign countries is as follows; in Japan each man, woman and child consumes 147 pounds of rice a year; in China 158 pounds; in Russia 11 pounds; in England 27 pounds; in France 34 pounds; in Italy 101 pounds, and in Germany 93 pounds.

It is a favorable sign when we see men considering what to do with such apparently small items of human food as broken rice grains. Anybody can waste; it requires no brains to do that. But to make the wisest and best use of the fragments of human time, effort, food, etc., so that the largest and best results can be obtained for humanity, this requires thought. We have an illustration of the Divine view of the value of human food in the command of our Lord, after he had miraculously fed 5,000 people with five loaves and two little fishes, to gather up the broken fragments of loaves and fishes so that nothing be lost.—John 6:12.

WE MUST LEND OR HUNGER

OUR GREATEST and most natural market outside the United States is Europe. Europe is like a good customer who has been burned out and requires credit. She needs food, coal, raw materials and machinery until she can get on her feet, and meantime, as she has neither gold nor the goods with which to make immediate payment, this country must loan and keep on loaning. It is estimated that to pull through the next year Italy will need loans from us of \$500,000,000, France about \$400,000,000 and Belgium will need about \$200,000,000.

But why cannot we refuse to sell to Europe except for cash, and if she cannot pay cash why cannot we let her go hungry? We can, but if we let her go hungry then we go hungry too. It works out in this way. Ours is a great agricultural country. We raise more food than we can eat. When we can sell this surplus food at good prices our farmers are prosperous. When the farmers are prosperous everybody is prosperous, because the farmer is a good customer, and spends his money freely when he has any to spend. When Europe ceases to need our food exports the prices here will fall, the farmer class will lose its purchasing power and we will all feel the pinch. Hence it is important that we lend to Europe if we would eat.

It is true of the body politic, as it is true of the Body of Christ, that "We are members one of another". (Eph. 4:25) More and more we are led to see that the command to "Love one another; not as Cain, who was of that wicked one, and slew his brother" (1 John 3:11,12) is not only good from an ethical standpoint, but it is actually good statesmanship, and a statesmanship that will be more and more valued as we progress farther and farther into the Golden Age.

OCEAN GIANTS

IT IS PROPOSED to build two 1,000-foot steamships to run between this country and European ports.

Thousand-foot ships are big ones, but they do not represent the progress of which humanity might be thought capable. No one knows what was the size of other contemplated boats, but Noah's ark some 4,389 years ago, made a good start with a length of 450 feet, a breadth of 75 feet and a height of 45 feet. The comforts of the ark were negligible and would not have satisfied the modern tourist trade, but they sufficed for the load of animals and people that took the trip from "the world that was" to "this present evil world." The ark, too, was scientifically designed, for its dimensions are said by a marine expert to be those suited for maximum carrying capacity.

SOCIAL and EDUCATIONAL

YOUTHS OF 131 AND 144 YEARS

IT SEEMS ODD to read of John Shell, the Leslie County, Kentucky, mountaineer, who recently celebrated his 131st birthday by riding in an automobile. He was born before the French Revolution. It seems odd, too, to read of Zorro, the 144-year-old Turk, still working as a day-laborer in Constantinople, along with his grandson and his grandson's grandson. He was born before the American Revolution and was over a hundred years old when General Grant was elected President the second time. We are not used to such things, but the world was once used to far greater age than that of either Shell or Zorro. The average ages of eight of the ten patriarchs from Adam to Noah was 929 years (Gen. 5:3-31; 9:29), and despite the Flood, and the consequent unfavorable effect upon human longevity, the average ages of the sixteen patriarchs from Shem to Moses was 251 years.—Gen. 11:10-32; 25:8; 47:28; Ex. 6:16-20; Deut. 34:7.

With the return of Edenic conditions in the earth we are assured that "As a child shall one die at an hundred years old" (Isa. 65:20) but the sinner, who makes no progress towards perfection under full light and opportunity, will be cut off in death as soon as a final decision in his case has been reached. Won't it seem strange when such men as Zorro are counted as children and when finally death ceases altogether?—1 Cor. 15:26.

A FAIR CHANCE FOR BABIES

WE ALL WANT the babies to have a fair chance, but the stubborn fact persists that unless the income of the home is sufficient they do not have that chance and can not have it. Professor Ogburn of Columbia University made a study of 4,000 families in 18 cities and recently gave some of his conclusions at a wage hearing in Chicago. It appears that investigations made prior to 1914 showed that where the family income was \$550 a year the deaths among the infants were 267 per 1,000, but there were less than a third as many when the income was \$1,250 a year, and it was not until the income reached \$2,500 that the death rate dropped to its lowest point. This shows the direct bearing that incomes have upon child welfare.

During the Great War the War Labor Board of Massachusetts decided that \$28 per week was a fair living wage for two parents and three children. This is \$1,456 per year. Professor Ogburn's studies coincided

with the War Board's estimates. He believed that \$1,385 per year was necessary for bare subsistence of a family of five in October, 1918, and that an income of \$1,550 is now necessary. The average annual expense of such a family for entertainment Prof. Ogburn found to be \$5.03 for movies, \$1.09 for concerts, 85c for newspapers, \$1.65 for postage and 30c for magazines. The head of this average family buys a new straw hat every other year and a new soft hat every third year.

Won't it be nice when there is absolutely plenty in the earth for everybody? The Psalmist speaks of such a time of the Lord's promised kingdom, the time of the Golden Age, when he says, "There shall be an abundance [Heb. *pissaw*] of corn in the earth upon the top of the mountains; the fruit thereof shall shake like Lebanon [a forest]; and they of the city shall flourish like grass of the earth." "He shall judge the poor of the people, he shall save the children of the needy."—Psa. 72:16,4.

COLLEGE PROFESSOR SORROWS

COLLEGE PROFESSORS have been hard hit by the high cost of living, and they know it. Nobody ever became a teacher because of the money there was in it, but there have been advantages in a social way, and lengthy periods of rest, and daily association with bright active, inquiring minds that have made many men of high ideals look to teaching as a line of work in which they could be happy, not only because of the good they could do but because of some compensating advantages.

But when men have to reduce their clothing allowances to the lowest notch, and their wives have to do their own work, and they have to practically give up books, music, travel, and even life insurance, at a time when more is expected of them than ever before, it is following, as a matter of course, that young men are avoiding the work of teaching and many of the older teachers are leaving to enter other lines of business. Many colleges have suffered greatly within the past year or two because the members of their faculties have gone to other lines of work where they could make salaries several times as large.

"The laborer is worthy of his hire" (Luke 10:7) and if we want education for the rising generation we must pay for the work done, or it will be done by incompetents. The demand for justice to the teachers is right in line with the policy of the coming age.

TWO MILLION NEW GARDENERS

A HAPPY, enthusiastic, successful and healthy army of two million gardeners has been added to the nature-lovers of our country; 400,000 in the states from Maine to Maryland; 250,000 in the states from Virginia to Mississippi; 600,000 in the states from Ohio to North Dakota and 500,000 in the states from Kentucky to New Mexico. That was the enrollment in the United States School Garden Army for 1919. It was all an outgrowth of the Great War, but it was a grand step in the right direction. It is bringing forward a new generation that will appreciate and love Mother Earth and the fresh air and the plants, as the past generation has not done. And it will be a healthier generation, and a far happier one.

It has good backing too. It has come to stay, for it has been made a part of the required school work in many of the curricula and the garden army director has become a part of the official family of the State Department of Education in some states, and will probably be made so in all states. The work is starting right. The motto has been, "A garden for every child—every child in a garden", and courses in gardening have been started in the normal schools, so that the children may have the right kind of teachers. In Ohio the legislature set aside \$1,500 in prizes to be awarded to the young gardeners, and they never appropriated \$1,500 to a more worthy purpose. In New Hampshire 7 per cent of the entire population of the state is enrolled in the Garden Army.

This movement is an important part of the work of the Golden Age. Our original inheritance in the garden of Eden is to be restored, and it will be restored in part by the efforts of men to subdue the earth, as was contemplated in God's original purpose. (Gen. 1:28) The ultimate effect will be that "the desolate land shall be tilled whereas it lay desolate in the sight of all that passed by. And they shall say, This land that was desolate is become like the garden of Eden." —Ezekiel 36:35.

THE SOCIAL UNIT PLAN

FIFTEEN THOUSAND people, in a section of Cincinnati, have proved that by working together they can virtually remove poverty, crime and disease from their midst. They have done it now for three years. Neighborhood administrations are formed which make it their business to see to it that every person in a particular block is adequately provided with work, food, medical attention and recreation. The theory is that when every block in every city is thus looked after, want crime and pestilence will be things of the past.

The theory is a good one and has the support of able men. We wish it well and interpret it as one of the harbingers of the better era.

GAMBLING FOR A SICK MAN'S BLANKETS

CHRISTENDOM is sick; every financier knows it; yet the financial news from Wall Street shows no indications of a let-up in the gambling spirit. When the master minds of the country are grappling with the railroad problem it does not read well that the stocks of equipment companies have advanced and "Are enjoying good earnings, with the prospect of an increase in domestic business when the railroads are returned to private operation." It looks too much as though some people were too sure of their present and future profits.

With the common people of the country greatly agitated over the price of shoes it does not read well that "While hide and leather markets reflected agitation against high prices, the stock moved forward in the belief that even at decreased price levels the company will continue to make large profits." It looks too much as though there is somebody that has had more to do with cries of leather shortage and demands for higher prices than is right.

With the great mass of people in New York that has had to give up the use of meat, butter, eggs and milk, it does not read well that "The local traction shares displayed a more buoyant tone on reports that fare increases would be allowed" and "Buying of this issue was predicated on the belief that higher fares will be granted to the traction companies." It looks too much as though some people were interested in seeing higher fares whose interest is not entirely unselfish.

Gambling is always interesting. There was the time, you remember, when eleven of the apostles cast lots to see which of the two men they had picked out for the twelfth apostle should be accepted of the Lord as such. (Acts 1:15-26) But this was before the Holy Spirit had come at Pentecost. Afterward, long afterward, they all learned that the Lord had chosen the Apostle Paul to that high honor, and to him was granted "Visions and revelations of the Lord" (2 Cor. 12:14) which he was privileged to communicate to the eleven who had been with the Lord from the first.—Gal. 1:11-24; 2:1-21.

BETTER TIMES COMING

BETTER TIMES are coming. It can be stated confidently and scripturally that present conditions of world-wide unrest are but precursors or forerunners of the Golden Age.

MANUFACTURING *and* MINING

MOTOR TRUCKS FOR OIL TRADE

IT HAS BEEN demonstrated that a 1 1-2 ton truck will replace not less than two 2-horse-drawn wagons, and a large truck will displace from six to nine horses and two or three horse-drawn wagons and effect a considerable saving in labor. A 2 1-2 ton truck is usually operated by one man, while a larger truck usually has a helper.

Within a radius of less than ten miles teams are usually most economical to operate, if kept busy all the time, but it is easier to obtain help to operate trucks than it is to drive teams. The truck has the advantage of being able to perform the work more satisfactorily in the heat of summer and in the intense cold of the winter season.

For long hauls and full loads the motor truck has the advantage of the horse in economy and in every other way, particularly because of its greater speed. A truck can handle goods within a radius of 60 miles more economically than they can be shipped by rail. This is because the goods do not have to be prepared so carefully for shipment and because of the fewer handlings that are required. When goods are loaded on motor trucks they are delivered direct to the destination. Where a mileage of 60 or 65 miles per day is covered the most economical size of truck is a 2 1-2 ton truck, whereas in larger centers, where the mileage is 35 to 40 miles per day a 3 1-2 ton truck is the most economical.

Another advantage of the motor truck is that it cuts down the number of hours a man has to work because it shortens the time necessary to make deliveries. It is very seldom that an old employe who has driven a team for a number of years and is broken in on a motor truck wishes to go back to the old style of vehicle. He finds the truck an interesting study and takes more interest in it and better care of it than he would the horses. It has proved in most instances that the old time horse-driver, who is broken in and carefully instructed, makes a much better motor truck driver than a professional chauffeur.

It is not uncommon now to see trucks carrying from 4,000 to 5,000 pounds making their way over the desert regions in the far west, where roads are entirely absent, for distances of fifty to sixty miles.

Special trucks are now made for the oil industry. The requirements encountered by trucks in the oil fields of West Virginia and western Pennsylvania have proven the necessity of these special designs. Most of

the loads consist of long parts, such as standard lengths of piping and derrick material. These overhang at the rear of the truck, and owing to the extremely poor roads which must be traversed in the mountains, the overhung load sways violently and sets up severe rocking strains in the body as well as in all parts of the rear of the truck. The average body will not stand up under these conditions.

The work of oil drilling requires the moving about of much heavy equipment, which has been done heretofore slowly and clumsily by three or four teams of horses. The roads in oil regions generally beggar description. Not infrequently the best oil deposits are in locations which are almost inaccessible. Jobs that formerly required half a day are now done by motor trucks in an hour. Drilling rigs, boilers, pumps, lumber are moved by trucks quickly and with ease, that can be handled by horses only slowly and with difficulty.

When a new field is opened up the same difficulty is always encountered in getting machinery and supplies of all kinds from the nearest railroad to the point where the equipment is to be used. If there are any roads in the section at the start they soon become so cut up with the heavy traffic and so slippery and greasy as to be almost impassable. Under conditions such as these, tractors of the caterpillar type haul loads through to destination which can hardly be moved by any other means. Horses can not be worked when the mud gets as deep as their gamble joints, and this not infrequently happens in the oil fields.

In Detroit recently, in a test, a truck in which the power is applied to every wheel ascended the Court House stairs, step by step, with 22 men aboard. This truck will run in mud so deep that the axle housings drag, and will go down and out of cellars and through sand, almost anywhere.

Creeping tractors, patterned after the "tanks" used in the Great War, are designed as power auxiliaries to do what trucks were not designed for. These tractors will haul loads over roads where a motor truck would not be able to turn a wheel. They are used to pull motor trucks over the worst of roads, and for moving boilers, drilling rigs and casing to new locations; for building and maintaining roads; for pulling trees and stumps and oil casings.

For certain kinds of work where it is desired to discharge the load on either side of a vehicle, gravity

dump bodies are provided which require no power to operate. These discharge the load and return to an upright position by gravity, afterwards locking automatically. The hopper is V-shaped, with perfectly straight sides, which allows the material to completely clear the body when it assumes the dump position.

Constructors, ship builders, quarries, steel and iron manufacturers—all of those industries sending out the most gigantic loads and requiring the most exacting schedules of time on their production—are coming more and more to use motor trucks. Tank cars are specially designed for the transfer of liquid loads and are now to be seen everywhere. Tank cars are built with compartments, connected with cross pipes in the rear which allow any one of the compartments, or all of them if desired to be opened into the main pipe leading to the pump or faucets for filling cans at the rear. Motor driven pumps empty or fill these tanks in ten minutes time.

The operation of several hundred motor truck vehicles over a period of one year shows the following percentages of cost:

Gasoline	\$23.21
Depreciation	21.76
Repairs	17.06
Tires	15.16
Garage	14.31
Interest, Taxes, License, Insurance	6.49
Lubrication	2.01

The "swift beasts" (Heb. *kirkaroth*, swaying furnaces) of Isa. 66:20 refer specifically to locomotives, but as automobiles are also, after a fashion, swaying furnaces, they are probably included in the expression. In a little while the Prophet Isaiah will be back here on the earth and we will ask him, or you can, whether automobiles and motor trucks are included in that expression or not.

WORKERS BUY A STEEL PLANT

ALL WHO wish well to their fellow men will wish well to the Aetna Iron and Steel Company, a corporation made up of former workers of the great steel plant at Gary, Indiana. These men have purchased the old Aetna gun-cotton plant, near Gary, at a cost of \$400,000. To succeed they will need to have among their numbers skilled salesmen and office workers as well as actual steel makers. They will need to have an executive head and to obey him. They will need to be reasonable in their wage demands, and all to work together for the good of the business. They will need to study economy in every way, and will probably need the services of some good financier.

If they make a success of their venture, their experiences will not differ greatly from their experiences in

the past, except that at dividend time they have a chance at greater profits than heretofore. There is no doubt, too, that they face the possibility of losing all they put into the venture. Business success generally follows a long period of self-restraint on the part of somebody, and self-restraint is a character builder. "He that ruleth his own spirit [is better] than he that taketh a city." (Proverbs 16:32) There are some who will not wish these workers well in their new venture, but we are not of that class. We hope that they will make a great success of their double role of employer and employee and receive an adequate return for the investments in money, skill and self-restraint that they put into the business.

THE MANUFACTURE OF STEEL

TO EXTRACT the metal from any ore the ore is melted by intense heat and by adding to it lime, which unites with the impurities of the ore to form a liquid slag which floats upon the molten metal. The metal is then drawn off from the bottom of the furnace, after which it needs to be refined. Coke is used to provide the fuel for melting the ore and in order to provide sufficient air for the combustion enormous quantities are pumped in through great stoves where the air is first heated to over 1,000 degrees. These stoves of which there are three or four to each furnace, are large cylinders filled with a checker work of fire brick.

Pig iron always contains impurities, among which are sulphur and phosphorous, and both of these are objectionable and need to be reduced by burning away. Sulphur in too great quantities causes steel when heated to bend or break. Phosphorous in too great quantities causes steel when cold to be brittle. For the burning out of these impurities oil has the advantage of providing a heat which can be easily regulated.

If Tubal-cain, "an instructor of every artificer in brass and iron" (Genesis 4:22), were to visit a modern blast-furnace plant he would surely be astonished at the gigantic scale on which we do things nowadays, even though the principles are the same as he taught five thousand years ago, but all these improvements are necessary to the manufacture of the machinery and tools that will be needed to do the drudgery of the world in the Golden Age on whose threshold we stand.

SECURITY OF POSITION

LABOR feels that a long period of service for a concern should give as much security of position as that universally accorded to lawyers, physicians, bankers and others who have grown old in the service of their clients.

FINANCE, COMMERCE *and* TRANSPORTATION

TOO MUCH MONEY

WHEN "free-silver" theories of currency were rejected in 1896, America saved itself from a web like what the people are now entangled in. Silver would have been put on the free coinage basis like gold which, if taken to the mint is, without charge, run through the processes necessary to turn it into gold coin.

Free coinage of gold had not unduly increased the volume of currency, because gold had been scarce. But if producers had been permitted to have silver coined free, the production of silver would have become so great that the quantity of money would have been noticeably increased.

Some might say this would have given the common people and the business men more money to handle, and there would have been an increase in the volume of business, for if any business man needed money for his business he could get all he needed. There is some truth in this; but there is more truth in the fact that business men do not need much more money, because they do business, not with money itself but with credits advanced by the banks; when a business man obtains a loan from a bank, he merely leaves the amount on deposit, and draws checks against it, and usually does not use much cash.

If the volume of money were increased, most of it would be deposited by the people in the banks, where it would become the basis for further loans to business men. On account of the fact that business men do not draw out money, but use checks, a bank loans more credits than the amount of the money, so that the cash in the banks may become the basis of credits ten to twenty times the amount of the cash.

A moderate increase in money in banks serves for very large increases in credit loans to business men. Safe and sane business increases slowly, because based on the slowly increasing consuming power of the people, and a large increase in the volume of money, such as would have resulted from "free silver," would not result in a corresponding increase of legitimate business, but an "inflation" of credits.

A condition exists today like that from inflation of silver, but the inflation now is from an unprecedented increase in the amount of gold. Not only has the volume of gold increased but that of other forms of currency. The amount of money in the United States was \$3,350,000,000 in 1913. In January, 1914, it had risen,

to meet the needs of trade, to \$3,447,000,000, or about 3 per cent increase; in January 1915, to \$3,543,000,000, another increase of about 3 per cent. In January, 1916, it was \$3,909,000,000, or about 10 per cent more; the inflation of currency due to the war had begun to be felt. In January, 1918, it was \$5,120,000,000, another increase of about 15 per cent. At the present time the amount has jumped to in round numbers \$7,563,000,000 or an increase in two years of 50 per cent, an advance in volume of currency wholly unrelated to any increase in the volume of business, or more exactly in the amount of goods produced.

This has an effect of vital importance to the people. While the people save a little, they spend practically all that they earn, the saving usually being a comparatively negligible factor. If their income is raised, they continue to save a trifle but usually spend practically all they earn. If there is no increase in the amount of goods produced, the people will simply spend more money for the same goods, a process which assumes the tangible form of a higher cost of living, now the burden of half the headlines in the newspapers.

Roughly speaking the increase in the cost of living has corresponded with the increase in the volume of currency. From January, 1914, to January 1915, the average wholesale prices of all commodities increased 3 per cent. The next year it increased 19 per cent. From 1916 to 1917 it increased 26 per cent and from 1917 to 1918 it showed an increase of 32 per cent, and since then has made a further large advance.

The volume of currency and the cost of living increase or decrease together. Until the volume of currency is lessened there is little hope of a material reduction in prices. In an era of high prices and corresponding discontent, the mental attitude of the workers reduces the volume of production, as agitation takes the place of efficiency, and men think about grievances rather than work. If the volume of goods, money and credits does not change, prices remain unchanged.

The outlook is for no particular contraction of the currency. If the gold now in the banks were to return to circulation among the people it would reduce the volume of money in banks which is being used as a basis for loans and credits to business men. But the people are trained to consider gold as for the banks, and they do not even try to get it into circulation. It is easier to use paper money and checks than coin, and universal experience is that a people trained to the

more convenient currency do not readily turn back to metal currency for daily use.

The chance is remote of a reduction in gold by its flow to other countries. The situation is reversed that used to prevail as regards payment of gold to Europe, for interest, ocean freight, tourists, laborers' home remittances, and trade balances. To a measureable extent the United States has become a creditor nation, which turns the gold stream toward our shores. Europe needs material for reconstruction and will pay America for it with gold. Europe's exports to America are far smaller than before, which creates a trade balance favorable to this country, with the amount of the balance payable in gold here.

If the banks could reduce the enormous volume of loans to business men, there would be less credit-dollars in circulation, and a contraction of the sums available for business purposes would ensue, and with less money going to the people to pay for goods with, prices and wages will fall. But there is little prospect of a change; the new Liberty Bonds are remarkably good security for bank loans, and there can be no diminishing in their volume until they are redeemed. Paper money may not be expected to decrease in volume for the Federal Reserve notes and bank notes show an increasing tendency toward expansion.

That there is no prospect of a decrease in the currency, but rather an increase, is evident. To get people that have money to refrain from spending practically all they get is to expect a change in human nature. There is going to be plenty of money in circulation, plenty to pay for things with, and on this basis prices should continue high, if indeed they do not rise, after the palliatives applied have run their course of partial and temporary efficiency.

FROM FARM TO HOME

THERE ARE too many middlemen between the farm and the home, and the great problem of the day is how to get rid of them or at least some of them. An investigation showed that there were eight to ten middlemen between the New York farmer and the ultimate consumer in the city. All of these middlemen have demanded profits, no matter what happened to the farmer, so that it has not infrequently happened that the farmer, rather than receive for his fruit less than the freight charges, has allowed it to rot upon the ground. And it does not seem right for the farmer to receive but six to ten cents per quart for his milk while the consumer ten miles away pays from sixteen to twenty cents.

We find ourselves wondering whether it may not be possible that the motor truck will solve this problem,

and possibly the Government may have a hand in it. The Government did so many things for us during the war that we get to thinking about its powers of organization and imagine things it might find a way to do to help us with our unsolved problems.

One of the principal items in the marketing of food is its transportation. The Government sells the transportation, practically all of it; perhaps it could be persuaded to buy and sell the food itself, or certain kinds of it. Wouldn't it be a great idea in this country, as it is in Europe, to place your order with the postman for butter, eggs, bread, potatoes, etc., and have it come direct by the next parcel post? Seems easy; doesn't it?

We shut our eyes and imagine a time when the people of a great district, acting through the government or some great cooperative association, will organize regular motor-truck services radiating from industrial centers for fifty or a hundred miles and thus effectively bring the food from the farm to the individual consumer. It would seem that it would not take a great deal more time to learn to grade, classify and price all kinds of farm produce than it does to figure parcel post rates, and the same kind of people that were glad a little while ago to buy the Government's surplus bacon would probably learn easily to appreciate the privilege of buying its fresh vegetables. The details of the job would be a task for a Solon, but it seems worth a trial. A ware house would be a necessity, but it is nothing new for the Government to have warehouses. It had many warehouses during the war.

This pressing problem we may be sure is one to which the Lord will give attention when he begins the work of straightening out the earth's tangled affairs. "The earth is the Lord's and the fulness thereof" (1 Cor. 10: 26) and we may be sure he will see to it that adequate arrangements are made for distributing its bounties among his countless happy subjects who will find here their heart's desire. "The desire of all nations shall come."—Haggai 2:7.

A TRUE STANDARD OF VALUE

GOLD IS THE world's present standard of value, because it is about the only thing of value in time of war that can be exchanged for necessities by the nations at war. With the passing away of wars, a better and truer standard of value seems possible.

The real basis of value is that which supports human life, not that which can be used to destroy it. What is needed in the way of money is a certificate which is good anywhere in the world for the same aggregate quantity of flour, butter, beef, bacon, beans, sugar, clothing and fuel. Is the combined intelligence of the world

equal to the production of such a coin or basis of exchange?

If we had such a standard of value a salaried man would know the value of what he had earned; now it changes from day to day. A man who made a contract would know the value of the contract; now he can tell little about it. A person with a savings account would know the value of the account; as matters now stand a person who has been saving money the past six years has been defrauding himself, because he can actually buy less now, with principal and interest included, than he could have bought with the principal alone when he first began to save.

It would be a step forward if all the Governments of the world would take all the gold in existence and melt it into one vast statue dedicated to human folly, and issue in its stead commodity certificates based upon the composite basket of goods which we are all working to create, and in which the whole world is concerned. It would not be as easy to do a thing of this kind as it sounds. It would require the power of the "King of kings" to bring about such a great reformation, but there is scriptural reason to believe, however, that there will come a time when money as we now know it will cease to exist, the "Mammon of unrighteousness" (Luke 16:9) having been superseded by some medium of exchange better suited to the conditions that are to come.

BUSINESS ITEMS

A STRIKING feature of the financial field is the five hundred applications for charters for national banks and requests for increases of capital of existing banks. This is regarded as an indication of widespread prosperity.

Great Britain, in order to hold its own in foreign trade, has begun the education of hundreds with a view to developing them into experts in that field of work. The most severe competition known is expected both from Germany and the United States.

The packing industry has been invaded by a combination known as "The Allied Packers", and composed of seven large packing concerns. A little more competition in this field should work out well for the people.

The necessity of taking a more human interest in employees has led the American Woolen Company to take out insurance policies in favor of its employees. The blanket insurance policy covers 35,000 employees and amounts at \$1,200 each to some forty million dollars.

FOREIGN TRADE BLOCKED

IT WAS expected that with the end of war foreign countries might be unable to pay for needed goods with gold and that this might cause trade to languish,

but a somewhat unexpected factor is having a not less serious effect on the sale of American products in European markets.

This is the decline of foreign exchange. When Europe is buying our goods and not selling us hers there exists an oversupply of foreign exchange, which falls in price as the demand for it decreases. It takes more units of foreign money to equal a given number of units of American money, and this has reached a point where the difference tends to wipe out the profits the foreigners might make on the sale of the goods they buy from America. Foreign buyers cannot afford to do business at a loss and they drop their orders to the lowest possible figure. The condition of foreign exchange is a bar to business and the foreign trade of this country is much smaller than was expected. This affects the profits of exporters, the output of manufacturers and the profits on the operation of ships, to say nothing of the effect on transportation lines bringing the goods to American ports.

The problem of foreign exchange is engaging the best financial minds, and hard work is being done to work out a solution that will open wide the doors to foreign trade.

COOPERATION GROWS Apace

THAT THE economic body thrives best where its members maintain an attitude, not of domination or competition but of cooperation, is demonstrated by many prosperous groups of cooperative peoples.

A few nations are distinguished for the extent to which cooperation is a factor in the daily life of the common people. Cooperative Russia, with some 2,000,000 members in such organizations, is one of the leaders, but the premier place belongs to Great Britain. There the cooperative system already embraces 3,500,000 persons, in over 2,500 societies engaged in the production and distribution of goods.

The British cooperative system is a power financially, rivalling some of the largest corporations of the United States. The total capital is about \$375,000,000 and the total trade is over \$1,000,000,000 annually, yielding a profit of nearly \$100,000,000 a year.

The members benefit by the usual cooperative-store plan whereby the members trading at the store receive back the profits on their trade at the close of the year. This according to the figures above amounts, with the factory profits added, to nearly ten per cent, or the equivalent of more than a month's trade a year for nothing. Such a system ought to be of interest to Americans as part of the campaign for the reduction of the cost of living.

The members during the war were able to get lower prices than others, even on articles for which the government set the price, because the annual dividend amounted to a reduction in price. Government restrictions hampered the full success of the cooperative system, by making it difficult to obtain the necessary supplies for manufacturing purposes, and for distribution through the cooperative stores. The work was impaired by the fact that thousands of the members were called into the army. Membership in the cooperative societies helped the soldiers because the societies made up to the soldiers the difference between their regular wages and their pay while in the army, several million dollars being disbursed in this way.

The cooperative societies, while officered by common workmen, are a living demonstration of the fact that the common people require no tutors, but are competent to manage their own affairs. The great system begun decades ago in the decision of a few workers in a humble cottage to join together in making purchases and has been prudent and efficient. The same wise management which raised the united cooperative societies to the position of the largest trade unit in Great Britain is now reaching out for extensions and improvements in many directions.

One of the developments is the purchase of large coal properties in Yorkshire whereby many of the cooperators can add coal to the list of articles on which they are able to save. This is in addition to a coal mine owned by the society in the neighborhood of Newcastle.

Large sums have been expended for farms and factories. The society paid during the war \$573,480 to extend its factories. It paid \$3,049,650 for new factories and workshops. In farms and other lands it invested \$3,333,960. The grand total of investment for land and factories, in war time, when progress should be slow, was nearly \$7,000,000. The amazing area of farms held by the cooperative societies is some 33,000 acres, in Lancashire, Cheshire, Yorkshire and Cambridgeshire.

If the enterprise were in America, one would never hear the end of it, but who outside of Britain's tight little isles has heard much of the prodigious enterprise of this combination of the common people! At the present time they are looking forward to the addition of the following to their already great list of businesses: flour mills, tanneries, jam factories, boot and shoe factories, corn mills, dairy farms, and other nameless odds and ends under the classification of "similar enterprises." Three weaving mills with a total of 1,900 looms are the property of the societies, and not satisfied, they are about to extend their textile interests, and build a large mill for the spinning of yarn.

In America the common people have swallowed, bait, hook and sinker, the delusion fostered and foisted upon them by the banking interests, that it takes special financial training acquired only at the lower end of New York City, to raise money. The British cooperative societies are securing the money to invest in their great extensions by issues of what they call "development bonds," in denominations of \$100, \$250, \$500, \$2,500, and \$5,000, up to a total of \$12,500,000 for the first issue. The societies agree that these bonds shall bear 4-1-2 per cent interest payable semi-annually and be redeemable at par after ten years; and judging by the past fidelity of the societies in keeping their promises they will meet this obligation the same as though they were "regular" financiers.

Another extension of membership and business is in process. The cooperative societies run their own banks, but up to this time have not been able to persuade the great British trades unions to place their banking business with them. Arrangements to this effect have been concluded, and in order to knit together more closely the interests of the British trades unions and the British cooperative societies, a great plan of agricultural and industrial development will shortly be announced for the benefit of both parties.

In the United States plans for cooperation in manufacturing and distribution of goods have never been the great success they are in Great Britain. The British people, it is said, are more thrifty and more honest in their dealings than the Americans, and both these qualities are required in a high degree to insure success in cooperation. Possibly under the lash of the high cost of living the American common people may become more thrifty, and no doubt enough thoroughly reliable people might easily be found in practically every community to make a success of American cooperative societies comparable to what is seen across the sea.

The idea of the Golden Age is a perfect cooperation among all mankind. It will be not merely a cooperation for business purposes as now, but a drawing together in a unity expressed by Paul, "That ye should speak the same things, and be perfectly joined together in the same mind and in the same judgment." (1 Corinthians 1:10) It will be the materialization of the brotherhood of man and the fatherhood of God.

MORE OIL THAN PIPES

THE OUTPUT rate of a bottle depends not on the size of the bottle, but on the size of the neck. In the oil industry the neck of the bottle is the capacity of the pipe lines. The retail trade is capable of absorbing more oil, but it cannot be piped from the wells.

POLITICAL, DOMESTIC *and* FOREIGN

SHANTUNG AND THE STUDENTS

BECAUSE its excellent harbor of Kiaochau is the shortest approach to Peking from the sea, and because the province, Shantung, of which it is the metropolis, excels in soil, climate, minerals and the industrious character of its people, Germany selected it as the basis of its raid in 1897. A corps of engineers visited the whole Chinese coast and having in view the German conquest of the world, had just concluded Shantung would serve its purpose best in China when, as a result of a quarrel, two German missionaries were killed by natives in the interior of that province. German troops were immediately landed, the occupation of the territory was announced, and a ninety-nine year lease of Kiaochau and outlying districts, together with railway and mining concessions, was demanded and obtained from the Chinese government. This lease was always particularly objectionable to the Chinese because the province was the birthplace of Confucius. Hundreds of thousands of the Chinese journey yearly to Confucius' tomb to do reverence to his memory.

Immediately after the outbreak of the war the Japanese government demanded the surrender of Kiaochau and the withdrawal from Japanese and Chinese waters of German men-of-war. The privilege of joining with Japan and England in the driving out of the Germans was refused to the Chinese, despite their request. The Germans were forced to surrender in ninety days.

A year after the outbreak of the war a demand, composed of twenty-one points, by which control of China was given to the Japanese, was suddenly presented to China by the Japanese. These demands came at a time when neither China nor the rest of the world were in position to do other than yield to them. It was strictly Japanese style and Japanese ethics (?) for Japan to present these demands at such a time.

In 1917 China followed the example of the United States in declaring war against Germany and notified her of the abrogation of the Treaty of 1898. Ten days later Great Britain and Japan entered into a secret treaty, under which Japan was to retain, in the province of Shantung, all the rights and privileges granted to Germany under that same treaty of 1898. The United States government, although a greatly interested party, apparently knew nothing of the existence of this secret treaty until February, 1919.

With a hypocrisy that would do credit to one of the

more professedly Christian nations engaged in the pastime of robbing a peace-loving neighbor, the Japanese claimed that they merely wished to develop the resources of Shantung so that its immense coal deposits may be used for warming the people. They also claimed that they wished to give the Chinese a better government than the Chinese can. But the facts are that the Japanese are morally bankrupt. They have made Shantung a base for the flooding of China with morphine, despite the fact that the Japanese government entered into a solemn covenant with the other nations of the world at the International Opium Convention at The Hague in 1912, promising to do all in their power to assist China in her fight against opium and drugs. At the same time that the Japanese are claiming this capacity for superior government they are engaged, in Korea, in a systematic and shameless massacre of Christian missionaries and Christian natives.

Early in the spring of the present year the students of Peking University, angered by the success of Japan and the failure of China, assaulted two of the three Chinese statesmen who negotiated secret treaties with Japan, based upon the piratical Japanese demand of twenty-one points above mentioned. The government arrested a number of the students, the Chancellor of the University resigned and disappeared because of threats against his life by members of the pro-Japanese party, and all the students in Peking above the rank of elementary schools went on strike. They divided into parties of ten, speaking against Japan and Japanese goods. They went to other cities all over China and organized the students similarly. Several hundred of the students were arrested in Peking. The next day the number of speakers was doubled and the arrests ran to over a thousand. The jails could not hold the students and they were shut up in the University buildings. The faculty met and telegraphed their protest widespread.

Merchants of Shanghai went on strike, followed by Tientsin and Nanking. Merchants of Peking and other cities prepared to join. There was talk of a strike against paying taxes. The government capitulated, sent delegates to the students to make apology, as demanded, re-instated the Chancellor, gave instructions to the delegates at Paris not to sign the treaty except with reservations as to Shantung and dismissed the three men accused of pro-Japanese affiliations.

The more we see of the Japanese government the

more we realize that it seems to have thoroughly absorbed the hypocrisy of the so-called Christian nations of the world. But not having had the advantage of centuries of training in making black appear white it is unable to cover up or conceal its true character. In these things which are now coming to light we are reminded of the Lord's words: "Beware ye of the leaven of the Pharisees, which is hypocrisy. For there is nothing covered, that shall not be revealed; neither hid, that shall not be known."—Luke 12:1, 2.

WILL JAPAN RULE RUSSIA?

SO MANY conflicting stories reach us about Russia that we can not believe them all. One month appears a French plan for an encircling blockade, the next a peace offer from England, the third a decision to invade at once, the fourth a withdrawal of American troops because we are not at war with Russia, and then a sinking of Russian warships by the British just as the British Government announces that no more troops will be sent. At one time the newspapers tell us the Moscow Government has been conquered, the next we know is that it has attracted the entire Russian people to its cause. One day we learn that Moscow is deluged with the blood of offenders against the Republic and the next that there has not been an execution in two months. We are told that persons prominent in the British Government are increasing their holdings in Russian securities and then comes the news that Germany is driving a great army into the heart of Russia.

There is one fact that stands out of the Russian collection of misstatements, however, and that is that there is no real foundation to the alleged All-Russian Government of Admiral Kolchak in Eastern Siberia. The State Department message to Colonel House summed him up when it said, "He is surrounded and dependent on the support of reaction elements whose principal idea of government is the reconquest of former grafts. His army is being organized on old lines of Czarist discipline. Several units have already revolted against brutality of officers."

Kolchak's army was levied by conscription and his treasury filled by the reestablishment of the government monopoly in the manufacture and sale of ardent spirits, which the late Czar's government, to its lasting credit, abolished at the beginning of the war, at a loss of \$350,000,000 a year revenue. Aided by arms, munition and money supplied by the Allies he has dissolved local assemblies of elected representatives of the All-Russia Constituent Assembly, imprisoned some and shot others; he has suppressed the opposition press, closed up trades unions and imprisoned all grades of socialists.

But Kolchak is losing ground. He has lost Ufa, Perm and Ekaterinburg in quick succession and the Russian Republic has gained them and with them vast stores of coal, iron and gold, platinum mines with a yield three times as great as the rest of the world's in the days before the war, deposits of nickel, copper, zinc, mercury, silver, iridium, cobalt and asbestos. Kolchak's own supporters in Paris now claim that he can only hold his own with the aid of armed foreign support. The Cossacks in the South are slowing up. There is nobody left in Siberia and eastern Russia to oppose the Russian Republic but the Japanese. Which is the worst foe to democracy? What will be the outcome? Japan, so the rumor has it, is now pouring new thousands of troops into Siberia, while to America is granted the work of keeping the railways open to facilitate their westward flow.

The Scriptures show that we are in the time when every valley shall be exalted and every mountain be brought low. (Isaiah 40:4) We understand this to mean that the lowly and depressed will be gradually raised and the proud and autocratic will be humbled. We class Japan with the latter. Her course in wishing to exercise lordship over the 30,000,000 helpless Chinese republicans at Shantung does not appeal to us, and we do not believe the Lord will favor her ambitious designs in Siberia, or in Russia. How do we know that it would be better and safer for civilization to have the yellow races clamoring at the door of Europe than to let the Russians choose and operate their own form of government?

THE NON-PARTISAN LEAGUE

THERE are many farmers in the Northwest who feel, rightly or wrongly, that they have been improperly treated at the hands of the railway, grain and banking powers of the country. Not long ago they conceived the idea of trying to take the power out of the hands of men who, when a farmer wanted to buy seed in the Spring and came into a bank to borrow \$75, was asked to sign a note for \$90, and pay interest on that amount at 15 per cent. They did this with a rush in North Dakota, because they became convinced that their legislators were crooked because of politics, and replaced them with non-partisan men who did what the farmers wanted done. Calvin Townley was the man who started the North Dakota movement, a plain farmer stung to action by what he considered the untrustworthiness of both the political parties operating in the state.

Townley was recently tried and convicted in a wealthy county of Southern Minnesota of conspiracy to discourage enlistments in the war against Germany. Each member of the jury that tried him was sufficiently

wealthy to own his own automobile; no member of the Non-Partisan League was allowed a place in it and the defense and one member of the preliminary panel openly charged every juror with acknowledged bias against the farmers' movement. The Government's own certificate of Townley's loyalty, and its acknowledgment of his aid, was not allowed in evidence. Townley was denied his request to dismiss his lawyers and make his own plea to the jury and since the close of the trial indictments charging perjury have been sought by the defense against the prosecuting attorney and the chief witness.

The prosecution failed to produce documentary evidence of opposition to the war in any of the League declarations or instruction sheets or letters to organizers, but the defense was able to show that organizers were specifically commanded to not in any way discourage the Government's war policies, but to support them. Testimony for the defense was excluded unless it was in the nature of a direct answer to the specific charges of the state.

The newspapers of the country are not very jubilant over the conviction of Townley. The farmers are now being joined by organized labor in Minnesota and Washington on a programme of public ownership and operation of railways, steamships, banks, stockyards, packing plants and grain elevators, largely as a result of the Townley trial. The surest way to make a movement grow is to persecute it.

A true statesman can not afford to seek for power, but that is the first thought of every politician and every monarch. The possession of power makes a politician or a monarch blind to what should be his first and last thought, that of securing freedom and justice for the individual. If there are people in the Northwest who have become distrustful of both the great parties their confidence is not to be gained by force.

There was a king long ago by the name of Rehoboam who received from some of his counsellors some very bad advice on the subject of force. The people felt that Solomon had not studied their interests sufficiently and desired that their burdens be lightened. Rehoboam was advised to tell them, and did tell them, "My father made your yoke heavy, and I will add to your yoke: my father also chastised you with whips, but I will chastise you with scorpions", and the result was an everlasting proof of his bad statesmanship.—1 Kings 12:1-20.

THE MEXICAN OIL SITUATION

PRIOR TO 1884 the Mexican Government required oil companies to file notices stating where and when they intended to drill wells and no operations could be undertaken until the desired official permission was

received. In that year, under the administration of President Gonzales, the Mexican Civil Codes were so amended as to make these notices unnecessary. In 1917 the revised Mexican Constitution restored the arrangement in effect prior to 1884, claiming, and not without justice, that "The ownership of lands and waters within the limits of the national territory is vested originally in the nation" which has "at all times the right to impose on private property such limitations as the public interest may demand as well as the right to regulate the development of natural resources, which are susceptible of appropriation, in order to conserve them and equitably to distribute the public wealth."

In pursuance of these principles a tax of \$1 an acre was levied on all oil acreage held by private owners, whether or not the land was being developed. Subsequently this was reduced to 60c, which was paid under protest, but when it came to filing notices of when and where they would drill, the companies declined to comply with the regulations, with the result that government troops appeared on the scene and prevented further operations. On May 1, the Mexican Congress was convened in extra session and is now endeavoring to fix upon legislation for satisfactorily reconciling the individual interests of the oil producers and those of the nation.

Few nations of the world have such a wealth of undeveloped natural resources as Mexico, a soil capable of producing all the cereal crops and 90 per cent of all the known fruits of the world, vast tracts of timber, including many of precious hardwoods and dyewoods, a wide range of climate, and every known mineral, with oil fields which exported more than 63,000,000 barrels in 1918. It is not to be wondered at that Mexico desires that the Mexican people should have a share of the benefits that will accrue from the development of these resources.

Unconsciously, the Mexican Government is trying to apply on behalf of the Mexican people a principle of the ancient Jewish law under which the Jew could not alienate from his posterity the land which had once been granted to his ancestors. By misfortune or mismanagement he could lose control of it for a time, but once in every fifty years it must automatically come back into his possession or that of his children, all debts against it and against its owners being cancelled.—Lev. 25:1-55

This Jubilee arrangement was an illustration of the plan by which God purposes to restore to human kind all that was lost in Eden, and this restoration era is at hand; we are standing on the threshold of "the times of restitution of all things, spoken by the mouth of all the holy prophets since the world began."—Acts 3:21.

FRENCH DEBTS AND DISCONTENT

THE FRENCH GOVERNMENT evidently made a mistake in not accepting Mr. Wilson's programme whereby Germany would have been made responsible directly for the area which she devastated. France would thus have been able to secure a far greater sum than she is able to secure in indemnities, and it is impossible for her to divide these indemnities among the owners of the devastated properties without apparently favoring some at the expense of others and thus causing dissatisfaction.

The national debt of France is now 200,000,000,000 francs, which is more than half her national wealth. It is obviously impossible for her to pay the interest on this vast sum without resorting to heroic measures. The minister of finances, several months ago, proposed a tax of 25 per cent on capital as a step toward cutting down this colossal debt, but the propertied classes objected and he abandoned his programme completely, having accomplished nothing by it but to send the cost of living still higher. The Parisian people, realizing that increased pay only means increased prices, are now demanding a complete reorganization of the whole system of production and distribution.

The frequent suppression of newspapers during the peace negotiations, or their appearance with long blank columns, created a bad effect upon the Parisian people, more especially as it became known that the articles prohibited in Paris had already appeared in English papers. Of the 100,000 soldiers brought to Paris to suppress possible May Day riots, many regiments had to be withdrawn and replaced after the soldiers had come in contact with the Paris people, as they were no longer dependable.

In the army and navy itself there were numerous outbreaks of discontent during the war the news of which never appeared until recently. The raising of the red flag on four ships of the Black Sea Fleet, the forming of Soviets at Toulon and the revolt of three artillery regiments at Toulouse all show that we are in just such "a day of wrath, a day of trouble and distress, a day of wateness and desolation, a day of darkness and gloominess, a day of clouds and thick darkness" (Zeph. 1:15) as the prophet shows will precede the day when the whole world will "call upon the name of the Lord, to serve him with one consent."—Zeph. 3:9.

THE ISOLATION OF VIENNA

VIENNA was once the great center of 50,000,000 people. Its population of 2,000,000 was not too great to be supported by such a hinterland, but the erection of the new states of Czecho-Slovakia, Hungary and

Jugo-Slavia has left only 4,000,000 rural population attached to Vienna, and Vienna can not live on these.

Of the 6,000,000 people of Austria 3,000,000 are industrial, and if some means could be found whereby Vienna could continue to be the financial, business and railroad center of what was once Austro-Hungary, it could continue to exist, but as it is these 3,000,000 have little to do and practically all the enterprises of the city are stagnant. The result for the moment has been to turn the city into one vast Monte Carlo, but this can not go on; people can not continue for long to live by gambling from one another. Somebody must get to work or they will all starve in a heap.

Thoughtful men have proposed three remedies: one is union with Germany, but this the Allies will not permit, another is communism, which is impractical. The thing that is most desired by the majority of the people is that America should take over the country and develop it. It is the claim of the Austrians that we have plunged mid-Europe into chaos and that we alone have the capital and the business ability to pull it out.

The isolation of Vienna has been the opportunity of Italy. She has been quietly buying up all the steamship securities once held throughout Austro-Hungary, thus obtaining at a small cost the control of the merchant marine of the Adriatic, the very thing she sought to gain by the possession of Fiume, now in her temporary possession as a result of D'Annunzio's raid.

Vienna has been for centuries the greatest seat of Roman Catholic power in the world. In its present idleness and impending poverty and degradation we see a part of the "judgment of the great harlot that sitteth upon many waters."—Revelation 17:1.

ON WHOM SHALL WE RELY?

ARE WE READY to give up our old time trust in righteousness and place it wholly in force? Do we still believe, "Blessed is that nation whose God is the Lord"? Do we really mean, as our coins declare, "In God we trust"? There are lots of people who are perfectly frank in saying they prefer to put their trust in the worn out formula that "The best way to keep the peace is to be prepared for war." And there are people whose temporary interests are best served by a widespread manufacture and use of munitions of war.

The secretary of one of the great international finance companies is said to have made the remark at a banquet, "If we can only get this country into the war we can get any damned thing we want." Now he is said to be alarmed at the discovery that some of the returned soldiers come back from abroad sadly brutalized by their experiences.

AGRICULTURE *and* HUSBANDRY

CULLING POULTRY

CULLING serves two purposes: First, it insures that the feed will be consumed by the better-producing hens, thereby increasing the profit. Second, it makes it possible to save those best suited for breeders, both on account of their better production and on account of their superior strength and vitality, qualities essential to layers to stand up under the severe strain of heavy laying. Weeding out the poor hens gives those left more room and a better chance.

Culling should be continuous throughout the year, of any hen which is sick, which is emaciated, or which shows evidences of nonproduction, weakness, or poor vitality.

The whole flock should also be given a careful and systematic culling at some one time with the object of dividing them into two lots, one the better producers and the other the poorer producers. From the better producers it is also desirable to pick out as many of the best as will be needed for breeders. Band or otherwise mark these hens so that eggs from them only will be saved for hatching. Market those selected as the poor producers. Save for laying and breeding those selected as the better producers.

Hens which show indications of laying in August or September are those which on the average have been the better producers for the year. The better producers during the first laying year are those which will be the better producers in subsequent years. Hens showing indications of having been good producers throughout the year should be retained for the next year regardless of their age, but relatively few hens will prove to be profitable producers beyond their second laying year if of the heavier breeds.

Sickness and lack of vigor are indicated by listlessness, inactivity, tendency to stay on or under the roost during the day, poor appetite, dull eye, dark or bluish color of comb, long toe nails, snaky or crow head, and the tendency to go to roost early in the evening and to be one of the last to leave the roost in the morning.

Molt is one of the most valuable and easily applied tests of production. Hens cease laying completely or almost completely during the molt. The better producers lay late in the fall, and therefore molt late. Late molters also molt rapidly as a rule, while early molters molt slowly. Therefore, save the hens which have not molted by August or are only just beginning to molt late in September or in October, and discard those which have

finished molting or are well into the molt. The hens which molt last, provided they are otherwise desirable, are the best ones to save for breeders. A hen which has not molted at this time is characterized by soiled and worn or broken plumage, which is especially evident in the tail plumage, while those molted or molting show clean, fresh plumage or growing feathers. Culling the early molters just as soon as they begin to molt is one of the easiest ways to weed out poor layers.

In those breeds having yellow legs, the color fades out slowly as the laying season advances. The rapidity and degree to which the yellow color is lost depends to a considerable extent upon the heaviness of laying. The yellow color goes out from the scales on the front of the shanks first and finally from the scales on the rear. Hens on grass range do not lose the shank color as quickly or completely as those in bare yards. Some soils also tend to bleach the color of the legs. Hens showing strong or medium yellow shank color are almost certainly poor layers, but occasionally poor layers may show pale or white shanks. In breeds such as the Rhode Island Red where the shanks may show horn color as well as yellow, the horn must not be confused with the yellow. The rear and sides of the shank show little of this horn color. A sick hen or one in poor condition may also show pale shanks.

In breeds having yellow beaks, the same principle applies as in the case of the yellow shanks. However, the color is lost from the beak more quickly than from the shanks and is also regained more quickly. The lower beak bleaches faster than the upper, but may be used where the upper is obscured by horn or black.

In yellow-skinned breeds the yellow color of the skin immediately about the vent is quickly lost with laying, and is quickly regained after laying ceases. White or pink vent color generally indicates that the hen is laying, while a yellow vent means that the bird is not laying. The vent of a hen laying heavily is large, expanded, or moist, while that of a hen not laying is comparatively small, hard, puckered, and dry.

When a hen is laying or about to lay, her comb is large, waxy, full of blood, and bright red in color. When not laying, the comb is small and shrunken, pale or dull in color, comparatively hard, and covered with whitish scales. A dark or bluish color indicates sickness. The changes in the wattles and ear lobes are similar to those of the comb, but not so marked.

As a hen stops laying there is a tendency for her to

take on fat. This is noticeable in examining the pelvic bones, the two bones which can be felt as points on either side of the vent. When the hen is laying, these bones are comparatively flexible. When she is not laying, they feel thicker and less flexible, due to the fat which has accumulated there. The spread or distance apart of these pelvic bones is also a valuable indication of whether or not the hen is laying. When laying they are wider apart than when not laying. The spread can be roughly measured for practical purposes by determining how many fingers can be laid between the bones. If the spread measures two fingers or less, the probabilities are that the hen is not laying while if the spread is greater, she is probably laying. In measuring this spread the size of the hens of different breeds, with the corresponding natural difference in the spread, must be kept in mind.

A hen laying well is a good eater. Her intestines are, therefore, fuller and more distended, and require more room than when she is not laying and not eating so much. When laying, the ovary and oviduct are of greater size and require more room. To provide this extra room, the distance from the rear end of the keel to the pelvic bones increases, with a consequent increase in size of the abdomen. A spread of three or more fingers in the smaller breeds, such as the Leghorn, and four or more fingers in the larger breeds, such as the Plymouth Rock, indicates that the hen is in a laying condition. A spread of less than three fingers in the smaller breeds and less than four fingers in the larger breeds indicates that she is not in a laying condition.

When the hen is laying, the greater size of the abdomen, together with the lessening tendency to accumulate fat at this point, results in a soft, flexible abdomen, suggesting, when handled, the texture of a partly milked-out udder of a cow. When laying has ceased, the abdomen grows smaller, or contracts, and it feels, when handled, harder and less flexible.

In culling the flock remember that it is safer to depend upon the agreement of a combination of several characteristics rather than to select by any one alone. With this in mind cull these hens: sick, weak, lacking vigor, inactive, poor eaters, molted or started to molt, with small, puckered, hard, dry vents; with small, shriveled, hard, dull-colored combs; with thick or coarse, stiff pelvic bones, pelvic bones close together, small spread between pelvic bones and rear end of keel, and full, hard, small abdomen. In breeds with yellow skin and shanks, the discarded hen should also show yellow or medium yellow shanks and yellow beaks and vents.

Save these hens: healthy, strong, vigorous, alert, and active; good eaters; not molting or just beginning to

molt in September or October; with large, moist vents; with large, bright-red combs; thin, pliable pelvic bones well spread apart, wide spread between pelvic bones and rear end of keel, and large, soft, pliable abdomen. In breeds with yellow skins and shanks, the hens saved should also show pale or white shanks, and pale or white beaks and vents.

The culling of live-stock which is constantly going on upon every well-managed farm is something akin to what is going on in the present operations of divine providence with respect to our race. The gospel was sent forth to the Gentiles "to take out of them a people for his name". (Acts 15:14) Those gathered by the gospel call are depicted as of every sort, and after the full number to suit the divine purpose have been gathered into the gospel net a certain kind of separation is carried on. "The kingdom of heaven is like unto a net, that was cast into the sea, and gathered of every kind: which, when it is full, they drew to shore and gathered the good into vessels." (Matt. 13:47, 48) There is nothing in this to intimate that those unsuitable at the first sorting may not grow up and at a later time be suitable for another purpose. The object of gathering out the "people for his name" is declared to be the blessing of all the residue of mankind.—Acts 15:17.

PURPOSES OF PRUNING

UNDER NATURAL conditions plants grow thickly; one crowds upon the other, and in that way all superfluous individuals as well as branches are crowded out. Under artificial conditions plants are placed at distances which prevent this natural pruning. The increased amount of food available to plants under artificial conditions frequently excites growth, so that the distance between the different whorls of branches, which naturally develop from near the end of the growth of each season, becomes great, giving the plant an open form and the appearance of having been built by stories. By a judicious use of the pruning knife the gardener shortens the annual growth, thus reducing the distance between the branches formed in successive years, with the result that the tree has a more compact and symmetrical form.

Extreme examples of the necessity of heading-back are almost invariably met with in the case of poplars grown for decorative purposes. Among orchard trees none presents greater necessity for annual treatment in this way than do the peach and the Keiffer pear, although nearly all of the fruit and ornamental trees while young require care in this particular.

Another reason why pruning is necessary with plants grown under artificial conditions is that some of our most

desirable ornamental trees and shrubs have an unfortunate natural habit of growth which results in a method of branching which makes trees unable to withstand high winds or snows. It is the gardener's business, therefore, to guard against such branching and to so direct the growth of the tree as to force it to distribute its branches in such a manner as will best prevent it from being broken during high winds or heavy storms. A notable example of this undesirable system of branching is had in the silver maple. This tree almost invariably branches so as to throw two strong shoots from the point of branching, each of which grows at about the same rate, with a very narrow angle between them; the result is, that as the branches increase in size, the union between them not being perfect, severe pressure placed upon one of them has a tendency to split them apart. Everyone who has observed the silver maple has frequently seen large trees badly broken or split after severe wind storms. If the tree trainer had given careful attention to the arrangement of the branches during the early life of such trees, these undesirable results, which are so fatal to successful park adornment, might have been avoided. Pruning, then, is necessary in order that the habits of a tree which are naturally bad may be corrected.

With fruit trees pruning is important because it can be used for the purpose of checking the growth as well as for the purpose of thinning the fruit. It is an old and well established maxim among fruit growers that whatever tends to check growth increases the fruitfulness of the plant. Pruning can be used to accomplish this result.

Contradictory as it may at first thought appear, pruning is frequently resorted to to accelerate or augment growth in plants. Weak growing nursery stock is frequently severely cut back during the resting period in order that all the strength of the root may be forced into the formation of a single upright stalk which will make the plant a salable nursery tree. Severe pruning is also resorted to with older plants for the purpose of rejuvenating them. Old apple trees and old shade trees are frequently so treated, in order to induce them to throw out strong new shoots.

With such plants as the peach, which bears its fruit upon the growth of the previous year, pruning is of great importance, as the growth can reduce the crop in proportion to the capacity of the tree. Successful fruit growers thoroughly understand the importance of gauging the quantity of fruit allowed to be borne by a tree to the capacity of the tree, the ability of the tree in this respect being measured by the rate of growth, the variety, and the soil and climatic conditions to which it is subjected.

Pruning is of prime importance also in controlling the action of some of our most dreaded plant diseases. The study of pear-blight, for instance, has shown that this disease is very generally communicated from plant to plant by insects, through the pollen, as they pass from blossom to blossom, or, later in the season, from shoot to shoot. It is also believed that the disease can be carried by the wind and that infection can take place while the vegetative processes are active and the tissue at the ends of the branches can easily be entered by the germs of the disease.

The way in which pruning is of service in controlling pear-blight is as follows: It is the natural tendency of the pear and the apple while young to form fruiting spurs upon the body and larger branches of the tree. These fruiting spurs produce blossoms from year to year, which are in turn as liable to be visited by bees or other insects carrying the destructive spores of the pear-blight as are the blossoms at the extremities of the branches. It is evident, therefore, that a blossom situated upon the body or larger branches of a tree becoming infected by this disease would communicate it directly to the framework of the tree, with the result that the tree would be fatally injured; but if these fruiting spurs are all eliminated from the body and larger main branches of the tree by careful pruning the possibility of infection in this way is overcome. The available means of gaining entrance to the tree by this parasite is confined to the smaller branches, which, if affected, can be cut away without severely injuring or disfiguring the tree. This is, in brief, the method of successfully controlling the pear-blight. It is purely a mechanical operation, but one which requires a rigid execution of the principle of removing all fruiting spurs from the body and main framework branches of the tree as well as cutting out all infested shoots in other parts of the tree.

In the case of the dreaded plum and peach rot the ravages of the disease can be stayed to a limited extent by the removal of branches which interfere and would bring the fruit upon adjacent branches in contact, for it is well known that this disease is readily communicated from fruit to fruit if they come in contact. It is the aim of successful growers of peaches and plums to have the fruits so distributed upon the branches that they shall not come in contact even when fully developed. It is the aim of the peach grower to have the fruits at least 6 inches apart, while it is the object of the plum grower to have them 2 1-2 to 4 inches apart.

The gardener, therefore, has as reasons for pruning trees the removal of dead, dying or broken branches, the removal of branches in order to prevent the breaking or disfiguring of the tree in later years, the removal of

branches and fruit spurs for protection against infectious diseases, and the reduction of the annual growth in order to reduce the crop in proportion to the capacity of the tree.

The Creator never intended that even in a perfect earth the trees and shrubs would not need human care. "The Lord God took the man, and put him into the garden of Eden to dress it and to keep it" (Gen. 2:15), and the more he knows about how to dress and keep the earth's surface, and the better use he makes of his knowledge, the more wonderful will be the results obtained. In several places in the Scriptures the heavenly Father himself is likened to a vine dresser, notably in John 15:1-8, showing that the pruning of vines and plants is necessary to their well-being, and especially to their fruit-bearing.

BUYING AND FATTENING BEEF

STEERS are ready to sell when they get so fat that the back apparently sinks a little, and an indentation appears deep enough to hold a cup of water so that it will not run down the sides. An animal ready for the block has two backs, one which grows on the steer, and the other put on by the feeder through the use of plenty of the right kind of feed.

The first lap in profitable buying is to buy the right kind of a steer. Cattle which are merely hide and bones are hard to judge. Feeders should average 900 to 1,000 pounds, of good quality and in good flesh. A few poor steers in a load will bring down the price of the whole load. Angus cattle get into very fine condition, make good gains and are economical feeders.

Desirable feeders are built like a block set on four pins, as low-hung as possible, should be straight along the back, wide back, thick loin, and deep, well-arched ribs; should carry out well behind, have wide chests and round shoulders fitting snugly to the body, with a short thick neck, wide, short head, quiet eyes and lips not too thick.

Cattle which are curried daily and fed on shelled corn, oats, oilmeal, and timothy and clover in limited quantities, with a little fodder now and then, will average to gain three pounds a day. The shelled corn is gradually increased until each head is getting a half bushel per day and the oilmeal until they are getting 3 lbs. per day. The steers like to be curried and currying them makes them friendly and in good condition to take on fat. The currying also makes the cattle more attractive to the buyer. In the spring the corn gets dry and needs to be ground.

Steers can be fattened by the above process in four months time and should be disposed of at that time, as

it does not pay to carry them longer. The ideal steer is rectangular and even from front to rear.

Too much grass gives meat a watery finish, and it sells at a discount. Too much green silage produces the same effect. Corn makes a fine white fat. The color of the best meat is bright red. Cottonseed meal firms up the flesh and adds to the quality. Steers eighteen months old are not sufficiently matured for prime cuts and carcasses past three years are too coarse in meat and uneven in finish and quality. The bones of the older animals are flinty, and layers of lean meat are stringy and tough, and the fat is yellow.

The raising of live-stock is one of the oldest occupations of man, and if you don't believe they knew something about it in olden times read Genesis 30:31-43 and see how Jacob, after having his wages changed ten times by his avaricious father-in-law, finally managed to get the better of him by using his knowledge of how and when to make use of pre-natal influences upon the unborn cattle.

SKY COLORS

TO THE FARMER the colors of the sky foretell for him the weather conditions on which his work may depend. He cannot rely on the Weather Bureau for the conditions for his particular farm, and naturally learns enough to forecast accurately his own weather.

Sky colors have been from of old an index of the meteorological. Shakespeare gives us the commonly accepted index of foul weather:

A red morn that ever yet betokened
Wreck to the seamen, tempest to the field,
Sorrow to the shepherds, woe unto the birds,
Gusts and foul flaws to herdsmen and to herds.

On the other hand red in the evening indicates the opposite of the morning red.

If the evening sky, not far up, but near the western horizon is yellow, greenish, or some other short wavelength color, the chances for good weather are excellent, for these colors indicate less condensation and a drier air than does the evening red.

But an evening sky, devoid of these colors, and overcast with a uniform gray indicates an air saturated with moisture and ready to drop down rain or snow.

Shakespeare from his depth of resource gives this index of a clear day:

The weary sun hath made a golden set,
And by the bright track of his fiery car
Gives token of a goodly day tomorrow.

We would like to say that our Lord referred to weather signs in the familiar passage Matthew 16:3, but these words are missing from the oldest Greek MSS. and are evidently no part of the Divine record.

SCIENCE and INVENTION

OUR DYE INDUSTRY IN DANGER

IT WAS RECOGNIZED during the war that the success of the American dye industry depended on the continuance of the war and that peace would see conditions resumed that had made the industry negligible. Peace is at hand, and ways and means are now being suggested for saving the millions invested in the business.

Owing to the German propaganda Americans had been led to believe that good dyes could not be made outside of Germany and that dyes made elsewhere would always be more expensive than the German made product. This was attributed to the patient research of German chemists, the free use of their services made in all German industries, the alleged thoroughness of German scientific education and what might not generally be known, that German chemists were so plentiful that good men could be hired for thirty dollars upward a month.

Until the European war broke out in 1914 there was practically no dye industry in the United States. The development of the industry had been opposed by immense textile interests on the plea of the necessity of keeping costs down, which the necessary protective tariff would have raised during the development period of the business. Out of the 900 different colors on the market American dye plants produced nine and was supplying about ten per cent of the market requirements. German concerns supplied 90 per cent of the dyes used and produced an infinite variety of hues, one plant alone listing over 11,000 colors.

The war placed American manufactures, totaling some three billion dollars, in a predicament. Most colors were simply unobtainable, and even the government found itself embarrassed to find dyes to print its stamps and currency. Dye works produce and use chemicals of value in the manufacture of explosives, and the United States found itself deprived of a supply of substances essential to the prosecution of war. The government immediately encouraged the building up of an American dye industry suitable for both peace and war purposes and hundreds of millions of dollars were invested therein.

Practically the entire American dye business is in danger of destruction at the hands of a German competition which Congressman Longworth describes as a "competition of an adversary so powerful, so fierce and so desperate that no practicable rates of duty would offer

a really effective defense." Not merely is the dye industry at stake, but the entire fabric of chemistry and allied sciences. The solution proposed to protect the interests of American chemical industry and science is a system of licensing the importation of dyes and other chemicals on such a basis that if a substance is being produced by American concerns it shall not be imported at all by foreign makers until the American plants are sufficiently well established to meet competition on equal terms.

As long as nations make war on one another it is absolutely necessary to practice self-preservation, even though production costs may run higher. In due time this condition will be changed, for it is promised that Jehovah in the Golden Age will "scatter the people that delight in war."—Psalms 68:30.

DIRIGIBLES and PHOTOGRAPHY

A USEFUL byproduct of the Great War is aerial photography, which gives promise of being widely used hereafter in the laying out of railroads, highways, irrigation canals, dams, timber reservations, park sites and boundaries. A good vehicle for the aerial photographer is the dirigible.

A dirigible can be stopped in midair, and raised or lowered to any altitude desired; it can be moored to a tree and can get along without shelter. During the war it was not uncommon for dirigibles to be moored in the open for months without damage. There is no vibration, hence long exposures can be made by the photographer and thus the best results obtained. There is plenty of room to work and to develop negatives, there is no occasion for haste, and there is no nervous strain upon the photographer while he is aloft. The first cost is about \$25,000 and the operating cost about \$1,200 per month. Helium can now be obtained in quantities for lifting purposes, and is safe, where hydrogen is always treacherous. Landing is simple; on calm days a ten-acre area will answer the purpose.

In photographic mapping an area of approximately two square miles is photographed at each exposure 10,000 feet above ground; at lower height the area of course is less.

"Surely the wrath of man shall praise" the Creator. (Psa. 76:10) Out of the Great War have come and are coming many inventions and discoveries that are fraught with blessings to mankind. Who would have expected war to bring a new method of mapping the earth!

TO BLOW EARTH TO PIECES?

W EIRD STORIES have been published of master minds discovering dread agencies of untold potency which the discoverers employed for the weal or woe of humanity. But that such power might be more than a fantasy was not given serious thought.

Sir Oliver Lodge, well known scientist, declares definitely the possibility of the discovery of such a source of power. He calls it "atomic energy" and notes that the first practical use of this power is in wireless telephony. This is beneficent enough, and there are endless other peaceful uses of atomic energy. Sir Oliver suggests that a single ounce would contain enough power to raise the entire sunken German fleet and pile it on top of the mountains. Just what use the fleet of battle ships and destroyers would be in a world where a pinch of the new power would be sufficient to wipe the fleet off the map is not told by the eminent scientist. The development of "atomic energy" would solve the power problem, for it would take the place of the cumbersome plants now employed for extracting from coal a fraction of its latent energy. The Standard Oil Company might suffer from the general adoption of atomic energy, unless it should first corner the market and dole it out at so many dollars a grain. The multitudinous owners of Fords, however, would rejoice in getting away from gasoline and having in its place a grain of atomic energy powder in an engine of vest pocket dimensions.

Sir Oliver's hope is that the world may not get hold of "atomic energy" until it has brains and morality enough to use it properly. Under present conditions the discovery of this power would be hailed as the most wonderful chance yet to monopolize the good things of the planet and reduce the inhabitants to perpetual slavery. But the Word of God leads one to the belief that men are destined to make a degree of progress little dreamed of, for instead of being imperfect it is promised that the race will progress up to absolute perfection, mental, moral and physical, and that these supermen will be those spoken of where it says, "The perfect shall remain in the land". (Proverbs 2:21) These giants in all the best there is in man are Biblically known as "the righteous" and are thus spoken of in the incoming Golden Age: "In his days [the Golden Age] shall the righteous flourish; he will never suffer the righteous to be moved; and the righteous shall inherit the land, and dwell therein forever."—Psalms 72:7; 5:12; 37:17; 55:22; 37:29.

Among the professions made by this eminent scientist is that he is a spiritist. If this is so, it is of interest to note that spiritism is another name for demonism, or the cultivation of relations with evil spirits. Possibly

demonism had something to do with the announcement of the tremendous force of "atomic power," and demonism may possibly have something to do with the premature discovery of this power, before men are good enough to properly handle it, for nothing would suit the purpose of demonism more than the introduction of an irresponsible force in the world to complete the perplexity, distraction and distress of humanity.

WAR INVENTIONS USEFUL

N OW THAT the Great War is over we find that we can use in peace a number of the war inventions. The gas mask is a necessity for firemen and rescue squads in mines, and has been for years, but the war has greatly simplified and improved its construction and hundreds now understand how to make and apply these masks who did not know before the war.

Beneath every great city are tunnels reaching far into the bowels of the earth in which live millions upon millions of rats, who are naturally breeders of pestilence and wholly a nuisance. By means of poison gas pumped into the outlets of their holes great quantities of these rats can be killed and their carcasses automatically deodorized, disinfected and shriveled up.

Especially valuable for communicating with entombed miners and with ships lost in the fog are some of the instruments employed to direct the whereabouts of sapping operations on land and submarine movements at sea.

While the government is making efforts to utilize airplanes for mail transportation it has been found that they are of real value in the surveying service. An airplane recently flew over Washington along a specified route and took all the photographs necessary to a complete, detailed composite view of the city in a little over two hours. Copies of these photographs are now on exhibition in various parts of the country and are remarkable for their clearness.

War is an evil, but not an unmixed evil, because there is one thing that it yields which is of real value to mankind, and that thing is knowledge. Much of this knowledge is worthless because it cannot be put to good ends, but one general effect of every war has been to spread knowledge of many subjects far and wide, among people many of whom would never have made any mental progress worth mentioning except that it was required of them.

The prophet shows that one evidence of the incoming Golden Age would be a general increase of knowledge on all subjects (Daniel 12:4), and the fact that we see all about us evidences of such enlightenment should be proof to us that "the night is far spent and the day is at hand."

HOUSEWIFERY and HYGIENE

HYGIENE VERSUS CORDIALITY

IT WAS a bit of hygienic wisdom that Health Officer Gaub of Montclair, New Jersey, uttered when his bulletin said, "Don't shake every paw that is extended to you." Certain diseases are communicated by contact. During an epidemic of grip a business concern improved the sickness record by having the door knobs continually wiped with an antiseptic solution. Less cases occurred after the precaution than before.

In the literal as well as the figurative sense no one knows whose hands are clean. Not all persons are as careful about personal cleanliness as they might be. Some use something besides the hygienic handkerchief for cleaning their noses. A small percentage have skin diseases or sores with which their hands come in contact. A still less number have tuberculosis or other infectious diseases, and can communicate the deadly germs via the hand. A very few are carriers of typhoid or of sexual disease germs. Promiscuous handshaking makes one liable to catch some of these germs.

Officer Gaub's advice has some sound medical opinion back of it: "The clean hand habit is a good one, and should be adopted, for it means much in promoting community health, due to the fact that the human hand has been shown to be the medium through which many diseases have been spread. Handshaking is almost universal, and while it stands for friendliness and sociability, it has its dangers. Medical men are agreed that the infection of influenza is often conveyed in this way."

Possibly other customs might be put under ban. No woman should kiss another on meeting or parting. No one ought to eat from a spoon or fork, and certainly not with such indecorum as from a knife, that another person has used, unless the eating tool has a certificate of sterility. Detectives, maintained at public expense, should see that no unmarried persons, or children especially, kiss one another. Street railway and railroad car seats should have removable and systematically sterilized covers. Handshaking should be made "safe for humanity" by laws requiring any person before grasping another's hand to see that the hand is properly and suitably inclosed in a germ proof glove, or in the case of the very poor, a mitten or stocking or a piece of cloth or paper. Provision should be made for all persons appearing in public to be hygienically clad in antiseptic gauze or in medicated cotton. In due time the public would become educated up to the correct standard of hygiene, especially if offenders were ferreted out by a sufficiently

large and alert force of medical spies. But we spare you.

The presence of germs is undeniable, but the principal error in the foregoing assumption is that liability to disease comes chiefly from the fact that the germs are upon the body. Well authenticated medical opinion states that every person is literally covered with germs and that every mouth and nose is a reservoir of all kinds of these lower forms of life. The hygienic thing is to build up the germ-resisting powers of the people so that the bodily powers overcome the efforts of the germs to find breeding grounds in weakened tissues. Persons of good vitality can shake hands and still be safe, if they are reasonable followers of the advice posted conspicuously in a large hospital:

"IF YOU WANT TO LIVE WASH YOUR HANDS."

One of the results that will be the crowning achievement of the healing arts will be the eradication of deadly germs from the earth, as has been done in some localities where a successful fight has been waged against yellow fever. As the Golden Age progresses this will undoubtedly be done, and simultaneously vitality will be built up to perfection. Then "the inhabitant shall not say, I am sick" (Isaiah 33:24), but every one that follows the beneficent guidance of the coming age will gradually find that "his flesh shall be fresher than a child's; he shall return to the days of his youth." —Job 33:25.

NEUROTICS IN TIME OF WAR

THE WAR did something for neurotics; it helped to discover them and thus made it possible to do something for them. A sufferer from neurosis does not know what ails him, nor does his physician, but the malady is very real and its cure easy. The *symptom* is a more or less imaginary illness, generally diagnosed as gastro-intestinal trouble, which totally unfits the sufferer for service in the battle-line, and results in his being taken to the hospital. Over 11,000 cases came to light in the army, and it is estimated by the physicians who came in touch with these cases that probably 10 per cent of all the cases in hospitals of all kinds are cases of neurosis which have not been identified as such. The old cure for neurosis in time of war was flogging or imprisonment; such a cure is really the torture of the sick. What the neurotic needs is light employment in the open air, or in any position in which the strain upon the nerves is slight. The neurotic can work, and accomplish good results, but not if egged on by fear or any other

motive calculated to impair his weakened nervous system.

"Nerves" are a reality not recognized by those who do not have them. The Scriptures indicate that along toward the last of his career, when our Lord was weakened by the healing of others, all at the expense of his own vitality (Greek, *dunamis*—Mark 5:30), his nervous system was badly shattered. The sweating of drops of blood in the garden of Gethsemane indicates this.

MOUNTAIN RESORT IN THE CITY

THIS SEEMS hardly possible, in view of the fact that most of the great cities of the world are built at tide water, but such progress was made during the Great War in the construction and management of man-moth gas bags that it is now seriously proposed that airships be used as hospitals for the cure of patients suffering with tuberculosis.

There are not many of earth's millions that can afford to go to the mountains when afflicted with early pulmonary tuberculosis, but it does not require a great stretch of the imagination to foresee a time when every city might be able to give all the benefit of a trip to the mountains to even the poorest inhabitants. It would be but a trifling expense to give the afflicted a few days or weeks life in the higher and drier atmospheres a mile or less above every city, by sending them up for a stay in captive airships fitted up for the purpose.

HONEY AS A FOOD

BEFORE the use of cane sugar, honey was one of the principal sweetening materials. As a food it is a syrup of four parts sugar to one part water, with practically no nitrogenous substances. The action of the bee's digestive juices make honey a predigested sugar more wholesome than cane sugar, valuable to delay oncoming fatigue during great exertion. Honey is slightly laxative and has certain other very slight physiological effects. A number of good recipes may be made up with honey, as follows:

Bran Brown Bread

Cup white or whole wheat flour; teaspoon soda; $\frac{1}{2}$ teaspoon salt; cup bran; $\frac{1}{2}$ cup honey; cup sour milk; $\frac{1}{2}$ cup raisins floured; sift together the flour, soda and salt; add other ingredients; steam 3 hours or bake 40 minutes in slow oven.

Butter Honey Cake

1 $\frac{1}{2}$ cups honey; $\frac{1}{2}$ cup butter; 3 egg yolks; 5 cups flour; 2 teaspoons ground cinnamon; $\frac{1}{2}$ teaspoon salt; 1 $\frac{1}{2}$ teaspoons soda; 2 tablespoons plain or orange-flour water; whites 3 eggs; rub together honey and butter; add unbeaten yolks; beat thoroughly; add flour sifted with cinnamon and salt; add soda dissolved in the water;

beat the mixture thoroughly; add the well-beaten whites of the eggs; bake in shallow tins; cover with frosting made as follows:

Orange Frosting for Butter Honey Cake

Grated rind of orange; teaspoon lemon juice; tablespoon orange juice; egg yolk; confectioner's sugar; mix all ingredients but the sugar; allow the mixture to stand an hour; strain; add confectioner's sugar until frosting is thick enough to be spread on the cake.

Other Spices for Butter Honey Cake

Instead of the cinnamon, this mixture of spices may be used: $\frac{1}{2}$ teaspoon ginger; 2 teaspoons cinnamon; teaspoon ground cardamon seed; teaspoon cloves; $\frac{1}{2}$ teaspoon nutmeg; $\frac{1}{2}$ teaspoon white pepper; chopped citron or nuts may also be added.

Honey Ribbon Cake

$\frac{1}{2}$ cup butter; 2 cups sugar; 4 eggs; cup milk; 3 $\frac{1}{2}$ cups flour; 5 teaspoons baking powder; 1 $\frac{1}{2}$ teaspoons ground cardamon seed; 1 $\frac{1}{2}$ teaspoons ginger; $\frac{1}{2}$ teaspoon cinnamon; $\frac{1}{2}$ teaspoon cloves; 1-3 cup raisins seeded and cut in pieces; 1-3 cup figs finely chopped; tablespoon honey; rub butter and sugar together; add yolks of eggs; sift together flour and baking powder; add them to the mixture, alternating them with the milk; add whites of the eggs well beaten; bake two-thirds of the mixture in two layer-cake pans; to the remainder add spices, fruit and honey and bake in layer-cake pan; put layers together with crystallized honey between.

Honey Cookies

2-3 cup honey; 2-3 cup sugar; 2 1-2 cups flour; 1-2 teaspoon soda; 1 1-2 teaspoon cinnamon; teaspoon cloves; teaspoon allspice; 2 ounces finely chopped candied orange peel; $\frac{1}{2}$ pound walnut meats finely chopped; sift together flour, spices, and soda; add other ingredients; knead thoroughly; roll out thin; cut with biscuit cutter; these cookies are very hard.

Baked Honey Custard

5 eggs; $\frac{1}{2}$ cup honey; 4 cups scalded milk; $\frac{1}{2}$ teaspoon powdered cinnamon; $\frac{1}{2}$ teaspoon salt; beat eggs enough to unite yolks and whites, but not enough to make them foamy; add other ingredients; bake in cups or large pan in a moderate oven; the baking dishes should then be set in water.

Soft Honey Cake

$\frac{1}{2}$ cup butter; cup honey; egg; $\frac{1}{2}$ cup sour milk; teaspoon soda; $\frac{1}{2}$ teaspoon cinnamon; $\frac{1}{2}$ teaspoon ginger; 4 cups flour; rub butter and honey together; add egg well beaten; add sour milk; add flour with soda and spices; bake in shallow pan.

TRAVEL and MISCELLANY

MAKING THE DESERT SAFE

THE AMERICAN DESERT is triangular in form, with its western edge the Sierra Nevada and Cascade mountains, its southern edge the Mexican border to a point about one-third the way through Texas, and its third edge from eastern Oregon to western Texas by a line running through Salt Lake City and Santa Fé. This country contains many prosperous cities, agricultural districts and mines, but the localities that have water supplies are widely separated and travel between them by automobile is unsafe without a knowledge of where water can be secured. Automobiles that use no water are wanted on the Desert.

The government has recently appropriated ten thousand dollars for sprinkling these desert regions with signboards directing thirsty travellers to water. About a thousand townships have already been covered by these signs and it is estimated that for \$100,000 more the whole territory can be covered and such things as death by thirst will be almost impossible. It is a surprise to many to learn that the famous Death Valley of California contains numerous large springs, some of which afforded excellent swimming to the party that covered that district with the signs above mentioned.

The Prophet says, "Go through, go through the gates; prepare ye the way of the people; cast up, cast up the highway; gather out the stones; lift up a standard for the people." He also says, "Prepare ye the way of the Lord; make straight in the desert a highway for our God". (Isaiah 62:10; 40:3) There is an interesting analogy between the signboards in the American Desert, pointing the thirsty travelers to springs of water, and the "standard for the people," lifted up by the people of God "in the desert" of human sin and folly. Humanity will find it safer travelling when the way of truth is pointed out.

ICELAND

ICELAND, like all other countries, has suffered greatly from increased cost of living as a result of the Great War, but she has profited too. The cost of living is more than double what it was four years ago but the war has taught the people how to get about three times as much for their wool as formerly, for now they have ships plying in regular commerce between Reykjavik and New York.

The people of Iceland, taken as a whole, are the most

highly educated people in the world, printing and selling more books in proportion to the population than any other country. Many speak a half-dozen or more languages fluently. There are 85,000 Icelanders in the home country and half that many in Winnipeg, Vancouver, Seattle and other points in the Northwest. Iceland is about the size of Kentucky. It has equal suffrage and no jails or courts. The last crime on the island was committed more than thirty years ago. In the matter of civil deportment no land in the world is as nearly ideal as Iceland.

The Iceland pony is the means of travel, and there is practically no other way of transporting people or goods than by pony back. For that reason the island is poetically and appropriately called "The land of bridle paths."

We may not suppose, perhaps, that it was of literal snow that the Lord spoke when he said, "Hast thou entered into the treasures of the snow"? (Job 38:22) It may be that this represents truths coming in crystallized form. Water symbolizes truth, and snowflakes are merely crystallized rain drops. However, it may also be true that Iceland and other far northern countries contain great treasures of mineral wealth or possibly even of agricultural wealth when their valleys, filled with glaciers at the time of the flood, gradually become more and more accessible to man.

BRITISH ANTARCTIC EXPEDITION

IN JUNE, 1920, a six years' polar expedition to the South Pole will be started under the leadership of John L. Cope, who accompanied the Shackleton expedition as surgeon and geologist. The object of the expedition will be to ascertain the position and extent of mineralogical and other deposits of economic value, to note the distribution and migration of whales and generally to extend the knowledge of Antarctica. The expedition will take along a fairly powerful wireless set to keep in touch with civilization during its long stay. It expects to use an airplane in accomplishing the final stages of the trip.

"There is nothing covered that shall not be revealed" (Matthew 10:26) The Antarctic continent is now about to be subjected to the closest scrutiny as to the treasures it contains for the needy world. Without doubt the coming expedition will lay bare many of its riches, providing a further step in the preparation of humanity for enjoyment of the blessings of the Golden Age.

SEEING DE TROYED FRANCE

OF THE million tourists who plan to visit "ruined France" next season, many thousands are destined to disappointment. A few, perhaps, picture the whole of France as a barren waste; others see only Northern France wholly devastated and expect to wander for weeks amidst scenes of desolation.

The truth is that not over ten per cent of France was occupied by the Teutons, and that of this area not over a tenth, or one per cent of the whole of the country was subject to the iron heel. As France has an area of some 207,129 square miles, the devastated part amounts to about 2,000 square miles, strung out along the line of the front from Switzerland to the North Sea.

Of parts overrun by the Germans the battlefield of the Marne is already as well cultivated as it was before the war; other parts show little trace of war. It is only in "No Man's Land" and adjacent thereto that the farms and villages are very seriously damaged or destroyed.

The villages were originally built of stone, tile and cement, and will be rebuilt the same way, for that is the age-long habit of the French citizen. But the thrifty Frenchman will consider well which will be worth most to him—a restored property or one making a good looking ruin for tourists to gaze at, and thus a location for a thrifty little bit of trade with the Americans.

The real damage to France consists of ruined textile mills, electric plants, machinery factories, sugar refineries, machine shops, mines and steel works, whose value totals close to a billion dollars, but whose ruins are anything but spectacular.

Tourists that want to see real devastation should have traveled over the wake of some of the armies of ancient times when there was nothing but heaps of stone for jackals to howl over and every trace of life was obliterated.

UNIVERSAL MILITARY TRAINING

IT IS NOT clear that the American people are ready to adopt the policy which brought about the ruin of Germany. The National Guard Association came out flatly against the proposal to put 1,500,000 Americans under arms every summer, and this would lead Congress to look askance at the plan to resort to national militarization which has been advocated by some.

There is something appealing to the minds of lots of people in militarism. They like to see the splendid specimens of physical manhood which the army brings together, they enjoy the uniforms, the marching, the military bearing of the officers, the music, the glistening weapons, the visible evidences of strength and force. But there are other things that have to be taken into consideration, and some of these are being considered now.

AIRPLANES ARE LIKE BOATS

AN AIRPLANE is an air boat, driving through the air the same as a submarine drives through the water. Anything that would retard the speed of a submarine in its element, the water, would retard the speed of an airplane in its element, the air. In the design of a boat every effort is made to make it glide easily and naturally through the water; angles, projections, everything that would create eddies are avoided.

The most economical design of an airplane hull is one that will permit the tucking away within its stream-lines of everything except wings, rudders and propellers, and the time will come when the landing wheels of airplanes will be tucked up into the hull during flight, as a gull on the wing tucks up its legs. In an airplane travelling 90 miles per hour if one raises the hand above the windshield, the sensation is the same as dipping it into the water from a motor-boat.

From the modern air-tunnel we know the details of the correct proportion of airplanes. In these tunnels experiments are made with miniature airplanes which exactly reproduce every existing or conceivable kind of machine. Watching the behavior of these machines in the currents of the tunnel, and cataloging them, the principles have been discovered which make today's machines stable and airworthy in bad flying weather.

Gradually mankind is mastering the science of navigation of the air; gradually he who "walketh upon the wings of the wind" (Psalms 104:3) is permitting our race to taste the joys of sailing about in the blue expanse of heaven. It is said that some become so enamoured of the air by the first flight that they are never able to content themselves in other occupations, though some can never be induced to go aloft a second time.

THE GREATEST STUDY OF MANKIND

CERTAINLY no one can overestimate the value of an accurate answer to the question "What is Man?" Of all questions which confront man this one should be most readily understood for the reason that we are all born on this human plane and all surrounded by thousands of other human beings. With such subject matter for observation we should be thoroughly informed; but we are not. On no subject are the majority of people more confused than upon this very one. So limited are our powers of observation, so inaccurate our ability to make deductions, that we are really confined to the information given us in God's Word. Aside from what the Bible tells us of man's nature and being there are two main thoughts abroad in Christendom. We are sure our readers will be greatly interested in the discussion of this subject which begins on the next page.

RELIGION and PHILOSOPHY

WHAT IS MAN?

"What is man that thou art mindful of him?"—Psalm 8:4.

ORTHODOXY would have us believe that man is not man at all, but is some kind of a dual being, ostensibly human, ostensibly made fit for the earth and its conditions and society, but really a sort of ethereal being confined by fate's decree in a body of clay, supposed to be sighing and moaning for the time of his deliverance. Very well. Suppose an arm is lost by accident; manifestly there is no more restraint upon that part of the mystic subjective self, which is supposed to be waiting for the moment of release. Does this spirit arm or leg fly to some more blissful sphere, waiting for the rest of the spirit body to join it? Is it laid aside in some celestial service station where "parts" are kept and whole bodies reassembled after death? Or does the new untrammelled arm faithfully dog the steps of its erstwhile neighboring body?

But, the orthodox tell us, by way of scattering the issue, while man's body is born after the manner of ordinary generation in animals, God in some unsearchable and inexplicable way implants a spirit and associates a soul with that body at the time of birth. Orthodoxy is unable to distinguish very surely between the spirit and the soul; but they are very sure that both are immortal—that God himself either does not or cannot terminate the existence which he started. In later years the majority of orthodox bodies have come to look with much more than tolerance upon the would be scientific theory called evolution. Practically all of the schools of science in Europe, which at first espoused the doctrine of evolution, have long since abandoned it as being founded on insufficient evidence. But it seems to have gotten well ingrained into the systems of ecclesiasticism. That it is a real and present factor in religious circles is plain from a recent item in a Denver newspaper, part of which we quote:

"The ministers of Denver having recently been thrown into mild tremors over the recurrence of the controversy concerning the doctrine of evolution, are now to take a long look into the past in the hope of determining where man came from and when he came. The Program Committee of the Denver Ministerial Alliance, inspired by President A.H. C. Morse, has scheduled an illustrated lecture for the meeting Monday on the topic, How Old is Man? It is expected that the traditional Bible chronology of Usher will be given a somewhat serious crimp when the proposition of anti-quarian cavemen passes over the screen and their personal history is recited by the distinguished lecturer from Boulder."

But if the reverend gentlemen of Denver are not interested in looking to the Bible to find out man's origin, some of the rest of us are. But let us first glance briefly at what legitimate science tells us about man, his body, soul and spirit.

Science informs us that the human body is composed of seventeen chemical elements. These elements are not peculiar to man: for they are found quite extensively in other realms of nature. But what can science tell us about the soul—that supposedly elusive genius pining to escape from its body of clay? Science knows nothing of such a being; the most elaborate and painstaking dissection of the human anatomy has revealed no trace of it. On the other hand the testimony of science is all to the effect that consciousness is inseparably connected with organism. If a great shock, or the action of disease benumbs the nervous system, consciousness not only ceases but it has ceased with such benumbing.

Science tells us that man's superior power of reasoning is due to his superior brain. Lower animals can reason somewhat, and it may be stated as generally true that power to reason is in proportion to the size and fineness of the brain structure. Moreover, even in man his power to think and feel varies at different stages of his individual development. The infant can reason little better than some of the lower animals and after, having grown to manhood, he passes into senility it not infrequently occurs that his powers of reasoning lapse back to a very low stage, and all because his organism is deteriorating.

And the spirit? The only spirit science knows about is the spirit or power of life. And this spirit of life is dependent upon nourishment, even to the smallest individual cell. If nourishment to a tiny cell is cut off, that cell will die, even though the life of the organism as a whole may persist. On the other hand, after the death of the coordinate activities of the body, life remains for several days in many individual cells of the body.

Science knows nothing of a future state. The few scientists who have dabbled in Spiritism and who profess to believe in a future state on the grounds of their researches in that field, may be truly scientific along other lines, but their conclusions in the realm of occultism are born more of desire than of science. The word science comes from *scio*, to know. Speculations by scientists, or by others, are not science, however interesting they may be. The very most that real science can say about spiritism is that spirits are evidently beings, of an invisible nature. And this accords perfectly with

what the Bible has to say on the subject, namely, that there are spirit beings of high intelligence, who never were human beings, but who, through their disobedience, are estranged from God and from all holy beings.

But what does the Bible say, then, about the nature of man? Its answer not only agrees with the best that science has to offer, but it goes much further in that it tells the origin and present of man, also his future.

The words immediately following our text give some valuable suggestions upon the point of our inquiry. "Thou madest him a little lower than the angels," establishes man's relationship to the superior orders of creation: angels, seraphim, cherubim, archangels, and quite possibly others which inhabit the celestial sphere. Whatever man is, then, he is not an angel, not as high in plane of existence as an angel—is not, in fact, a spirit being at all, he is "of the earth earthy."—1 Cor. 15:47.

"And hast crowned him with glory and honor." The reference here is evidently to the glory of being endowed with the character image of Jehovah (Genesis 1:26, 27), and with the honor of being made lord over all of God's other creation of earth. Not only was he *qualified* by his very superiority of nature to be earth's king, but God definitely "set him over the works of his [God's] hands" (Hebrews 2:7) and "put all things under his feet".—Psalm 8:6.

Man according to these Scriptures, is an exquisite animal, originally crowned with the glory of character perfection, and with the honor of earthly dominion. But does not the Bible mention the soul and the spirit? Quite so; but they in no wise disturb the simple yet glorious picture of man. The soul is a conscious being, the individuality, the *ego*; the spirit is simply the animating principle, the spark of life. No personality whatever attaches to the spirit. Let us examine the account of man's creation more minutely. We read: "And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life [Hebrew, the breath of lives, i. e. that breath common to all life]; and [as a consequence of this action] man became a living soul"—a pulsating, sentient being.—Genesis 2:7.

Could anything be simpler? This brief statement of twenty-seven words tells the whole story of man's creation. God formed a body of earth; he animated that body, and conscious existence began. But while man is sublimely and wonderfully made (Psalm 139:14), in that his organism is intricately fashioned and the actions and reactions of his elaborate nervous system defy accurate calculation, still, there is no mystery regarding his nature, if the Bible account be followed. He is a *human* being, an earthly being, made fit for and appropriate to the earth and its arrangements. No uncanny "soul" crouched in him as in a prison cell; no

elusive "spirit" hovered over or near him. No: man stood upright as God's highest handiwork on earth, as Jehovah's representative, capable of responding to all the promptings of his Maker. The Scriptures leave no doubt whatever as to man's original perfection. "His [God's] work is perfect" (Deuteronomy 32:4); "God hath made man upright" (Ecclesiastes 7:29); and "God saw everything that he had made, and, behold, it was very good". (Genesis 1:31) If with Jehovah's perfect taste and with his perfect ability to have improved upon his own handiwork he still pronounced man "very good", he must have been a glorious creature indeed. But though he was a perfect being, yet he was a dependent creature and God had made every provision for his well-being and happiness. He had provided for his sustenance the fruit of certain trees of the garden, saying, "Of every tree of the garden thou mayest freely eat: but of the tree of the knowledge of good and evil, thou shalt not eat of it; for in the day that thou eatest thereof thou shalt surely die".—Genesis 2:16, 17.

But the sad story is that Adam did disobey and thus brought upon himself death, and at the same time brought upon all his posterity imperfection, sorrow, sickness, suffering and death. (Romans 5:12, 18, 19) There has been no perfect human being on earth since Adam's disobedience, our Lord Jesus alone excepted. We all sinned in that one transgression and "are come short of the glory of God". Now our glory, like our knowledge, is fragmentary (1 Corinthians 13:9) but while our original endowment of perfect wisdom, perfect justice, perfect love and perfect power is now disarranged and distorted, such disarrangement does not affect our nature.

Adam surely understood what death meant; he could hardly have *realized* what it would mean in suffering and distress, for he had never observed, much less experienced, death. But he had a perfect mind and knew full well that death meant the taking away of those life rights and privileges which he had received not as a debt, but as a boon from his Maker, but even if he had had the slightest uncertainty on this point Jehovah made it plain when his disobedient son was being driven from Eden, his lovely home: "In the sweat of thy face shalt thou eat bread until thou return to the ground; for out of it wast thou taken, for dust thou art and unto dust shalt thou return".—Genesis 3:19.

Some would here be inclined to quote the words of the poet: "'Dust thou art, to dust returneth' was not spoken of the soul". But which is worthy of greater credence, Longfellow or Jehovah? There is no effort in this text to distinguish between the cessation of activities in the body and the cessation of consciousness. Elsewhere we are told concerning man: "His breath goeth forth, he returneth to his earth; in that very day his thoughts

perish". (Psalm 146:4) Furthermore it is the same "thou" which would be responsible for the transgression which was to come under the sentence of death, in case of disobedience. God deals with the responsible part of an individual: "Man looketh on the outward appearance but God looketh on the heart". (1 Samuel 16:7) Jehovah certainly knew that Adam's body was not going to walk around and do something without the direction of the mind. The warning did not read: 'In the day that thy body eateth thereof thy *body* shall surely die'; but it did read: "In the day that *thou* eatest thereof *thou* shalt surely die". Both the warning and the sentence were manifestly to the individual, the conscious, sentient, the responsible being as a whole.—Ecclesiastes 3:20.

"The dust of the ground" is, of course, merely another way of saying "the elements of the earth". Before his transgression Adam had a perfect mind, a perfect body, perfect environment, perfect life, a perfect dominion. He had all these things to keep and to enjoy *forever*. Death is not a normal thing on earth, any more than it is so in heaven. But when Adam sinned he lost at once his perfect dominion and his perfect surroundings. His mind and body, through dearth of proper nourishment, began to lose their respective sharpness and vigor; and the bright flame of life, which had been started by Jehovah's own hand, began first to dim, then to flicker, and finally died out altogether. All his powers returned to that inert unconscious state in which they were prior to his being energized with life from a divine fountain.

And what becomes of the soul at death? It simply ceases to exist; it goes just where the flame goes when the candle is snuffed out; it goes just where the figures go when they are rubbed off the blackboard. You may retain a memory of them; the *results* of the figuring maybe lasting even after the figures themselves are gone. Even so, some influential souls, "departing, leave behind them footprints on the sands of time". And do not the Scriptures speak of a resurrection and does not that imply that something is alive somewhere? Certainly the Scriptures speak of a resurrection; but why a resurrection if the individual is already alive somewhere? Evidently there is some kind of a record kept of each individual child of Adam, that his individuality may be reproduced in God's due time, that he may be recreated with the same identity, and given a body, for there can be no conscious existence without an organism. But a record of a soul or being is a vastly different thing from having that soul or being alive somewhere.

Where does the spirit or animating principle go at death? It simply returns to its Giver. Up to the point of death the possessor of life can retain his life and also pass it on to others by process of procreation, but as soon as death has ensued no one has control of that measure

of life but God. The most skilled physician cannot "Back to its mansion call the fleeting breath". And so we read just as our own five senses tell us: "Then shall the dust return to the earth as it was [the seventeen elements shall disintegrate]; and the spirit [energy or power of life] shall return to God who gave it".—Ecclesiastes 12:7.

A little illustration might help to retain the points in mind. Here is a candle; it has neither light nor heat. We light it with fire and both light and heat are given off. It has power, capacity for performance. Its little flame can be used to light other candles, or it could be used to start a very destructive conflagration. The wax is gradually burned up; the flame flickers and dies. Its powers to start other flames, or even to work injury, is gone; it gives forth neither light or heat. So with the creation of man. There was first the inert and insensible body of Adam. The brain and nervous system were there, but incapable of perception or reasoning. Then it is lighted from the torch in God's own hand, and both light and warmth, both brilliancy of human wit and warmth of love are radiated. Thousands may feel the influence of that personality; had it not been for sin and the ensuing sentence of death that warmth and light could radiate for all eternity; but as facts now stand a few years suffice to consume the organism and the individual ceases to pulsate, ceases to radiate any more thoughts or to give out tender sympathies. The soul is dead. The spark of life is under God's control to be given back at the resurrection (which is to be brought about by divine power as a result of Christ's redemptive sacrifice) and the body simply decomposes into its several elements.

But does not the apostle say something about being 'delivered from this body of flesh'? And does he not also mention about our 'outward man perishing, but our inward man being renewed day by day'? Yes, but the apostle was a member of the *new* creation; and that is another story. Much of the confusion on the subject of man's nature has come from applying Scriptures to man which are intended to apply only to the church of the Gospel age, which is admittedly in a transitory state. To understand the Bible at all, it is essential that we "rightly divide the word of truth".

Man originally created perfect, became a sinner, forfeited his life and brought sickness and death upon all of his offspring. Jesus provided redemption for mankind through his death and resurrection. "By the grace of God he tasted death for every man," and this fact must be "testified to all in due time". (Hebrews 2:9-1; 1 Timothy 2:3-6) In God's "due time" the blessing of being restored to human perfection will be offered to all mankind. The Bible designates such as "the time of restoration" or re-construction period—the Golden Age.

GOLDEN AGE CALENDAR

October 29 to November 11, 1919

YEAR:	1919 A. D.: 6048 since Creation; 7427-8 Byzantine Era; 5650 Jewish Era; 2672 of Rome; 2695 of Greek Olympiad Era; 2570 Japanese Era; 1333 Mohammedan Era.
STARS:	Morning: Venus, Mars, Jupiter and Saturn; Evening, Mercury.
OCTOBER 29:	Fiesta de Minerva holiday, Guatemala; 1913, Austria requests immediate armistice.
OCTOBER 30:	Mohammedan Hadji holiday, Ceylon; 1918, Italians advance from Piave River, Austria recognizes Czechoslovak nation, Turkish army on Tigris captured.
OCTOBER 31:	Halloween; Moon first quarter 8:43 p. m., New York; Administration Day holiday, Nevada; Emperor's Birthday holiday, Japan; Thanksgiving Day, Norway; 1918, Airplane scandal reported.
NOVEMBER 1:	All Saints' Day holiday, Louisiana, Algeria, Argentina, Austria, Hungary, Belgium, Bolivia, Brazil, Quebec, Chile, Colombia, Dominican Republic, France, Germany, Guatemala, Haiti, Honduras, Italy, Mexico, Nicaragua, Panama, Paraguay, Philippine Islands, Peru, Salvador, Spain, Turkey, Uruguay, Venezuela; State Fire Day, Nebraska; Mid-Autumn Holiday, China; Feast of the Lanterns, Hong Kong; 1918 Brooklyn Elevated wreck kills 79; Sugar allowance increased to 3 lbs. per person; Hungary minus a king.
NOVEMBER 2:	All Souls Day, Belgium, Bolivia, Ecuador, Germany, Guatemala, Haiti, Nicaragua, Porto Rico; St. Justus Day, Trieste; Memorial Day, Brazil; 1918, 362,358 German prisoners taken since July 18, Italians take 30,000, King Boris abdicates Bulgarian throne.
NOVEMBER 3:	Separation from Colombia holiday, Panama; 1918, Italians take Trent with 20,000 prisoners; Jugoslavs take Austrian fleet.
NOVEMBER 4:	Election Day, United States except District of Columbia; Occupation Day, Rhodesia; 1918, Austria accepts truce terms; Allies sign terms for Germany.
NOVEMBER 5:	Cup Day, Melbourne; 1918, Elections give Republican control of Congress.
NOVEMBER 6:	General election, Porto Rico; Gustavus Adolphus Day, Sweden; 1918, 400 "flu" orphans placed in New York asylums; Germans retreating fast.
NOVEMBER 7:	Full Moon, 6:25 p. m., New York; Small partial eclipse of moon visible in U. S., begins 5:58 p. m., ends 7:30 p. m., Eastern Time, old; Holi festival, India; 1918, Methodists give \$5,000,000 for after-war work; Americans occupy Sedan, revolts in German navy, premature peace report in America.
NOVEMBER 8:	St. Dimitrios Day, Bulgaria, Greece, Roumania; 1918, "flu" deaths in New York total 19,000; rebels control much of Germany, Germany asks for cessation of hostilities.
NOVEMBER 9:	King Edward's Day, Jamaica; 1918, Socialists take over German government, Kaiser Wilhelm renounces throne, his soldiers revolt, general strike in Germany.
NOVEMBER 11:	Martianmas; King's Birthday, Italy; 1918, President Wilson reads armistice terms to Congress; Thomas G. Masaryk elected president Czechoslovak Republic, Germany signs armistice terms, and war ends.

The Golden Age

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HOPE AND CONVICTION



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No. 4

LABOR and ECONOMICS

THE COAL STRIKE

WEEKS ago, the representatives of the miners of the Central Competitive District met in convention at Cleveland. This District covers Western Pennsylvania, Ohio and Indiana and mines one-half of the bituminous coal produced in the United States. The total bituminous coal output of the United States is approximately 600,000,000 tons.

During the past year the men have been averaging only two or three days work per week. In the early part of the year coal was a drug on the market and when there was a good market for the coal, cars could not be had in sufficient quantity to handle it promptly. The miners claim that in the ten weeks ending with August the car shortages cut production to the extent of 12,000,000 tons.

Thus it happens that although the men are working at what appear to be good wages, their actual earnings during the past year have averaged but \$75 per month, and in 1918, when they had more work than at any other time in recent years, their average earnings were only \$80 per month. They have averaged during the past year to work only about three days per week. The daily output is 9 or 10 tons per man.

During the war the men received two increases in pay, the last contract dating from April 1st., 1918. That contract provided that the men should continue at the same rate of wages during the war, but not beyond April 1st., 1920. At the convention the men claimed that the war is over and that the contract no longer holds. They said that they had worked at the old wages since the date of the armistice, November 11, 1918, merely by common consent.

Additionally they called attention to the fact that although their wages have risen 47% since 1914 yet the average increase in the cost of living during that time was 85% and the net result is that their social condition is worse now than it was five years ago.

The remedies agreed upon in the convention were a six hour day and five day week, by which it was hoped that a greater continuity of employment would be obtained, and owing to the dim light and gas-laden atmosphere in which the work is done the men felt that these hours are proper enough to ask for the mining industry. They also asked for a 60% increase in wages, with time and a half for overtime and double time on Sundays and holidays. They claimed that on \$75 per month, at present prices of foodstuffs, they do not get enough to eat and can not properly feed their children.

Early in September the miners' delegates met the operators at Buffalo. The miners came armed with fixed instructions from the Cleveland convention that the foregoing demands must be met by the operators or they would go on strike November 1st.

The reply of the operators was that the public is a party to the agreement made on April 1st., 1918, and that the agreement must remain in force until the President issues his proclamation of peace. They therefore declined to grant the miners' demands. They also complained that the demand for a new wage agreement was sprung upon them in the fall, when they are least able to meet it, because then is the time for the great rush of coal orders, whereas, heretofore, the spring has been the time for coal parleys.

The conference was adjourned to Philadelphia early in October and again neither side seemed able to make any concessions satisfactory to the other. The meeting broke up and Mr. Lewis, the District President of the miners, returned to Indianapolis and issued an order that all work should cease at midnight October 31st., except such work in the care of properties as is permitted under the rules in force at such time. This order was sent out October 15th., with the declaration that "the United Mine Workers of America are now embarking in the greatest enterprise in the history of the trade union movement." The strike order was sent to all states.

Immediately after the strike order was issued the Government took a hand and Secretary Wilson of the Department of Labor, summoned the operators and representatives of the miners to meet him in Washington. The greatest determination to make no concessions was manifested on both sides.

Estimates as to the number of miners that would be affected by the strike ranged all the way from 225,000 to 800,000 men, the assumption in latter case correctly judging that a strike in the Central District would inevitably be carried into other Districts. It is not thought that the Anthracite District will be affected, as supplemental agreements have been made carrying current agreements over to April 1st., 1920.

The miners stated they believe that all of their demands can be readily granted without any increase in the price of coal. On the other hand Senator Frelinghuysen has stated that the demands, if granted, will cost consumers over a billion dollars per year. In any event there is said to be less than a month's coal stock on hand and a protracted strike at this time would cause a complete stoppage of all traffic and industry. The stock of coal held by the railroads at this time is very limited. So great is the importance of the bituminous coal output to the industries of the country that the amount produced has doubled within the past ten years.

There are doubtless great profits in the coal business at this time and presumably the miners know this and wish to enjoy a share of them. They claim that they are not Bolsheviks but are seeking to effect some kind of arrangement by which they can be guaranteed permanent employment as long as they are able to work and thereafter a reasonable living for themselves and those dependent upon them. These are not unreasonable aims. The miners are probably sympathetic with the steel strikers and trying to help them to win.

The operators are said to be considering the usual plan of having the public pay for the strike, and pay a good round interest on it, if the strike is successful. They think that if less coal is produced it will be bid for at prices which will cover all possible differences in cost of production. If the strike is protracted, pneumonia and influenza are likely to follow the scarcity in fuel and distress and hunger will affect all classes.

Under the Lever Act a war measure to prohibit interference with production and distribution of coal in war time, the miners were enjoined from striking under penalty for conspiracy. However, the strike was inaugurated on November 1st, the miners made leaderless by the injunction which paralyzed any possible direction of the coal workers.

Some Bible students have thought that the text, "there shall not be a coal to warm at, nor a fire to sit before it" (Isaiah 47:14) teaches that the great time of trouble spoken of by our Lord, as the "great tribulation, such as was not since the beginning of the world" would be ushered in by a great coal strike.

Examining the passage cited we do not see it that way. The prophet seems to be describing the fire referred to by President Wilson when he said "the world is on fire", and conveys the thought that the fire in question is not literal fire, "not a coal to warm at", not that kind of a fire, but a symbolical fire, "the fire of God's jealousy." (Zephaniah 3:8) How careless we were not to notice that the literal "earth abideth forever."-Ecclesiastes 1:4.

FOREIGN COAL SITUATION

THE BITUMINOUS coal situation in this country cannot be fully understood without a consideration of the situation abroad. There is little or no coal in Norway, Sweden, Denmark, Holland, Italy, Switzerland and the Balkans. Hitherto these countries have been supplied by England, Germany and Belgium. Large quantities have also been required by France, Spain and Austria, which consume more than they can produce.

Due to labor troubles, Britain's annual production has shrunk from 287,412,000 tons to 214,000,000. This means that instead of having 75,000,000 tons to export she can export only 15,000,000 tons. The whole of Europe is expecting that the United States will make up this deficiency of 60,000,000 tons and a further shortage of 21,000,000 tons due to smaller outputs of Belgium and Germany. It would require 60,000 men digging coal at top speed for a year to produce the shortage of coal that will be experienced in Europe this year and this coal can come from the United States only. To carry this coal would require 1,620,000 cars of 50 tons each. Paris is destitute of coal as we write.

Many factors complicate the situation. The ship owners of Norway, Sweden, Denmark and Holland instead of carrying coal to Norway, Sweden, Denmark and Holland, have preferred to have their ships carry coal to South America or other places from which return cargoes and greater profits could be obtained. They have preferred that the less profitable business should be carried in Uncle Sam's new merchant marine while they reap the profits of the more desirable cargoes and destinations. Shipments from England have been impeded, vessels sometimes lying at anchor three to four weeks before they can get a load. The price obtained for the coal ranges from \$30 and \$32 per ton at Baltic ports to \$33 per ton in Italy.

LABOR CONFERENCE FAILURE *By Newton Hartshorn*

THE RISE of Labor Unionism in England and the United States dates from 1830. In the United States Charles A. Dana, Wendell Phillips, Wm. Lloyd Garrison, Robert Owen and Albert Brisbane were some of its advocates. Horace Greeley opened the *New York Tribune* to its discussion.

The rapid development of machinery is fast obliterating the line between skilled and unskilled trades and a large share of the funds of the unions are devoted to the organizing of the lower forms of unskilled labor as in the case of the unskilled laborers of the Steel Trust recently. To defeat the aims of the unions the Steel Trust has admitted its skilled operatives to a small share in its earnings and a few stocks have been allotted to them and a pension system introduced.

Cooperative industries in some of the individual necessities and in food distribution is a feature of English trade unionism and the capital invested in them approximates \$100,000,000.

There is a decidedly political aspect to Trade-Unionism, although in America that feature has been disastrous to its promoters, as capital and employers here retain corps of skilled politicians that are able to outwit any that the labor unions can employ, besides the vast sums of money that the former have always at their command.

In England however, class prejudice is so strong that those who suffer from the rigid caste and low wages are easier welded together into a cohesive force, although the basis of the franchise is much narrower and more favorable to the property holder than here; the Labor party which was organized in 1906 elects more than 50 members of Parliament out of 670.

The practical equality of the Union and the Liberal parties in the House of Commons has enabled the Labor party, with the aid of some smaller factions of independent labor members, by skilled tactics, to hold the balance of power and some times shape legislation.

The goal of Trade Unionism is to bring under its banner practically all of the workers, but its battle line in the United States is now collective bargaining; the recognized right to adjust wages and other conditions of labor in all industries, through an agent of the union, not in the service of that particular employer with whom the bargain is made. In England the main point battled for now, besides the raising of wages and shortening of hours, is the nationalizing of the coal mines. In America, in North Dakota, an organization of the workers, including the farmers, has captured the state government, and this movement spreading to other states may next year be formidable.

Collective bargaining is the rock on which the recent Industrial Conference in Washington split and went to pieces. This Conference, and the reduction of prices of food and other necessities were depended upon to avert the threatened coal strike and railroad strike and if the passage of an act of Congress, now pending, can not stop them, the serious results to follow any one can see.

Capital and Labor stand now much in the relative position that the Central Powers and the Allies did in July 1914. Each aimed to dominate the other and consequently the World—Autocracy against theoretic Democracy. All far-seeing men concluded that in a fight to the finish between them the result would be about what it has been; practically half of the world was destroyed and now, in 1919, Capital and Labor stand facing each other in the same way and far-seeing men conclude that if the threatened fight to a finish takes place the remaining half of the world will be destroyed.

A gigantic blow by Labor is threatened; the Illinois Federation of Labor has voted for one big Union of all workers in Canada and the United States, and organized labor plans to join forces with the farmers.

Capital says if the fight must come it might as well come now, and labor says the same. Is there not a better way? Vice-President Marshall points it out in the following, according to the *Boston American*:

"Just as long as capital and labor stand and glare at each other, we may expect everlasting turmoil and a nation-wide catadysm.

"The Congress of the United States is a kind of doctor that treats symptoms and doesn't treat disease.

"No legislative remedy that I know of can be found to produce peace and quietude and good order—unless the manufacturers see something more in business than dividends and look upon the employes as brothers in the Republic, and not as cogs in the machine or as numbers on a payroll.

"And unless the laboring men have some higher incentive to do their work than the mere wage which comes from the doing of it; if they put in their time finding how little they can do and how much more they can get for the doing of it, it is hopeless from their standpoint.

"It is no part of government to boost one man and to boot another.

"It is hopeless if the mad passions of men are to hammer at legislative halls for their final and just settlements. A government of discretion dies.

"The only government in business life that can hope to live is a government of love and compassion.

"What the economic life of America needs is not a law-giver but an evangelist.

"The country needs a rebaptism of peace patriotism such as it had of war patriotism.

"There never will be perfect justice in the world until the lion and the lamb lie down together, and not, as they do now, with the lamb inside of the lion.

"Just now we need a body of citizens who are content to do a day's work for a day's wage; who are willing to pay a day's wage for a day's work; who believe more in the common good than in the larger good.

"Since the world began, business and wealth have had no such opportunity for the Angel of the Lord to write their names down beside that of Abou Ben Adhem as they have just now.

"The trumpet call of conscience is not only to the meek and lowly, but to the high and mighty, and when dividends and wages are measurably forgotten in the love of service for our Christian country, if there is any hope at all, passion, personal preferment and personal success must all be put in the background and the capitalist and the laborer must realize that the consumer is also entitled to admission into the brotherhood, and business must be primarily for the love of promoting a contented and happy people.

"Dividends and wages must be secondary. This is a problem for solution by men who believe in the fatherhood of God and the brotherhood of man.

"It calls on every man of every creed to solve it; not for one person; not for one class; but in the interests of the whole people.

"It is not to be hoped that soon again the Nazarene shall walk through field and factory, through palace and hovel, leaving behind Him everywhere the only solution for every great problem, the healing influence of His golden rule.

"I am in favor of any alleviating measure for the time that would adjust these troubles, but I have no confidence in the proposed settlement of these difficulties. This offers no new solution, and I only say it in the hope that men of every creed may realize how futile has been our theology, when we have imagined that we could go to church on Sunday and love God whom we have not seen, without the rest of the week loving our fellowmen whom we have seen."

FLOGGING THE SEA

AGES AGO, when the king business was more flourishing than at present, one Persian monarch so far forgot himself as to have the sea flogged when it overlooked the social amenities of his realm and showed more deference to the moon than it did to the king's wishes. The tide rose and wet the royal feet. The royal anger rose faster than the tide, and the poor sea was punished as a consequence. Who was there that dared to question the ethics of the king's commands; who dared even think that his conduct was puerile, childish, infantile? No doubt there was much dutiful effort at looking approval. For was not the king the king? Was he not the vested interests of the country; was he not the established institutions of the land? Besides, there may have been some Bolshevik sea serpent or I. W. W. eel hidden in those audacious waves; and would not that possibility justify, yes, render glorious and patriotic what otherwise might look like futility and foolishness?

The world has not changed much since then. The restless, turbulent masses of humanity are still being

flogged by the kings of today. The State Constabulary of Pennsylvania furnishes one instance of this kind of work. A corporal of the United States forces in Siberia was recently beaten by Cossacks of the czarist troops of Russia—abetted, if not aided, by the Japanese. Considerable hubbub has been raised, and properly, over that affair. It was an outrage. But mounted Cossacks of Western Pennsylvania, together with "thugs, gangsters, and detectives," have brutally beaten up and dispersed peaceable groups of steel strikers within the last few weeks. The public press is almost silent on the subject, except to say that it was "necessary" to "prevent" possible disorderly manifestations. No official has any authority to command anyone to act contrary to law.

Furthermore, from the standpoint of history, violent treatment of defenseless masses is both foolish and futile. It displays as great an ignorance of the real value of things as the poor old king who thought he was master of the sea. Instead of demonstrating his power, it demonstrated his weakness, for that which he chose to look upon as an affront was merely the outworking of certain really powerful and natural influences which the king would have done well to investigate and understand.

We suspect that fear plays a large part in these aberrations of justice. The merits of the steel workers' strike have absolutely nothing to do with the matter. The Constabulary are afraid something might happen to start rioting and they might get hurt. The higher officials are afraid they might lose some of their prestige with the great and influential, unless they make a show of force. And so it goes all along the line.

Those who have taken upon themselves the responsibility of public office in these days have no easy task; that must be remembered. But they often do the very thing which makes their position most difficult. For men to parade around or assemble in meetings could do no harm. On the contrary it would give outlet to their restiveness; and after a few hours the men would go home tired and peaceful. This plan was followed in New York several years ago when I. W. W.'s paraded on Fifth Avenue. They were not interfered with, and not the slightest trouble resulted. Before the parade the police commissioner was besieged with demands from white-faced enthusiasts and professional patrioteers to interfere with the proceedings. The commissioner's course of declining to interfere with the tide proved to be the wise one; for in a few hours the tide receded of itself, leaving no jetsam of broken heads or bloody uniforms.

How happy the time when neither animals nor men "shall hurt or destroy" and when "none shall make them afraid".—Isaiah 11:9; 17:2.

"Just now we need a body of citizens who are content to do a day's work for a day's wage; who are willing to pay a day's wage for a day's work; who believe more in the common good than in the larger good.

"Since the world began, business and wealth have had no such opportunity for the Angel of the Lord to write their names down beside that of Abou Ben Adhem as they have just now.

"The trumpet call of conscience is not only to the meek and lowly, but to the high and mighty, and when dividends and wages are measurably forgotten in the love of service for our Christian country, if there is any hope at all, passion, personal preferment and personal success must all be put in the background and the capitalist and the laborer must realize that the consumer is also entitled to admission into the brotherhood, and business must be primarily for the love of promoting a contented and happy people.

"Dividends and wages must be secondary. This is a problem for solution by men who believe in the fatherhood of God and the brotherhood of man.

"It calls on every man of every creed to solve it; not for one person; not for one class; but in the interests of the whole people.

"It is not to be hoped that soon again the Nazarene shall walk through field and factory, through palace and hovel, leaving behind Him everywhere the only solution for every great problem, the healing influence of His golden rule.

"I am in favor of any alleviating measure for the time that would adjust these troubles, but I have no confidence in the proposed settlement of these difficulties. This offers no new solution, and I only say it in the hope that men of every creed may realize how futile has been our theology, when we have imagined that we could go to church on Sunday and love God whom we have not seen, without the rest of the week loving our fellowmen whom we have seen."

FLOGGING THE SEA

AGES AGO, when the king business was more flourishing than at present, one Persian monarch so far forgot himself as to have the sea flogged when it overlooked the social amenities of his realm and showed more deference to the moon than it did to the king's wishes. The tide rose and wet the royal feet. The royal anger rose faster than the tide, and the poor sea was punished as a consequence. Who was there that dared to question the ethics of the king's commands; who dared even think that his conduct was puerile, childish, infantile? No doubt there was much dutiful effort at looking approval. For was not the king the king? Was he not the vested interests of the country; was he not the established institutions of the land? Besides, there may have been some Bolshevik sea serpent or I. W. W. eel hidden in those audacious waves; and would not that possibility justify, yes, render glorious and patriotic what otherwise might look like futility and foolishness?

The world has not changed much since then. The restless, turbulent masses of humanity are still being

flogged by the kings of today. The State Constabulary of Pennsylvania furnishes one instance of this kind of work. A corporal of the United States forces in Siberia was recently beaten by Cossacks of the czarist troops of Russia—abetted, if not aided, by the Japanese. Considerable hubbub has been raised, and properly, over that affair. It was an outrage. But mounted Cossacks of Western Pennsylvania, together with "thugs, gangsters, and detectives," have brutally beaten up and dispersed peaceable groups of steel strikers within the last few weeks. The public press is almost silent on the subject, except to say that it was "necessary" to "prevent" possible disorderly manifestations. No official has any authority to command anyone to act contrary to law.

Furthermore, from the standpoint of history, violent treatment of defenseless masses is both foolish and futile. It displays as great an ignorance of the real value of things as the poor old king who thought he was master of the sea. Instead of demonstrating his power, it demonstrated his weakness, for that which he chose to look upon as an affront was merely the outworking of certain really powerful and natural influences which the king would have done well to investigate and understand.

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SOCIAL and EDUCATIONAL

EVOLUTIONIST GUESSING

AND NOW comes into court a learned scientist of a famous institution of learning and tells us all about it, and what he can not remember and tell of his own personal knowledge he tells anyway, as is the custom with modern "scientists."

Dr. Evolution tells us, and I prithee, O reader, do not laugh at what he telleth thee, that his ancestor some 18,000,000 years ago was a fish by the name of *Osteolepis*. He tells us how he knows this, because he saith, "No brain here, just an animal controlled by a nervous system."

Then it seems that the family-tree shows that 3,000,000 years later the Doctor's ancestors had become primitive reptiles, and the family name had changed to *Seymouria*. The Doctor explains about this second ancestor that he was "also brainless" and a little more bone-headed than the poor fish that started all the trouble. Then comes another little jump of only 12,000,000 years in the genealogy record, with everything running true to form, until forth came Dr. "Opossum" who betrayed the best teaching of his ancestors by manifesting the "first spasm of true brain." No explanation of this.

There is a little break in the record here. Our modern Doctor is not just sure whether his ancestor appeared 2,000,000 years ago or 2,750,000, but it was one or the other and the difference is slight. There is no doubt that he appeared, for the Doctor says that "There arose in Wyoming one of the first of the ancestral primates, or apes" and that he "had only a small thimbleful of brains", which all seems perfectly regular.

The Doctor cuts things pretty fine when he gets down to our own times. He admits that "Our record of human history covers only 6,000 years" and tells us that "the average human skull was not complete" until about 34,000 years prior to that time.

Reader, would you know the true explanation of how the Doctor knows that we all started from a poor fish, and how it came about that some of those fish, managing to live part of the time out of the sea, made it possible for us nowadays to glide to and from our work hanging on to trolley straps instead of wiggling and twisting and finning ourselves through the water?

Would you know how the Doctor learned all these grand facts that happened 18,000,000, 15,000,000, 3,000,000, 2,000,000 ("or maybe, 2,750,000") and 34,000 years ago? Reader, we are astonished at your ignorance, but we will tell you. The Doctor had his

own private date stamped on every one of those creatures when they were born. You must remember that he is a "scientist" and scientists do not do things by guess-work. He had to know these things or he could not write about them, and there is no other possible way to know.

It seems too bad to have men using their God-given mental faculties in this enlightened Twentieth Century to try to establish the thoroughly discredited evolution theory. The evolution theory has gone into the discard as a result of the discovery of the now well-established Mendelian law of heredity, which always works, and the observation that the supposed law of Evolution does not work and can not be made to work.

All about us we see that the various creatures are of fixed natures which do not evolve to higher natures; and though those who hold to the evolution theory have made repeated endeavors, they have never succeeded in blending different species or in producing a new fixed variety. No instance is known where one kind has changed to another kind. Though there are fish that can use their fins for a moment as wings, and fly out of the water, and frogs that can sing, they have never been known to change into birds; and though there are among brutes some which bear a slight resemblance to men, the evidence is wholly lacking that man was evolved from such creatures. If the theory were correct Evolution would be a fact today, and we would see about us fish becoming birds, and monkeys becoming men.

One theory regarding the creation (excepting man) by a process of evolution, to which we see no serious objection, we briefly state as follows: It assumes that the various species of the present are fixed and unchangeable as far as nature or kind is concerned, and though present natures may be developed to a much higher standard, even to perfection, these species or natures will forever be the same. This theory further assumes that none of these fixed species were originally created so, but that in the remote past they were developed from the earth, and by gradual processes of evolution from one form to another. These evolutions, under divinely established laws, in which changes of food and climate played an important part, may have continued until the fixed species, as at present seen, were established, beyond which change is impossible, the ultimate purpose of the Creator in this respect, to all appearances, having been reached. Though each of the various families of plants and animals is capable of improvement or of degradation, none of them is sus-

ceptible of change into, nor can they be produced from, other families or kinds. Though each of these may attain to the perfection of its own fixed nature, the Creator's design as to nature having been attained further change in this respect is impossible.

It is claimed that the original plants and animals, from which present fixed varieties came, became extinct before the creation of man. Skeletons and fossils of animals and plants which do not now exist, found deep below the earth's surface, favor this theory. This view neither ignores nor rejects the Bible teaching that man was a direct and perfect creation, made in the mental and moral image of his Maker. The account in the Scriptures is explicit:

"And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. So God created man in his own image, in the image of God created he him; male and female created he them."—Gen. 1:26, 27.

BROTHERLY LOVE IN PRISON

THE REAL NATURE of men shines out when they are in prison. All are on a common level; the rules are severe and life is hard, but it is surprising under these unfavorable conditions to see how much of brotherly interest is manifested toward those who are most unfortunate. There is no place where a sick man, a blind man or a cripple is treated more considerately by his fellows than in prison, and this speaks well for human kind. One of the first discoveries a prisoner makes is that the majority of the men in prison are like the majority out of it, and that there is no great difference. Bad men are just naughty boys who got caught; but it sometimes happens that men are imprisoned who are not bad at all.

The governor of New York State has just released a prisoner, a former lawyer, who blinded himself in an attempt to commit suicide. While he was in prison his attendants and fellow-prisoners taught him the touch system of typewriting, and he now goes forth in the brave hope of picking up again the threads of life which he once hoped to snap completely asunder.

While there is generally goodheartedness among prisoners they also have a very definite code of honor. The reward for trespassing upon the rights of another prisoner is usually a sudden black eye from an onlooking inmate and a brief period of unconsciousness on a stone floor. The one who bestows the reward, however, gets ten or fifteen days in the dungeon or "bull pen", and has an equal period added to the time which he must serve.

The reward for "snitching" (tattling to a guard) or "stool-pigconing" (helping to lay a trap for a fellow-prisoner) is to get cut with a safety razor blade from the opening of the ear to the corner of the mouth. Such a man is marked for life, and there are many such in prison. Betrayal of a fellow-prisoner "hath no forgiveness".

In a sense all men, since the fall of our first parents in the Garden of Eden, are convicts, outcasts, waiting for the time when the curse shall be no more. Thank God that time is coming. Then there will be no prisons, nor need for any. "God himself will be with them [with men here upon earth, in the new order of things], and be their God. And there shall be no more curse. There shall be no night there."—Revelation 21:3; 22:3, 5.

HOW AUTOMOBILES TAKE THE PEOPLE OFF

BENEFITS of \$7,500 were paid after a salesman had stopped at a garage to inflate one of the tires of his car. He evidently got too much pressure; the rim blew off the wheel, struck him in the head and fractured his skull. The heirs of a New Jersey clerk received \$4,500 because he tried to help his wife drive; the car went over an embankment into a lake, and three were drowned. A Deputy Sheriff of Atlanta left an insurance estate of \$2,625 when the front wheel collapsed and the car turned turtle. The survivors of a 63-year old lumber broker of Seattle received \$7,500 after he had been out driving with his wife; while crossing a narrow bridge over a deep ravine, the machine swerved, broke the rail and dropped to the bottom of the gorge.

Another amount of \$7,500 went to the wife of a man driving home; at a street crossing he noticed his daughter on one side and started to cross over at a speed of only fifteen miles, to give her a ride home, but failed to notice that the car was headed for a water trough in the middle of the road; he tried to steer away but the right side of his car struck the water-tank and the force of the blow threw his head forward against the steering wheel and fractured his skull. In New York a tire and rim burst from an automobile and pieces of the rim seriously injured two men about the head and neck and crashed through a drug store window near the soda fountain causing several women to faint.

Accidents are so common nowadays that it is difficult to imagine conditions soon to prevail in the Golden Age when all accidents will be foreseen and prevented; for it is divinely predicted that "they shall not hurt [anyone] nor destroy [cause death] in all my [God's] holy mountain [kingdom]."—Isaiah 11:9.

MANUFACTURING and MINING

BOILER WATER TREATMENT

IF YOU COVER a steam pipe with asbestos, magnesia, or other heat-insulating material, you keep the heat in the steam; if you line or coat a boiler tube with scale or other heat-insulating material, you keep the heat out of the boiler water, and send it to the stack. By lagging your pipes you save fuel easily. By lining your tubes with scale you waste it continuously and needlessly.

All natural waters contain more or less of this heat-insulating material, partly as suspended matter such as clay, fine sand, insoluble forms of iron, aluminum, etc., which generally may be removed by filtration, and partly as dissolved matter, such as compounds of calcium, magnesium, sodium, potassium, and other mineral salts.

In the case of a boiler tube covered with a dense scale the only way to maintain a constant flow of heat from the furnace to the boiler water is to increase the "heat pressure," so to speak; that is, to burn more fuel. With a deposit of 1-9 inch of scale, 16 cents of every dollar paid for coal is lost. The loss is easily prevented and the advantages of soft water abundantly justify all expenditure necessary to secure it.

Facts collected by the Government show that a crucible steel company, by substituting soft for hard water, effected a saving of \$22,000 per annum in its coal bill. Another steel company reported a saving of \$30,000 from the softening of its boiler water. A marble company reported a saving of 21 per cent of its fuel by softening its boiler water. Other companies reported profits resulting directly from the substitution of soft for hard water varying from 32 per cent to 71 per cent. The Chicago and Northwestern Railroad Company, comparing its operating expenses in 1902-1903, before and after softening its water supply, reported a saving of \$75,000 per annum. At present prices of coal this saving would be twice that amount. It is estimated that the use of hard water in the locomotive boilers of the country involves the annual consumption of 15,000,000 tons of coal more than would be needed were soft water exclusively used.

The methods employed in softening water are divided into two classes, those in which the scale-forming property is removed before the water enters the boiler, and those in which the softening is effected within the boiler itself by means of boiler compounds.

It can not be too strongly emphasized that this sludge and of the boiler compound itself.

question of water treatment is one in which the employment of chemical and engineering knowledge is both absolutely necessary and highly profitable, and it would be far wiser to omit all forms of water treatment (involving the use of chemicals) rather than to undertake such without knowing accurately the composition of the water and of the material used to soften it. It is most important to remember that the quality of the water, even when secured from the same source, varies widely from time to time. A condition of excessive concentration of water after a protracted drought may be changed within an hour to a corresponding excessive dilution by a summer storm. The result would be to decrease enormously the percentage of dissolved matter and to increase, probably to a much greater degree, the amount of suspended matter.

As a consequence, a prescribed treatment of the water based on its analysis at any particular time might not lead to satisfactory results if applied at another time.

As an instance of the serious danger of an un intelligent "dosing" of boiler waters may be cited the results of a long series of investigations which have, apparently, shown that carbonate of soda in solution produces brittleness in boiler steel. Carbonate of soda (soda ash) is used in most water-treating processes and its un intelligent use may readily lead to a very dangerous condition in a boiler.

Boiler compounds afford a very useful means of boiler-water treatment in plants whose size or value of output would not justify the use of a more expensive method. This would be true of a large percentage of the plants of the country.

In spite of a great variety of trade names a very large percentage of all boiler compounds consist most largely of carbonate of soda, to which caustic soda is sometimes added, and occasionally phosphate of soda. Starchy materials, and those containing tannin are frequent ingredients. The supposed effect of these last two materials is to coat the particles of precipitated incrusting material and prevent its cohesion into compact scale. The chief disadvantage, assuming that they are used intelligently, is the necessity of frequently blowing down the boiler to prevent the accumulation of "sludge" and of alkaline (sodium) salts in the water, both of which cause foaming. Furthermore, this blowing down must be supplemented by washing out, and occasionally closing down the boiler to complete the removal of the sludge and of the boiler compound itself.

Whenever competent supervision of boiler-water treatment is available within the plant organization, it is preferable to soften the water before it enters the boiler, and this must be done when the percentage of scale-forming ingredients is high.

The removal of scale-forming components from water by chemical means, whether before or after entering the boiler, is accomplished by converting the calcium and magnesium compounds into practically insoluble forms, causing them to separate from the water and allowing the material to be removed by blowing down, filtering or sometimes by settling.

There are in current use in power plants practically only one lime-soda process, of which there are two varieties differing chiefly in the temperature of the water when treated. The treatment consists of adding to the "raw" water softening agents in carefully controlled amount, according to the composition of the water, mixing these thoroughly with the water, and permitting sufficient time to elapse for the separation of the "sludge" before the water is fed to the boiler. In the case of the "hot-continuous" process this separation is effected more rapidly, though it admits of less storage capacity than in the case of the "cold-continuous". Another advantage of the hot process is that it expels the air from the water and so reduces the corrosion.

The zeolite process is entirely unlike the processes described above and, unlike them, gives a water of zero hardness. The softening agent is an artificial material composed largely of sodium compounds, which are exchanged for the scale forming material of the water; that is, the water dissolves sodium compounds from the softener and replaces it by the calcium and magnesium which had caused the hardness of the water. The hard water simply flows over the permutit packed in a cylinder or is forced up through it and flows from it with all scale-forming material removed. After a time the softener must be regenerated by allowing a solution of salt to flow over it, restoring its original composition and activity.

The construction and operation of this softening equipment is extremely simple. On the other hand, in the case of water of a high degree of temporary or carbonate hardness there is a correspondingly large amount of sodium salts introduced into the water so that foaming is liable to occur (as is liable to occur when softening water of a similar composition by means of boiler compounds). In such cases the following modified form of zeolite process is used:

In this an intermittent or continuous tank equipment, as described already under the lime-soda process, is connected through a filter to a zeolite softener. Only

lime is used in the tank, the soda compound being secured from the zeolite. The filter is placed between the tank and the zeolite softener to avoid any sludge coating the permutit particles and so impair its efficiency.

No process of water softening is satisfactory unless the amount of suspended matter is reduced to a minimum. In the case of very finely divided matter this may be done by adding so-called coagulants—alum, for example—but these should be used with extreme caution and always under expert direction. Ordinarily, though, such suspended matter is removed by filters, of which the sand filter with a down flow of the water is the most satisfactory type. They are not expensive either in original or maintenance costs.

The purpose of the methods described above is to prevent the formation of scale. There is another class of water-treating material used largely to remove scale. Graphite and kerosene are most often used for these purposes. Their action seems entirely mechanical.

Opinions as to the desirability of their use vary from enthusiastic commendation to absolute condemnation, though their use seems generally approved by practical men. Neither should be used, however, in boilers in which there is already a heavy deposit of scale, as the loosening of this and its accumulation in the bottom of the boiler is apt to lead to blistering and bagged boiler metal. Both graphite and kerosene should be used very cautiously. Kerosene, if used in excessive quantity, is apt to distil over and attack gaskets.

The healing of bitter waters by putting something into them to remove their injurious effects happened at least thrice in Bible times. One instance of this we have when the Israelites in the wilderness "could not drink of the waters of Marah because they were bitter" and Moses "cried unto the Lord; and the Lord showed him a tree, which when he had cast into the waters, the waters were made sweet." (Exodus 15:23, 25) Another instance is where Elisha healed the waters of Jericho by casting salt into the spring (2 Kings 2:19:22) and a third instance is where he healed the poison pottage.—2 Kings 4:38-41.

The tree cast into the waters of Marah represents the cross of Christ, able now to make all our bitter experiences sweet, and able in the dawning age to give the poor world a new hope of life. The salt cast into the spring represents the Lord's true people during this gospel age. "Ye are the salt of the earth." (Matt. 5:13) The Lord will use them to heal at their source the waters of truth made brackish with creedal errors during the Dark Ages.

FINANCE, COMMERCE and TRANSPORTATION

SUCCESSFUL WELFARE WORK

FEW CORPORATIONS can be accused of doing kind things from a purely kindly purpose, but many go to great lengths in doing good to their employees because it pays. Welfare work is profitable because it gains some good-will from employees, attracts and holds the better class of workers, affords suitable training for the new or ambitious, and makes a fractional increase in efficiency.

So when one of the large concerns of the metropolis, the New York Edison Company, does welfare work on quite a large scale, it must not be suspected of millennial motives, nor of much else than adding to or conserving the return on the investment.

The work is carried on through the Association of Employees, now in its fifteenth year. The social activities center about the Club House, which is liberally patronized for social affairs, smokers, library, entertainments, lectures and departmental gatherings. Two annual events gladden the hearts of the workers—the winter amateur theatrical entertainment, followed by a ball, and the summer Association outing. The Company has many lady employees; and ladies' nights, appropriately enough, are not infrequent.

Most of the male workers for any electrical operating concern get plenty of exercise in their work, but the boys and younger men find vent for their extra steam in athletics—indoor games and bowling in winter and outdoor games and sports for the warm season. The smaller boys are organized as Boy Scouts, and have the use of a summer camp on Long Island Sound and a fall and winter shack with kitchen, open fireplace and the other things dear to the boy heart, in the great Interstate Park between New York and New Jersey.

The Association furnishes various kinds of service, and has several classes of membership, active members who may vote and hold office, honorary features, including employees working on an hourly basis, who may share in the benefits of the sick fund. The insurance feature provides \$250 without medical examination, which may with examination be increased to \$1,000 on whole life, 20-payment, endowment or other plans. The beneficiary of a deceased member receives \$100 additional from the Company. Sick benefits covering up to 26 weeks are obtainable by the weekly payment of two cents for each \$1.44 a week payable in case of sickness. That the various features are attractive, or else that the Company has carried on an active propaganda or used compulsion

for its members, appears in the growth of the Association from 50 in 1906, 1,137 in 1910, 5,265 in 1915, to 5,823 in 1919.

The educational features are interesting. A fully equipped laboratory for educational purposes is maintained where practice and experiments in technical subjects are afforded. There is a Technical school, a Commercial school and an Accounting school. The educational work from October to April in technical courses is carried on by lectures, platform experiments, laboratory experiments, and class work. The five technical courses cover such principles of electricity as a worker should know, and the principles of direct and alternating currents and the corresponding types of machines. The knowledge imparted is designed to fit the workers for their work, and the commercial courses comprise elementary branches, telephony, stenography, health factors, and such specialized data as appear in courses for information clerks, junior clerks, office boys and junior inspectors. The way of promotion in the Company's accounting rooms is made plain by courses in bookkeeping, principles of accounting and accounting problems. A summer school is conducted for the junior inspectors and agents of the lighting inspection and special service bureaus.

It may surprise some to see how practical is the instruction worked up in this corporation school system. None of the old-fashioned, stilted, pedagogical books for the modernly educated young man who is to learn practical English! What he studies would benefit anyone: choosing a theme, developing an original thought, framing an address, the parts of an address, variety, divisions of oratory, effective speaking and applications of business English. In another course designed to develop general efficiency the worker studies about appearance, manners, courtesy, right thinking and specialized knowledge as success factors, tests of efficiency, the purpose of education and citizenship. In another course for developing general business efficiency the subjects are: what is psychology? what is consciousness, attention and interest, instinct, habit and the nervous system, sensation and perception, imagination, memory, reason, the will, principles of appeal and response in business, and psychology of American efficiency? With a substratum of such practical ideas in his mind, what wonder that an Edison worker should automatically develop in efficiency!

In order that injured employees may suffer no pecun-

inary loss they are paid full wages during disability and are given the necessary medical attendance. It is surprising that only 8 per cent of the accidents are purely electrical, the other causes being falls 14 per cent, struck by material 30 per cent, material in eye 12 per cent, burns 6 per cent, cuts 8 per cent, sprains 6 per cent, tools 7 per cent, infected wounds 4 per cent, handling ashes 3 per cent, and machinery and frost bite 1 per cent each. Only 20 per cent are out over a week. Medical cabinets and pulmotors are conveniently stationed to render prompt service in sudden emergencies.

Permanency in employment is rewarded by a service annuity for employes over 50, who have served continuously for 25 years; it consists of not over 60 per cent of the annual wages earned, at the rate of 2 per cent for each year of service up to 30 years. To encourage thrift in a practical way there is a savings and loan association, conducted at the Company's expense and affording a safe investment at 6 per cent, with satisfactory arrangements for loans, mortgages and withdrawal of funds.

Arrangements of all kinds are beneficial to both employer and employe, if administered in the right spirit, and especially if the employer deals with the employe on a just and liberal basis as to wages and promotion. The suspicion is always liable to arise among employes of a concern doing extensive welfare work, that the welfare is in lieu of an adequate wage, and may operate to quench aspirations for higher pay. It is interesting to note that the junior engineers, chemists and other technical men of New York City have recently organized a trades union in order, by collective bargaining, to obtain a satisfactory income.

Welfare work arises primarily from the kind instincts of human employers, and secondarily on a more extensive scale from the fact that it pays. The motive is a self-seeking one. That it has not yet touched the mainspring of love is plain because the executives' attitude is one of condescension and patronage rather than the broad brotherly love that will characterize the Golden Age and will ultimately knit executives and employes of an industry into one big family.

BANKRUPT TROLLEY LINES

TO ONE FAMILIAR with the methods by which American electric railways were financed it is nothing surprising to see the executive heads of some thirty roads in solemn conclave and unanimous in the conviction that "something must be done."

Without some new scheme for working the long-suffering public for more money the managers express the fear that the electric railway systems of New York State at least cannot long survive. Massachusetts has

blazed a dishonorable way for bankrupt electric railways, with its showing of scores of miles of track abandoned to weeds and washouts, and New York fears a like fate. From the giant Interborough Rapid Transit of New York City down to the smallest and shortest lines the Macedonian cry goes forth.

Trolley lines which were subjected to the promotion methods of two or three decades ago are reaping the harvest that comes from bad sowing. Private enterprise built the roads, in return for bond issues of two or three times the value of the materials and labor in the construction, and sweetened the bonds with huge issues of common stock. Both bonds and stocks were painted up for a "killing" and were rapidly passed into the hands of "innocent" investors seeking something for nothing, and who by paying exorbitant prices acquired the kind of vested interest that demands interest and dividends on the liquid element of the financing. The payment of these periodic sums "skinned" the roads and kept them from being adequately kept up out of what was left of income. Finally the war finished the ruin.

Thirty years ago the only way to interest the men that knew how to build the roads was to let them get a big promoter's profit. Without this incentive the electric railways never would have been built. The state could not build them and the common people had not the venturesome spirit to combine their little savings into the great sums required for big enterprises. The methods necessarily were those of a period of rather risky promotions, and it is fair to judge the performance of the past by the conservative standards of the present. The people needed the roads, and need them now, and the businesslike thing is to keep the roads going for the public benefit. Under no circumstances ought the false lead of Massachusetts to be followed, for no prejudice and no precedent should be allowed to stand in the way of the continuation of this valuable public service.

It is acknowledged that the credit of the companies has been destroyed and that funds cannot be raised for extensions, betterments and improvements. Investors fear to buy bonds and notes of companies whose profits are eaten up by high operating costs, whose avenues for relief are blocked by public service commissions, and whose very future is imperiled by an unprecedented world crisis. No practical arrangement is known for the state to oversee the operation of the transportation lines. The fixing of the price of transportation has been taken out of the hands of the executives and been divided between state and municipal authorities into an inextricable confusion. Some executives want only state commissions and others want both state and municipal. There is a similar disagreement over the financial,

operating, regulation and public ownership plans advanced to bring relief.

The financial arrangements are as much a part of the machinery for conducting an electric railway as the rolling stock and road bed. The present outlook is that the financial leg of the stool is cracked through and is giving way. If the executives cannot solve the problem it may be necessary to look to the state for the permanent financing of this public necessity.

It is suggested that while the state has broad shoulders it may not be able to bear all the proposed burdens that a variety of business failures would impose upon it. The situation is indeed so perplexing that it is beyond permanent repair by human means; it is part of the unavoidable breakdown of the present order of things. Fortunately it will be succeeded quickly by a new arrangement that will not merely fix up present failures but under the auspices of the Golden Age will solve all problems perfectly and never come to an end.

IRON INDEX OF PROSPERITY

AT THE BASIS of all business is iron and steel. There is almost nothing made, built, or worked, in which these metals are not employed. Buildings require iron rails, rods and pipes and steel beams; machinery is made largely of iron and steel, and agriculture, mining and lumbering are carried on by their aid. As these and other branches of business become more active they utilize more iron and steel.

The volume of production of iron and steel is an indication of the total prosperity of all lines of business. A comparison of the figures of production at different times shows the changes in general prosperity.

The orders for iron and steel show prospective prosperity, or depression, because what is ordered now will determine the industry of coming months when that iron and steel is being produced, delivered and utilized. Under normal conditions still another indication of coming prosperity is the *price* of iron or steel. The price is based on the demand, and when the demand increases the price goes up. A high price indicates a heavy demand and a heavy volume of orders. Since it takes, in the iron business, two or three months to deliver on orders, the price is an index of conditions two or three months ahead, for it shows the volume of business that will exist then, when the metal is being delivered and put into use.

Some of the figures as to the production of these metals are readily available and can be used as prosperity indices, and some are not. Prices are always public property. The figures of volume of production of steel and iron are assembled and published, rather late, by the American Iron and Steel Institute. Quite exact

figures of production of pig iron are published promptly in the *Iron Age* every month. The volume of unfilled orders on hand of the United States Steel Corporation is published at the close of every month. So many competing furnaces are producing pig iron that it is not possible to gather and total the unfilled orders for iron.

A large production of iron and steel indicates prosperity, present and for a month or so to come. The same thing is indicated if the steel mills are operating at a high percentage of capacity, up to 95 per cent, which is as well as a steel mill can do, and represents full working capacity. Good business for a couple of months ahead is indicated if the unfilled steel orders are large. The most far-reaching index is the price of pig iron, on account of the number of months ahead at which the iron ordered will be delivered, made into steel, and put into use in general business.

Changes in these figures indicate corresponding changes in prosperity. A change which is noted as a storm signal is a sudden drop in price of pig iron, when the price has been high. It is invariably followed by a serious slump in business about three or four months afterward. Business men begin to reef their sails, curtail extensions and collect on doubtful credits, when they see such a drop in the price of pig iron.

According to the published figures, the percentages of operation of the steel mills have been, 50 per cent May, 60 per cent June, 75 per cent July, 80 per cent August, 80 per cent September, and 60 per cent in October owing to the steel strike. The unfilled orders decreased steadily from December to May at the rate of 640,000 tons a month, since when they have increased about 600,000 tons a month up to the beginning of the steel strike. Other figures showing the conditions and prospects of general business will be published in *THE GOLDEN AGE* from time to time as they become available, for it is a good thing for readers to have first hand information along these lines.

In general, the country is at present in a very prosperous condition, the immediate future bespeaking months of prosperity, though clouded by the uncertainties of popular unrest.

With information and statistics for entire industries and nations available, the average business man, barring unforeseeable turns, is in a better position to know the future than even the kings and emperors of old. The standard method of forecasting the future was, "Let now the astrologers, the star-gazers, the monthly prognosticators, stand up" (Isaiah 47:13), and "Then came in the magicians, the astrologers, the Chaldeans, and the soothsayers"; but the success of such methods was more liable

than not to be as recorded, "but they did not make known the interpretation." (Daniel 4:7) The less occult help and the more knowledge of business data a business man has the more likely he is to be successful.

NEW YORK TRUCK LINES

THE SHIP-BY-TRUCK business has come to stay unless the railroads, returned to private control, should devise competitive schemes to destroy the new competition. There are now scores of established routes for hauling freight in every direction out of New York. Wherever there are good roads there the trucks go.

The longest regular truck route is 906 miles round trip to Buffalo by way of Albany. There is a choice of five different trucking concerns by which to ship.

Pittsburgh via Philadelphia comes next with 802 miles and 31 concerns. Others are: Boston via Providence, 486 miles, 19 concerns; Boston via Springfield, 468 miles, 14 lines; Scranton via Wilkesbarre, 314 miles, 1 line; Atlantic City, 290 miles, 3 lines; Hartford, 226 miles, 3 lines; Allentown, Pa., 200 miles, 5 lines; Camden, N. J., 198 miles, 1 line; Port Jefferson, N. Y., 128 miles, 1 line; Asbury Park, 120 miles, 2 lines; West Point, 120 miles, 2 lines.

Other regular lines run to Mt. Kisco, New Haven, Camp Dix, Bridgeport, Albany, Rahway and Newark. Six lines make a specialty of regular routes covering Greater New York, and 97 concerns will truck material "anywhere". The lines vary in time from weekly to two or three times a week, or daily; and a host of concerns will go "anytime."

The cost of trucking freight is usually less than by rail; the goods are delivered at the door or at a convenient terminal warehouse; usually the goods are delivered in excellent condition; and the time is often less than by express.

GREAT SHORTAGE COMING

IN DAYS of change it is hazardous to predict business conditions half a year ahead, but business men are concerned over a condition expected to materialize next spring.

Orders are coming, domestic and foreign, in unprecedented volume. There is unlimited spending ability.

The difficulty is the probable shortage of materials with which to fill the orders, and a shortage of labor to do the work.

The required quantity of raw materials has not been produced. Other shortages will be: a billion yards shortage in cotton goods; silks and wools millions of yards short; leather scarce; steel and iron below requirements; and so on. Textile mills are promising buyers 60 per cent of their orders and will soon reduce this to 25 per

cent. Manufacturers are still working on fall and winter orders whereas they usually are busy on spring goods at this season.

The unrest of labor diminishes production by strikes or low efficiency. Many workers, used to spending their large wages freely, become restive on the least restriction. Tens of thousands are going to Europe.

Hundreds of thousands practiced war thrift and now want to spend their savings. The inhibitions of war are past, and the orders for goods are like the torrent from a flood gate. Whether or not this demand will force prices to the sky, many things will be absolutely unobtainable at any price.

The scarcity suggests that the world has not reached the peace and plenty promised for the Golden Age. These good things are coming, for of them it is written, "The children of men shall put their trust under the shadow of thy wings; they shall be abundantly satisfied with the fatness of thy house; and thou shalt make them drink of the river of thy pleasures." (Psalms 36:7-8) And this will, in due time—soon—come to pass exactly as promised, because, "God loved the world."

DECIMAL PRICING WANTED

ONE OF THE labor-producing habits of business is to sell things by 12's and 144's. The only good reason for continuing an obviously obsolete system is because "It hath been ever thus."

At the National Hardware Association convention recently the cry went up for a modern method. The hardware men want a uniform method based on the decimal system. One manufacturer puts up cases labeled "dozens" and another next door packs his with "gross" labels. Others catalogue and pack by the dozens and bill by the gross. The proposed improvement is being investigated, and if no good objections appear, will be adopted, and we will be able to say good-bye to the old familiar nomenclature.

COMMISSIONS ON BONDS

MANY PERSONS owning government bonds and desiring to add to their holdings or to sell do not know what is a fair commission to pay on the transaction. According to the Government Bond Committee of the Investment Bankers' Association the following are the proper commissions: Up to and including, \$100, 50 cents; \$200, 60 cents; \$300, 70 cents; \$500, 90 cents; \$600, \$1.00; \$700, \$1.10; \$800, \$1.15; \$900, \$1.20; \$1,000, \$1.25. The basis for determining the market value for the transaction should be the current quotation on the New York Exchange, or after the close of the Stock Exchange for the day, the closing price on that day.

POLITICAL, DOMESTIC *and* FOREIGN

ARMENIA AND THE TURKS

SURROUNDED on all sides by Turks and governed by them, the Armenians have been for centuries in a most difficult position. The Turks are not good rulers, and the reason for it lies in their religion. It is this question of religion that determines government. A heathen nation, with a heathen ruler, like Japan, shamelessly takes advantage of surrounding peoples and nations without being in the least deterred by conscience. A truly Christian ruler has constantly in mind the principles of Christianity, a hypocritical Christian ruler professes one thing and does another, and a Mussulman goes by the Koran. The Koran teaches intolerance toward Christians. Therefore the Armenians have had a hard time under Turkish rule.

As soon as the Turks entered the war all Armenian men able to bear arms were forced into the army where they did the menial labor, trench-digging and all service in which no arms were necessary, the Turks being afraid to arm them. Shortly afterward, to a people thus stripped of their natural defenders, the announcement was made that all Armenians would be deported to Mesopotamia "for the duration of the war, in order to safeguard the empire."

The deportation started on a set day. Turkish and Kurdish soldiery started the Armenians on the way, on foot. The order included every one, men, women, children, old and young, including cultured and refined teachers, students and graduates of American-founded missionary colleges. The men were separated from the women and children and marched ahead to "clear the way." They were then marched away to a secluded spot and butchered. Next the children were butchered before the eyes of their mothers, and the women were divided among the soldiery to be used as they saw fit. Out of parties of 5,000 Armenians it frequently happened that only 100 survived the trip. Arriving in Mesopotamia, without shelter, with very little clothing, and with scanty food, most of the remainder perished, in all estimated at about 1,000,000 persons. About 4,000 managed to reach the Mediterranean shore and signal to French warships. They were taken first to Egypt and then, many of them, to America, where they are now living.

At the outbreak of the war the total number of Armenians in the world was estimated at 4,500,000. They have been badly scattered by the frequently recurring deportations and their accompanying massacres,

and this has tended to keep them a subject people. At that time there were 2,700,000 living within the borders of what is now Armenia, and the rest were scattered in outlying provinces. The bulk of the 2,700,000 were on the Russian side of the border, for Armenia is in two parts, Russian Armenia and Turkish Armenia, lying side by side, South and East of the Black Sea.

When the Russians began their campaign in the Caucasus in the Fall of 1914 the Armenians helped them. Without their aid the successful advance into the territory now included in Turkish Armenia would not have been possible. Their difficulties began when the Russian army of 300,000 men became Bolshevized and melted away in the summer of 1917. Those were dark days for the Armenians, who had no other course open to them but to hold the lines which the Russians had abandoned, and which were now left in their hands.

With the advent of the United States into the World War the Armenians received new hope. After being cut off from the outside world for fourteen months they were rescued from their desperate plight by the plucky British army which cut its way through from the Persian gulf and has since, until recently, garrisoned the country.

Armenia has enemies on all sides, for the reason that she has Moslems on all sides. These are now leagued together for her destruction. Her natural enemies, besides the 3,000,000 Turks that survived the War, are the 3,000,000 Russian Moslems, called Tartars, who have organized themselves into the republic of Azerbaijan with their capital at Baku in Eastern Caucasia, the 2,000,000 Bolshevik Russians who have organized the Georgian republic in Western Caucasia, and the 1,000,000 Kurds, practically nomads, who inhabit the wild mountain regions of Turkish Armenia. If Armenia could have kept from getting into trouble with the Tartars she would have had a chance.

The first breach between the Armenians and their Tartar neighbors to the Northeast came in the latter part of July, 1919. At that time the Tartars murdered an Armenian official. The Armenians made the mistake of sending troops to enforce a demand for the punishment of the guilty. The Tartars attacked these troops, defeated them, and then, as Moslems, began a systematic massacre of all Armenians within reach, including their own unoffending subjects who had the misfortune to be nearest at hand.

There is no love lost between the Turks and the Tartars, as in ravaging the territory of Russian Armenia the Turks take three fourths of all Tartar crops as well as all of the Armenian crops, but when the Turks gained power recently over an Armenian community they showed enough interest in the Tartars because of their common Moslem faith to allow them to murder the Armenians two days before taking a hand in the same work themselves.

The British army of occupation was withdrawn from Armenia in September. It was but 42,000 men, but with the help of the Armenians was sufficient to maintain order in the turbulent country inhabited by the mixed Turkish, Armenian and Kurdish peoples. The reason it was withdrawn was because the brave British troops that composed it had been away from home four years and the labor elements of England wanted their return, urging that British taxpayers and British soldiers can not be expected to keep half the human race in order.

Statements appeared in the press that the reason the British army moved Northward from the Persian gulf was not to protect Armenia, or punish Turkey, or hold the Bolsheviki in check, but to get possession of the immense riches of the Caspian oil fields about Baku. The withdrawal apparently proves that if the British did have this in view it is not now a part of their plan, or that they feel that the same results can be obtained more easily in another way. There is no indication that Great Britain expects to withdraw her troops from Egypt, however.

The general wish, except on the part of the French, is that America should accept a mandate to govern Turkey, including Armenia and the other republics which have arisen in what was once the Turkish empire, but there are difficulties. One of these is that the United States is not at war with Turkey, and has not been, and when, lately, in the pursuance of his duties, Admiral Bristol of the United States Navy warned Turkey not to continue her massacres of Armenians, Turkey appealed to the Paris conference for protection against American aggression, and the French press took her part.

At present there is no lawful way by which the United States can send troops into Armenia without a declaration of war against Turkey. The first thing such troops will have to do will be to engage in battle with the Turks now enveloping that unhappy country. The President can not constitutionally send these without the consent of Congress, although troops were sent to Siberia and Northern Russia without Congressional consent. If war is declared against Turkey it is not likely that enough soldiers can be obtained except by conscription. It is

feared that the sending of troops to Armenia would almost surely embroil the United States in extensive European quarrels which have centered about the Dardanelles for centuries.

The bitterness which exists between the Armenian Christians and the Turkish Moslems as a result of Turkish deportations and massacres and Armenian activities in behalf of the Russians and English is seen in bits of news which come from time to time. When the Armenians retreated with the Russians from certain sections of Turkish Armenia in the summer of 1917 they destroyed all Turkish houses and expelled the Turks over the frontier in a naked and half-starved condition. Now, as fast as the Turks gain control over territory which has been occupied by Armenians, they are destroying every vestige of the Armenian population.

The encircling of Armenia now under way by the Turks, Tartars and Kurds, all under the direction of Enver Pasha, of German-Turkish alliance fame, has for its object the complete obliteration of the Armenians from the face of the earth. That the Armenian republic can hold out until Christmas seems quite improbable. As fast as the Turks gain ground in their encircling movement they carry out their usual plans of massacre, the young girls being carried off to the Turkish harems. When they recently captured Nakhichevan, with an estimated slaughter of 6,000 to 12,000 persons, Americans crossing into Persia report having seen the river at which they crossed full of headless, mutilated, bodies.

It is generally believed that the only argument to which the Turkish enemies of Armenia will listen is force, and that as soon as it is definitely known that the United States will not send troops, Armenia and the Armenians must perish from the earth, because the man-power of the Armenians is now exhausted. If Armenia is destroyed civilization will find itself facing a combination of Turkish and Bolshevik forces in Asia Minor which will have no opposition in their march Westward to the Dardanelles.

Armenians are professed Christians, and the Great War has shown that they have as much and as little right to the name Christian as any of the other nations that have claimed that title. But it seems hard to see a great and enlightened people, who have been of great help to the Allies, and who have suffered so horribly during the war, now left helpless to be destroyed by Moslem savages.

These are days when Nations are divinely forgiven just as they have forgiven others, in accordance with Christ's words, "If ye forgive not men [even Turks] their trespasses, neither will your Heavenly Father forgive your trespasses."—Matthew 6:15.

AGRICULTURE and HUSBANDRY

CIVILIZING THE CACTUS

IT IS MORE of a job to civilize the cactus than some of us imagined a few years ago, when we first began to hear stories about the wonders of spineless varieties. We read about what excellent food it made for cattle, and how it was so cheap to produce that the result in due time, would probably be the raising of cattle in such numbers that the best porterhouse steak could be sold at a profit for 10c per pound. Porterhouse! Porterhouse!! Where did we ever hear that word before? Ah! That was before the cheaper cuts had become so expensive we could not afford to buy anything but soup bones.

We heard about the cactus fruit, how delicious it is, and how it is already found in candied form in the Far West confectionery stores, how it is splendid for jellies and even useful in the manufacture of paint.

Dispatches are just going the rounds that at San Bernardino, Cal., a cactus food products plant is now about to turn "the wild thorny cactus of the desert wastes" into cattle food, "table syrup of high quality and delicious flavor", glucose, gluten, bread flour and paper pulp. This may all be true and we hope it is, for it is important to mankind that the cactus be made usable if that is possible, and it seems as though it might be.

The government has been engaged for years in making elaborate experiments with some fifteen hundred varieties of cactus at two stations in Texas and one in California, and has learned a few things which are of interest in this connection.

The two worst things about the cactus, or prickly pear, as it is also called, are, first, that it has some large "prickers", like thorns, which are called spines, and, second, that it has some more pricklers, like small needles, which are called spicules. By the time you have shaken hands once with a cactus which is well provided with spines or spicules, or both (for they generally grow together), you will know why we have to civilize the cactus.

Another thing about the cactus is that it does not stay civilized as it ought. In 1905 the Government imported from the island of Malta a few cuttings of a large spineless species called *Opuntia ficus indica*, but what does it do after it has been in America for six years but develop into a big cactus one side of which is practically spineless while the other side is exceedingly spiny? What can you say to a plant that acts that way? A plant of another spineless variety shows the same

disposition as this one. It is well known, however, that lack of spines can be maintained in certain species by "vegetation propagation", and that the variations back to spines are comparatively slight.

There are species of cacti in southern Texas which are variable. Sometimes they have spines and sometimes they have not. When they do not have spines they always do have spicules, however, to a greater or less degree. As a matter of fact completely spineless joints are somewhat rare. Usually, on certain varieties, there will be produced one cutting to a limb entirely or partially spineless, and these parts can be cut and used for fodder. On some varieties the spines can be readily burned off and the whole plant can then be used.

In southern Texas the plants grow more rapidly, while at the California station the development of fruit is more rapid. The less the plant growth, the greater the fruit development. Plants which have made no vegetative growth in a season have produced an exceedingly heavy crop of fruit. Fruit usually comes in the third year of the plant.

The spineless forms do not do well in moist soil or when the air is moist. They rot very badly. In cold weather, also, the poorly supported limbs are very likely to break off. The recommended and usual practice in propagating the plants is by a cutting from an older one. Resetting is necessary after a few years, on account of the deterioration and unsightly condition which manifests itself.

A temperature of 20 degrees Fahrenheit is about as low as the so-called spineless Indian-fig group of cacti can withstand, although this temperature may go as low as 40 degrees below zero for the small, extreme northern forms. The plants have great recuperative powers. Limbs which have become discolored and droop through an angle of 90 degrees or more will often recover and gain their normal position. In one case where a loss of at least 50 per cent was estimated from a heavy freeze the result was an actual loss of not over two per cent. When the plants are sick from frost they must not be cut, bruised or handled on account of the rapid rotting which ensues. The greatest loss in cold weather comes from the breaking off of large limbs of the spineless form which is in most general use, due to the fact that it is weak at the joints.

The wealth and variety of green exhibited by cacti are scarcely excelled in any other group of plants, and the color of the individual plant is constantly changing.

There is the color of the old, the young and the middle-aged joints, the autumn and spring color, as well as the color of health, disease, and protection. The color of the young growth is often strikingly beautiful, as is also that caused by cold weather or severe drought.

The flowers of fully one fourth of the cacti change color decidedly as the day advances. Some change from light yellow to deep orange with a tinge of red, some from light yellow to pink, others from brick red to deep purple. On the other hand, many cactus plants have variously colored flowers on the same plant, each changing or not, as the case may be. One of the southern Arizona cacti has flowers ranging from greenish yellow through chocolate to bright purple. Purplish tints may be produced at will in many species.

There are a number of species in which new fruits rise from the old ones, which become incorporated as a permanent part of the plant, thus making pendent bunches of fruits of greater or less extent. Sometimes this condition of proliferation, as it is called, is brought on by the attacks of a small fly which deposits its eggs in the very young flower buds, causing complete sterility of the fruit, which is belated and of small size. A similiar condition is caused by lice congregating on the tips of the young flower buds and preventing them from opening. These bunches of fruit are of considerable importance upon the stock ranges of the Southwest, furnishing succulent and nutritious morsels which contribute not a little to the sustaining capacity of the ranges in time of need.

It is the Government investigator's belief that "Our deserts are incapable of supporting crops of native pear—much less of the spineless introduced varieties." No doubt that is his honest opinion, and the result of careful study, but when we read his opinion we think of other Government investigators in earlier days, who proved that it would never be possible for a steamer to cross the ocean because it could not carry coal enough to make the voyage, and the others who proved that nothing could ever be raised on arid lands which are now yielding wonderful harvests of wheat and other crops.

We believe the study which is now being made of cacti will be of very great advantage to mankind in the near future. Our own conviction is that the climatic conditions are so changing that in due time the American desert will disappear entirely, and that in the meantime the desert areas will yield much food that will be needed and appreciated by man and beast, and this food, we apprehend, will come in large part from the civilized cactus. "The desert shall rejoice and blossom as the rose."—Isaiah 35:1.

CORN AND WHEAT CROPS

THE CORN crop for the year was recently estimated at 2,858,000,000 bushels, which is about 26 bushels per year for every man, woman and child in the United States. Most of this grain is consumed first by live stock and afterwards by humans in the form of meat, though corn in the form of corn flakes, corn meal mush, sweet corn, succotash, canned corn, corn fritters, corn muffins and hominy is widely used, and in the South there are many homes in which no meal is considered complete unless there is some form of corn bread upon the table. The crop for 1919 is considered of good quality and fair size. This staple food of Americans and of American cattle was first brought to the attention of white men by the Indians of the American continent. It is a plant particularly suited to our hot summer climate, and not grown to any great extent elsewhere. We export very little.

It is estimated that the wheat crop this year will be about the same as it was last year, 919,000,000 bushels, or about 8 bushels per year for each of us. This is 300,000,000 bushels less than was expected, but this still allows a large quantity for export, on the basis of the 1918 experience. The spring wheat crop this year did poorly, and it is declared by many farmers in the winter wheat belt that they will not attempt the sowing of spring wheat again. The drouth this year in Montana and Western Canada was very severe, practically ruining the wheat crop in those sections.

The word "corn" as used throughout the Scriptures refers to grain of all kinds. Some times it refers to wheat, as when our Lord used the expression, "Except a corn of wheat fall into the ground and die, it abideth alone; but if it die it bringeth forth much fruit." (John 12:24) The thought back of this is that if Jesus had not sacrificed his life he might have maintained it forever, but in that event he would not have been privileged to bestow life upon the church and the world.

TO BUY LAND OR TO SELL

AT CURRENT prices for farm products the valuation of \$300 and upward per acre for land which would have seemed so out of all reason a few years ago is only what should now be expected. The sale of anything is based upon its supposed value, upon what it is worth to its possessor, what profit can be made out of it, and even at \$300 per acre a profit can be made at present out of a well-managed farm.

But the current prices of farm products are based upon the assumption that Europe can be supplied with credit to buy our goods. As soon as she can no longer buy at present prices the prices must fall, and when they

do fall the price of \$300 will be too high. The man who has money to invest in a farm at the present time should expect to see his land depreciate in value to a point where it will return only the profit that it returned before the war. Unless he can pay cash for the farm he had better not buy it. But if he can pay cash he can hardly put his money into any form of property more likely to give lasting satisfaction. It is a kind of property that is very tangible in these intangible times.

A man who has a large farm, larger than he can work to the best advantage, would do well to divide his holdings at the present time, especially if he has an interest-bearing debt that can be cleared off. It is not going to be so easy to pay the interest on a high-priced farm next year as it is this year, and it will be harder still the year following. Persons who sell farm property now would do well to sell for cash. Prices on some kinds of farm products have already begun to fall.

In Abraham's time the land was free to the user. Although Abraham lived just an hundred years in Palestine (Genesis 12:4; 25:8) yet he never owned any of the land (Acts 7:5), despite the fact that he maintained a great household of 318 servants (Genesis 14:14) and was accounted a "mighty prince" among the people. (Genesis 23:6) When the time came for him to bury Sarah he had no place to put her, and the sale of a burial plot was particularly conditioned on the fact that he was "a stranger and sojourner" among the Canaanites, the real owners.—Genesis 23:1-20.

TO INCREASE WHEAT YIELD

THE MISTAKE is too often made by farmers in the Winter-Wheat Belt of thinking that there will always be enough moisture for the greatest growth, with the result that short crops are harvested when more attention to the saving of moisture would have assured good yields.

One of the most successful farmers in Illinois turns under the stubble as soon as the oats are off. He harrows, the same day, what has been turned under and before sowing time goes over the field several times with the disc, drag, or roller so as to kill off the weeds, to settle the subsoil, and to keep a mulch on top.

Home-grown wheat should be used as seed, for it has been shown by experiment that seed acclimated in a locality generally gives better yields than seed of the same variety brought from a distance. Fanning and grading the seed before sowing should always be done, thus removing broken, immature and shriveled grains, weed seeds and foreign material. Smut balls and many grains which have been affected by scab will be removed by the fanning mill, as these are lighter than sound

grain. Where stinking smut and loose smut are present, seed wheat should be treated with formalin.

Broadcasting is a very ineffective way of sowing. More uniform stands are secured with less seed, and winter resistance is greater, where drills are used for seeding. In well-prepared soil it makes little difference what kind of a drill is used. It is seldom good practice to plant at a greater depth than three inches; a half inch less is better. On the Great Plains, from three to four pecks per acre is the usual rate of seeding, but in all other parts of the Winter-Wheat Belt six pecks is the usual quantity sown.

To avoid the Hessian fly, seeding should be delayed as long as possible. The first frost in the fall destroys most of these insects, and thus greatly reduces the damage which they may inflict. If the right date for planting be selected, neither early enough to be attacked by the fly nor yet so late as to cause danger of winter-killing, four-fifths of the injury to winter wheat may be avoided. Risks of late seeding may be greatly lessened by providing a firm, well-drained seed bed, finely worked on top, in which there is plenty of moisture and available plant food.

Ordinary stable manure supplies the elements needed to keep wheat land in good producing condition, except that it is short in phosphorus. On the best farms this is now added in the stable as the manure is made, 50 pounds of rock phosphate to one ton of manure. This system of reinforcing manure with phosphorus is practiced extensively throughout the Middle West and South. One pound of phosphate dusted in the stable of each horse or cow per day accomplishes the desired result.

One of the best rotations of crops, for a rotation which contains wheat as one of the items, is corn, oats, wheat and clover, the farm being divided into four equal parts and worked regularly every season. On a farm where such a rotation was practiced with excellent results the programme of fertilization was as follows:

For the corn ten tons per acre of the above-described phosphated manure was plowed under, the plowed land being subsequently dressed with one ton per acre of limestone. For the oats no fertilization. For the wheat two fertilizations, one in the fall of a complete fertilizer made up of 200 pounds steamed bone meal, 100 pounds acid phosphate and 40 pounds muriate of potash, and one in the spring of 60 pounds nitrate of soda. This 400 pounds of fertilizer per acre costs about \$6.50 per acre for the materials.

The outcome of the foregoing treatment was an eight-year average of 77 bushels of corn per acre, followed by 61 bushels of oats, 33 bushels of wheat and 3 2-3 tons

of clover, an increase as compared with unfertilized lands of 50 bushels of corn, 31 bushels of oats, 21 bushels of wheat and over 2 tons of hay.

In the Golden Age "The seed shall be prosperous; the vine shall give her fruit, and the ground shall give her increase, and the heavens shall give their dew." (Zechariah 8:12) Many of these changes are now being brought about in the earth in what seems a perfectly natural way, but which are really the outworking of Jehovah's good purposes toward our race. He is using the minds of men, and the needs of humanity to develop the superior methods of cultivation which will make of the earth an Eden restored. "And they shall say, This land that was desolate is become like the garden of Eden."—Ezekiel 36:35.

FRUIT GROWING VICTORIES

MANITOBA, Alberta and Saskatchewan have always been considered beyond the fruit zone on account of the severe winters freezing and bursting the trees. During the past ten years the Canadian Forestry Commission has been grappling with this problem and at their Agricultural College at Indian Head, a suburb of Winnipeg, they now have a bearing orchard of plum trees and apple trees that is a great success. The trees in this orchard are sheltered from the prevailing winter winds by a screen of closely-set fir trees.

A very different way of producing a variety of fruits where there was none was brought to light in the work of a horticulturist at Findlay, Ohio, recently. He had upon his farm an apple tree that was decayed in several places, had several dead limbs, and his friends said it would never yield again. He scraped the tree, removed all the dead matter, filled the holes with cement, and the tree revived. Then he began to experiment with it. Now he has grafted upon the original tree thirty-two varieties of apples and six varieties of pears and obtains fruit of various kinds from the tree from early summer until late in the Fall. The tree is more than seventy-five years old, and is part held together with chains.

An unique incident of our Lord's ministry was the pronouncement of the curse upon the barren fig tree, "Let no fruit grow on thee henceforward until the age. And presently the fig tree withered away." (Matt. 21:19) That fig tree represented the Jewish nation. Our Lord referred to the same tree again, "Now learn a parable of the fig tree: When his branch is yet tender, and putteth forth leaves, ye know that summer is nigh: so likewise ye when ye see all these things, know that it is near, even at the doors." (Matthew 24:31, 32) Thus the Lord tells us that when we begin to see Zionism in the earth, the Jews beginning to return to Palestine, and large numbers planning to follow them, as is now

the case, we may know that the barrenness of the Jews toward the Lord is at an end, and that the dawn of the age, the Golden Age, is at hand, even at the door. Thus we may expect that in a few years there will be a great returning to the Lord on the part of the Jews, the fruitage which the great husbandman saw so long ago.—Romans 11:26.

YOUR BUSHEL OF PEANUTS

DID YOU eat your bushel of peanuts last year? You did if you are an average American, for there are 100,000,000 Americans and we raised 100,000,000 bushels of peanuts in 1918. To be sure, we only harvested 50,000,000 bushels, but pigs harvested the rest, and then we harvested the pigs. And when we ate the hams and bacon we ate the 50,000,000 bushels of peanuts that the pigs gathered for us.

We ate a lot of peanuts from the shells, a lot salted, a lot in the form of peanut butter, and a lot in the form of peanut oil, which came to us disguised as butter, salad oil, etc.

Uncle Sam has just acknowledged officially that we do love the peanut. He has had his dietary experts on the job and they have assured him that the peanut is a perfect substitute for meat. And meat has been or is scarce. It ought not to be scarce, but it has been made so, and that makes it so even if it isn't so. Meat ought not to be made scarce by piling it up in a warehouse until it spoils and has to be sold for fertilizer. But anyway the peanut is valuable for food and Uncle Sam has now set apart \$12,000 "for collecting and distributing by telegraph, mail and otherwise, information on the supply, demand, commercial movement, disposition, quality and market prices of peanuts." We hope that this does not mean that the same thing that happened to the meat will happen to the peanut. We would like to eat our bushel next year instead of having it locked up in a warehouse until the Senate ratifies, without reservations, the League of Nations treaty, or some other far-off time.

We wonder if those were peanuts that Jacob referred to in Genesis 43:11 when he said to his eleven sons "Take of the best fruits in the land in your vessels, and carry down the man [the ruler of Egypt, Joseph] a present, a little balm, and a little honey, spices, and myrrh, nuts, and almonds." [Just after we had written that we looked the matter up and found that it was doubtless pistachio nuts that Jacob sent—the kind used in flavoring ice cream]. The "garden of nuts" of Canticles 6:11 includes nuts of all kinds. The reference, spiritually, is to the heart-gardens of the Foolish Virgin class that does not yield as quickly as a garden of spices its treasures to the heart-Gardener, the Lord.

SCIENCE and INVENTION

HAECKEL AS A "SCIENTIST"

NO MAN of science had a greater influence among his contemporaries than evolutionist Ernest Haeckel, who recently died at Jena, Germany. His many friends and admirers praised him as a light of the first magnitude, and innumerable clergymen of modernist tendencies swore by Haeckel and mistaught the Bible from their pulpits in the "light" of the great German.

Now that the war has made it possible to discuss German philosophy without being called an ignoramus, the searchlight and the microscope have been applied to many a Teuton scientist, and the world sees them in a less favorable light. Even before the war the reliability of Haeckel's conclusions was assailed, he was robbed of his cheaply won laurels, he was convicted of forging scientific proofs, and his ignorance both of scientific principles and of his own principles was clearly proven.

For example, Professor Frank Thilly, in a lecture before the Sage Philosophical Club at Cornell University, summed up his argument as follows: "We have examined Haeckel's philosophy and have pointed out its inconsistencies and inadequateness. It violates the fundamental requirements of scientific hypothesis; it is not consistent with itself, and does not explain the facts. It is so full of contradictions that its opponents will have no difficulty in citing passages from the 'World Riddles' convicting the author of almost any philosophical heresy under the sun. The fact is, Haeckel's philosophy is no system at all, but a conglomeration of different systems, a metaphysical potpourri, a thing of shreds and patches."

Another critic of Haeckel, Professor O. D. Chwolson, of the Imperial University at Petrograd, says, "The result of our investigation is terrible—one might say it makes one's hair stand on end! Everything, absolutely *everything* Haeckel says in connection with questions of physical research is false, is based on misconceptions or betrays an almost incredible ignorance of the most fundamental questions. Equipped with such utter ignorance, however, he considers it possible to declare the foundation of modern physical science, the kinetic theory of substance, as untenable. Haeckel's 'World Riddles' are typical of these writings whose authors ignore and despise the twelfth commandment: Thou shalt never write about anything thou doest not understand."

When "scientists" fall out, and tear one another to pieces, the common people have the chance to ascertain just how little even the "great" ones know.

WIRELESS FIRE IGNITION

HERE IS a question that is agitating the insurance companies just now, and there are other people who are interested. A few years ago the steamship "Volturno" was burned in midocean. There was no apparent cause for the conflagration. It was at a time when wireless stations were very active and a scientist suggested that the cause of the accident was the crossing of wireless waves at the time and place where the ship took fire.

Now comes the announcement of a French scientist, Mr. G. A. Leroy, that he has perfected a device by which the electric waves of wireless apparatus have set on fire combustible materials several yards away. This announcement was followed by the observation of some one that the balloon which recently fell in the Loop district of Chicago, killing a dozen people and wrecking a large bank, burst into flames just after it had passed near a high-powered wireless plant.

What wonderful unseen powers are in the air about us, electric currents of all sorts, magnetism, heat, radio-activity, the spiritual powers of demonism and the beneficent powers of the holy angels, "Ministering spirits, sent forth to minister for them who shall be heirs of salvation!"—Hebrews 1:14.

SIXTY MILES A GALLON

WHEN A TINY Saxon "Four" does thirty miles or a motorcycle does fifty miles on a gallon of gasoline the proud owner never lets his friends forget it. What will the ubiquitous Ford owner not say when he gets the new gasoline motor invented in Kansas City?

It is called the Van Dyke motor and claims to be built on quite new principles. It gives promise of unheard-of mileage records per gallon. Among other claims made for this remarkable invention are that it increases the power ten per cent through confinement of heat ordinarily radiated; it operates on a fuel saving of sixty per cent compared with standard machines; it will make an unusually efficient airplane motor; it will make possible the manufacture of a car selling for \$250.

The ancient prophet, Daniel, would perhaps not be unduly surprised to come back and see the common people skimming over the ground in "chariots" costing four for a thousand dollars, for it was he who uttered the prophecy to the effect that "many shall run to and fro" (Daniel 12:4), and it is possible that a 100-mile-an-hour racing machine might not give concern to the

Hebrew sage of Babylon. At any rate, many are running to and fro, and if that is the fulfilment of the prophet's prediction, the other part goes with it that this is the "time of the end," in plain words, the end of this order of things, to be shortly followed by the long promised Golden Age.

TRANS-ATLANTIC TELEPHONY

THAT THE early realization of the idea of talking across the ocean by wireless may be at hand appears from the statement that the General Electric Company is considering plans for doing it. A wealthy New Yorker has a partner in Paris and wishing to obviate the delay of the electric cable, is having plans drawn up for calling him up like any other department of the business with this difference that the call will go by wireless and the response will be from Paris.

The consulting engineer of the "G. E." in charge of this kind of work, has perfected the duplex wireless telephone and says that the trans-Atlantic system contemplated will be much like that of an ordinary telephone exchange. It will make it easy for the traveller who is expected to write a letter home every day, to take up the hotel-room phone and talk three minutes with wife or sweetheart; and something like that will come, we are confidently informed, when wireless telephone exchanges are established in all the principle cities of the world.

It will be quite a dream of the ancients fulfilled when man talks familiarly with his fellow across sea and land.

SIGNALLING TO MARS?

EVERY once in a while some "scientist" gets publicity by resurrecting the ancient scientific possibility of communicating with the planet Mars.

This is always interesting and enough of the common people will at least scan the newspaper paragraph to add that much "fame" to a man of science. The assumption is that the planet Mars is peopled with intelligent beings, who have a similar feverish liking for "some new thing," that they are trying to communicate with the planet Earth; and that there are "scientists" on Mars equally desirous with the earth scientists of securing "fame". But who knows whether the Martians (?) may be quite good people and might not care to communicate with so disreputable a planet as Earth?

Another scientist makes his bow, as he repeats the first act of the familiar play, "Mars and the Martians." It is Professor David Todd and he proposes to utilize the biggest balloon ever made and go up to the highest height ever gone to by humans. The gas bag will have a capacity of 140,000 cubic feet, and is expected to ascend

with the Professor to the height of 50,000 miles. It is by means of a new invention, of course, which perhaps has never been tried before and nobody knows for sure whether it will work, but divides the balloon into two compartments, the upper containing hydrogen gas, and the lower ordinary fresh air. And the Professor has just returned from Brazil and "perfected" a signalling apparatus for the experiments. The announcement is evidently official for it is made by Leo Stevens, balloon instructor at Fort Omaha.

It takes the old things to catch the public attention, but they have to be tagged as new. Even signalling to Mars is an old thing dressed up occasionally. The old cynic of Jerusalem had it right when he wrote, "The thing that hath been is that which shall be; and that which is done is that which shall be done; is there anything whereof it may be said, See, this is new? it hath been already of old time, which was before us." (Ecclesiastes 1:9-10) We wonder how many times the ancients tried to signal to Mars?

FISHES AND HORSES MINDS

A DISTINGUISHED professor of psychology answered a question as to the mental processes of the lower animals by stating that they thought and felt like human beings but to a less degree.

Scientists are on the right track in investigating the minds of animals for there is something to be discovered, though of what practical value is not dwelt upon. One "famous authority," Dr. Francis Ward, has studied fish and says that they actually think. A fish has memory and judgment to refuse a bait covering a hook, provided the fish's latest sad experience with the hook is not over a certain number of days or hours distant. The fish was able to connect mentally the hook and bait with a signal a few inches above. That fishes love one another just as higher animals do has been proved, as well as that they give expression to their emotions. Indeed, if one knows fish, he can, according to Dr. Ward, watch them and tell what they are thinking about, what they intend to do, and the state of their feelings.

More people know horses than know fish, and that horses have emotions and love their friends and hate their tormentors there is no question. No one of humane instincts can have much to do with a good horse without gaining an affection for the animal, which is often reciprocated to a marked degree. That horses even weep is vouched for by a prominent veterinarian who states that they have well developed tear glands, and that "in a dumb brute's existence, especially an old and nervous horse, there might be times of great fatigue, when his physical condition could produce such a reaction, which is something like hysteria."

HOUSEWIFERY and HYGIENE

SAFETY ZONES FOR BABIES

BABIES who expect to spend their first year of life in a city should take care to choose a "safety zone." According to a report on Infant Mortality in Saginaw, Mich., given out recently by the Children's Bureau of the U. S. Department of Labor, it is more than 6 times as dangerous for a baby to be born in one section of the town as in another. The investigations of the Bureau have shown that the essentials of a safety zone for babies are that a majority of the fathers in it must earn a living wage, the mothers must not be employed during the year before or the year following the baby's birth, the mothers must receive proper care when their babies are born, both fathers and mothers must be able to read and write, and the babies must be properly housed.

In Saginaw there were several wards where poor drainage, unsanitary disposition of garbage and refuse, out-door toilets, shallow well drinking waters and dwellings which lacked sewer connection rendered the section unsafe for babies. In the ward in Saginaw where the least favorable conditions prevailed, one baby out of every 6 died before it was a year old, as compared with one out of every 34 in the best residential wards. In the ward having the highest infant mortality, a majority of the fathers had very small wages. Of the 21 babies who died in this ward, 18 had fathers earning less than \$850 a year. The infant mortality rate was only about half as great for those babies whose fathers earned between \$850 and \$1050 a year as it was for the city as a whole, and only about one-fourth as great for those whose fathers earned \$1250 or more, while babies who were unfortunate enough to choose fathers earning less than \$450 died at a rate over twice as great as that for the whole city.

It is only when the father's earnings were small that the Saginaw mothers went out to work. The infant mortality rate for the babies of working mothers was 132.7 as compared with 78.3 for those whose mothers were not gainfully employed. A low income also means that the mother as a rule does not receive proper care before the baby is born. In Saginaw the deaths of two-thirds of the babies were due primarily to prenatal causes. "Prenatal Care" says the report, "is especially needed for the inexperienced young mother and in families in which the father's earnings are low, judging from the high mortality among first-born babies and in the lower earnings groups."

There were, however, in Saginaw, a sufficient number

of safety zones to make the rates for the city as a whole compare very favorably with other cities where the Children's Bureau has made a similar study. The Infant mortality rate for Saginaw is only 84.6, notably less than that of the registration area. Thirty-nine per cent of the births occurred in families where the father's earnings were over \$850 a year, a proportion exceeded only by that of Brockton, Mass. Less than an eighth of the Saginaw mothers were gainfully employed, during the year prior to the baby's birth or during any part of the baby's first year. In the manufacturing cities of Brockton and New Bedford, Mass., one-fifth and two-fifths of the mothers, respectively, had worked in order to supplement the family income. Only a few of the Saginaw mothers, even when employed, worked away from home, so that a majority of the babies had the advantage of breast feeding and mothering. The attendance of a physician at confinement in Saginaw was the rule to which there were few exceptions. Very few of the mothers were cut off from useful information regarding the care of their babies through their inability to read. Only 6 per cent of the Saginaw mothers were illiterate, as compared with 13 per cent in Brockton, Mass., 16 per cent in Johnstown, Pa., and 17 per cent in Manchester, N. H.

But, although Saginaw is a comparatively safe place for babies, all babies do not have an equal chance to live. If every baby is to be given a chance, the report points out, every family must be enabled to maintain a fair standard of living and every expectant mother must be in a position to secure proper care and advice. In this way every part of the city can be made a safety zone for babies.

In the Golden Age human life will be considered precious everywhere, more highly esteemed than "the golden wedge of Ophir." (Isaiah 13:12) It will be esteemed for what it is—the wonderful, inscrutable gift of God, and while we have reason to believe that the number of new babies will gradually decrease as men and women become more and more unselfishly interested in the welfare of the whole race, yet we may be sure that when the babies arrive they will be made welcome and cared for in such a way, if possible, as to guarantee not only their physical but their mental and moral well-being in every sense. There is something wrong with people who do not have a warm spot in their hearts for the little folks that bring so much of sunshine with them into the world.

TRAVEL and MISCELLANY

HIS CORNER OF CHINA

WHAT A single individual may accomplish who is altruistically devoted to the welfare of his fellows may be seen by any traveler that takes the trouble to go up the Yangtse River to the city of Nan-tung Chow.

There lives a Chinese scholar, Chang Chien, who had tried in vain to give play to his beneficent ideas in high government positions, and finding the Chinese politicians' control of government inimical there to the welfare of the common people, the same as in other countries, he left public service and settled in Nan-tung Chow determined to begin to make his community a model one. The effect of this sage's efforts has been to create in the heart of China, what all the missionaries of Christianity have never accomplished, a model for the community development of the nation, something that will doubtless stand as the best that can be accomplished until the Golden Age transforms the entire world, including China.

To Chang Chien were given in charge all the public institutions of the city, including the poorhouse, the jails, the police and the educational work. He has a scheme of industrial development which has taken form in six land development companies and numerous other industries. There is an agricultural college, working on experimental fields to ascertain the best crops and the best methods of handling them. According to "Asia", these include fields of Sea Island cotton, sugar cane from America, wheat suited to different soils, apples, pears, figs, bamboos and mulberries. Embroidery is developed into a local industry through a school conducted by a Chinese lady, the finest embroidery expert of the Republic. Other departments are under the charge of specially selected experts. Nan-tung Chow is indebted to Chang Chien for a system of five public parks, connected by winding driveways and artistic bridges and containing beautiful lakes and grottoes.

Chang Chien is an efficient altruist, for he follows the definite plan of inaugurating two new enterprises a year. The 1919 program includes an automobile road to the famous Lang Shan Hills, and 1920 will see more roads, dikes for flood prevention and a school for silk culture.

The citizens of Nan-tung Chow, down to the children, are with the wise man who has led them up from poverty to culture and plenty. Chang Chien states the simple principles by which he won confidence and awakened the Chinese to their present progress: "If you wish to develop a community, you must first of all avoid all

self-interest, which is a stumbling block to true progress. If you would have the common people desire cleanliness and appreciate the beautiful in art and nature, they must first be given the opportunity to earn their rice. Create a condition such that the people do not think of poverty."

What this great citizen of the Chinese Republic is doing will be the burden of thousands of altruistic men and women when the Golden Age has come in its glory. Then the great and powerful will regard it their greatest achievement, not to help themselves to the people's millions, but to help the people by millions with devoted service. When that time comes it will be as though the command, "Forward March!" had been given for all the peoples of all nations, for it will see the whole world marching on with a progress and a prosperity undreamed of. Every man will be every other man's brother and every woman every other woman's sister. All will be for one and one will be for all. It will indeed be the Golden Age of which poets have sung, dreamers have dreamed and for which the whole world has ever hoped. It is coming—soon—for would Christ have commanded all Christians everywhere for eighteen centuries to pray the prayer, "Thy will be done on earth as it is done in heaven" unless it were in the divine plan that the prayer should be fulfilled?

ALL ABOARD FOR EUROPE

FOR SIX YEARS war, submarines, passports, censorship and other conditions have hindered the tourist trade, but next year the bars are expected to be down.

Steamship companies report, possibly for advertising purposes, that 1920 will witness an unprecedented rush to see the war-torn fields and towns of France and Belgium. European travel will carry the fresh distinction of familiarity with the renowned names of new battlefields. Thousands will go with reverent grief to see the graves of their soldier dead. Tens of thousands of former soldiers will accompany their people over scenes they helped to make historic. The old crowd of millionaires cannot let the newly-rich outdo them in ability to talk about "the Continent." Hundreds of thousands of other people will revisit the old folks, tour quietly in the established manner, visit art galleries and pay homage at the multitudinous shrines of the old world. The total of visitors is estimated at a million, of whom a third have booked their passage provisionally on the hundred ships that will be waiting for them.

If the army of tourists could begin their march at once it would be a godsend to Europe, for it is estimated that the million travelers will spend four billion dollars abroad. The direct effect of this flood of money will be to put billions into circulation and stimulate Europe's domestic trade and manufactures. It will be the equivalent of an American loan of that amount, with the advantage to Europe of not having to be paid back and carrying no interest charges. It will give Europe a vast sum with which to repay this country for manufactured and raw materials which the poverty stricken nations are unable to pay for now with either gold or goods. It will go in the shape of funds based on foreign exchange, and by raising the demand for foreign exchange, will increase the value of the pound, franc and mark, and stimulate the purchase of American goods abroad, a trade now languishing from the losses met in changing foreign monetary units into dollars. In many ways the promised exodus will be a benefit to both the Old World and the New; its failure would be a calamity.

There is some danger, however, of the tourist tide not turning Europeward, if the spread of the revolutionary movement is not checked, for wealthy tourists would feel anything but at home in a communist country. But tourists are not looking for any special danger in that direction, though it may become more serious.

The relationship established by a vast international trade makes the whole world dependent on every part, and every part on the whole. So unnoticed a movement as the tourists' visits to Europe are necessary to the welfare of thousands. It is true that throughout the entire world "We are all members one of another" (Ephesians 4:25), for the economic body, even as the true church, Christ's body, is "not one member but many, and whether one member suffer, all the members suffer with it, and the eye cannot say unto the hand, I have no need of thee, nor again the hand to the feet, I have no need of you; there should be no division in the body, but the members should have the same care one for another."—1 Corinthians 12:14-16.

THE GREATEST TRAVELER

IF A REGAL crown were to be awarded to the greatest traveler in the world's history it would not fall on Christopher Columbus, Marco Polo, Americus, nor any of the noted explorers of ancient or modern times. Nor would it be given to Julius Caesar, Napoleon Bonaparte, nor any king, potentate or nobleman, nor even to the best spender in the American army of invasion that will "see ruined Europe" next year.

The traveler who is entitled to wear the crown is the salesman. He is the greatest because the most useful.

Wherever he travels the famed two blades of grass grow where but one had grown. He builds factories, creates towns and cities, makes whole states and nations prosperous. He originates new wants and expands the horizon of human interests. He elevates the standards of living and supplies the necessities, comforts and luxuries for the better life. Wherever he goes he blesses the inhabitants of city, town and country. He is the king of travelers, because he is the greatest servant of the people.

REWARDING THE CHIEFTAINS

THE SUM OF \$3,000,000 has been set aside by the British Government for special rewards for the commanding officers of the Great War. Of this amount Field-Marshal Haig and Admiral Beatty are each to get \$500,000 and Viscount French and Admiral Jellicoe will each get \$250,000. The American custom is to reward its military chiefs with one or more monster parades and possibly a little better title and pay, and that is all. The English example is hardly calculated to chill the ardor of military men in Great Britain. Rather we may suppose they will welcome any further opportunities to serve their country in a military way, and this does not make them peace makers or peace lovers. Nevertheless, "Blessed are the peacemakers; for they shall be called the children of God."—Matthew 5:9.

GROWTH OF THE U. S. FLEET

AT THE TIME the United States fleet made its grand tour of the world in 1908 its total tonnage was 206,527; today it is more than five times as large. Then there were 800 officers and 13,508 men; now there are 4,000 officers and 66,000 men. Then the largest ship had four twelve-inch guns and could shoot 10,000 yards. Now the largest ship carries twelve fourteen-inch guns and can hit the target at 20,000 yards. Then coal was the fuel; now oil.

When the time comes that they "beat their swords into plowshares and their spears into pruning hooks" (Isaiah 2:4), what a lot of pruning hooks they will be able to get out of one of these armored ships, carrying twelve fourteen-inch rifles.

AUTOMOBILE VACATIONISTS

MANY VACATIONISTS last summer made a second-hand automobile perform their transportation service. At the beginning of the vacation they bought second-hand cars, took the folks out and back, and enjoyed many pleasant trips about the vacation point. On return home the autos were sold at a net cost for operation and depreciation which was a light investment for the added vacation pleasure.

RELIGION *and* PHILOSOPHY

WORLD HAS ENDED—YOU MAY NEVER DIE

FOR MANY CENTURIES sickness, sorrow, suffering and death have afflicted the human race. But there has been just enough joy mixed with the sorrows of life to create a longing desire for life everlasting. And if that life everlasting could be accompanied by perfection the happiness of man would be complete. Recognizing Jehovah as the great First Cause, whose attributes are wisdom, justice, love and power, and who is the Creator of man, it seems entirely reasonable that having permitted man to so long desire the blessings of life everlasting, his wisdom and love would lead him to make provision for the gratification of that desire. Reason or theorizing alone could not lead us to a satisfactory conclusion, nor has man been left to rely merely upon these. Jehovah has graciously provided a record, written by holy men of old and by his inspired witnesses, which record discloses that God has a great plan which he has caused to develop in an orderly and majestic manner. In this record, the Bible, we find the testimony concerning man's origin, his course, the reason for his sickness, sorrow, suffering and death, and what the future holds for him.

The Bible has never been wholly and completely understood, but according to the standard stated therein the light has shone brighter and brighter as the centuries have progressed, and the promise is made that far greater light would be shed upon its pages in the close of the age. When the Prophet Daniel recorded a brief history of the world long before these events transpired, Jehovah told him to close up the prophecy and seal the words, so that they could not be understood, until the time of the end. The inference must be reached that when that "time of the end" occurs the Bible would be better understood.

If in this hour of great distress upon humankind we can find a consoling message that will bind up the broken hearted and comfort those that mourn, then with gladness we should embrace this message and be eager to transmit it to others, that they too might rejoice. This article is written for the purpose of proving that the time is here to understand the Bible; that we are in "the time of the end"; that the old order is perishing from the earth; that the new is coming in; that restitution blessings will soon be offered to the world and then men who obey the righteous laws of Jehovah will never die. In this article and a subsequent one, we hope to make this proof so clear and convincing that all who have faith in the Bible can see the reason for the sorrows now on earth and the blessings that shall follow.

In the examination of this subject we must apply the prophetic evidences in the place where they belong. The Scriptures admonish us: "Study to show thyself approved unto God, a workman that needeth not to be ashamed, rightly dividing the word of truth." (2 Timothy 2:15) The Scriptures that applied at one stage of the world's history may have no application now, and vice versa. Such was recognized by the New Testament writers, and particularly by the Lord Jesus himself.

For nearly nineteen centuries students of divine prophecy have expected and looked for the world to end, because Jesus taught it would end. Many Christian men, however, failing to recognize the distinction between the symbolic and literal phrases of the Bible, have been confused concerning the end of the world. For instance, the great John Calvin taught that upon the happening of that event Jesus, reappearing near the earth, would cause fire to be emitted from the clouds, setting the earth aflame and totally destroying it and everything on it. Being a clergyman of great renown, it was supposed that he based his conclusions upon a proper interpretation of the Bible, and great numbers believed his teaching; and for this reason, with fear and trepidation, many have looked forward to the ending of the world.

Reason would lead us to the conclusion that Jehovah would not create a wonderful earth like this, permit man to bring it to a high state of cultivation in many places, and then completely destroy it. Such is wholly out of harmony with his character. Likewise such is wholly out of harmony with the plain teachings of his Word, which says: "The earth abideth forever." (Ecclesiastes 1:4) "For thus saith the Lord that created the heavens; God himself that formed the earth and made it; he hath established it, he created it not in vain, he formed it to be inhabited." (Isaiah 45:18) When the Bible speaks of the world ending it does not mean the literal earth, but it does refer to an epoch or dispensation of time during which a certain arrangement of things or social order exists. In proof of this the Scriptures disclose that there was a "world" which existed from the time of Eden until the great deluge: "Whereby the world that then was, being overflowed with water, perished." (2 Peter 3:6) At the end of the flood a new "world" began, and the promise is made by the same Scriptural writer that it shall end. The period of that world is from the flood until the coming of Messiah's kingdom, and his kingdom would mark the beginning of another new world or new order of things.

There are several distinct periods of time mentioned in the Scriptures which have their culmination practically at the same time. Among these are "the times of the Gentiles" and "the end of the world." The Scriptures disclose that the Gentile Times span a period of 2520 years. They had their beginning with the overthrow of Zedekiah, the last king of Israel, in the autumn of 607 B. C. at the time Nebuchadnezzar of Babylon established the first universal empire in the earth. This period of 2520 years, then, necessarily ended in the autumn season of 1914 A. D. Referring to this period of time the great Master, through the Revelator, said: "The nations were angry, and thy wrath is come." (Revelation 11:18) This prophecy was fulfilled exactly on time.

We now submit the testimony of Jesus of Nazareth. Everyone who believes that he is the Son of God and that he spoke with authority must believe, in the light of the events that are daily transpiring, that the old world has ended. Jesus had been teaching his disciples that the world would end, and that he would come again and that his kingdom should supplant the old, unrighteous order. Five days before his crucifixion his disciples approached him as he sat on the Mount of Olives and propounded this question: "Tell us, when will this happen? What will be the sign [proof] of your arrival, and of the end of the world?"

It was not God's purpose that the disciples should at that time clearly understand the answer that the Master gave. His answer was couched in such prophetic phrases that it could be understood clearly by no student of the Bible until the events transpired. His answer, in the light of present events, however, is now manifest. He showed that the end of the world would be marked with great trouble and disturbances in the earth. His answers are set forth in the 24th chapter of Matthew and the 21st chapter of Luke. Among the answers given by him are the following:

"Nation shall rise against nation, and kingdom against kingdom, and there shall be famines, and pestilences, and earthquakes in divers places. All these are the beginning of sorrows."—Matthew 24:7,8.

Chronologically, the old world ended in the autumn season of 1914, and exactly on time nation rose against nation and kingdom against kingdom, and there followed the greatest war of all history. Twenty-nine nations were involved in that war, including by far the greater part of earth's population. The nations involved are particularly designated among mankind as Christian nations. True to the prophetic utterances, this was the beginning of sorrows, marking the end of the world.

Closely, followed a further fulfilment of this prophetic answer; namely, the famine. Notwithstanding the fertile condition of the earth and the wonderful means of

production, the conditions accompanying the war made it necessary to establish in nearly every country a Food Administrator. That the peoples have been in a condition of famine for the past three years no one would attempt to gainsay. From Armenia comes the cry today of threatened starvation; a similar cry from Russia; from Germany; from Austria; from the Balkans; in fact, from nearly all parts of the earth. Mr. Frank A. Vanderlip, for some time President of the National City Bank of New York, recently, through the Associated Press, declared:

"I doubt if America comprehends the extent of the paralysis of European industry. Of course, we expect idleness throughout the devastated districts, but there is partial idleness throughout the whole industrial area of Europe, in neutral as well as in belligerent countries. In England more than a million people are receiving regular grants from the Government because of unemployment, and the number is expected to grow as the British army is further demobilized. In Belgium 300,000 are receiving unemployment aid. The Government of Holland is giving subsidized food to meet conditions of unemployment. Italy is dealing with an army of unemployed. Great industries in Poland are prostrated. In Czecho-Slovakia the limits of disorganization have been reached. In Rumania the farmers are without live stock and there is not enough of seed to plant the fields."

It is to be expected that this condition of food shortage will grow worse.

Following upon the heels of the war and the food shortage came the greatest pestilence that has afflicted mankind. In four years the war victims numbered approximately 9,000,000. In less than one year the victims of the dread influenza exceeded 12,000,000. Scientists warn against a recurrence of the pestilence because the lack of food, causing lack of nourishment amongst the people, lays their systems open to the attack of disease germs.

Throughout the Scriptures the word earthquake used in a symbolic sense means revolution. Here then we have another fulfilment of the prophetic answer of Jesus. With the fall of aristocracy in Russia came a great revolution. With the fall of plutocracy in Germany a revolution occurred there. The public press almost daily reports conditions prevailing throughout Europe bordering on revolution, while every day the news columns are filled with reports of a disturbed condition amongst labor in America and throughout the world.

In further answer to the questions propounded by the disciples concerning the end of the world Jesus said: Then there will be "upon the earth distress of nations with perplexity; the sea and the waves roaring; men's hearts failing them for fear, and for looking after those things which are coming on the earth." There could be no doubt of the fulfilment of this Scriptural statement in the very hour through which we are now passing.

In his address to Congress since these days of disturbance have begun, President Wilson said: "These are days of great perplexity, when a great cloud hangs over the greater part of the world. It seems as if great, blind material forces have been released which have for long been held in leash and restraint."

Government officials are in perplexity; financiers are perplexed; business men are disturbed and their hearts are fearful; men who have to do with labor organizations are in perplexity and disturbed; and the restless element of humanity which the Lord likened unto the sea, is roaring, and those who make up the numbers, the peoples, the waves, are dashing against each other, and there is a general condition of unrest in the earth, all of which evidences the fact that the old world has come to an end and the time for the new is here.

One of the most conclusive proofs given in the answer of Jesus is that concerning the Jewish people. God organized the Jews into a nation and dealt with them exclusively for more than eighteen centuries. The time came when, because of the Jews' unfaithfulness, that nation was destroyed, and Jesus said: "They shall fall by the edge of the sword, and shall be led away captive into all nations, and Jerusalem shall be trodden down of the Gentiles until the times of the Gentiles be fulfilled." —Luke 21:24.

The student of prophecy finds that there is a parallel between the events which transpired relative to Israel and the events transpiring during the Gentile dominion. Jehovah through the Prophet Jeremiah, spoke to Israel advising the people of that nation that they would be driven out of their own country into a country with which they were not familiar; that there they would receive great persecution, and that this period of persecution and suffering would be the same length as the period of their favor, and that thereafter he would bring them back into Palestine and again show them favor. Their returning to Palestine, Jesus mentioned, would mark the time of his presence and the end of the world. (See Jeremiah 16:13-18). Through the Prophet Zechariah the Lord Jehovah foretold there would be great rejoicing in Jerusalem over the entrance of the King (Messiah), and that that day would mark the time when the "double" would begin to count; that is to say, it would mark the beginning of God's favor being withdrawn from the Jewish people and the beginning of a period of suffering equal to the period of their favor.

The Prophet says: "Rejoice greatly, O daughter of Zion; shout, O daughter of Jerusalem: behold, thy King cometh unto thee: he is just, and having salvation; lowly, and riding upon an ass, and upon a colt the foal of an ass." (Zechariah 9:9) Matthew 21:1-9 records a fulfilment of this prophecy, when Jesus made his tri-

umphal entry into Jerusalem, offering himself as King. That great event transpired in the spring of the year A. D. 33. The favor to the Jews began in 1812 B. C., and A. D. 33 marked the end of a period of 1845 years, the time when Jesus officially withdrew God's favor from the Jewish people, saying to them: "Behold, your house is left unto you desolate." Since this period of time should be doubled, according to this prophetic evidence, we must add 1845 years to A. D. 33, which brings us to A. D. 1878, at which time there should be some evidence of God's favor beginning to return to the Jews in order that this parallel might be carried out. We find the fulfilment in history in this.

Palestine, sacred to all orthodox Jews, had long been in the possession of Turkey. A war between Turkey and Russia resulted in the treaty of San Stephano, which practically eliminate Turkey's European possessions.

At this juncture of affairs, there appeared upon the scene a remarkable man, the Prime Minister of Great Britain, officially designated Lord Beaconsfield, his true name being Disraeli, a full-blooded Israelite. Acting in his official capacity, he called to his aid the army and navy of Great Britain, served notice on Russia that she must recede from the harsh treaty made with Turkey, and the result was the Berlin Congress of Nations which assembled June 13, 1878 and was in session for thirty days. It was presided over by Lord Beaconsfield, the Jew, who wrote the treaty and dictated the policy of the convention. The conference resulted in a new treaty, more favorable to Turkey, and in consideration for this act on the part of Great Britain, Turkey guaranteed certain religious and civil rights to the Jews in Palestine which they had not enjoyed since they were driven out at the fall of that nation. Thus in A. D. 1878, exactly on time, God's favor began to return to the Jews, distinctly marking the parallel fulfilment.

While the favor was officially withdrawn from the Jews in the spring of A. D. 33, it was not until exactly forty years thereafter, to wit, A. D. 73, that Judea became depopulated and the Jews ceased to be a nation. Accordingly, in 1878 favor began to return to the Jews and was marked progressively by the advance of Zionism and Jews returning to Palestine, until the end of forty years, to wit, in the spring of 1918, when a distinct event happened, again fulfilling the parallelism. The Allied armies under General Allenby had wrested the possession of Palestine for the purpose of establishing in Palestine a separate and distinct nation for the Jews.

Nathan Strauss, the grand old man of American Jewry, in a speech delivered in New York City during the progress of the war, said: "We are living in an age when we are about to realize the two-thousand-year-old

hope of the Jewish people. I am especially glad that we are witnessing the spectacle of the whole world applauding and approving and supporting our great purpose to establish the Jewish people on their own soil."

Jesus used a parable as further corroborative evidence of the events that should be transpiring about the time of "the end of the world." On a previous occasion he had likened the Jewish nation unto a fig tree. Now he says: "Learn a parable of the fig tree; When its branch is yet tender and putteth forth leaves, ye know that the summer is nigh: so likewise, when ye shall see all these things, know that it is near, even at the doors. Verily, verily I say unto you, this generation shall not pass till all these things be fulfilled." In other words, when these events begin to take place the people or generation then on earth would be permitted to see a complete fulfilment of the prophetic evidences set forth in this great prophecy, proving conclusively the ending of the old world and the coming in of the new.

As additional evidence in answer to the question, Jesus said: "The gospel of the kingdom shall be preached in all the world for a witness unto all nations, and then *the end shall come.*" This has been fulfilled. The message of the kingdom, translated into every known tongue and language, has been carried to the four corners of the earth. This has not been for the purpose of converting the world, but, according to the testimony of Jesus, has been "as a witness," that some of the world might know about it.

Further answering his disciples, Jesus declared that as it was in the days of Noah, so shall it be in the end of the world. "For as in the days that were before the flood they were eating and drinking, marrying and giving in marriage, until the day that Noe entered the ark, and knew not until the flood came, and took them all away." And we find it exactly so in the time in which we are now living. Very few, comparatively speaking, of the peoples of earth really stop to consider what is the meaning of the present disturbed conditions of society. They continue with their business and social affairs as usual, giving little or no heed to the Scriptural testimony and the fulfilment of prophetic utterances. Such was true in Noah's day. While Noah preached the people scoffed and mocked him. At the present time of distress, when the people are greatly in need of comfort, the clergy as a class not only fail to tell the people the meaning of this terrible trouble, but they treat the subject with contempt and scoff at anyone who claims that the world has ended.

When Jerusalem fell into the hands of the Allied armies, this, together with the great influx of Jews into Palestine, caused a few clergymen to meet in London and issue a manifesto and publish it throughout the

world, to the effect that the return of the Jews to Palestine indicates the near establishment of the Lord's kingdom and the end of the world. An enterprising reporter of the *Chicago Herald* interviewed a large number of clergymen on the question, almost all of whom scoffed at the thought expressed by the manifesto. Many of them said, "We feel that the present war has no more bearing on the second coming of Christ than other wars and revolutions have had." In other words, "Things continue as they were from the beginning." This very scoffing of this class of learned gentlemen is another fulfilment of Biblical testimony proving that the world has ended. We read the words of St. Peter: "That ye may be mindful of the words which were spoken before by the holy prophets, and of the commandment of us, the apostles of the Lord and Saviour: knowing this first, that there shall come in the last days scoffers, walking after their own desires, and saying, Where is the proof of his presence [and of the end of the world]? for since the fathers fell asleep all things continue as they were from the beginning of creation. For this cause they are willingly ignorant"—concerning the end of the world.—2 Peter 3:2-5.

Addressing himself to the disciples in parabolic phrase, Jesus likened his true followers, true Christians, to wheat, and the false, or merely nominal Christians, to tares. He said the two would grow together in the same denominations until the time of the harvest, and then there would be a separation. He plainly said: "The harvest is the end of the world." A clear fulfilment of this prophetic evidence is found in present day events when Christian people, without regard to denomination or creed, are forsaking the old systems and coming together to worship God in spirit and in truth, studying the Bible for the purpose of illuminating their minds and doing good to their fellow men.

The Scriptures further disclose that approximately at the end of the world the demons will have greater power. These demons, according to St. Peter and St. Jude, were incarcerated in *tartarus* at the time of the deluge, there to be restrained until the judgment day. In a previous issue THE GOLDEN AGE carried an article showing the origin of these demons and how they practise fraud upon the people by misrepresenting the dead. We now mark the fulfilment of the prophetic statements of the Bible that these demons are exercising greater power and deceiving some of the bright minds of earth. For instance, a London dispatch says:

"Sir Arthur Conan Doyle, the famous author, described last night how he had heard the voice of his son, who has been dead for a year. He said: 'I was in a darkened room with five men, my wife, and an amateur medium. The medium was bound in six places with a string. My wife

gave a cry, and I heard my son's voice. He said, 'Father'. I answered, 'Yes, son'. He said, 'Forgive me'. I knew to what he referred. We had only one difference in all his lifetime—his non-belief in spiritism."

Thus the demons are bringing to bear their power in misrepresenting the dead and overreaching the minds of men. Why was it necessary for Sir Conan Doyle to be in a dark room? Why was it necessary to have a medium there in order to hear the voice of one speaking from another world? The answer is obvious in view of the Scriptural statement that the demons, in practising fraud upon mankind, operate in the dark, are lying spirits, and take this course to deceive mankind. Such was the case in Noah's day, and such is the case now. The Scriptures disclose, in Revelation 7, that approximately at the end of the world these demons will cause great violence among the people. Jesus stated, as further evidence of the end of the world: "For then shall be great tribulation such as was not since the beginning of the world to this time, nor ever shall be."

When a long-time lease ends and the buildings erected on it are in a decayed condition, and a new owner comes into possession with the intention of erecting new buildings, his first acts are to tear down and remove the old and clear the lot for the building of the new structure. The old order or old world ended in 1914, and exactly on time the work of removing the old order began and

still progresses. The great King of kings and Lord of lords is directing this work, and he is removing the old preparatory to the erection of the new and righteous order of things. The prophet of the Lord, having in mind this very time when the kings of earth would be making a last desperate stand to hold their possessions, wrote: "And in the days of these kings shall the God of heaven set up a kingdom, which shall never be destroyed: and the kingdom shall not be left to other people, but it shall break in pieces and consume all these kingdoms, and it shall stand for ever."—Daniel 2:44.

We submit that the evidence is conclusive to the reasonable mind who believes in the Scriptures, that the world has ended; that the old order is passing away and the new is coming in; and if that be true, then this must mark the dawning of a new and better day; it must mark the beginning days of the Golden Age, and of necessity must mark the time for the fulfillment of the great Biblical promises that Jehovah has made for the blessing of mankind with life, liberty and happiness. In our next issue we will produce the Scriptural proof that there are millions now on earth that will never die, and the man who avails himself of the divine testimony and conforms himself to the rules of the new order will be the one to receive the long-desired blessings of life everlasting in a state of happiness.

Sweet Old Poems

Ring Out

Ring out wild bells to the wild sky,
The flying cloud, the frosty light:
The year is dying in the night;
Ring out, wild bells, and let him die.

Ring out the old, ring in the new,
Ring, happy bells, across the snow:
The year is going, let him go;
Ring out the false, ring in the true.

Ring out the grief that saps the mind,
For those that here we see no more;
Ring out the feud of rich and poor,
Ring in redress to all mankind.

Ring out the slowly dying cause,
And ancient forms of party strife;
Ring in the nobler modes of life,
With sweeter manners, purer laws.

Ring out the want, the care, the sin,
The faithless coldness of the times;
Ring out, ring out my mournful rhymes,
But ring the fuller minstrel in.

Ring out false pride in place and blood,
The civic slander and the spite;
Ring in the love of truth and right,
Ring in the common love of good.

Ring out old shapes of foul disease,
Ring out the narrow lust of gold,
Ring out the thousand wars of old,
Ring in the thousand years of peace.

Ring in the valiant man and free,
The larger heart, the kindlier hand;
Ring out the darkness of the land,
Ring in the Christ that is to be.

—Alfred Tennyson.

Clear the Way

Men of thought, be up and stirring
Night and day,
Sow the seed, withdraw the curtains,
Clear the way.

Men of action, aid and cheer them
As you may.

There's a fount about to stream;
There's a light about to beam;
There's a warmth about to glow;
There's a flower about to blow;
There's a midnight blackness changing
Into gray.

Men of thought, men of action,
Clear the way!
Once the welcome light has broken,
Who shall say
What the unimagined glories
Of the day?

What the evil that shall perish
In its ray?

Aid the dawning, tongue and pen;
Aid it, hopes of honest men;
Aid it, paper; aid it, type;
Aid it, for the hour is ripe;
And our earnest must not slacken
Into play.

Men of thought, and men of action,
Clear the way!
Lo, a cloud's about to vanish
From the day;
Lo, the right's about to conquer—
Clear the way!

Many a brazen wrong to conquer—
Into clay.

With that right shall many more
Enter smiling at the door;
With the giant wrong shall fall
Many others, great and small,
That for ages long have held us
For their prey.

Men of thought, and men of action,
Clear the way!

—Charles Mackay.

GOLDEN AGE CALENDAR

NOVEMBER 12 TO 25

YEAR: 1919 A. D.; 6048 since Creation; 7427-8 Byzantine Era; 2672 of Rome; 2695 of Greek Olympiad Era; 2579 Japanese; 1333 Mohammedan.

STARS: *Morning*, Venus, Mars, Jupiter, Saturn; *Evening*, Mercury.

Nov. 12: Sun rises 6:42 a. m., sets 4:46 p. m.; Moon rises 9:47 a. m., sets 9:47 p. m.; High tide 11:26 a. m., New York.

Nov. 14: Moon last quarter, 10:40 a. m.; 1918, 2,532 American prisoners released from German prisons; 55,000 New York garment workers strike for 8-hours and 20 per cent wage increase.

Nov. 15: St. Leopold's Day, Vienna; Proclamation of the Republic Day, Brazil; 1918, German soldiers insist on holding a Constituent Assembly; German army begins to evacuate Poland; Kaiser flees to Holland; 250,000 Italian prisoners go home from Austria; General strike ends in Switzerland; U. S. Board of Censorship discontinued; Demobilization of American army begins.

Nov. 16: Quadrennial election of Chamber of Deputies, France; 1918, 65,000 railroad telegraphers' wages advanced; War production ordered to slow down in preparation for peace.

Nov. 17: 1918, American army begins the march toward Germany; Alsace-Lorraine Day in Paris; German kings and dukes abdicate.

Nov. 18: Announcement that President Wilson will go to Paris.

Nov. 19: Coal shortage in New York.

Nov. 20: 1918, Twenty German submarines surrender to British; Post Office consolidates all American telegraph lines; Beginning of 1910 Revolution Day, in Mexico.

Nov. 21: St. Michael and Gabriel Day, Bulgaria, Greece Roumania; 1918, German fleet surrenders to British; Kolchak seizes position of Director and Commander of Russian army and navy; Congress adjourns; War prohibition bill signed.

Nov. 22: Annular eclipse of sun, begins before sunrise, ends 8:49 to 8:57 a. m., visible in most of the United States except the Pacific Coast; New Moon, 10:20 a. m.; First day of month Frimaire (Sleety) of French Revolution; 1918, Homeward movement of American army begins; Ukraine government established; Spartacus revolt in Berlin; Railroads hire Elihu Root to fight government ownership.

Nov. 23: First day of Jewish month Kislev; Nu-name-sai (Second Harvest Festival), Japan; 1918, Hundreds of army officers shot in Petrograd; Paderewski leaves for England on Polish affairs; Cardinal Gibbons approves Zionism; Railroad men awarded wage increase.

Nov. 24: Repudiation Day, Frederick County, Maryland; 1918, Kaiser Wilhelm at Amerongen, Holland.

Nov. 25: 1918, Agreement reached between German Soldiers' and Workmen's Council and the German government.

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LABOR and ECONOMICS

CAPITAL — LABOR TENSION

ONE SKIRMISH after another between capital and labor causes the common people, who have to foot all the bills, to wonder where this thing will end. Every strike to improve the condition of some of us makes it just that much harder for all of us. And the strikes are such strange strikes. They are not what they used to be. This striking of policemen is an entirely new thing, and a shock all around.

Theoretically police have no right at all to strike; for they represent us, the people as a whole. They are appointed custodians of law and order. We want to know where they are all the time, because we never know when we may need them. And yet we must not forget that the big boys in uniform are just ordinary men like the rest of us, and they have to live, and since the prices of everything have risen so dreadfully they have fallen an easy prey to the idea that they ought to have more money, so that they can provide their families with the things they need. It all seems human enough, when you think of it. But if they knew there was an ordinance forbidding them to join a union, then they should have obeyed the law, because they expect us to do so.

The steel strike is and has been a long, hard battle. Pennsylvania is in line with what those acquainted with this section had expected. Many of the workers in the Eastern mills are of so-called "Pennsylvania Dutch" extraction, a very conservative, slow-going, kindly-dispositioned class of people who live simply, own their own homes and accept with resignation conditions which they can not easily change. In the steel business there have been but two shifts during the twenty-four hours, from time immemorial, the men generally working from 5:00 until 5:00, running one week on the day shift and the other on the night shift. This arrangement gives the worker one Sunday off every other week, and every other week he works a straight twenty-four hour shift, from

5:00 p. m. Saturday to 5:00 p. m. Sunday. Then the following week he works from 5:00 a. m. to 5:00 p. m. each day up until Saturday inclusive, his night shift starting in at 5:00 p. m. the next day.

The operation of blast furnaces continuously is almost inevitable, as the expense of shutting one down and starting it again is very great. In not a few instances the temporary shutting down of a blast furnace has caused the failure of the company operating it. No doubt a part of the effort to get three shifts of eight hours each into the steel business, instead of the long twelve-hour grind which has been the rule heretofore, is due to the success of the railway workers in procuring a working day of eight hours. The work around a blast furnace or steel mill is as hard and as dangerous as railroading, and it is hard to see why the one class should continue to work twelve hours when the other has to work but eight.

President Wilson's conference at Washington of representatives of capital and labor had a great task mapped out for it "for the development of a new relationship between capital and labor," but the labor delegates bolted and upset the program when the right of collective bargaining was not conceded by the capitalist group. It is hard to see how such a conference could do other than make further concessions to labor, because all can see that labor has the strength that comes from superior numbers, and it now seems determined to have a voice in the management of practically every great industry with which it is connected. In Japan this principle of "attendance of labor delegates at all conferences of the company" has just been conceded to the printers of Tokio. This is the more remarkable because labor unions in Japan are outlawed organizations.

A blind man, on the dark side of the moon, can see plainly that an intelligent, determined, powerful majority will have its own way eventually. "Be wise now, therefore, O ye (money) kings."—Psalm 2:10.

HIGH COST OF LIVING

WHO'S TO BLAME? If we can find him and fix him with one in the cranium, he is done for, and the difficulty, of course, will settle itself. Such a cast of mind makes Mr. Average Citizen an easy mark for people who are too smart for him. As a matter of fact, the man to blame is often the best one to help fix things up, and may be as anxious as anyone to see his error corrected.

However, to definitely fix responsibility for the high cost of living, may enable a good many Average Citizens to relieve some mental tension. Such responsibility can now be definitely and finally set upon the right parties. To know the genesis of "H. C. L." throws light upon the subject. This is known in certain circles. The insiders even know the individual transaction with which "H. C. L." was born.

Tradition of the street has it this way: It was in the early days of the big war, in 1914 or thereabouts. The event took place in the explosives industry. Many of the smaller nations were caught short of gun powder. The American powder companies were filled with orders for way ahead. They did not care whether any more orders came or not.

One of the smaller countries had exhausted its patience waiting for the big powder companies to accept their order for a few million pounds. They approached a lesser concern supplicating permission to spend their money. Even the small companies were full of business from large customers, with orders booked far ahead. The ruling price was say thirty cents a pound. So the small concern, in order to discourage the small country, said that they would accept the order at a dollar a pound or thereabouts.

The general situation was in control of His Excellency, Mars, the world's Over-Lord of the last few years, and powder at a dollar was cheap beside the possible ruin of War. The order was placed, and the little powder concern had the best order yet on its books.

Within a month or thereabouts, the current price of powder was a dollar a pound. Other business grasped the golden opportunity. Other commodities, bought by countries at war, were jumped up to a figure intended to approach the famous standard, "*All the traffic will bear.*"

Steel, iron, copper, lead, guns, pistols, leather, ships, ocean transportation, grain, canned foods and a swarm of others, left Mother Earth, for a trip whose top was the sky. Government control was forced into the field to regulate the race between supply and the demands of War. The insatiable greed of Mars for more and yet more to burn up and destroy in the Great Pastime,

interlocking with the willingness of the trader to accept the enormous prices offered without haggling by the buying agents of foreign governments, created a bad combination for Mr. Average Man. He must pay more or go without and see the food and clothing the kiddies needed go sailing across the Atlantic. The imperative demand of hungry stomachs and cold backs were the enforced compliance of the common people with the ruinous course of the War Lords of Europe. Thus was "H. C. L." born and quickly grew from expansive infancy into boisterous maturity.

The blame for the high cost of living rests upon Mars. The ready purse of War began it and sustained it. On no other shoulders does exclusive responsibility rest.

The whole world is crying out against the high cost of living; it is the cry of ignorance and emotion against plain arithmetic.

Mathematics says that there is no cost of living problem if the buying power of the worker is undiminished. If when commodities rise, wages rise to the same extent, the worker's day's labor continues to get him just as much at one time as another. He lives with the same comfort because he has the same things to work with, play with and live upon.

But the common people are common people because they are not smart enough for the uncommon people, many of whom started from the common level and by ability or crookedness have risen to places of power.

If the people were clever enough to insist upon having, in the business of exchange or trade, a measure of value that would not vary in actual value, they would not be troubled about the high cost of living. If a dollar would always buy the same quantity of goods, varying only with scarcity or plenty, the people would have one less important factor to contend with. Their wages would always be at a figure that they could understand.

But when the dollar, right under the nose of the man on the street, imperceptibly shrinks day by day, the wage earner, to use a common phrase, does not know "where he is at." In his mind for many decades a dollar has been a dollar, and that was all there was to it. But with the advent of War a dollar ceased to be a dollar's worth, and Mr. Worker and Miss Worker found themselves month by month able to buy less and less of this world's goods.

If the profiteer in labor had wished to find a clever scheme without being seen, to rob labor of the products of his labor, he could not have devised a better instrument than the vanishing dollar.

The business man could always raise prices at will unless he was hindered by a public service commission or by a food commissioner. Getting wages raised, how-

ever, was not so simple a matter because it was usually the result of a fight with the employer. The employer could always keep ahead in the race, for he could raise prices again and it would be some time before the worker would realize that the employer's price-increase meant just that much real wage decrease.

One party was making more than the other party. It was always the business man who did the price raising. He was making invisible differential between the extra pay grudged to the worker and the additional price he forthwith charged labor and which ordinarily was substantially larger than the wage increase it was supposed to balance.

Labor not understanding, and in the home circle finding the mathematics of prices and wages transmuted into emotions and feelings developed by privations of loved ones finds it impossible to maintain the calm, self-possessed demeanor of pure mathematics. He first cries out. Some day he may act. Conan Doyle, the great English writer, says that unless effective steps are taken promptly to check rising food cost there will be grave violence in Great Britain. In Florence, Italy, the workers ransacked the stores of the profiteers and after declaring a strike secured a reduction in prices of fifty to seventy-five per cent. France has doubled the number of selling booths from which low price food is distributed and has established cheap restaurants to serve meals at fixed prices.

Low food costs are imperatively needed; but if food prices are forced down, who will pay the farmer enough for him to make a living and enable him to keep on raising farm products for the rest of the people to eat?

Truly in every direction there are intricate and perplexing questions which must be solved to keep the people from greater discontent, and yet the solution of these problems appears to require a more than human wisdom, and a Solomon has not yet appeared to show the way. But—the Golden Age draws on apace, and soon the long looked for Messiah shall arise and bring order out of the world's confusion and chaos. "Thy kingdom come."

THE LITTLE PROFITEER

A MAN has to live, and when rising prices are fashionable, the price autocrat has to make his profit represent as good a living as before. To a dealer wages or salary are spelled "profit," and his wage may be large or small or even minus—he must make money when the making is good. If prices double, the dealer, to have the same wage, should obtain like profit. This is only fair. Any worker's income should vary with prices, so that there be none of the inequity of some

getting less and others more. Undesired consequences might be cited from such inequalities—unrest, discontent, vindictiveness, revolution, anarchy.

The big profiteer does not bear sole responsibility for the prevailing distress. Everyone does who helped "boost" prices or wages. The retailer did not neglect his part in raising the cost of living. In the sunshiny trade days of 1915-1916 some retailers were slow to sense the changing situation. Honest fogies, they could not charge a multiple profit on goods they had bought low. But the little profiteers persuaded them to "play the game," and get their share of the golden stream while it lasted. A grocery trade journal ran full-page advertisements that raising prices was the style and no grocer should fail to raise his; "everybody was doing it," and "they could get the money." It was a kind of golden age, which forced thousands of Fords and hundreds of "sixes" and "eights" upon a willing retail trade.

But now dealers looking for a too-good living have to be reasonable. It has seemed as though a jail sentence was the only thing to keep some dealers within bounds. For the public weal, the little profiteers have to adopt the new fair-price fashion.

Profiteers are nothing new. They had them in days of old, when the prophet Ezekiel said, "Thou hast taken usury and increase, and thou hast greedily gained of thy neighbors by extortion, and hast forgotten me, saith the Lord God."—Ezekiel 22:12.

DECENTRALIZING PACKING

THE KENYON-ANDERSON bill recently before Congress for the decentralization of the packing business aims to correct the waste in hauling animals from points all over the country to Chicago or Kansas City, and then shipping directly back the finished product. It hopes to eliminate a long string of commission merchants and middlemen. It proposes to license all packers and provides a list of punishable offenses for unfair, unjustly discriminatory or deceptive practices in commerce.

The bill proposes to license any number of standardized plants erected by municipalities or subdivisions of states, or by their accredited representatives. It proposes that records and accounts shall be submitted to the Secretary of Agriculture and that the services of the plant shall be available to all customers on the basis of fair and reasonable returns and without unjust discrimination. It contemplates the services of special cars and the assistance of the Government in matters of inspection, standardization, plans and advice, but not financial assistance.

It is the hope of the framers of the bill to change the

packing business from a centralized business into one in which the local centre of production will be the local centre of distribution. However, if it is profitable to decentralize the packing business, one can not but wonder why the great packers have not found this out long ago. But perhaps they have had too many other things on hand to give this phase of the business adequate attention. It is freely claimed that the big packers have been busier in cornering all substitutes for meat than in providing meat itself for the people at legitimately low prices. It certainly looks as though something is wrong when 700,000 lbs. of beef, lamb and pork are kept in storage so long that they have to be sold for fertilizer at 1½¢ per pound.

FOOD AND CLOTHING

ACCORDING to the National Industrial Conference Board in its recent research there is a race between food and clothing, as to which will increase the most in price.

Between July, 1914, and July, 1919, food increased in price 90%, but was distanced 10% by clothing, which increased 100%. Other increases were, shelter 28%, fuel, heat and light 57% and sundries 63%. The average advance in the cost of living was 73%.

The figures computed by the Board are claimed to be those of the average family expense or budget, and probably represent the facts, unless there was an effort to make the figures as small as possible in order to have them show that wages increased as much as the cost of living. There is an old saw to the effect that "Figures do not lie, but liars do figure." There is no intention to discredit the figures arrived at, but before accepting them as final, it might be well for "the man on the street" to know something about the personnel of the Board, their connections and the motives by which they might be influenced.

According to the Board the percentages of a man's family expense are distributed as follows: Food 43.1%, shelter 17.1%, clothing 13.2%, fuel, heat and light 5.6% and sundries 20.4%, total 100%.

DEMAND FOR LABOR

THE maintenance of a proper labor supply depends somewhat upon the wages paid to labor. If the wages are sufficient to keep labor at work the supply is more plentiful than if some are not at work. A man who is idle temporarily because he is dissatisfied with his wages or other conditions of labor is, for that time, not a worker at all. If all the workers in the country went on strike at the same time it could not be said that labor is plentiful but that it is scarce.

For some reason that does not appear on the surface, the Scriptures intimate that just before the dawn of the Golden Age there will be a period during which work will not be obtainable on any condition. Possibly this will be caused by a temporary break-down of credit. The passage reads: "For before these days there was no hire for man, nor any hire for beast; neither was there any peace to him that went out or came in because of the affliction: for I set all men every one against his neighbor".—Zechariah 8:10.

PRINCIPLES OF SUCCESS

ANY WORKER in any occupation might profit by the advice given to army officers by Major-General McGlachlin:

You must have courage, self-reliance and good judgment.

Courage is a very common natural gift, but it may also be developed by practice in dangerous games and occupations.

Self-reliance is usually a result of training and personal effort, to be attained by actually performing tasks.

Good judgment comes from the study of your task before you do it and from reflection upon the results obtained and mistakes that may have been made.

In your life from day to day, you should observe the principles of simplicity, directness, thoroughness and promptness.

The simpler your thoughts and reasoning, the more clear will be your decision. The simpler your language, the more easily you will be understood.

Direct statements will result in clarity of understanding by your subordinates and by your superiors, and are equally appreciated by both.

Thorough treatment of subjects that you are required to handle will result in their effective disposition.

You must train yourself to regard these subjects not merely from your own standpoint but from that of your superiors and that of your subordinates, keeping in view always the interests of the government which you serve.

Do not sacrifice thoroughness to simplicity. Brevity is a virtue, but thoroughness is the more important principle.

Be prompt. It is indispensable. Procrastination is the root of all evil. Those who put things off do not do them. Those who do not do them are not useful.

JANITORS ON STRIKE

THE 7,600 members of the Chicago Flat Janitors' Union are demanding \$3.50 to \$5.00 an apartment a month and living quarters on or above the street. The flat owners declare that the janitors are now getting \$125 to \$175 a month, free living quarters, free heat, light and gas, and that the demands signify wages of \$200 to \$250 a month.

SOCIAL and EDUCATIONAL

SHORTAGE OF TEACHERS

THE STATUS of the teaching profession is important because it reflects the public attitude toward the future welfare of the people.

A report from 1,512 school superintendents indicates that the United States is short 38,000 teachers, or 5.8% of the 650,000 teaching positions. There are also 65,000 persons accepted as teachers who are not fit for their positions. This represents 103,000 teaching positions without teachers of even fair ability.

Of the 1,512 school superintendents, 1,430, or 94.6% report that the teachers' salaries have not been increased in proportion to the increase in the cost of living; 1,267 or 83.8% report that they have found it necessary to lower the standard of qualifications in the effort to get teachers; 1,052 or 69.6% report that the number of girl and boy teachers below twenty-one is increasing; 1,395, or 92.3% report that promising young men and women are not taking up teaching as in the past. The situation is least serious where salaries have been increased most.

The development of the mind and character of the young is not to be compared with the washing of windows, if the criterion is the wage increase of the workers. Either the teaching profession is considered of no particular importance, or there is a systematic scheme to discredit the public schools by impairing their efficiency.

The real trouble may be that the teachers are a negligible factor because they do not control votes and are not properly unionized. Perhaps if the 650,000 American teachers were welded into a trades union they would have a labor backing which would give pause to school boards that pass up their petitions for relief from grinding poverty. No class of workers is more important than those that control the future of the people as the teachers do through the education of the young. They should be given salary increases at least commensurate with the higher cost of living.

Nicholas Velimirovic, the moral and mental leader of Serbia, according to the *Educational Review*, asserts that "If there is anything to be learned from the war, it is doubtless this: The education of youth in all the countries of the world must become an international affair of the very first importance."

Neglect of the teaching profession bespeaks no promising future for this country, for the man and woman of twenty years hence will be largely what the teacher of

today makes them. "Train up a child in the way he should go; and when he is old, he will not depart from it" (Proverbs 22:6) is still a good recipe for the creation of future citizenship.

AUTO THIEVES IN FRANCE

NINE HUNDRED automobiles, most of them stolen, were missed by the American Expedition in France. The car-stealing epidemic was not confined to any one class or any one nationality. If a car was left by the roadside it was certain to disappear in a very short time. Perhaps a farmer hauled it to his farm and built a haystack around it. Or a passing unit of some other organization helped itself to magneto, carburetor, spark plugs, spare tires and spare wheel. Instances are on record where between dark and daylight, and in a driving snow storm, the three good wheels, engine, steering gear and radiator of a temporarily disabled machine disappeared and were never recovered.

Fords with the numbers painted out have been hard to trace, as it was practically impossible for anybody to prove that the car ever did belong to the American Expeditionary Force. The great majority of the passenger cars in the American army service, however, were unknown to France before the war, and when offered for sale were quickly recovered.

Many people who have or profess to have great respect for the eighth commandment, "Thou shalt not steal" (Exodus 20:15), seem to take the position that it applies only to stealing from individuals. In principle it is just as wrong to steal from an association of people as from an individual, yet there are many, even seemingly respectable people, whose consciences are lax when it comes to dealing with a corporation, or with the Government. The Scriptures show that in the Golden Age thefts and defalcations must be made good for the full amount and 20% additional; and where, for any reason, as might be the case with a corporation, this cannot be made good "unto him against whom he hath trespassed", it is required that "the trespass be recompensed unto the Lord." (Numbers 5:6-8) There is hope here for some who by stock manipulations have robbed corporations of millions. If personally required to make up all these defalcations they would be reduced to virtual slavery for myriads of years, but no doubt the "recompense unto the Lord" will take some form of contrition not expressed so much in dollars and cents as in true repentance and reformation of heart.

COLLEGE GRADUATE UNION

THERE IS an impression that the technical professions are very well paid. Young men by thousands are fitting themselves to become mechanical, electrical, and civil engineers.

But there are so many young technical graduates that they cannot obtain adequate pay and hence they create a kind of educated proletariat. In New York they have been so underpaid by profiteering employers that they have organized a trades union and are asking salary increases of \$500 a year.

This affects 3,160, including junior engineers, engineering assistants, chemists, architects and inspectors in engineering work. The present college system tends toward an over-supply of educated workers and a killing competition among them.

If young men realized how poorly paying the technical professions are, especially at the outset, far less would go to college but would enter the more remunerative and useful trades.

The value of college education is greatly overestimated. Now that the workers are well paid, there is not the reason that formerly existed for spending four years and several thousand dollars for something that no longer guarantees a good income with relief from hard work.

In breaking with all college traditions and lining up with the working people the young technical graduates of New York have learned that not exclusiveness, but cooperation wins success.

The advice of old time is still good to "consider the art," but the college man is learning from another of the insects of ancient Palestine which had a deserved reputation for getting whatever it went after: "The locusts have no king, yet they go forth all of them by bands."—Proverbs 30:27.

TOO LITTLE BAIL

OCCASIONALLY we hear it said that the bail required for certain violators is too large; there have been instances in which bail was denied altogether. But it is seldom one hears of a case where the bail might be considered too small. It seems to us, however, that \$1,000 bail is too small a requirement for any one of the three men in Northern New York who climbed into the room of Mrs. Le Felche in the absence of her husband, pulled her from bed, stripped her in the presence of her eleven year old son and six year old daughter, and poured hot tar and feathers over her naked body.

The Jews were forbidden to torture any living thing. Torture is wholly foreign to the character of him of whom it is written that he is "the God of all grace"

(1 Peter 5:10) whose "tender mercies are over all his works". (Psalm 145:9) Men who so far forgot their original inheritance of godlikeness as to torture a helpless woman in the night time, have fallen far. The Lord says to some such, "Thou thoughtest that I was altogether such an one as thyself" (Psalm 50:21) and the intimation is that they thought wrong.

EDUCATION FOR THE POOR

NOW THAT COLLEGES are raising millions, next in order should be donations of large amounts to help the children of the poor who are not able to invest a thousand dollars a year for education. Twenty million dollars given to Yale represents about \$5,000 per student. To properly or appreciably affect the education of the poor children would be an enterprise like a national drive for Liberty Bonds. There are, conservatively speaking, perhaps ten million children of the poor in this country, and to supply each one of them with an endowment that would provide an income of \$200 a year would require the raising of the enormous sum of fifty billion dollars.

If it is a financial impossibility to provide a \$200-a-year education for all the young people, it is probably a good thing that a few thousand Yale students are going to have that much added to the liberal amounts already provided for their education.

"Higher" education is regarded a good enough thing for tens of thousands of young men to invest in it hundreds of dollars a year a piece, but it is seriously lacking in one element, for after it has done all it can it usually leaves its beneficiaries in the position of those the Bible speaks of as "ever learning, and never able to come to the knowledge of the truth".—2 Timothy 3:7.

NEWSPAPER MEN ORGANIZE

A YEAR AGO Boston newspaper men averaged \$21 a week. They organized a union, interviewed the typographers, pressmen and photo-engravers as to what they were getting, presented demands of \$38 minimum for reporters and \$45 for desk men, and got it. The newspaper owners did not want to recognize the union, but they did when they thought of the embarrassments of missing several editions. There was no mention of the brain workers' victory in any Boston newspapers.

The man who organized the Boston editors and reporters in his opening address alluded to them as brainless brainworkers. He seemed to think that, as the Scriptures express the matter, "the laborer is worthy of his hire," and he could see no reason why the men who do the rough work around newspaper offices should receive twice the pay for their work as do those who actually supply the material for the reading public.

MANUFACTURING and MINING

SHAFT BEARINGS AND OILS

ROLLER BEARINGS will bear the heaviest loads, ball bearings rank next and babbit metal is next. If the bearings are loose, thick lubricants like graphite and grease are best, especially where there is flying dirt. Such lubricants form ridges around the shaft at the ends of the journal and close the openings to the entrance of sand or dirt.

The best oils for high speed shafts with light pressure on the bearings are a mixture of 20% sperm oil (obtained from the blubber and head of the sperm whale), 30% olive oil (of which the better grades are dark and poorer grades light in color) and 50% light mineral oil.

For low speed shafts with light pressure on the bearings the best lubricant is 30% olive oil and 50% light mineral oil.

For high speed shafts with heavy pressure on the bearings the best lubricant is 35% lard oil (the liquid obtained from crystallized lard by straining under pressure), 25% sperm oil and 40% heavy mineral oil.

For low speed shafts with heavy pressure on bearings the best lubricant is 50% colza oil (a pale yellow oil obtained from rape seed) 25% lard oil and 25% tallow oil (obtained from solid tallow by pressure).

For moderately high speed shafts with very heavy pressure on the bearings the best lubricant is 35% sperm oil, 20% colza oil, 25% lard oil, 15% tallow oil and 5% fine plumbago.

For low speed shafts with very heavy pressure on the bearings the best lubricant is graphite-grease which consists of 25% tallow, 30% palm oil, 33% mineral oil and 12% fine graphite.

The resistance of various oils to being squeezed out of bearings at 65 degrees temperature Fahrenheit is as follows:

Sperm oil	1.0
Light mineral oil.....	1.7
Cottonseed oil	1.0
Olive oil	2.0
Lard oil.....	2.2
Rape oil.....	2.3
Neatsfoot oil.....	2.4
Tallow oil.....	2.5
Heavy mineral oil.....	4.0
Castor oil.....	32.0

At 220 degrees Fahrenheit all oils are about equally fluid.

Castor oil is obtained from castor beans by pressing, steaming and filtering and is nearly colorless.

Neatsfoot oil is obtained by boiling out the feet of slaughtered animals, and if properly prepared from fresh material contains less than 1/2 of 1% of fatty acid, but the commercial oil sometimes contains as high as 30%. Neatsfoot oil containing over 4% of fatty acid should not be used as a lubricant.

Tallow oil should have a sweet clean odor when used as a lubricant and should be free from suspended matter.

In the Scriptures the Body of Christ is compared to the human body, and in this figure the joints are particularly referred to. These joints, in a way, compare to the bearings in a piece of machinery. Unless they are well oiled there is trouble. And again, if they are well oiled with the spirit of loving service of other members of the Body, "The whole body fitly joined together and compacted by that which every joint supplieth, according to the effectual working in the measure of every part, maketh increase of the body unto the edifying of itself in love."—Ephesians 4:16.

TEXTILES RUN FULL

THE PROSPERITY of the textile industry is shown by the percentage of the total number of spindles that are busy. At present the industry is running as near full capacity as possible, for on account of repairs and other necessary idleness it is never feasible for 100 per cent of the spindles to be in operation.

The following percentages of spindles active at different dates clearly indicate the rise of the textile mills from the depression of last winter. The figures are for the woolen mills, which are fairly representative of the whole industry:

Present time, 92%, August 91%, July 91%, June 85%, May 83%, April 71%, March 58%, February 59%, January 63%, December (1918) 84%, November 88%, October 91%, September 92%.

The total number of spindles in the woolen mills is 2,176,953 and in the worsted mills, 2,307,178, grand total, 4,484,131. Some branches of the business are running 95% of full capacity, and others are running double shift, the latter circumstances being the cause of the high prices for some goods produced on overtime pay rates.

If Solomon, the writer of Proverbs, were here today he might not advise to "Go to the ant, thou sluggard; consider her ways, and be wise" (Proverbs 6:6), but "Go to the mill worker," for there has seldom been a time when the mills were busier than now.

SUGGESTION SYSTEMS

IF "MONEY makes the mare go," ideas make the business go. The ideas of all the workers are more valuable than those of any one person. A business is immensely benefitted where ideas flow naturally and freely from every worker to those that can make them operative.

A variety of suggestion systems for employees has been tried out. In most instances they failed, but in a few cases they have achieved the hoped-for success. That the failures far outnumber the successes is owing to the failing that executives have of not giving really considerate treatment to those that work with them.

In one suggestion system described by *System* the writer ascribes the fault to the management:

"The blame rested wholly with the management. The general manager was not seriously concerned about getting ideas that he could use from the workers. He was fairly confident that he and the executives associated with him were competent to run the business all right. The suggestion system he looked upon as more or less of a game which might amuse the employees.

"As a result of this attitude, no serious effort was made to apply the suggestions even though some of them gave indications of constructive thought on the part of employees. Not many workers can be kept continuously interested in the moderately remote chance of winning a rather slender prize, particularly when the purpose of the contest is so obviously farcical."

In the few cases where the suggestion system is a success, *System* continues, the controlling factors are:

"1. The openmindedness of the management and the serious desire for ideas of employees.

"2. The willingness to consider thoroughly the ideas that are offered, no matter whether they seem good or not at first glance; and the intention in any case to let the employees know the decision and the reason for it.

"3. The desire to reward fairly the man who makes the suggestion, if it has any value."

The danger that a management runs of being set down as simply hypocritical in asking for suggestions, crops out when the employee is not fully advised of the executive attitude toward the suggestion, and a detailed explanation is not given why the suggestion will not work or is not expedient at the time: "The Eastman Kodak Company," continues *System*, "uses an analysis sheet by means of which those responsible for looking into the suggestions of workers measure the cost of changes against the savings they may effect. The worker is taken into the confidence of the management, and if an idea cannot be used with practical results, the reasons as they are shown by the analysis sheet are fully explained to him." As a result, this concern receives cordial cooperation from its employees.

In contrast to the Eastman attitude, the following about a superintendent who at first had apparently favored a suggestion, tells the story of the complete

failure of a suggestion system: "A day or two later he (the superintendent) told the department head he had decided against it, ending with 'for reasons which I cannot discuss with you.' Imagine how speedily that man, who could not or would not take the time to give his reasons to a responsible department head, would have spoiled the chances of any suggestion system."

Frank and cordial treatment of workers is likely to keep them more interested in their work than in ideas for social, industrial and political change, and the opinions of executives in this respect is somewhat as follows: "It is safe to say that when the minds of workers are turned in the direction of building up, there is not much room for those ideas which tend to tear down and destroy, ideas often lying hidden, making the workers disgruntled and gloomy of temperament, inefficient of hand, and fertile soil for seeds of unrest, dissatisfaction, or industrial strife." Evidently the safe thing for business management is to be a kind of "big brother" to those who work with them. In the present crisis nothing less will answer than the practical application of the Golden Rule in every business. Such a business is likely to suffer least in the periodic labor storms that sweep over industry after industry.

It pays to be brotherly. It is the natural thing for men to treat one another with consideration and even with brotherly love. It is the thing that is to be the rule in the fast-approaching Golden Age, for the rule then is to be that every man, from executive down, to hold his position, must "love his neighbor as himself," and that those that will not accommodate themselves must inevitably be dropped as the misfits of a better social order, the unfit that cannot survive.

WILL LABOR BE SCARCE?

IT ALL DEPENDS upon whether we continue to lend money to Europe. If we lend her what she requires labor will be scarce, for we shall have to continue to run our fields and workshops at full speed to fill her requirements; but if we withdraw our credit then there will be a change in the other direction.

Just at present labor is scarce in America. More than 3,000,000 men have been returned from the United States army and navy to civil life, and nearly all of these have at once found profitable employment. One thing that has made this possible is the immigration situation. There is no immigrant labor to be had.

Prior to the war we were receiving a net immigration from Europe of 800,000 persons annually. During the past five years there has been no net immigration, the number going out having just about equalled the number coming in.

FINANCE, COMMERCE and TRANSPORTATION

PROGRESS OF AUSTRALIA

IN THE YEAR 1917 the manufactures of Australia amounted to over one billion dollars. This means that she is rapidly coming into a position where she will be able to produce all or nearly all the things she needs or uses. At present her principal imports are apparel, machinery, paper and drugs. The exports consist principally of grain, dressed meat, hides, wool, and metals. The country contains rich stores of gold, coal and other metals and minerals.

Australia is 2,400 miles long and 1,900 miles wide. The interior is at present an immense plateau, an almost barren plain, except in the eastern and southeastern portion, in which there are extensive plains admirably suited to stock-raising and agriculture. The rivers are subject to great irregularities, depending upon the fall of rain. The climate is generally hot and dry but very healthy. Occasionally there are excessively hot winds from the interior which result in great discomfort, followed by cold winds from the south. Snow storms are common in June, July and August, the winter season.

Australian trees and bushes generally have scanty foliage and thick leathery leaves, well fitted to retain moisture. Some of the eucalyptus trees have been found to measure 500 feet in height.

Australia was first settled in 1788 as a penal settlement. In 1851 gold was discovered in large quantities and a great immigration followed. The last convict vessels arrived in 1868, and in the 80 years in which it was a penal colony. Australia and Tasmania received about 140,000 of these exiles from their native shores. The effect of the outdoor life was to restore most of these convicts to noble, upright, healthy manhood. Many of the most respected families of Australia today trace their lineage to these men.

Come to think of it, we all trace our lineage to a convict, an exile; namely, father Adam. For God "hath made of one blood all nations of men, for to dwell on all the face of the earth; and hath determined the times before appointed, and the bounds of their habitation; that they should seek after the Lord, if haply they might feel after him, and find him, though he be not far from every one of us." (Acts 17:26, 27) God foresaw the wisdom of placing a hardy race of men to subdue the Australian continent and pursued the policy, strange to us, but wise, as we now see, of letting its pioneers be exiles who for one reason or another had incurred the

displeasure of their fellow men, and been banished from their midst, only to find a happier home elsewhere.

WASTING OTHERS' MONEY

THE PEOPLE who have done the least work in the world, and therefore have the least right to be wasteful, are frequently the most prodigal in wasting money which has been saved by others and which temporarily comes into their care. Representative Bland of Idaho, who has been investigating conditions in France, reports that 70 per cent of the funds sent to philanthropic and benevolent organizations in France has gone for expenses of administration and that the committee of which he is chairman are bringing with them copies of an agreement under which \$1,500,000,000 worth of Government property which included, as two of the items, food and textiles alone worth \$500,000,000, was sold for \$400,000,000.

Possibly it was necessary for Government employees to destroy several million dollars worth of automobile parts and other material at Verneuil, France, as testified by a former officer of a motor unit in the expeditionary force, but it seems hard to believe that some use could not be found for bales of flax, automobile bodies, wheels, tires and axles in a world in the condition of the one in which we now find ourselves.

The end of the war has left the War Department with a great number of unused automobiles on its hands, some 47,000. Many of these, still in their crates, are piled five high in an open field near Washington, where they have remained ever since the armistice was signed, their covers and upholstery rotting away and their machinery covered with rust. Congress is now pressing for the sale of these machines, and with many of the automobile factories three months behind in their orders there seems no reason why they should not be sold at once for what they will bring. Any money the Government can save in this way will be so much less it will have to procure otherwise.

The greatest waster of the ages is a something described in the eighteenth chapter of Revelation as "Babylon the Great". Concerning this symbolic city it is said that "in her was found the blood of prophets, and of saints, and of all that were slain upon the earth." (Revelation 18:24) The fall of this mystical city is indicated as just preceding the thousand year reign of Christ, described in Revelation 20:1-7.

RAILROAD EQUIPMENT

CONTRARY to expectation the equipment of the railroads is not being kept up as thoroughly as it should, and the manufacturers of railroad equipment are being hit by a shortage of orders. The Government is seeking to reduce the billion dollar shortage on the anticipated income from operation, and for the time is letting equipment go. Railroad men say that there can be no relief for a year or more.

At the same time there is an enormous demand for railroad equipment in foreign countries, but the proper arrangements have not been made yet for financing huge orders from outside the country. European countries are able to pay only in bonds and the American banks are not prepared to handle such bonds for the equipment concerns. With an unprecedented need for their product in domestic and foreign markets, equipment manufacturers are obliged to see their plants close down for lack of business.

CONFERENCE OF ADVERTISING MEN

THE PROCEEDINGS of the Associated Advertising Clubs of the World, held at New Orleans September 24th and 25th, read like a page from the proceedings of the League of Nations. There were delegates from all parts of the United States, Canada, Mexico, Cuba, Great Britain and Argentina, cablegrams from the Prime Minister of Australia, the President of Peru and other dignitaries whose habitat is far from our shores.

The subjects discussed were such as to how to help Mr. Wilson solve the industrial problem, how to make Latin America better known to the people of the United States, how to protect Liberty Bond holders against securities of questionable value, how to make the United States better known in Mexico, and other subjects such as one would expect to engage the attention of statesmen but which very properly engage the attention of those who have so much to do with molding public opinion and directing the success of public ventures as falls to the once-despised advertising man.

The advertising man of today is a disseminator of information. He is expected to supply real news, and if the concern with which he is connected is not doing work that is important enough to merit publicity there is no reason why it should expect the public to be interested in what it has to say. The advertising man is a pusher for business, a pioneer, an expert in the art of creating new wants or new ways to supply old ones.

Every person who announces a policy is an advertiser, a publisher, a proclaimer of what he purposes to do. When Satan said, "I will exalt my throne above the stars of God; I will sit also upon the mount of the congregation, in the sides of the north; I will ascend above the

heights of the clouds; I will be like the most High" (Isaiah 14:13,14) he was advertising or announcing his policy, namely that of self-aggrandizement. When our Lord said, "I came down from heaven, not to do mine own will, but the will of him that sent me" (John 6:38) he was advertising or announcing his policy, that of complete submission to the Father's will. In the Golden Age it will be apparent to all that his was the wise course. The Lord's present high exaltation "above every name that is named" is justly merited. In his prehuman existence, and in his earthly ministry, he was always faithful and efficient in all that he was given to do. His promotion was as inevitable as was Satan's downfall and ruin.

AIR TRANSIT

WHILE transit by air is not yet out of the realm of science, in some cases it almost approaches being an established method of transportation.

The difficulty of using air commercially is its danger and excessive cost. A motor truck or automobile can stop and rest if disabled, but there is short shrift for the airplane that would like to rest in mid air. To make air travel even approach safety there would have to be established air lanes marked by landing places frequent enough for a machine to volplane to safety anywhere.

Efforts are being made to "practicalize" air travel. An airplane of 19,000 pounds, to carry 3,000 pounds of mail, and equipped with three motors and wireless telephone, and manned by two pilots and a navigator, is being built to run between New York and Chicago in seven hours—provided nothing happens.

Giant gas-bag machines are planned in England to travel between New York and London. They are to be luxurious affairs, with saloons, dining room, and sleeping cabins. The equipment contemplates 3,500,000 cubic feet of gas, a carrying capacity of seventy tons, a non-stop ability of 6,000 miles and a speed of eighty miles an hour, to cross the Atlantic in fifty hours—always provided the inevitable does not occur.

It was an approach to practical transportation when a nine-year-old Texan with his mother rode from Houston to attend school at New York. The trip was safely made from Dallas, via Arkansas, Illinois, Indianapolis, Dayton, Cleveland, Buffalo and Binghamton. The risks of the air lane were sharply illustrated by the killing in a fall of Major Frissell at Port Jervis, N. Y. He had said the air was "bumpy", and it proved to be so.

In the present state of air transit, men, like riches, "make themselves wings; they fly away as an eagle toward heaven" (Proverbs 23:5), but men lack the sure sustaining power which keeps the eagle safe and sound in his wide flung kingdom of the sky.

POLITICAL, DOMESTIC and FOREIGN

OUR BOYS AND THE FRENCH

A GREAT many American soldiers did not come away from France with very good opinions of either the country or the people. They detested its mud, which is everywhere, its unpaved streets, its lack of bathtubs, its omnipresent manure piles, its system of charging Americans several times as much for supplies as it did Frenchmen for the same articles, and its women most of all. The true American loves and admires true womanhood and finds little to admire in a community where, according to a prominent D. D., a man can enter almost any home and treat the woman of that home as his own wife. And he stated that this is largely true throughout France.

The French people did not find all of our soldiers all that they should wish, either. They found them too much addicted to hard liquor, and not infrequently too rude in speech and act. The effect of French liquors upon our soldiers may be judged from the fact that at one time in the summer of 1918 there were 30,000 officers and men of the American troops absent without leave from their organizations.

According to the mother of an American soldier now buried in France, the French are reported to be greatly shocked over the American neglect of some cemeteries in which are buried the American dead. Some of these cemeteries, a year after they were first used, were said to be full of rows of closely packed white crosses and long trenches instead of, as with the French, individual graves, carefully cared for. In some of the cemeteries there was said to be no flag flying, no person on guard, nothing to indicate that anybody had any interest in the weed-covered grounds. In the French grounds the officers and men are buried together; in the American grounds they are kept separate. What is the reason for this?

General Pershing is of the opinion that the Americans who fell in battle in France should be allowed to lie where they are now buried, but this does not seem to agree with the general sentiment of those who have lost their loved ones on the field of battle. General Pershing was given a great welcome on his arrival in New York, but his return did not awaken the enthusiasm expected, and a few days later the proposition to award him a golden sword was received so coldly in Congress that it was abandoned for the time. The American people are thinking a lot now about the boys they have lost and are not so much interested in the officers.

It will be a great day for the fathers and mothers and brothers and sisters and sweethearts of the boys that fell in France when "all that are in their graves shall hear his voice and shall come forth" (John 5:28, 29) and it will be a great day for the boys themselves. We believe that this awakening of those now asleep in death is near at hand and that it will not be so long before some of those boys now buried in France will come and look at the very places where all that was left of their mortal remains was laid in the summer of 1918. In a future issue we hope to give the reasons for our belief that the resurrection will begin within the next decade.

SIZE OF PEACE ARMY

IT IS GENERALLY believed that Senator Chamberlain effectually killed the so-called March bill, recently presented for Mr. Baker, Secretary of War, and the General Staff of the United States army. Senator Chamberlain denounced the bill not only because it aimed at a vast military establishment, 509,000 men in time of peace, but because the General Staff wanted for the purpose a lump sum to be expended entirely at its discretion, Congress merely serving in the capacity of milker of the public cow to provide the funds. Senator Chamberlain said that the bill as proposed spelled "Militarism to a degree never surpassed in the palmiest days of the great general staff of the German army." The General Staff was what ruined Germany. There is no General Staff in the navy, probably the most efficient, best managed department of the Government. Perhaps that is the reason for its efficiency.

It may be true that there are good reasons why the United States peace army should in a few years be four times as great as it was in 1917, but it would seem as though the wreckage in Europe should be convincing that it is not a good thing to have millions of armed men standing around with nothing to do. It stands to reason that some of those men, those who have the most to gain by it, or who think they have the most to gain by it, will use what influence they have to bring on war, in the hope of profiting thereby.

What is the proper size of a standing army for the United States in time of peace? Should it be 500,000 as proposed by Mr. Baker, or 300,000 as proposed by General McAndrew, former Chief of Staff of the American Expeditionary Force, or 120,000 as it was in 1917? Obviously it all depends on what we want the army to

do. There is no need in hiring for a particular job of work four times as many workers as are necessary for that job. And then there is to be considered also, that to get men for this particular job the wages must be high enough to attract them, or they will have to be obtained by conscription, and it does not seem reasonable for the United States to resort to conscription in time of peace. Various forms of peace conscription have been proposed.

There are but two general reasons for an army in time of peace. One is to properly guard our outlying possessions against sudden attack, and the other is to maintain order at home. What reason is there to believe that the forces adequate for this purpose in 1917 would not again be adequate in time of peace? Senator Swanson says with reference to large military expenditures, "A large part of the immense sums now appropriated for armaments could be utilized to secure better educational advantages, to construct good roads, to build better homes, to aid religious and charitable institutions, to develop industries, and for the general advance of comfort and civilization." These are the words of a statesman and this is a statesmanlike utterance.

In time of peace the principal duty of the United States army is to preserve order within the United States itself, and possibly with the idea that because of post-war conditions there would be more disorder than usual, Secretary of War Baker has issued orders that hereafter State officials can call directly upon commanding generals of military departments in their vicinity to furnish such troops as may be necessary for the protection of lives and property, thus performing duties which formerly devolved largely upon the National Guard of the State itself.

The armies of olden times did not amount to much, at least not to start with. The first account of a "battle" recorded in the Scriptures is in the fourteenth chapter of Genesis. There four kings carried away captive Abraham's nephew Lot, after they had defeated the five opposing kings. We are not to suppose that the army which captured the Sodomites was a large one, even though the names of four kings are introduced in connection with it. This was not a very long time after the flood, and the entire population was not as yet large.

The suggestion of certain higher critics about vast armies, great cities, etc., at this time, are out of harmony with the facts—first, the shortness of time after the flood; and second, the ability of Abraham, with 318 men, to even make an attack and disconcert and confuse the army and deliver Lot and the Sodomites and all their goods. These facts all agree that the cities, the armies, the kingly powers of that day, were very meager in comparison with what we have in mind when we use

similar terms in our own day. In all probability the armies of the four kings combined did not exceed a thousand men.

OFFICERS AND MEN

SECRETARY BAKER of the War Department has revoked the military order posted at Camp MacArthur, Waco, Texas, which, in effect, forbade the attendance of an officer at any social affair at which an enlisted man was present and which made it obligatory upon the officer either to leave or to force the enlisted man to leave. This revocation was a good piece of business. We do not want in this country a set of lazy prigs that imagine they are some uncommon clay, too good to associate with their fellows. Uniforms do not make men.

Senator Chamberlain has protested that there must be a reformation of the court martial system which will make it impossible, as was recently the case in Texas, to impose the death penalty for a minor offense and then carry it out within 48 hours, before the papers in the case could reach Washington for review. He presented a bill authorizing amnesty for all soldiers, sailors and marines convicted by court martial.

Military officers should not forget that the first requirement is that they be men, and no man is a real man who takes unfair advantage of those that are for the time placed in his power. Of all men on earth the military officer is the last man that can afford to show that he dare not abide by the simple rules of plain justice but must resort to artifice to bolster up his claim to authority and to respect. Who can imagine the noble Centurion Cornelius, the story of whose conversion to the Christian faith is so beautifully told in the tenth and eleventh chapters of the Acts of the Apostles, failing to treat the soldiers under him with utmost courtesy and respect? The thought that a man must be priggish, cruel and unfair to be made suitable material for an officer could only arise in the mind of a 2x4 who knows in his heart that there is no real reason why anybody should respect him at all.

A WAR BY-PRODUCT

THE EFFECTS of a world war are not wholly bad. A by-product is that there are many less workers in the United States than would have been the normal case if there had been no European war. This makes conditions in America favorable as respects employment, but it no doubt necessitates that many Americans must work at harder manual labor than they have been accustomed to, as our heavy work has been largely performed heretofore by new immigrants.

WHO ARE ANARCHISTS?

ANARCHISM, as a philosophy, according to the Encyclopedia Britannica, is the opposite of Socialism. The aim of the Socialists is to center all power in the Government and to make the Great State, as they call the prospective socialist arrangement, the controlling factor in nearly every activity of human life. Anarchism thinks that the State already has too much power, and that nearly all the troubles of mankind originate from that fact. Socialism believes in centralization of power more and more, in behalf of the people. Anarchism believes in decentralization for the same reason.

Believers in the theories of anarchism are of two distinct schools, the one believing in the gradual spread of their doctrines and the other believing that force is necessary. There is great antagonism between the two schools of thought, but both admit that if their philosophy should prevail it would wipe out the weaker mental, moral and physical specimens of the race. This is not a very cheerful outlook for any of us that are privately forced to admit, just to ourselves, that we are not as strong either mentally, morally or physically, as we could wish!

We do not know to which of these schools of thought Alexander Berkman and Emma Goldman belong. We only know that these two are largely in the public eye at present as they have just been released from prison and are known as anarchist leaders. Berkman is described correctly as "a studious, earnest, widely read man of very pleasant, quiet manner." He designates himself as "an idealist whose views and ideals conflict with those of capital." When asked in court if he was an anarchist he refused to answer, further than to say, "The hearing is an invasion of my conscience and my thoughts, not an inquiry into my actions."

In the Homestead steel strike twenty-eight years ago, when he was but a lad, Bergman shot and injured H. C. Frick, and for that crime spent fourteen years in a Pennsylvania prison. His sentence of two years at Atlanta Penitentiary, just completed, was for violation of the sedition act. Miss Goldman was arrested and sentenced at the same time as Berkman and has just been released from the Missouri State Penitentiary at Jefferson City.

Both Mr. Berkman and Miss Goldman have issued statements of conditions in their places of confinement that call for investigation and action. Officers who disobey the state or federal rules in their management of prisons are anarchists themselves, are they not? The meaning of the word "Anarchy" is "without rule" and rules are even more necessary for the rulers than for the ruled. If a ruler does not abide by the rules expressly prepared to limit his own power, how can he, with a

good conscience, require of others that they keep the rules he is supposed to enforce?

And then comes up the question of Bolshevism. Is that Anarchism? The general idea in the public mind seems to be that it amounts to the same thing, and there has been a vast amount of literature circulated to encourage that idea. But we have an interesting proof that the two are quite different, and that not in Russia, where the anarchists are recognized as entirely separate and distinct from the Bolsheviks (Socialists). We had the illustration in this country, at a lecture room of the Rand School, where there was a lecture on the meaning of the term "soviet". The hour devoted to the lecture on this topic had passed; and the room was occupied by a committee giving careful attention to the housing problem, when it was burst open by a gang that threw them into the street, along with their furniture, and made a complete wreck of the room. The men who broke up this orderly meeting of thinking men and women were anarchists, were they not? If not, what were they? At any rate they were not friendly to the soviet (Bolshevist) idea and made the attack for that reason.

And what about those riots in Omaha? There a mob of five thousand people partially wrecked the county court house with bombs in order to wreak their vengeance on the negro whom they finally succeeded in lynching. All law and order were thrown to the winds, and the mayor who attempted to stem the tide was strung up and barely escaped with his life. Is it not a good time to do a little heart-searching on these questions?

On August 9th, Representative Blanton, Democrat, of Texas introduced in Congress a joint resolution "declaring that a state of anarchy exists in United States, authorizing the president to free interstate mails and traffic from further unlawful interference, and to adequately protect citizens in their property rights." Here Representative Blanton is apparently accusing one or more departments of the Government itself of not living up to the rules which have been prepared by Congress to limit its powers. His position is that the men who have violated these rules are anarchists. Is that true?

At Portland, Oregon, on September 15th, President Wilson expressed conviction that unless the League of Nations becomes a reality, now existing Governments will be overthrown and their form changed. On the same day Senator Overman of North Carolina in the United States Senate used almost the same language, saying, "Until this is done there can be no peace, but unrest, revolution, starvation and anarchy will stalk up

and down the world, bringing in its wake destruction of nations, social disorder, wretchedness and finally the extermination of the races of men."

Curiously enough only one day previous Arthur Henderson, British labor leader, said in the International Socialist conference in Switzerland that before winter sets in there will be a "terrible spasm of rage and despair among the peoples of Europe during which the final remains of civilization may be totally annihilated"; and two days later he said in England, "The present world unrest means that *the old order of things is in its death throes.*"

Two weeks later the Governor of New York summoned the people "to a continual exercise of pure patriotism and love for country and its institutions, to the end that our free institutions and the example of our citizens may offset and check the manifest spirit of unrest and lawlessness," and on October 3rd the president of the Union of Iron, Steel and Tin Workers told the Senate investigating committee that in the refusal of Elbert H. Gary, chairman of the Board of the United States Steel Corporation, to arbitrate the steel strike Gary "is sowing the seeds of anarchy".

Now who are the greater anarchists, those idealists like Berkman or Miss Goldman who believe in certain theories which they wish to see established, or those prison officials who disregard the laws made to control them, or those roughnecks who wrecked the socialists' lecture room where the housing problem was being studied, or the mob in Omaha that wrecked the court house and attempted to hang the mayor, or the departmental heads alleged to be unlawfully interfering with proper use of the mails, or the enraged and despairing peoples spoken of by the President and by Senator Overman and Mr. Henderson, or ex-judge Gary of the steel trust? It seems clear that the title of anarchist is one that is freely handled by those who do not give the subject very much thought.

That the world is filled with much disorder and violence at present can not be questioned by any intelligent person who reads the news of the day. The causes of this reach back to the Great War. During the days of the war, and before those days, the people who should have been taught to love their neighbors as themselves were taught a lot of other things that are now finding their natural expression. It is an unhealthy and ungodly sentiment that can be stirred to great enthusiasm and activity only by opportunities to help participate in some form of violence, and cannot be equally enthused by opportunities to help bless the lowly in some quiet unobtrusive way.

In the face of so much strife it seems hard to realize

that we are really at the doors of the Golden Age, when the Lord's kingdom shall be established and "the meek shall inherit the earth." (Matthew 5:5) Yet we have long prayed for that kingdom: "Thy kingdom come, thy will be done in earth, as it is in heaven" (Matthew 6:10) and if we believe that our prayers are worth anything, we must believe that just such a condition of things is coming. Everywhere the Scriptures teach that the dawning of that better day will be in times of temporary strife and tumult such as we now see about us.

"Come, behold the works of the Lord, what desolations he hath made in the earth. He maketh wars to cease unto the end of the earth; he breaketh the bow, and cutteth the spear in sunder; he burneth the chariot in the fire. Be still, and know that I am God: I will be exalted among the nations, I will be exalted in the earth." (Psalm 46: 8-10) Here the three steps occur in their natural arrangement, first the desolations which we observe following the Great War, second the full end of militarism, third the full establishment of God's long-promised kingdom in the hearts and lives of mankind.

The words of the Lord, "Blessed are the meek" (Matt. 5:5) and "Blessed is the nation whose God is the Lord" (Psalm 33:12), are as true today as ever they were; and the time will come when a weary world will turn back to the Scriptures as affording the only safe and sane basis for the conduct of the affairs of men. In the Golden Age now at hand the Lord will "break the bow and the sword and the battle out of the earth". —Hosea 2:18.

JAPANESE AVIATION

JAPAN has set aside \$125,000,000 for the development of aviation. This will be a good thing for the mechanics employed in their construction and it may be that Japan will get some airplanes out of the expenditure. During the Great War the United States expended several times that amount and about all that we got out of it was an investigation and a general amnesty for those that expended the money "not wisely but too for those who spent the money "not wisely but too well".

MEAT SERVICE OF FOREIGN GOVERNMENTS

THE United States and England are almost the only countries that permit private slaughtering. In Australia the abattoirs are government institutions. A ranchman in the heart of Australia can drive his cattle to the nearest railway station, deliver them to the station-agent of the State railway, and they will be slaughtered, refrigerated and stored in the public abattoir, and ultimately sold in London for him by the Government acting as his agent.

AGRICULTURE and HUSBANDRY

AGRICULTURE IN ALASKA

THE AREA of Alaska is a little more than the combined areas of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Ohio, Indiana and Illinois. The tillable area is about equal to that of Connecticut.

Much of the land, even on rather steep hillsides, is boggy, the drainage being poor. The formation of the soil and the blanket of moss, almost universally present, greatly extends the marshy area. In some places the layer of dead and living moss covers the ground to a depth of several feet. The power possessed by the moss of absorbing and retaining large amounts of water and its character as a nonconductor of heat will, to some extent, account for the cold, wet condition of the underlying soil. The presence of this dense mossy layer makes travelling very difficult, since crevices, rocks, fallen limbs, and trees are so covered that numerous pitfalls are hidden from sight. Beneficial results follow the removal of the moss so that the soil may be warmed and thawed earlier in the season.

In general, the coast of Alaska is characterized by great rainfall and a rather constant temperature, due to the Japan current, which sweeps the whole coast. In many places zero temperature is seldom experienced. The average daily range of the thermometer during the summer months is very small. The temperature at Wrangell, Juneau and Sitka are almost the same as those for the same period at Trondhjem and Bergen, in Norway, Helsingfors, Finland, the whole of Scotland and the Orkney Islands. The total amount of summer rainfall, while large, is not excessive. In general, along the coast region, the winter's snow has disappeared at sea level by the middle of April, although snow flurries are common for some time after that date. Killing frosts are seldom experienced between May and October.

The organic content of many of the Alaskan soils is very much higher than in any of the agricultural lands of the States. Frequently the soil is acidulous and requires considerable lime to sweeten it. In places the soil is peaty in appearance and when dry it burns readily. There is considerable of this soil in the southeastern portion. In southwestern Alaska a gravelly subsoil is more abundant and the presence of volcanic material in some places renders the soil very rich and requires less drainage.

The southeastern part of Alaska is heavily timbered with a growth that will eventually be very valuable. The spruce grows eight feet in diameter and more than two hundred feet high; red and yellow cedars abound, usually at some little elevation above the sea. As the exportation of lumber is unlawful the only use of the forests at the present time is for lumber and fuel for the sparse population.

The grasses of Alaska flourish to an extraordinary degree in all parts of the country. Wherever the timber is cut away and the undergrowth of shrubs is kept down, a dense growth of grass soon takes place, to the exclusion of all other plants. Timothy, orchard grass, and blue grass grow to great size. One of the most common native grasses is the Alaskan red top. It is a prominent factor in nearly all grass mixtures and frequently exceeds a man in height. White clover is spreading rapidly. The grass is nutritious, the cattle always becoming sleek and fat during the summer season.

Alaskans claim that it is more expensive to make hay on the ground than it is to bring it from San Francisco or Seattle, but this is because of the crude hand-scythe methods employed. A few days' work in leveling off the irregular hummocks, so that mowers and horse rakes could be used, would reduce the cost to a few dollars per ton.

The abundance of berries in Alaska has been a subject of remark by everyone who has written concerning this country. The flavor of most Alaskan berries is excellent. They are widely used for food, being put up by the whites in the usual way in preserves, jellies and cans; among the natives the principal method of preserving them is in seal oil.

One of the native plants used to a considerable extent is wild rice, the underground bulbs of which are collected, dried, powdered, and made into a sort of cake. Beach peas grow in many portions of the country. The plants yield abundantly, and the pods are well filled with small, juicy peas about the size of the French peas of the market.

There is quite a number of pot herb plants which grow well in Alaska, among which are skunk-cabbage, shepherd's purse, horse-radish, dandelion, and turnip tops. The hardier vegetables of our own garden also do well, such as lettuce, radishes, carrots, parsnips, onions, peas, snap beans and rhubarb.

Potatoes grow, but not to a size desired, although isolated specimens weighing a pound each are to be

obtained. In some places cabbage and cauliflower will not head. Samples are frequently seen of the abnormal behavior of beets and turnips, the plants frequently attempting to complete their life cycle in one season. In such cases no enlarged root is formed and the plant runs to seed early. Some varieties of turnip are less subject to this undesirable trait than others.

The methods of gardening which have been generally employed are very poor. Often a large amount of labor is expended in planting a crop, but once planted it is allowed to care for itself. Close planting seems to be the rule. Potatoes are generally planted six inches apart in rows separated not more than a foot. The result of such planting is a thick growth of vines that covers the ground to such an extent that the sun's rays never reach the ground. It is not surprising that small potatoes result from such planting. Bedding up of the soil is generally practiced. Usually the beds are formed about three or four feet wide and raised as high above the general level as can be done economically.

At nearly every Alaskan village some cows, pigs and poultry are kept, while horses are kept at some of the larger places. At several places dairies are maintained, supplies of milk and small quantities of butter being furnished during many months of the year. Pigs thrive exceedingly well but when allowed to run at large their flesh is liable to acquire a fishy flavor. Protection of live stock from the winter rains is essential, although there is a flock of sheep on one of the islands that has no other shelter than that provided by a not very vigorous growth of spruce trees. The winter range is of little value, as the grasses contain little nutrition after being soaked by the winter rains.

In southeastern Alaska, with the exception of the tide flats, land must first be cleared of the dense forest growth, and in some places the deep moss will have to be removed. The spruce stumps must be dug out, as they are very slow in rotting, and not infrequently produce large second-growth timber. In addition to clearing, the land must be thoroughly drained and protected against seepage from above. This ditching and removal of stumps is very laborious and expensive. In the southwestern portion of the country the expense of clearing away the stumps will not be required, nor is draining necessary to the same extent. Lack of markets and transportation facilities retard the agricultural development of the country, but these are being improved gradually.

When climatic conditions, topography, soils, etc., of Norway, Iceland, the Orkney Islands, as well as Scotland, Sweden and Finland, are compared with those of Alaska, it seems probable that what has been accomplished in these European countries can also be done in

Alaska. Rye, oats and barley are grown in sufficient abundance in the north of Europe to supply local demands, and also to some extent for export. Cattle, sheep and swine are extensively raised in these countries, sheep doing well in Iceland, which appears less auspicious from an agricultural standpoint than Alaska.

Our hopes for the future of Alaska's agricultural development lie chiefly in the relatively slight climatic changes which we judge will be required to make the coast country more congenial. This part of the country will naturally be the first to be developed. But our hopes extend to the farthest limits of the interior. We trust in our God that he has all the means at his disposal, and all the power required, to bring about such climatic changes as will eventually make the whole interior of Alaska "rejoice and blossom as the rose".—Isaiah 35:1.

OLD MAXIMS VALUABLE

MANY A FARMER has been laughed at for giving credence to the ancient maxims of the farm, but the United States Department of Agriculture has thought these rural proverbs worthy of an investigation. The result is that many of them have been proved to be the expression of the keen common sense of agriculturists of olden time and worth perpetuating.

It is difficult in the country to know just the best time to plant different seeds. The old maxims furnish correct information by making comparison with the development of other plants under local conditions. Beans are best planted when the blackberry bushes blossom. Early gardening may commence when the catkins have formed on the maple trees. At the close of the season warning of frost is given by the maturing of the cockleburrs.

There is a best time for every farm operation, and this is accurately indicated by some tree, shrub or plant. Scientists have imagined that their "scientific" instruments were superior to anything else, but the Washington researchers are demonstrating something that the Bible ages ago said might be expected now: "The wisdom of their wise men shall perish [be found comparatively worthless]; and the understanding of their prudent men shall be hid."—Isaiah 29:14.

VEGETARIANISM A SETTLED QUESTION

OUR Lord ate roast lamb and settled the vegetarian question, and since he knows that human beings require some meat we feel sure he will so arrange matters in the incoming Golden Age that all will have opportunity to get their quota. The distribution of meats is a subject to which any ruler can afford to give profound attention. It is something that touches the interests of every human being except vegetarians and such others as do not wear leather shoes.

SCIENCE and INVENTION

RAT POLICE IN ENGLAND

ONE OF THE good positions today in England is that of Rat Officer, a job that carries a fair salary and possesses the advantage of a free technical education on rats. The British Board of Agriculture is enough interested to hire as a lecturer before the Rat Police a Fellow of the Zoological Society and to call a national conference for their benefit.

On account of the vast stores of food and merchandise stored and transported during the war the rat became a factor of national importance. Each rat, it is estimated from their known depredations, costs somebody \$1.50 a year, which might easily become a burden too great to be borne by any nation, if the rats should be allowed to live and multiply unchecked. The rat capacity for propagation is for each pair to raise an annual family of twenty to fifty. A statistician has estimated that a single pair of rats unhindered might multiply into a family of close to a billion children, grandchildren, etc., in five years. This would impose upon the community the unbelievable burden of a billion and a half dollars a year. From this alone the necessity of combatting the rat as one of the worst enemies of man is readily deducible.

The rat is said to have the one civic virtue of scavenger for city sewers, but over against that is a long column of liabilities. As a carrier of disease this creature has no equal. There is scarcely a dangerous infectious disease that rats may not carry through a community. It has long been known that they disseminate the germs of trichinosis. In Asiatic countries the rat is dreaded as a carrier of the bubonic plague. Where there are no rats this deadly plague has no chance of spreading with any speed. Rats did their share in the bringing of the germs of the recent black plague—alias influenza—within reach of hundreds of thousands of those that paid the price of life for the infection.

Like the plague, the rat originated in China. Both the black rat and the larger brown rat spread over Europe from their Asiatic haunts, the former as much as 600 years ago, and the more ferocious and dangerous brown rat in 1727, when it entered Russia and thence went all over Europe, exterminating its small cousin as it took possession of rat-land. By ships it has been spread all over the world. The brown variety is one that has the ill fame of occasionally eating babies.

In Great Britain these rodents consume \$250,000,000 worth of food annually. In wheat producing countries, as Australia, rats destroy many times their weight of

grain, and spoil much more by their unclean nests and by a noisome infection which ruins whole masses of the wheat. The necessity of guarding stores of grain against rats is only too well known to the American farmer and grain handler.

The British plan contemplates making it an offense not to take prescribed measures against rats. The occupier or owner of a property will become liable to a fine of \$100 for "neglect to take reasonable and necessary steps to destroy rats and mice or to prevent infestation. It will apply to buildings and other structures on land, sewers, drains and culverts, and to ships and other vessels." The success of rat-destruction methods appears in the record of the Albert Docks, where now not over fifteen a week are taken in some three miles of docks.

In like manner the rat will finally be exterminated throughout the world, but it will take time. That a time will come when none of these destructive agencies will continue to exist may be understood from the promise: "They shall not hurt nor destroy in all my holy mountain [kingdom, the Golden Age]."—Isaiah 11:9.

THE FITTEST SURVIVE

IT WAS the evangelists and other clergy that gave a bad name to the theory known as the survival of the fittest. Nevertheless it is a fact that the fittest survive.

A general misunderstanding of Charles Darwin's theory caused it to become quite a harmful influence in philosophy. The commonly taught idea was that the great scientist held exclusively that those creatures have the best chance of survival in life's struggle which are the most powerful and savage and best able to defend themselves and destroy others.

As the survival-of-the-fittest theory became the accepted philosophy of most thinking men, and because the tendency of anyone is to live his ideas, there resulted a caste of powerful and influential men who made the principle of force the moving power of practical life. Men's heroes are those that approximate their philosophic ideals, and the great men have been "the mighty men of valor," true to the type of the survival of the savage and ferocious fittest.

Darwin, however, taught also that those creatures had exceedingly bright prospects of survival which, though weak and defenceless individually, acted in masses. Instances of the survival of such groups are the herds of peccaries in South America, of wolves in packs, of buffaloes in herds, of ants and bees. Another example is

seen in Northern Siberia in the nesting places of vast flocks of ducks and geese. A single duck is easy prey for an eagle; but let the king of birds appear near these nesting places, and he will be attacked and literally torn in pieces by swarms of ducks, which, at the cost of a few lives protect one another.

Owing to a low grade of moral ethics on the part of the great men of the world, humanity is still in a dark-age stage where the fittest to survive are imagined to be the most ferocious, unscrupulous and destructive. Those to whom homage is paid are still as in the dark past of man, "the mighty men" and those who by what a prominent thinker terms "commercial cannibalism" have amassed immense stores of goods. The wisdom of this world is their wisdom. None other would be permitted to be taught. Time and again in the dark ages the world's great ones have drowned various humane theories in the blood of their advocates and adherents.

The best wisdom for the common people is to follow what is termed divine wisdom. As James says, "The wisdom that is from above is first pure [sincere, not double dealing], then peaceable [not warlike], gentle [not rough and boisterous], and easy to be entreated [not hard hearted], full of mercy [not cruel, ferocious and destructive], and good fruits [not evil fruitage of wicked acts], without partiality [treating all alike with kindness], and without hypocrisy." How different from present methods of persistent deception of the people in the public press, in the pulpit and everywhere else that it pays to withhold or distort the truth!—James 3:17.

The time is coming when the antiquated type of great man will be as extinct as the monsters of the geologic past, and in their place the great ones of the Golden Age will be the gentle, Christlike lovers of mankind, who will be the beloved leaders of a world full of those of whom it is said, "The meek shall inherit the earth", and with the earth "shall inherit everlasting life." (Matthew 5:5, 19:29) The world will be a good place for the common people to live in when the oppressors are gone and when the people love their neighbors as themselves.

ROTARY MAGNETIC MOTOR

HOW SOON the problem will be solved of a motive power and mechanism far more efficient than yet devised, is unknown, but C. H. R. Smith, of Oswego, N. Y., claims to have refused \$1,000,000 for a new rotary magnetic motor. The new device, he says, will operate automobiles, street cars, locomotives, shipping, lighting plants, and in fact do anything which is being done by any other prime mover.

The machine is said to be driven by magnets, on so simple a plan that any one can produce his own power,

without coal, steam or electric wires, and unaffected by heat or cold. The motor will run equally well in the air or submerged in water. It can be quickly installed in an automobile—after which no more 28-cent gasoline!

Mr. Smith says, "This invention will furnish power for heating houses, as well as lighting houses and all buildings and streets. The electric railway companies can remove their trolley wires, and dismantle their costly power plants. All unsightly smoke stacks can be removed, as there will be no need for coal. Pittsburgh, the smoky city, can be made as light as day. There will be no more coal famines in the winter months, as coal will not be needed, and the coal mines can be sealed, and the coal barons will be checked. Motorists will operate their automobiles without using gasoline."

Some day new sources of power are destined to be discovered, and if inventor Smith has an invention of the claimed efficiency, he will be a renowned world benefactor. But the financial interests will soon know its worth, and will seek to quietly "can" it, in order to prevent a catastrophic annihilation of values in oil, coal and public utility properties.

The Good Book says that such blessings are to be divinely given to man that "eye hath not seen, nor ear heard, neither have entered into the heart of man, the things which God hath prepared for them that love him". (1 Corinthians 2:9) In the Golden Age all men will love God for his goodness and for his matchless character, and it may be that some such invention as inventor Smith's may soon appear to inaugurate some of the blessings that are to come.

FUTURE FOR THE AIRPLANE?

ACCORDING to *Aeronautics*, which speaks with a British caution, the airship appears to have a great future for special commerce where time is a dominant factor and the demand is sufficient to justify a large machine.

It has also a great field in the opening up of new countries where other means of communication are difficult. The only limitation to size will be the cost of the airship and its sheds, just as in steam vessels it is the cost of the vessels and the cost of deepening the harbors that limit the size of Atlantic liners.

Developments of this character generally take place slowly. Otherwise failures occur, as in the case of the Great Western. It may be many years before the airship is increased from its present maximum of 750 to 1,500 feet. If the development is subsidized or assisted by the government, very rapid development may be accomplished.

In peace time the seaplane, airplane and airship will have their uses. But except for special services of high

utility it is questionable whether they will play more than a minor part as compared with steamship, railway and motor transport.

An example of special service was when an Italian soprano, engaged to sing in Paris, missed her train at Milan. She hired an airplane and got to Paris in good time. Another artist flew from Paris to Deauville to keep his appointment. Herminie Korner, leading lady of the Munich Theater, flew from Munich to the Augsburg Theater and return with two of her company. Joe Labero, an actor, flew from Hanover to the Hamburg Theater and dropped 60,000 dodgers over Hamburg.

While it is written that men "shall mount up on eagles' wings" and the present development of the air machine perhaps sufficiently fulfills this prediction, there are such pronounced limitations on present methods of air transportation, that something else may have to be looked for, for the complete fulfillment of the old Biblical pronouncement.

SEAWEED UTILITIES

WHILE MAN has been busy reaping and consuming the products of the surface of the earth, he has neglected an entire realm of the vegetable world.

It is estimated that there are some 15,000 varieties of what in ignorance of its life-giving qualities is termed sea "weed". Only a little attention has been paid to the vegetable growth of the waters, but that has yielded valuable results.

The idea has taken root in some astute minds that seaweed may have commercial or money-making possibilities, and with selfishness as a motive, something is being done to make them valuable to humanity.

In Japan the matter has been gone into for some time, and 600,000 Japanese now work in the seaweed industry, turning the water growths into boots, picture frames, marble flooring, electric switchboards and a substitute for cotton. The French seaweed becomes a stiffener for mattresses and a sizing for straw hats. In South Australia it works up into ropes and cord for fishing nets. In Essex, England, seaweed is used for fertilizer, and in other parts of England "laver" is eaten as a vegetable. In Ireland "tope," eaten hot, becomes a remedy for rheumatism and throat troubles. In America seaweed is employed to regulate the bowels. Now certain varieties are being transformed, with other materials, into bricks for building purposes.

According to Professor Charles E. Bessey, of the University of Nebraska, seaweeds are classified according to color, and there are many varieties—1,000 blue-green alimes, 10,000 green seaweeds, 1,500 brown seaweeds, 2,500 red seaweeds and about 200 stoneworts. Perhaps it was partly in reference to the hitherto un-

utilized fields of the sea that the Bible predicts that in the Golden Age, "I [God] will multiply the increase of the field."—Ezekiel 36:30.

CHEAP COPPER

THE PROCESS of extracting copper from ore has cost sixteen to twenty cents a pound. It required the stamping of the ore to powder, sometimes its roasting, and then the chemical treatment to separate the metal from minerals composing the ore.

A new process, the Greenwalt, claims to extract the copper directly from the ore at from seven to ten cents a pound. The method is electrolytic and the copper is practically pure.

Old processes obtain from 65% to 80% of the copper in the ore. By the new method from 77% to 87% is secured.

In ancient Hebrew times the mining and extraction of copper was described poetically: "Stone man melts for copper; he searcheth the stone of thick darkness and of the shadow of death; he hath sunk a shaft far from the wanderer; they that are forgotten of the foot are suspended [in the shaft]; away from man [in the shaft], they waver to and fro; in the flint man hath thrust his hand; he hath overturned mountains from the roots; in the rocks he hath cleft channels." (Job 28:1-11) There were copper mines in the Sinai Peninsula, and on the Red Sea shores were furnaces and the wharves whence the copper was shipped. In later times of persecution Christians were forced to work in the copper mines of that locality.

NITROGEN INDUSTRY

A GERMAN Government loan of 200,000,000 marks was the basis for the great nitrogen works at Oppau, near Ludwigshafen. The factory will have a storage capacity of 350,000 tons of ammonia fertilizer, and a daily capacity of 2,800 tons, and will employ 8,000 to 9,000 persons. The first building of the seven to be built, is completely equipped with machinery, and its magnitude may be surmised from the fact that it has 3,500 telephones and has already cost \$750,000.

RECENT CHEMICAL PLANTS

THE ACTIVITY of an industry may be indicated by the number of patents issued to inventors. Patents in chemistry never were so active before. Among many recent patents are: a process for separating nitrogen from air, one for the recovery of iodine from residues, and one for the formation of ammonia by means of the electric arc. A process is patented for the electrolytic treatment of tinned scrap, one for a new type of electric furnace, and one for the manufacture of better dry cells.

ALCOHOL IN INDUSTRY

WHEN KING Alcohol was dethroned as a beverage last July the annual use of the drug in the United States dropped from 269,000,000 to 100,000,000 gallons, the latter quantity being consumed largely in the various arts, and the difference having been drunk heretofore solely as a beverage.

It is predicted, however, that the time is not far distant when 2,500,000,000 gallons of alcohol will be annually employed in the arts and industries and for motor fuel in automobiles. As the petroleum supply dwindles and the price of gasoline advances to that of alcohol, alcohol will rapidly replace gasoline as a fuel. Even now denatured ethyl alcohol in carload lots is the cheaper. Furthermore, alcohol yields more power to the gallon than gasoline, it does not clog carbureters, it is clean to handle, and does not have a disagreeable odor.

There are scores of untouched sources of commercial alcohol. Any plant, fruit or grain which can be fermented is a possible spring for the greater stream of the drug which is yet to flow to do the work of man. Palms, corn stalks, sawdust and the cactus are among the articles which can be fermented into some kind of sugar, and the sugar into alcohol. Alcohol may be enthroned again as King—not as a beverage but as a power, in the realm where gasoline now reigns.

In olden days alcohol was not known as a separate distillate, and the liquids containing it were noteworthy, or notorious, as intoxicants. Now that the country is legally dry as Sahara, the Biblical warnings against intemperance may be out of date, but they will long serve as reminders of former days: for example, of an England or an America, made "merris" by its liquors.

AFRICA AND THE AIRPLANE

SIR GEORGE LLOYD, Governor of Bombay, is considering a seaplane service between Bombay and Karachi, to be established by New Year. An inland postal service is in hand between Bombay and the other principal cities of India.

The Belgian Government is about to develop commercial aviation on the Congo. There will be regular mail and passenger service between Kinshasa and Stanleyville. The trip will take two days, and the service will start after New Year, with twelve 300-horsepower hydroplanes. Each plane will carry 900 kilos at a speed of 115 to 120 kilometers an hour.

Central Africa missionaries want hydroplanes to take the place of a fleet of launches now running between various mission stations. At inland points landings will be arranged in the straight, smooth central streets of the native towns, which are usually 100 feet wide and cleared of grass and other obstacles.

A regular service is operated from France to Morocco, starting at Toulouse, with stops at Barcelona, Alicante, Malaga and Rabat, bringing Rabat two days' journey from Paris. Passengers and mail leave Paris by the night train and the flight to Rabat, Morocco, takes sixteen hours. A branch line runs to Oran in Algeria. An airplane service is also being arranged from London to British West Africa.

The period of human progress beginning in 1800 is predicted in the Bible as "the day [period] of his preparation"—the preparation for the Golden Age by means of every conceivable improvement that can make for the comfort and well-being of people.—Nahum 2:3.

CANADIAN CHEMISTRY

IN ALBERTA, Canada, the Government is about to establish a research department to aid in developing the natural resources of the province. It is hoped to built up large industries in coal, oil, natural gas and salt. The Dominion Government has prepared a Directory of Canadian Chemical Industries, giving a summary of the industries devoted to chemistry and their work for the past six years.

BRITISH MOTOR INDUSTRY

AS THE PRICE of gasoline rises there rises with it the zeal of inventors to devise a better fuel. Hundreds of minds are now working on this problem.

Nottingham, England, reports that an American inventor has produced a fuel which has been judged worthy of an official test. The new motor fuel is claimed to run an automobile thirty miles for ten cents.

SCIENTIFIC MANAGEMENT IN BIBLE TIMES

IN Bible times the relation between master and servant was very close, despite the fact that these servants were sometimes hundreds in number. Abraham had 318 servants born in his own house, not counting their wives and children. (Genesis 14:14) Job had 22,000 head of live stock and it must have taken many servants to look after these. (Job 42:12) Elisha was plowing with twelve yoke of oxen, also implying many servants. (1 Kings 19:19) Yet the customary salutation of an employer to his servants was "The Lord be with you", and the customary reply of the servant was, "The Lord bless thee". (Ruth 2:4) Modern methods of demands, curt refusals, violence, machine guns, etc., do not point the way to the Golden Age. Wiser counsel must prevail, and it will prevail, in due time, for the time will come when the groaning creation, now reaching blindly after better things, shall be delivered from the bondage of corruption into a glorious liberty from sin and every evil thing.—Romans 8:19-22.

HOUSEWIFERY and HYGIENE

NOTES ON INFLUENZA

THE *New York Medical Journal* publishes an interesting item concerning the causes of infection from influenza. Instead of susceptibility to influenza being particularly affected by antiseptic applications to the nose and throat, the ruling consideration is the vitality of the individual.

In the United States Navy a hundred men volunteered for exhaustive tests. These men were in the best state of health and were kept so during the period of experiment. They were subjected to every possible mode of infection. Live influenza bacilli were sprayed hourly into their noses and throats. They were fed germs with their food. They were kept in close contact in almost every conceivable way with influenza patients, sleeping with them, eating with them, breathing the same air, and vigorously trying to get the disease. In spite of all efforts, not one of this hale and hearty group of sailors contracted the "flu". This experiment is advanced as strong proof of the theory that the contracting of influenza is principally a question of strong or weakened condition of the body.

The medical publication *Hygeia* publishes notes on the experience with influenza in the common school in Stockholm, Sweden. The school had 711 pupils of whom 419 contracted the disease. So far as a careful study of the record goes, the spread of the disease among the pupils in the school was almost at the same rate as the average spread throughout the city. In consequence it is not considered worth while to close the schools because the fact that the pupils are together in the school does not produce more danger from the disease than if they were at home.

IMMUNITY TO "FLU"

ABOARD SHIP, or wherever sleeping quarters are confined, the chances of influenza infection are high. A battleship crew sleep with limited cubic space where proper ventilation is impossible, like the conditions in a crowded city tenement. Even in a hospital ward, with ten feet between bed centers, influenza spreads, but in ships where hammocks are two feet apart, says the *London Lancet*, the chances of infection are 125 times as great as where the sailors lie "head-to-foot" fashion, for infection risk varies as the cube of the distance.

Immunity depends on personal vitality. In the case of several medical men who had been immune for months,

each succumbed to the disease two days after a well defined lowering of vitality: in two cases the cause was a long journey; in another the taking of too much alcohol; in the fourth a long walk after the long confinement aboard ship.

Anything that lowers vitality may open the doors to a prompt attack of "flu". The exhaustion may come from a drug, from constipation, from indigestible food, from staying up too late, from overworking or exercising, from a fit of passion, from badly ventilated lodging, working or sleeping rooms, or from poor or under nutrition.

Immunity to influenza ranges from almost none in the under-nourished of war countries to the almost complete immunity of the athlete. It will reach 100 per cent in the perfect human beings who will be developed in the Golden Age. It will then be true, as the Bible says, "The Lord will give strength unto his people."—Psalm 29:11.

PREVENTION OF PESTILENCE

THE REGULATION and prevention of great epidemics is interestingly discussed in the *London Lancet*, the leading British medical journal. The *Lancet* is concerned over the inability of the profession to handle the influenza pestilence. It asks the question:

"Can the great epidemics of disease which from time to time sweep over the earth be prevented by human effort?"

"When the recent truly terrible epidemic of influenza—we use the words deliberately, for the deaths outnumbered immeasurably those caused by four and a half years of the greatest war in history—swept over the world, how many were saved from its attacks by individual or communal measures of precaution? The medical profession cannot claim that the course of the epidemic was seriously affected, much less stayed, by any such measures.

"In the history of epidemics, influenza took its origin in a region somewhere near the Russian border of Turkestan, spreading along the trade routes as transportation moved. The epidemic focus of influenza is somewhere on the Eastern border of Russia. It is not too much for a reconstructive medical profession to conceive the clearing up of a region, which by its inaccessibility and its neglect has every twenty-five or thirty years originated waves of disease spreading over the globe. But this evidence is restricted to one particular outbreak of the disease. The so-called Spanish Influenza of 1918-19 arose we know not where. The records do not show the same clear progress from one well-defined center to the rest of the globe. The interests at stake and the rewards of success in preventing even one single pandemic, such as that of 1889 or 1918, are on too colossal a scale for a policy of despair.

"Preventative medicine can proudly claim to have opened the eyes of modern statesmen and administrators to the overwhelming importance to the state and the people, of dealing seriously with the problems of disease prevention. Today large, costly and far-seeing measures with this object occupy a place in practical politics.

"We like to picture a world where the prevention and eradication of all disease that can be prevented or eradicated should be the aim—even the *first* aim—of national and international policy and effort; where measures having as their object the saving of millions of human lives would be thought as worthy of a great statesman's energies and of the interest of the public as Free Trade, bimetalism and the nationalization of the railways. When the smoke and noise of war have cleared away, and the nations are really at peace again, the statesmen of the world could find no higher or more stimulating aim for their energies than the cleansing of epidemic breeding grounds."

The problem of the M. D.'s is real and great, and their purpose is good, but it would be better if they forgot the "proudly" part, because "Pride goeth before destruction." (Proverbs 16:18) Evidently the cleansing of pestilence foci depends upon worldwide good government, and that cannot be expected until the coming Golden Age ushers in the Kingdom of God. Then all disease will gradually be banished, and humanity built up in vitality until it will be impossible for germs or bacteria to find a feeding ground in weakened tissue.

VOLCANOES TO BLAME?

THE MEDICAL profession has an ideal! Every conceivable source for the "flu" had been raked over, but it has required a "scientist" to blame the pestilence of 1918 on the volcanoes. There was an eruption of Mount Kloet in Java recently which wiped out some thousands of natives, and years ago Krakatoa exploded and filled the upper air with the volcanic dust that caused the brilliant sunsets of 1883. This proves that there have been great volcanic eruptions, which must be the first premise in establishing the blame for the "flu" on the volcanoes.

The "scientists" say that they do not know, and cannot be sure, and that "sufficient time has not elapsed" and probably it might be added that they never will know, but they ask respectful consideration for the idea that in some unexplainable and disconnected way the thoroughly heat-sterilized contents of the volcanoes distributed throughout the atmosphere may be, or might be, responsible for the untold suffering and grief of pestilence.

The theory is again that the poison gases let loose over "No Man's Land" were carried everywhere by the winds and caused the "flu" in Spain, Germany, England, France, South America, Africa, Asia and the United States. Of course, there were rains to wash the air clean from these poisons and keep them from being

carried worldwide. But no supposition is insignificant enough to prevent a "scientist" from building a world-reforming theory upon it. The "scientific" conclusion is that "another war would be followed by a widespread pestilence, and every effort should be made to avert wars in the future."

The truth about the black plague pestilence is that Europe was flooded with Asiatics who were infected but immune to the pneumonic plague, and that when the infection spread it found an unusually large number of persons in a low state of vitality owing to the world scarcity of food. Poison gases and volcanoes probably had nothing to do with it.

Science is a useful handmaid of society when it confines itself to facts. But the divine opinion of some of it is as when Paul speaks of "science falsely so called" (1 Timothy 6:20), and "The wisdom of this world is foolishness with God."—1 Corinthians 3:19.

FRENCH HYGIENIC RENEWAL

A CAMPAIGN for the reconstruction of the regions of France devastated by the war has been inaugurated by the Interallied Congress for Social Hygiene. This, according to the *Medical Record*, includes problems in hygiene in the war territory that, on account of the thoroughness of German "frightfulness", are novel and difficult.

Many French wells, contrary to rules of civilized warfare, have been poisoned in a variety of ways. Here the water itself must be actually disinfected by means of ozone or a process known as javelization. The inhabitants are advised to boil the water they use, and where they desire to reoccupy their properties on devastated land, are counseled to dig deep artesian wells so as to avoid the perils to health of the drinking of polluted surface water.

In many places the soil itself will have to be purified, some of it superficially and some quite deeply. Where there are shell holes, mines and other deep openings, and water has collected, the surface is transformed from good farm land into poisonous marshes. Malaria is a menace, and the land has to be thoroughly and deeply drained. Exposed surfaces are being disinfected, and insect life destroyed, which might become a menace to human health by touching infected places and communicating the infection to the people. Old latrines, dung heaps, stables and slaughter houses receive special attention, that the soil where they have been may become fit again for human beings to live on, for children to play on and for the raising of food. In some places there are subterranean passages and dugouts, which of course have become filled with water which is anything but safe for

health, and the filling in of which is one of the peculiar problems being met by the agencies started in motion by the Congress for Social Hygiene.

CAUSES OF ADENOIDS

OF LATE YEARS there has been a great prevalence of diseased tonsils and adenoid growths in children, which require removal by surgical operations that are both painful and expensive. It is right and necessary that these should be removed in order to enable the children to develop in growth and prevent diseased or weakened conditions for life. Prevention is much better than a cure however, especially since the surgical operations must quite frequently be repeated one or more times in after years.

Even years ago it was known by some people that the use of pacifiers by babies is one of the chief causes of diseased and enlarged tonsils and adenoid growths, which result from the suction.

Tonsils are a necessity to the body, especially to growing children, as they supply a fluid secretion. The tonsils are an indicator of the condition of the body. When they are diseased the body is out of condition, which results most frequently either from over eating or from not getting the right kind of foods. Too much milk is not good; for it is too rich a food, unless the child is older and gets plenty of exercise.

By removing the causes the tonsils will heal, unless there is a tenseness of the muscles of the neck leading to those parts. This trouble can be corrected by a graduate osteopath or chiropractor.

Diseased tonsils are alone sufficient cause for adenoid growths. These growths are also caused by mothers not sufficiently cleansing the baby's nostrils, thus causing a gathering of matter and an irritated condition.

Catarrh, which results from an aggravated cold when the system is out of condition, is another cause of adenoid growths. In fact anything that irritates the tonsils and those parts of the nose, such as whooping cough, long hard crying spells, etc., will cause adenoid growths and diseased tonsils.

Children who suffer with catarrhal colds should be taught how to cleanse the nasal passages conveniently and efficiently, and this is something many adults do not know. The process is extremely simple.

Into a cup of warm water, quite warm to the touch but not hot, sprinkle enough salt to give it a mildly salt taste. Then using the hand as a receptacle snuff the solution thoroughly up first one nostril and then the other until some of it runs down the throat. Expel the contents of the nose and repeat until fully cleansed. Follow by gargling the throat with the same solution.

ITALIAN BABIES DYING

ITALIAN BABIES are perishing for lack of milk. The American Free Milk and Relief for Italy has been asking for \$100,000 to provide dry milk and condensed milk for babies in Italy. Out of about 300,000 Italian babies needing help only a little over one-tenth have been properly provided for. How serious is the shortage of milk in Italy appears from the fact that during the war ninety-three per cent of the cattle were killed to feed the families of Italian soldiers. The influenza epidemic caused the death of over a million persons and left innumerable nursing babies behind, thousands of whom have died from lack of nourishment. It is reported that unless very large quantities of milk are sent to Italy, another year will see very few babies alive in that country.

SOAP BEST HEALTH-GUARD

ALL KINDS of germicides are employed by people who are zealous for health via germlessness, but according to the Philadelphia Tuberculosis Committee the best one is common soap. Soap, of course, removes dirt, but it took a "scientist" to make a culture of the external contents of unwashed and of washed hands, and to announce that by far the greater number of germs were removed with the dirt. However, says the Committee, a single splash in soapy water is not adequate, but the hands must be diligently and frequently scrubbed, effectually enough to visibly remove the soiled condition, in order to be safeguarded against tubercular infection. It is heroic treatment to "wash and be clean", but perhaps worth while, particularly if the old saw were true that "cleanliness is next to godliness."

THE DRUG VICE

ACCORDING to the New York City Health Department, observations made on 2,776 drug users, indicate that in about half the cases secret users of drugs have the care of other persons part of the time, thus increasing the danger of spread of the vice. Besides the number registered—about 5,000—there are about 90,000 other addicts in the city. It is evident that there are many secret channels through which drugs are reaching the victims. Interesting figures are published concerning the birthplace of drug users registered including the United States with 2,621, and Italy second with nearly as many. The way in which the users became involved in the meshes of the drug habit was told by a large number. 1,223 fell through evil associations, 280 through illness, 128 to relieve pain, 72 through insomnia, 7 alcoholic drink, 50 opium smoking, 12 family trouble, 3 down and out, and 30 for the pleasure of the thing.

MORE HONEY RECIPES

ENTIRELY disregarding the slight medicinal value of honey, it is a wholesome, useful foodstuff worthy of extended use. It is agreeable and introduces a pleasing variety and makes the diet more appetizing and consequently more wholesome. The cheapest form in which to buy honey is extract, in bottles. Honey makes a large number of good recipes, some of which are as follows:

Honey Bread

2 cups honey; 4 cups rye flour; teaspoon soda; 4 teaspoons aniseed; 2 teaspoons ginger; 4 teaspoons powdered cardamom seed; 2 egg yolks; $\frac{1}{4}$ cup brown sugar; sift flour with spices and soda; add other ingredients; put dough in shallow buttered pans to an inch depth and bake in hot oven.

Honey Sponge Cake

$\frac{1}{2}$ cup sugar; $\frac{1}{2}$ cup honey; 4 eggs; 1 cup sifted flour; mix sugar and honey; boil until syrup spins a thread when dropped from spoon; beat yolks of eggs until light; pour syrup over yolks of eggs; beat mixture until cold; add flour; cut and fold beaten whites of eggs into mixture; bake 40 or 50 minutes in pan lined with buttered paper, in slow oven.

Honey Pound Cake

1 cup sugar; $\frac{1}{2}$ cup honey; 1 cup butter; 4 eggs; 2 cups pastry flour; $\frac{1}{2}$ teaspoon powdered cardamom seed; $\frac{1}{2}$ teaspoon soda; $\frac{1}{2}$ teaspoon plain or orange-flower water; rub together butter and sugar; add honey; add yolks of eggs well beaten; add whites of eggs, beaten to stiff froth; then plain or orange-flower water; add gradually flour sifted with soda and cardamom seed; beat mixture 10 minutes; put dough into warm tin with high sides; bake in slow oven one hour.

Honey Drop Cakes

$\frac{1}{2}$ cup honey; $\frac{1}{2}$ cup butter; $\frac{1}{2}$ teaspoon cinnamon; $\frac{1}{2}$ teaspoon cloves; 1 egg; $1\frac{1}{2}$ to 2 cups flour; $\frac{1}{2}$ teaspoon soda; 2 tablespoons water; 1 cup raisins, cut in small pieces; heat honey and butter until butter melts; while the mixture is warm add the spices; when cold add part of flour, egg well beaten, soda dissolved in water, and raisins; add enough more flour to make a dough that will hold its shape; drop by spoonfuls on a buttered tin; bake in a moderate oven.

Honey Bran Cookies

2 tablespoons butter; $\frac{1}{2}$ cup honey; 2 eggs; $\frac{1}{2}$ to $\frac{3}{4}$ teaspoon soda; $\frac{1}{2}$ cup flour; 1 cup bran; $\frac{1}{2}$ teaspoon powdered aniseed; rub together butter and honey; add eggs unbroken; beat mixture thoroughly; sift together flour, soda, aniseed; combine all the ingredients; drop from teaspoon on buttered tin; bake in moderate oven.

Honey Pudding

$\frac{1}{2}$ cup honey; 6 ounces bread crumbs; $\frac{1}{2}$ cup milk; rind of half lemon; $\frac{1}{2}$ teaspoon ginger; 2 egg yolks; 2 tablespoons butter; 2 egg whites; mix honey and bread crumbs; add milk, seasonings, yolks of eggs; beat mixture thoroughly; add butter and whites of eggs well beaten; steam about 2 hours in pudding mold which is not more than three-quarters full.

Honey Charlotte Russe

1 quart cream; 6 lady fingers; $\frac{1}{2}$ cup delicately flavored honey; chill honey by placing dish containing it in pan of ice water; whip cream; add it to honey, mixing well; line a dish with lady fingers; fill with honey and cream; serve very cold.

Fruit and Honey Jelly

A good jelly may be made from winter apples and honey, using a cupful of honey to each cupful of apple juice and proceeding as in ordinary jelly-making; honey can be used with other fruits suitable for jelly; the more delicately flavored honeys are best for this purpose. alfalfa honey giving an especially spicy taste.

Honey Fudge

2 cups sugar; $\frac{1}{2}$ cup honey; $\frac{1}{2}$ cup water; 2 eggs; whites; 1 teaspoon vanilla extract; boil together sugar, honey and water until syrup spins a thread when dropped from a spoon (about 250 degrees F.); pour syrup over well-beaten whites of eggs, beating continuously until mixture crystallizes; pour into buttered pans; add flavoring after mixture has cooled a little. Drop in small pieces on buttered or paraffined paper. Vanilla may be omitted.

Honey Caramels

2 cups granulated sugar; $\frac{1}{2}$ cup cream or milk; $\frac{1}{2}$ cup honey; $\frac{1}{2}$ cup butter; mix ingredients; heat and stir until sugar is dissolved; cook without stirring until a firm ball can be formed from a little of mixture dropped into cold water; beat mixture until it crystallizes; pour into buttered pans; cut into squares; the addition of pecan nuts improves these caramels.

Honey Popcorn Balls

Honey can be heated up to about 245 degrees Fahrenheit without being greatly changed in color or flavor; if it is heated carefully most of the water is expelled; the honey then becomes hard on cooling and can be used for making popcorn balls; To make them, dip the popped corn into the hot honey, shape into balls and cool. Honey popcorn balls absorb moisture when standing in the air. They must therefore be either kept very closely covered or reheated and dried before being used.

RELIGION *and* PHILOSOPHY**MILLIONS NOW LIVING WILL NEVER DIE**

"Verily, verily, I say unto you, If a man keep my saying, he shall never die."—John 8:51.

THE INQUIRING mind naturally asks: Why should man see death at all? Is it not possible for him to live everlastingly? Not understanding why death has ravaged the human race and what remedy Jehovah has provided against it, the many have concluded that death has always prevailed among men and men will always die. An understanding of the Scriptures clarifies the subject entirely.

The Lord created but one man—Adam. All the works of Jehovah are perfect. (Deuteronomy 32:4) Man was created in the image and likeness of God and Jehovah gave him dominion over the things of earth. (Genesis 1:26-28) The first man, Adam, being perfect in organization and having a perfect wife, Eve, and the right to propagate his race and fill the earth, not only had life and liberty and happiness himself but could have maintained the same for all of his offspring had he been obedient to Jehovah. God had informed him that a violation of his law would result in the loss of everything he had. The Genesis account is that God told Adam that death would result from disobedience of the divine command. Man did violate God's law and was sentenced to die, the formal part of the judgment reading: "For dust thou art and unto dust thou shalt return." To enforce this judgment of death God separated Adam from his perfect home, Eden, deprived him of the perfect food which grew there, caused him to feed upon the poisonous elements of the earth, and thus the death sentence was executed.

The perfect man Adam begat no children, but while undergoing the sentence of death he exercised his procreative powers and there were born of Adam and Eve children. They inherited the imperfections resulting to their parents by reason of the death sentence. "As by the disobedience of one man [Adam] sin entered into the world, and death by sin, so death has passed upon all men, for that all have sinned." (Romans 5:12) Thus the whole race came under legal condemnation, and thus understanding God's arrangement we can appreciate the words of the Psalmist: "Behold, I was shapen in iniquity, and in sin did my mother conceive me."—Psalm 51:5.

This judgment of death being justly inflicted by Jehovah for a violation of his law could never be reversed by him, and unless he made some provision for the relief

of mankind, the whole race ultimately would go into death and there would be no resurrection—no hope for them in the future. God promised, however, that he would redeem man from death. Through the prophet he said: "I will ransom them from the power of the grave; I will redeem them from death."—Hosea 13:14.

Since a perfect man had sinned and brought death upon the race, nothing but the life of a perfect man could satisfy that judgment; and since all of the human race were imperfect, therefore "none of them could by any means redeem his brother, nor give to God a ransom for him."—Psalm 49:7.

Jesus in his prehuman existence was the Logos, and in order to carry out the Father's will his life was transferred from spirit to human. "God sending his own Son in the likeness of sinful flesh, and for sin, condemned sin in the flesh." (Romans 8:3) He was rich in heavenly glory, wisdom and power, and though he was rich "yet for your sakes he became poor, that ye through his poverty might be rich." (2 Corinthians 8:9) The human race had lost the right to life, and all were going into death. When Jesus came he said: "I am come that they might have life, and that they might have it more abundantly." (John 10:10) "The Son of man came not to be ministered unto, but to minister, and to give his life a ransom for many." (Matthew 20:28 "We see Jesus, who was made a little lower than the angels for the suffering of death, crowned with glory and honor, that he by the grace of God should taste death for every man."—Hebrews 2:9.

The death and resurrection of Jesus provided a ransom or purchase price for the entire human race. Then in God's due time every one of Adam's race, the living and the dead, must know this fact and have a chance to accept the benefits of it. "For this is good and acceptable in the sight of God our Saviour, who will have all men to be saved [from the condemnation of death by the ransom sacrifice], and to come unto the knowledge of the truth. For there is one God, and one Mediator between God and men, the man Christ Jesus; who gave himself a ransom for all, to be testified in due time." (1 Timothy 2:3-6) This ransom price for the purchase of mankind from death was provided nearly 1,800 years ago. But men have continued to die for the reason it was not God's due time to begin to offer them life. "God at the first did visit the Gentiles to take out of them a people for his name. . . . And after this I will return, and build again the tabernacle of David, which

is fallen down; and I will build again the ruins thereof, and I will set it up: that the residue of men might seek after the Lord, and all the nations upon whom my name is called, saith the Lord, who doeth all these things."—Acts 15: 14-17.

Jehovah made a promise to faithful Abraham, saying, "In thy seed shall all the families of the earth be blessed." The seed of Abraham is the Christ, Jesus the Head and the church his body. (Galatians 3: 16, 27, 29; Colossians 1: 18) From the time of the death and resurrection of Jesus until his second coming is the time in which God has visited the nations of the earth and had the Gospel preached as a witness, according to Jesus' prophetic statement, in order that those who heard and made a full consecration to do Jehovah's will and remain obedient unto their covenant might thus be gathered out from among men, and with the great King, Christ Jesus, constitute the promised seed of Abraham, through which the blessings will come to mankind under Messiah's reign. There will not be a great number of these. Jesus himself is authority for saying that it will be just a little flock, a comparatively small number. (Luke 12: 32) Only those who, during the Gospel age and before the setting up of his kingdom, make a full consecration and prove themselves overcomers have the promise of immortality, the promise of joint heirship with Christ Jesus in his kingdom—Revelation 2: 10; 3: 21.

For many years good, honest men and women have asked, What hope is there for me of getting life everlasting? The church systems, through their creeds, have answered this question in this wise: Catholicism said: Only a very few die and go to heaven. The majority of Catholics at death must spend a long period in purgatory, and there is a chance of these being afterwards transferred from purgatory to heaven, and all the others must spend their eternity in fire and brimstone, being tormented forever. The answer of the creeds of the various Protestant systems is really worse. According to their theory no purgatory even is provided. There is no hope of life everlasting in happiness according to their theory except for those who become members of the church and die and go to heaven. All others must spend eternity being tormented by fireproof devils. Is there any wonder that reasonable, sensible men have rejected the churches, rejected the Bible, and even turned against God? Forced to believe that this was the only provision made, they have disregarded all Biblical teaching. This has been a great mistake.

Entering the Twentieth Century great truths are being unfolded to mankind. The progress in invention, science and education in general is more marked in this

century than ever before, and with it has come a greater enlightenment of people concerning the Bible, because the time is due. And now students of the Scriptures are finding out that the Bible means exactly what it says; namely, that Jehovah provided through the death and resurrection of Jesus a purchase price for all men, and in God's due time a knowledge of this fact must be brought to all, "Because he hath appointed a day in the which he will judge the world in righteousness by that man [Christ Jesus] whom he hath ordained; whereof he hath given assurance unto all men, in that he hath raised him from the dead."—Acts 17: 31.

When are these precious promises due to be fulfilled? Referring to the article in our last issue concerning the end of the world, we quote again the words of the Master: "And the nations were angry, and thy wrath is come, and the time of the dead that they should be judged, and that thou shouldest give reward unto thy servants the prophets, and to the saints, and to them that fear thy name." (Revelation 11: 18) Clearly, then, many of these great truths are now due to be understood, because the old order is passing away and the new order is coming in. Jesus taught, and every one of his disciples emphasized, his second coming and the establishment of his kingdom. One of them, referring to that glorious time, wrote: "Times of refreshing shall come from the face of the Lord [Jehovah], and he will send Jesus Christ, which before was preached unto you, whom the heavens must retain until the times of restitution of all things, which God hath spoken by the mouth of all his holy prophets since the world began." (Acts 3: 19-21) Therefore the time must come when there shall be offered to mankind the blessings of being restored to the conditions that Adam enjoyed before he sinned; namely, perfection of body and of mind, and perfection of conditions surrounding him, insuring his peace and lasting happiness.

Are we near the fulfillment of that prophecy? Note again the answer of Jesus concerning the end of the world: "For then shall there be great tribulation such as was not since the beginning of the world to this time, no, nor ever shall be. And except those days should be shortened, there should be no flesh saved: but for the elect's sake those days shall be shortened."—Matthew 24: 21, 22.

This saying of Jesus is subject to only one interpretation; namely, that the old order will completely pass away by the greatest time of trouble the world has ever known; that there will never be another such time of trouble; that it will be so great that all the human race would perish from the earth unless the Lord would cause it to be shortened, but for his elect's sake, namely,

those whom he has elected or taken out of the world—the Lord Jesus and the true Christians—for the sake of such those days will be shortened and will therefore result in many human beings passing through this time of trouble without dying. Why should the Lord permit any to escape death in that time of trouble unless he expected to do them some good? Why say for the elect's sake that he is going to shorten the time, and thus save many from death? There can be but one conclusion. The elect constitute the seed of Abraham according to the promise, through which blessing shall be ministered to the remainder of mankind. Therefore God would spare some to pass through this time of trouble that the elect might begin the reconstruction work of the human family, first with those who remained on earth.

Again referring to the great time of trouble that is now afflicting mankind, the prophet of the Lord wrote: "And it shall come to pass that in all the land, saith the Lord, two parts therein shall be cut off and die; but the third shall be left therein. And I will bring the third part through the fire [the fiery trouble], and will refine them as silver is refined, and will try them as gold is tried: they shall call on my name, and I will hear them: I will say, It is my people: and they shall say, The Lord is my God." (Zechariah 13:8, 9) Why bring a part of the people through the fiery trouble unless it is God's purpose to give them a chance to accept the blessings that shall be ministered through Christ? Clearly this is the purpose; for he says these will hear him and will become his people and be obedient to him.

Again, the prophet of the Lord, speaking concerning those who love righteousness in this time, said: "Blessed is he that considereth the poor: the Lord will deliver him in time of trouble. The Lord will preserve him and keep him alive, and he shall be blessed upon the earth [not in heaven]: and thou wilt not deliver him unto the will of his enemies." (Psalm 41:1, 2) This is a wonderful incentive for men in this hour of great disturbance and distress to be considerate of the poor and afflicted, to deal righteously with their neighbors, to live in peace and honor the Lord. Such are the ones that are promised deliverance in the time of trouble. Those who seek meekness and righteousness and avoid turmoils are specially promised protection in the time of trouble. —Zephaniah 2:2, 3.

Referring again to the same great stress upon the world and what shall follow thereafter, the prophet of Jehovah said: "Wait ye upon me, saith the Lord, until the day that I rise up to the prey; for my determination is to gather the nations, that I may assemble the kingdoms, to pour upon them mine indignation, even all my fierce anger: for all the earth shall be devoured with the

fire of my jealousy. For then will I turn to the people a pure message, that they may all call upon the name of the Lord, to serve him with one consent." (Zephaniah 3:8, 9) Why turn to the people a pure message after this time of trouble is over unless God intends that the people should profit by it?

Many children have been left fatherless in this time of war and revolution, and with comfort the Lord's prophet says: "Leave thy fatherless children, I will preserve them alive; and let thy widows trust in me." —Jeremiah 49:11.

After those who pass through the time of trouble have been ministered unto and given the opportunities of blessings by the Messiah, then those who have slept in their graves in death shall be awakened and given a knowledge of the truth. That will be their "due time" to hear the message concerning the ransom. "Marvel not at this, for the hour is coming in which all in their graves shall hear his [Christ Jesus'] voice and shall come forth; they that have done good unto a resurrection of life; and they that have done evil [and all who have gone into death have done evil] unto a resurrection [restanding to life] by judgments." (John 5:28, 29, Revised Version) "There shall be a resurrection of the dead, both of the just and of the unjust." (Acts 24:15) "Christ is risen from the dead and become the firstfruits of them that slept. For since by man [Adam] came death, so by man [Christ Jesus] came also the resurrection of the dead. For as all in Adam die, even so all in Christ shall be made alive. But every man in his own order." (1 Corinthians 15:20-23) The apostle then proceeds to show that the Messiah "must reign until he hath put all enemies under his feet. The last enemy that shall be destroyed is death."

It will be during the reign of the glorious Messiah that the following text will be fully realized: "If a man keep my saying, he shall never see death." It cannot be said that man, in the true sense, lives until he has the legal right to live, and the legal right to live will come to him only when it is offered as a gracious gift through Christ Jesus, as the Apostle stipulates. (Romans 6:23; 5:18, 19) Jesus declared: "And whosoever liveth and believeth in me shall never die." (John 11:26) This Scripture must have a fulfillment, and the time for the beginning of its fulfillment is the beginning of restitution times, which commence with the reign of the Messiah. The old order being dead and passing away, and the new coming in, there are millions of persons on this earth now who will pass through that trouble and who, obeying the Lord's righteous rule, shall never die.

The prophet Job has given us a beautiful picture of this arrangement for the restoration of mankind. He

describes a man who is aged and sick; and there is brought to him a knowledge of the great ransom. He believes and accepts the Lord's teaching and obeys the righteous rule and is restored to his youth, and his flesh becomes fresher than that of a child. Mark this beautiful Scripture: "He keepeth back his soul from the pit, and his life from perishing by the sword. He [man] is chastened also with pain upon his bed, and the multitude of his bones with strong pain: so that his life abhorreth bread and his soul dainty meat. His flesh is consumed away that it cannot be seen; and his bones that were not seen stick out. Yea, his soul draweth near unto the grave, and his life to the destroyers. If there be a messenger with him [one to deliver to him the message of salvation through the ransom sacrifice], an interpreter [one who interprets to him and explains the Scriptures], one among a thousand to show unto man his [the Lord's] uprightness: then he [the Lord] is gracious unto him [man], and saith, Deliver him from going down to the pit: I [says the man] have found a ransom [a purchaser]. His flesh shall become fresher than a child's: he shall return to the days of his youth. He shall pray unto God and he will be favorable unto him: he shall see his face with joy: for he will render unto man his righteousness."—Job 33: 18-27.

St. John, the follower of the Lord Jesus, was convicted of the alleged crime of sedition and banished to the Isle of Patmos. While he was there as a convict in

a rock quarry, the Lord visited him and gave him a wonderful mental vision of the blessings to come. St. John saw the incoming of the Golden Age, and sublimely described it thus: "And I saw a new heaven [invisible ruling power of the Christ] and a new earth [new organized society on earth]: for the first heaven and the first earth were passed away [the old order of things perished]: and there was no more sea [no more radical, anarchistic element]. And I John saw the holy city [symbolic of Messiah's kingdom], the new Jerusalem, coming down from God out of heaven, prepared as a bride adorned for her husband [thus describing the righteous kingdom of the Lord, the Messiah taking possession of the things of earth]. And I heard a great voice out of heaven saying, Behold the tabernacle [dwelling place] of God is with men [on earth, not in heaven], and he will dwell with them, and they shall be his people, and God himself shall be with them, and be their God. And God shall wipe away all tears from their eyes: and there shall be no more death, neither sorrow, nor crying, neither shall there be any more pain: for the former things have passed away. And he that sat upon the throne said, Behold, I make all things new."—Revelation 21: 1-5.

In this glorious reign of Christ the great enemy, of death, will be destroyed. When there is no more death to ravage humankind the peoples of earth will live in joy, in happiness, in peace forever.

Wait Thou On God

O zealous friend of missions and men!
Your questioning lines reveal
A Martha's care for the Master's cause
Not needful for you to feel.
Your verse declares that Heathendom walls,
And eagerly "pleads for light":
While Christian prayer and denials fails
To rescue their souls from blight.
You say, "They cry on misery's brink
For succor within your power;
Yet twenty-nine hundred heathen sink
Into Christless graves each hour."
Are you more wise than the Father, who gave
To justice his cherished Son?
Or has the Lord of a conquered grave
Abandoned His work undone?
Doth God depend on fallible men
To publish "The Only Name"?
And, if they fail, can His Love condemn
The helpless to endless flame?
Hath He, who claims all silver and gold,
Ordained that my scanty store
Must win a soul for the upper fold
Or sink it forevermore?
Hath He, before whose radiant face
The heavens and earth shall flee,
Consigned the fate of a blood-bought race
To mortals like you and me?
Tell us, O Christ, who suffered such loss,
Have billions of untaught slaves
Been wrecked in sight of thy blood-stained cross
And perished in hopeless graves?
Creed answers—Yes! but reason cries—No!
And reason and truth agree:
No jot can fail of that Word, I know,
"I will draw all men unto Me!"
When all are drawn by the wooings of love,
And knowledge and duty blend,
Then only they who rebellious prove
Will merit a traitor's end.

God hasteth not: the centuries sweep
All obstacles from His path.
His gracious Plan worketh wide and deep,
While slow is His righteous wrath.
His glory yet shall cover the earth
As the waters o'erspread the sea:
Each soul shall learn of the Saviour's worth
And the blood of Atonement free.
"Good will to men!"—Blest echoes that thrill
His "first fruits" with rapture grand—
"Shall be to all," when on Zion's hill
The "Bridegroom" and "Bride" shall stand.
God works by means, or worketh alone,
As serveth His purpose best:
By infinite hands makes His power known,
Or showeth His arm undressed.
O brother mine! no longer repine,
Nor question God's Love and might:
He sips the cup of a joy divine
Who readeth the lesson right.

—George M. Bills.

Lay Down Your Rails

Lay down your rails, ye nations, near and far,
Yoke your full trains to steam's triumphant car,
Link town to town, unite in iron bands
The long-straggled and oft-embattled lands,
Pearls, mild-eyed seraph; knowledge, light divine,
Shall send their messengers by every line,
Men joined in amity shall wonder long
That hate had power to lend their hearts astray,
And made it virtuous and sublime to slay.
How grandly now these wonders of our day
Are making preparation for Christ's royal way,
And with what jealous hope our souls
To watch the ball of progress as it rolls,
Knowing that all as yet complete or begun
Is but the dawning that precedes the sun.

J. G. Whittier.

TRAVEL and MISCELLANY

THE MODERN FAIRY LAND

FAIRYLAND is a country inhabited by little children and fairies; but most of us left it some years ago. It takes a poet to show us again the fairyland we live in. It seems like some dream to look from the editorial offices of THE GOLDEN AGE across shining waters to the wonderful sky line of New York, changing hourly with a newness of tint, of shadow and light, with tier on tier of stars by night, and sometimes resplendent with the glory of the setting sun—never the same, and always inviting one to fairyland.

It was the poetical Lord Dunsay who recently spoke in New York, on "The Land of My Dreams" and gave the poet's view of the city:

"The first impression your city made upon me was of its symmetry and scientific orderliness. I saw the great buildings with their windows in regular rows, and I thought they were completely under the dominance of logic, and could not enter into the realm of fabrics. But at sunset time on the first evening I looked on the Woolworth Tower, and it was as if twilight had hidden the base of a great mountain, and only the summit was revealed with its incredible precipices lifting their inscrutable beacons."

Marked appreciation of the beautiful is not a gift given in great measure to all, for life is too hard, and the struggle for bread takes the energy, and leaves little for appreciation of the wonders of our beautiful world. But the time of the Golden Age is at hand, when it will be given to all to open wide their eyes and see the tender beauty and the glorious majesty of creation. Man will have the opportunity to become godlike—to do as the prophet Job suggests, "Deck thyself now with majesty and excellency, and array thyself with glory and beauty."—Job 10: 10.

TRAVELERS' RISKS

AN EXPERIMENT by some boys yielded results of value to any traveler by automobile. They tried to see how close they could let a train get to them before they got off the track but they stood on the other track. It was practically impossible to estimate the time, for in nearly every instance the train would have struck them. Few if any adults have any conception of the speed with which a fast-approaching train covers the ground. At sixty miles an hour it goes eighty-eight feet a second, and is upon a person on the track before he can get out of the way.

Many of the automobile accidents at crossings occur at places which are well protected with bells or other signals, or are open to the view of the autoist. It is not the driver's indifference to danger, his determination to get by first, his slowness in working the mechanism nor his excitement and confusion, but his inability to estimate the speed of the oncoming train that brings disaster. The train is usually upon him in a shorter time than he thinks it can be.

The higher in the scale of perfection a man is the more balanced his faculties, and among other things the greater the check that prudence puts upon ambition and haste. In the age which will soon open there will be plenty of time for men to learn thoroughly things they now neglect, for the new age will bring to man a constantly lengthening lifetime, until at last life's vista—in conditions contributing to perfect enjoyment—will stretch out without end. Who would willingly die, when so great an opportunity is before him?

MORE ACCIDENTS

A CONNECTICUT farmer recently yawned, broke his jaw, and went to the hospital. Connecticut seems to be a dangerous State, for another man there was trying to open a fruit jar for his wife, and broke his wrist. Still another was grinding meat for a meat pie, when the handle of the grinder flew off and fractured his knee cap.

An accident may happen anywhere. A pin prick with the resultant septic poisoning is common. Others that have often happened are, the falling of plaster from the ceiling; the dropping of an inkwell or a pair of shears from the eleventh story of a building. Falls in bath tubs are quite ordinary accidents.

In one instance a man was lying on a couch in his home; the rising wind blew the curtain against the gas jet, which set fire to the curtain and then to the man's clothes.

No person can claim to be immune, or can get into a place where he is immune from exposure to accidental injury.

In New York an overhead trolley wire broke, fell into a passing automobile and severely burned and shocked four men.

Some workmen were stirring boiling tar on a paving job. An automobile with two occupants approached. A bumble bee stung the driver. The machine hit the kettle of tar, tipped it over, scattered the tar, and badly burned the workmen.

GOLDEN AGE CALENDAR

NOVEMBER 26 TO DECEMBER 9

YEAR: 1919 A. D.; 6048 since Creation; 7427-8 Byzantine; 5680 Jewish; 2672 of Rome; 3095 Greek Olympiad era; 2579 Japanese; 1338 Mohammedan.

STARS: *Morning*, Venus, Mars, Jupiter, Saturn; *Evening*, Mercury.

Nov. 26: Sun rises 6:59 a. m. sets 4:35 p. m.; Moon rises 8:08 p. m. sets 8:08 a. m.; Twilight begins 5:18 a. m., ends 6:14 p. m.; High tide 9:44 a. m., 10:20 p. m. (New York); St. John Chrisostome Day, Greece.

Nov. 27: Thanksgiving Day, U. S., Porto Rico; 1918, American army in Germany; Practically all German soldiers being discharged; Over 1,500,000 prisoners released by Germans; Constantinople occupied by British; Students' Army Training Corps at colleges demobilized.

Nov. 28: 1918, Belgium clear of German troops; Mooney's sentence commuted to life imprisonment.

Nov. 29: 1918, British army reaches German frontier; U. S. Peace Conference representatives to be Wilson, Lansing, White, House and Bliss.

Nov. 30: St. Andrew's Day, Queensland, Victoria, New Zealand, Manila; 1918, Russian fleet surrenders to Allies; Republic of Lithuania proclaimed; Labor votes against any wage reduction; Breweries closed by Presidential decree.

Dec. 1: Flag Day, Portugal.

Dec. 2: King's Coronation Day, Siam; 1918, King Nicholas of Montenegro deposed.

Dec. 3: Arbor Day, Georgia; 1918, Garfield resigns as Fuel Administrator; Sugar restrictions removed.

Dec. 4: Shangan Day, Rhodesia; Presentation Blessed Virgin Mary Day, Bulgaria, Rumania, Serbia; 1918, Wilson sails for the Peace Conference; Re-construction Congress of 4,000 men at Atlantic City; Railway executives urge return of roads to private ownership.

Dec. 5: Birth of Prophet Day, Turkey; 1918, First snow in New York; Turkish fleet surrenders to Allies; Food riots in Cologne.

Dec. 6: 1918, Archbishop of Canterbury appeals to Christians to support the League of Nations; Bolsheviks fighting in Berlin; Pope exhorts for "guidance by Providence of the Peace Conference."

Dec. 7: Birthday of Confucius, China; St. Ambrose Day, Milan; Death of Macco Day, Cuba.

Dec. 8: Immaculate Conception Day, Argentina, Austria, Hungary, Bolivia, Brazil, Quebec, Chili, Colombia, Costa Rica, Dominican Republic, Ecuador, Germany, Guatemala, Honduras, Italy, Panama, Paraguay, Philippines, Peru, Salvador, Spain, Uruguay, Venezuela.

The Golden Age

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HOPE AND CONVICTION



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No. 6

LABOR AND ECONOMICS

Another Labor Conference

THE October labor conference went to pieces because three interests, labor, capital and the public, met together as interests, and from the first they each seemed to conclude that the most important mission of each party was to hang together, no matter what happened to the conference as a whole. We all see now that this was not the right way to go about it. There were some mistakes, too, in the personnel. It inflamed the situation to have Elbert H. Gary among the representatives of the public, while the steel strike was in full swing, and the larger mass of unorganized labor, including the professions, was not represented at all.

Now the President has issued a call for another conference whose mission it will be, not to deal directly with any condition which now exists, but to search out the underlying causes, and propose a remedy that will avoid such deplorable conditions as those which have recently confronted the country.

The object of the conference is declared to be to determine some plan by which "our industries may be conducted with such regard for justice and fair dealing that the workman will feel himself induced to put forth his best efforts, that the employer will have an encouraging profit, and that the public will not suffer at the hands of either class."

The new conferees, of whom there are seven, include ten government officials, such as cabinet officers, governors and other public officials, two lawyers, two college presidents, a railroad official, one merchant and one fisher. It assembled in Washington, December first. It is expected to act in an advisory

capacity, as to legislation suitable to meet the present industrial situation.

The American Federation of Labor, apparently impressed with the thought that labor, organized or unorganized, is wholly unrepresented on the new board, has issued a call for a general conference at Washington, on December thirteenth, stating that labor is now confronted with dangers so grave as to affect the very foundation of its structure.

British Labor Policy

THE British Government has announced a very liberal labor policy. Among other things it proposes the state purchase of mines, the social amelioration of the mining areas, admission of the miners to councils for the reorganization and economical management of the mines, and a free career to mining talent.

It also proposes an inquiry and propaganda to promote increased output, the development and control of electric and water power supply, a national maximum forty-eight hour week, a living wage for all workers, workers to have a voice in working conditions, workers to have a financial interest in their work, provision to be made for workers in periods of unemployment, the workers' homes to be made healthful and their transport expeditious.

Lloyd George, the British Premier, in announcing the British labor policy, made an utterance that is remarkable for its breadth of view. He said:

"Millions of gallant young men have fought for the new world. Hundreds of thousands died to establish it. If we fail to honor the promise given to them, we dishonor ourselves."

"What does a new world mean? What was the old world like? It was a world where toil for myriads of honest workers, men and women, purchased nothing better than squalor, penury, anxiety, and wretchedness—a world scarred by alums and disgraced by sweating, where unemployment through the vicissitudes of industry brought despair to multitudes of humble homes; a world where, side by side with want, there was waste of the inexhaustible riches of the earth, partly through ignorance and want of forethought, partly through entrenched selfishness.

"If we renew the lease of that world we shall betray the heroic dead. We shall be guilty of the basest perfidy that ever blackened a people's fame. Nay, we shall store up retribution for ourselves and for our children. The old world must and will come to an end. No effort can shore it up much longer. If there be any who feel inclined to maintain it, let them beware lest it fall upon them and overwhelm them and their households in ruin.

"It should be the sublime duty of all, without thought of partisanship, to help in building up the new world, where labor shall have its just reward and indolence alone shall suffer want."

American Labor Ideals

AMERICA has lagged behind some countries in progressive labor legislation; yet a great deal of constructive work has been done, and plans are being tried out which give promise of splendid results, if they can be put into general operation. We mention a few instances which have come to our notice.

The Clark Equipment Company, Buchanan, Mich., has made of its grounds a high-class park. A complete greenhouse equipment, band and band stand, basketball, football and baseball teams and grounds, hospital for employes and families, coöperative store, and shop committees of employes for keeping in touch with the plant management, are features which tend to the promotion of tranquility of mind among the employes. The employes of the Clark Company are encouraged to become stockholders in the company, and when they do so receive special dividends upon their stock, in addition to the regular dividends paid to other share-holders. The Clark company builds and sells homes to its employes at cost of construction.

The Lycoming Foundry and Machine Company, Williamsport, Pa., also has various teams for athletic contests, an orchestra, a sick benefit association, a newspaper, life insurance for all employes, badges for long and continuous service, and a plan of building and selling homes to its employes similar to that used by the

Clark company, and proved equally successful.

The International Harvester Company, Chicago, has tried out a plan of having a House, composed of employes elected one from each department; a Senate, composed of the foremen; and a cabinet and executive, composed of the officers, after the plan of government of the United States. The House and Senate meet weekly, on company time, to discuss working conditions, safety, sanitation, wages, hours and piece work. Any changes must be approved by all three bodies.

The constituency of the House members is so arranged as to make sure that each voter is in personal contact with his representative. In small factories there is one representative to every twenty-five or thirty employes; in large factories one to every 200 or 300 employes. The effort is made to keep the House from becoming oversized and unwieldy, but the men have the utmost freedom in choosing their representatives, as otherwise the company has no way to learn the real opinions of its men.

Grievances in the plant are settled first between the employe and the foreman; or, that failing, between the employe, the foreman and the employe's representative in the House; or, third, between the representative and the superintendent of the plant; or, fourth, in the House and the Senate; or, fifth, by the president of the company. It is found advantageous to employ an executive whose business it is to see that there is no friction at any point in this industrial machinery, which in actual test has been found to work splendidly.

Under this arrangement, the hours of labor have been reduced from fifty-three hours per week to forty-four hours per week, without decrease in production, twelve hour shifts of certain employes have been eliminated, and piece-work rates have been rectified where it was shown that they were too high or too low in competition with other workmen engaged in similar operations. Standards of production, quality and cost, have been fixed for each department and wage dividends, on a fifty-fifty basis, have been paid to the men and the company for increases in production above the standard production. In some cases these wage dividends have run as high as seventeen per cent, paid every other week in cash.

In some factories, production has been speeded up by an arrangement under which eight

ten men working together in a unit compete in production with other similar groups. This is called the group-production system. Bonuses and prizes constitute special rewards for the workers in these groups.

Another method which has been tried satisfactorily is the setting aside of a definite percentage of the net earnings of the company to be divided among the employees in the form of wages. This resulted, in one case, in an increase of fifty per cent in wages to the men.

Fears of Capitalists

MANY of the capitalists of the country seem to have a well-defined fear that no matter what concessions they make to labor, or what effort to ameliorate the workers' social and industrial relations, they will make no progress toward solving the problem of labor's menacing attitude, and therefore they are talking about plans for resorting to force.

The Merchants' Association, New York, advocates that employees of public utility companies shall be enlisted like an army, so that employees would contract to work for a certain period, during which they could not legally quit or be discharged except as provided for. This looks like inviting a lion to accept a halter made of cotton twine.

Frank A. Vanderlip, former president of one of New York's greatest banks, is of the opinion that the nation can not permit the creation and growth of large labor combines which, if left unchecked, "would be in a position to threaten the foundations of American social and economic life". We have to "permit" many things.

General Miles, now eighty-three years of age, does not like the look of the way things are going. In an address at Shawmut Congregational Church, Boston, November eleventh, after remarking that in China the laborers work seventeen hours for five cents worth of rice, and in Japan earn but fifteen cents a day, with eighteen cents a day in the factories of Tientsin and twenty cents as a day's wage in Russia, he declared that if the state does not take suitable steps to curb labor agitators, he is in favor of resorting to mob violence.

Other capitalists, studying the question, and noting that limitations have been put upon combines of capital, propose the limitation of labor combines, but a thing which they fail to mention in this connection is that the laws

accomplished little in preventing the combines of capital, which is combined now in as great strength as ever before in history.

Still other capitalists acknowledge that we do have large corporations, and declare frankly their belief that the countries where the development of large corporations has gone furthest are those countries where the people enjoy the highest wages and the best conditions of life. They even go further and declare that, as a rule, the smaller the business is, the more unsatisfactory the wages and working conditions.

Labor Extremists

IT GOES without saying that labor has in its camp many men who are very foolish; men who think riches can be distributed without being produced, and who have the idea that somebody has a great, deep, exhaustless treasury out of which fabulous wages could be paid forever without anybody putting anything into the bag; but the average workingman is not a natural born fool and can be depended upon in the long run to act with reason and judgment.

One thing which has disturbed some capitalists is the situation in Australia. There labor has had full control of the states and of the commonwealth itself, and has the most elaborate and elastic system of boards and courts in the world, objects of labor's own creation, but with the continued growth of trade-unions in the commonwealth, the number and seriousness of strikes continue. It seems that the very class that placed the labor statutes on the books ignore them and resort to strikes to gain their ends. This is not fair to the public, to their employers or to themselves.

Another thing which has disturbed some capitalists is the attitude of organized labor toward the proposed gift of Mr. Melville G. Henry, of Tacoma. Mr. Henry is a wealthy man, but in his declining years and in feeble health. He has a coal mine, estimated to be able to produce 1,000 tons of coal daily for a hundred years, and to be able to lay down coal in the towns from Seattle to Portland at four-fifths of the freight rate alone now paid on coal brought in there from Wyoming. He offered this mine, free of all cost, to the labor unions of the Northwest, estimating that it would save \$2,000,000 to the laboring men of that country, but complains that his offer was coldly received, except by one tinmiths' union.

Mr. Henry said that in offering the mine he had hoped to solve some of the problems of labor, because, to use his own words, "most people cannot realize the silent tragedy of the toiler. He does not live, but barely exists in most cases. There is a world full of wealth if managed for all. I feel sure that now, more than ever before in these days of high cost of living, labor should own and control its source of supply of the most important necessities, even to owning its own dairy herds and fruit ranches." These are noble sentiments.

The Public's Interest

WE ARE all interested in this labor problem. It is a self-evident fact that only a savage fights for his own interests regardless of those about him, and there is an obligation owed alike by the employer and the employe, to conduct their affairs so that the community as a whole does not suffer. Senator Edge, of New Jersey, made a wise observation when he said, "Labor is not the employe of capital (only), but of the people at large, of the whole United States, and the people are the employer of capital also".

The membership of The American Federation of Labor is now 4,000,000, but this is only about one-sixth of the laboring force of the United States, so that the other five-sixths have to be considered in these questions. We must not forget that every time a reduction in output is made, some one's standard of living is reduced; and not infrequently this loss is passed on to some class that is not at all organized and is unable to bear it. It has been said, and we think truthfully, that reckless indifference as to whether the shop wheels turn or not is one of the great causes of the High Cost of Living.

We are just getting to the point where the ethics of the labor question is coming to the light. It is a time for thought and effort to do right, and not a time for passion. There was a time when rebates were considered all right; now everybody knows that it was a contemptible piece of thievery. The public is waking up to the principles of *right*. A proposition has just been made to create a permanent industrial board in Washington to regulate industry in the manner in which the Interstate Commerce Commission regulates traffic. We think well of this suggestion. It is so good that it seems late in arriving.

The Senate of the United States, through its

investigation committee, has just recommended an eight-hour shift in the steel industry. This was a step in the right direction. The twelve-hour shift is a barbarism that can no longer be tolerated. Such hours break down the vitality of men and are extravagant even if paid for, because the increased fatigue of the worker is not compensated for by his increased earnings, and cannot be. He is worn out before his time.

So difficult and serious is the labor situation that the Pittsburgh *Leader* solemnly says, "The people of America must go down on their knees and ask for divine aid. We must pray for those who exercise authority that they may be wise and just. We must pray that all of our citizens may be faithful to duty and obedient to law."

It is evident that the laboring people of the world plan its control. In England, in the municipal elections, the labor socialists gained control of thirty-nine out of forty-three districts in London. All the industrial centers were captured by their candidates and they predict that they will control the government of England in the general elections next year.

At this time, it seems to us that those who have been stewards of earth's wealth and power in the recent past can do well to read with great care the parable of the unjust steward who was about to lose his stewardship, and who was commended by his master because he recognized that that time had come, and did the wisest thing he could do under the circumstances. He yielded gracefully to the inevitable, and made himself solid with his former debtors by lightening their burdens. See Luke 16:1-15.

Employment of Soldiers

THE Government has reported that of the 4,000,000 men who were returned to civil life since the signing of the armistice about eighty per cent were taken back by their former employers and only about 25,000 had been unable to secure employment of any kind up to the date of the report, in September. This is a very remarkable showing and indicates great prosperity in the country, with a desire to do the right thing by the soldiers on the part of employers. Occasionally there are disappointments. Not long ago five ex-soldiers robbed a Chicago bank and explained as their reason that they had been unable to get work. Of the 25,000 jobless ex-soldiers 10,000 are said to be in Greater New York.

SOCIAL AND EDUCATIONAL

Love vs. Hate

By Newton T. Hartshorn

IS THERE a wave of hate—a sort of moral influenza, as a result of the war, sweeping over the world? Men have good reason to conclude that war breeds hate and more war and more hate, and earnestly study how to inaugurate some form of control that will stop the periods of murder madness.

Just as the war was breaking out, a great world's peace congress was assembled in Germany; its deliberations were cut short the first day, and its members fled. A few weeks before there was heralded all over the world: "Peace and good will to men"—"no more war, a new era has commenced". A new era had commenced, sure enough! The world is a cage of hawks. How can the doves of peace survive in it unless the hawks are chained?

All must admit that love is the essential quality in peace, and that hate is a quality which invariably causes war—the destruction of human liberty and order. The cultivation of love, even for one's enemies, is the basic principle of Christian philosophy. Even justice, wisdom and power are deficient without it; in fact, love is the very essence of life, and hate the agent of decay and death. We seem to have reached the climax of the principle (or lack of principle) of rule by human force, which only provokes hate unless absolutely just and loving. The machine gun, the rifle, the revolver, the bomb, the bayonet and the boycott are not the agents of effective persuasion, but of irritation, hate and retaliation. The machinery of government is obliged to be constantly augmented by more force in opposition—more hate. The working people are solidly organized against the capitalists; and the employers and the capitalists are solidly organizing against the working people—more force and more force, but no love.

With man's nature unchanged, is there any prospect that organized human government by the use of force can put down all resistance and inaugurate perpetual peace, that insurrections and wars will cease? History forbids any such conclusion. The power of selfishness and

its sequence, hate, can not be put down by human force, although those who have formed the League of Nations, a church and state system apparently, may try it as it was tried by a church and state system during the dark ages and failed.

Collective man's character is fixed—crystallized. Generation after generation of youths, while plastic, under kindly tutoring, molded to a humanitarian spirit, have not retained it. How can the start be made? How get rid of the old environment—the old human nature? Even a great military and police force and an extended judicial system are inadequate to protect fully the property and lives of the law-abiding and the innocent. Predatory nations and gangs plunder and murder worse than was ever known in the dark ages. Robbers in the daytime, on the streets of our populous cities, ply their inhuman calling.

Men have theorized that the race could be educated, trained and evolved to a higher plane, preparing it for the coming of Christ, ready to set up his kingdom. But when could the start be made? Millions of priests and ministers, also religious teachers, following generation after generation, and hundreds of theological schools at work for nearly 2,000 years, and still the wars and the selfishness, the murders and robbery and hate have grown worse and worse! The theory that a clergy class or any other human class can reform the world is forever and finally exploded. Phenomenal, superhuman, divine power, and that alone, can start the new order. The change must be positive and radical. The prayer which our Lord taught his disciples, "May thy kingdom come, and thy will be done on earth as it is done in heaven", indicates to a certainty that the time will be when that change will come. "Man's extremity is God's opportunity". The problem has become so complex that there is no hope that man can solve it. Yet unless it is solved, soon the race will perish in a debacle of murder and starvation.

There can be no question, however, that in due time, when man is ready to admit that he has failed, divine power will take control and stop all human rule by force and all disorder and

crime. This will probably take the form of the temporary physical paralysis of any one who attempts to harm his neighbor in word or deed; and no force will be needed or permitted by either human governments or individuals. That would perfectly solve the problem. The hawks would be chained, and the doves would survive.

Thus gradually the quality of selfishness and hate would be eliminated from all except the incorrigible, those who would not or could not reform. Pent up hate and selfishness in their case being the active agents of decay, they would drop off in death. But those who desire to reform, and those who had a large measure of the spirit of love and obedience, would not chafe under restraint; they would survive and prosper. Gradually the new order, the kingdom of heaven, would begin to be instituted in a natural way. The Scriptures show that this is the way in which our Lord's prayer will be answered in due time, and that then gradually all that have died will return (recreated) from the grave.—John 5:28, 29.

Pathologists are making astonishing advances in discovering the causes of disease and the means of prolonging human life. They claim that it is not impossible to find some means of preventing the cells that compose the human body, from breaking down. Once that means is discovered, they claim, the problem of endless life is solved. It is well known that loving, happy dispositions conduce to long life; and divine love being so vastly more vitalizing than human love, under the conditions prevailing in the kingdom of heaven on earth we might reasonably assume would be the means of preventing the cells from breaking down.

Scientific attainment along all lines is miraculous these days. Astronomers, geologists, electrical specialists and chemists note in their line great changes pending in the physical world, changes destined to increase vastly the vital energy which can be evolved from matter or by it, and to remove certain devitalizing agents that have for thousands of years had an adverse influence on organic life on the planet. In fact the earth has never been completed, and the human race has ever been living under abnormal conditions. But shortly mankind will for the first time experience what living on a completed earth under a perfect divine government will be—"the desire of all nations".

Only a little more than 4,000 years ago the polar ice caps on the planet aggregated approximately 11,000,000 square miles, devitalizing human life almost to the point of extinction. Ice is a very great devitalizing agent. The polar ice caps now aggregate only about 7,000,000 square miles. Normal conditions are asserting themselves; and the ice will, in the not distant future, all be gone. Then the meteorological conditions on the planet will become perfect.

The clouds are dark and threatening now all over the world; but the sun is shining behind them. "Seek righteousness, seek meekness: it may be ye shall be hid in the day of the Lord's anger." "My determination is to gather the nations, that I may assemble the kingdoms to pour upon them mine indignation, even all my fierce anger; for all the earth [selfish social order] shall be devoured with the fire of my jealousy [not literal fire]. For then [after this] I will turn to the people a pure language [the truth] that they may all call upon the name of the Lord to serve him with one consent." (Zephaniah 2:3; 3:8, 9) "And God shall wipe away all tears from their eyes and there shall be no more death, neither sorrow nor crying, neither shall there be any more pain; for the former things are passed away. Behold I make all things new."—Revelation 21:4, 5.

College Boy Police

ACCORDING to *School and Society*, when the Boston police left their positions the following invitation by Professor E. H. Hall, of the Harvard physics department, appeared in the *Boston Herald*:

"Come back from your vacations, young men; there is sport and diversion for you right here in Boston!"

President A. Lawrence Lowell, of Harvard, issued this bulletin:

"In accordance with its traditions of public service the University desires in a time of crisis to help in any way that it can to maintain order and support the laws of the Commonwealth. I therefore urge all students who can do so to prepare themselves for service as the Governor of the Commonwealth may call upon them to render."

Later he stated:

"Students willing to volunteer for police duty are asked to report to Superintendent Pierce. The fact should be emphasized that these volunteers are reporting simply as citizens of the Commonwealth in response to a call from the Governor."

MANUFACTURING AND MINING

Drilling and Pumping Oil

By Harry P. Weaver

PETROLEUM from Sicily was burned in the temples of Jupiter before the beginning of the Christian era, and petroleum from the Caspian Sea deposits about Baku has been the source of the "holy fire" burned for centuries in the temples of India. The famous petroleum spring at Cuba, N. Y., was mentioned by missionaries nearly three hundred years ago, and petroleum was sold as medicine down to the time of the discovery of the process of refining the crude oil so that illuminating oil could be obtained from it.

The first efforts at obtaining petroleum in the United States were confined to collecting the oil from surface springs. Nine barrels were thus obtained in Western Pennsylvania in the spring of 1838 and were sold promptly in New York City for \$275.19. The first oil well was sunk at Titusville, Pennsylvania, by Col. E. H. Drake, and at a depth of 69½ feet he struck a vein of oil which rose to within ten feet of the top of the well. During the next four months the well produced 2,000 barrels, which sold readily at \$20 per barrel. The production of all wells in the country amounted the next year to 500,000 barrels; in ten years it had risen to 5,000,000 barrels; in 1880 it was 26,000,000 barrels; in 1900 it was 63,000,000 barrels; four years later, with the advent of the automobile, it was 120,000,000 barrels. Oil and gas were formed similarly to coal. Copious vegetation, replete with carbonic acid gas, was laid down in deposit, covered and confined, and subjected to decay, subsequently formed oil and its fumes—natural gas. Gas, however, is not the fumes of oil alone; for it is frequently found in regions independent of oil.

No longer in use is the four-cornered fully closed-in tower, but the great, convenient, seventy-four feet standard rig; no longer the diminutive stem, bailer, jars and bits that, conveniently bound together, constituted only a fair burden for the back of the husky tool dresser; but great massive tools that require to be handled by power cranes; no longer the twenty feet of hole per shift of twelve hours,

but one hundred twenty feet in the same time; no longer the 69½ foot hole but an average, in Pennsylvania, of 1,800 feet.

Here, for example, is a brief history of Bradford Oil Company's No. 46. The first forty feet were put down 16 inches in diameter through loose earth, mud and soft slate; and a wooden box or tube, called the "conductor box", was inserted to the bottom, to keep back the foreign matter from the hole. This first hole is called the spudding hole, because drilled by what is called the "spudding" process.

At the bottom of the spudding hole a hole 8½ inches in diameter, called the "big" hole, was started and continued through all the water-producing soils and rocks to a depth of 350 feet. Here the well was cased with iron pipe 6½ inches in diameter, set firmly on the bottom and reaching clear to the surface.

At the bottom of the big hole another hole 6½ inches in diameter was started and sunk to the bottom of the oil-bearing strata. The oil sand of this particular well was 75 feet thick, of a rich brown color, very soft and fine, and highly productive of oil and gas.

The drilling of an oil well is a man's job; it is no job for a seller of hair ribbons and perfumery. The old-style method of drilling was by use of a steam engine; and these are even yet largely used, though some prefer the gas engine because it stands the strain better. The heavy tools are laboriously lifted to a generous height and then suddenly dropped back into the hole. Between lifts the engine speed is greatly accelerated, because it has nothing to do. Therefore the engine room of a drilling rig is an exciting place.

Shooting the well is no ladies' job either. The old-time oil-well shooter travelled at night in a buggy, carrying with him enough nitro-glycerine to shoot his next well. If the horse ran away or if he struck a rough spot in the road, they filled in the spot the next day and sent another man the next night with another load. When No. 46 was shot, they touched off 100 quarts of nitro-glycerine in the oil-bearing strata at one time. Nobody has ever been down a hole to see just what happens under such

circumstances, but the effect seems to be to loosen up things somewhat and start the oil to flowing, if there is any to flow.

After the well is "shot", tubing two inches in diameter, properly equipped with "working barrel" and "standing valve" at the bottom, is inserted to the bottom of the hole. How would you go about it to put an iron pipe a third of a mile long down a much larger iron pipe? Would you first screw the pipe together on the ground and then lift it up and drop it into the hole? If you tried that plan would you not be afraid it would bend a little before you got it straight up in the air?

Or would you just hold the pipe down the well with one hand and screw in the lengths one after another with the other hand, gradually letting down the pipe until you struck bottom? But suppose you got tired and dropped a few lengths or a quarter of a mile of pipe down the well? How would you get it again? Well! You can let the oil man worry about that. He knows how to do it, and without losing any of his precious oil, or even any of his precious gas. But it is no job for one of the weak sisters.

After he has his tube down the well the oil man puts in his rod, equipped with another sort of valve, and this, too, has to reach all the way from the top of the bottom of the well. Then he is ready to pump. This rod is called the sucker rod. By means of surface rods any number of sucker rods can be operated from a single power house conveniently located with reference to the group. Compressed air is also much used for pumping, and has some advantages over any other method.

The average price of Pennsylvania crude petroleum has been about \$2.50; now it stands at \$4.25 per barrel, with small probability of a decline. The average production per well is today approximately half a barrel per day. A small operator with twenty producing wells has a very comfortable income, while one with fifty wells has the foundation for a fortune. A gusher may make a millionaire over night, but Pennsylvania has probably had its last great gusher.

The first place where petroleum is mentioned in the Bible is in the account of the construction of the Tower of Babel. There the partially evaporated fluid is referred to as "slime".

"And they had bricks for stone, and slime

had they for mortar." (Genesis 11:3) The first battle of history occurred amid the "slime-pits", the oil-bearing strata at the head of the Dead Sea. "The vale of Siddim was full of slime-pits; and the kings of Sodom and Gomorrah fled, and fell there".—Genesis 14:10.

Curiously enough, bricks cemented together with dried petroleum have been found in large quantities in Nineveh and Babylon, and the oil deposits in the valley of the Dead Sea are now being developed. It was these oil-bearing and sulphur-impregnated shales that supplied the "brimstone and fire" which destroyed Sodom and Gomorrah. (Genesis 19:24) We are glad to have the prophetic assurance that those people of Sodom, destroyed so many years ago, shall yet "return to their former estate" (Ezekiel 16: 55) on the borders of the inland sea where they once lived.

Quicksilver Scarce

PERSONS owning thermometers can look at the quicksilver in the bulb and comfort themselves that there, at least, is something that is not lessening in value. Those needing thermometers should take note that quicksilver is worth \$1.27 a pound and going up, because it is becoming scarce.

Quicksilver is one of the semi-precious metals. In the United States it is found at New Almaden, California, and comes from Almaden, Spain, where it is separated from the sulphur in cinnabar ore, by a current of hot air arranged so as to burn the sulphur and leave the mercury, or quicksilver, in the metallic state. The tendency of quicksilver to unite with gold into an amalgam causes the chief use of the metal beside the familiar one in the thermometer. The mercury is spread over a copper plate, over which the gold ore is washed; the gold from its weight comes in contact with the plate and is promptly amalgamated with the quicksilver, from which it is separated by heat. Another familiar use is as a medicine when rubbed to a fine globular powder with rose water, under the name of blue mass. Among the chemical compounds is bichloride of mercury, made by heating a mixture of mercuric sulphate and common salt, which is sometimes taken as a poison, and results in painful and lengthy suffering and in death.

Quicksilver is also essential to the manufacture of high-class mirrors.

FINANCE·COMMERCE·TRANSPORTATION

Foreign Exchange

THE unfavorable condition of foreign exchange and its effect on foreign and domestic trade and on manufactures and agriculture have been much in evidence in the newspapers; but it might as well be so much Greek, for some of the public who do not understand enough about foreign exchange to know what is wrong.

Foreign exchange is the medium of exchange for business between, for example, this country and England. It is not the exchange of money, for currency or gold is employed as little as possible, but is such an exchange as takes place when one dealer pays another by check; no money passes, but a transfer of credit is made on the accounts of a single bank, if both dealers use the same bank, or between two banks if they employ different banks. Foreign exchange employs paper or drafts, something like checks, called bills of exchange.

A transaction in foreign exchange requires four parties; a merchant, M, and a broker, B, in this country and a merchant, BM, and a broker, BB, in England. Merchant M sells goods to merchant BM. Instead of sending the bill direct, merchant M sells it, with a draft on BM, to broker B, who is buying such bills constantly. This gives merchant M the money and gives broker B a credit payable from England, which becomes part of his fund of like credits. Broker B does not collect direct from British merchant BM, but send the bill with draft attached to British broker BB, who presents the draft to merchant BM, who pays the bill to BB. This completes the transaction. Like transactions where merchant BM sells goods to merchant M are executed in reverse order. The grand total of transactions is larger on one side than on the other, and the difference is periodically settled by shipments of gold. A person wishing to remit to England without having sold goods can purchase a bill of exchange out of the fund of credits of broker B and mail the bill of exchange direct to England, where the receiver collects the money from broker BB.

Ordinarily a dollar is worth 100 cents in gold, and a British pound is worth 486½ cents in gold.

The pound is now worth only about 40½ cents in gold. Foreign exchange is figured so that an equal amount of gold is represented in the money of both countries. Some bills of exchange are cabled across, and there is no interest to be taken into account, but bills payable in thirty days, or other period, take into account the interest payable for the tying up of the funds for that time. Other items carefully figured in are insurance, freight, packing, commission and wear of the gold coin, as though it were shipped. If the pound is fluctuating in value, it may go up or down, during the period; and the broker selling the exchange figures the risk in as part of the cost of the exchange. Quite a high charge is made on time bills of exchange for remittances to countries where the local currency is making wide and frequent fluctuations.

The value of the exchange of different countries is published daily in financial pages of the newspapers, and exchange bankers are continually kept advised of changes through the day. The value of exchange for France and some other countries is figured as so many francs for 100 cents in gold. If a country's currency is inflated it will be worth less cents to the franc, lire or other unit, and will require more units to equal 100 cents in gold.

Another factor produces fluctuations in exchange: Exchange when bought and sold by the bankers becomes in effect a commodity and subject in price to the law of supply and demand. If, for example, there are twice as much goods shipped to France as are shipped from France, French merchants will owe more than they are able to pay without the bankers' shipping gold. French merchants having bills to meet for goods received will compete for the available exchange, and will bid the price of exchange up, so that they will offer more francs for 100 cents in gold than the local value of the franc would warrant. This amounts to paying more than the billed price for the goods, makes the goods cost more, reduces the profits of the French merchant, and hinders him from ordering goods from America, on which he may lose money. If there is too great a "balance of trade" in favor of this country, and the foreign

merchants are unable to pay the balance with bills based on goods shipped by them, or with gold, the trade between the two countries is reduced to the figure where the imports and exports and the corresponding bills of exchange balance each other. Each country has a certain stock of gold, most of which is needed to sustain the value of the local currency, and part only can be shipped to pay for bills of exchange. The government cannot afford to permit too much gold to be sent out of the country, or the currency would become disorganized and, the gold foundation being removed, may drop to a very low figure or become subject to wild fluctuations, especially if the government prints an excessive amount of paper currency not based on gold, to take the place of the gold which has been shipped away.

In extreme instances when the scarcity of exchange is excessive and cannot be overcome with counter shipments of goods or gold, as at present between this country and Europe, the discrepancy can be overcome by this country's loaning Europe amounts enough to balance the unavoidable difference. Europe pays this country out of the money loaned, and securities, on account of which it was proposed to loan credits of from one to five billion dollars to Europe in order to keep trade going there and here.

If the matter cannot be balanced up with goods, gold or loans, foreign trade has to fall in volume and become equal between the countries. In this country this would cause the decline of the great prosperity in manufacturing, mining, agriculture and trade enjoyed since the early summer of 1919. The consequences would be too serious to be readily invited—such economic, industrial and social effects as flow from factories wholly or partially shut down, men out of work, and the increase of poverty, discontent, unrest and of revolutionary sentiment. The effect would be felt both sides of the ocean and would be serious. It would not be properly remedied by turning over the management of affairs to men who did not understand the intricacies of commerce.

If the balance can be restored between the countries, the value of exchange will rise to its normal figure. Rising exchange stimulates trade, because merchants deal under the opposite risk of falling or fluctuating exchange, and have the same chance to make money that a local dealer has in a rising market.

The problems of commerce and exchange are liable to become too great for even the experienced minds that are working upon them. They are part of the conditions that were foretold by Christ, when he said, "There shall be upon the earth distress of nations with perplexity," (Luke 21: 25) and when the old Hebrew prophet said, "That they may do evil with both hands earnestly, the prince [profiteer] asketh and the judge [ruler] asketh a reward [graft or honor]; and the great man uttereth his mischievous desire [for a share of the spoils]; so they wrap it up [arrange it]; the best of them is as a brier; the most upright is sharper than a thorn hedge; the day of thy watchman and thy visitation cometh; now shall be their perplexity."—Micah 7: 3, 4.

Pig Iron Hard to Buy

WOULD-BE buyers of iron are reported to be finding it hard to get. Several factors look toward some rise in the price of pig iron, such as the strikes affecting iron, steel, coal and coke, and the huge demands of business; and furnace men are unwilling to sell much iron at present prices, when the possible artificial scarcity may send the price up and cause a relative loss on iron sold now. Buyers are eager enough to order the metal, but sellers prefer to wait. The prosperity in the pig iron business is an index of prosperous conditions for some months to come; especially is this true when a rising tendency in prices show an unsatisfied demand, and more business going on than can be supplied with iron.

Aviation by Dirigible

DURING the World War a German dirigible flew from Bulgaria practically the whole length of Africa and return without mishap. Some of the Zeppelins were 800 feet long, with speeds of 80 miles per hour, and carrying capacity for 500 passengers. It is believed that in this type of machine lies the future of aviation as a field for legitimate transportation.

The dirigible can be built to fly around the world without landing, can stop for repairs in mid air, can descend slowly in a fog, or can rise above fogs or storms if desired. The airplane does not have these advantages, and engineers are now seriously considering the establishment of aviation lines in which dirigibles will be used exclusively.

POLITICAL—DOMESTIC AND FOREIGN

Nationalism in Russia

A WIRELESS dispatch from the Russian Republic claims that two thousand industrial establishments have been nationalized by them, or about eighty-two per cent of all the industries in the country. It is very difficult to obtain from the daily press any adequate idea of what the Russian people are trying to do; and perhaps the newspapers themselves do not know, and are contenting themselves with raising a general howl in lieu of giving out real information on the subject. It looks from the above dispatch as though the Russians are trying to work out the problem of what is called Nationalism. In 1897 the Nationalists put forth this claim:

"The combinations, trusts and syndicates, of which the people at present complain, demonstrate the practicability of our basic principles of association. We merely seek to push this principle a little further and have all industries operated in the interest of all, by the nation—the people organized—the organic unity of the whole people.

"The present industrial system proves itself wrong by the immense wrongs it produces; it proves itself absurd by the immense waste of energy and material which is admitted to be its concomitant. Against this system we raise our protest: for the abolition of the slavery it has wrought and would perpetuate, we pledge our best efforts."

While it has some favorable points, Nationalism as a whole is quite impractical. Although Nationalism does not, like Communism, directly threaten the destruction of the family, its tendency would surely be in that direction. Among its advocates are many broadminded, philanthropic souls, some of whom have helped, without hope of personal advantage, to found colonies where the principles of Nationalism were to be worked out as public examples. Some of these colonies have been utter failures, and even the practically successful have been forced to ignore Nationalist principles in dealing with the world outside their colonies; and, as might be expected, they have all had considerable internal friction.

Several colonies on this Nationalist plan have started and failed in the United States. One of the most noted failures is that known as the

Altruria Colony, of California, founded by Rev. E. B. Payne, on the theory "One for all and all for one." It had many advantages over other colonies in that it picked out its members, and did not accept all sorts. Moreover, it had a Lodge form of government of very thorough control. Its founder, giving the reasons for the failure, in the *San Francisco Examiner*, said:

"Altruria was not a complete failure; we demonstrated that trust, good will and sincerity—which prevailed for a part of the time—made a happy community life, and on the other side, that suspicion, envy and selfish motives diabolize human nature and make life not worth while. We did not continue to trust and consider one another as we did at first, but fell back into the ways of the rest of world."

What some people demonstrate by experience others know by inductive reasoning, based upon knowledge of human nature. Any one wanting a lesson on the futility of hope from Nationalism while selfishness still controls the hearts of men, can get his experience cheaply by boarding for a week each at three or four second-class "boarding houses".

About September first, General Maurice, the great London military critic, said in the *New York Times*:

"The only hope I see of overcoming Bolshevism by force of arms is through a long, slow process of exhaustion. That process is at work, and will continue to work as long as we continue to cut off supplies of food and munitions from the Bolsheviks and furnish their opponents with both; but it will not be rapid and it will be costly."

Maybe we are not as wise as General Maurice. Certainly, if what he seeks to overturn is what has been tried several times without success in this country under the guise of Nationalism, it is far more likely to overturn itself than to be overturned by force. It takes some people a long time to learn that the one sure way to bring great success to a difficult cause is to persecute it. Persecution causes investigation, and investigation of a new thing is more likely to bring to light its good points than its defects.

So deep-seated are the laws of constitutional selfishness, and so certain are their operation that, if all the rich were dead today, and their wealth distributed pro rata, those laws would

within a few years reproduce the very conditions of today. And any system of laws that the majority of men might enact, which would deprive men of the opportunities for exercising their acquisitive and selfish propensities, would sap the life of progress and rapidly turn civilization back toward improvidence, indolence and barbarism.

The only hope for the world is in the kingdom of our Lord Jesus Christ, the Millennial kingdom. It is God's long promised remedy, delayed until its due time, and now, thank God, it is nigh, even at the door. Man's extremity will be God's opportunity, at a juncture when human ingenuity and skill have exhausted themselves in seeking relief without avail. "The desire of all nations shall come."

Uncle Sam's Boys Abroad

THERE is an apparent difference of opinion between the Congress and the executive department of the Government respecting the places in which United States troops may be used. Congress alone has the power to declare war; yet the Secretary of War holds that the President alone can determine where United States troops are to be used, and that no authorization for the use of United States troops in Siberia was needed. If the President or the Secretary of War can legally place troops in Siberia they would seem to have equal rights in Mexico, Canada, Japan, China, England, France or elsewhere, actually producing a state of war to which Congressional sanction would be a mere form. The Constitution evidently did not contemplate this, and Congressional leaders, led by Senator McCormick of Illinois, are now protesting against the further use of United States troops in Europe or Siberia without instructions from Congress. The Versailles treaty with Germany provided that American troops shall be maintained in Europe for fifteen years. The League of Nations, if adopted, would have legalized this.

The pressure for return of American soldiers from Siberia was hastened by the flogging of Benjamin Sperling, a Brooklyn soldier, by Cossack chiefs in Eastern Siberia who are nominally responsible to Admiral Kolchak, the ruler pro tem of Western Siberia, but who are actually mere instruments of Japan on her westward march into Siberia. The Kolchak Govern-

ment has apologized for the outrage; and the Japanese Government is expected to do so, as it is believed to have been the more responsible. The American troops in Siberia are understood to be under instructions to stay there but not to fight.

There is no doubt that we are at a place where the policy of our Government must be definitely fixed respecting European affairs, and especially the use of our soldiers in connection with those affairs. American forces in the Adriatic, acting under the general orders of the British Admiralty recently drove out of Tran, Dalmatia, Italian troops that had been landed there in the attempt to seize the port without the consent of the Paris conference. This brought upon us the displeasure of many Italians who naturally blame us for depriving them of one of the things promised to them in the secret treaty under which they entered the war. They cannot understand why their secret treaty should be set aside while the Japanese secret treaty respecting Shantung is considered sacred.

Concerning the Government's recently announced purpose to send 7,200 men to France to replace troops about to return, and the further announcement that some of these troops would probably be used in Silesia (on the borderland between Germany and Poland) in connection with the voting about to take place there as to whether Silesia is to be included in the new Poland, Senator Moses, of New Hampshire said:

"The orders for our troops to go to Silesia are simply carrying out the general scheme adopted by the President at the Peace Conference of making the United States a party to all the internal disputes of Europe. If the treaty should be ratified in its present form, this would be an everyday occurrence."

We know that at heart our President does not believe in the United States concerning itself with the Silesian coal mines or other strictly European affairs. We remember that he was elected the last time because he kept us out of the war. He stated just prior to that reelection that it is "the fixed and traditional policy of the United States to stand aloof from the politics of Europe", and gave expression to the fear that the success of his political opponents would mean "that we shall be drawn in one form or another into the embroilments of Europe."

We believe that it is good governmental policy

for the United States Government to avoid entangling itself in the border disputes and other local affairs of Europe and European countries. We have a reason for this. It reads: "Let none of you suffer as a busybody in other men's matters." (1 Peter 4:15) It is quite as true in national life as it is in private life that most people have sufficient to occupy them in attending to their own business properly; and if they give sufficient attention to the business of others to be competent to meddle in their concerns they are surely neglecting to some extent their own affairs. One of the best ways to help along the Golden Age is to mind our own business and encourage others to do the same.

Belgium Getting Stronger

AS BELGIUM was the first country to suffer in the war so it is one of the first invaded countries to show signs of recovery. While it is a great industrial country, yet it is also one of the most closely tilled countries in the world. Its agricultural interests did not suffer to any appreciable extent during the war or since. The farmers received fabulous prices for their products, and still receive them.

The coal mines of Belgium were undamaged by the war and are now said to be producing eighty-four per cent of their pre-war total, which permits the export to France of 300,000 tons per month and considerable quantities to Holland, Switzerland and Italy.

During the war one-half the blast furnaces were destroyed and half the remainder were damaged, so that at present only one-fourth of the blast furnaces that were in operation in 1914 are in blast now.

Clearances through the port of Antwerp are said to be about one-third what they were before the war, and this presumably represents in a fair way the general condition of the country.

The transportation situation is in pretty good shape, the Germans having returned the rolling stock which they carried away, together with much other railway equipment. Passenger travel is about the same now as before the war.

Hundreds of the great Belgian factories are still idle, and a great many of the old employees of these factories have been lured to France by the higher wages. Repairs for the factories are difficult to obtain, and in many cases their owners have been ruined and are unable to re-

gain their former business. Full recovery will entail a long, hard fight.

The Belgian Government is doing the right thing by farmers whose lands were within the fighting zone. These lands are being leased to the Government at five per cent of their pre-war value, the Government guaranteeing to return them to their owners in a few years' time in as good condition as before the war.

Full recovery of the country is impeded by the peanut politics of the clerical party, which, in the effort to retain its hold as the majority party of the Government, is trying to discourage the use of the French language, by which the Belgian people have hitherto kept in touch with the progress of the world.

The value of Belgian property destroyed during the war is estimated at \$7,000,000,000, or about \$1,000 for every man, woman and child in the country. The national debt is now one-half that amount. There is a plethora of paper money, and prices are sky-high.

Though Belgium is so small, being only about the combined size of New Jersey and Delaware, yet its population is equal to that of the whole of New England; and its rivers, although they are short, are so important that fifteen of them have been canalized. These canals are all in use.

The glory of Belgium is in its agriculture, the Belgians being universally considered the model farmers, or, we should say, gardeners, of the world. Nearly all the farm work in Belgium is done with the spade, and the whole land is one vast garden. Every farm is fully stocked, but the cattle are not turned out to graze. They are fed on green crops, arranged to come forward in regular succession. Every particle of liquid manure is collected in a tank sunk in the floor of the cattle shed. It is these liquid manures that have made Belgium the garden spot of the world.

Belgium seems to be the one country which, having at first accepted the Reformation doctrines, was driven by persecution back into the Roman Catholic Church and has since remained there, with apparently no desire to again look into "the perfect law of liberty". (James 1:25) In our opinion the great war and the present struggle of the clerical party to maintain itself in power will result soon in a real and great Reformation in Belgium. And we think, too, that this Reformation will make itself felt in every part of the world.

European Food Situation

FROM the signing of the armistice to the end of June, 1919, Mr. Hoover, the world food administrator, sent relief foods amounting to \$770,000,000 to twenty-one European countries. Without this food the people of Europe would literally have been starved.

Europe paid for the food, and paid high prices for it. American bacon sold to the Germans at as high as \$1.60 per pound. At present the warehouses of northern Europe are packed with food of all kinds, which is in danger of spoiling because there is no market for it. It is not that the Europeans do not want the food, but they have not the money to pay for it. Mr. Hoover estimates that to release this food to the hungry nations that desire it would require a credit of \$4,000,000,000. But credits to a Europe that is virtually bankrupt and facing revolution, do not fill the professional American financier with any special enthusiasm.

In August of this year, in the city of Chemnitz, Germany, ninety citizens and soldiers were killed, and two hundred and fifty wounded, in food riots in which the famished rioters killed the horses of the soldiers and divided their flesh among the people.

An unexpected reversal of the usual experience occurred when the relief expedition tried to sell flour in the southern part of Russia. They found that local flour, scarce as it was, was selling in the open market for about two-thirds that asked for the American flour, and were obliged to take it elsewhere to dispose of it.

Universal Training

UNIVERSAL military training has been proposed as a convenient method of providing a trained soldiery for the protection of the country in case of future wars. Plans for this vary from the Swiss plan of six months training spread out over a period of eight years, to the so-called West Point plan of requiring one year's continuous training for all youths of eighteen, military court martials for all violators of military law, and organization into an army reserve at the close of the period of training. It is conceded that universal military training would save the lives of many men in case of war and that it builds up the physique.

In New York State, under the Slater act, passed in 1916 and amended in 1917 and 1918, all boys in the state above the age of sixteen

years, and not over nineteen years of age, are required to report for military training "not more than three hours in each week" for forty-one weeks in each year. In New York City the time spent in training is one and one half hours per week, including the use of arms, disciplinary exercises, close order drill, skirmishing, signaling, teamwork, personal hygiene, sanitation, first aid, and military customs. Schoolboys are trained in the afternoons, and boy laborers after 5 p. m. Employers are required to see that every boy they take into their business is registered for training.

The movement toward universal military training is a natural outcome of the World War, and yet it was the universal military training of Germany that plunged the world into the war. The Prince of Peace will have a more effectual method of preserving peace than training everybody to fight. There is always the fear that if you train people to fight, they will sooner or later fight whether it is necessary or not. "In his day shall the righteous flourish; and abundance of peace so long as the moon endureth." —Psalm 72:7.

Ten Million Under Arms

CHINA is said to be contemplating a system of universal training which would give her at all times ten million men under arms. We would suppose that China would have learned something from the experiences of Europe; but perhaps it is a little too early for the Chinese to see that their past course has been the wise one and that their proposed course is most foolish, dangerous to their own peace and to that of the rest of the world. "Blessed are the peacemakers" (Matthew 5:9), and it should require a large amount of argument to persuade any sensible person that ten million armed men constitute a peace-promoting body.

South African Natives

IN THE general awakening of the world incident to the World War, the natives of South Africa are discovering that out of 94,000 natives who went to the war, 40,000 were left buried, while those who returned are debarred by law from purchasing land, from employment in skilled industrial work, and from church membership in the Dutch Reformed Church. In Bible times the black races were treated like human beings. See Acts 8:27-39

AGRICULTURE AND HUSBANDRY

Farming for Nothing

FARMERS are making some money, but when the amount paid by the public is compared with what the farmers get, some of them feel as though they were farming for almost nothing. If a farmer gets \$8.37 for the four and a half bushels of wheat that make a barrel of flour, it would seem that an inordinate profit is made somewhere when the baker sells the same flour into loaves for \$58.70, and the hotel keeper sells the flour in bread slices for \$587.00. It is alleged that the farmer makes no money on his 186-cent-a-bushel wheat. Inquiry is being made where the profit goes between the farmer and the consumer and to find ways of getting the food to the user with less expense.

The miller sells the grain as flour for \$12.75. This makes a charge of \$4.38 between farmer and miller for his service and for transportation, storage, inspection, commissions, insurance, and depreciation in volume. The consumer pays \$14.00, giving the retailer \$1.25 a barrel, which will be acknowledged as a reasonable return. The baker is not rolling in wealth; for most of the \$45.95 he is supposed to get goes out for the labor that distributes the loaf at the doors, and the rest to bakery expenses, including labor, ingredients, repairs, upkeep, insurance, interest, depreciation, waste, and the other unavoidable costs of a small plant.

Perhaps much of the seemingly high cost is owing to the inflation of the currency to double or more what it was in pre-war days, making everything seem double, including expenses and profits. If the figures were reduced to a pre-war basis they would not seem so formidable; for the farmer would receive \$4.19, the miller, \$6.35, the retailer \$7.00, the baker \$29.35, and the hotel keeper \$294, the "profits" not appearing excessive anywhere in this schedule, considering the cost of doing business.

Farmers have to pay double for farm labor, but it costs the farm worker twice as much to live; and so with costs all along the line. Most classes, perhaps, are not much worse off than before the war, but feel worse. Farmers are being driven out of the business, but it is a question whether the forces in operation prior to the

war, lowering profits everywhere, would not have driven many out anyway. When the war started, the country was about to enter a serious depression with hard times for many classes. The hard times have come for many while the country appears prosperous; for the profits from the farmer to consumer in most cases are a disappearing factor. There are good times for some, very excellent times; but they are for those that are in a position to control selling prices, which the farmer is not.

The situation is interesting, perplexing, deceptive, complicated. Workers, dealers, producers seem to be making money, but are not, and cannot locate the trouble; or if they can, they are unable to control it, excepting a favored few. The farmers are beginning to cry out, and the cry is almost like that to come pictured by the Apostle James: "Behold the hire of the laborers [farmers] who have reaped down your fields, which is of you kept back by fraud [the various schemings of profiteers], crieth; and the cries of them which have reaped are entered into the ears of the Lord."—James 5:4.

Seventy Million Acres

NOT THAT land is to be created—that was done ages ago—but over seventy million acres in the United States are to be made available—some time. It is the 74,471,700 acres of wet and overflowed land that Congress is thinking of, with a view to having it reclaimed for farm purposes.

According to the Department of the Interior this vast tract, over four per cent of the total area of the country, can be readily and economically drained and made dry enough for agriculture to flourish. This is an area over twice that of New England, more than the states of New York, Pennsylvania, New Jersey and Delaware, or more than the sum of those of Iowa and Illinois.

Most of the wet land is in the bottoms of the Mississippi and along the Gulf and Atlantic coasts, but the heart of the agricultural section contains twenty million acres. Much of the area is adjacent to centers of population, and a very large part is provided with railroads which

cross or run near the swamps. At the nominal value of \$10 an acre the land is worth \$750,000,000, but once made productive it would, it is estimated, advance ten times in value, to about eight billion dollars. It has practically no population now, but when reclaimed could support 100 persons to the square mile, and would furnish homes for 2,500,000.

The interest manifested in the question is from its possible effect on the cost of food. Once drained, the swamp land is rich and productive of large, valuable crops. Wet lands in the Mississippi valley, South Carolina, Florida, New Jersey and other states, after reclamation, are producing enormous crops. Every farmer knows the worth of bottoms and meadow lands, which are what the swamps become when the water is drained off.

As the amount of land in the country reclaimable through drainage is much greater than that through irrigation, and is richer and more accessible, the belief is prevalent that private enterprise, which hitherto has done most of the reclamation, should be superseded by a great national movement with provision by the government for making useful as much of the seventy million acres as is feasible.

Some of earth's land is desert or barren because it has too little water, and some because it has too much. Either adding or subtracting water may bring a condition like that spoken of by Isaiah, the prophet: "The desert shall rejoice and blossom as the rose; it shall blossom abundantly, and rejoice even with joy and singing."—Isaiah 35:1, 2.

A Willow-Peach

IT IS hard to predict what the Burbanks of the Golden Age may produce in the way of plant development, but many wonderful things have been done, and experiments are going on everywhere to obtain better food for the people. In Orefield, Pennsylvania, William Baer is trying an interesting experiment. He has planted a tract with young peach trees and one "lonely" willow tree. The hope is that the willow through its contact with the peach trees will bring forth a new variety of peach. The experiment is designed to enable the pollen of the peach blossoms to lodge in the blossoms of the willow, with the possibility of the willow blossom becoming fertilized and an entirely new fruit produced. It perhaps would be well

not to name the fruit before it begins its existence; but if it materializes, it might be termed the "willow-peach." The time is coming when millions of agriculturists will be trying every conceivable experiment to improve farm and orchard products; and then out of the myriads of ideas, some are bound to be fruitful and cause the fulfilment of the ancient prediction that in the Golden Age, "Then shall the earth yield her increase."—Psalm 67:6.

Blowing Up the Campagna

FOR miles around the city of Rome, Italy, extends a barren expanse called the Campagna Romana. Lack of water and a stratum of tufa, or porous volcanic soil, have kept the ground from producing anything but grass.

American methods of applying dynamite to increase the fertility of land are being employed. Out of the vast stores of explosives left over from the war, the Italian government is using some to improve the Campagna. Explosives are placed about two feet below the surface and detonated, tearing up the soil and making it cultivable. It is figured that if the entire area were usable for farm purposes enough produce might be raised to feed Rome.

Even if supplying of explosives did benefit a business which made considerable money during the war, and which is alleged to be prepared to promote war as a business proposition, the common people are glad to see that business doing work of a Golden Age variety.

Double Crops of Berries

THE YEAR 1919 produced double crops of berries in numerous localities in the United States where the weather conditions were right, and in the early part of November the second crop of raspberries was on sale in considerable quantities in the New York markets. This is not such an uncommon thing as some of the newspapers seem to think; for when the weather permits, it may happen any year. Those who raised the berries know that the bushes which bore a second crop in 1919 will bear no berries in 1920, the plants having already utilized their 1920 vitality, so to speak. There is a species of strawberry, however, which produces crop after crop throughout the season, and it is not unreasonable to expect that in the near future means will be found to develop the same characteristics in berries of other types.

SCIENCE AND INVENTION

Sun-Spots

AMONG the fascinating, but as yet unsolved, subjects of astronomy are the relations between the sun, the sun-spots, the planets, and terrestrial phenomena. It is obvious that the mysterious orb of day is the source or sustainer of all forms of energy on earth, and it is known that certain solar cycles are paralleled by related cycles on earth. There is a border land of relations between sun and earth which some declare is not understood, and which others affirm has been scientifically investigated.

Even savages appreciate the sun and the sunlight, but it has taken the painstaking efforts of hundreds of astronomers with gigantic and delicate scientific instruments to convey the knowledge that the sun is a most mysterious heavenly body.

The sun is a globe 886,500 miles in diameter, immensely hotter than the greatest heat attainable by even the electric arc, and estimated to be at least 15,000 degrees Fahrenheit. It turns around like the earth; but unlike the earth, the central or equatorial part rotates at a different speed from the polar part—the former in 24.9 days and the latter in 26.4 days at 30 degrees latitude. This goes to show that the exterior, at least, is not solid.

The sun proper, or interior, is liquid, solid, or gaseous—it is not certain which—for at nearly 15,000 degrees it cannot be known how matter acts even under the tremendous pressure at the sun's center. Its average weight is 1.41 times that of water. At the surface—if there be a surface—gravitation would be so great as to be 27.95 times that at the surface of the earth; a woman weighing 100 pounds would weigh 2,795 pounds, and be instantly crushed by her own weight, and a fat man would have no chance at all.

Over the interior of the sun is what all see, the photosphere, a brilliant shining surface of white hot gas, which is constantly boiling or surging up from below in great centers and sinking down around the areas, producing a mottled appearance like rice grains in soup. This is the surface in which sun spots occur. Above the photosphere is a red hot atmo-

sphere called the chromosphere, which shoots up in mountainous elevations, or erupts for a hundred (or two) thousand miles in monstrous spouts, clouds or plumes, shot up with lightning speed, and evidently borne aloft by the impulsive power of the sun's rays. Such eruptions have been known to shoot out a blast of flame 330,000 miles long in one hour.

Above the chromosphere for a distance of 10,000,000 miles or more extends a soft whitish light called the corona, which at times is uniform about the sun, and at times extends in only two or three directions. The corona seems to be composed of minute molecules of gaseous substances, extremely attenuated, like the wispy tail of a comet. Its appearance is beautifully described as "a complex glory of spaced polar rays, dark rifts, filaments, straight, curved and interlacing, and stupendous synclinal structures with rich, nebulous mottling."

Sun-spots appear to be holes in the photosphere, down which hot outer gases rush at tremendous speed toward the interior. Sun-spots are quite numerous at times, the maximum times coming at regular intervals of 11.13 years, from which they decline in number to a periodic minimum. The years of maximum sun-spots are 1882, 1893, 1904, 1916, 1927, and 1938, and the years of minimum spots are 1889, 1900, 1911, 1922, 1933, and so on. According to this schedule we should be about half way between maximum and minimum; but 1919 has been a year of great sun-spot activity, with one spot of 50,000 by 100,000 miles, the largest yet.

Astronomers have definitely ascertained that the following phenomena vary at the same time as the sun-spots: the feculae or bright spots near the sun-spots; the eruptions and prominences of the chromosphere; the form of the corona from partial shafts or arrowhead form with minimum spots, to a form well developed in every direction with maximum spots; auroras or northern and southern lights; changes in the day and night fluctuations of the earth's magnetic conditions; magnetic storms, which are greatest when sun-spots are maximum; the earth's average temperature, which is least when the spots are most, and varies regularly during the

11.13 year period by from .9 to 1.8 degrees Fahrenheit. "Many other terrestrial changes," says the Britannica, "in rainfall, cloudiness, number of cyclones, panics, prices of foods, famines, growth of trees and even flights of insects have been seriously compared with sun-spots, some showing rather well substantiated periodicity with the spots, and others probably with purely fanciful results."

It is interesting that serious magnetic disturbances arise from shafts of the corona not necessarily arising from sun-spots, but going out in definite directions and rotating with the sun; when such shafts of coronal emanations strike the earth, there arise the great magnetic storms which cause auroras and even destroy the efficiency of telegraph and telephone systems in the areas affected. The sun-spot periods do not agree with any other known periods of the planets or other members of the solar system, and seem to arise from conditions peculiar to the sun, or from some unknown influence quite outside the solar system. It is taught by some who have studied the subject much, that the relative positions of sun, planets, and moon with definite points on the earth, tend to produce such phenomena as storms, earthquakes, volcanic eruptions, and hot and cold spells or "waves".

It seems as though to know the sun would be to know the Creator. As yet we understand very little. The more we learn, the better we understand how mysterious are the sun and the stars, the more we can say sympathetically with the poet-prophet, "God is wise in heart and mighty in strength; who spreadeth out the heavens; who maketh Arcturus, Orion, and Pleiades, and the chambers of the south; who doeth great things past finding out; yea, wonders without number."—Job 9:4-10.

Astronomy at the Equator

THERE are some advantages in studying astronomy at the equator that do not apply at other portions of the earth. Let us imagine two persons, one at the North Pole and the other at the South Pole. There are two nights in each year when the days and the nights are of equal length at every point on the earth's surface. Those nights are approximately March 21st and September 21st. On the night of March 21st those two men are looking at a certain section of the heavens, each at a different part. On the

night of September 21st they are looking at portions of the heavens which could not be seen by them on March 21st because of the bright light of the sun. Again they are each looking at different stars. The inhabitants of the north polar regions and those of the south polar regions never see the same stars. But the man on the equator, by remaining up all night on those two nights, can see all the stars the heavens contain that are visible to residents of our earth. Astronomers make frequent trips to the Andes observatories because of this fact.

To one standing on the equator, or elsewhere at a distance from the poles, the stars seem to rise four minutes earlier each night than the night previous, so that in six months all the stars that were seen on a given night have dropped below the horizon and are no longer visible. This gain of four minutes each day throughout the year brings back into visibility by the end of the year the stars that were visible the year previous. Thus the sun appears to rise 365 times each year while the stars appear to rise 366 times. This appearance is due to the actual revolution of the earth around the sun.

Standing on the equator and looking toward the north the observer will see the north pole star just at the horizon; looking toward the south he will see no such pole star, but will note that "the chambers of the South" (Job 9:9) are relatively empty as compared with the northern hemisphere, within which are located "the sweet influences of the Pleiades" (Job 38:31), the abode of Him that "stretched out the north over the empty place, and hangeth the earth upon nothing." (Job 26:7) Who taught the prophet Job astronomy?

50,000 Feet, Not Miles

IN COLD type it looks badly to read that the professor who is going to signal to Mars expected to rise 50,000 miles in his balloon. (You are right! It was feet, not miles, that were meant) It is believed that flights at a height of 50,000 feet are possible, a plane with a passenger having already flown at a height of 31,800 feet. Only a broken water pipe prevented the flight to 37,000 feet, which was the estimated capacity of the machine.

Passengers on the railways of Colorado frequently faint when crossing the mountains at an altitude of only about 10,000 feet.

HOUSEWIFERY AND HYGIENE

Babies Home and Abroad

THE ideal home is neither a childless home nor one in which there are so many children that the father and the mother can not properly care for them. We believe that in most American homes children are welcome to the extent that their fathers and mothers feel able to give them a fair start in the world. But with the rising cost of living many are wondering whether they can properly maintain numerous additions to their families; and the mothers, upon whom the burden chiefly falls, have recently been considering, in the International Conference of Women Doctors, whether Congress should not be petitioned to make it legal to give medical advice on the subject of birth control. At present it is illegal to impart any information on this subject.

In France the Government is considering what proper measures can be taken to increase the birth rate by increasing the number of marriages. It is observed that there are many more babies this year than last year, as is to be expected; and it is also observed that the babies this year are remarkable for their size, weight and general health.

In England it is noted that since the war the proportion of boy babies to girl babies is as 1,052 to 1,000. This is a remarkable increase, an adjustment of nature which has been observed in connection with other wars, a seeming attempt to replace a part at least of the boys destroyed. England also hopes to accelerate the birth rate.

In Poland the baby question comes up in another form. It is estimated that in this part of the world are not less than a million babies born shortly before or during the war that have never had sufficient food to develop either mentally or physically, and as a consequence are dwarfed and helpless.

A sad feature about the babies in even this favored land is that one per cent of them are mentally defective, one per cent have organic heart disease, five per cent have or have had tuberculosis, twenty per cent have adenoids, diseased tonsils or other similar defects and the same number are suffering from insufficient

food, while twenty-five per cent have defective eyes. In many instances the parents of these children are doing everything in their power to help these little ones get a proper start, while in others the parents are wholly irresponsible and indifferent to the welfare of the little beings that owe their existence to them.

The human family is like an old apple tree nearly ready to die, that puts forth an enormous quantity of blossoms but bears little fruit. When the tree was young and healthy the blossoms were fewer, but there was more fruit in proportion to the number of blossoms. In the early days of the human family there were frequently a good many years before any children appeared. In the case of the ten patriarchs from Adam to Noah the first son in the family was born when the father had reached the average age of over 155 years, and Noah was 500 years old when his first child was born.—Genesis 5:1-32.

We are familiar with the suppositions of the higher critics that these years before the flood were not really years, but that they were merely months of thirty days each that were called years. This is just like the higher critics. It would explain how Noah was actually only 500 months old when we thought he was 500 years old, so that his first son was born when Noah was about forty-two. But it leaves us with the interesting suggestion that his great-grandfather Enoch was only sixty-five months old when we thought he was sixty-five years old, so that Enoch's first son was born when Enoch was less than five and one-half years old.

This arrangement of the higher critics made it especially nice for Enos, Cainan and Mahalaleel, father, son and grandson. In this instance, according to the higher critics, there could have been but eleven years and three months difference between Enos and his grandson, and all three of the boys could grow up together. What a cute little higher critic Grandpa Enos must have been at his twelve-year old birthday party, with his eldest son Cainan seated at his right hand, having by that time attained to the ripe old age of six years and seven months, and his

grandson Mahalaleel at his left, already attained to the age of nine months and rapidly growing up into young manhood.

Free Milk to Babies

EUROPE is an illustration of what a milkless diet does to babies. In Italy alone thousands of little ones have died from lack of milk. In Germany and Austria, it is said that children exhibit a growth retarded in development by about the period of the economic blockade and that many children are so undernourished as to be immediate victims of slight disorders that would ordinarily make no trouble.

Not every American city is so provident of its resources of child life as Sacramento, California. The Commissioner of Public Health, Dr. G. C. Simmons, deserves especial honor for his care for the Sacramento babies. He has made arrangements so that free milk will be distributed this winter to families with children under two years of age. Commissioner Simmons says: "Since milk has gone up in price many families are cutting down on their supply, causing children to be sick and undernourished; hence we have arranged to distribute milk free of any charge."

There is no American community that would not have gone to the rescue long ago, if it had been horses or hogs that were undernourished or suffering from epidemic, for horses and hogs possess some value to business, and without them profits might be decreased. If hogs were of no value in business no one would turn a hand if all the hogs in the country had cholera. What counts in these days is how much money can be made out of a thing.

Babies are of value, however, for without grown-up babies no money could be made at all in anything. Babies create the unearned increment of land and buildings; at any rate this increase in value of property is caused by increase in population. The increase in New York State in babies and in assessed valuation of real estate—which largely represents unearned increment—shows that babies increase in economic value from time to time. During the period from 1881 to 1890 the average increase in real estate value per baby was \$1,101. The worth of a baby to business doubled in the period from 1890 to 1917; for with each additional baby real estate values jumped \$2,151.

The reason why babies create unearned in-

crement is that babies grow up and work, and the work makes everything worth more. If the Sacramento babies have fifteen cents' worth of milk a day for three months of winter, each baby would represent an investment of about \$15 a year or \$30 for the two years. But as not over ten per cent of the Sacramento babies will get the free milk, the amount per baby is only \$1.50 a year. This makes a very nice investment of the people's money; for if Sacramento real estate jumps \$80 a year per baby, as it has in New York the last twenty years, the profits on the \$1.50 investment are some \$78.50.

If the unearned increment real estate increase were only a quarter of the total increase, it would be \$20 a year, which would give the still more modest profit of \$18.50 per baby. Besides, the free milk will make more of the babies grow up, which would be pure "velvet", as the business phrase goes. There are few better investments than giving poor babies free milk, though why it should be only during the winter is not clear; for babies have to consume lacteal fluid during the rest of the year, and to give them milk all the time would cost only about \$6 a year when averaged over all the babies, and this would leave a good profit.

Better days are coming for babies. It is still the time when "there is a generation, whose teeth are as swords, and their jaw teeth as knives, to devour the poor from off the earth, and the needy from among men." (Proverbs 30:14) Some day, soon, the Golden Age will be here, and then it will be different; for of that time it is written, "Who is like unto the Lord our God, who dwelleth on high! He raiseth up the poor out of the dust, and lifteth the needy out of the dunghill; that He may set him with princes, even with the princes of His people." —Psalm 113:5-7.

The Osteopath

THE Osteopath tells you that if the body is to function properly every part must be in normal relation with every other part, and that organisms contain within themselves the inherent power to cure disease. He has the idea that if there is anything serious the matter with you and if each one of the principal bones of your body can be used as a pudding-stick to stir up the rest of your anatomy and to get a warm current of blood flowing through your body, you will get well; and you generally

He tells you how a sixth dorsal vertebra, being turned out of its true relationship to the vertebrae above and below it, will involve the vasomotor nerves to the stomach, impair the secretory power of the gastric glands, make digestion slow and incomplete, form gas in the stomach and cause pain and distress of mind, all of which can be relieved by one who knows how to reset the slipped vertebral joint.

He tells you how a slip off a curb stone or any other slight fall may cause a misplacement of the pelvic bones that will cause all the symptoms of appendicitis; and he suggests to you that before you let them cut you open you had better find out whether or not it is necessary. Maybe the osteopath can fix you up in a few minutes so that you won't need to be cut at all.

He tells you how a fall may so affect the spine as to cause cystitis, and when the spine is corrected the bladder trouble disappears. He tells you how the neck vertebrae, getting out of proper relation to one another, may cause distortion of the features and pains in the face and jaw, stiff neck or headaches which only osteopathy can relieve.

In a well authenticated case in hand an infant suffered severely from worm fits. In one of these a worm eight inches long was taken from his nose. In the accompanying convulsions his chest became deformed by the knees being brought up so forcibly against it that one side was depressed nearly half an inch. After thirty-five years, osteopathic treatments removed the curvature of the spine which had persisted all this time, lifted the depressed ribs and the appearance of the chest is now normal.

It is well that we come to reverence our bodies and their Maker. What a wonderful lot of soldiers are those white corpuscles, roaming about through the human system, attacking and destroying invading germs and devouring particles of dead foreign matter! They form a defensive army; and whenever germ invasions occur they rush in great numbers, like trained soldiers, to destroy the invading host. Often many of them succumb in the struggle, and their dead bodies go to form the pus or "matter" so often observed after injuries. They are an embodiment of the healing power of nature; and recovery in infectious diseases is due largely to their activity. The blood contains other germicides and antiseptics, and health returns wherever there is proper quality and quantity.

There are 310 mechanical movements known to mechanics today; and all of these find representation in the human body. Here are all the bars, levers, joints, pulleys, wedges, pumps, pipes, spirals, eccentrics, wheels and axles, ball-and socket movements, beams, girders, trusses, buffers, arches, cables, columns, and supports known to science. The osteopath believes that if all of these parts are kept in good mechanical working order by the aid of a capable anatomical engineer, good health will persist for a decade or two after the body would ordinarily have gone to the scrap heap.

How wonderfully we are made! The Psalmist, using the human body as a picture of the Body of Christ, says, "I will praise thee; for I am fearfully and wonderfully made: marvelous are thy works; and that my soul knoweth right well. My substance was not hid from thee, when I was made in secret, and curiously wrought in the lowest parts of the earth. Thine eyes did see my substance, yet being imperfect; and in thy book all my members were written, which in continuance were fashioned, when as yet there was none of them. How precious are thy thoughts unto me, O God."—Psalm 139:14-17.

New Oils to Eat

IT LOOKS as though prohibition were turning the liquor men from parasites into business men. The saloon was a waster, but the new brewer and saloonkeeper may prove a dangerous rival to men long established in business; for the wine and liquor men are showing themselves good losers, and are attacking the problem of making a living and turning brains into dollars, with vigor and effect.

In California the grape growers, who were closely linked with the wine interests, were greatly concerned over the destruction of the values in their properties. Now they are finding new ways of utilizing the grape and are turning wastes into useful products.

The wine interests have put the chemist at work. Hitherto the only valuable part of the grape was the juice; but it is announced that the grape has been made to yield an edible oil that is destined to rival the olive, corn and cotton-seed oils as food for man.

One fifth of the tonnage of grapes is pomace, the pressed mixture of skins and seeds, and of this twenty-five per cent is grape seed, or about 100 pounds of seeds per ton of grapes. This is

now crushed, grape oil extracted at a cost of \$1.20, and the residue of the seeds is used for feed for animals. It may not be long before grape oil appears on the grocers' shelves, and a new food product given not merely to the American public, but to the people of the world wherever vineyards exist.

The same chemistry that gives the grape oil looks forward to the production of edible oils from the seeds of tomatoes, pumpkins and other vegetables. Little by little the pressure of necessity is bringing blessings to the people, making life pleasanter, affording variety, and making less intolerable the cost and conditions of living.

A Vegetarian Samson

AT FIFTEEN Dean Duffield Cutting of Seattle stands six feet, weighs 185 pounds, and is a giant in strength, and he has never eaten meat. All day long he handles a 75-pound drill at the shipyard without particular effort.

His strength does not come from animal food; for he breakfasts on a quart of cool water, lunches on three peanut sandwiches, two or three bananas and a pint of milk, and dines on beans without pork, mashed white or sweet potatoes and other vegetables. When a child he saw a picture of a dog retrieving a fowl, and has never cared for meat since.

This boy's experience reminds one of a youth in an oriental court, who insisted on being fed on "pulse" and water, meaning uncooked grain of various kinds, and as a result displayed the best physical and mental development in the court.—Daniel 1:8-16.

Clippings and Articles

FRRIENDS of THE GOLDEN AGE who mail us clippings, will help the editors by observing these suggestions: Do not send whole newspapers or pages; cut the clipping out; if it occupies more than a column, cut the paper around so as to include the parts in other columns, without having parts on narrow strips; if it is on more than one page, paste or pin the columns together at the top of the clipping; on blank spaces in the heading or elsewhere, not down side of clipping, write legibly name, town, state and date of newspaper or magazine; do not roll clippings, but fold flat.

Recipes suitable to the next approaching season, and practical hints on home-keeping health and hygiene are suggested from women friends. From any reader brief articles are

acceptable on topics under any of the ten departments. Boil everything down and make things clear. Keep a copy, for what you send will not be returned, but considered a contribution to our work.

Pot Roast

Take a piece of beef from the round in a chunk. Sear this all over by pressing it down in a hot frying pan, first on one side and then on the other. This makes a covering that keeps in the juices. Then simmer it a long, long time in a deep covered dish. When it is half done put in salt and pepper, chopped onions and plenty of finely minced vegetables, and keep on cooking till it is tender and the juice is pretty well absorbed. You can keep it shut up in the oven or let it cook slowly on the back of range, but it must cook slowly and a long time. A four-pound piece will easily make three meals. The remaining juice may be thickened. A cup of tomatoes with vegetables may be added.

Pot Roast

Wipe one and one-half pounds lean beef. Cut in one and one-half inch pieces and sear, uncovered, in oven at temperature of 450 degrees for ten minutes. Add one onion sliced, eight slices of carrot, two sprigs of parsley, 1½ teaspoons salt, ¼ teaspoon peppercorns, 2 cups canned tomatoes, 1 cup peas. Cover and finish baking. Before serving, thicken with three tablespoons of butter to which have been added three tablespoons of flour.

Hamburg Roast

Secure from your butcher about twenty cents worth of hamburg steak, well ground; mix thoroughly with the meat one cup of bread crumbs, one large or two small onions, chopped fine. Season to taste with salt and pepper. Place in baking pan, put several small lumps of butter on top and pour a cup of sweet milk or water over all, to make gravy.

—And a California Roast

"It is the opinion of your humble servant that there will be *but very few* now living who will not die if the cooking recipes given in the GOLDEN AGE are followed. Why not give recipe for healthful food dishes?"

M. S. D., Paso Robles, C.

TRAVEL AND MISCELLANY

Devil Worship in China

THE fear of evil spirits, and the desire to outwit them or appease them, is the secret of most of the illogical things that the Chinese do. The reason for the walls about the Chinese burial plots is to keep out evil spirits. The statues of animals and gods stationed at the four corners of the lots are to frighten these spirits away. The two large painted eyes at the bow of each boat are to enable the craft to see the evil spirits which are lurking in the waters, and so to avoid them. The temple roofs and the rich men's houses are decorated with large carved wood dragons to drive the spirits away. They are supposed to travel in straight lines only; and for that reason the wonderful Great Wall winds snakelike over hills and through valleys throughout the fifteen hundred miles of its length. To foil the plans of the evil spirits the wall was built with many steep turns. Temples are built with blank walls opposite the entrance gates to stop the progress of the devils, and pots and jars are left on the house roofs to catch them. Buildings are limited in height for fear the evil spirits in their flights might run into them.

This demon worship leads to superstition in every direction. It has woven itself about everything pertaining to death. Bodies remain unburied until the medium assures the family that the lucky day has arrived. When the day does arrive, the body is buried with food and clothing for its future needs, and sometimes with a horse and cart in which to travel about. Fastened to the coffin is a rooster, which is supposed to convey the spirit to its ancestral home. China has vast coal deposits, but the Chinese will not develop these because of their superstitious fears of disturbing the dead. The forests have long since disappeared, and the people suffer terribly in the winter for want of the fuel which lies right at their hand.

All can see that instead of being partakers of the Lord's table the poor Chinese are partakers of the table of devils" (1 Corinthians 10: 21) the Apostle plainly states that all the worship presently offered to idols went to the demons infest the atmosphere of our earth and was

accepted by them. These demons are indeed all about us, as they were in the time of our Lord; but the ideas of the Chinese that they move in straight lines, or can be frightened by anything that human beings can do, are of course absurd. All the spiritualistic phenomena of our day are the work of these demons, as has been previously shown in these columns. In worshiping demons the Chinese are only doing in another way what is done by every person who attends a spiritualistic seance; and the same is true of persons who, while supposing that they worship the true God, are bowing down to doctrines which dishonor Him and his Word of Truth.

Atmospheric Dust

WHAT starts the rain? is a question worthy of the investigative mind of a child, but one which some adults could not answer.

The evidence is strong that without plenty of dust there would be no rain. The nucleus of every raindrop is believed to be a mote of dust. If it is true that the condensation of the moisture of the air is dependent upon tiny bits of dust, it can readily be seen how important the dust of the atmosphere is.

Dust plays an important part in four ways: It is one of the chief causes of haze; it probably serves as centers of condensation for fog particles and rain drops; it is the cause of the sunrise and sunset colors and of the air color itself; and it is the cause of twilight.

Dust comes from several sources. It is blown up from the surface of the earth by wind; it comes from space outside the atmosphere; as salt dust it rises up from ocean spray; and some is blown up from volcanoes. In the volcanic explosion of Mount Krakatoa, between Sumatra and Java, dust and steam were thrown up twenty miles into the air. The dust from this explosion produced the wonderful sunset colors of 1883, which lasted for three or four years, showing that the volcanic dust remained suspended in the air for that length of time.

Dust is carried by the winds for great distances. It may be said that there is no square mile of earth that has not received dust from every other square mile.

If a man were given the problem of how to create an earth and an atmosphere which would provide suitable water supply for practically the entire surface, he would probably set out to invent an elaborate system of some kind to do the work. But the Creator, who did a better job than any human could have imagined, employed the dust of the ground to give the rain its start to water the ground, and used the same dust to paint the beautiful tints that are the despair of the artist.

To accomplish great things man employs great agencies; but "base things of the world," we are told, "and things which are despised, hath God chosen, to bring to nothing things that are."—1 Corinthians 1:28.

South Africa to Boom

DURING the war among other countries, South Africa learned something about taking care of itself without outside help. Much of the foodstuffs had previously been imported; but when war drafted the world's shipping, South Africa, rather than starve, learned to produce its own food.

The people had imported even their breakfast eggs from England, but now they raise plenty of eggs and chickens for home consumption. Butter and cheese are being produced; and the traveler can drink home-grown coffee, and eat South African vegetables. It is difficult to get textile and machinery industries underway, but mills and factories are gradually rising.

The tourist today finds Johannesburg, not a village, but a city of tall buildings, street cars, theaters, movies and hotels. The world demand for diamonds never was so great, and the Kimberly mines are operating full capacity. South Africa is called a good country for white people, with 2,000,000 whites, and some 3,000,000 colored persons there. The land is developed in only a few parts, and the hardships of frontier life are no worse there than elsewhere.

The real boom for South Africa will materialize after the Golden Age is inaugurated; for South Africa will share with all other countries the good things that are coming. What is written of "Zion", will also be true of the most distant countries: "Jehovah shall comfort Zion; he will comfort all her waste places; and he will make her wilderness like Eden, and her desert like the garden of the Lord; joy and gladness shall be found therein, thanksgiving, and the

voice of melody." (Isaiah 51:3) Yes, South Africa will boom!

Road of Epsom Salts

IN ADDITION to the best known use of epsom salts, and its employment as a fertilizer and as raw material for the manufacture of the sulphates of sodium and potassium and in sizing and dyeing cotton goods, a new use has been found in Texas.

There the traveler can pass swiftly over a road of this unique road-building material. For ten miles out of Rockport, some 170 miles southwest of Galveston, the road is being surfaced with a material which analyzes twenty-five per cent epsom salts, and which is obtained from flats where the evaporation of the Gulf water impregnates the soil with this salt.

Highway engineers, it is declared, find the mixture a good road-surfacing material; for the salt absorbs enough moisture from the air to keep the roads damp, free from dust, and firm on the driest days. It becomes slippery in wet weather, but this is overcome by adding a small proportion of shell and regulating the slope of the surface of the road.

Better and better roads will be the slogan as the civilization of the Golden Age rises higher, but there is one road the like of which has not been seen. The orders will go forth to "make straight in the desert [of man's failures] a highway for our God." (Isaiah 40:3) Not that God will use it for himself, but he will have it for men to use. As intimated, it will be a figurative, though very real road: "The highway of the upright is to depart from evil."—Proverbs 16:17.

Bright Clothes for Men

ALL MUST have noticed the gradual advance of women into the realm of men's attire, and a growing use by men and boys of garments suitable for the fair sex. It is only a few years since a colored hat-band on a man's hat was unknown. Now a London tailor is trying to introduce ruffles, pink breeches and bright stockings among men. It is our belief that the gradual removal of all differences of sex is under way, appropriate to the new condition of the Golden Age when none will die and the repopulation of earth will no longer be necessary. See Mark 12:18-26 for a statement of some conditions to exist in the "new" age.

RELIGION AND PHILOSOPHY

The Golden Age—From a Soldier's Viewpoint

By Brigadier General W. P. Hall, U. S. Army

THE Golden Age is that period in human history referred to by the Apostle in Acts 3: 20, 21 when he speaks of "the restitution of all things, which God hath spoken by the mouth of all his holy prophets since the world began". Surely it will be interesting to inquire what the human race has lost and what will be restored to it during the 1,000 years during which the Christ is to reign on the earth, as declared in Revelation 5: 10 and 20: 6. We find in the first three chapters of the Genesis account, that man was made in the image and likeness of God, received a paradise home, everlasting life, happiness, and the dominion of the earth, provided he remained obedient to God's commands; and that the man was pronounced by the Lord to be very good. The Bible tells us that Adam lost all, for both himself and the human race, on account of disobedience.

It requires but a casual glance at Adam's posterity—for we are all of the blood of Adam (Acts 17: 26)—to see what we have lost through the fall of father Adam.

On account of the World War, the United States is providing for more than 280,000 wounded, many having lost legs, arms, sight or hearing, etc. The other nations have many millions who are in the same condition as are some of our brave soldiers.

Our great Creator declares that he will restore to the willing and obedient all that they have lost, when his kingdom is established on the earth. We will not at this time refer to the many evidences that the Lord's kingdom is very near, just at the door. We see from Zechariah 13: 8, 9 and other Scriptures, that there are millions now living who will never die, but will fall into line as subjects of the kingdom. Take notice of a few of the joys that will come to all of these.

"The eyes of the blind shall be opened, the ears of the deaf shall be unstopped, the lame shall leap as an hart, and the tongue of the dumb shall sing." "The flesh of an old man shall become that of a child and he shall return to the vigor of his youth." "God shall wipe away all

tears from their eyes; and there shall be no more death, neither sorrow nor crying; neither shall there be any more pain." (Isaiah 35; Job 33: 25; Revelation 21: 4) Our Lord tells us that during his thousand-year reign on earth, all in their graves will come forth; they that have done good, to the resurrection of life; and they that have done evil, to the resurrection by judgment. (John 5: 29) This thousand-year reign of the Lord will be the judgment day for the world. See what a joyful time it will be: "Let the heavens be glad, and let the earth rejoice; let men say among the nations, 'Jehovah reigneth.' Let the fields rejoice, and all that are therein, . . . because he cometh to judge the earth."—1 Chronicles 16: 31, 33.

It has been our privilege and pleasure to assist in showing the wonderful plan of our God towards the human race, to many soldiers on the Border and to some of the wounded at the Walter Reed Hospital, at the National Capital, by means of the Photo-Drama of Creation. We find quite a number interested at this time. Only think what the interest will be when men with one leg or one arm begin to awaken in the morning with two legs and two arms; when the "wheeled-chair men" will have no more use for that form of transportation! Won't there be times at Walter Reed and all the great hospitals in this country and throughout the world? Nor will these great blessings be confined to soldiers, but will surely extend to all the human race, both the dead and the living.

The headlines of the daily papers will be overtaxed in recording only a few of those wonderful things.

When our Lord at his first advent raised the dead, healed the cripples, the blind, and the deaf, his work was only a type of the grand work he will soon begin in the antitype. In the type, Jesus asked the afflicted whether they believed that he could heal them. Upon a reply in the affirmative, the man was healed instantly. In the great antitype, faith in the Lord and his kingdom will be easy. Speaking of the times in which we are living, the prophet tells us (Daniel 2: 44): "And in the days of these kings shall the God of heaven set up a kingdom which shall never be destroyed."

Who Will Show the Way?

IT IS said that in some of the European nations the people are becoming depressed and discouraged. During the war they were stimulated by the supreme effort to win the war; then buoyed up by hopes engendered by promises of a peoples' peace; now disillusioned, and heart-sick, they are sinking into apathy.

It had seemed as though the common man was to be rewarded for his sacrifice; as though, with autocracy banned, democracy would be blessed with prosperity and peace. But the leaders have felt it necessary to rivet chains upon all to constrain the restless; they see no way of deflating currency and giving the people relief from exorbitant living cost; and they feel obliged to fetter Freedom, just when the common people believed they would at last be free. Industry seems about to feel the chill hand of Uncertainty. Finance calls for funds to rehabilitate the fallen structure of industry and trade. Governments cannot continue the paternalism of war. All hands are weak. Wisdom fails. Leadership is dismayed.

Lord Curzon, spokesman for the British Government says:

"Nothing seems to me more certain than that great trouble and unforeseen developments lie before the world. I doubt whether as a result of the war we have succeeded in pacifying Europe. Whether we have or not, it is certain that for some time we will be insecure as to the stability of Asia. Having escaped the dangers of the war, Asia may be confronted with a peril even more serious through disorder and the breakup of Russia and Turkey."

The words of other leaders go beyond perplexity, and border on dismay. The search continues for a Moses to lead the world out of the quagmire. The clergy feel that the mission is theirs. "The new world conditions, brought about by the war conditions of industrial life, of international relations, and of education," declares Professor Shelby of Lane Theological Seminary, "call for increased leadership by the church and especially by the ministers. It is the duty of the ministers to assume a greater leadership in the world than they have ever before exercised." The clergy think the world's hope may be realized if only they may exercise greater authority and power than they did through the dark ages.

The Interchurch World Movement takes up

the burden of saving the world. "It is formulating," says Dr. John R. Mott, international head of the Young Men's Christian Association, "probably the greatest program undertaken by Christians since the days of the Apostles. The Protestant churches of America face the immediate necessity of intervention in the troubled industrial situation in the country."

The clergy will make an intensive investigation. The research platform includes:

"A first-hand study of industrial disputes with a view to rendering any possible service towards just settlements;

"The study and cataloguing of the occasions of the suppression of free speech, and to furnish suppressed groups the place and opportunity for free discussion of any and all affairs short of violence;

"To promote among employers the idea of recognizing labor in management, looking ultimately to their having a voice in financial control;

"To promote the idea among employees of responsibility for production; and

"To study cooperation movements, the problems of the immigrant, and to prepare literature on minimum standards of living, the history of labor and industry, housing, women in industry, agricultural labor, migratory workers, racial relations, and government service and relations."

The general committee, in charge of the world's hope, is composed of 150 prominent clergymen and laymen from the various denominational boards, and is assured by government officials, large employers and labor men that "a united Protestant constituency would have tremendous influence. The time has come for the church to take part, and the church's participation will be welcomed." "It is high time," says Dr. Fisher, head of the industrial relations department of the movement, "for a united Protestantism to cease being content with abstract statements of principles and to get down to actual participation in the labor disputes of the present."

Even militarism sees the need of an orderly settling of the world's new warfare. Colonel Carnegie says, for the Interchurch movement:

"Nothing is more necessary than the spirit that comes through the churches to industry for promoting better relations between employers and employees."

The church is the chosen champion to destroy autocracy and make the world safe. That churches will do what little they can no doubts. That they may accomplish their glorious purpose is quite another question.

need is vital. The desired end is clear. The time for action is short. The means alone are in question. Who will be the true Moses to lead to the Promised Land? The near future will decide.

The Word of God affirms that it will be Christ and his church that will lead humanity out of Egyptian bondage into the Golden Age. Without a doubt it will be done through the church of God. But among the claimants to be the church, it must be decided who is the church. The divine decision will in due time be manifested in the accomplished fact that some claimant will have done the task.

It is a wonderful Golden Age into which the world is soon to emerge from darkness and disaster. It is the dream of ancient sages made real. It is the realized hope of the world. It is "the desire of all nations". (Haggai 2:7) For the Golden Age is a period in which we are told that the world "shall obtain joy and gladness, and sorrow and sighing shall flee away."—Isaiah 35:10.

How will this wonder come to pass?

First, the common people will be given assured freedom from want. It is rarely that a man desperate from poverty and hunger seeks the consolations of religion. But in the happy Golden Age of man there will be plenty; for "the earth shall yield her increase" (Psalm 67:6); and, says God, "I will call for the corn [grain], and will increase it, and lay no famine upon you; and I will multiply the fruit of the tree, and the increase of the field." (Ezekiel 36:29, 30) This will come by the God-given discoveries of a thousand Burbanks working for love of the people.

All will rapidly come to have good homes and pleasant surroundings. Nowadays the worker builds a palace and a millionaire lives in it; he builds an apartment, and has the privilege of living in it as long as he pays another millionaire rent. But then, "they [the workers] shall not build and another inhabit; but they shall build houses and inhabit them; they shall enjoy the work of their hands." And every worker can have his own little orchard. The worker will not create an orchard or vineyard for the rich, and never taste the fruit; for "they shall not plant, and another eat, but they shall plant vineyards, and eat the fruit of them" (Isaiah 5:21, 22); and "they [the workers, for all will be producers] shall sit every man under

his vine, and under his fig tree." (Micah 4:4) It will be ideal—the Golden Age—when every man, woman and child will be happily placed in his own home amid a culture and a plenty such as yet are unknown. Look at the beautiful suburbs of our cities, and think of nation after nation dwelling in such surroundings from one end of the continent to the other and the whole world over.

Now the cry of everyone from prince to pauper is for the blessings of peace. False prophets cry, "Peace! peace!"—but there is no peace. National war ceases; internecine war commences; and no human wisdom can see the end. But the end is promised; for in due time the Savior will say to the angry commotion, peace. National war ceases; internecine war come the "great calm" so much desired. The militarists will no longer lead men into war, but the Prince of Peace will "guide our feet into the way of peace." (Luke 1:79) "Nation shall not lift up sword against nation, neither shall they learn war any more;" but the people "shall beat their swords into plowshares, and their spears into scythes." (Isaiah 2:4) The blessed growth of the arts of peace shall never again cease; for God says, "I will extend peace to her like a river" (Isaiah 66:12), and "of the increase of his government [Christ's kingdom] and peace there shall be no end, to order it, and to establish it with judgment and with justice [in all relations of men] from henceforth even forever." And to this God sets his signature when he adds, "The zeal of the Lord of hosts will perform this."—Isaiah 9:7.

He Whose Right It Is

ZEDEKIAH, last king of Israel, was a very wicked ruler, and to him the Lord said: "And thou, profane, wicked prince of Israel, whose day is come, when iniquity shall have an end, thus saith the Lord God, Remove the diadem and take off the crown: this shall not be the same: exalt him that is low, and abase him that is high. I will overturn, overturn, overturn it: and it shall be no more, until he come whose right it is; and I will give it to him."—Ezekiel 21:25-27.

The one whose right it is to succeed to the throne as ruler and blessing of mankind is the Lord Jesus, the Christ, the great Messiah. Nearly nineteen centuries ago he came to earth as a man and died upon the cross that he might

provide the ransom or purchase price for the human race by which mankind could be legally released from the condemnation of death. He arose from the dead and ascended on high. Before going away he taught his disciples to pray to Jehovah, "Thy kingdom come, thy will be done on earth as it is done in heaven." (Matthew 6:10) He told his disciples that he expected to return. (John 14:1-5) They asked him the specific question, "Tell us, when shall these things be? and what shall be the sign [proof] of thy coming and of the end of the world?" He answered that the time would be marked by great trouble in the earth—a great world war, in which "nation shall rise against nation, and kingdom against kingdom". (Matthew 24:7) That war began in 1914 and is ended. He further said that the war would be followed by famine and pestilence. The famine is now in the earth; and likewise we have experienced the pestilence, the great influenza. He said further that the war, famine and pestilence would be followed by revolutions; and such have already occurred in some of the nations, and all other nations are being threatened. He further stated that upon earth there would be "distress of nations with perplexity; men's hearts failing them for fear". (Luke 21:26) And this is fulfilled. "For then shall be great tribulation, such as was not since the beginning of the world to this time, no, nor ever shall be."—Matthew 24:21.

A New Idea In "Religion"

A PROMINENT church paper of one of the great religious denominations has made an appeal that should strike a responsive chord in every human heart. It proposes that for the immediate future the professed church of Christ should pay a little less attention to preaching about fighting, and raising money on first one religious "drive" and then another, and devote its energies to preaching the Gospel.

It calls attention to the fact that for several years past the people have heard a great deal about fighting, and it is not sure, now that the soldiers have returned, that all of them have developed in Christlikeness as a result of their activities and environment while abroad. Why this should be when the soldiers have been ministered to daily by the Knights of Columbus, the Y. M. C. A. and other war organizations is not explained.

It also seems to notice an apparent chilling of public interest in "drives" to raise money for religion. Many people have agreed to set aside specified sums from their incomes for the next five years for one, two or three purposes; and the church paper in question thinks that more money can be raised by getting new converts and getting the money out of them, than by trying to raise more funds from the old ones.

There is a suggestion, too, that the people who have been in the front line trenches on all these recent drives would welcome some evidence that their money is being wisely expended, and that the results coveted and promised are attainable, if not in the immediate present then in the not far future.

We think these observations by our contemporary are opportune. We are inclined to stress this matter of professed ministers of religion attending to the business of religion. We realize, of course, that having little to do during the week, and little on Sunday, ministers are easily interested in any worldly subject in which some or all of the members of their congregations are interested; and this fact is no doubt responsible for many of their recent activities.

We hope this idea of having ministers encouraged to preach the Gospel will not be lost sight of. Many of them have preached on every other subject, and to dwindling congregations, as the statistics show; and if now, this time-honored custom of trying to run the world's affairs should give way to a faithful preaching of the Word of God, and the means by which men may gain everlasting life, we go on record as prophesying a renewed interest in religion by some who had formed the idea, justly or unjustly, that many ministers were in the preaching business to preach what the people wanted and not what the Bible teaches.

We think our contemporary made a mental hitch in insinuating that the best way to raise more money is to get more converts. We know that some have formed the idea that the true ideal of religion is "To get more converts, to raise more money, to build more churches, to get more converts, to raise more money, to build more churches", etc.; but we think a better conception of the matter would be obtained by studying the Scriptures, especially the life of Christ, and noting the absence from his preaching of any desire either for numbers or collections or church buildings. He seemed to be

lued with the idea that the greatest object of the Christian should be to lead a Christlike life, and to tell of the coming kingdom of righteousness, peace and life eternal, that will be the joy and satisfaction of every human heart. If the ministry will turn to this, and away from fighting and drives for church money, they may yet save something out of the wreck that civilization now faces.

Judea for the Jews

TO THE Jew, after release from his seventy-year bondage to Babylon, the very thought of the captivity was hateful and everything connected with it was to be eliminated; the new Jewry which preceded Christ's day was to be one refined from all trace of the pagan.

History repeats itself; and today in Palestine the Jew plans for a Jewish polity, entirely freed and cleansed from every suggestion of the age-long captivity in Europe. It is not surprising that the Zionistic Jews, or "Palestinians", agreed that as candidates for the constituent assembly the only eligibles should be Hebrew-speaking Jews. No mixed dialect was to have an official footing in reorganized Jewry. Not even Yiddish, though the language of seven millions, is to be permitted in official circles.

Thus the strange exile of a nation, for ages maintaining its identity unaltered, begins to end. The break with Europe is to be complete. Anything the European oppressors have forced upon the Jews is to be discarded—the ignoble habits of mind, dress, occupation or speech are to go forever.

The Jew in Palestine is to be a farmer, an occupation denied to him for centuries. He will institute the most advanced system of education, with the world's most famous educators, in contrast with the enforced Russian denial of

higher education. His clothing will be the best the world affords, against the yellow badge of anti-Semitic reproach. His dwellings will be amid gardens, in place of Europe's over-crowded tenements and hovels.

"The Jews", says the *London Spectator*, "are to have Jerusalem at last; they are no longer to be there on sufferance of the Moslem. The tables are to be turned; they are at last able to stalk proudly through its streets; it is the Moslems and the Christians who are henceforth to take the wall. The Wailing Place is deserted. No one comes there now. For the first time in centuries the spectacle of the crouching Hebrew lifting up his voice in lamentations at the lost glories of Israel has wholly ceased. There is nothing to lament. The sun shines on Zion."

"There is a time [the long, hard, so-called "Christian" age] to break down [Jerusalem], and a time [forever] to build." (Ecclesiastes 3:3) This is the time now begun. Soon Jerusalem is destined to blossom out into a beauty, honor and grandeur greater than even the most sanguine Zionist might expect; for it is "the Holy One of Israel" who is fulfilling his own prophecies, before all eyes. "He [the Holy One of Israel] shall build my city [Jerusalem], and he shall let go my [the Jewish] captives [captive for eighteen centuries in Europe] not for price nor reward."—Isaiah 45:13.

And to what peak of honor are the Jews in Palestine to be lifted? "Thus saith Jehovah, The labor of Egypt [the whole civilized world] and merchandise of Ethiopia and of the Sabeans [the pagan world], men of stature [of prominence] shall come over [to the Jews in Jerusalem], and they shall fall down unto thee [the restored Jewish state], they shall make supplication unto thee, saying, Surely God is in thee."—Isaiah 45:14.

HOW LONG?

God of all right! how long
Shall priestly robbers at Thine altar stand
Lifting in prayer to Thee, the bloody hand
And haughty brow of wrong?

Hoarse, horrible, and strong,
Rises to Heaven that agonizing cry,
Filling the arches of the hollow sky,
How Long, Oh God, How Long?

Written 1848

John Greenleaf Whittier

GOLDEN AGE CALENDAR

DECEMBER 10 TO 24

Year, 1919 A.D.: 6043 since Creation; 7427 Byzantine Era; 5680 Jewish Era; 2672 of Rome; 2605 of Greek Olympiad Era; 2379 Japanese Era; 1333 Mohammedan Era.

Stars: Morning; Mars, Mercury, Jupiter, Saturn, Venus.

Sun., Dec. 10: Sun rises 7:13 a.m., sets 4:32 p.m.; Moon rises 9:48 a.m., sets 9:45 p.m.; Twilight begins 5:35 a.m., ends 6:11 p.m.; High tide 10:13 a.m. and 10:34 p.m. (New York); 1698, American-Spanish Peace Treaty signed at Paris; 1918, William Hohenzollern reported to have attempted suicide.

Thur., Dec. 11: 1918, 30-day armistice with Germany ceased.

Fri., Dec. 12: Our Lady of Guadalupe Day, Mexico; 1901, Marconi sent first wireless signal from England to Newfoundland.

Sat., Dec. 13: Important conference of labor men at Washington; 1918, President Wilson arrived at Brast, France.

Sun., Dec. 14: 1911, South Pole discovered; 1917, Advertising signs ordered darkened by Federal Fuel Administration.

Tues., Dec. 15: Death of Prophet Day, Turkey; 1773, Tea destroyed in Boston Harbor.

Wed., Dec. 17: Dedication of Temple Day, 25th day of Jewish month Kislev; 1917, Canadian conscription law confirmed.

Fri., Dec. 19: St. Nicholas Day, Bulgaria, Greece, Roumania, Serbia; National Holiday, Venezuela.

Sat., Dec. 20: 1860, South Carolina seceded; 1917, Australia defeats conscription.

Mon., Dec. 22: Winter begins with winter solstice, 4:27 p.m.; Month Nivose (Snowy) began in French Revolution.

Tues., Dec. 23: Pete of the Queen, Spain; Jewish month Tebet begins; 1894, Captain Dreyfus degraded in French army.

The Golden Age

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HOPE AND CONVICTION



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No. 7

LABOR AND ECONOMICS

The Food Supply

FEW questions are of greater human interest just now than that of food. Everybody must eat to live, and all are interested to know whether there is food enough in the world to feed its millions, and if there is how those that need it can get it.

As a whole the American crops are excellent; and in the matter of live stock we have now 4,609,000 more swine, 350,000 more milch cows and 287,000 more of other cattle than we had a year ago. Australia has a vast surplus of food; and the crops in Canada, South Africa, Argentina and in many parts of Europe were all of generous proportions.

The great American hen continues to do her duty. Last year she produced, it is calculated, 23,052,000,000 eggs. That looks like a lot of eggs; but it amounts to only 210 eggs per year, or a little more than one every other day, for every man, woman and child in the United States. Probably the poultry raisers ate some eggs which have not been counted.

It requires a great quantity of food to supply 110,000,000 people for a year. A little while ago the Government disposed of what many people thought was a large surplus of food, accumulated for the army; but somebody got to figuring on the total and estimated that the whole lot did not amount altogether to a day's supply per household. The Government bought this meat at wholesale and sold it at the same prices, in some instances for 50 per cent less than the current prices charged by dealers.

There is one article that is short, however, and that is salmon. The salmon catch, all the way from Behring Sea to the mouth of the Columbia

River, is the poorest in the history of the fishing business. In the great Fraser River, of British Columbia, the salmon pack this year was only 7,000 cases as compared with 155,700 cases in 1915. The Canadian Fish Commission believes that the salmon business has been ruined by a too efficient system of traps and seines in the Puget Sound region; that the fish have been caught before they could get to their spawning grounds, and therefore reproduction has ceased. If this is true it is a pity; for salmon is a staple article of food that will be missed.

Chemicalized Foods

A GOOD many of the plants that were formerly engaged in the manufacture of alcoholic liquors are now being turned into "food factories", and we do not know whether to view this with pleasure or with alarm. It all depends upon what the chemists connected with these plants intend to do.

If they are planning further assaults upon the life insurance company's mortality experience tables by fixing up doctored frankfurters, cakes colored with egg-yellow made from coal tar dyes, bleached fruits, processed rancid oils, cream scoured with soda ash, corned beef and smoked ham redolent with chlorine, ice cream colored with ribbon dyes and pies made of rejuvenated decayed fruits, we can tell them now that there is plenty of this kind of material on the market and we can get along better without these things than with them.

Just recently we discovered that the Horse Aid Society has a connection with a Brooklyn sausage factory, possibly the same plant, or one of the plants, in which some 60,000 diseased

cattle were formerly turned into sausage annually, until the proprietors of the works were sent to the penitentiary. Now these diseased cattle are diverted; we do not know just what does become of them.

If the chemists would turn their attention to the needs of the human system they would do a great service to humanity. As an indication of possibilities along this line we note the familiar fact that the human body contains some sixteen or seventeen elements; that the soil contains the same elements; and that the grain which grows on the soil contains the same elements. Yet when we make our grain into white flour we take for human use the least nutritious portion of the grain, containing only a few of the elements, and give to the cattle the outside of the grain, the most nutritious and valuable parts, and the only ones that contain the minerals needed by the system.

Dr. Wiley, the food expert, recently told the House Committee on Agriculture that it is due to the use of white wheat bread that at the outbreak of the war only sixty per cent of our young men were found to be in proper condition for military service. The human system is not properly nourished by white bread.

Milk as a Food

THE chemists or somebody else have been working away at the milk question, and have discovered a method for condensing buttermilk and reducing it to a semi-solid condition where it gives promise of being of great utility in baking. It is said that this solid milk can be added to bread, producing a more healthful loaf, and one which takes a delicious brown at a comparatively low baking temperature. This lower temperature allows the retention of a larger amount of moisture in the loaf. It looks as though this discovery might be one of considerable value.

For some time a means has been used for converting fresh milk into a dry powder which can be shipped anywhere and eighty per cent of the freight saved. This powder may be kept for weeks, or even for months, and with proper precaution can be remade into fresh sweet milk at the end of that time.

Milk is ideal as a food because it has all five of the elements necessary to human life and growth, fats, nitrogenous substances, sugar, minerals and vitamins or growth-factors. No

other food can take the place of milk for the human infant. Without its vitamins the growth is stunted, as is now so unhappily the case with the million or more of European babies that have never tasted milk; and there is an effect upon the eye, called dryeye, which shows the hunger of the child's system for just what the milk provides.

Because it is pertinent to our subject, and because it is important, we mention here that where infants of under eighteen months cannot be nursed, the best available substitute for the mother's milk is to be had by letting good fresh cow's milk stand until the richer portion has all risen to the top. To this top milk add an equal volume of pure water, and to the mixture add one ounce of sugar of milk to each quart of mixture. After the child reaches eighteen months this preparation may gradually give way to ordinary cow's milk.

Distribution of Food

IT IS easy enough to criticize our present methods of distribution, but we ought to criticize them and keep on criticizing them until we do something definite to improve a plan whereby it costs from two to ten times as much to deliver foodstuffs to the consumer as it does to produce the food itself—a plan which has increased in "efficiency" until now every sixteen people in the country support a distributor, as against thirty-one people in 1870. Gambling in the stock markets has something to do with this inefficiency; and Congress ought to make it illegal for these gamblers' quotations to pass through the mails or over the wires. In one day there is more wheat sold in Chicago than comes into Chicago in an entire year; and every time it is sold there is a tax, however slight, laid on every table in the land.

Another item which enters into distribution costs and the welfare of the people is the storage of food. In August, a representative of Swift and Company informed a Congressional investigation committee that the total supply of dressed meats ready for the market on June first was sufficient to last for only ten days. But if that was the truth on June first, and if the newspapers tell the truth, which is equally uncertain, then it was not true three months later; for at that time, and with men, women and children suffering for lack of food, it was estimated that there was \$2,000,000,000 worth of food

stored in New York City, not altogether in the licensed warehouses, but much of it in brewery lofts and other unlicensed places.

At that time, when the Government began to get after the hoarders and profiteers in human necessities, millions of dollars worth of food-stuffs were seized in a St. Louis warehouse on the charge that they had been held over three months with the object of increasing the price, ten million eggs were seized in Detroit, and there were like seizures in Buffalo and elsewhere. At that time the charge was also made that warehousemen were storing food in one city as long as the law permits, and then moving it to another city and re-entering it to storage without keeping any record of the time when it was first stored.

Because of their power, the five great packers, Swift, Armour, Wilson, Morris and Cudahy, upon whom the nation specially leaned in war time to supply food to the army, are now the special objects of suspicion in the matter of profiteering. These five packers own ninety per cent of all the refrigerator cars in the country. In 1916 they slaughtered eighty-two per cent of all the cattle, handled half the poultry, eggs and cheese, and are rapidly gaining control of all foods for man and beast. They are also making large inroads into the marketing of building material and fuel commodities.

These five packers have gained control of 762 other companies. They now manufacture or deal in 775 commodities and dominate the food supply of the world. The recent boost in shoe prices is traceable to them in this way: Controlling the hide supply they took excessive profits and passed the increase on to the manufacturer, who added something more for himself, and the wholesaler and retailer followed the same course. These packers quickly dominate any field they enter. In 1917 Armour first undertook the sale of rice; in that same year he became the greatest rice merchant in the world, his sales amounting to more than 16,000,000 pounds. Immediately, the wholesale price of rice increased eighty-five per cent.

The big packers control the stockyards to which the nation's meat supply is shipped, control the commission men who are the producers' only representatives at the yards, discriminate against independent packers who would use the yards, prevent new packers from

getting into business, and restrict the meat supply of the nation by so manipulating the livestock prices as to discourage the producers. A favorite way to do this is to boost the market until an immense quantity of stock is known to be on cars on the way to the yards, and then to suddenly drop the prices so that on arrival at destination the shipper receives far less than the stock quotations had led him to expect. The financial power of these packers is so great that no competitor can hope to succeed if they use their power to break down his credit.

Oddities in Food

THE widespread use of the automobile has so reduced the demand for horses, and the growers find them so unprofitable, that the Government has sanctioned the sale of horse meat, with a view to killing off the surplus supply. It also hopes to add to the leather supply by this means. All horse meat or horse meat products must be labelled as such.

The New York State Department of Farms and Markets has issued an appeal to the people of New York City to learn to eat rabbits, calling attention to the fact that at prevailing meat prices rabbits are cheap and wholesome food, and are considered a great delicacy in many parts of Europe.

The United States Department of Agriculture has been setting forth the virtues and advantages of the goat. The goat will eat anything, stay anywhere and submit to any kind of treatment. In return it gives a rich, creamy milk that is especially good for babies and can be made up into seventeen different kinds of cheese. Roasted kid is considered to be one of the most delectable of meats.

In the foregoing, the Government has made efforts to assist the common people in providing a meat supply at prices within their means, and in this has done a good work. In times of high prices for meats we might remember the conditions in the siege of Samaria when "an ass's head was sold for fourscore pieces of silver" (2 Kings 6:25) and the terrible conditions which prevailed then and at the time of the siege of Jerusalem in A. D. 70, when women even ate their own children.

It is a comfort to know that these conditions of scarcity are all temporary and will give way to a better time when there will be plenty for all.

"Fear not, O land; be glad and rejoice: for the Lord will do great things. Be not afraid [of food shortage], ye beasts of the field: for the pastures of the wilderness do spring, for the tree beareth her fruit, the fig tree and the vine do yield their strength."—Joel 2: 21, 22.

Benefiting the Cripples

ABOUT 200,000 American soldiers received such wounds during the World War that they are more or less disabled and require special training to fit them for the future. Human nature is very forgetful of what it owes to its benefactors; and these soldiers, who might find many ready to help them today, would not find as many two years from now. Further, it can not be long, in the nature of things, before they will be expected to compete with those who are uninjured, and when they do, it is necessary that they be specially fortified by training if they would hold their positions.

The Government is undertaking the training of all disabled soldiers; and experience has shown that there is hardly any trade or profession that they can not master under the personal and kindly care of their teachers, provided they have the will to do so. Their compensation, when fitted for the new work, is usually superior to that before they entered the service. While learning they are given compensation of not less than \$75 per month if they live alone, and \$30 for wife and \$10 for each dependent child.

During the Golden Age there will be some very wonderful healings of cripples. We read, "Then shall the lame man leap as an hart". (Isaiah 35:6) We had some wonderful examples of God's power to heal during our Lord's ministry, and also during the days of the apostles. How thrilling must have been the scene, shadowing forth the coming glory of the Messianic age, now dawning, when Peter said to the man lame from his mother's womb, "Silver and gold have I none; but such as I have I give thee: In the name of Jesus Christ of Nazareth rise up and walk. And he took him by the right hand and lifted him up: and immediately his feet and ankle bones received strength. And he leaping up stood and walked, and entered with them into the temple, walking and leaping, and praising God". (Acts 3:6-8) Immediately following this wonderful exhibition of God's power comes St. Peter's still more

wonderful sermon on the Times of Restitution (Acts 3: 19 - 21) as a result of which thousands of Jews were converted to the Christian faith.

Mining Under the Ocean

ONE OF the oil fields of the Pacific Coast, lying within a few miles of Los Angeles, extends out into the Pacific Ocean, and a considerable number of oil wells are located at some distance from the shore.

In England, the workings of the Cumberland coal field run two miles out under the sea. The ventilation of these mines is a nice engineering problem, but is successfully accomplished.

At Workington, England, in the year 1837, before the science of surveying was as highly developed as at present, the sea burst through and the workers were drowned.

Many of the oldest mines of England, long ago worked out and abandoned, have filled with water in the lapse of time, and constitute an ever present danger to the miners in adjacent mines, who may be drowned at any moment.

A Coffee Shortage

THIS would look nice for a headline, would it not, in a day when we are fed with news regularly that first this item of food and then that item is not to be had at the old price because the supply is so limited?

The facts are that there probably never was a time in the world when there was as much coffee in sight as there is at this moment. About half of the coffee-users of the world have been without coffee for five years, and during that time the production has been the same as ever. The green coffee beans keep indefinitely, and get better as they grow older.

Maybe somebody can tell us, atop this information, why coffee that can be bought wholesale in Brazil for 12½c should sell here at retail for 75c, but it is hard for us to understand. It looks to us as though the system of distribution is too well organized, so well organized that the common people have not even a "look in" unless they can arrange for coöperative buying.

Well! Anyway! The Golden Age comes along, not all at once, but gradually. Given the necessities of life in abundance, and statesmen who have a real and abiding interest in *people*, it will not be long before such a condition as this will be corrected.

SOCIAL AND EDUCATIONAL

The New Millionaires

THE new millionaires, created by the blood-money of war profits, have distinguished themselves by a display of foolishness, during the year 1919, unexampled hitherto in the history of the United States, or in any other country, so far as we can judge, with the possible exception of the Roman Empire in the period just before its fall.

In the matter of personal adornment, nothing has been too rare or too costly to suit the taste of the newly rich. Dealers in gems have found it almost impossible to import sufficient quantities to keep their customers supplied, and the gems sold have been of the very highest quality. The dealers report that, whereas they have two rush seasons, Easter and Christmas, this year it has been Christmas in every day of every month. This is an unhealthy state of affairs.

During the summer season, the most expensive hotels in all parts of the country, with rates ranging from \$7 to \$25 per day, were unable to care for their guests, and resorted to the construction of automobile camps to provide shelter for those who could not be accommodated with rooms indoors.

At Saratoga, where a club seat at the ring side is \$8.80, and the cheapest admission is \$1.10, the grounds were packed as never before, the gate receipts ranging from \$65,000 to \$100,000 per day and the daily bets at the track running as high as \$2,000,000. In the great cities, bookmakers toured the sky-scrapers and placed other millions.

The gambling at Saratoga was not confined to horse-racing; but at the card table hundreds of thousands of dollars were repeatedly pivoted upon the turn of a card. A similar mania is reported from France, where fortunes are won and lost in a single play. It is supposed that part of this high-strung nervous tension in America and in France is due to the suppression of the liquor traffic in this country and the cocaine traffic in France.

The women of France and England are reported to have lost much of their womanly modesty during the year, and perhaps the same is true to some extent in this country. In France

and England the dresses are alleged to be nearing the vanishing point, and if they get much worse in this country than they were at some of the bathing resorts, we can adopt the Japanese style of separating the men and women bathers by a line, and paying no further attention to such little items as dress. At one American resort over 500 girls were detained by the police, and word sent to their mothers to bring their daughters sufficient underclothing so that they could go home in decency, or the clothing would be supplied by the city.

At the most expensive restaurant in New York, where two tablespoons of coffee cost fifty cents, the most beautiful and elaborately dressed women of the age stand in line waiting for an opportunity to obtain seats. The houses in which some of these people live have cost fabulous sums. One is alleged to have cost \$5,000,000. One man used 200 tons of coal to heat his house during last year's coal famine. A woman expended \$60,000 for an opera cloak.

Every one is willing to criticize these millionaires, but in some cases we fear the judgment is too severe. We therefore urge that our readers do not think too uncharitably of them. Remember that they as well as the poor are in some respects under the control of the present social system. Custom has fixed laws and barricades around their heads and hearts. False conceptions of Christianity, endorsed by the whole world, rich and poor, for centuries, have worn deeply the grooves of thought and reason in which their minds travel to and fro. They feel that they must do as other men do; that is, they must use their time and talents to their best ability and on "business principles". Doing this, the money rolls in on them, because money and machinery are creators of wealth.

Thus they no doubt reason that having the wealth it is their duty not to hoard it all, but to spend some of it. They perhaps question whether it would be better to dispense it as charity or to let it circulate through the avenues of trade, and wages for labor. Under present wrong conditions, therefore, it is extremely fortunate for the middle and poorest classes that the wealthy are "foolishly" extravagant, rather than miserly, spending lavishly a portion

of the flood of wealth rolling into their coffers—for diamonds, for instance, which require “digging”, polishing and mounting and thus give employment to thousands who would only add to the number out of work if the wealthy had no foibles or extravagances, but hoarded all the money they could get.

In making these suggestions for the measure of consolation they may afford to the poorer classes, we would not be understood as in any sense justifying the selfish extravagance of the rich, which is wrong, and which the Lord condemns as wrong. (James 5:5) Can we wonder that many are envious, and some angry and embittered, when they contrast the wastefulness of the newly rich with their own family's penury, or at least enforced economy. While we wait until the Lord shall vindicate their cause, we cannot wonder that such matters awaken in the hearts of many of the common people feelings of envy, hatred, malice and strife such as we see occasionally manifesting themselves in the current news of the day.

Conditions of Newsboys

AN INVESTIGATION of the industry of street marketing of newspapers in the principal cities revealed interesting facts about the newsboys.

In Cincinnati, for example, there are 2,800 newsboys, or 12% of the boys of the city between ten and sixteen. The boys are not orphans; for 81.2% have both parents living.

They are not from very poor families; 90% of the poor families in which there are newsboys receive no charitable assistance. The Jews are 6% of Cincinnati's population, but furnish 29% of the newsboys, showing that the trading instinct is a strong factor in turning boys to the occupation. About 87% are native born. The native born are 90% in Seattle, 80% in Baltimore and 70% in Boston.

The daily earnings of newsboys average twenty cents in Cincinnati, twenty-two cents in Baltimore and twenty-eight cents in Chicago. In England and Wales the earnings of 45,000 street traders are 12½ cents a day.

Many newsboys are in constant touch with degrading or criminal surroundings. According to Maurice B. Hexter, Superintendent of the United Jewish Charities, who made the Cincinnati investigation, the boys on two papers were dealing with twenty-three supply men, of whom

thirteen were colored men with extensive criminal records. In some cases the boys have to bribe these men to obtain their quota of papers. “No wonder,” says the *Journal of Education*, “lying, cheating and gambling flourish”.

Human Longevity

ONLY a little while ago we learned from the “experience tables” that the average of human life has gradually increased from 33 to 35 years. How is it that it is now said to be shortening? The answer is that it is shortening for those who have reached 55 or more years of age, while it is greatly lengthened for many who would have died in infancy but for the superior care infants now receive.

Between 1900 and 1910, in nine American States, the average death rate for all persons under 35 years of age decreased 15%. For persons between 15 and 20 years of age this decrease was as great as 19%. Between 35 and 45 years of age the decrease in the death rate was 7%. Between 45 and 55 years of age it was 2%. But over 55 years of age the death rate increased 9%. The causes assigned for this increase are chiefly diseases of the heart, kidneys, circulatory system and apoplexy.

These diseases of maturity, or “degenerative diseases”, as the physicians call them, show what we all know to be a fact; namely, that we are living too fast. A French surgeon believes that he has discovered a method to prevent all these diseases of old age. It consists in grafting the interstitial gland from a young animal to an old animal, causing the latter to take on youth and vigor. His first experiments were with 120 animals, in each case with success. His next experiment was with a man over 80 years of age, upon whom he grafted a gland taken from a monkey. The result was that in a short time the man was restored to the health, vigor and mental alertness of a man of 30 years.

The time is at the door when the life of humanity shall be returned to its youth, but our understanding is that the restoration will be done by Christ; for the gift of God, eternal life, can come only through him. (Romans 6:23) Nevertheless, the French experiments are interesting. They are adding to our fund of human knowledge and at any rate enable us to see how easy it will be for the Lord to perpetuate human life indefinitely when, in due time, his kingdom shall be established in the earth.

MANUFACTURING AND MINING

The Chilean Nitrates

By T. A. H. Clarke

CHILI'S nitrate of soda deposits were discovered by Indians about a hundred years ago. In building a fire they noticed that the ground took fire in various directions. Fearing that this was the work of evil spirits they took specimens to the priest, who analyzed it and piled the unused portions in his garden. The next spring there was wonderful vegetation in the spot where the nitrate had been piled. Curiously enough, nothing grows on the nitrate beds themselves; but when nitrate is mixed with soil the results are marvelous. Experiments have shown that on soil where nitrate of soda was used the productivity lacked only about twenty per cent of being double what it was without the nitrate.

The only nitrate deposits capable of being worked commercially exist in Chili, and constitute Chili's most important article of export. Fish skeletons have been found in these nitrate deposits, and it is supposed therefore that at some time the deposits constituted the ocean's bed and were formed by decay of its fishes and seaweeds. The deposits are now found at elevations of 2,000 to 6,000 feet above the sea, to which they have been raised by the earthquakes that are characteristic of the region. The grounds are largely owned by the Government and are auctioned off from time to time.

The rock in which the nitrate deposits are found is generally white, but may be yellow, gray or violet. It is salty to the taste and soluble in water. The nitrate pampas are in the midst of rainless deserts. The caliche (nitrate rock) is broken up by explosives, transported by rail to rock crushers, boiled, refined, crystallized, dried and packed in 200lb. bags for shipment. Iodine and table salt are by-products of the process of manufacture. The standard nitrate used for fertilizing purposes is ninety-five per cent pure.

It is estimated that 50,000 men are employed in the 167 plants engaged in the production of commercial nitrates, and that three per cent of the available deposits are being worked. During the war Chili experienced a great boom, on account of the immense quantities of nitrate used in the manufacture of munitions. The

nitrate has to be lightered out to vessels often to a distance of several miles; but great efficiency in this work enables the loading of as high as 250 tons per hour, in spite of the heavy swells frequently experienced.

Surely God's ways are not man's ways. What a strange thing that, out of these desert wastes, should come something which is causing hundreds of thousands of acres of land in the United States, and elsewhere, to yield almost double their usual crops. The Lord has available all the materials wherewith to turn this earth into a Paradise again as soon as the clock of the ages has struck the time that suits his plan and purposes.

Oil From Coal

IMPERILED economically by the hard peace conditions, Germany is impelled to thrifty employment of her resources. A resource lacking in the German Republic is petroleum, and the Germans are establishing vast factories to convert coal into petroleum and coke. The coke will contain most of the energy from the coal, and the petroleum will be a clear addition to the national resources. According to the claims of Prince Loewenstein, a prominent chemist and manufacturer, 13½% of the coal can be taken out and the remaining "cokelike" substance burned with only 2% loss of efficiency. The 13½% will comprise 10% crude petroleum, 1½% benzine and 2% heavy oil. The government plans to build huge plants for the process, and to utilize the "coke" in the national railroads, which hitherto have used annually about 12,000,000 tons of coal. The processing of the coal will give 18,000 tons of benzine; 24,000 tons of heavy oil and 120,000 tons of crude petroleum for use in the nation's industries.

The distillation of coal or shale for oil is not new. A process was patented in England in 1850 and another in this country in 1854. By 1859 over sixty plants were working the American oil shales and supplying the newly invented "kerosene", to take the place of the whale and animal oils and candles hitherto used for lighting. Up to 1860 the shale-oil industry prospered, but the discovery of petroleum in liquid form brought an end to the business.

"He becometh poor that dealeth with a slack hand; but the hand of the diligent maketh rich".

—Proverbs 10:4.

Decreased Efficiency

IN A manufacturing plant no factor is as important as the contribution of the workers. The ability and willingness of the worker to turn out all the work possible is all-important, and has been a prime mover in the efficiency and profitableness of manufacturing industries.

War conditions have had an interesting effect upon the working branch of manufacturing. According to a large Philadelphia manufacturer an investigation shows that the product per man per hour under identical conditions today and before the war is one-third less now than then. This is notwithstanding an increase of 100% in wages. In an investigation covering several states the wage per man per hour had increased 240% while the product per hour had decreased 62%.

Of course, the reliability of such figures is subject to investigation as to motives that might control the investigators. What the average business man finds is liable to be what he wants to find. Figures can often be "adjusted" to tell almost any story.

But if the figures are to be relied upon, the outcome of easier working will result in a smaller volume of goods produced, less goods per capita, and higher prices for the goods that are produced. There is no question that if every worker produced twice as much there would be twice as much available for distribution among the workers, whether by the current wage system or under any other régime. The only way to spell plenty is w-o-r-k.

Perhaps some of the let-up in work is owing to justifiable causes. Sometimes in the past the workers have been worked too hard, in which case they ought to work less strenuously; for a worker's health and well-being are of untold more importance than the product of his labor. Knowing the tendency of employers in the far and the recent past to drive labor beyond endurance, persons of broad view are glad to see any improvement in working conditions.

Employers seem to think that they are a kind of privileged class, not bound by necessity to work to the extent they make their employes work. They should remember that they are

subject to the same divine law as anyone else, and that one of the requirements of even the Mosaic law was the employer should so regulate working conditions "that thy manservant and thy maidservant may rest as well as thou".—Deuteronomy 5:14.

American Industries

EXPRESSED in millions of dollars the capitalization of the various industries of the United States is as follows:

Railroads	\$16,563, or 42.3%
Iron and Steel	4,281, or 10.7%
Chemicals	2,034, or 7.3%
Textiles	2,810, or 7.2%
Food	2,174, or 5.6%
Lumber	1,723, or 4.4%
Paper and Printing	1,433, or 3.6%
Beverages	1,015, or 2.7%
Metals (other than iron and steel)	1,013, or 2.6%
Stone, Clay and Glass	987, or 2.5%
Vehicles	803, or 2.2%
Leather	743, or 2.0%
Tobacco	303, or .9%
Miscellaneous	2,047, or 5.4%
TOTAL, \$39,206, or 100%	

Economists divide human activities into production, distribution, and consumption. Of the industries here listed, those devoted to distribution amount to 44.5%, and those devoted to production are 55.5%, showing a substantial equality between the two. If farming, commerce and finance were added, the figures would be somewhat different.

It is noteworthy that the one industry that has been a drag on the others—beverages—with a billion dollars investment, has been wiped out by national prohibition. It is the only one, except tobacco, whose destruction could not cause some serious consequences. It is gone, and is a good riddance.

The industries of today, with an American population of a hundred million, are nothing to those of the incoming Golden Age when the billion and a half world population will in a few hundred years rise to over twenty billion. Of this incomprehensible number over a billion should be domiciled in the United States, and the industries of the country should be ten or twenty times what they are now.

The contrast between those now having control of these vital and indispensable interests is suggested by two Biblical expressions: now, "the workers of iniquity flourish" (Psalm 92:7); then, "in his days shall the righteous flourish".—Psalm 72:7.

FINANCE·COMMERCE·TRANSPORTATION

Short-Line Railroading

GEORGE M. BRINSON had put some \$700,000 of his own money into an 88-mile railroad running out of Savannah, Georgia. The line ran through farm and timber lands and touched no other large city. He was making the road begin to show a fair return.

It was a typical, local, rural enterprise. Mr. Brinson was president, general manager, and pretty much all the officers. He could pay his workers better wages than they had earned on farms or in the timber. They gladly worked hard for him, because he was a good boss. In an emergency the shop men would put on extra steam to get the rolling stock ready for renewed service. Others willingly worked the same way, and regarded themselves much better off than they had been.

The road-bed was not yet seasoned, and before putting good, substantial, new locomotives on the line, Mr. Brinson bought five old "rattle-trap" locomotives, to take the brunt of the rough service and rack themselves to pieces. The line had some cars of its own, but not enough for the traffic; and it borrowed the needed extra rolling stock from the big lines, which were getting new business from the Midland and glad to accommodate a new "feeder".

Mr. Brinson has appeared and testified before the House Committee on Interstate Commerce. The road had been in operation only a few years before the American-German war. Now he cannot get a shop-man to help out by speeding up when a locomotive is out of repair and is urgently needed to handle traffic. The big lines no longer loan him their cars. The local labor receives the same wages as the Government pays everywhere. He cannot make the old deal, to induce traffic to move over his line, even if he could get the cars to carry it.

The total investment in the road is about \$1,200,000, including \$360,000 of bonds. Mr. Brinson says the bonds are in default as to interest payments; but the bondholders, being local people, have not foreclosed. He states that he cannot possibly operate the road to clear expenses, to say nothing of paying interest on the bonds. The value of his \$700,000 in the

stock has been largely wiped out; and there seems not the slightest chance of ever declaring dividends on the investment.

Things look blue, if not black, for the Midland. And it is typical of the little roads which have signed the short-line contracts governing conditions of operation.

The country's railroad expansion requires substantial, enterprising business managers of Mr. Brinson's type. He is the kind of man that throws railroads into new stretches of country, and opens up and develops them. The railroad development of the land is in the hands of the Brinsons, the executive heads of the hundreds of short-line feeders for the big systems.

How much does Mr. Brinson feel like building another short-line road, like the others he has built and successfully managed up to a paying position, before he sold them to others? What is to become of the necessary expansion of the country's roads? Who will develop the territory just ready for new lines?

The old is passing. Perhaps new ground will be opened up effectively by truck lines. Perhaps cheaper transportation than railroads will be found in the Ford gasoline motor car. Inventive genius is constantly working on new and better methods. Soon even the world will realize that "old things are passed away; behold, all things are become new".—2 Corinthians 5:17.

A Very Weighty Matter

MR. EDITOR: In your issue of October 1st, 1919, page 6, second column, you make a statement which has been called in question, viz., "Every year our railroads carry 650 tons for every man, woman, and child in the land". I would like to ask whether this can be a misprint or a misstatement. If that means each man, woman, and child, and there are five in the average family, it would mean 3,250 tons to be loaded and unloaded for each family, and it would look as if Dad would have to hustle lively in moving freight, in addition to earning a living.—E. M., Los Angeles, Calif., Oct. 25, 1919.

Just the kind of shot we might have expected from a country where the climate is so perfect that houses are a nuisance, clothing is a burden and the food question is a joke! E. M. ought to

live up in the frozen North through one or two of our January and February water-pipe festivities, and "heft" our imitation marble slabs, our limestone-laden flour, our "bony"-laden hard coal, our "loaded" fabrics; and then he would know why we have to have things up in this country in the winter time in order to keep alive.

Suppose now, E. M., that we were to get a box of oranges from the paradise where you live. It comes right through 3,127 miles to New York. To start with, let us suppose it weighed 60 lbs. Statistically speaking, when that box of oranges reaches our front steps it will weigh just 93.81 tons. You just send the box right along and see how bravely Dad runs out and lugs that 93.81 tons up the steps, and watch the smiles on the faces of the kiddies when he does so. Railroad tonnage is figured in ton-miles. 650 tons for each person means 650 tons carried one mile. But most of our things are carried many miles, and this runs up the tonnage. A ton of Scranton coal in Los Angeles would weigh, theoretically, over 3,000 tons. But, pshaw, what is the use of our sending coal to Los Angeles? They would not know what it was when they saw it.

Rice Imports

THE shipment of American foods to Europe has had an interesting effect upon the rice trade. In 1917 the total rice movement from China and Japan to the United States was 33,486 tons; but in 1918 one American banking company alone, through one American port, imported a quantity three times as great.

In 1694 a vessel bound for Liverpool from Madagascar was blown so far out of her course that she had to put in to Charleston, S. C., for repairs. While there the captain of the vessel gave a small package of rice to one Thomas Smith, to use as seed. It had been supposed previously that rice would not grow in this country, but Smith grew enough rice the first year to almost feed the whole colony, and it has been a staple crop of the marsh lands of the southern states ever since. No doubt the Lord knew how suitable is the South for rice production; and it was his hand that guided the Madagascar vessel to these far shores, and laid the basis for a part of the great food supply that will be needed by the myriads of mankind that will fill the earth in the Golden Age.

Canada's Finances

THE new governing factors of Canada will have large problems to handle. During the four years ending with 1918, Canadian investors advanced seventy-one per cent of the total sum of \$1,561,619,024 put into the war during that period. In that time the national debt was multiplied by more than five, and the interest on the debt by more than nine. Within that period, although the gold supply increased, the paper money in circulation increased so greatly that there are now only forty-two cents in gold back of every paper dollar, while in 1914 there were seventy-four cents back of each dollar.

The Government's requirements for the year, on account of demobilization and other extraordinary expenses due to the war, are estimated at \$800,000,000, of which amount only about \$280,000,000 can be provided by the revenues of the country. Somebody must "find" the balance. At the close of the fiscal year Canada's debt will be about \$2,000,000,000, or \$250 per capita. The pension burden in Canada will be very heavy. The 8,000,000 people of Canada will try to pay in pensions an amount equal to that paid by 50,000,000 people of the United States to the Union Veterans of the Civil War.

No Solomon, or collection of Solomons, will handle the complicated questions that modern statesmen have to face without experiencing a large part of the "distress of nations, with perplexity" which our Lord said would immediately precede or accompany the time when they shall "see [with the eyes of their understanding] the Son of man coming [into control of earth's affairs] in a cloud [a time of trouble such as never was since there was a nation] with power [irresistible] and great glory" (ultimately). Then the Lord adds: "When ye see these things come to pass, know ye that the kingdom of God is nigh at hand". (Luke 21:25-31) The new Canadian legislators have a hard job ahead of them, and in the end they will be even more glad than others when the Lord lifts the burden from their shoulders, and bears it away himself by inaugurating the Golden Age for which we have always longed. What a blessed condition will then obtain everywhere! All who will accept the gracious arrangements of the incoming Messianic kingdom will thereby be enabled to return to divine favor and life everlasting in a world-wide Paradise restored.

POLITICAL—DOMESTIC AND FOREIGN

A Canadian Revolution

NOBODY need be alarmed when we state that a revolution is in process in the great country to the north of us. It is a peaceful revolution, but none the less real. The people seem bent on no longer entrusting their interests to either of the two old parties, but of having a housecleaning, from the ground up. The work of removing all the old political elements and placing new parties and new men in charge of the country's affairs is in full swing, and apparently nothing can stop it.

During the war the Canadians came to feel more and more a just sense of their country's importance in the affairs of the world, and at its conclusion demanded separate representation of Canada at the peace conference and the privilege of signing the treaty on their own account. In the treaty as drawn there is no distinction between Canada and other powers signatory to it. This determination of the Canadians to have something to say about how they will be governed in the future is now reflecting itself in the domestic politics of the provinces and dominion.

Throughout the war Canada was governed by what the Canadians have called a Unionist Government; that is, a coalition of the so-called Conservative and Liberal parties, in which all differences were merged until the war should be won. Now the common people are raising such a clamor to be heard on their own account that the old line-up of the Conservatives and Liberals has been resumed, and for the delectation of the public the Liberal leaders have been telling the people what they think of their late bed-fellows. In a statement printed in the public press they recently denounced the Government in these words:

"We charge that the Government has failed to represent the people and has outlived its usefulness. No body of men has the right to usurp power and continue to rule without submitting its policy to the consideration of the people. The Government has failed to take the people into its confidence in framing its policy in the past, as also in formulating its policy for the future."

The Canadian people as a whole seem to believe pretty much all that the Liberals have had to say about their late bed-fellows, but

they go farther and believe that the Liberals themselves are as untrustworthy as the Conservatives. They claim that the whole arrangement by which the people have been governed by orders-in-council, by which liberty of thought has been terrorized through wholesale arrests, seizure of publications, and breaking-up of meetings of law-abiding, God-fearing people, through overworking the word "patriotism", has been, to say the least, extra-legal.

Now the Canadians seem to have reached the conclusion that, for them, terrorism shall cease to terrorize. And who shall say that they, at least, have not shown some real common sense, and some *real* patriotism? Does true patriotism mean that one may never dare to have a different opinion from that held by the person or persons who, for the moment, have the reins of power? Or does it mean if one is really patriotic, that he must wave his arms and throw his hat in the air, and shout himself black in the face, every time such person or persons give expression to a new thought or to a contradiction of an old one?

The new determination of the Canadian people to be done with old party lines first came to light in a by-election held in St. Catharines, Ontario, in February, 1919. The District had always been a Conservative stronghold. There a new party, the Labor party, entered the field. It had been unknown hitherto, and a candidate was secured with difficulty. But it came very near winning the election, and its supporters claim that it did win the election if the votes had been honestly counted. It was a startling indication of the temper of the people, of their determination to have a real democracy instead of an autocracy posing as a democracy.

During the summer there was another expression of the popular dissatisfaction with the old Canadian parties in the troubles at Winnipeg. There were many things connected with the Winnipeg troubles that have never been cleared up, and it is not generally known on this side of the line, even to this day, that the majority of the Winnipeg strike leaders were British-born, and of proven loyalty to Canada and the Canadian people, right at the time when they were being widely accused as fomentors of

disturbances among foreigners. In the Fall the Canadian people had their long-desired opportunity to give an expression at the polls of just how they felt about how things have been managed by the old parties.

In October came the elections for the legislature of Ontario, the most populous, most conservative province in the Dominion. Besides the new Labor party, the United Farmers of Ontario, another political party only two years old, entered the field. These farmers are absolutely against any return to the sale of liquor, are opposed to intervention in Russian affairs, demand that Canadian politicians keep out of European affairs altogether, welcome settlers from oppressed lands to come to the Dominion, have a plan of progressive legislation in view which they hope to make into laws, and are linked up with similar organizations of farmers in the provinces of New Brunswick, Manitoba, Saskatchewan and Alberta, who furnished them with speakers in the campaign.

The result was a campaign that is described as having taken on the nature of a religious revival. The women voters leaned more and more to the side of the two new democratic parties. Prominent men who entered the contest on the Government side swung to the side of the people during the fight. The outcome was a surprising victory of these two brand new parties over the two old ones. The Conservatives, who had formerly held the control by a total of 80 out of 111 seats, were dethroned, and the coalition of the Labor and United Farmer parties has 56 seats, a majority of one over all the old party candidates and independents put together.

The people of Ontario went to considerable trouble to lay emphasis upon their disapproval of the old parties. A so-called labor-soldier candidate was defeated apparently for no other reason than that he was backed by the expiring Conservative government. One man was reported as elected merely because he had been attacked as a Bolshevik. The mayor of Brantford was elected, supposedly, because he ignored the demands of the Conservatives that he should not let one of the western labor leaders, Mr. Ivens, speak in the city.

The gentleman, William Ivens, about whom the dispute in Brantford centered, is a Methodist minister, and at the time of the troubles in Winnipeg was editor of the *Western Labor*

News, the official organ of the strikers. When he was arrested and taken to the penitentiary near Winnipeg, another gentleman, by the name of Woodsworth, was placed in charge of the same paper. The latter is an interesting character, an idealist, for twenty years a minister in the Methodist church, author of a patriotic book, entitled "Strangers within our Gate—Coming Canadians," founder of the Winnipeg People's Forum, founder of the Canadian Welfare League, and Director of the Bureau of Social Research of Manitoba, Saskatchewan and Alberta. At the end of a week he also was arrested on the charge of inciting to hold an unlawful assembly. When the facts were explained to the people of Brantford, they seemingly concluded that those responsible for the arrests of Ivens and Woodsworth were entitled to a rebuke; and they administered it.

Since then the United Farmers have won three out of five by-elections in New Brunswick, Ontario and Saskatchewan, points twenty-five hundred miles apart. In New Brunswick the United Farmers candidate was returned by a 3,000 majority over a returned soldier. In Ontario the Farmers' candidate had a majority of nearly 2,000 and in Saskatchewan of nearly 4,000 votes. This shows an awakened people.

The Farmers' platform includes lowering of tariffs on goods imported from other countries, especially if imported from Great Britain; reciprocity with the United States; a tariff commission; taxation of unimproved land values; an income tax ranging from 2% on \$2,000 to 50% on incomes of \$100,000; inheritance tax; income tax on corporation profits; public ownership of public necessities; abolition of titles; abolition of the Canadian senate; national prohibition; referendum and recall; and complete equalization of the parliamentary status of women.

We cannot but sympathize with the people in their aspirations for a more democratic government, and in these aspirations they approach more nearly to the standards set forth in the Scriptures. To the confusion of those who ignorantly claim that the Bible sanctions an established empire rule over the people, instead of "a government of the people by the people," be it noted that Israel had a republican form of government which continued for over four hundred years. And it was changed for that of a kingdom at the request of "the Elders," with-

out the Lord's approval, who said to Samuel, then acting as a sort of informal president, "Hearken unto the voice of the people in all that they shall say unto thee, for they have not rejected thee, but they have rejected me, that I should not reign over them". The people feel their need of a wise and strong ruler and will find him in the Lord, and in him alone, and that shortly. The new parties in Canada may do something to alleviate the condition of the people; but they can not do much. The conditions the leaders of these parties must face are very difficult. They will find themselves confronted with problems they have not foreseen, and will be expected to produce changed conditions more quickly than will be possible. We hope for them that they will be wise, and kind, and just, and strong for the interests of all the people.

Governmental Limitations

IT IS plain enough that if none of us ever did anything, or produced anything, we would all be naked, homeless and starved. Until we get to work and produce something there is not much to govern, unless it be to form a sort of mutual defense society to prevent the stronger from killing and eating the weaker. So the fundamental fact of government is work. "If any would not work, neither should he eat." (2 Thessalonians 3:10) We must not get the idea that any kind of government man can devise will make it unnecessary for him to work. And just now, when there is a shortage of almost everything that human beings need, due to the great waste of the war, the governments of the world are right in their conception that anything that will cause the people as a whole to produce more goods will be to the benefit of the people as a whole.

This brings us to the question of how men can be induced to produce more, so that there will be more to divide. The prevailing rule of thought in the past has been that the only thing that will induce the average man to put forth his best efforts is a desire to own and to hold things. And it must be admitted that there is a great deal of truth in this contention. A system which makes each man responsible for the care of his own wife and children will cause the average man to put forth more effort than where his work will be used for the benefit of the wives and children of others.

Any man who has the idea that it would be better for the Government to own and operate all the industries of the country would do well to visit any public building in any city of the United States and note the general shiftlessness of the occupants, the dirt, disorder and indifference manifest on all sides, and then turn to any equally large building in the hands of a private concern and note the difference. The general atmosphere of the one is dirt and laziness, and of the other cleanliness and industry.

The average man looks upon a political job as an easy one; and while he has the job he is liable to expend most of his energies in trying to retain the job rather than in trying to render efficient service. But if he has a job with a private concern he knows that he must produce definite results, and that if he does not do it he may lose his job. He sees other men about who are doing their best to help themselves up in the world; and his fear of what they may do to him and his family if he does not do the work expected of him leads him to put forth more effort than he might otherwise do.

So then there are some good things to be said about competition. But competition in many lines is an absolute waste. Two telephone systems or two street railways in the same community are a nuisance. Two telegraph companies render better service than one; but it is a great waste to the community as a whole to have to maintain two complete sets of offices, poles, wires and equipment. Here is a legitimate field for Governmental activity—how to produce an absolutely reliable and efficient telegraph service, one equal to that provided by private owners, but at less expense to the public. The public should pay less to the Government for such a service than to private owners because a Government ownership of telephone poles and wires would enable the telegraph lines to be operated in conjunction with them at reduced cost. All the wires could be carried upon the one set of poles. Governmental telegraph service in European countries shows that this is a problem which, if placed in the right hands, can be handled efficiently by the Government, and at reduced costs to the public. Besides, the Government has facilities, through the Post Office, for the delivery of telegrams.

Competition, if it can be honestly maintained, should result in good service and low prices to the consumer. But if all the milk dealers, for

example, gather together and agree on certain prices, competition ceases, and there is as true a monopoly as though one concern did all the business. And there is the disadvantage that one concern could do all the work, and do it more efficiently and more economically than a dozen, all traversing the same streets, at the same time, with the same product. Which is better, to have a real monopoly and not admit that it is such, or to admit that monopoly is inescapable in such a business, and endeavor to hold it in restraint by having the municipality itself engage in the business as a competitor? In numerous cities abroad this plan is followed with good results.

Unrestrained competition is bad, too; for it leads to long hours, abominable shops and factories, adulteration of goods, false representations of merchandise, and the dishonest underselling of competitors with a view to ruining them. We must have the aid of a Government, national, state or municipal, to prevent the stronger from killing the weaker by laws of their own making. Fortunately, at this stage of the game, the worker himself has something to say about it; and his protests against long hours, low wages and unsanitary working conditions all operate to the advantage of society as a whole. He would render a still further aid to humanity if he would blazon upon the housetops every act of adulteration of goods or misrepresentation of them that comes to his knowledge, even if he lost his job by doing it.

In that case the Government he has benefitted ought to aid him in securing employment.

What is needed is a spring of human endeavor other than the law of selfishness, a new well of water, a law of love, a motive that has the interests of others more in view than one's own interests, which, however, should not be neglected. The present governments of earth are far better than none at all; and we all do well to think about their activities in constructive fashion, considering what they can reasonably do in the interests of the people as a whole without at the same time becoming intolerable nuisances by inefficiently and expensively doing what private enterprise can do better, and by attempting to decide for us just how we shall think on questions in which they are interested. The more the people expect the Government to do for them, the higher will be the taxes which must be extracted from the people in one form or another. There is no escaping this.

The thing that we all desire, whether we know it or not, is the establishment of Christ's kingdom. "Thy kingdom come. Thy will be done in earth, as it is in heaven." (Matthew 6: 10) Earth's new King will know just what laws to put into effect, and just how to enforce them. He alone has the power to give such a government as will insure neither sickness, sorrow nor death to those who obey his just and righteous will. This is earth's hope, and its only hope. And, best of all, "The desire of all nations shall come"!—Haggai 2:7.

The Great Agnostic's True Vision

I see a world
Where thrones have crumbled
And where kings are dust.
The aristocracy of idleness
Has perished from the earth.

I see a world without a slave.
Man at last is free.
Nature's forces
Have by science been enslaved;
Lightning and light,
Wind and wave,
Frost and flame,
And all the secret subtle powers
Of earth and air
Are the tireless toilers
For the human race.

I see a world at peace,
Adorned with every form of art;
With music's myriad voices thrilled;
While lips are rich
With words of love and truth;
A world in which no exile sighs,

No prisoner mourns;
A world on which
The gibbet's shadow does not fall;
A world where labor reaps its full reward;
Where work and worth go hand in hand.

I see a world
Without the beggar's outstretched palm,
The miser's heartless, stony stare,
The piteous wail of want,
The livid lips of lies,
The cruel eyes of scorn.

I see a race
Without disease of flesh or brain,
Shapely and fair.
And,
As I look,
Life lengthens,
Joy deepens,
Love canopies the earth,
And over all in the great dome
Shines the eternal star
Of human hope.

Robert G. Ingersoll.

AGRICULTURE AND HUSBANDRY

Dehydrating Grapes

TEN tons of grapes in twenty-four hours is the record maintained by the first commercial dehydrating plant of the kind, located in Pomona, California. It is a saver of waste products; for forty-five per cent of the grapes treated would have been scrapped, because broken or otherwise injured by heavy rains.

Country people are familiar with the old method of drying fruits, by exposing them, in trays, to sunlight, dust, flies, and germs. When drying attains the dignity of a manufacturing process the old name is too commonplace and it becomes dehydration, which signifies the extraction of water, or plain "drying". Fruit of any kind may be dried by the new process, and stored indefinitely. When soaked with water, the dry cells swell up, and the fruit regains much of its original size and, according to the inventor, most of its flavor.

If dehydration plants were scattered generally over the country and made as accessible to the farmer as a dairy, the over-production of any kind of fruit or vegetable could be turned from loss into profit; for the dried product might be stored until the close of the season for the fresh fruit or vegetable, and then be placed on the market, without fear of deterioration, to the advantage of farmer and consumer and to the lowering of the cost of living.

Dehydration plants make for easier work in the kitchen. If there were a plant in a city the housewives, instead of going to the labor and expense of canning and preserving, could bring their fruit to the plant and get it back dehydrated and in a form most convenient for preservation and use. Doubtless many new recipes might be invented for sweetening or flavoring fruits before having them dehydrated, and hitherto unusual combinations of fruits and vegetables might be made by enterprising housewives. The existence of drying-plants in towns and cities will open up an entirely new field of enterprise and originality in home and store. Grocers would need have no fear of loss through spoiled fruit and produce; for anything approaching the danger line could be rushed to the dehydrating plant and returned in its new form ready for sale immediately, or

when the demand for dehydrated products would make the operation profitable.

In the Pomona grape-dehydrating plant, the grapes are placed in large trays with screen bottoms, and slipped into huge oven-like driers. Heat comes from large gas burners; and heated air is circulated over the grapes by a huge fan, which sends it through a net work of chilled pipes, on which the moisture is condensed and drips away, the dried air returning for further duty. The repeated use of the air is one of the secrets of the economy of the plant as compared with other plants where the air is discharged into a chimney.

It is largely the California wine grapes that are being dehydrated, in order to meet the demand that will arise for the use of such grapes for the making of wine in the home, certain officials having ruled that wine may be made for home consumption.

Savings in freight, crates, tin, sugar and decay are claimed for the new process. Immense losses can now be prevented in crops that ripen quickly, or that are damaged by rain, frost or heat, and great advantages are predicted for housewives in country, town and city, wherever the dehydrated system obtains.

Poor humanity needs the help that a general economy of food would furnish, for now by tens of thousands people in war-torn Europe are being "burnt with hunger". (Deuteronomy 32: 24) With what unspeakable relief will these distracted ones welcome the day when "they shall not hunger nor thirst" (Isaiah 49: 10), and "they shall be no more taken away with hunger in the land" (Ezekiel 34: 29); for with many such improvements as that outlined above will the Golden Age be blessed.

Buying in the Dark

THE latest in the land-shark business is "peanut units". The guileless gullible buys so many square feet or acres of land sweetened with the promise of all kinds of profits from peanuts that will be grown on the land. A Chicago concern is said to be offering land in Florida, to be planted with peanuts, at the modest (!) price of \$2,500 for ten acres, or multiples thereof at the same price.

HOUSEWIFERY AND HYGIENE

Typhus a Pestilence Now

PUTRID fever, ship, jail and camp fever are some of the names under which typhus fever has traveled in the past, and through which it has won an undesirable reputation. It is now raging with the proportions of a pestilence in the war belt from the Baltic Sea to the Black Sea. Physicians are unable to cope with it; and it is pronounced to be on far too extensive a scale for even the Red Cross to meet with hope of success.

The disease is rare in the United States because it is a filth disease and the Americans are one of the cleanest people in the world. When it occurs it is usually among immigrants. It is rare in European centers of population; but in filth centers, such as certain cities of Ireland, Russia, Egypt, India and Mexico, it becomes epidemic. Its presence is both a misfortune and a disgrace, because due to overcrowding, bad ventilation, poor food, and bad habits, which are the fruits of ignorance.

Typhus is like typhoid in some respects, but is easily recognized, quarantined, disinfected and controlled. It is communicated by contact, by the breath, by germs arising from the skin, and by the dust of the room. Under favorable conditions about ten per cent of the cases die, but in centers of filth and squalor the mortality is appalling. It begins like typhoid, but develops a dull red rash. Since the treatment consists mostly in combating the causes that give rise to the disease, it appears that it is not well understood by physicians, who have to let the disease run its course of fourteen to twenty-one days, without being able to assist nature materially though they mitigate the suffering.

The prospects are that with the people of the war zone exhausted, poverty stricken, undernourished, and discouraged by the miseries of war, the dreaded pestilence may spread from its present zone of Lithuania, Esthonia, Poland, Ukrainia, Serbia and the Balkan states into Hungary and Austria. Only if prosperity can be restored in other nations of Europe can the typhus be prevented from extending itself all over the continent. There is a shortage of food and medical supplies, and of soap with which to

fight the plague; and there are 10,000 people for every doctor in Poland, with a worse condition elsewhere. It is the worst visitation of typhus since the dark ages.

This is one of the great pestilences directly due to the war. It is one of the indications of the end of this age, and of the early establishment of the kingdom of God. It is written of this time that, "Before him [before the Golden Age] went the pestilence" (Habakkuk 3:5); and Christ said that the days immediately before his presence would be marked by "famines and pestilences". (Luke 21:11) It is good however, to know that the period of evil conditions will be very short, and that the world will quickly pass into the better days of the Golden Age.

Remedial Foods

USE celery for any form of rheumatism or dyspepsia.

Lettuce for insomnia.

Watercress for scurvy.

Onions are the best nervine known.

Spinach for gravel.

Asparagus to induce perspiration.

Carrots for suffering from asthma.

Turnips for nervous disorders and for scurvy.

Raw beef for frail constitutions and for consumptives. Chop fine, season with salt, and heat by placing the dish in hot water.

Cranberries for erysipelas. Use externally as well as internally.

Cranberries, raw, are good appetizers.

Cranberries in cases of yellow and typhoid fevers are almost indispensable as a tonic and to clear the system of harmful germs. For some forms of dyspepsia there is no more effective remedy known. Carry a supply and eat frequently during the day.

Use cranberries for biliousness.

Fresh ripe fruit to purify the blood and tone up the system.

Sour oranges for rheumatism.

Watermelon for epilepsy and yellow fever.

Blackberries for diarrhoea.

Tomatoes are a powerful aperient for the liver, for dyspepsia and indigestion.

Bananas for chronic diarrhoea.

SCIENCE AND INVENTION

Creation Nearing Perfection

By I. B. Alford

(Released to The Golden Age)

IT IS very manifest that in antediluvian times the entire earth's surface was of uniform temperature and moisture—that there were no extremes of heat and cold, wet and dry as now. This means that the entire earth was in a much more fruitful condition then than now. In one certain locality—the Garden of Eden—absolute perfection prevailed. In this place the beauties and grandeur of perfection were such as to stagger the efforts of the most active imagination. The uniform temperature and moisture conditions prior to the Flood resulted from “the waters above the firmament”—air—remaining in suspension as is observed in the case of the planet Saturn today. This canopy served as a kind of hot-house condition, preventing lowering of temperature. Hence, it rained not at all, but “there went up a mist from the earth, and watered the whole face of the ground”. —Genesis 2:5, 6.

This equable climate and uniform moisture insured an abundance of the most varied tropical vegetation, as well as animal life. As evidence of this fact note the finding underneath glacial ice-drifts of bodies of tropical animals in perfect state of preservation. An antelope was found thus recently with undigested grass in its stomach. And more recently still, during the summer of 1919, specimens of fruits, such as oranges, lemons, bananas, cocoanuts and many kinds of edible fruits now extinct, were found in a petrified state underneath an old avalanche at the base of White Mountain in Pennsylvania. Also the petrified remains of frogs, lizards and horned toads were in evidence in the same locality.

What does this prove?

Simply that there was once an abundance of tropical fauna and flora in the present state of Pennsylvania. Then what magical wand hath wrought so great a transformation from tropical to low temperature conditions? The answer is, The Flood of the Bible in Noah's day.

Let us now follow “the waters above the firmament”, and see them gradually collect, under the influence of earth's centrifugal force, about the poles until the great pull of gravity

there causes these waters to be precipitated in great deluges upon the earth. With the breaking of this canopy the hot-house condition of the earth was released, and the waters froze as they fell and entrapped under mountains of snow and ice many unsuspecting forms of life.

It might be well for geologists who have tried in vain to ascertain the time and cause of the great Glacial Age of history to consider again, in the light of the canopy theory as above stated, the Scriptural narrative of the Flood. It is very manifest that during the earliest periods of earth's development only the lowest forms of life were in existence. This is accounted for in the light of the fact that the relative proportions of the various elements of the earth's atmosphere were such as to sustain only those forms of life at that time.

With the passing of time through the several epochs in the creation of the earth both the temperature and the component elements of the air underwent great changes. As, for instance, in the Carboniferous Age, the surplus amount of carbon-dioxide of the air at that time supplied this necessary element to the rank forests with which the earth was covered, until a diminution in the amount of carbon, by reason of its absorption, caused such rank growth to cease. On account of the absence of animal life at that time there was no way for nature to maintain a balance of atmospheric conditions as now. This condition resulted in the death of the vast forests of that age. But being highly impregnated with carbon these forests did not decay; for under such conditions, without sufficient oxygen, decay was impossible.

With the descent upon the earth of this carboniferous canopy and its simultaneous consumption in the vast forests of earth, there were laid the foundations of the great coal fields, which still exist. These subsequently by deluges and avalanches became submerged, resulting in their being mined from beneath the earth's surface today. At the “end of the age,” the air being filtered of its surplus amount of carbon-dioxide and charged, instead, with an increased amount of oxygen, the earth teemed with myriads of “living creatures, fowls of the air, cattle, creeping things,” etc.

At the psychological moment, man, the crowning act of creation, steps forth from his plastic mold "a little lower than the angels", but the highest of earthly creations. God had prepared for him a place; and Eden was his home. In this home, as already stated, it was Adam's privilege to remain forever, provided he should keep inviolate the laws of his Creator. His descendants likewise would have been born with the same privileges. And with the gradual increase of his large family, now estimated at twenty billions, he would gradually, as necessity had demanded, have extended, by subduing the earth, the limitations of the Garden of Eden until it reached that condition of world-wide paradise.—Genesis 1:26-28.

This plan of subduing the earth would have been much more easily accomplished than the one upon which man has been engaged since knowledge began to increase, because the "thorns and thistles" of the earth were little in evidence until after the Flood. Besides, Adam in the beginning virtually had control over the earth, and it was only necessary at that time to bring it into complete subjection. But Adam lost this near-perfection control, and with it, his perfect manhood. As a result both man and the earth began a gradual decline down to the time of the Flood. After this event rapid decay of man was manifest; and the earth swarmed with the promised "thorns and thistles".

It becomes necessary at this stage to consider again the relative component parts of the air, and its temperature, since these determine *wholly* the variety and profusion of life on earth, and the degree of their vitality.

The comparative absence of nitrogen in the atmosphere prior to the Flood was due to the minimum amount of decay during that time. But with the wholesale destruction of plant and animal life at the time of the last deluge, and the consequent decay of same, the air became saturated with nitrogen—the result of this decay. This intrusion of nitrogen, a by-product, into the air had the effect of upsetting its former balanced state of equilibrium.

As proof of this statement note the beginning of shortening of human life immediately following. And, of course, as death and decay increased by reason of the continued shortening of life, the amount of nitrogen in the air also increased until at the present time seventy-seven per cent of the volume of the atmosphere

is said to be nitrogen! With this great amount of nitrogen intruding itself in the air the original elements of oxygen and carbon-dioxide must of necessity be much diluted. And this is now understood as having been the immediate cause of the shortening of life after the Flood. Not only was the air thus diluted, but it was polluted—poisoned—by reason of such contamination, becoming in a sense death-dealing.

Lest some may hold with the old text-books on Chemistry that nitrogen is a component part of the air, it only becomes necessary here to call attention to the fact that this substance undergoes no change whatever in the process of respiration. Carefully conducted experiments show conclusively that in the process of animal respiration there is an appreciable decrease of oxygen and a corresponding increase of carbon-dioxide. But the amount of nitrogen in both pure (so-called) and impure air remains the same. Thus we see that nitrogen has been an intrusion in the air; but before we have finished this discussion, we propose to show how even this temporary interference will, like the permission of evil, result finally in great benefit to humanity. In the first place it hastens the "dying" penalty; and this within itself was a blessing to man during the supremacy of evil in the age just now passing away. In the absence of conversion to Christianity and genuine reformation of life, long exposure to evil influences renders any character more depraved. All have doubtless observed that little children ordinarily are more nearly immune from common vices than are adults.

Besides this, it now appears, during these days of "increase of knowledge" that the nitrogen, stored in the atmosphere, is yet to serve a most important economic purpose in contributing to the restoration of the earth's fertility. Of late years the agricultural scientist has discovered means of extracting this element from the air and of causing it to enter the soil of earth, where it becomes available plant food. This is accomplished by growing certain plants called legumes—peas, beans, the various kinds of clover, etc., which, by the process of osmosis, absorb nitrogen from the air and deposit it through root nodules into the soil, where it becomes amalgamated by a kind of microbe action with the soil, setting free certain important elements which are at once taken up by plants, thus stimulating their growth.

Nor is this all: It has been found that nitrogen can be very profitably used in the manufacture of high explosives. This being true, the various governments have, during the recent war, had recourse to this almost inexhaustible supply of material, constructing immense chemical plants for the purpose of extracting out of the air this necessary element. But with the signing of the armistice this output is now being turned into an entirely different channel, that of manufacturing nitrogenous commercial fertilizers. This will greatly aid the earth in yielding her "increase", as foretold, and will result in another blessing to man instead of an injury. How literally true is the statement that "God is able to make even the wrath of man to praise him"!

With the increase of the food products of the earth as a direct result of rendering the soil more productive, will come a corresponding increase in the *quality* of such foods. This fact has already been demonstrated by carefully conducted experiments. Two pigs from the same litter were each segregated and given exactly the same attention as to water, food and general environment. In fact, all conditions were exactly the same in every respect as to the amount of food, and each given the same kind of food. The food in each case was corn in equal weight. The only difference was the quality of the corn; one lot of which was grown on soil producing only fifteen bushels per acre, while the other corn came from land producing sixty bushels per acre. The test extended over a period of ninety days, simultaneously conducted. The pig fed on the better quality of corn gained more than twice as much increase in weight as the other pig which consumed the same number of pounds of food containing the inferior quality of corn.

It seems pertinent to note in this connection that of all avenues of human activities, none are making greater progress than that of intensive farming. The goal of this particular line of activities will have been consummated when the entire earth is fully "subdued", and caused to become exceedingly fruitful. If any one doubts that these things will be accomplished it is but necessary to remind such an one that these things are already being accomplished today. Consider, for instance, the tomato which only a few years ago grew in its wild state, and about the size of an ordinary marble; today, by means

of proper selection, breeding and cultivation its size is increased more than seventy times, not to speak of the great improvement in its lusciousness. From everywhere come easily verified reports of the development of the pecan from the originally wild seedling which required twenty to forty years to begin bearing, to the modern paper-shell of eight to ten times its original size, and bearing profitably at five to eight years of age. These illustrations are taken from the achievements of the present average crop productions, and do not consider the marvelous achievements of such men as Burbank and other specialists.

Less than twenty years ago the average farmer was contenting himself with growing but one crop per year, and each successive crop was rapidly depleting his soil. Today he is growing two or more crops per season—at least one a legume—and at the same time is improving from year to year the fertility of his soil. And this without using commercial fertilizers.

Who that believes in God shall doubt his word or power? He has spoken and is able to perform the same. He has said, "My Word shall not return unto me void, but it shall accomplish the thing whereunto I have sent it". He declares that he will make the place of his footstool—the earth—glorious; that "Jehovah who created the earth formed it not in vain, but to be inhabited"—"that even the desert places shall become like the ancient Garden of the Lord".

There remains in this connection one other thought to be considered. We have already observed the descent and precipitation from time to time of deluges of various substances upon the earth, and the effects of these deluges upon all life at that time. According to scientists of the present day, there is yet another deluge, consisting this time of electricity, approaching the earth. This within a few years will be precipitated upon the earth, and it is claimed will result in great benefit to humanity, because its contact with the earth will destroy injurious microbes, germs and parasites. This will cause fermentation to cease and thus produce the effect of preserving for an indefinite period of time all perishable fruits and vegetables. This will in a measure partially restore antediluvian conditions, and will produce the effect of greatly alleviating human sufferings.

Finally, as a concluding thought, it remains to be shown that the presence of nitrogen in

the air is for the purpose of conserving another very important use. It is claimed in the Bible that there will be a resurrection of both the just and the unjust. The Savior himself said; "Marvel not at this; for all that are in their graves shall come forth". Now we take this to mean just what it says, that the dead shall return to life. But how is this to be accomplished?

Do we expect a return of their decayed bodies out of death?

By no means. We understand and hold with the Bible that their bodies have become *non est* by reason of their "return to the dust whence they came".

But do we expect them to return as human beings?

Yes.

With flesh and bone and sinew as of yore?

Exactly so.

Where will their bodies come from?

God in whose memory they are held will provide for them necessary bodies just as he did that of the first man Adam.

Now we return to a consideration of nitrogen and its further use in the air. It is claimed by chemists that a considerable portion of the human body is nitrogen. Then in the resurrection of the twenty billions of the Adamic family now asleep in the tomb, much of this element being at hand, long held in suspension for this very purpose, will be consumed in providing, in the general resurrection, human bodies for all now asleep in death, but who shall "come forth" "in due time". And incidentally, this process, and that above mentioned, of enriching the soil, will have the effect of filtering nitrogen from the air. This will restore its former pristine purity as it was in the days before the Flood. Under such a condition of atmospheric purity, man, breathing the undiluted invigorating oxygen, would live approximately a thousand years. In addition the perfect fruits, resulting from increased fertility of the earth as above shown, will maintain the possibilities of everlasting life. And this is exactly what the Bible teaches, and exactly what humanity instinctively desires.

With a return of the billions of humanity from the tomb back to earth, and being surrounded by the superabundance of earth's perfect fruits of that time, disease germs having been destroyed by the descent of the electrical canopy now so close as to come almost in contact at

times, this battle-scarred earth, drenched in human gore, will in time become a veritable Garden of Eden.

Paradise, lost through Adam's transgression, will, through the merit of the Ransom, "to be testified in due time", be restored. Burning and frozen deserts now defying the ingenuity of man, being subdued, will be transformed into dreamlands of beauty and glory. Supplanting the marshalling of the hosts of war, with their instruments of destruction and death, will be the busy hum of productive machinery and the march of industry applying the cumulated energy of inventive genius to the harnessing of all the hitherto latent forces of nature, and bending these into complete subjection and use for the everlasting blessing of the entire human race. Then the billions of dollars now being applied to destructive purposes will be turned into constructive channels. "Swords shall be beaten into plowshares, and spears into pruning hooks." No more uprising of "nation against nation"—there will be but one nation, a holy nation. Nor will war be learned any more; for Jehovah "maketh wars to cease from the river to the ends of the earth". Then will be realized, through the everlasting ages of eternity, the true import of the message of the angels on the hills of Judea as they sang the song of "Peace on earth, good will among men".

With this condition of perfection of the material earth will come logically the perfection of man, mentally and morally, as well as physically. All incentives to selfishness and greed being eliminated, by reason of earth's superabundance, the "residue of humanity" shall attain perfection in every respect. Then also "the knowledge of the Lord shall cover the earth as deep as the ocean". Then shall his "glory be revealed and all flesh shall see it together". Then shall humanity, no longer confused, "know the truth" and thereby become "free". With his reason thus restored the mind of man will again become superior to matter. Since the earth was made for *man*, not *man* for the earth, he will be able to order the seasons at will—even the "winds and the waves will obey him".

The Apostle Peter, our Lord and all the holy prophets since the world began, declare that the human race is to be restored to glorious perfection, and shall again have dominion over earth as its representative Adam had.

RELIGION AND PHILOSOPHY

Universal Peace

"On earth peace, good will toward men."—Luke 2:14.

CHRISTMAS is regarded by many people as the date of the birth of the babe Jesus in a manger at Bethlehem. Whether or not the date is correct is of small importance, but the event was and is of the greatest importance.

Bethlehem is situated on an elevation overlooking a deep ravine, beyond which are fields where shepherds graze their flocks. Beautiful for location is this historic spot, particularly attractive to one of poetic mind and deep reverential heart, and doubly so since the great events, recorded in Holy Writ, which there transpired nearly nineteen centuries ago. From the surrounding hills of Judæa the shepherds had brought their sheep to the field opposite Bethlehem and corralled them there for the night. While the others slept, one or more of the shepherds kept vigil over the flocks, waiting for the dawn of day. The atmosphere of Judæa is exceedingly rarified, and the stars shine forth with unusual beauty and brilliancy, and thus the glory of the night is enhanced.

Without doubt these lowly herders of sheep were men of great reverence for God, men who trusted in his promises made to their father Abraham and hence were expecting the coming of Messiah. And for their faithfulness Jehovah rewarded them with a wonderful vision. While these humble watchers were gazing into the starlit heavens and meditating upon the majesty and expressed wisdom of Jehovah, there suddenly appeared unto them a star of remarkable brilliancy, standing over against Bethlehem, the city called the city of David. Simultaneously the angel of the Lord, the heavenly messenger, appeared unto them, and the light of the glory of the Lord shone round about them. Then the shepherds were sore afraid. What man of reverential mind would not have been awe-struck at such a marvelous manifestation!

To calm their fears, the heavenly messenger sweetly said to these humble men of the fields; "Fear not: for, behold, I bring you good tidings of great joy, which shall be to all people. For unto you is born this day in the city of David a Savior, which is Christ the Lord. And this shall

be a sign unto you; Ye shall find the babe wrapped in swaddling clothes, lying in a manger." (Luke 2:10-12) Awed by this vision and thrilled with their environment, the shepherds in wonder and amazement stood speechless before the heavenly messenger. Then suddenly there appeared with this angel a whole multitude of the heavenly host, angels bright and fair; and in celebration of this marvelous event of the ages they joyfully sang together an anthem of praise to Jehovah, "Glory to God in the highest, and on earth peace, good will toward men".

Long centuries and the burdens of earthly cares have effaced or hidden this glorious vision from the minds of most men who call themselves Christians; and today these words announcing universal peace to those of worldly mind sound as but a hollow mockery. Nearly nineteen centuries have come and gone since that heavenly messenger announced the birth of Jesus and brought a message of good tidings; and after these long years of laborious effort on the part of some men to establish ideal conditions, with dismay they witness the whole world rocked from center to circumference and all kindreds and peoples engaged in the strife of tongues, tumult, distress and war. Now the great mass of so-called Christendom is trusting in the god of force and violence rather than in the God of peace and love. Millions of earth's habitants, including those who pose as teachers and preachers of the Gospel, have turned to infidelity, disregarding the Word of God, and advise, counsel and engage in strife and violence. Alas! their faith in God and in his precious promises is gone.

How different with those who truly love the Lord and who study to show themselves approved unto God! Their diligent and prayerful search to know the meaning of these events past and present the Lord has been pleased to reward with a clear vision; and now they are privileged to mark the majestic onward tread of Jehovah in the unfolding of his marvelous plan. And thus understanding, their hearts are filled with joy; and the sweet message of that heavenly host resounds through the corridors of the age, calling attention to the momentous

events that are transpiring and the even greater ones immediately to follow. Not only do they rejoice in their own hearts, but it is the privilege of such true followers of the Master with confidence to say to the bewildered and frightened of nominal Christendom: "Behold, thy God reigneth".

And now we invite all sober-minded peoples of earth—Christian and infidel, Jew and Gentile, bond and free—to come with us while we together briefly review this beautiful Christmas story, and ascertain its meaning and significance to the groaning people of all the nations of earth. Its message of comfort is intended for all; for the angel of the Lord said: "Behold, I bring you good tidings of great joy, which shall be to all people". The time is now due for the world to begin to understand the real meaning of what occurred on that memorable morning in Bethlehem; and those who do understand and avail themselves of such knowledge will be greatly blessed and comforted in heart, mind and body.

Why should the babe Jesus be born at all? Why mark his birth with such ceremony and joyful expression by the heavenly host? The answer is the old, old story, which grows sweeter the oftener told; and never so sweet as now, because the time is here for its appreciation by man.

Four thousand years before the staging of this drama in the hills of Judæa, Jehovah had created a perfect pair—Adam and Eve—and provided them with a perfect home in Eden. He had endowed them with power and authority to bring forth children, to fill the earth and to control it and to make the entire earth as a garden, a glorious spot, a fit habitation for a happy and perfect race of people. To this first pair the Lord granted the privilege of life everlasting in a state of human blessedness, conditioned, however, upon a faithful obedience to his law. The wife, deceived by Satan into a violation of the divine law, in turn induced her husband to take the step of disobedience wilfully rather than be separated from her. The result of this transgression was an infliction of the penalty of the law, which penalty is described in the Genesis account (chapter 3) as a dying condition until death was fully accomplished, a return to the dust whence the Lord had taken the elements to make man.

Having judicially determined that the perfect

man should die because of his disobedience to the law, Jehovah chose, as a means of enforcing this judgment, to compel man to live outside of the perfect Eden and to feed upon the poisonous elements of the earth until complete death would ensue. Hence he drove the two out of Eden and set a flaming sword at the garden's entrance, lest Adam might return and partake of the tree of life. For 930 years Adam battled with the elements of the earth, daily succumbing, until at the end of that time he was dead.

The secret of all the suffering, sorrow, sickness and death of humankind from then until now lies in what occurred in Eden and following. While in Eden the perfect man did not exercise his power to beget children; and hence the perfect pair never brought forth children. It was only after undergoing the legal sentence of death, and after they had imbibed the poisonous elements of earth's vegetation, that this pair cohabited and children resulted. It is reasonable, therefore, to see that this condemnation fell upon the offspring; and that the father, now imperfect, could not beget a perfect child; hence the offspring of Adam would be an imperfect one. For this reason the Psalmist wrote: "Behold, I was shapen in iniquity and in sin did my mother conceive me". (Psalm 51: 5) And for the same reason the inspired witness said, "As by one man sin entered into the world, and death by sin; so death passed [by inheritance] upon all men, for that all have sinned". (Romans 5:12) The ultimate result of the operation of the divine law of necessity would have meant the complete extinction of the human race. Today, instead of men living 930 years, the average life is much less than one-tenth as long.

God foreknew the course that man would take; and before the foundation of the world he outlined a plan for human redemption and blessing. Nearly two thousand years after the humankind had wandered in the earth in sorrow and distress, Jehovah spoke to his servant Abraham, likewise an imperfect man, but one who exercised great faith in God, and to him made promise that through his seed all the families, nations, kindreds and peoples of earth should have a blessing. (Genesis 12:2, 3; 22: 18; Galatians 3:16) Later, God organized the descendants of Abraham into a nation under the name of Israel, and with that nation and people made a law covenant and from time to

time reiterated his promise to bring a blessing to the nations of earth through the seed of Abraham. The Israelites verily believed that this promised seed was an earthly seed. The promise at one time was confined to the house of David; and when David ascended the throne the Jews thought that the time had come for the blessing of mankind. The prophets, however, foretold the coming of another and greater one; and at the time of Jesus' birth all thoughtful people of Israel were looking for the coming of the Messiah. God through his prophet had foretold that Messiah would be born in Bethlehem of Judra.—Matthew 2:5,6.

Here we emphasize one thing prominent in the message brought by the angel; namely, the word *all*. It will be marked in the examination of this and other Scriptures relating to the redemption of man that God had promised to bless *all* the families of the earth, and that at the birth of Jesus the angel announced that this is glad tidings which shall be brought to *all* people. It is not the thought of the Scriptures that such a message would be brought to all at the same time; but that in God's due time every one of the human race would hear this message of glad tidings and would each have the opportunity of availing himself of the benefit of it.

The race was justly condemned to death because of disobedience to the law of God; and this judgment could not be set aside or reversed for the reason that God is unchangeable. His laws are fixed. However, such a judgment could be satisfied by the demands of the law being met. In due course of time God made promise to the house of Israel, his specially chosen people, that a provision for releasing mankind from death and the effects of this judgment would be made. "I will ransom them from the power of the grave; I will redeem them from death: O death, I will be thy plagues; O grave, I will be thy destruction."—Hosea 13:14.

The word ransom means a price exactly corresponding. A perfect man had violated God's law, and death resulted. Therefore the only thing that could constitute a ransom or corresponding price for mankind would be the life of another perfect man, exactly equivalent to Adam while in Eden. In other words, the redemption and deliverance of the human race from death, and its restoration to human perfection and happiness, must entirely depend upon the voluntary submission to death of a

perfect human being—nothing more and nothing less.

At once, then, we see that none of Adam's stock could meet this requirement of the law and redeem the human race because all were imperfect, having descended from Adam. And this thought is expressed by the Psalmist, who says, "None of them can by any means redeem his brother nor give to God a ransom for him". (Psalm 49:7) Any child begotten by a member of the Adamic stock would necessarily be imperfect; hence the account concerning the conception of Mary and the birth of the babe Jesus shows that she conceived by the power of the holy Spirit. (Matthew 1:18-25) Therefore Jesus was begotten not by man, but born of a woman, and when born he was "holy, harmless, undefiled and separate from sinners". (Hebrews 7:26) When he grew to manhood's estate he was the exact counterpart of Adam prior to his disobedience. Not until we understand these things can we understand why there was so much joy in heaven among the angelic host at the birth of Jesus. The heavenly beings had been observing for four thousand years the downward course of mankind. They had seen the great degradation and sorrow that sin had inflicted upon the human family, and now they perceived that Jehovah was making provision for the redemption and blessing and uplifting of all men.

That which man prizes above everything else is life; for without life nothing else can be enjoyed. The whole human race, being under the condemnation of death, ultimately must die. Why, then, did Jesus come to earth? Why was he born? He answers; "That the people might have life and have it more abundantly". (John 10:10) He "was made flesh and dwelt among us". (John 1:14) "Forasmuch as the children are partakers of flesh and blood, he also himself likewise partook of the same." (Hebrews 2:14) "We see Jesus, who was made a little lower than the angels [namely, a human being] for the suffering of death, crowned with glory and honor; that he by the grace of God should taste death for every man." (Hebrews 2:9) Jesus himself declared that he laid down his life for the sheep. (John 10:11, 15, 16) Here he uses the word sheep to illustrate those who are willing and obedient to the will of God, that they shall receive the benefit of his sacrifice.

And this opportunity must come to all, as

St. Paul states: "For this is good and acceptable in the sight of God our Savior, who will have *all* men to be saved and to come unto the knowledge of the truth. For there is one God, and one mediator between God and men, the man Christ Jesus; who gave himself a ransom for *all*, to be testified [to *all*] in due time." (1 Timothy 2:3-6) Here again it is observed that it is God's will that all men shall be saved from the condemnation of death and thereafter brought to a knowledge of God's provision for them, which knowledge opens to them the opportunity of accepting the benefits of the ransom sacrifice. Hence, says the Apostle, these facts must be testified to all men in God's due time. As this testimony comes to men at different times and they understand it, they rejoice in it because to them it is good tidings, good news of a better thing for them—an opportunity for life.

Why, then, if Jesus died on the cross nearly nineteen centuries ago, should the human race continue to suffer? The Scriptural answer is clear. The promise to Abraham was that in *his seed* should the blessing come to mankind; and this seed must first be fully developed before the benefit of the ransom sacrifice can be extended to all. It is important, therefore, to perceive what constitutes the seed and how it is developed. The Scriptural proof is that this seed is the Christ, the Messiah, composed of Jesus, the Head, and the church, meaning the called-out class which constitute the members of the body of the Messiah class. Hence St. Paul argues: "As many of you as have been baptized into Christ have put on Christ . . . And if ye be Christ's, then are ye Abraham's seed, and heirs according to the promise".—Galatians 3:27, 29.

It has pleased the heavenly Father to devote the period of time elapsing from the resurrection of Jesus until the setting up of his kingdom to the work of selecting those who would be willing followers of the Master, and who would prove their faithfulness and loyalty to him even unto death, and to whom he would grant the privilege of joint-heirship with Christ Jesus in his kingdom. (Romans 8:16, 17; 2 Timothy 2:11, 12) The selection of this class has been from among those who have voluntarily consecrated their lives to the Lord. Not every one who says, "Lord, Lord", will be of that class, but only those who enter into a covenant with God by

sacrifice and continue thus faithful unto death. These are promised a part in the first resurrection and an association with Christ Jesus as members of the royal priesthood. Therefore we can understand the words of the Master when he said that only a little flock (comparatively speaking) of mankind would have this blessing.—Luke 12:32.

The purposes of the Lord in this regard are ascertained from the words of the Apostle: "God at the first did visit the Gentiles to take out of them a people for his name. And to this agree the words of the prophets; as it is written, After this I will return, and I will build again the tabernacle of David, which is fallen down; and I will build again the ruins thereof, and I will set it up; that the residue of men might seek after the Lord, and all the Gentiles, upon whom my name is called."—Acts 15:14-17.

Jesus taught his disciples, and through them the church has been taught, that after he had ascended on high he would return in course of time and gather unto himself the saints, and then would establish his kingdom for the purpose of blessing mankind. All Christian people have looked forward to the second coming of the Lord, and to the end of the wicked order of things and the establishment of a new and righteous order. This same thought was in the mind of the disciples when they approached Jesus just before his crucifixion and propounded to him the direct question: "Tell us when these things shall be, and what shall be the proof of thy coming and the end of the world?"—Matthew 24:3.

The Lord Jesus answered their question, and the answer is recorded in the twenty-fourth chapter of Matthew and the twenty-first chapter of Luke. He describes the great stress and trouble that is now upon the human race. Among other things he said that there would be a great world war in which nation would rise against nation, to be accompanied by famine, pestilence and revolutions and a time of trouble such as never was before; and all mankind are witnessing the fulfillment of this prophecy at this very time. Again he said in answer to the same question that there would be "upon the earth distress of nations, with perplexity; the sea and the waves [restless humanity] roaring; men's hearts failing them for fear, and for looking after those things which are coming on the

earth: for the powers of heaven [ecclesiastical systems] shall be shaken". (Luke 21:25, 26) All the trouble that has afflicted the nations since the fall of 1914 has been clearly in fulfillment of the prophetic utterance of the Lord. To the Christian this means (and soon all the world will learn to know that this is the meaning) that the kingdom of the Lord is at hand, that Christ is present, that he is tearing away the old order of things preparatory to establishing a kingdom of righteousness and peace which shall constitute "the desire of all nations". "I will shake all nations, and the desire of all nations shall come".—Haggai 2:7.

The wars, famine, pestilence, revolutions and like disturbances that so much distress mankind do not constitute any part of the glad tidings. No one rejoices in this suffering and trouble; but the Christian rejoices that these troublesome times are the proof foretold by the Lord that would precede the establishment of his kingdom of righteousness which would bring blessings to all the groaning creation. The message that has been preached to the people for long centuries, and is yet being preached by many, to the effect that it is the Lord's purpose to save a few in heaven and to consign all the residue of mankind to a condition of endless torture, contains no glad tidings to any one of an honest heart. Surely it could be no real joy to any person to be convinced that he would spend eternity in heavenly bliss while at the same time some one near and dear to him would be spending eternity in torture. Such a doctrine is not taught by the Word of God, but is the result of a distorted interpretation of the Scriptures.

The divine program, which has been developing progressively for many centuries, has now about reached the point of time for the world of mankind to begin to understand and appreciate some of the lengths and breadths and heights and depths of the love of God. His inspired witness wrote: "Times of refreshing shall come from the presence of Jehovah; for he will send Jesus, who before was preached unto you, whom the heavens must retain until the times of restitution of all things, which God hath spoken by the mouth of all his holy prophets since the world began".—Acts 3:19-21.

The word refreshing here suggests the thought of something that makes one happy after a long experience with that which is con-

trary to happiness. The autumn season marks the dying and falling of the leaves, the trees appear bare, and the wind moans and sighs through their branches. Then follows the long, dark, cold winter, picturing in a measure the long night of suffering and death that has afflicted the human race. In the spring season the warm, gentle rays of the sun, falling upon the earth, cause the grass to spring forth, the trees to bud and leaf, followed by the blossoms and the fruit, the singing of the birds and the rejoicing of all nature because of the reviving, or coming again to life, of that which was dead. Seemingly the Apostle had such a picture in his mind when he said that times of refreshing would come at the establishment of Messiah's kingdom because it would mean the restoration of that which father Adam lost for himself and all of his offspring, namely, life and all the sweetness incident thereto. The perfect man Jesus, having laid down his life and thereby providing the purchase price for the human race, now returns for the purpose of ministering to mankind by giving to him the very thing that he has long desired.

Long ago the Apostle saw this and wrote: "He [God] hath appointed a day, in which he will judge the world in righteousness by that man [Christ Jesus] whom he hath ordained; whereof he hath given assurance unto all men in that he hath raised him from the dead". (Acts 17:31) The assurance here then is to every man that has lived on the earth that he must have a fair and impartial trial in a time of righteousness, which trial is for the purpose of giving him an opportunity to render himself in obedience to the law of God and live. It means that millions who have gone into death will return again; for "there shall be a resurrection of the dead, both of the just and the unjust." (Acts 24:15) The great Master himself assures us that all in their graves shall hear his voice and awaken to the resurrection by judgments, i. e., a time of trial and opportunity for life and its blessings.—John 5:28, 29.

The work of reconstructing the human race will devolve upon the great Messiah, and that great work will begin as soon as the present trouble upon the earth has ended; for Jesus assures us that there never will be another time like it. (Matthew (24:21) Then, under his righteous reign, every one will have a chance of hearing the sayings of Jesus and then will

apply his words, "Verily I say unto you, If a man keep my saying he shall never see death." That Scripture, like all other sayings of the Master, must have its time for fulfillment; and no one could keep his sayings until first they heard them. The millions in death could not hear until awakened out of death, and the millions now on earth could not hear until God's due time and until they are told. That due time is about at hand.

Will that be a time, then, of rejoicing and gladness? The Lord through the prophet gives us a vision of that great time of blessing, saying, "The wilderness and the solitary place shall be glad for them and the desert shall rejoice, and blossom as the rose," thus picturing how the earth itself shall begin to yield that which is necessary for the sustenance of mankind and permit him to enjoy the fruits of his labors without the intervention and oppression of the profiteers. "It shall blossom abundantly, and rejoice even with joy and singing: the glory of Lebanon shall be given unto it, the excellency of Carmel and Sharon, they shall see the glory of the Lord, and the excellency of our God."

Before the coming of that glorious day, however, the prophet infers that the people would become very much discouraged and without strength. He pictures them as trembling in their knees and hanging down their hands, and for their encouragement says: "Strengthen ye the weak hands, and confirm the feeble knees. Say to them that are of a fearful heart, Be strong, fear not: behold, your God will come with vengeance, even God with a recompence; he will come and save you." St. Paul tells us that the whole world aside from Christians are blind, and blinded by the adversary. Many people are actually blind, while practically all are blind concerning a vision of God's plan.

The prophet then pictures the blessings during the reconstruction, saying, "Then the eyes of the blind shall be opened, and the ears of the deaf shall be unstopped. Then shall the lame man leap as an hart, and the tongue of the dumb sing: for in the wilderness shall waters break out, and streams in the desert."

Then the prophet describes a way opened for the human race to journey back to the perfection of life, of body and mind, continuing: "And an highway shall be there, and a

way, and it shall be called The way of holiness: the unclean shall not pass over it; but it shall be for those: the wayfaring men, though fools, shall not err therein". This highway is the Messiah, who is given as a mediator between God and man, to lead man back to the state of perfection; and the way to pass over it will be by rendering themselves in obedience to the law of the Messiah. It shall be a holy, a righteous way. No person shall be permitted to progress in wickedness, in profiteering, in oppression, in keeping the people in ignorance or filching their pockets under the pretense of preaching the Gospel or anything else; but its object shall be the cleansing and blessing of the people, and it shall be so clear and plain that every man can understand it. "No lion shall be there"; that is to say, no monstrous beast, such as czars, beastly governments, oppressing corporations, or ecclesiastical, political or financial systems. "Nor any ravenous beast [government of oppressive violence] shall go up thereon, it shall not be found there; but the redeemed shall walk there." The earth and everything in it shall be made conducive to the uplifting and blessing of mankind.

Having in mind, then, that the Apostle assures us time and again that Jesus ransomed the entire human race, *all* of them, the prophet continues: "And the ransomed of the Lord shall return [meaning they shall return from the land of the enemy, from death and from their bondage in blindness and ignorance and superstition], and come to Zion [the Messiah] with songs and everlasting joy upon their heads: they shall obtain joy and gladness, and sorrow and sighing shall flee away". (Isaiah 35) Indeed then all shall know the truth of the message that the angel brought to the shepherds as they watched their flocks—good tidings of great joy unto all.

Messiah's kingdom will establish a universal peace. As the prophet declares, when his kingdom is established, then the nations shall come and say, "Let us go up to the mountain [kingdom] of the Lord, and he will teach us of his ways, and we will walk in his paths. . . . And they shall beat their swords into plowshares, and their spears into pruninghooks: nation shall not lift up a sword against nation, neither shall they learn war any more. But they shall sit every man under his vine and under his fig tree; and none shall make them afraid".—Micah 4:1-4.

To assure such a lasting blessing will require, of course, nothing short of a perfect ruler. Then the earth will have such, for "the government shall be upon his [Messiah's] shoulder; and his name shall be called Wonderful, Counsellor, The mighty God, The everlasting Father, [Life-giver], The Prince of Peace. Of the increase of his government and peace there shall be no end".—Isaiah 9:6, 7.

To the Christian, therefore, who has a clear vision of the divine plan and who appreciates the time through which the world is now passing this should be the happiest Christmas he has ever spent, because by the eye of faith he can see the Sun of Righteousness rising with healing in its beams, driving back the great dark night of suffering, tumult and trouble, preparatory to the healing, blessing and uplifting of the human race, back to the perfection of life, liberty and happiness. The incoming of this glorious time means the beginning of the Golden Age—a time of rejoicing for all who love righteousness.

Juvenile Bible Study

MAN'S highest duty and privilege is to glorify God. One who loves and obeys the great Creator loves and obeys righteousness, makes a better citizen and a greater benefactor to mankind. To love and obey Jehovah one must know him. How can we know him except through his Word, and how can we know and understand his Word unless we are taught? If it is proper and necessary to send our children to the public schools that they there may be taught concerning the selfish things of this life, with stronger reasoning is it proper and necessary that they be taught concerning the things that have to do with their eternal welfare and happiness.

The Biblical education of children, we believe, has been sadly neglected. Every parent owes a duty to his own child and a corresponding duty to every other child to whom he can render aid. In view of the time of great stress now upon the human race, is it not high time that we take some positive action toward the instruction of the children concerning the greatest thing about which they should know, the Word of God? We believe that all parents, whether Christian or not, desire to see their children grow up in righteousness and truth. Because of the long-felt need in behalf of the children, THE GOLDEN

AGE inaugurates a children's Bible study department. There is no desire or purpose to teach the doctrines of any sect or system; but the sole purpose is to instruct the children in the Bible. To do so we have arranged this study in question and answer form, propounding the questions and briefly answering, citing the Scriptures where the proper Biblical answer may be had. We suggest that the parents propound these questions to their children and aid them to locate in the Bible the answer, thus familiarizing the child (and incidentally the parent) with the texts of the Bible and enabling them to get some insight into the glorious character of Jehovah and the Lord Jesus.

We suggest that the child be given one question each day and that in addition to the answer here given, it be encouraged to look up the Scriptures cited and any other Scriptures that, with the aid of the parent, it might find bearing on the question. As this is a primary study, we therefore begin with the subject

THE BIBLE

1. What is meant by the word Bible?

Answer: A book that contains the Word of God as expressed to man, and has reference to all the sixty-six books collectively, contained in what is commonly accepted as the Holy Scriptures.

2. What is the Bible?

Answer: It is an expression of God's will toward man and an outline of his plan concerning the human race, given for man's instruction.—John 17:17; 2 Corinthians 4:2.

3. Are we invited to study the Bible?

Answer: Yes; Jehovah says to us: "Come, now, let us reason together" (Isaiah 1:18); and "Study to show thyself approved unto God".—2 Timothy 2:15; John 5:39; Deuteronomy 29:29; Revelation 1:3; 1 Peter 3:15.

4. Should we expect to understand the deep things in the Bible?

Answer: If we study it with a reverential and prayerful desire we may understand them. "The reverence of the Lord is the beginning of wisdom." (Proverbs 1:7) The plan of God is a secret which he has promised to reveal to those who reverentially seek to understand it. "The secret of the Lord is with them that fear him; and he will show them his plan."—Psalm 25:14; 1 Corinthians 2:10.

5. Can everybody understand the Bible?

Answer: They could, if everyone would com-

ply with God's rules. Certain portions of the Bible are due to be understood at certain times; but even when those times come, he will not permit the wicked to understand, but the wise shall understand.—Daniel 12:10.

6. Who can understand the Bible?

Answer: The first thing essential is an honest desire to understand it. (Luke 8:15) Then one must be wise after God's manner of wisdom (Daniel 12:10; James 3:17); and that kind of wisdom means that he recognizes Jehovah God as the great First Cause, the Creator and the Giver of all good gifts. Then one must search the Scriptures and study them.—John 5:39; Jeremiah 29:13; Acts 17:11; 1 Corinthians 2:10.

7. Is the Bible intended to be understood; or is it a book shrouded in mystery, only for one class to understand?

Answer: It is a reasonable book; for God invites us to reason with him (Isaiah 1:18; Job 13:3); and the Bible gives the reason for God's dealing with man and also the hope that man has. (1 Peter 3:15) We should reason when we study the Scriptures or talk to others about them.—Acts 17:2.

8. If reasonable, then why cannot everybody understand the Bible?

Answer: Because not every one is honest, and the dishonest will not be able to understand it. (Luke 8:15) Some do not desire to be righteous and good; hence they do not understand. (Matthew 5:6) Some may be honest and desire to be righteous, but do not study. (2 Timothy 2:15) Some are too wise in their own conceits concerning earthly wisdom and do not give God credit for knowing and stating it in his Word. (Matthew 11:25; 1 Corinthians 1:19) And some are too wicked.—Daniel 12:10.

9. Do the great, the wise, the mighty and the noble and educated have any special advantage in understanding the Bible, and is it necessary to have a finished college education in order to understand it?

Answer: No; on the contrary, the vision (which means an understanding of God's Word) is hid from many who are wise after the manner of earthly wisdom and is made known and understood by those who humbly and honestly seek to understand, though they may be poor and have little education.—1 Corinthians 1:20, 21, 26-29.

10. What is necessary for one to do to understand the Bible?

Answer: First, he must have an honest desire to understand it and a reverence for Jehovah as the great eternal One, the Maker of all things; he must have faith in God. "Without faith it is impossible to please him." (Hebrews 11:6) Second, he must have a sincere desire to know the truth and tell the Lord he is willing to do his will.—Proverbs 1:7; John 14:26; 1 Corinthians 2:12; Psalm 25:14; Romans 8:14.

11. Is it profitable to study the Bible and if so, in what way?

Answer: See 2 Timothy 3:15-17; John 17:17.

12. Does a knowledge of the Bible enable one to do better?

Answer: See 2 Timothy 3:16.

13. Is the Bible written entirely in plain language, or is some of it in symbols?

Answer: Some of it is written in plain phrase, while many parts of it are written in symbolic language, some in parables and dark sayings.—Mark 4:32; Matthew 13:35; Revelation 1:1-3.

14. Why was not the Bible written in plain language so everybody could understand it, and without symbols or dark sayings?

Answer: God's purpose is to reveal an understanding of his plan gradually. For instance, he had the prophets write many things which they could not understand. They merely served as clerks or writers to make a record of things they saw. (Daniel 12:8) The prophecy of the Bible is history written before it happens. Jehovah foreknew everything from the beginning to the end (Acts 15:18); and he caused it to be written in such a way that it could not be understood until the prophecy is fulfilled by the events taking place. Then he expected the people to understand it.

15. Can you give an instance in which the Lord foretold something to happen that we now see?

Answer: Yes: He had Daniel record many centuries ago that the time would come when there would be rapid traveling across the land and a great increase of knowledge in the world, which has come within the last hundred years. (Daniel 12:4) There are many instances of this kind in the Bible, as we will find from time to time in these studies. The Lord revealed through another prophet a description of the locomotive and railway train, many centuries before any man ever thought about inventing or building one. We will give the description of this in some later lesson.

TRAVEL AND MISCELLANY

Service for Travelers

AT THE foundation of the swift, smooth travel of today is an intricate system of coördinated service. Without the surrender of the individual railroad worker's will to that of the system, travel would be both difficult and dangerous, and civilization would sink toward the level of the semi-barbarons.

Every railroad man is inspired with the ideal of as nearly perfect service as he can render. Service by a worker the public scarcely hears of, the car inspector, makes sure that no car leaves the terminal in a condition that might cause an accident. The engineman's service calls for uninterrupted watchfulness and thoughtfulness over every rod of track and at every signal, to make safe delivery of the cargo at every stop.

Safe and efficient service by the conductor takes a personal, sincere interest in the passengers, watches conditions, observes the dispatcher's orders, and sees to the safety and as far as possible the comfort of the hundreds temporarily in his care. Service by the shopman takes care that the rolling stock is in as good condition as possible in the time allowed for the adjustment and repair of engines and cars and is an important contribution toward the efficient operation of the system. The railroad clerk's service contributes in some measure to the possibility of the management's having the records which make for the efficient operation of the system.

There is no place where lack of the spirit of service shows more than in the conduct of the executives. Their spirit travels through the personnel, and manifests itself in the acts of every employe of the road. Governing the entire system is the service rendered by the bankers and financiers who act as directors, appoint executives, control policies and supply the funds required in a large way to purchase materials, equipment and labor for the best maintenance and operation of the system.

Modern travel is the resultant of the service of thousands working separately but all to a common end. In a successful railroad it represents the best that can be done for the money to secure the safe and comfortable delivery of passengers and freight over mile after mile of

track to the destination. It is an exemplification of the Biblical maxim that "whosoever will be chiefest, shall be servant of all". (Mark 10:44) Presumably it is true of the personnel of a system, from bankers down, if unfaithful, that they are liable to hear the other Biblical injunction, "Cast ye the unprofitable servant into outer darkness: there shall be weeping and gnashing of teeth".—Matthew 25:30.

The Big Bean

SO ACCUSTOMED are we to the bean in a shell that it rather surprises us to see in a display window a bean two or three feet long. This monster among beans is a butter bean originated in Japan.

One seed of the new bean may grow into a plant 90 or 100 feet long bearing 100 beans, each up to four to six feet long and weighing ten, twenty or thirty pounds, or more. It would take a large and hungry family to dispose of one twenty-pound bean at a meal or even in a day. Just how much the big bean might help out the cost-of-living problem may be figured out by the curious by estimating how many might be raised in a city back-yard.

The Japanese bean first began to be used in this country after the war got under way, and is now being widely used as a staple food. It is said to be good eating when cut and fried like egg plant, or boiled and served with a white sauce.

If this is a specimen of how the field is to "yield its increase" in the Golden Age, what wonderful things may be expected when the better order is fully under way!

Disease Aggravates Shortage

THE milk shortage in Switzerland is made worse by the foot-and-mouth disease, which is epidemic. On account of danger to the people, dances and other assemblages of the people, including funerals, are greatly restricted in the attendance permitted. No milk is allowed to reach condensed-milk factories or milk-chocolate plants; and the milk rations of children are reduced thirty per cent. Cattle markets are closed, and farmers from infected districts are forbidden to enter the towns.

GOLDEN AGE CALENDAR

DECEMBER 24 TO JANUARY 6

YEAR: 1919-20 A.D.: 6048 since Creation; 7248 Byzantine Era; 5690 Jewish Era; 2672 of Rome; 2695 of Greek Olympiad Era; 2579 Japanese Era; 1338 Mohammedan Era; 144th year of independence of the United States.

STARS: *Morning*: Mercury, Venus and Mars to Dec. 31; Jupiter to Jan. 1; *Saturn*. *Evening*: Venus, Mars and Jupiter after Jan. 1.

December 24, Wednesday

Mohammedan month Rabi' II begins; Sun rises 7:22 a.m.; sets 4:37 p.m.; Moon rises 7:00 a.m.; sets 7:00 p.m.; Twilight begins 6:11 a.m.; ends 5:42 p.m. (New York); 1918, President Wilson promises a people's peace by agreement of everybody concerned in the settlement; Serious coal shortage in Germany; Allies decide that Russia herself must bring order out of chaos, and are in accord in refusing to undertake any large military expedition into Russia; A petition with 23,000 signatures appealing for release of 300 conscientious objectors from the Fort Leavenworth military disciplinary barracks is given to Secretary Baker.

December 25, Thursday

Christmas Day: 1776, Battle of Trenton (25-26); 1918, Russian princes and Czarist officers, basing hopes on Kolchak and Denikine, ask 150,000 Allied troops as enough to "save the country"; Germany returns 6,000,000,000 francs worth of stocks taken from French banks; Chaplain Edsop makes a report on the allied inefficiency and profiteering of the Y. M. C. A. in France.

December 26, Friday

Day after Christmas, China, Denmark, Dutch West Indies, Germany, Netherlands, New Zealand, Switzerland; Boxing Day, Australia, Hong Kong, Jamaica, Rhodesia; St Stephen's Day, Austria, Belgium, Finland, Hungary, Italy; 1918, Pope Benedict kindly promises his aid and support to the decision of the Versailles Council; Profiteers use airplanes to take their enormous profits from Germany to Switzerland; German Spartan forces seize the Prussian War Ministry.

December 27, Saturday

Second Day after Christmas, Western Australia; 1918, Berlin Workmen's and Soldiers' Council convenes for purposes of reconstruction; Intervention in Russia and a military attack is ordered on by the Allies; Allied agreement approached by Russian Bolsheviks concerning terms of peace; A fund of \$1,000,000,000 is declared necessary to meet the 1919 deficiency in the \$2.26-a-bushel Government price of wheat.

December 28, Sunday

Proclamation Day, Australia.

December 29, Monday

Bank Holidays, Costa Rica, (29-31); 1918, President Wilson announces that "it is the conscience of the world we now mean to place upon the throne which others tried to usurp"; U. S. Senators receive hundreds of telegrams protesting against keeping American boys in Russia.

December 30, Tuesday

1917, Coldest New York day in thirty-three years, thirteen degrees below zero; 1918, draft agreement made between United States, Canada, and Great Britain; President Wilson declares to 5,000 British workmen, "If the future had nothing for us but a new attempt to keep the world at the right poise by a balance of power, the United States would take no interest in it, because she will join no combination of power that is not a combination of us all"; Clemenceau declares his adherence to the "old system of alliances called the balance of power; I should not be telling the truth, if I said I had always been in agreement with him (Wilson) on all points"; Secretary Dunlop advocates a navy as large as Great Britain's, "if the League of Nations fails to limit armaments."

December 31, Wednesday

New Year's Eve, Switzerland; Memorial Day, Portugal; Prince Boris's Birthday, Bulgaria (not celebrated this time); 1917, Germany announces unrestricted submarine warfare in certain zones; 1918, Bolshevik revolt establishes a temporary Bolshevik republic in Silesia, Germany; War has cost the United States \$18,160,000,000.

January 1, 1920, Thursday

New Year's Day: Beginning of the year 4714, Julian Era; and of the year 1957, Spanish Era; Jewish Feast of Tebet; Christmas Day, Bulgaria; Chinese New Year: Spring Holiday, China, Dutch East Indies, Hawaii, Hong Kong; Independence Day, Haiti; King's Birthday, Siam; 1801, Union of Great Britain and Ireland; 1863, Lincoln's Emancipation Proclamation; 1918, General March made Chief of Staff, United States Army; Bolsheviks seize Roumanian ships in Black Sea and capture Odessa; Tartars proclaim Crimean Republic; Senate for Federal control of railroads until eighteen months after the war; 1919, Pope Benedict's New Year's message to America benevolently hopes the Peace Conference may result in a new world order, with a League of Nations, conscription abolished, and tribunals established to adjust international disputes; President Wilson en route to Italy to see the king, the pope, and the Methodist College; France proposes to assume the mandate for Armenia, Syria and Lebanon; Kaiser's palace damaged \$1,500,000 by theft and vandalism.

January 2, Friday

Maha Shivarati Day, India; Arbor Day, Arizona; Purification Day in Roman Catholic countries; 1919, Christian People's Party in Germany protests against legislation "opposing liberty in parochial schools"; President Wilson's journey through Italy is "like a triumphal procession"; Senator Johnson protests against more shedding of blood of American boys in Russia.

January 3, Saturday

Carnival Day, Egypt; San Blas Day, Paraguay; Lundi Gras Day, Belgium, France; Monday before Lent Carnival, Bolivia, Honduras, Peru; 1917, United States severs diplomatic relations with Germany and dismisses Ambassador Bernstorff; 1919, Prominent Britons petition release of 1,500 conscientious objectors in British prisons; Colombia asks United States to pay the \$25,000,000 due her through the launching of the Panama Republic under the Roosevelt régime; The authorities and an immense crowd give President Wilson an enthusiastic welcome; he announces that the task of the Peace Conference is "to organize the friendship of the world," and not to establish the balance-of-power principle; he discusses matters with Pope Benedict; he cables for \$100,000,000 to feed Europe; Rear Admiral Rodman recommends the destruction of the surrendered German war ships (which recommendation the Germans followed later); Turks begin killing Armenians.

January 4, Sunday

January 5, Monday

1919, Special propaganda agents are placed on American war ships to combat anti-British propaganda; Roumanian Jews are granted full citizenship rights.

January 6, Tuesday

Christmas Day, Russia, (G-S); Epiphany Day, in Roman Catholic countries; 1919, Geneva and Milan give President Wilson a tumultuous greeting; Congress appropriates the \$100,000,000 "to revictual Europe"; Germany announces that it is necessary for her to "intervene energetically (against the Russian Bolsheviks) by taking diplomatic and military measures"; President Paderewski of Poland pleads for Allied help against Bolshevism; The National Security League plans an extensive post-war campaign against Bolshevism; Theodore Roosevelt dies.