

The Golden Age

A JOURNAL OF FACT
HOPE AND CONVICTION



December 24, 1919, Vol. 1, No. 7



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

Ten Cents a Copy—\$1.50 a Year

CONTENTS of the GOLDEN AGE

LABOR and ECONOMICS

The Food Supply.....	195	Oddities in Food.....	197
Chemicalised Foods.....	195	Benefiting the Cripples.....	198
Milk as a Food.....	196	Mining under the Ocean.....	193
Distribution of Food.....	196	A Coffee Shortage.....	198

SOCIAL and EDUCATIONAL

The New Millionaires.....	196	Human Longevity.....	200
Conditions of Newsboys.....	196		

MANUFACTURING and MINING

The Chilean Nitrates.....	201	Decreased Efficiency.....	202
Oil from Coal.....	201	American Industries.....	202

FINANCE, COMMERCE, TRANSPORTATION

Short Line Railroadings.....	203	Canada's Finances.....	204
A Very Weighty Matter.....	203	Rice Imports.....	204

POLITICAL, DOMESTIC and FOREIGN

A Canadian Revolution.....	205	The Great Agnostic's.....	
Governmental Limitations.....	207	True Vision.....	208

AGRICULTURE and HUSBANDRY

Dehydrating Grapes.....	209	Buying in the Dark.....	209
-------------------------	-----	-------------------------	-----

HOUSEWIFERY and HYGIENE

Typhus a Pestilence Now.....	210	Remedial Foods.....	210
------------------------------	-----	---------------------	-----

SCIENCE and INVENTION

Croton Nearing Perfection.....	211		
--------------------------------	-----	--	--

RELIGION and PHILOSOPHY

Universal Peace.....	215	Juvenile Bible Study.....	221
----------------------	-----	---------------------------	-----

TRAVEL and MISCELLANY

Service for Travelers.....	223	Disease Aggravates.....	
The Big Boon.....	223	Shortage.....	223

Published regularly every other Wednesday at
125 Broadway, New York City, N. Y., by
WOODWORTH, HODGINGS and MARTIN.
CLAYTON J. WOODWORTH..... Editor
ROBERT J. MARTIN..... Business Manager
WM. F. HODGINGS..... Sec'y and Treas.
Correspondents and proprietors. Address of each,
125 Broadway, New York, N. Y.
TEN CENTS A COPY—\$1.50 A YEAR.
Make remittances to The Golden Age.
Entered as second-class matter, September 24, 1912, at
the Post Office at New York, N. Y., under the Act of
March 3, 1879.

The Golden Age

Vol. I

New York, Wednesday, December 24, 1919

No. 7

LABOR AND ECONOMICS

The Food Supply

FEW questions are of greater human interest just now than that of food. Everybody must eat to live, and all are interested to know whether there is food enough in the world to feed its millions, and if there is how those that need it can get it.

As a whole the American crops are excellent; and in the matter of live stock we have now 4,609,000 more swine, 350,000 more milch cows and 287,000 more of other cattle than we had a year ago. Australia has a vast surplus of food; and the crops in Canada, South Africa, Argentina and in many parts of Europe were all of generous proportions.

The great American hen continues to do her duty. Last year she produced, it is calculated, 23,052,000,000 eggs. That looks like a lot of eggs; but it amounts to only 210 eggs per year, or a little more than one every other day, for every man, woman and child in the United States. Probably the poultry raisers ate some eggs which have not been counted.

It requires a great quantity of food to supply 110,000,000 people for a year. A little while ago the Government disposed of what many people thought was a large surplus of food, accumulated for the army; but somebody got to figuring on the total and estimated that the whole lot did not amount altogether to a day's supply per household. The Government bought this meat at wholesale and sold it at the same prices, in some instances for 50 per cent less than the current prices charged by dealers.

There is one article that is short, however, and that is salmon. The salmon catch, all the way from Behring Sea to the mouth of the Columbia

River, is the poorest in the history of the fishing business. In the great Fraser River, of British Columbia, the salmon pack this year was only 7,000 cases as compared with 155,700 cases in 1915. The Canadian Fish Commission believes that the salmon business has been ruined by a too efficient system of traps and seines in the Puget Sound region; that the fish have been caught before they could get to their spawning grounds, and therefore reproduction has ceased. If this is true it is a pity; for salmon is a staple article of food that will be missed.

Chemicalized Foods

A GOOD many of the plants that were formerly engaged in the manufacture of alcoholic liquors are now being turned into "food factories", and we do not know whether to view this with pleasure or with alarm. It all depends upon what the chemists connected with these plants intend to do.

If they are planning further assaults upon the life insurance company's mortality experience tables by fixing up doctored frankfurters, cakes colored with egg-yellow made from coal tar dyes, bleached fruits, processed rancid oils, cream scoured with soda ash, corned beef and smoked ham redolent with chlorine, ice cream colored with ribbon dyes and pies made of rejuvenated decayed fruits, we can tell them now that there is plenty of this kind of material on the market and we can get along better without these things than with them.

Just recently we discovered that the Horse Aid Society has a connection with a Brooklyn sausage factory, possibly the same plant, or one of the plants, in which some 60,000 diseased

cattle were formerly turned into sausage annually, until the proprietors of the works were sent to the penitentiary. Now these diseased cattle are diverted; we do not know just what does become of them.

If the chemists would turn their attention to the needs of the human system they would do a great service to humanity. As an indication of possibilities along this line we note the familiar fact that the human body contains some sixteen or seventeen elements; that the soil contains the same elements; and that the grain which grows on the soil contains the same elements. Yet when we make our grain into white flour we take for human use the least nutritious portion of the grain, containing only a few of the elements, and give to the cattle the outside of the grain, the most nutritious and valuable parts, and the only ones that contain the minerals needed by the system.

Dr. Wiley, the food expert, recently told the House Committee on Agriculture that it is due to the use of white wheat bread that at the outbreak of the war only sixty per cent of our young men were found to be in proper condition for military service. The human system is not properly nourished by white bread.

Milk as a Food

THE chemists or somebody else have been working away at the milk question, and have discovered a method for condensing buttermilk and reducing it to a semi-solid condition where it gives promise of being of great utility in baking. It is said that this solid milk can be added to bread, producing a more healthful loaf, and one which takes a delicious brown at a comparatively low baking temperature. This lower temperature allows the retention of a larger amount of moisture in the loaf. It looks as though this discovery might be one of considerable value.

For some time a means has been used for converting fresh milk into a dry powder which can be shipped anywhere and eighty per cent of the freight saved. This powder may be kept for weeks, or even for months, and with proper precaution can be remade into fresh sweet milk at the end of that time.

Milk is ideal as a food because it has all five of the elements necessary to human life and growth, fats, nitrogenous substances, sugar, minerals and vitamins or growth-factors. No

other food can take the place of milk for the human infant. Without its vitamins the growth is stunted, as is now so unhappily the case with the million or more of European babies that have never tasted milk; and there is an effect upon the eye, called dryeye, which shows the hunger of the child's system for just what the milk provides.

Because it is pertinent to our subject, and because it is important, we mention here that where infants of under eighteen months cannot be nursed, the best available substitute for the mother's milk is to be had by letting good fresh cow's milk stand until the richer portion has all risen to the top. To this top milk add an equal volume of pure water, and to the mixture add one ounce of sugar of milk to each quart of mixture. After the child reaches eighteen months this preparation may gradually give way to ordinary cow's milk.

Distribution of Food

IT IS easy enough to criticize our present methods of distribution, but we ought to criticize them and keep on criticizing them until we do something definite to improve a plan whereby it costs from two to ten times as much to deliver foodstuffs to the consumer as it does to produce the food itself—a plan which has increased in "efficiency" until now every sixteen people in the country support a distributor, as against thirty-one people in 1870. Gambling in the stock markets has something to do with this inefficiency; and Congress ought to make it illegal for these gamblers' quotations to pass through the mails or over the wires. In one day there is more wheat sold in Chicago than comes into Chicago in an entire year; and every time it is sold there is a tax, however slight, laid on every table in the land.

Another item which enters into distribution costs and the welfare of the people is the storage of food. In August, a representative of Swift and Company informed a Congressional investigation committee that the total supply of dressed meats ready for the market on June first was sufficient to last for only ten days. But if that was the truth on June first, and if the newspapers tell the truth, which is equally uncertain, then it was not true three months later; for at that time, and with men, women and children suffering for lack of food, it was estimated that there was \$2,000,000,000 worth of food

stored in New York City, not altogether in the licensed warehouses, but much of it in brewery lofts and other unlicensed places.

At that time, when the Government began to get after the hoarders and profiteers in human necessities, millions of dollars worth of food-stuffs were seized in a St. Louis warehouse on the charge that they had been held over three months with the object of increasing the price, ten million eggs were seized in Detroit, and there were like seizures in Buffalo and elsewhere. At that time the charge was also made that warehousemen were storing food in one city as long as the law permits, and then moving it to another city and re-entering it to storage without keeping any record of the time when it was first stored.

Because of their power, the five great packers, Swift, Armour, Wilson, Morris and Cudahy, upon whom the nation specially leaned in war time to supply food to the army, are now the special objects of suspicion in the matter of profiteering. These five packers own ninety per cent of all the refrigerator cars in the country. In 1916 they slaughtered eighty-two per cent of all the cattle, handled half the poultry, eggs and cheese, and are rapidly gaining control of all foods for man and beast. They are also making large inroads into the marketing of building material and fuel commodities.

These five packers have gained control of 762 other companies. They now manufacture or deal in 775 commodities and dominate the food supply of the world. The recent boost in shoe prices is traceable to them in this way: Controlling the hide supply they took excessive profits and passed the increase on to the manufacturer, who added something more for himself, and the wholesaler and retailer followed the same course. These packers quickly dominate any field they enter. In 1917 Armour first undertook the rice business; in that same year he became the greatest rice merchant in the world, his sales amounting to more than 16,000,000 pounds. Immediately, the wholesale price of rice increased eighty-five per cent.

The big packers control the stockyards to which the nation's meat supply is shipped, control the commission men who are the producers' only representatives at the yards, discriminate against independent packers who would use the yards, prevent new packers from

getting into business, and restrict the meat supply of the nation by so manipulating the livestock prices as to discourage the producers. A favorite way to do this is to boost the market until an immense quantity of stock is known to be on cars on the way to the yards, and then to suddenly drop the prices so that on arrival at destination the shipper receives far less than the stock quotations had led him to expect. The financial power of these packers is so great that no competitor can hope to succeed if they use their power to break down his credit.

Oddities in Food

THE widespread use of the automobile has so reduced the demand for horses, and the growers find them so unprofitable, that the Government has sanctioned the sale of horse meat, with a view to killing off the surplus supply. It also hopes to add to the leather supply by this means. All horse meat or horse meat products must be labelled as such.

The New York State Department of Farms and Markets has issued an appeal to the people of New York City to learn to eat rabbits, calling attention to the fact that at prevailing meat prices rabbits are cheap and wholesome food, and are considered a great delicacy in many parts of Europe.

The United States Department of Agriculture has been setting forth the virtues and advantages of the goat. The goat will eat anything, stay anywhere and submit to any kind of treatment. In return it gives a rich, creamy milk that is especially good for babies and can be made up into seventeen different kinds of cheese. Roasted kid is considered to be one of the most delectable of meats.

In the foregoing, the Government has made efforts to assist the common people in providing a meat supply at prices within their means, and in this has done a good work. In times of high prices for meats we might remember the conditions in the siege of Samaria when "an ass's head was sold for fourscore pieces of silver" (2 Kings 6:25) and the terrible conditions which prevailed then and at the time of the siege of Jerusalem in A. D. 70, when women even ate their own children.

It is a comfort to know that these conditions of scarcity are all temporary and will give way to a better time when there will be plenty for all.

"Fear not, O land; be glad and rejoice: for the Lord will do great things. Be not afraid [of food shortage], ye beasts of the field: for the pastures of the wilderness do spring, for the tree beareth her fruit, the fig tree and the vine do yield their strength."—Joel 2: 21, 22.

Benefiting the Cripples

ABOUT 200,000 American soldiers received such wounds during the World War that they are more or less disabled and require special training to fit them for the future. Human nature is very forgetful of what it owes to its benefactors; and these soldiers, who might find many ready to help them today, would not find as many two years from now. Further, it can not be long, in the nature of things, before they will be expected to compete with those who are uninjured, and when they do, it is necessary that they be specially fortified by training if they would hold their positions.

The Government is undertaking the training of all disabled soldiers; and experience has shown that there is hardly any trade or profession that they can not master under the personal and kindly care of their teachers, provided they have the will to do so. Their compensation, when fitted for the new work, is usually superior to that before they entered the service. While learning they are given compensation of not less than \$75 per month if they live alone, and \$30 for wife and \$10 for each dependent child.

During the Golden Age there will be some very wonderful healings of cripples. We read, "Then shall the lame man leap as an hart". (Isaiah 35:6) We had some wonderful examples of God's power to heal during our Lord's ministry, and also during the days of the apostles. How thrilling must have been the scene, shadowing forth the coming glory of the Messianic age, now dawning, when Peter said to the man lame from his mother's womb, "Silver and gold have I none; but such as I have I give thee: In the name of Jesus Christ of Nazareth rise up and walk. And he took him by the right hand and lifted him up: and immediately his feet and ankle bones received strength. And he leaping up stood and walked, and entered with them into the temple, walking and leaping, and praising God". (Acts 3:6-8) Immediately following this wonderful exhibition of God's power comes St. Peter's still more

wonderful sermon on the Times of Restitution (Acts 3: 19 - 21) as a result of which thousands of Jews were converted to the Christian faith.

Mining Under the Ocean

ONE OF the oil fields of the Pacific Coast, lying within a few miles of Los Angeles, extends out into the Pacific Ocean, and a considerable number of oil wells are located at some distance from the shore.

In England, the workings of the Cumberland coal field run two miles out under the sea. The ventilation of these mines is a nice engineering problem, but is successfully accomplished.

At Workington, England, in the year 1837, before the science of surveying was as highly developed as at present, the sea burst through and the workers were drowned.

Many of the oldest mines of England, long ago worked out and abandoned, have filled with water in the lapse of time, and constitute an ever present danger to the miners in adjacent mines, who may be drowned at any moment.

A Coffee Shortage

THIS would look nice for a headline, would it not, in a day when we are fed with news regularly that first this item of food and then that item is not to be had at the old price because the supply is so limited?

The facts are that there probably never was a time in the world when there was as much coffee in sight as there is at this moment. About half of the coffee-users of the world have been without coffee for five years, and during that time the production has been the same as ever. The green coffee beans keep indefinitely, and get better as they grow older.

Maybe somebody can tell us, atop this information, why coffee that can be bought wholesale in Brazil for 12½c should sell here at retail for 75c, but it is hard for us to understand. It looks to us as though the system of distribution is too well organized, so well organized that the common people have not even a "look in" unless they can arrange for coöperative buying.

Well! Anyway! The Golden Age comes along, not all at once, but gradually. Given the necessities of life in abundance, and statesmen who have a real and abiding interest in *people*, it will not be long before such a condition as this will be corrected.

SOCIAL AND EDUCATIONAL

The New Millionaires

THE new millionaires, created by the blood-money of war profits, have distinguished themselves by a display of foolishness, during the year 1919, unexampled hitherto in the history of the United States, or in any other country, so far as we can judge, with the possible exception of the Roman Empire in the period just before its fall.

In the matter of personal adornment, nothing has been too rare or too costly to suit the taste of the newly rich. Dealers in gems have found it almost impossible to import sufficient quantities to keep their customers supplied, and the gems sold have been of the very highest quality. The dealers report that whereas they have two rush seasons, Easter and Christmas, this year it has been Christmas in every day of every month. This is an unhealthy state of affairs.

During the summer season, the most expensive hotels in all parts of the country, with rates ranging from \$7 to \$25 per day, were unable to care for their guests, and resorted to the construction of automobile camps to provide shelter for those who could not be accommodated with rooms indoors.

At Saratoga, where a club seat at the ring side is \$8.80, and the cheapest admission is \$1.10, the grounds were packed as never before, the gate receipts ranging from \$65,000 to \$100,000 per day and the daily bets at the track running as high as \$2,000,000. In the great cities, bookmakers toured the sky-scrapers and placed other millions.

The gambling at Saratoga was not confined to horse-racing; but at the card table hundreds of thousands of dollars were repeatedly pivoted upon the turn of a card. A similar mania is reported from France, where fortunes are won and lost in a single play. It is supposed that part of this high-strung nervous tension in America and in France is due to the suppression of the liquor traffic in this country and the cocaine traffic in France.

The women of France and England are reported to have lost much of their womanly modesty during the year, and perhaps the same is true to some extent in this country. In France

and England the dresses are alleged to be nearing the vanishing point, and if they get much worse in this country than they were at some of the bathing resorts, we can adopt the Japanese style of separating the men and women bathers by a line, and paying no further attention to such little items as dress. At one American resort over 500 girls were detained by the police, and word sent to their mothers to bring their daughters sufficient underclothing so that they could go home in decency, or the clothing would be supplied by the city.

At the most expensive restaurant in New York, where two tablespoons of coffee cost fifty cents, the most beautiful and elaborately dressed women of the age stand in line waiting for an opportunity to obtain seats. The houses in which some of these people live have cost fabulous sums. One is alleged to have cost \$5,000,000. One man used 200 tons of coal to heat his house during last year's coal famine. A woman expended \$60,000 for an opera cloak.

Every one is willing to criticize these millionaires, but in some cases we fear the judgment is too severe. We therefore urge that our readers do not think too uncharitably of them. Remember that they as well as the poor are in some respects under the control of the present social system. Custom has fixed laws and barricades around their heads and hearts. False conceptions of Christianity, endorsed by the whole world, rich and poor, for centuries, have worn deeply the grooves of thought and reason in which their minds travel to and fro. They feel that they must do as other men do; that is, they must use their time and talents to their best ability and on "business principles". Doing this, the money rolls in on them, because money and machinery are creators of wealth.

Thus they no doubt reason that having the wealth it is their duty not to hoard it all, but to spend some of it. They perhaps question whether it would be better to dispense it as charity or to let it circulate through the avenues of trade, and wages for labor. Under present wrong conditions, therefore, it is extremely fortunate for the middle and poorest classes that the wealthy are "foolishly" extravagant, rather than miserly, spending lavishly a portion

of the flood of wealth rolling into their coffers—for diamonds, for instance, which require “digging”, polishing and mounting and thus give employment to thousands who would only add to the number out of work if the wealthy had no foibles or extravagances, but hoarded all the money they could get.

In making these suggestions for the measure of consolation they may afford to the poorer classes, we would not be understood as in any sense justifying the selfish extravagance of the rich, which is wrong, and which the Lord condemns as wrong. (James 5:5) Can we wonder that many are envious, and some angry and embittered, when they contrast the wastefulness of the newly rich with their own family's penury, or at least enforced economy. While we wait until the Lord shall vindicate their cause, we cannot wonder that such matters awaken in the hearts of many of the common people feelings of envy, hatred, malice and strife such as we see occasionally manifesting themselves in the current news of the day.

Conditions of Newsboys

AN INVESTIGATION of the industry of street marketing of newspapers in the principal cities revealed interesting facts about the newsboys.

In Cincinnati, for example, there are 2,800 newsboys, or 12% of the boys of the city between ten and sixteen. The boys are not orphans; for 81.2% have both parents living.

They are not from very poor families; 90% of the poor families in which there are newsboys receive no charitable assistance. The Jews are 6% of Cincinnati's population, but furnish 29% of the newsboys, showing that the trading instinct is a strong factor in turning boys to the occupation. About 87% are native born. The native born are 90% in Seattle, 80% in Baltimore and 70% in Boston.

The daily earnings of newsboys average twenty cents in Cincinnati, twenty-two cents in Baltimore and twenty-eight cents in Chicago. In England and Wales the earnings of 45,000 street traders are 12½ cents a day.

Many newsboys are in constant touch with degrading or criminal surroundings. According to Maurice B. Hexter, Superintendent of the United Jewish Charities, who made the Cincinnati investigation, the boys on two papers were dealing with twenty-three supply men, of whom

thirteen were colored men with extensive criminal records. In some cases the boys have to bribe these men to obtain their quota of papers. “No wonder,” says the *Journal of Education*, “lying, cheating and gambling flourish”.

Human Longevity

ONLY a little while ago we learned from the “experience tables” that the average of human life has gradually increased from 33 to 35 years. How is it that it is now said to be shortening? The answer is that it is shortening for those who have reached 55 or more years of age, while it is greatly lengthened for many who would have died in infancy but for the superior care infants now receive.

Between 1900 and 1910, in nine American States, the average death rate for all persons under 35 years of age decreased 15%. For persons between 15 and 20 years of age this decrease was as great as 19%. Between 35 and 45 years of age the decrease in the death rate was 7%. Between 45 and 55 years of age it was 2%. But over 55 years of age the death rate increased 9%. The causes assigned for this increase are chiefly diseases of the heart, kidneys, circulatory system and apoplexy.

These diseases of maturity, or “degenerative diseases”, as the physicians call them, show what we all know to be a fact; namely, that we are living too fast. A French surgeon believes that he has discovered a method to prevent all these diseases of old age. It consists in grafting the interstitial gland from a young animal to an old animal, causing the latter to take on youth and vigor. His first experiments were with 120 animals, in each case with success. His next experiment was with a man over 80 years of age, upon whom he grafted a gland taken from a monkey. The result was that in a short time the man was restored to the health, vigor and mental alertness of a man of 30 years.

The time is at the door when the life of humanity shall be returned to its youth, but our understanding is that the restoration will be done by Christ; for the gift of God, eternal life, can come only through him. (Romans 6:23) Nevertheless, the French experiments are interesting. They are adding to our fund of human knowledge and at any rate enable us to see how easy it will be for the Lord to perpetuate human life indefinitely when, in due time, his kingdom shall be established in the earth.

MANUFACTURING AND MINING

The Chilean Nitrates

By T. A. H. Clarke

CHILI'S nitrate of soda deposits were discovered by Indians about a hundred years ago. In building a fire they noticed that the ground took fire in various directions. Fearing that this was the work of evil spirits they took specimens to the priest, who analyzed it and piled the unused portions in his garden. The next spring there was wonderful vegetation in the spot where the nitrate had been piled. Curiously enough, nothing grows on the nitrate beds themselves; but when nitrate is mixed with soil the results are marvelous. Experiments have shown that on soil where nitrate of soda was used the productivity lacked only about twenty per cent of being double what it was without the nitrate.

The only nitrate deposits capable of being worked commercially exist in Chili, and constitute Chili's most important article of export. Fish skeletons have been found in these nitrate deposits, and it is supposed therefore that at some time the deposits constituted the ocean's bed and were formed by decay of its fishes and seaweeds. The deposits are now found at elevations of 2,000 to 6,000 feet above the sea, to which they have been raised by the earthquakes that are characteristic of the region. The grounds are largely owned by the Government and are auctioned off from time to time.

The rock in which the nitrate deposits are found is generally white, but may be yellow, gray or violet. It is salty to the taste and soluble in water. The nitrate pampas are in the midst of rainless deserts. The caliche (nitrate rock) is broken up by explosives, transported by rail to rock crushers, boiled, refined, crystallized, dried and packed in 200lb. bags for shipment. Iodine and table salt are by-products of the process of manufacture. The standard nitrate used for fertilizing purposes is ninety-five per cent pure.

It is estimated that 50,000 men are employed in the 167 plants engaged in the production of commercial nitrates, and that three per cent of the available deposits are being worked. During the war Chili experienced a great boom, on account of the immense quantities of nitrate used in the manufacture of munitions. The

nitrate has to be lightered out to vessels often to a distance of several miles; but great efficiency in this work enables the loading of as high as 250 tons per hour, in spite of the heavy swells frequently experienced.

Surely God's ways are not man's ways. What a strange thing that, out of these desert wastes, should come something which is causing hundreds of thousands of acres of land in the United States, and elsewhere, to yield almost double their usual crops. The Lord has available all the materials wherewith to turn this earth into a Paradise again as soon as the clock of the ages has struck the time that suits his plan and purposes.

Oil From Coal

IMPERILED economically by the hard peace conditions, Germany is impelled to thrifty employment of her resources. A resource lacking in the German Republic is petroleum, and the Germans are establishing vast factories to convert coal into petroleum and coke. The coke will contain most of the energy from the coal, and the petroleum will be a clear addition to the national resources. According to the claims of Prince Loewenstein, a prominent chemist and manufacturer, 13½% of the coal can be taken out and the remaining "cokelike" substance burned with only 2% loss of efficiency. The 13½% will comprise 10% crude petroleum, 1½% benzine and 2% heavy oil. The government plans to build huge plants for the process, and to utilize the "coke" in the national railroads, which hitherto have used annually about 12,000,000 tons of coal. The processing of the coal will give 18,000 tons of benzine; 24,000 tons of heavy oil and 120,000 tons of crude petroleum for use in the nation's industries.

The distillation of coal or shale for oil is not new. A process was patented in England in 1850 and another in this country in 1854. By 1859 over sixty plants were working the American oil shales and supplying the newly invented "kerosene", to take the place of the whale and animal oils and candles hitherto used for lighting. Up to 1860 the shale-oil industry prospered, but the discovery of petroleum in liquid form brought an end to the business.

"He becometh poor that dealeth with a slack hand; but the hand of the diligent maketh rich".
—Proverbs 10:4.

Decreased Efficiency

IN A manufacturing plant no factor is as important as the contribution of the workers. The ability and willingness of the worker to turn out all the work possible is all-important, and has been a prime mover in the efficiency and profitableness of manufacturing industries.

War conditions have had an interesting effect upon the working branch of manufacturing. According to a large Philadelphia manufacturer an investigation shows that the product per man per hour under identical conditions today and before the war is one-third less now than then. This is notwithstanding an increase of 100% in wages. In an investigation covering several states the wage per man per hour had increased 240% while the product per hour had decreased 62%.

Of course, the reliability of such figures is subject to investigation as to motives that might control the investigators. What the average business man finds is liable to be what he wants to find. Figures can often be "adjusted" to tell almost any story.

But if the figures are to be relied upon, the outcome of easier working will result in a smaller volume of goods produced, less goods per capita, and higher prices for the goods that are produced. There is no question that if every worker produced twice as much there would be twice as much available for distribution among the workers, whether by the current wage system or under any other régime. The only way to spell plenty is w-o-r-k.

Perhaps some of the let-up in work is owing to justifiable causes. Sometimes in the past the workers have been worked too hard, in which case they ought to work less strenuously; for a worker's health and well-being are of untold more importance than the product of his labor. Knowing the tendency of employers in the far and the recent past to drive labor beyond endurance, persons of broad view are glad to see any improvement in working conditions.

Employers seem to think that they are a kind of privileged class, not bound by necessity to work to the extent they make their employees work. They should remember that they are

subject to the same divine law as anyone else, and that one of the requirements of even the Mosaic law was the employer should so regulate working conditions "that thy manservant and thy maidservant may rest as well as thou".—Deuteronomy 5:14.

American Industries

EXRESSED in millions of dollars the capitalization of the various industries of the United States is as follows:

Railroads	\$16,563, or 42.3%
Iron and Steel	4,281, or 10.7%
Chemicals	3,034, or 7.5%
Textiles	2,810, or 7.2%
Food	2,174, or 5.5%
Lumber	1,723, or 4.4%
Paper and Printing	1,433, or 3.6%
Beverages	1,015, or 2.7%
Metals (other than iron and steel)	1,013, or 2.6%
Stone, Clay and Glass	987, or 2.5%
Vehicles	803, or 2.2%
Leather	743, or 2.0%
Tobacco	303, or .9%
Miscellaneous	2,047, or 5.4%
TOTAL, \$39,206, or 100%	

Economists divide human activities into production, distribution, and consumption. Of the industries here listed, those devoted to distribution amount to 44.5%, and those devoted to production are 55.5%, showing a substantial equality between the two. If farming, commerce and finance were added, the figures would be somewhat different.

It is noteworthy that the one industry that has been a drag on the others—beverages—with a billion dollars investment, has been wiped out by national prohibition. It is the only one, except tobacco, whose destruction could not cause some serious consequences. It is gone, and is a good riddance.

The industries of today, with an American population of a hundred million, are nothing to those of the incoming Golden Age when the billion and a half world population will in a few hundred years rise to over twenty billion. Of this incomprehensible number over a billion should be domiciled in the United States, and the industries of the country should be ten or twenty times what they are now.

The contrast between those now having control of these vital and indispensable interests is suggested by two Biblical expressions: now, "the workers of iniquity flourish" (Psalm 92:7); then, "in his days shall the righteous flourish".—Psalm 72:7.

FINANCE·COMMERCE·TRANSPORTATION

Short-Line Railroading

GEORGE M. BRINSON had put some \$700,000 of his own money into an 88-mile railroad running out of Savannah, Georgia. The line ran through farm and timber lands and touched no other large city. He was making the road begin to show a fair return.

It was a typical, local, rural enterprise. Mr. Brinson was president, general manager, and pretty much all the officers. He could pay his workers better wages than they had earned on farms or in the timber. They gladly worked hard for him, because he was a good boss. In an emergency the shop men would put on extra steam to get the rolling stock ready for renewed service. Others willingly worked the same way, and regarded themselves much better off than they had been.

The road-bed was not yet seasoned, and before putting good, substantial, new locomotives on the line, Mr. Brinson bought five old "rattle-trap" locomotives, to take the brunt of the rough service and rack themselves to pieces. The line had some cars of its own, but not enough for the traffic; and it borrowed the needed extra rolling stock from the big lines, which were getting new business from the Midland and glad to accommodate a new "feeder".

Mr. Brinson has appeared and testified before the House Committee on Interstate Commerce. The road had been in operation only a few years before the American-German war. Now he cannot get a shop-man to help out by speeding up when a locomotive is out of repair and is urgently needed to handle traffic. The big lines no longer loan him their cars. The local labor receives the same wages as the Government pays everywhere. He cannot make the old deal, to induce traffic to move over his line, even if he could get the cars to carry it.

The total investment in the road is about \$1,200,000, including \$360,000 of bonds. Mr. Brinson says the bonds are in default as to interest payments; but the bondholders, being local people, have not foreclosed. He states that he cannot possibly operate the road to clear expenses, to say nothing of paying interest on the bonds. The value of his \$700,000 in the

stock has been largely wiped out; and there seems not the slightest chance of ever declaring dividends on the investment.

Things look blue, if not black, for the Midland. And it is typical of the little roads which have signed the short-line contracts governing conditions of operation.

The country's railroad expansion requires substantial, enterprising business managers of Mr. Brinson's type. He is the kind of man that throws railroads into new stretches of country, and opens up and develops them. The railroad development of the land is in the hands of the Brinsons, the executive heads of the hundreds of short-line feeders for the big systems.

How much does Mr. Brinson feel like building another short-line road, like the others he has built and successfully managed up to a paying position, before he sold them to others? What is to become of the necessary expansion of the country's roads? Who will develop the territory just ready for new lines?

The old is passing. Perhaps new ground will be opened up effectively by truck lines. Perhaps cheaper transportation than railroads will be found in the Ford gasoline motor car. Inventive genius is constantly working on new and better methods. Soon even the world will realize that "old things are passed away; behold, all things are become new".—2 Corinthians 5:17.

A Very Weighty Matter

MR. EDITOR: In your issue of October 1st, 1919, page 6, second column, you make a statement which has been called in question, viz., "Every year our railroads carry 650 tons for every man, woman, and child in the land". I would like to ask whether this can be a misprint or a misstatement. If that means each man, woman, and child, and there are five in the average family, it would mean 3,250 tons to be loaded and unloaded for each family, and it would look as if Dad would have to hustle lively in moving freight, in addition to earning a living.—E. M., Los Angeles, Calif., Oct. 25, 1919.

Just the kind of shot we might have expected from a country where the climate is so perfect that houses are a nuisance, clothing is a burden and the food question is a joke! E. M. ought to

live up in the frozen North through one or two of our January and February water-pipe festivities, and "heft" our imitation marble slabs, our limestone-laden flour, our "bony"-laden hard coal, our "loaded" fabrics; and then he would know why we have to have things up in this country in the winter time in order to keep alive.

Suppose now, E. M., that we were to get a box of oranges from the paradise where you live. It comes right through 3,127 miles to New York. To start with, let us suppose it weighed 60 lbs. Statistically speaking, when that box of oranges reaches our front steps it will weigh just 93.81 tons. You just send the box right along and see how bravely Dad runs out and lugs that 93.81 tons up the steps, and watch the smiles on the faces of the kiddies when he does so. Railroad tonnage is figured in ton-miles. 650 tons for each person means 650 tons carried one mile. But most of our things are carried many miles, and this runs up the tonnage. A ton of Scranton coal in Los Angeles would weigh, theoretically, over 3,000 tons. But, pshaw, what is the use of our sending coal to Los Angeles? They would not know what it was when they saw it.

Rice Imports

THE shipment of American foods to Europe has had an interesting effect upon the rice trade. In 1917 the total rice movement from China and Japan to the United States was 33,486 tons; but in 1918 one American banking company alone, through one American port, imported a quantity three times as great.

In 1694 a vessel bound for Liverpool from Madagascar was blown so far out of her course that she had to put in to Charleston, S. C., for repairs. While there the captain of the vessel gave a small package of rice to one Thomas Smith, to use as seed. It had been supposed previously that rice would not grow in this country, but Smith grew enough rice the first year to almost feed the whole colony, and it has been a staple crop of the marsh lands of the southern states ever since. No doubt the Lord knew how suitable is the South for rice production; and it was his hand that guided the Madagascar vessel to these far shores, and laid the basis for a part of the great food supply that will be needed by the myriads of mankind that will fill the earth in the Golden Age.

Canada's Finances

THE new governing factors of Canada will have large problems to handle. During the four years ending with 1918, Canadian investors advanced seventy-one per cent of the total sum of \$1,561,619,024 put into the war during that period. In that time the national debt was multiplied by more than five, and the interest on the debt by more than nine. Within that period, although the gold supply increased, the paper money in circulation increased so greatly that there are now only forty-two cents in gold back of every paper dollar, while in 1914 there were seventy-four cents back of each dollar.

The Government's requirements for the year, on account of demobilization and other extraordinary expenses due to the war, are estimated at \$800,000,000, of which amount only about \$280,000,000 can be provided by the revenues of the country. Somebody must "find" the balance. At the close of the fiscal year Canada's debt will be about \$2,000,000,000, or \$250 per capita. The pension burden in Canada will be very heavy. The 8,000,000 people of Canada will try to pay in pensions an amount equal to that paid by 50,000,000 people of the United States to the Union Veterans of the Civil War.

No Solomon, or collection of Solomons, will handle the complicated questions that modern statesmen have to face without experiencing a large part of the "distress of nations, with perplexity" which our Lord said would immediately precede or accompany the time when they shall "see [with the eyes of their understanding] the Son of man coming [into control of earth's affairs] in a cloud [a time of trouble such as never was since there was a nation] with power [irresistible] and great glory" (ultimately). Then the Lord adds: "When ye see these things come to pass, know ye that the kingdom of God is nigh at hand". (Luke 21:25-31) The new Canadian legislators have a hard job ahead of them, and in the end they will be even more glad than others when the Lord lifts the burden from their shoulders, and bears it away himself by inaugurating the Golden Age for which we have always longed. What a blessed condition will then obtain everywhere! All who will accept the gracious arrangements of the incoming Messianic kingdom will thereby be enabled to return to divine favor and life everlasting in a world-wide Paradise restored.

POLITICAL—DOMESTIC AND FOREIGN

A Canadian Revolution

NOBODY need be alarmed when we state that a revolution is in process in the great country to the north of us. It is a peaceful revolution, but none the less real. The people seem bent on no longer entrusting their interests to either of the two old parties, but of having a housecleaning, from the ground up. The work of removing all the old political elements and placing new parties and new men in charge of the country's affairs is in full swing, and apparently nothing can stop it.

During the war the Canadians came to feel more and more a just sense of their country's importance in the affairs of the world, and at its conclusion demanded separate representation of Canada at the peace conference and the privilege of signing the treaty on their own account. In the treaty as drawn there is no distinction between Canada and other powers signatory to it. This determination of the Canadians to have something to say about how they will be governed in the future is now reflecting itself in the domestic politics of the provinces and dominion.

Throughout the war Canada was governed by what the Canadians have called a Unionist Government; that is, a coalition of the so-called Conservative and Liberal parties, in which all differences were merged until the war should be won. Now the common people are raising such a clamor to be heard on their own account that the old line-up of the Conservatives and Liberals has been resumed, and for the delectation of the public the Liberal leaders have been telling the people what they think of their late bed-fellows. In a statement printed in the public press they recently denounced the Government in these words:

"We charge that the Government has failed to represent the people and has outlived its usefulness. No body of men has the right to usurp power and continue to rule without submitting its policy to the consideration of the people. The Government has failed to take the people into its confidence in framing its policy in the past, as also in formulating its policy for the future."

The Canadian people as a whole seem to believe pretty much all that the Liberals have had to say about their late bed-fellows, but

they go farther and believe that the Liberals themselves are as untrustworthy as the Conservatives. They claim that the whole arrangement by which the people have been governed by orders-in-council, by which liberty of thought has been terrorized through wholesale arrests, seizure of publications, and breaking-up of meetings of law-abiding, God-fearing people, through overworking the word "patriotism", has been, to say the least, extra-legal.

Now the Canadians seem to have reached the conclusion that, for them, terrorism shall cease to terrorize. And who shall say that they, at least, have not shown some real common sense, and some *real* patriotism? Does true patriotism mean that one may never dare to have a different opinion from that held by the person or persons who, for the moment, have the reins of power? Or does it mean if one is really patriotic, that he must wave his arms and throw his hat in the air, and shout himself black in the face, every time such person or persons give expression to a new thought or to a contradiction of an old one?

The new determination of the Canadian people to be done with old party lines first came to light in a by-election held in St. Catharines, Ontario, in February, 1919. The District had always been a Conservative stronghold. There a new party, the Labor party, entered the field. It had been unknown hitherto, and a candidate was secured with difficulty. But it came very near winning the election, and its supporters claim that it did win the election if the votes had been honestly counted. It was a startling indication of the temper of the people, of their determination to have a real democracy instead of an autocracy posing as a democracy.

During the summer there was another expression of the popular dissatisfaction with the old Canadian parties in the troubles at Winnipeg. There were many things connected with the Winnipeg troubles that have never been cleared up, and it is not generally known on this side of the line, even to this day, that the majority of the Winnipeg strike leaders were British-born, and of proven loyalty to Canada and the Canadian people, right at the time when they were being widely accused as fomentors of

disturbances among foreigners. In the Fall the Canadian people had their long-desired opportunity to give an expression at the polls of just how they felt about how things have been managed by the old parties.

In October came the elections for the legislature of Ontario, the most populous, most conservative province in the Dominion. Besides the new Labor party, the United Farmers of Ontario, another political party only two years old, entered the field. These farmers are absolutely against any return to the sale of liquor, are opposed to intervention in Russian affairs, demand that Canadian politicians keep out of European affairs altogether, welcome settlers from oppressed lands to come to the Dominion, have a plan of progressive legislation in view which they hope to make into laws, and are linked up with similar organizations of farmers in the provinces of New Brunswick, Manitoba, Saskatchewan and Alberta, who furnished them with speakers in the campaign.

The result was a campaign that is described as having taken on the nature of a religious revival. The women voters leaned more and more to the side of the two new democratic parties. Prominent men who entered the contest on the Government side swung to the side of the people during the fight. The outcome was a surprising victory of these two brand new parties over the two old ones. The Conservatives, who had formerly held the control by a total of 80 out of 111 seats, were dethroned, and the coalition of the Labor and United Farmer parties has 56 seats, a majority of one over all the old party candidates and independents put together.

The people of Ontario went to considerable trouble to lay emphasis upon their disapproval of the old parties. A so-called labor-soldier candidate was defeated apparently for no other reason than that he was backed by the expiring Conservative government. One man was reported as elected merely because he had been attacked as a Bolshevik. The mayor of Brantford was elected, supposedly, because he ignored the demands of the Conservatives that he should not let one of the western labor leaders, Mr. Ivens, speak in the city.

The gentleman, William Ivens, about whom the dispute in Brantford centered, is a Methodist minister, and at the time of the troubles in Winnipeg was editor of the *Western Labor*

News, the official organ of the strikers. When he was arrested and taken to the penitentiary near Winnipeg, another gentleman, by the name of Woodsworth, was placed in charge of the same paper. The latter is an interesting character, an idealist, for twenty years a minister in the Methodist church, author of a patriotic book, entitled "Strangers within our Gate—Coming Canadians," founder of the Winnipeg People's Forum, founder of the Canadian Welfare League, and Director of the Bureau of Social Research of Manitoba, Saskatchewan and Alberta. At the end of a week he also was arrested on the charge of inciting to hold an unlawful assembly. When the facts were explained to the people of Brantford, they seemingly concluded that those responsible for the arrests of Ivens and Woodsworth were entitled to a rebuke; and they administered it.

Since then the United Farmers have won three out of five by-elections in New Brunswick, Ontario and Saskatchewan, points twenty-five hundred miles apart. In New Brunswick the United Farmers candidate was returned by a 3,000 majority over a returned soldier. In Ontario the Farmers' candidate had a majority of nearly 2,000 and in Saskatchewan of nearly 4,000 votes. This shows an awakened people.

The Farmers' platform includes lowering of tariffs on goods imported from other countries, especially if imported from Great Britain; reciprocity with the United States; a tariff commission; taxation of unimproved land values; an income tax ranging from 2% on \$2,000 to 50% on incomes of \$100,000; inheritance tax; income tax on corporation profits; public ownership of public necessities; abolition of titles; abolition of the Canadian senate; national prohibition; referendum and recall; and complete equalization of the parliamentary status of women.

We cannot but sympathize with the people in their aspirations for a more democratic government, and in these aspirations they approach more nearly to the standards set forth in the Scriptures. To the confusion of those who ignorantly claim that the Bible sanctions an established empire rule over the people, instead of "a government of the people by the people," be it noted that Israel had a republican form of government which continued for over four hundred years. And it was changed for that of a kingdom at the request of "the Elders," with-

out the Lord's approval, who said to Samuel, then acting as a sort of informal president, "Hearken unto the voice of the people in all that they shall say unto thee, for they have not rejected thee, but they have rejected me, that I should not reign over them". The people feel their need of a wise and strong ruler and will find him in the Lord, and in him alone, and that shortly. The new parties in Canada may do something to alleviate the condition of the people; but they can not do much. The conditions the leaders of these parties must face are very difficult. They will find themselves confronted with problems they have not foreseen, and will be expected to produce changed conditions more quickly than will be possible. We hope for them that they will be wise, and kind, and just, and strong for the interests of all the people.

Governmental Limitations

IT IS plain enough that if none of us ever did anything, or produced anything, we would all be naked, homeless and starved. Until we get to work and produce something there is not much to govern, unless it be to form a sort of mutual defense society to prevent the stronger from killing and eating the weaker. So the fundamental fact of government is work. "If any would not work, neither should he eat." (2 Thessalonians 3:10) We must not get the idea that any kind of government man can devise will make it unnecessary for him to work. And just now, when there is a shortage of almost everything that human beings need, due to the great waste of the war, the governments of the world are right in their conception that anything that will cause the people as a whole to produce more goods will be to the benefit of the people as a whole.

This brings us to the question of how men can be induced to produce more, so that there will be more to divide. The prevailing rule of thought in the past has been that the only thing that will induce the average man to put forth his best efforts is a desire to own and to hold things. And it must be admitted that there is a great deal of truth in this contention. A system which makes each man responsible for the care of his own wife and children will cause the average man to put forth more effort than where his work will be used for the benefit of the wives and children of others.

Any man who has the idea that it would be better for the Government to own and operate all the industries of the country would do well to visit any public building in any city of the United States and note the general shiftlessness of the occupants, the dirt, disorder and indifference manifest on all sides, and then turn to any equally large building in the hands of a private concern and note the difference. The general atmosphere of the one is dirt and laziness, and of the other cleanliness and industry.

The average man looks upon a political job as an easy one; and while he has the job he is liable to expend most of his energies in trying to retain the job rather than in trying to render efficient service. But if he has a job with a private concern he knows that he must produce definite results, and that if he does not do it he may lose his job. He sees other men about who are doing their best to help themselves up in the world; and his fear of what they may do to him and his family if he does not do the work expected of him leads him to put forth more effort than he might otherwise do.

So then there are some good things to be said about competition. But competition in many lines is an absolute waste. Two telephone systems or two street railways in the same community are a nuisance. Two telegraph companies render better service than one; but it is a great waste to the community as a whole to have to maintain two complete sets of offices, poles, wires and equipment. Here is a legitimate field for Governmental activity—how to produce an absolutely reliable and efficient telegraph service, one equal to that provided by private owners, but at less expense to the public. The public should pay less to the Government for such a service than to private owners because a Government ownership of telephone poles and wires would enable the telegraph lines to be operated in conjunction with them at reduced cost. All the wires could be carried upon the one set of poles. Governmental telegraph service in European countries shows that this is a problem which, if placed in the right hands, can be handled efficiently by the Government, and at reduced costs to the public. Besides, the Government has facilities, through the Post Office, for the delivery of telegrams.

Competition, if it can be honestly maintained, should result in good service and low prices to the consumer. But if all the milk dealers, for

example, gather together and agree on certain prices, competition ceases, and there is as true a monopoly as though one concern did all the business. And there is the disadvantage that one concern could do all the work, and do it more efficiently and more economically than a dozen, all traversing the same streets, at the same time, with the same product. Which is better, to have a real monopoly and not admit that it is such, or to admit that monopoly is inescapable in such a business, and endeavor to hold it in restraint by having the municipality itself engage in the business as a competitor? In numerous cities abroad this plan is followed with good results.

Unrestrained competition is bad, too; for it leads to long hours, abominable shops and factories, adulteration of goods, false representations of merchandise, and the dishonest underselling of competitors with a view to ruining them. We must have the aid of a Government, national, state or municipal, to prevent the stronger from killing the weaker by laws of their own making. Fortunately, at this stage of the game, the worker himself has something to say about it; and his protests against long hours, low wages and unsanitary working conditions all operate to the advantage of society as a whole. He would render a still further aid to humanity if he would blazon upon the housetops every act of adulteration of goods or misrepresentation of them that comes to his knowledge, even if he lost his job by doing it.

In that case the Government he has benefitted ought to aid him in securing employment.

What is needed is a spring of human endeavor other than the law of selfishness, a new well of water, a law of love, a motive that has the interests of others more in view than one's own interests, which, however, should not be neglected. The present governments of earth are far better than none at all; and we all do well to think about their activities in constructive fashion, considering what they can reasonably do in the interests of the people as a whole without at the same time becoming intolerable nuisances by inefficiently and expensively doing what private enterprise can do better, and by attempting to decide for us just how we shall think on questions in which they are interested. The more the people expect the Government to do for them, the higher will be the taxes which must be extracted from the people in one form or another. There is no escaping this.

The thing that we all desire, whether we know it or not, is the establishment of Christ's kingdom. "Thy kingdom come. Thy will be done in earth, as it is in heaven." (Matthew 6: 10) Earth's new King will know just what laws to put into effect, and just how to enforce them. He alone has the power to give such a government as will insure neither sickness, sorrow nor death to those who obey his just and righteous will. This is earth's hope, and its only hope. And, best of all, "The desire of all nations shall come"!—Haggai 2:7.

The Great Agnostic's True Vision

I see a world
Where thrones have crumbled
And where kings are dust.
The aristocracy of idleness
Has perished from the earth.

I see a world without a slave.
Man at last is free.
Nature's forces
Have by science been enslaved;
Lightning and light,
Wind and wave,
Frost and flame,
And all the secret subtle powers
Of earth and air
Are the tireless toilers
For the human race.

I see a world at peace,
Adorned with every form of art;
With music's myriad voices thrilled;
While lips are rich
With words of love and truth;
A world in which no exile sighs,

No prisoner mourns;
A world on which
The gibbet's shadow does not fall;
A world where labor reaps its full reward;
Where work and worth go hand in hand.

I see a world
Without the beggar's outstretched palm,
The miser's heartless, stony stare,
The piteous wall of want,
The livid lips of lies,
The cruel eyes of scorn.

I see a race
Without disease of flesh or brain,
Shapely and fair.
And,
As I look,
Life lengthens,
Joy deepens,
Love canopies the earth,
And over all in the great dome
Shines the eternal star
Of human hope.

Robert G. Ingersoll.

AGRICULTURE AND HUSBANDRY

Dehydrating Grapes

TEN tons of grapes in twenty-four hours is the record maintained by the first commercial dehydrating plant of the kind, located in Pomona, California. It is a saver of waste products; for forty-five per cent of the grapes treated would have been scrapped, because broken or otherwise injured by heavy rains.

Country people are familiar with the old method of drying fruits, by exposing them, in trays, to sunlight, dust, flies, and germs. When drying attains the dignity of a manufacturing process the old name is too commonplace and it becomes dehydration, which signifies the extraction of water, or plain "drying". Fruit of any kind may be dried by the new process, and stored indefinitely. When soaked with water, the dry cells swell up, and the fruit regains much of its original size and, according to the inventor, most of its flavor.

If dehydration plants were scattered generally over the country and made as accessible to the farmer as a dairy, the over-production of any kind of fruit or vegetable could be turned from loss into profit; for the dried product might be stored until the close of the season for the fresh fruit or vegetable, and then be placed on the market, without fear of deterioration, to the advantage of farmer and consumer and to the lowering of the cost of living.

Dehydration plants make for easier work in the kitchen. If there were a plant in a city the housewives, instead of going to the labor and expense of canning and preserving, could bring their fruit to the plant and get it back dehydrated and in a form most convenient for preservation and use. Doubtless many new recipes might be invented for sweetening or flavoring fruits before having them dehydrated, and hitherto unusual combinations of fruits and vegetables might be made by enterprising housewives. The existence of drying-plants in towns and cities will open up an entirely new field of enterprise and originality in home and store. Grocers would need have no fear of loss through spoiled fruit and produce; for anything approaching the danger line could be rushed to the dehydrating plant and returned in its new form ready for sale immediately, or

when the demand for dehydrated products would make the operation profitable.

In the Pomona grape-dehydrating plant, the grapes are placed in large trays with screen bottoms, and slipped into huge oven-like driers. Heat comes from large gas burners; and heated air is circulated over the grapes by a huge fan, which sends it through a net work of chilled pipes, on which the moisture is condensed and drips away, the dried air returning for further duty. The repeated use of the air is one of the secrets of the economy of the plant as compared with other plants where the air is discharged into a chimney.

It is largely the California wine grapes that are being dehydrated, in order to meet the demand that will arise for the use of such grapes for the making of wine in the home, certain officials having ruled that wine may be made for home consumption.

Savings in freight, crates, tin, sugar and decay are claimed for the new process. Immense losses can now be prevented in crops that ripen quickly, or that are damaged by rain, frost or heat, and great advantages are predicted for housewives in country, town and city, wherever the dehydrated system obtains.

Poor humanity needs the help that a general economy of food would furnish, for now by tens of thousands people in war-torn Europe are being "burnt with hunger". (Deuteronomy 32: 24) With what unspeakable relief will these distracted ones welcome the day when "they shall not hunger nor thirst" (Isaiah 49: 10), and "they shall be no more taken away with hunger in the land" (Ezekiel 34: 29); for with many such improvements as that outlined above will the Golden Age be blessed.

Buying in the Dark

THE latest in the land-shark business is "peanut units". The guileless gullible buys so many square feet or acres of land sweetened with the promise of all kinds of profits from peanuts that will be grown on the land. A Chicago concern is said to be offering land in Florida, to be planted with peanuts, at the modest (?) price of \$2,500 for ten acres, or multiples thereof at the same price.

HOUSEWIFERY AND HYGIENE

Typhus a Pestilence Now

PUTRID fever, ship, jail and camp fever are some of the names under which typhus fever has traveled in the past, and through which it has won an undesirable reputation. It is now raging with the proportions of a pestilence in the war belt from the Baltic Sea to the Black Sea. Physicians are unable to cope with it; and it is pronounced to be on far too extensive a scale for even the Red Cross to meet with hope of success.

The disease is rare in the United States because it is a filth disease and the Americans are one of the cleanest people in the world. When it occurs it is usually among immigrants. It is rare in European centers of population; but in filth centers, such as certain cities of Ireland, Russia, Egypt, India and Mexico, it becomes epidemic. Its presence is both a misfortune and a disgrace, because due to overcrowding, bad ventilation, poor food, and bad habits, which are the fruits of ignorance.

Typhus is like typhoid in some respects, but is easily recognized, quarantined, disinfected and controlled. It is communicated by contact, by the breath, by germs arising from the skin, and by the dust of the room. Under favorable conditions about ten per cent of the cases die, but in centers of filth and squalor the mortality is appalling. It begins like typhoid, but develops a dull red rash. Since the treatment consists mostly in combating the causes that give rise to the disease, it appears that it is not well understood by physicians, who have to let the disease run its course of fourteen to twenty-one days, without being able to assist nature materially though they mitigate the suffering.

The prospects are that with the people of the war zone exhausted, poverty stricken, undernourished, and discouraged by the miseries of war, the dreaded pestilence may spread from its present zone of Lithuania, Esthonia, Poland, Ukrainia, Serbia and the Balkan states into Hungary and Austria. Only if prosperity can be restored in other nations of Europe can the typhus be prevented from extending itself all over the continent. There is a shortage of food and medical supplies, and of soap with which to

fight the plague; and there are 10,000 people for every doctor in Poland, with a worse condition elsewhere. It is the worst visitation of typhus since the dark ages.

This is one of the great pestilences directly due to the war. It is one of the indications of the end of this age, and of the early establishment of the kingdom of God. It is written of this time that, "Before him [before the Golden Age] went the pestilence" (Habakkuk 3:5); and Christ said that the days immediately before his presence would be marked by "famines and pestilences". (Luke 21:11) It is good however, to know that the period of evil conditions will be very short, and that the world will quickly pass into the better days of the Golden Age.

Remedial Foods

USE celery for any form of rheumatism or dyspepsia.

Lettuce for insomnia.

Watercress for scurvy.

Onions are the best nervine known.

Spinach for gravel.

Asparagus to induce perspiration.

Carrots for suffering from asthma.

Turnips for nervous disorders and for scurvy.

Raw beef for frail constitutions and for consumptives. Chop fine, season with salt, and heat by placing the dish in hot water.

Cranberries for erysipelas. Use externally as well as internally.

Cranberries, raw, are good appetizers.

Cranberries in cases of yellow and typhoid fevers are almost indispensable as a tonic and to clear the system of harmful germs. For some forms of dyspepsia there is no more effective remedy known. Carry a supply and eat frequently during the day.

Use cranberries for biliousness.

Fresh ripe fruit to purify the blood and tone up the system.

Sour oranges for rheumatism.

Watermelon for epilepsy and yellow fever.

Blackberries for diarrhoea.

Tomatoes are a powerful aperient for the liver, for dyspepsia and indigestion.

Bananas for chronic diarrhoea.

SCIENCE AND INVENTION

Creation Nearing Perfection

By I. B. Alford

(Released to The Golden Age)

IT IS very manifest that in antediluvian times the entire earth's surface was of uniform temperature and moisture—that there were no extremes of heat and cold, wet and dry as now. This means that the entire earth was in a much more fruitful condition then than now. In one certain locality—the Garden of Eden—absolute perfection prevailed. In this place the beauties and grandeur of perfection were such as to stagger the efforts of the most active imagination. The uniform temperature and moisture conditions prior to the Flood resulted from “the waters above the firmament”—air—remaining in suspension as is observed in the case of the planet Saturn today. This canopy served as a kind of hot-house condition, preventing lowering of temperature. Hence, it rained not at all, but “there went up a mist from the earth, and watered the whole face of the ground”. —Genesis 2:5, 6.

This equable climate and uniform moisture insured an abundance of the most varied tropical vegetation, as well as animal life. As evidence of this fact note the finding underneath glacial ice-drifts of bodies of tropical animals in perfect state of preservation. An antelope was found thus recently with undigested grass in its stomach. And more recently still, during the summer of 1919, specimens of fruits, such as oranges, lemons, bananas, cocoanuts and many kinds of edible fruits now extinct, were found in a petrified state underneath an old avalanche at the base of White Mountain in Pennsylvania. Also the petrified remains of frogs, lizards and horned toads were in evidence in the same locality.

What does this prove?

Simply that there was once an abundance of tropical fauna and flora in the present state of Pennsylvania. Then what magical wand hath wrought so great a transformation from tropical to low temperature conditions? The answer is, The Flood of the Bible in Noah's day.

Let us now follow “the waters above the firmament”, and see them gradually collect, under the influence of earth's centrifugal force, about the poles until the great pull of gravity

there causes these waters to be precipitated in great deluges upon the earth. With the breaking of this canopy the hot-house condition of the earth was released, and the waters froze as they fell and entrapped under mountains of snow and ice many unsuspecting forms of life.

It might be well for geologists who have tried in vain to ascertain the time and cause of the great Glacial Age of history to consider again, in the light of the canopy theory as above stated, the Scriptural narrative of the Flood. It is very manifest that during the earliest periods of earth's development only the lowest forms of life were in existence. This is accounted for in the light of the fact that the relative proportions of the various elements of the earth's atmosphere were such as to sustain only those forms of life at that time.

With the passing of time through the several epochs in the creation of the earth both the temperature and the component elements of the air underwent great changes. As, for instance, in the Carboniferous Age, the surplus amount of carbon-dioxide of the air at that time supplied this necessary element to the rank forests with which the earth was covered, until a diminution in the amount of carbon, by reason of its absorption, caused such rank growth to cease. On account of the absence of animal life at that time there was no way for nature to maintain a balance of atmospheric conditions as now. This condition resulted in the death of the vast forests of that age. But being highly impregnated with carbon these forests did not decay; for under such conditions, without sufficient oxygen, decay was impossible.

With the descent upon the earth of this carboniferous canopy and its simultaneous consumption in the vast forests of earth, there were laid the foundations of the great coal fields, which still exist. These subsequently by deluges and avalanches became submerged, resulting in their being mined from beneath the earth's surface today. At the “end of the age,” the air being filtered of its surplus amount of carbon-dioxide and charged, instead, with an increased amount of oxygen, the earth teemed with myriads of “living creatures, fowls of the air, cattle, creeping things,” etc.

At the psychological moment, man, the crowning act of creation, steps forth from his plastic mold "a little lower than the angels", but the highest of earthly creations. God had prepared for him a place; and Eden was his home. In this home, as already stated, it was Adam's privilege to remain forever, provided he should keep inviolate the laws of his Creator. His descendants likewise would have been born with the same privileges. And with the gradual increase of his large family, now estimated at twenty billions, he would gradually, as necessity had demanded, have extended, by subduing the earth, the limitations of the Garden of Eden until it reached that condition of world-wide paradise.—Genesis 1:26-28.

This plan of subduing the earth would have been much more easily accomplished than the one upon which man has been engaged since knowledge began to increase, because the "thorns and thistles" of the earth were little in evidence until after the Flood. Besides, Adam in the beginning virtually had control over the earth, and it was only necessary at that time to bring it into complete subjection. But Adam lost this near-perfection control, and with it, his perfect manhood. As a result both man and the earth began a gradual decline down to the time of the Flood. After this event rapid decay of man was manifest; and the earth swarmed with the promised "thorns and thistles".

It becomes necessary at this stage to consider again the relative component parts of the air, and its temperature, since these determine *wholly* the variety and profusion of life on earth, and the degree of their vitality.

The comparative absence of nitrogen in the atmosphere prior to the Flood was due to the minimum amount of decay during that time. But with the wholesale destruction of plant and animal life at the time of the last deluge, and the consequent decay of same, the air became saturated with nitrogen—the result of this decay. This intrusion of nitrogen, a by-product, into the air had the effect of upsetting its former balanced state of equilibrium.

As proof of this statement note the beginning of shortening of human life immediately following. And, of course, as death and decay increased by reason of the continued shortening of life, the amount of nitrogen in the air also increased until at the present time seventy-seven per cent of the volume of the atmosphere

is said to be nitrogen! With this great amount of nitrogen intruding itself in the air the original elements of oxygen and carbon-dioxide must of necessity be much diluted. And this is now understood as having been the immediate cause of the shortening of life after the Flood. Not only was the air thus diluted, but it was polluted—poisoned—by reason of such contamination, becoming in a sense death-dealing.

Lest some may hold with the old text-books on Chemistry that nitrogen is a component part of the air, it only becomes necessary here to call attention to the fact that this substance undergoes no change whatever in the process of respiration. Carefully conducted experiments show conclusively that in the process of animal respiration there is an appreciable decrease of oxygen and a corresponding increase of carbon-dioxide. But the amount of nitrogen in both pure (so-called) and impure air remains the same. Thus we see that nitrogen has been an intrusion in the air; but before we have finished this discussion, we propose to show how even this temporary interference will, like the permission of evil, result finally in great benefit to humanity. In the first place it hastens the "dying" penalty; and this within itself was a blessing to man during the supremacy of evil in the age just now passing away. In the absence of conversion to Christianity and genuine reformation of life, long exposure to evil influences renders any character more depraved. All have doubtless observed that little children ordinarily are more nearly immune from common vices than are adults.

Besides this, it now appears, during these days of "increase of knowledge" that the nitrogen, stored in the atmosphere, is yet to serve a most important economic purpose in contributing to the restoration of the earth's fertility. Of late years the agricultural scientist has discovered means of extracting this element from the air and of causing it to enter the soil of earth, where it becomes available plant food. This is accomplished by growing certain plants called legumes—peas, beans, the various kinds of clover, etc., which, by the process of osmosis, absorb nitrogen from the air and deposit it through root nodules into the soil, where it becomes amalgamated by a kind of microbe action with the soil, setting free certain important elements which are at once taken up by plants, thus stimulating their growth.

Nor is this all: It has been found that nitrogen can be very profitably used in the manufacture of high explosives. This being true, the various governments have, during the recent war, had recourse to this almost inexhaustible supply of material, constructing immense chemical plants for the purpose of extracting out of the air this necessary element. But with the signing of the armistice this output is now being turned into an entirely different channel, that of manufacturing nitrogenous commercial fertilizers. This will greatly aid the earth in yielding her "increase", as foretold, and will result in another blessing to man instead of an injury. How literally true is the statement that "God is able to make even the wrath of man to praise him"!

With the increase of the food products of the earth as a direct result of rendering the soil more productive, will come a corresponding increase in the *quality* of such foods. This fact has already been demonstrated by carefully conducted experiments. Two pigs from the same litter were each segregated and given exactly the same attention as to water, food and general environment. In fact, all conditions were exactly the same in every respect as to the amount of food, and each given the same kind of food. The food in each case was corn in equal weight. The only difference was the quality of the corn; one lot of which was grown on soil producing only fifteen bushels per acre, while the other corn came from land producing sixty bushels per acre. The test extended over a period of ninety days, simultaneously conducted. The pig fed on the better quality of corn gained more than twice as much increase in weight as the other pig which consumed the same number of pounds of food containing the inferior quality of corn.

It seems pertinent to note in this connection that of all avenues of human activities, none are making greater progress than that of intensive farming. The goal of this particular line of activities will have been consummated when the entire earth is fully "subdued", and caused to become exceedingly fruitful. If any one doubts that these things will be accomplished it is but necessary to remind such an one that these things are already being accomplished today. Consider, for instance, the tomato which only a few years ago grew in its wild state, and about the size of an ordinary marble; today, by means

of proper selection, breeding and cultivation its size is increased more than seventy times, not to speak of the great improvement in its lusciousness. From everywhere come easily verified reports of the development of the pecan from the originally wild seedling which required twenty to forty years to begin bearing, to the modern paper-shell of eight to ten times its original size, and bearing profitably at five to eight years of age. These illustrations are taken from the achievements of the present average crop productions, and do not consider the marvelous achievements of such men as Burbank and other specialists.

Less than twenty years ago the average farmer was contenting himself with growing but one crop per year, and each successive crop was rapidly depleting his soil. Today he is growing two or more crops per season—at least one a legume—and at the same time is improving from year to year the fertility of his soil. And this without using commercial fertilizers.

Who that believes in God shall doubt his word or power? He has spoken and is able to perform the same. He has said, "My Word shall not return unto me void, but it shall accomplish the thing whereunto I have sent it". He declares that he will make the place of his footstool—the earth—glorious; that "Jehovah who created the earth formed it not in vain, but to be inhabited"—"that even the desert places shall become like the ancient Garden of the Lord".

There remains in this connection one other thought to be considered. We have already observed the descent and precipitation from time to time of deluges of various substances upon the earth, and the effects of these deluges upon all life at that time. According to scientists of the present day, there is yet another deluge, consisting this time of electricity, approaching the earth. This within a few years will be precipitated upon the earth, and it is claimed will result in great benefit to humanity, because its contact with the earth will destroy injurious microbes, germs and parasites. This will cause fermentation to cease and thus produce the effect of preserving for an indefinite period of time all perishable fruits and vegetables. This will in a measure partially restore antediluvian conditions, and will produce the effect of greatly alleviating human sufferings.

Finally, as a concluding thought, it remains to be shown that the presence of nitrogen in

the air is for the purpose of conserving another very important use. It is claimed in the Bible that there will be a resurrection of both the just and the unjust. The Savior himself said; "Marvel not at this; for all that are in their graves shall come forth". Now we take this to mean just what it says, that the dead shall return to life. But how is this to be accomplished?

Do we expect a return of their decayed bodies out of death?

By no means. We understand and hold with the Bible that their bodies have become *non est* by reason of their "return to the dust whence they came".

But do we expect them to return as human beings?

Yes.

With flesh and bone and sinew as of yore? Exactly so.

Where will their bodies come from?

God in whose memory they are held will provide for them necessary bodies just as he did that of the first man Adam.

Now we return to a consideration of nitrogen and its further use in the air. It is claimed by chemists that a considerable portion of the human body is nitrogen. Then in the resurrection of the twenty billions of the Adamic family now asleep in the tomb, much of this element being at hand, long held in suspension for this very purpose, will be consumed in providing, in the general resurrection, human bodies for all now asleep in death, but who shall "come forth" "in due time". And incidentally, this process, and that above mentioned, of enriching the soil, will have the effect of filtering nitrogen from the air. This will restore its former pristine purity as it was in the days before the Flood. Under such a condition of atmospheric purity, man, breathing the undiluted invigorating oxygen, would live approximately a thousand years. In addition the perfect fruits, resulting from increased fertility of the earth as above shown, will maintain the possibilities of everlasting life. And this is exactly what the Bible teaches, and exactly what humanity instinctively desires.

With a return of the billions of humanity from the tomb back to earth, and being surrounded by the superabundance of earth's perfect fruits of that time, disease germs having been destroyed by the descent of the electrical canopy now so close as to come almost in contact at

times, this battle-scarred earth, drenched in human gore, will in time become a veritable Garden of Eden.

Paradise, lost through Adam's transgression, will, through the merit of the Ransom, "to be testified in due time", be restored. Burning and frozen deserts now defying the ingenuity of man, being subdued, will be transformed into dreamlands of beauty and glory. Supplanting the marshalling of the hosts of war, with their instruments of destruction and death, will be the busy hum of productive machinery and the march of industry applying the cumulated energy of inventive genius to the harnessing of all the hitherto latent forces of nature, and bending these into complete subjection and use for the everlasting blessing of the entire human race. Then the billions of dollars now being applied to destructive purposes will be turned into constructive channels. "Swords shall be beaten into plowshares, and spears into pruning hooks." No more uprising of "nation against nation"—there will be but one nation, a holy nation. Nor will war be learned any more; for Jehovah "maketh wars to cease from the river to the ends of the earth". Then will be realized, through the everlasting ages of eternity, the true import of the message of the angels on the hills of Judea as they sang the song of "Peace on earth, good will among men".

With this condition of perfection of the material earth will come logically the perfection of man, mentally and morally, as well as physically. All incentives to selfishness and greed being eliminated, by reason of earth's superabundance, the "residue of humanity" shall attain perfection in every respect. Then also "the knowledge of the Lord shall cover the earth as deep as the ocean". Then shall his "glory be revealed and all flesh shall see it together". Then shall humanity, no longer confused, "know the truth" and thereby become "free". With his reason thus restored the mind of man will again become superior to matter. Since the earth was made for *man*, not *man* for the earth, he will be able to order the seasons at will—even the "winds and the waves will obey him".

The Apostle Peter, our Lord and all the holy prophets since the world began, declare that the human race is to be restored to glorious perfection, and shall again have dominion over earth as its representative Adam had.

RELIGION AND PHILOSOPHY

Universal Peace

"On earth peace, good will toward men."—Luke 2: 14.

CHRISTMAS is regarded by many people as the date of the birth of the babe Jesus in a manger at Bethlehem. Whether or not the date is correct is of small importance, but the event was and is of the greatest importance.

Bethlehem is situated on an elevation overlooking a deep ravine, beyond which are fields where shepherds graze their flocks. Beautiful for location is this historic spot, particularly attractive to one of poetic mind and deep reverential heart, and doubly so since the great events, recorded in Holy Writ, which there transpired nearly nineteen centuries ago. From the surrounding hills of Judæa the shepherds had brought their sheep to the field opposite Bethlehem and corralled them there for the night. While the others slept, one or more of the shepherds kept vigil over the flocks, waiting for the dawn of day. The atmosphere of Judæa is exceedingly rarified, and the stars shine forth with unusual beauty and brilliancy, and thus the glory of the night is enhanced.

Without doubt these lowly herders of sheep were men of great reverence for God, men who trusted in his promises made to their father Abraham and hence were expecting the coming of Messiah. And for their faithfulness Jehovah rewarded them with a wonderful vision. While these humble watchers were gazing into the starlit heavens and meditating upon the majesty and expressed wisdom of Jehovah, there suddenly appeared unto them a star of remarkable brilliancy, standing over against Bethlehem, the city called the city of David. Simultaneously the angel of the Lord, the heavenly messenger, appeared unto them, and the light of the glory of the Lord shone round about them. Then the shepherds were sore afraid. What man of reverential mind would not have been awe-struck at such a marvelous manifestation!

To calm their fears, the heavenly messenger sweetly said to these humble men of the fields; "Fear not: for, behold, I bring you good tidings of great joy, which shall be to all people. For unto you is born this day in the city of David a Savior, which is Christ the Lord. And this shall

be a sign unto you; Ye shall find the babe wrapped in swaddling clothes, lying in a manger." (Luke 2: 10-12) Awed by this vision and thrilled with their environment, the shepherds in wonder and amazement stood speechless before the heavenly messenger. Then suddenly there appeared with this angel a whole multitude of the heavenly host, angels bright and fair; and in celebration of this marvelous event of the ages they joyfully sang together an anthem of praise to Jehovah, "Glory to God in the highest, and on earth peace, good will toward men".

Long centuries and the burdens of earthly cares have effaced or hidden this glorious vision from the minds of most men who call themselves Christians; and today these words announcing universal peace to those of worldly mind sound as but a hollow mockery. Nearly nineteen centuries have come and gone since that heavenly messenger announced the birth of Jesus and brought a message of good tidings; and after these long years of laborious effort on the part of some men to establish ideal conditions, with dismay they witness the whole world rocked from center to circumference and all kindreds and peoples engaged in the strife of tongues, tumult, distress and war. Now the great mass of so-called Christendom is trusting in the god of force and violence rather than in the God of peace and love. Millions of earth's habitants, including those who pose as teachers and preachers of the Gospel, have turned to infidelity, disregarding the Word of God, and advise, counsel and engage in strife and violence. Alas! their faith in God and in his precious promises is gone.

How different with those who truly love the Lord and who study to show themselves approved unto God! Their diligent and prayerful search to know the meaning of these events past and present the Lord has been pleased to reward with a clear vision; and now they are privileged to mark the majestic onward tread of Jehovah in the unfolding of his marvelous plan. And thus understanding, their hearts are filled with joy; and the sweet message of that heavenly host resounds through the corridors of the age, calling attention to the momentous

events that are transpiring and the even greater ones immediately to follow. Not only do they rejoice in their own hearts, but it is the privilege of such true followers of the Master with confidence to say to the bewildered and frightened of nominal Christendom: "Behold, thy God reigneth".

And now we invite all sober-minded peoples of earth—Christian and infidel, Jew and Gentile, bond and free—to come with us while we together briefly review this beautiful Christmas story, and ascertain its meaning and significance to the groaning people of all the nations of earth. Its message of comfort is intended for all; for the angel of the Lord said: "Behold, I bring you good tidings of great joy, which shall be to all people". The time is now due for the world to begin to understand the real meaning of what occurred on that memorable morning in Bethlehem; and those who do understand and avail themselves of such knowledge will be greatly blessed and comforted in heart, mind and body.

Why should the babe Jesus be born at all? Why mark his birth with such ceremony and joyful expression by the heavenly host? The answer is the old, old story, which grows sweeter the oftener told; and never so sweet as now, because the time is here for its appreciation by man.

Four thousand years before the staging of this drama in the hills of Judæa, Jehovah had created a perfect pair—Adam and Eve—and provided them with a perfect home in Eden. He had endowed them with power and authority to bring forth children, to fill the earth and to control it and to make the entire earth as a garden, a glorious spot, a fit habitation for a happy and perfect race of people. To this first pair the Lord granted the privilege of life everlasting in a state of human blessedness, conditioned, however, upon a faithful obedience to his law. The wife, deceived by Satan into a violation of the divine law, in turn induced her husband to take the step of disobedience wilfully rather than be separated from her. The result of this transgression was an infliction of the penalty of the law, which penalty is described in the Genesis account (chapter 3) as a dying condition until death was fully accomplished, a return to the dust whence the Lord had taken the elements to make man.

Having judicially determined that the perfect

man should die because of his disobedience to the law, Jehovah chose, as a means of enforcing this judgment, to compel man to live outside of the perfect Eden and to feed upon the poisonous elements of the earth until complete death would ensue. Hence he drove the two out of Eden and set a flaming sword at the garden's entrance, lest Adam might return and partake of the tree of life. For 930 years Adam battled with the elements of the earth, daily succumbing, until at the end of that time he was dead.

The secret of all the suffering, sorrow, sickness and death of humankind from then until now lies in what occurred in Eden and following. While in Eden the perfect man did not exercise his power to beget children; and hence the perfect pair never brought forth children. It was only after undergoing the legal sentence of death, and after they had imbibed the poisonous elements of earth's vegetation, that this pair cohabited and children resulted. It is reasonable, therefore, to see that this condemnation fell upon the offspring; and that the father, now imperfect, could not beget a perfect child; hence the offspring of Adam would be an imperfect one. For this reason the Psalmist wrote: "Behold, I was shapen in iniquity and in sin did my mother conceive me". (Psalm 51: 5) And for the same reason the inspired witness said, "As by one man sin entered into the world, and death by sin; so death passed [by inheritance] upon all men, for that all have sinned". (Romans 5:12) The ultimate result of the operation of the divine law of necessity would have meant the complete extinction of the human race. Today, instead of men living 930 years, the average life is much less than one-tenth as long.

God foreknew the course that man would take; and before the foundation of the world he outlined a plan for human redemption and blessing. Nearly two thousand years after the humankind had wandered in the earth in sorrow and distress, Jehovah spoke to his servant Abraham, likewise an imperfect man, but one who exercised great faith in God, and to him made promise that through his seed all the families, nations, kindreds and peoples of earth should have a blessing. (Genesis 12:2, 3; 22: 18; Galatians 3:16) Later, God organized the descendants of Abraham into a nation under the name of Israel, and with that nation and people made a law covenant and from time to

time reiterated his promise to bring a blessing to the nations of earth through the seed of Abraham. The Israelites verily believed that this promised seed was an earthly seed. The promise at one time was confined to the house of David; and when David ascended the throne the Jews thought that the time had come for the blessing of mankind. The prophets, however, foretold the coming of another and greater one; and at the time of Jesus' birth all thoughtful people of Israel were looking for the coming of the Messiah. God through his prophet had foretold that Messiah would be born in Bethlehem of Judra.—Matthew 2:5,6.

Here we emphasize one thing prominent in the message brought by the angel; namely, the word *all*. It will be marked in the examination of this and other Scriptures relating to the redemption of man that God had promised to bless *all* the families of the earth, and that at the birth of Jesus the angel announced that this is glad tidings which shall be brought to *all* people. It is not the thought of the Scriptures that such a message would be brought to all at the same time; but that in God's due time every one of the human race would hear this message of glad tidings and would each have the opportunity of availing himself of the benefit of it.

The race was justly condemned to death because of disobedience to the law of God; and this judgment could not be set aside or reversed for the reason that God is unchangeable. His laws are fixed. However, such a judgment could be satisfied by the demands of the law being met. In due course of time God made promise to the house of Israel, his specially chosen people, that a provision for releasing mankind from death and the effects of this judgment would be made. "I will ransom them from the power of the grave; I will redeem them from death: O death, I will be thy plagues; O grave, I will be thy destruction."—Hosea 13:14.

The word ransom means a price exactly corresponding. A perfect man had violated God's law, and death resulted. Therefore the only thing that could constitute a ransom or corresponding price for mankind would be the life of another perfect man, exactly equivalent to Adam while in Eden. In other words, the redemption and deliverance of the human race from death, and its restoration to human perfection and happiness, must entirely depend upon the voluntary submission to death of a

perfect human being—nothing more and nothing less.

At once, then, we see that none of Adam's stock could meet this requirement of the law and redeem the human race because all were imperfect, having descended from Adam. And this thought is expressed by the Psalmist, who says, "None of them can by any means redeem his brother nor give to God a ransom for him". (Psalm 49:7) Any child begotten by a member of the Adamic stock would necessarily be imperfect; hence the account concerning the conception of Mary and the birth of the babe Jesus shows that she conceived by the power of the holy Spirit. (Matthew 1:18-25) Therefore Jesus was begotten not by man, but born of a woman, and when born he was "holy, harmless, undefiled and separate from sinners". (Hebrews 7:26) When he grew to manhood's estate he was the exact counterpart of Adam prior to his disobedience. Not until we understand these things can we understand why there was so much joy in heaven among the angelic host at the birth of Jesus. The heavenly beings had been observing for four thousand years the downward course of mankind. They had seen the great degradation and sorrow that sin had inflicted upon the human family, and now they perceived that Jehovah was making provision for the redemption and blessing and uplifting of all men.

That which man prizes above everything else is life; for without life nothing else can be enjoyed. The whole human race, being under the condemnation of death, ultimately must die. Why, then, did Jesus come to earth? Why was he born? He answers; "That the people might have life and have it more abundantly". (John 10:10) He "was made flesh and dwelt among us". (John 1:14) "Forasmuch as the children are partakers of flesh and blood, he also himself likewise partook of the same." (Hebrews 2:14) "We see Jesus, who was made a little lower than the angels [namely, a human being] for the suffering of death, crowned with glory and honor; that he by the grace of God should taste death for every man." (Hebrews 2:9) Jesus himself declared that he laid down his life for the sheep. (John 10:11, 15, 16) Here he uses the word sheep to illustrate those who are willing and obedient to the will of God, that they shall receive the benefit of his sacrifice.

And this opportunity must come to all, as

St. Paul states: "For this is good and acceptable in the sight of God our Savior, who will have *all* men to be saved and to come unto the knowledge of the truth. For there is one God, and one mediator between God and men, the man Christ Jesus; who gave himself a ransom for *all*, to be testified [to *all*] in due time." (1 Timothy 2:3-6) Here again it is observed that it is God's will that all men shall be saved from the condemnation of death and thereafter brought to a knowledge of God's provision for them, which knowledge opens to them the opportunity of accepting the benefits of the ransom sacrifice. Hence, says the Apostle, these facts must be testified to all men in God's due time. As this testimony comes to men at different times and they understand it, they rejoice in it because to them it is good tidings, good news of a better thing for them—an opportunity for life.

Why, then, if Jesus died on the cross nearly nineteen centuries ago, should the human race continue to suffer? The Scriptural answer is clear. The promise to Abraham was that in *his seed* should the blessing come to mankind; and this seed must first be fully developed before the benefit of the ransom sacrifice can be extended to all. It is important, therefore, to perceive what constitutes the seed and how it is developed. The Scriptural proof is that this seed is the Christ, the Messiah, composed of Jesus, the Head, and the church, meaning the called-out class which constitute the members of the body of the Messiah class. Hence St. Paul argues: "As many of you as have been baptized into Christ have put on Christ . . . And if ye be Christ's, then are ye Abraham's seed, and heirs according to the promise".—Galatians 3:27, 29.

It has pleased the heavenly Father to devote the period of time elapsing from the resurrection of Jesus until the setting up of his kingdom to the work of selecting those who would be willing followers of the Master, and who would prove their faithfulness and loyalty to him even unto death, and to whom he would grant the privilege of joint-heirship with Christ Jesus in his kingdom. (Romans 8:16, 17; 2 Timothy 2:11, 12) The selection of this class has been from among those who have voluntarily consecrated their lives to the Lord. Not every one who says, "Lord, Lord", will be of that class, but only those who enter into a covenant with God by

sacrifice and continue thus faithful unto death. These are promised a part in the first resurrection and an association with Christ Jesus as members of the royal priesthood. Therefore we can understand the words of the Master when he said that only a little flock (comparatively speaking) of mankind would have this blessing.—Luke 12:32.

The purposes of the Lord in this regard are ascertained from the words of the Apostle: "God at the first did visit the Gentiles to take out of them a people for his name. And to this agree the words of the prophets; as it is written, After this I will return, and I will build again the tabernacle of David, which is fallen down; and I will build again the ruins thereof, and I will set it up; that the residue of men might seek after the Lord, and all the Gentiles, upon whom my name is called."—Acts 15:14-17.

Jesus taught his disciples, and through them the church has been taught, that after he had ascended on high he would return in course of time and gather unto himself the saints, and then would establish his kingdom for the purpose of blessing mankind. All Christian people have looked forward to the second coming of the Lord, and to the end of the wicked order of things and the establishment of a new and righteous order. This same thought was in the mind of the disciples when they approached Jesus just before his crucifixion and propounded to him the direct question: "Tell us when these things shall be, and what shall be the proof of thy coming and the end of the world?"—Matthew 24:3.

The Lord Jesus answered their question, and the answer is recorded in the twenty-fourth chapter of Matthew and the twenty-first chapter of Luke. He describes the great stress and trouble that is now upon the human race. Among other things he said that there would be a great world war in which nation would rise against nation, to be accompanied by famine, pestilence and revolutions and a time of trouble such as never was before; and all mankind are witnessing the fulfillment of this prophecy at this very time. Again he said in answer to the same question that there would be "upon the earth distress of nations, with perplexity; the sea and the waves [restless humanity] roaring; men's hearts failing them for fear, and for looking after those things which are coming on the

earth: for the powers of heaven [ecclesiastical systems] shall be shaken". (Luke 21:25, 26) All the trouble that has afflicted the nations since the fall of 1914 has been clearly in fulfillment of the prophetic utterance of the Lord. To the Christian this means (and soon all the world will learn to know that this is the meaning) that the kingdom of the Lord is at hand, that Christ is present, that he is tearing away the old order of things preparatory to establishing a kingdom of righteousness and peace which shall constitute "the desire of all nations". "I will shake all nations, and the desire of all nations shall come".—Haggai 2:7.

The wars, famine, pestilence, revolutions and like disturbances that so much distress mankind do not constitute any part of the glad tidings. No one rejoices in this suffering and trouble; but the Christian rejoices that these troublesome times are the proof foretold by the Lord that would precede the establishment of his kingdom of righteousness which would bring blessings to all the groaning creation. The message that has been preached to the people for long centuries, and is yet being preached by many, to the effect that it is the Lord's purpose to save a few in heaven and to consign all the residue of mankind to a condition of endless torture, contains no glad tidings to any one of an honest heart. Surely it could be no real joy to any person to be convinced that he would spend eternity in heavenly bliss while at the same time some one near and dear to him would be spending eternity in torture. Such a doctrine is not taught by the Word of God, but is the result of a distorted interpretation of the Scriptures.

The divine program, which has been developing progressively for many centuries, has now about reached the point of time for the world of mankind to begin to understand and appreciate some of the lengths and breadths and heights and depths of the love of God. His inspired witness wrote: "Times of refreshing shall come from the presence of Jehovah; for he will send Jesus, who before was preached unto you, whom the heavens must retain until the times of restitution of all things, which God hath spoken by the mouth of all his holy prophets since the world began".—Acts 3:19-21.

The word refreshing here suggests the thought of something that makes one happy after a long experience with that which is con-

trary to happiness. The autumn season marks the dying and falling of the leaves, the trees appear bare, and the wind moans and sighs through their branches. Then follows the long, dark, cold winter, picturing in a measure the long night of suffering and death that has afflicted the human race. In the spring season the warm, gentle rays of the sun, falling upon the earth, cause the grass to spring forth, the trees to bud and leaf, followed by the blossoms and the fruit, the singing of the birds and the rejoicing of all nature because of the reviving, or coming again to life, of that which was dead. Seemingly the Apostle had such a picture in his mind when he said that times of refreshing would come at the establishment of Messiah's kingdom because it would mean the restoration of that which father Adam lost for himself and all of his offspring, namely, life and all the sweetness incident thereto. The perfect man Jesus, having laid down his life and thereby providing the purchase price for the human race, now returns for the purpose of ministering to mankind by giving to him the very thing that he has long desired.

Long ago the Apostle saw this and wrote: "He [God] hath appointed a day, in which he will judge the world in righteousness by that man [Christ Jesus] whom he hath ordained; whereof he hath given assurance unto all men in that he hath raised him from the dead". (Acts 17:31) The assurance here then is to every man that has lived on the earth that he must have a fair and impartial trial in a time of righteousness, which trial is for the purpose of giving him an opportunity to render himself in obedience to the law of God and live. It means that millions who have gone into death will return again; for "there shall be a resurrection of the dead, both of the just and the unjust." (Acts 24:15) The great Master himself assures us that all in their graves shall hear his voice and awaken to the resurrection by judgments, i. e., a time of trial and opportunity for life and its blessings.—John 5:28, 29.

The work of reconstructing the human race will devolve upon the great Messiah, and that great work will begin as soon as the present trouble upon the earth has ended; for Jesus assures us that there never will be another time like it. (Matthew (24:21) Then, under his righteous reign, every one will have a chance of hearing the sayings of Jesus and then will

apply his words, "Verily I say unto you, If a man keep my saying he shall never see death." That Scripture, like all other sayings of the Master, must have its time for fulfillment; and no one could keep his sayings until first they heard them. The millions in death could not hear until awakened out of death, and the millions now on earth could not hear until God's due time and until they are told. That due time is about at hand.

Will that be a time, then, of rejoicing and gladness? The Lord through the prophet gives us a vision of that great time of blessing, saying, "The wilderness and the solitary place shall be glad for them and the desert shall rejoice, and blossom as the rose," thus picturing how the earth itself shall begin to yield that which is necessary for the sustenance of mankind and permit him to enjoy the fruits of his labors without the intervention and oppression of the profiteers. "It shall blossom abundantly, and rejoice even with joy and singing: the glory of Lebanon shall be given unto it, the excellency of Carmel and Sharon, they shall see the glory of the Lord, and the excellency of our God."

Before the coming of that glorious day, however, the prophet infers that the people would become very much discouraged and without strength. He pictures them as trembling in their knees and hanging down their hands, and for their encouragement says: "Strengthen ye the weak hands, and confirm the feeble knees. Say to them that are of a fearful heart, Be strong, fear not: behold, your God will come with vengeance, even God with a recompence; he will come and save you." St. Paul tells us that the whole world aside from Christians are blind, and blinded by the adversary. Many people are actually blind, while practically all are blind concerning a vision of God's plan.

The prophet then pictures the blessings during the reconstruction, saying, "Then the eyes of the blind shall be opened, and the ears of the deaf shall be unstopped. Then shall the lame man leap as an hart, and the tongue of the dumb sing: for in the wilderness shall waters break out, and streams in the desert."

Then the prophet describes a way opened for the human race to journey back to the perfection of life, of body and mind, continuing: "And an highway shall be there, and a

way, and it shall be called The way of holiness: the unclean shall not pass over it; but it shall be for those: the wayfaring men, though fools, shall not err therein". This highway is the Messiah, who is given as a mediator between God and man, to lead man back to the state of perfection; and the way to pass over it will be by rendering themselves in obedience to the law of the Messiah. It shall be a holy, a righteous way. No person shall be permitted to progress in wickedness, in profiteering, in oppression, in keeping the people in ignorance or filching their pockets under the pretense of preaching the Gospel or anything else; but its object shall be the cleansing and blessing of the people, and it shall be so clear and plain that every man can understand it. "No lion shall be there"; that is to say, no monstrous beast, such as czars, beastly governments, oppressing corporations, or ecclesiastical, political or financial systems. "Nor any ravenous beast [government of oppressive violence] shall go up thereon, it shall not be found there; but the redeemed shall walk there." The earth and everything in it shall be made conducive to the uplifting and blessing of mankind.

Having in mind, then, that the Apostle assures us time and again that Jesus ransomed the entire human race, *all* of them, the prophet continues: "And the ransomed of the Lord shall return [meaning they shall return from the land of the enemy, from death and from their bondage in blindness and ignorance and superstition], and come to Zion [the Messiah] with songs and everlasting joy upon their heads: they shall obtain joy and gladness, and sorrow and sighing shall flee away". (Isaiah 35) Indeed then all shall know the truth of the message that the angel brought to the shepherds as they watched their flocks—good tidings of great joy unto all.

Messiah's kingdom will establish a universal peace. As the prophet declares, when his kingdom is established, then the nations shall come and say, "Let us go up to the mountain [kingdom] of the Lord, and he will teach us of his ways, and we will walk in his paths. . . . And they shall beat their swords into plowshares, and their spears into pruninghooks: nation shall not lift up a sword against nation, neither shall they learn war any more. But they shall sit every man under his vine and under his fig tree; and none shall make them afraid".—Micah 4:1-4.

To assure such a lasting blessing will require, of course, nothing short of a perfect ruler. Then the earth will have such, for "the government shall be upon his [Messiah's] shoulder; and his name shall be called Wonderful, Counsellor, The mighty God, The everlasting Father, [Life-giver], The Prince of Peace. Of the increase of his government and peace there shall be no end".—Isaiah 9: 6, 7.

To the Christian, therefore, who has a clear vision of the divine plan and who appreciates the time through which the world is now passing this should be the happiest Christmas he has ever spent, because by the eye of faith he can see the Sun of Righteousness rising with healing in its beams, driving back the great dark night of suffering, tumult and trouble, preparatory to the healing, blessing and uplifting of the human race, back to the perfection of life, liberty and happiness. The incoming of this glorious time means the beginning of the Golden Age—a time of rejoicing for all who love righteousness.

Juvenile Bible Study

MAN'S highest duty and privilege is to glorify God. One who loves and obeys the great Creator loves and obeys righteousness, makes a better citizen and a greater benefactor to mankind. To love and obey Jehovah one must know him. How can we know him except through his Word, and how can we know and understand his Word unless we are taught? If it is proper and necessary to send our children to the public schools that they there may be taught concerning the selfish things of this life, with stronger reasoning is it proper and necessary that they be taught concerning the things that have to do with their eternal welfare and happiness.

The Biblical education of children, we believe, has been sadly neglected. Every parent owes a duty to his own child and a corresponding duty to every other child to whom he can render aid. In view of the time of great stress now upon the human race, is it not high time that we take some positive action toward the instruction of the children concerning the greatest thing about which they should know, the Word of God? We believe that all parents, whether Christian or not, desire to see their children grow up in righteousness and truth. Because of the long-felt need in behalf of the children, THE GOLDEN

AGE inaugurates a children's Bible study department. There is no desire or purpose to teach the doctrines of any sect or system; but the sole purpose is to instruct the children in the Bible. To do so we have arranged this study in question and answer form, propounding the questions and briefly answering, citing the Scriptures where the proper Biblical answer may be had. We suggest that the parents propound these questions to their children and aid them to locate in the Bible the answer, thus familiarizing the child (and incidentally the parent) with the texts of the Bible and enabling them to get some insight into the glorious character of Jehovah and the Lord Jesus.

We suggest that the child be given one question each day and that in addition to the answer here given, it be encouraged to look up the Scriptures cited and any other Scriptures that, with the aid of the parent, it might find bearing on the question. As this is a primary study, we therefore begin with the subject

THE BIBLE

1. What is meant by the word Bible?

Answer: A book that contains the Word of God as expressed to man, and has reference to all the sixty-six books collectively, contained in what is commonly accepted as the Holy Scriptures.

2. What is the Bible?

Answer: It is an expression of God's will toward man and an outline of his plan concerning the human race, given for man's instruction.—John 17:17; 2 Corinthians 4:2.

3. Are we invited to study the Bible?

Answer: Yes; Jehovah says to us: "Come, now, let us reason together" (Isaiah 1:18); and "Study to show thyself approved unto God".—2 Timothy 2:15; John 5:39; Deuteronomy 29:29; Revelation 1:3; 1 Peter 3:15.

4. Should we expect to understand the deep things in the Bible?

Answer: If we study it with a reverential and prayerful desire we may understand them. "The reverence of the Lord is the beginning of wisdom." (Proverbs 1:7) The plan of God is a secret which he has promised to reveal to those who reverentially seek to understand it. "The secret of the Lord is with them that fear him; and he will show them his plan."—Psalm 25:14; 1 Corinthians 2:10.

5. Can everybody understand the Bible?

Answer: They could, if everyone would com-

ply with God's rules. Certain portions of the Bible are due to be understood at certain times; but even when those times come, he will not permit the wicked to understand, but the wise shall understand.—Daniel 12:10.

6. Who can understand the Bible?

Answer: The first thing essential is an honest desire to understand it. (Luke 8:15) Then one must be wise after God's manner of wisdom (Daniel 12:10; James 3:17); and that kind of wisdom means that he recognizes Jehovah God as the great First Cause, the Creator and the Giver of all good gifts. Then one must search the Scriptures and study them.—John 5:39; Jeremiah 29:13; Acts 17:11; 1 Corinthians 2:10.

7. Is the Bible intended to be understood; or is it a book shrouded in mystery, only for one class to understand?

Answer: It is a reasonable book; for God invites us to reason with him (Isaiah 1:18; Job 13:3); and the Bible gives the reason for God's dealing with man and also the hope that man has. (1 Peter 3:15) We should reason when we study the Scriptures or talk to others about them.—Acts 17:2.

8. If reasonable, then why cannot everybody understand the Bible?

Answer: Because not every one is honest, and the dishonest will not be able to understand it. (Luke 8:15) Some do not desire to be righteous and good; hence they do not understand. (Matthew 5:6) Some may be honest and desire to be righteous, but do not study. (2 Timothy 2:15) Some are too wise in their own conceits concerning earthly wisdom and do not give God credit for knowing and stating it in his Word. (Matthew 11:25; 1 Corinthians 1:19) And some are too wicked.—Daniel 12:10.

9. Do the great, the wise, the mighty and the noble and educated have any special advantage in understanding the Bible, and is it necessary to have a finished college education in order to understand it?

Answer: No; on the contrary, the vision (which means an understanding of God's Word) is hid from many who are wise after the manner of earthly wisdom and is made known and understood by those who humbly and honestly seek to understand, though they may be poor and have little education.—1 Corinthians 1:20, 21, 26-29.

10. What is necessary for one to do to understand the Bible?

Answer: First, he must have an honest desire to understand it and a reverence for Jehovah as the great eternal One, the Maker of all things; he must have faith in God. "Without faith it is impossible to please him." (Hebrews 11:6) Second, he must have a sincere desire to know the truth and tell the Lord he is willing to do his will.—Proverbs 1:7; John 14:26; 1 Corinthians 2:12; Psalm 25:14; Romans 8:14.

11. Is it profitable to study the Bible and if so, in what way?

Answer: See 2 Timothy 3:15-17; John 17:17.

12. Does a knowledge of the Bible enable one to do better?

Answer: See 2 Timothy 3:16.

13. Is the Bible written entirely in plain language, or is some of it in symbols?

Answer: Some of it is written in plain phrase, while many parts of it are written in symbolic language, some in parables and dark sayings.—Mark 4:32; Matthew 13:35; Revelation 1:1-3.

14. Why was not the Bible written in plain language so everybody could understand it, and without symbols or dark sayings?

Answer: God's purpose is to reveal an understanding of his plan gradually. For instance, he had the prophets write many things which they could not understand. They merely served as clerks or writers to make a record of things they saw. (Daniel 12:8) The prophecy of the Bible is history written before it happens. Jehovah foreknew everything from the beginning to the end (Acts 15:18); and he caused it to be written in such a way that it could not be understood until the prophecy is fulfilled by the events taking place. Then he expected the people to understand it.

15. Can you give an instance in which the Lord foretold something to happen that we now see?

Answer: Yes: He had Daniel record many centuries ago that the time would come when there would be rapid traveling across the land and a great increase of knowledge in the world, which has come within the last hundred years. (Daniel 12:4) There are many instances of this kind in the Bible, as we will find from time to time in these studies. The Lord revealed through another prophet a description of the locomotive and railway train, many centuries before any man ever thought about inventing or building one. We will give the description of this in some later lesson.

TRAVEL AND MISCELLANY

Service for Travelers

AT THE foundation of the swift, smooth travel of today is an intricate system of coördinated service. Without the surrender of the individual railroad worker's will to that of the system, travel would be both difficult and dangerous, and civilization would sink toward the level of the semi-barbarous.

Every railroad man is inspired with the ideal of as nearly perfect service as he can render. Service by a worker the public scarcely hears of, the car inspector, makes sure that no car leaves the terminal in a condition that might cause an accident. The engineman's service calls for uninterrupted watchfulness and thoughtfulness over every rod of track and at every signal, to make safe delivery of the cargo at every stop.

Safe and efficient service by the conductor takes a personal, sincere interest in the passengers, watches conditions, observes the dispatcher's orders, and sees to the safety and as far as possible the comfort of the hundreds temporarily in his care. Service by the shopman takes care that the rolling stock is in as good condition as possible in the time allowed for the adjustment and repair of engines and cars and is an important contribution toward the efficient operation of the system. The railroad clerk's service contributes in some measure to the possibility of the management's having the records which make for the efficient operation of the system.

There is no place where lack of the spirit of service shows more than in the conduct of the executives. Their spirit travels through the personnel, and manifests itself in the acts of every employe of the road. Governing the entire system is the service rendered by the bankers and financiers who act as directors, appoint executives, control policies and supply the funds required in a large way to purchase materials, equipment and labor for the best maintenance and operation of the system.

Modern travel is the resultant of the service of thousands working separately but all to a common end. In a successful railroad it represents the best that can be done for the money to secure the safe and comfortable delivery of passengers and freight over mile after mile of

track to the destination. It is an exemplification of the Biblical maxim that "whosoever will be chiefest, shall be servant of all". (Mark 10:44) Presumably it is true of the personnel of a system, from bankers down, if unfaithful, that they are liable to hear the other Biblical injunction, "Cast ye the unprofitable servant into outer darkness: there shall be weeping and gnashing of teeth".—Matthew 25:30.

The Big Bean

SO ACCUSTOMED are we to the bean in a shell that it rather surprises us to see in a display window a bean two or three feet long. This monster among beans is a butter bean originated in Japan.

One seed of the new bean may grow into a plant 90 or 100 feet long bearing 100 beans, each up to four to six feet long and weighing ten, twenty or thirty pounds, or more. It would take a large and hungry family to dispose of one twenty-pound bean at a meal or even in a day. Just how much the big bean might help out the cost-of-living problem may be figured out by the curious by estimating how many might be raised in a city back-yard.

The Japanese bean first began to be used in this country after the war got under way, and is now being widely used as a staple food. It is said to be good eating when cut and fried like egg plant, or boiled and served with a white sauce.

If this is a specimen of how the field is to "yield its increase" in the Golden Age, what wonderful things may be expected when the better order is fully under way!

Disease Aggravates Shortage

THE milk shortage in Switzerland is made worse by the foot-and-mouth disease, which is epidemic. On account of danger to the people, dances and other assemblages of the people, including funerals, are greatly restricted in the attendance permitted. No milk is allowed to reach condensed-milk factories or milk-chocolate plants; and the milk rations of children are reduced thirty per cent. Cattle markets are closed, and farmers from infected districts are forbidden to enter the towns.

GOLDEN AGE CALENDAR

DECEMBER 24 TO JANUARY 6

YEAR: 1919-20 A.D.: 6048 since Creation; 7248 Byzantine Era; 5680 Jewish Era; 2672 of Rome; 2085 of Greek Olympiad Era; 2570 Japanese Era; 1338 Mohammedan Era; 144th year of Independence of the United States.

STARS: *Morning*: Mercury, Venus and Mars to Dec. 31; Jupiter to Jan. 1; Saturn. *Evening*: Venus, Mars and Jupiter after Jan. 1.

December 24, Wednesday

Mohammedan month Rabia II begins; Sun rises 7:22 a.m.; sets 4:57 p.m.; Moon rises 7:00 a.m.; sets 7:00 p.m.; Twilight begins 6:11 a.m.; ends 5:42 p.m. (New York); 1918, President Wilson promises a people's peace by agreement of everybody concerned in the settlement; Serious coal shortage in Germany; Allies decide that Russia herself must bring order out of chaos, and are in accord in refusing to undertake any large military expedition into Russia; A petition with 23,000 signatures appealing for release of 300 conscientious objectors from the Fort Leavenworth military disciplinary barracks is given to Secretary Baker.

December 25, Thursday

Christmas Day: 1776, Battle of Trenton (25-26); 1918, Russian princes and Czarist officers, basing hopes on Kolchak and Denikin, ask 150,000 Allied troops as enough to "save the country"; Germany returns 6,000,000,000 francs worth of stocks taken from French banks; Chaplain Edson makes a report on the allied inefficiency and profiteering of the Y.M.C.A. in France.

December 26, Friday

Day after Christmas, China, Denmark, Dutch West Indies, Germany, Netherlands, New Zealand, Switzerland; Boxing Day, Australia, Hong Kong, Jamaica, Rhodesia; St Stephen's Day, Austria, Belgium, Finland, Hungary, Italy; 1918, Pope Benedict kindly promises his aid and support to the decision of the Versailles Council; Profiteers use airplanes to take their enormous profits from Germany to Switzerland; German Spartan forces seize the Prussian War Ministry.

December 27, Saturday

Second Day after Christmas, Western Australia; 1918, Berlin Workmen's and Soldiers' Council convenes for purposes of reconstruction; Intervention in Russia out of a slight stain is occasioned by the Allies; Allied negotiators approached by Russian Bolsheviks concerning terms of peace; A fund of \$1,000,000,000 is declared necessary to meet the 1919 deficiency in the \$2.26-a-bushel Government price of wheat.

December 28, Sunday

Proclamation Day, Australia.

December 29, Monday

Bank Holidays, Costa Rica, (29-31); 1918, President Wilson announces that "it is the conscience of the world we now mean to place upon the throne which others tried to usurp"; U.S. Senators receive hundreds of telegrams protesting against keeping American boys in Russia.

December 30, Tuesday

1917, Coldest New York day in thirty-three years, thirteen degrees below zero; 1918, draft agreement made between United States, Canada, and Great Britain; President Wilson declares to 5,000 British workmen, "If the future had nothing for us but a new attempt to keep the world at the right pole by a balance of power, the United States would take no interest in it, because she will join no combination of power that is not a combination of us all"; Clemenceau declares his adherence to the "old system of alliances called the balance of power; I should not be telling the truth, if I said I had always been in agreement with him (Wilson) on all points"; Secretary Danneberg advocates a navy as large as Great Britain's, if the League of Nations fails to limit armaments.

December 31, Wednesday

New Year's Eve, Switzerland; Memorial Day, Portugal; Prince Boris' Birthday, Bulgaria (not celebrated this time); 1917, Germany announces unrestricted submarine warfare in certain zones; 1918, Bolshevik revolt establishes a temporary Bolshevik republic in Silesia, Germany; War has cost the United States \$18,160,000,000.

January 1, 1920, Thursday

New Year's Day: Beginning of the year 4714, Julian Era; and of the year 1957, Spanish Era; Jewish Feast of Tebet; Christmas Day, Bulgaria; Chinese New Year; Spring Holiday, China, Dutch East Indies, Hawaii, Hong Kong; Independence Day, Haiti; King's Birthday, Siam; 1801, Union of Great Britain and Ireland; 1863, Lincoln's Emancipation Proclamation; 1918, General March made Chief of Staff, United States Army; Bolsheviks seize Roumanian ships in Black Sea and capture Odessa; Tartars proclaim Crimean Republic; Senate for Federal control of railroads until eighteen months after the war; 1910, Pope Benedict's New Year's message to America benevolently hopes the Peace Conference may result in a new world order, with a League of Nations, conscription abolished, and tribunals established to adjust international disputes; President Wilson en route to Italy to see the king, the pope, and the Methodist College; France proposes to assume the mandate for Armenia, Syria and Lebanon; Kaiser's palace damaged \$1,500,000 by theft and vandalism.

January 2, Friday

Maha Shivarati Day, India; Arbor Day, Arizona; Purification Day in Roman Catholic countries; 1919, Christian People's Party in Germany protests against legislation "opposing liberty in parochial schools"; President Wilson's journey through Italy is "like a triumphal procession"; Senator Johnson protests against more shedding of blood of American boys in Russia.

January 3, Saturday

Carnival Day, Egypt; San Blas Day, Paraguay; Lundi Gras Day, Belgium, France; Monday before Lent Carnival, Bolivia, Honduras, Peru; 1917, United States severs diplomatic relations with Germany and dismisses Ambassador Bernstorff; 1918, Prominent Britons petition release of 1,500 conscientious objectors in British prisons; Colombia asks United States to pay the \$25,000,000 due her through the launching of the Panama Republic under the Roosevelt régime; The authorities and an immense crowd give President Wilson an enthusiastic welcome; he announces that the task of the Peace Conference is "to organize the friendship of the world," and not to establish the balance-of-power principle; he discusses matters with Pope Benedict; he cables for \$100,000,000 to feed Europe; Rear Admiral Rodman recommends the destruction of the surrendered German war ships (which recommendation the Germans followed later); Turks begin killing Armenians.

January 4, Sunday

1919, Special propaganda agents are placed on American war ships to combat anti-British propaganda; Roumanian Jews are granted full citizenship rights.

January 5, Tuesday

Christmas Day, Russia, (G-S); Epiphany Day, in Roman Catholic countries; 1919, Geneva and Milan give President Wilson a tumultuous greeting; Congress appropriates the \$100,000,000 "to revictual Europe"; Germany announces that it is necessary for her to "intervene energetically (against the Russian Bolsheviks) by taking diplomatic and military measures"; President Paderewski of Poland pleads for Allied help against Bolshevism; The National Security League plans an extensive post-war campaign against Bolshevism; Theodore Roosevelt dies.