

The Golden Age

A JOURNAL OF FACT
HOPE AND CONVICTION



November 12, 1919, Vol. 1, No. 4.



Published every other
week at 1265 Broadway,
New York, N.Y., U.S.A.

Ten Cents a Copy—\$1.50 a Year

Entered as second-class matter Sep-
tember 26, 1919, at the Post Office at
New York, N. Y., under the act of
March 3, 1879.

THE GOLDEN AGE

Contents

LABOR and ECONOMICS	
The Coal Strike..... 99	Labor Conference Failure 101
Foreign Coal Situation..... 100	Flogging the Sea..... 102
SOCIAL and EDUCATIONAL	
Evolutionist Guessing..... 103	How Automobiles Take
Brotherly Love in Prison 104	the People Of..... 104
MANUFACTURING and MINING	
Boiler Water Treatment..... 108	
FINANCE—COMMERCE—TRANSPORTATION	
Successful Welfare Work 107	Great Shortage Coming..... 110
Bankrupt Trolley Lines..... 108	Decimal Pricing Wanted..... 110
Iron Index of Prosperity 109	Commissions on Bonds..... 110
New York Truck Lines..... 110	
POLITICAL—DOMESTIC and FOREIGN	
Armenia and the Turks..... 111	
AGRICULTURE and HUSBANDRY	
Civilizing the Cactus..... 112	To Increase Wheat Yield..... 112
Corn and Wheat Crops..... 114	Fruit Growing Victories..... 112
To Buy Land or to Sell..... 114	Your Bushel of Peanuts..... 112
SCIENCE and INVENTION	
Hacker as a Scientist..... 117	Trans-Atlantic Telephony 118
Wireless Fire Igniter..... 117	Signalling to Mars (?)..... 118
Sixty Miles a Gallon..... 117	Wishes and Horses Minds 118
HOUSEWIFERY and HYGIENE	
Safety Zones for Babies..... 119	Cake & Pudding Recipes..... 120
TRAVEL and MISCELLANY	
His Corner of China..... 121	Rewarding the Chieftains..... 122
All Ahead for Europe..... 121	Growth of the U. S. Fleet..... 122
The Greatest Traveler..... 122	Automobile Vacationists..... 122
RELIGION and PHILOSOPHY	
World Has Ended—You May Never Die..... 123	
SWEET OLD POEMS	
Wait Thou on God..... 127	Clear the Way..... 127
Ring Out..... 127	Lay Down Your Balls..... 127
CALENDAR	
Golden Age Calendar, November 12 to 25..... 127	

Published every other Wednesday at
1265 Broadway, New York, N. Y., by
WOODWORTH, HUDGINS and MARTIN.
CLAYTON J. WOODWORTH..... Editor
ROBERT J. MARTIN..... Business Mgr.
WM. F. HUDGINS..... Sec'y and Treas.
Copartners and proprietors. Address
of each, 1265 B'way, New York, N. Y.
TEN CENTS A COPY—\$1.50 A YEAR.
Make remittances to *The Golden Age*.
Entered as second-class matter, September 25, 1919, at
the Post Office at New York, N. Y., under the Act of
March 3, 1879.

The Golden Age

Vol. I

New York, Wednesday, November 12, 1919

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 cataclysm.

"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.

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.

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-pigeoning" (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 unintelligent "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 unintelligent 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 woollens 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 Bolsheviks 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 dost 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 fulfillment 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 800,000 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 fulfillment 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 fulfillment 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; about, 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 fulfillment 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 fulfillment 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 fulfillment.

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 Straus, 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 re-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 fulfillment 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 warpath 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.