

# WATCHMAN













Indian State Railways



The span of life in Germany seems to be on the increase. At the time of the Reformation, the average was twenty years, in the time of Frederick the Great, it was thirty; in 1870, lorty; just before the World War, lifty; and at present it is sixty years.

A super-telescope, with four times the magnifying power of the largest now in existence, will soon be erected on a mountain in California. It will have a reflection 200 inches in diameter, and will penetrate millions of light years into space, bringing to view hundreds of millions of stars now unseen.

Tropical fireflies, which have two luminous spots like headlights in addition to the luminous abdomen, are so large and so bright that they are used by the poorer natives of the Caribbean region to light their huts. William Beebe, the naturalist, tells marvellous stories of the brilliance and lasting powers of these living lanterns. The reverent worshipper of the Creator admires the divine handiwork and stands silent before the mystery of their light that science has not fathomed.

Four or five hundred years before the Christian era and well along during the early period of Christendom, Corinth, Greece, was noted not alone for the beauty of its monuments, but for the range of its spectacles and plays. The recent uncovering, therefore, of a great theatre by the Princeton archaeologist, Dr. Shear, marks a fine contribution to the knowledge of the early Greek city. This theatre has interest for those who are conversant with its purely cultural character. The structure must have witnessed the production of the religious spectacles for which the city was famous. The Pauhellenic festivals filled the great edifice, with its accommodations for 20,000 auditors. Wealth and frivolity, as well as serious concern for religion and interest in the drama and in choral exhibition, marked the Corinth of the centuries before the Christian era, and the city reflected the progress of Greece through the stages of its development in the plastic arts. The revival to knowledge of this theatre and so much else of interest in the uncovered ruins of the old city will give fresh interest to classical subjects.

Rags, "the tail end of nothing to most of us," have come into their own in the healing of broken men. Their value in keeping hospital patients from brooding over troubles, in restoring deadened muscles to usefulness, and in leading blunted and twisted minds back towards normal interests, is emphasized in a paper by Dr. Eya Louise Zoller, assistant chief aid in occupational therapy in the United States Veterans' hospital at Boise, Idaho, published by the American Occupational Therapy Association. Weaving rags into rugs, with the looms operated either at the bedside or by foot power, she has found, "in every way seems to be the most satisfactory form of occupational therapy for the general medical and surgical cases, as well as the neuropsychiatric cases, "in such an institution. The rugs can be simple or intricate in pattern and colour, and for this reason offer an excellent medium for the exercise of originality by the patients. Further, they are useful and salable, and some of the patients have been able to dispose of enough rugs to pay for the warp used and them supply their homes and friends, developing their muscles to

usefulness. In some instances, men discharged from the hospital have been able to buy or make looms and become partially or wholly self-supporting.

Science is taking the terror out of one of the world's most dreaded diseases. Regarded since the dawn of history as a living death, leprosy apparently is being brought within the list of curable maladies, and the leper is being given firm ground for hope. Within the last few weeks eight patients have been released on probation from the National Leprosarium—at Carville, Louisiana, and sent back to their homes, no longer a menace to the public health. Since the institution was established by the United States Public Health Service seven years ago, thirty-seven have been released, and only one has suffered a relapse. Those released recently had been under treatment from two to seven years, and about 400 others remain. Many of the Many of the bacteriological, chemical, and clinical studies which have contributed to the advances made in treatment of the disease in recent years have been conducted by health service workers in Hawaii. Their principal achievement has been the development of chemical derivatives from chaulmoogra oil obtained from an Oriental tree, which have increased its effectiveness in combating the leprosy germ. The treatment was rather painful, however, until the specialists developed a method of administering the injections with a local anæsthetic. The scientific studies also have established that the disease is communicated only by direct and usually prolonged contact with a victim. Casual contact, the investigators find, is not so dangerous as it has been regarded, and they suspect that nasal secretions probably have most to do with transmission of the garms.

'Accident is the mother of invention in ninety-nine cases out of a hundred." says Louis Brennan, torpedo in ventor. Observing the behaviour of a frayed driving belt on a planing machine, he saw that it was possible to make a machine travel forward by pulling it backward. The invention of the torpedo resulted. Workmen in a paper mill carelessly omitted to add any size to the pulp, and the result was a parcel of paper that was thrown aside as waste. Some one tried to use this waste to write a note, and discovered its absorbent character. Blotting paper then came into existence. Daguerre carelessly laid down a silver spoon upon a plate that had been treated with iodine. He noticed that the image of the spoon was retnined, and from the experience evolved the idea of the silver-coated photograph plate. The cash register was cevised as a result of observing an automatic indicator of a steamboat propeller shaft's revolutions. The pneumatic tire was suggested by the tying of a piece of water piping around the wheel of a wheelbarrow. During a certain process in the breaking up of silver nitrate, two well known scientists observed that the wire by which electricity was being conducted became coated with silver. The invention of silver plating resulted. When one man's wife had trouble keeping refractory hairpins in place, the husband twisted one and solved the problem. A pot of brine boiled over, and where the brine ran out the pot was glazed. The result was glazed potter, A piece of cheese tossed by a workman dropped into the plating bath used in producing copper disks from which wax phonograph records were stamped. The disks from that bath were found to be far superior to the others. Investigation revealed that the casein in the cheese had done the work. A French scientist, while experimenting, in-advertently opened the wrong valve. Several drops of moisture settled in a glass tube, and he thus accidentally discovered liquid oxygen.

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## The Healing Virtues of Cold Water

By A. B. Olson, M.D., D.P.H.



of Nature, he soon acquired skill and efficiency in the use of the cold bath as a remedy. Without any advertising other than that done by the grateful patients who came to his primitive establishment, he soon acquired a large patronage and tens of thousands of invalids of all classes of people, rich and poor, nobles of high degree and farmers of the countryside, flocked to Graefenberg for treatment. His seemingly miraculous cures attracted the attention not only of his own countrymen but of people from all the countries of Europe, and his fame even reached America. Many books were written lauding the Preissnitz cold water cure, and some



of these by learned men such as Dr. R. J. Culverwell, Fellow of the Royal College of Surgeons of England.

From the earliest dawn of history water has been used by practically all the nations of all countries, not only for the cleansing of the external skin but also for healing purposes. Homer men-tions bathing. Hippocrates prescribed cold baths for despondency and Galen also recommended them in his practice. Horace himself practised the cold bath and in his day it was regarded as a remedy for gout and paralysis. The ancient Egyptians are known to have used water for remedial purposes. The term "Roman bath" which still survives points to the popularity of baths among the ancient Romans. We are told that "the Romans held

it an equal disgrace to be ignorant of swimming and of reading "—a thought well worth our consideration. Vast ruins of the old bathing establishments of Rome are shown visitors to-day and even in ancient Pompeii the bath house was a public institution and evidently very popular.

Priessnitz not only emphasized the healing potency of cold water baths of various descriptions but also taught the importance of taking exercise, of abstemious living, especially as regards eating and drinking, of regular habits of life, including going to bed early and getting up early. He laid great emphasis upon the health-giving properties of fresh air and the outdoor life, and prescribed

for his patients long rambles across the green fields and hills, through the forests and up and down the mountainside. His success was due not only to the hydrotherapy that he practised but equally to the wise regimen that he prescribed for his guests. Priessnitz advocated teetotalism and considered it a sin against the body to "put an enemy into his mouth to steal away his brains." In short he advocated an all-round rational health culture, for he seemed to understand that sickness and disease were due very largely to a lowered state of vital power. Loss of vitality and physical debility naturally render anyone more or less susceptible to the invasion of infection and the consequent development of disease.

In all his work, from his small beginning to the establishment of a large practice, Priesanitz laid the greatest stress upon the efficacy of the use of cold water. It is true that his methods were heroic at times and it is also undoubtedly true that his cold water applications were sometimes too drastic for the weak patients that received them. Nevertheless, his great success was undoubtedly due to his faith in the stimulating powers of cold water and his methods of applying it!

He recommended and used cold water treatments for many disorders, and for results depended upon the tonic and restorative effects of the cold applications which he gave his patients. For the strong and vigorous who were able to bear it, he would recommend a brief plunge in a tub of cold water, and for less vigorous patients the cold half bath for a few moments or a cool or cold foot bath, cold leg baths or arm baths, and even dipping the head in a basin of cold water. He was especially fond of the cold douche, and he also utilized sprays and showers. Naturally in those days his apparatus was very simple. It consisted chiefly of wooden tubs of various shapes and sizes, and for the spray or shower he used an ordinary watering pot. He was perhaps wiser than he recognized in insisting upon short, brief applications of the cold water. Even when bathing in the sea or lake or river he recommended a single plunge, and then advised the patient to come out and dry himself with a vigorous friction. One of his favourite prescriptions was wrapping the patient in a sheet dipped in a pail of cold water, and even this was given for only a few moments and then the patient received a vigorous rub. At other times, after the patient was wrapped in a sheet dripping with cold water, he was next wrapped in blankets and left in this cold pack, which very soon became a heating pack, for half an hour or more. Wet towel rubs, wet sheet rubs, wet hand rubs and cold frictions of various kinds were popular in his institution.

There is every reason to believe that fresh air and cold water are the two greatest tonics afforded us by nature. People who are not accustomed to cold water or cold baths might follow the counsel of the wise Benjamin Franklin who advocated fresh air baths, cool or cold, according to one's

degree of resistance. Cold air and cold water baths have a delightfully stimulating influence upon the entire body when taken wisely and under proper conditions, and they have a gentle invigorating effect upon the entire system and upon all the organs. A cold application has a stimulating effect upon the digestive organs, and by encouraging peristalsis increases motility of the bowels and better elimination. Cold applications generally improve the appetite and tend to overcome constipation. The circulation of the blood and lymph, too, is benefitted by these cold applications, and respiration becomes deeper and more frequent. In addition to the cold applications externally one must not forget the advantages of cold water drinking.

We are living in an effeminate age and there is a general wide-spread fear of cold of any kind, whether it is cold air, which everyone imagines to be a draft which is going to cause a "cold in the head," or whether it is simply some cold water application. People seem to shrink from cold and the more they coddle themselves in poorly ventilated, overheated rooms, the weaker their resistance to cold becomes and the more likely they are to "catch cold." This is all a great mistake and the tendency is to make invalids. Cold water wisely used is a splendid pick-me-up whether it is taken externally or internally. A tepid or cold brisk wet hand rub in the morning or the same given by means of a turkish mitt, is a fine morning tonic and if followed by friction leaves a refreshing glow which is very comforting.

It is well to bear in mind that one should gradually accustom one's self to the use of cold applications. By using a little care to begin with and gradually increasing the cold as the skin get healthier and more active, most people in ordinary health can easily get used to cold applications and derive the greatest benefit from them. After a few weeks most persons could stand in a bath with the feet in a little hot water and wrap a large turkish towel or sheet soaked in cold water around the body, and rub themselves vigorously and quickly for a few seconds and then dry with plenty of friction. Cold compresses and the moist abdominal bandage are valuable means of combating various disorders. Many people, especially in Europe, have found a real advantage and great benefit from walking for a few moments before breakfast in the cold wet grass in the morning. With the dew on the grass they take a quick barefoot walk and afterwards bathe the feet in cold water for a few seconds and then administer a vigorous friction. This was first suggested by Pfarrer Kneip, and hence has been called "the Kneip walk."

The hygienic advantages and helpful effects of the free use of pure water taken internally cannot be overemphasized. There is no drink that quenches the thirst more satisfactorily or more perfectly than cold water! It is well to realize that cold water taken internally is not only a fine tonic and a (Turn to page 19)

## The Fall of Man

By Carlyle B. Haynes



HE purpose of God in creating the earth was that it might be inhabited by a pure and holy race of beings. He declares: "He created it not in vain, He formed it to be inhabited."

Isa. 45:18. In accordance with this purpose, "God created man in His own image, in the image of God created He him; male and female created He them." Gen. 1:27.

His purpose for the human race is outlined in

this language:

"And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth." Gen. 1:28.

When man was placed upon the earth he was crowned with "honour and glory," and made but a little lower than the angels." Ps. 8:5. And God meant that men should continue to retain this likeness to Himself not only in physical form, but also in character. He designed that this earth should be the abiding place of purity and holiness.

Man was to multiply on the face of the earth. That is, he was to bring into existence a great multitude of beings such as he was himself, pure and holy, all of them retaining their likeness to God These

be ings were never to die, for they were to have access to the tree of life which was placed in the midst of the garden of Eden, the fruit of which they might "freely eat." And as they increased and filled the earth they were to constitute the kingdom of God on earth, which, as each subject possessed eternal life, was to remain on the earth forever.

God also instructed them to "subdue" the earth. As children were born and went out over the earth, they were to take the garden of Eden which God had planted in the east as an example of what they were to make the entire earth. It was the design of God that the whole earth should become a great paradise for the dwelling-place of the creatures He had made.

In the garden of Eden, "out of the ground made the Lord God to grow every tree that is

pleasant to the sight, and good for food; the tree of life also in the midst of the garden, and the tree of knowledge of good and evil." Gen. 2:9. There was nothing lacking in the garden which would have been for the welfare of man.

"And the Lord God took the man, and put him into the garden of Eden to dress it and to keep it. And the Lord God commanded the man, saying, of every tree of the garden thou mayest freely eat: but of the tree of the knowledge of good and evil, thou shalt not eat of it: for in the day that thou eatest thereof thou shalt surely die." Gen. 2:15-17.

This tree was placed there as a constant and ever present reminder of the sovereignty and ownership of God, and as a test of their love and obedience to their creator. The warning not to eat of this tree was the only restriction placed upon them as to the use of all that was in the garden. Therefore it was the only possible point of attack on the part of the devil.

Perfect in symmetry.

Perfect in symmetry. beauty and stature, the first pair were the head of the creation. All things were placed under their feet. Under their dominion was placed every living thing on the earth. And they enjoyed unrestricted communication with their Creator, speaking with Him face to face. Their visitors and companions were the angels of heaven, who doubtless told them of the fall of Satan and his hosts, and warned



Eve being tempted by Satan through the serpent

them to be on their guard against his wiles.

Satan saw the peace and joy of the holy pair in the garden and was tormented by this reminder of the happiness which he had forever forfeited. Determined to thwart God's plan, he set himself to undermine the loyalty and allegiance of mankind to God, and to take him captive, thus ruining his happiness, while at the same time gaining him as an adherent in his controversy with the Father. Fondly hoping to defeat the plans of God in the creation of the earth and the race, he laid his plans to deceive and cause the fall of man.

Knowing that the man had been warned against him as the one who had been cast out of heaven, he realized that he could not appear to him openly. So he chose as his instrument one of the creatures which God had made, hoping if he succeeded that the man would be led to charge

God with fault. The serpent at that time was one of the most beautiful of animals, having wings with which it flew into the trees where it nourished itself with fruit. Speaking through the serpent, Satan caused Eve first to doubt the wisdom of God in withholding the fruit of this tree from them, boldly declaring that God knew all the time that if they did eat it they would become as wise and

powerful as Himself. Then, leading her on, he told her that God merely designed to frighten her by telling her that she should die if she ate of the fruit, that there was no truth in such a statement, and no harm in the fruit.

Believing the words of the arch-deceiver, which ran so closely by the side of her own desire. Eve took the fruit of the tree as it was handed her by the serpent, and ate it. Under the influence of the devil, she imagined that she was becoming like a god. Rejoicing in what she mistakenly thought was a new and higher state of existence, she immediately thought of Adam, and gathering more of the forbidden fruit she hastened to him with it, urging him to eat, relating her own experience, assured him that the fruit

was perfectly harmless.

In utter dismay Adam listened to his wife, fully recognizing that she had been overthrown by the very enemy against whom the angels had warned them. He realized that this sin of hers would eternally separate her from him, unless he ate with her of the fruit, and he resolved that if she was to die he would die with her. He would at least join her in her fate. Taking some of the fruit, he ate of it.

It was not long until the guilty pair in the garden fully realized what they had done. A fear of the consequences of their transgression took possession of them, and when they heard the voice of Jehovah in the garden they hastily hid themselves, feeling that they could not look into His face. They saw themselves as they were, and they were afraid of God.



The entrance to the Garden barred by the angel

In answering the question God asked him, Hast thou eaten of the tree, whereof I commanded thee that thou shouldest not eat?" Adam was forced to tell of his sin, but in doing so he laid the blame on the woman and on God by saying, The woman whom Thou gavest to be with me, she gave me of the tree, and I did eat." Turning to the woman, God said, "What is this that thou hast done?" And she also joined in a covert reproach against God by saying, "Theserpent beguiled me, and I did eat?" Gen. 3: 11, 12.

By this sin of our first parents the sentence of death was passed upon all mankind. A curse was pronounced upon the ground, and man was condemned to a life of toil. The right to eat of the tree of life was taken away, and the

first pair were driven from the garden, angels being placed at its entrance to keep them from entering and partaking of the tree of life. But here, at the very beginning of their new life, a gleam of hope was given to them which kept them from being altogether cast down. In cursing the serpent for his deception, God had said:

"And I will put enmity between thee and the woman, and between thy seed and her seed; it shall bruise thy head, and thou shall bruise his heel." Gen. 3:15.

## Acid-Base Balance

By J. L. Thomas

UMAN nature is naturally interested in something that is new, so much so that many times we tend to become faddists, and emphasize to an undue extent a new idea that comes to us.

We know that old saying, "There is nothing new

We know that old saying, There is nothing new under the sun," which holds true many times, but frequently an idea which we knew very well before presents itself to us in such an entirely different

light that it seems new.

The matter of supplying the human machine with repair foods and with fuel foods is a very important subject, in which every one should be interested and have knowledge. We have learned that we need a certain amount of protein, neither too little nor too much, a certain amount of carbohydrate, and a certain amount of fat in our daily

diet. Connected with that is another phase which should be considered,- the matter of the balance between acid foods and base foods. When an excessive amount of acidifying food is eaten, the buffer substances of the bloud draw up on the alkali reserve of the body in order to maintain the blood at a normal alkalinity. This reduction of the alkalireserve produces numerous annoving symptoms. This alkaline reserve of the body depends to a very large extent on

the quality of the food which we take into the body. When food is eaten, it is digested, absorbed, and then oxidized, or burned, to produce heat and energy. As a result of this oxidation process, one of the end products is carbonic acid. If this should accumulate in the body, the alkalinity of the tissues would be lessened, but it is eliminated by the respiratory system just as rapidly as it is formed, so that we have nothing to fear from this. Another end product of oxidation, however, is an ash which is largely excreted by the kidneys, and which may be acid, base, or neutral in reaction. It is this which maintains or breaks down the alkaline reserve of the tissues. In order to determine just what particular foods will give this type of reaction in the body, we cannot depend at all on taste. Some of the most acid foods prove up.n testing to be alkaline in reaction of the ash. For instance, lemons, grapefruit, oranges, and limes, which you know are extremely acid to the taste,

prove upon testing to be very basic, or alkaline in ash reaction. The general classification of foods according to their ash reaction is as follows: The acid-forming foods are meat, eggs, breads, and cereals; the alkaline-forming foods are fruits, vegetables, legumes, and milk; the neutral foods are the starches, fats, and oils.

We can see from this chart the reaction of the ash of some of the more common foods. Dried double beans head the list of alkaline foods, and oysters the list of acid foods. There are some foods, however, which have been found by experiment to be particularly alkalinizing; regardless of their standing on this chart. These are double beans, apples, bananas, milk, melons, oranges, lemons, potatoes.

The normal diet should contain sufficient of

the alkaline foods to balance or overbalance the acid-ash foods. If the acidash foods predominate in the diet, we have a condition which we call acidash acidosis. The symptoms of this condition are fatigue, headache, loss of appetite, sleeplessness, general nervousness. an acid stomach acid perspiration, and to a great extent acid or sour" disposition. You may smile, but Dr. Sansum says he has many cases to his credit in which an "acid disposition"

has been remedied by an alkalinizing diet. You may not find all the above symptoms in one patient, but those mentioned are the outstanding ones.

In maintaining an alkaline balance in the daily food, this instruction is very good: "Discard all flesh and fowl foods, eat sparingly of eggs, moderately of breads and cereals, freely of liquids, using the fruit juices as much as possible." We have no fixed figure by which we may decide an alkaline diet. We cannot say that you need so many grams of this particular food or that, as you can in protein requirement. But if there is a preponderance of the alkaline foods in the diet, there will be no difficulty in the final outcome. In balancing our diet as far as acid base is concerned, it is not necessary, by any means, entirely to eliminate acid foods. Eggs, breads, and cereals, which are acid in reaction, are very worth-while foods, and add much to the nourishment of the

ACID-FORMING	Foods	ALKALINE, OR BASE- FORMING FOODS		
Oysters	15.3	Dried double beans	41.6	
Veal	13.5	Spinach	27.0	
Oatmeal	12.4	Almonds	12.3	
Whole eggs	12.0	Dates	11.0	
Salmon, fresh	11.4	Lettuce	7.4	
Chicken	11.2	Potatoes	7.0	
Ham, fresh	10.9	Bananas	5.6	
Halibut, steak	9.8	Lemons	5.5	
Beef	9.8	Orange juice	4.5	
Rice	9.8	Apples, fresh	3.7	
Mutton	8.9	Grapes	2.7	
Walnuts	8.0	Milk, whole	2.3	
Whole-wheat bread 7.6		Peas, green	1.3	
Lentils	5.3			

rigures per 100 grams of edible portion.

body. Eat a moderate amount of them, and freely of fruits and vegetables.

You will be interested in knowing just what effect such a diet has upon your sense of wellbeing. Doctors are interested in what is happening to our tissues, but we as individuals are more interested in how we feel. One thing you will note from an alkalinizing diet is a resistance to colds. A teaspoonful of soda in a large glass of water every four hours is often recommended for colds. Soda is an alkaline agent, and will check the cold but at the same time it irritates the mucous membrane of the stomach and the intestines. Why not take fruit juices, which are alkaline? They will do the same work, and are not in any way harmful to the body.

Another effect of this diet is a lessened sense of fatigue, a feeling of greater endurance. That does not mean that after a hard day's work you will not feel tired, but you will not feel so excessively tired as upon a poorly balanced diet. There is less danger of overeating on this diet, because the alkaline foods are mostly bulky foods, and the increased mastication satisfies the appetite. Another reason is that the alkalinizing foods supply a large amount of minerals and vitamins which are needed in the body.

When all these requirements of the body are supplied, craving for an excessive amount of food is not present. There is also a lessened desire for sweets. The reason is that the vitamin and mineral requirements of the body are satisfied. So many times when we finish a meal it is not that we need additional foods, but just that we crave something else, and it is usually something sweet that we eat. After a decidedly alkaline meal you will-not notice that desire for something extra in the form of an excessive sweet. Vegetarians as a rule fall short in this respect. We give up many things which are injurious to our bodies, but we continue to consume large quantities of sweets.

It can be readily seen from the above facts that an alkalinizing diet is important. If we find that such a diet cuts sharply across some of our most cherished likes, remember we are in this world to live most and serve best, and to do that we must "eat to live, and not live to eat."

### Mumps

This infectious disease was known and described by the physicians of ancient Greece. Every year, in the spring and autumn, it still makes its appearance and attacks children and young adults, particularly males. It is not a serious disease, but every case should have careful nursing as there are complications which may occur unless the patient is properly looked after.

The symptoms appear from two to three weeks after the disease has been caught from some-

one already suffering from it. During this long "incubation period" the child feels quite well, but at the end of it, he begins to complain of a swelling of one side of the neck. After a few days, this usually spreads to the other side as well. The swelling begins below the ear and spreads forward over the jaws and cheek, and backward and downward to the neck, at the same time becoming very hard, tense and tender. Opening the mouth and chewing become so painful that in many cases only fluids can be taken. Before these swellings become very marked there is some fever, which is not often severe.

The swellings are caused by the affection by the disease of the glands which make the saliva of the mouth. The salivary gland first affected is known as the parotid gland; the submaxillary and sublingual salivary glands which lie under the lower jaw also sometimes become tender and swollen.

After eight or ten days the tenderness gradually disappears and the glands regain their usual size, and the patient feels none the worse for having had the disease.

This is the history of an ordinary case of mumps, where the patient has been prevented from eatching cold and has been kept in bed until the swelling has gone down. If the patient has been allowed up too soon he is much more liable to get inflammation of other glands in the body, which is attended with more serious results.

Occasionally earache develops with perhaps a discharge from the ear and slight deafness. There are also severer complications that have been known to occur, but they are so rare that where the patient is well looked after, they need not be dreaded.

The patient must be kept in bed and not allowed to get up or walk about until the salivary glands have lost their swelling and tenderness. The room which he occupies should have the window open day and night. To protect him from draughts and colds a pad of cotton wool should be bandaged over the face on either side. Where there is severe pain hot fomentations may be applied. In ordinary cases no medicine will be required, but of course the decision as to whether it is necessary or not lies with the doctor. The diet should be light and during the acute stage will have to be liquid. It may consist of milk, thin cornflour or arrowroot, etc., Marmite dissolved in hot water, grape juice, and fresh fruit juices. Later, milk puddings, eggs, and bread and butter can be added.

One week after all swelling has subsided, the patient may be considered free from infection. He should be given a bath with a good antiseptic soap or with some "Izal" or "Cyllin" or a similar compound in the water, and afterwards dressed in clean clothes. He may then be allowed to mix again with others.

A. G. SIMMINS, M. B., M. R. C. S.

## How the Fossils Got Into the Rocks

G. McCready Price, M. A.



HE lands boarding the Mediterranean are rich in the fossil remains of animals and plants. In the days of the Greeks and Romans sea-shells and the bones of reptiles and elephants

and other animals were found in abundance in the hills of Italy and Greece and Asia Minor. The people of that time believed these fossils to be actually the remains of living things which formerly had been buried by the waters in the rocks

where we now find them.

During the Middle Ages, however, many wild theories were held as to the origin of these things that we now call fossils. Some said they were freaks of Nature, and that they had been formed by mysterious forces in the rocks in freakish imitation of types of life. Others who were familiar with the Bible and believed its record of a universal deluge long ago had a ready explanation in saying that these things were actually relics of creatures which had been destroyed at the time of the Flood. Indeed, this may be said to have been the almost universal explanation of these things down until comparatively modern times. Voltaire, the French sceptic, did not like this explanation; and he suggested that the sea-shells found in the rocks of the Alps, and other mountains, were merely those that had dropped off the hats of the Crusaders and other pilgrims returning from pilgrimages to the east. Of course, this was no explanation; it is doubtful if Voltaire expected it to be taken seriously. But this remark of his tends to show that the sceptics of that day really had a hard time to meet the apparent confirmation of the Biblical story of a universal Deluge which is presented by these relics of former life found buried in the rocks of all the continents.

In our day a very elaborate system of explaining these phenomena in terms of the present-day action of the forces of Nature has been developed, and this so-called "scientific" explanation has hecome very widespread throughout all civilized countries. This explanation has been practically the only one offered for these phenomena during the last seventy-five or one hundred years. this geological theory of how the fossils were buried has been built upon and enlarged in such a way that it has grown into what is termed the theory of organic Evolution, which professes to tell how all of our modern plants and animals have developed from simpler forms of life by a longdrawn-out process of development prolonged over

many millions of years.

As already remarked many people formerly explained the presence of the fossils in the rocks by attributing their burial to the action of a great, world-catastrophe corresponding to the Bible record of the Flood. This explanation was maintained by many careful and thoughtful writers down until the early part of the nineteenth century

when a very considerable knowledge of the scientific facts regarding the fossils and the rocks had been developed. John Woodward, a professor in Gresham College, and a Fellow of the Royal Society, may be regarded as almost the founder of the scientific study of the rocks here in England. I have before me at this present writing a copy of his book dealing with these subjects which was printed in the year 1695, or some two hundred and thirty years ago. Another book which takes substantially the same position is the famous "Reliquiae Diluvianae" issued in 1824 by Professor William Buckland, F.R.S., professor of mineralogy and geology in the university of Oxford. Many other books taking the same view might be listed here. Suffice it to say that this explanation of how the fossils were buried held its place in standard scientific literature until the early part of the nineteenth century, when it was replaced by what is termed the Uniformitarian theory of Hutton and Lyell, the chief work of the latter having first been issued in the year 1833. Lyell's work on Uniformitarian geology, or evolutionary geology as it might more properly be called, was the chief preparation for the work of Charles Darwin which was issued in 1859. From that day to this evolutionary theory regarding the fossils and regarding the development of plants and animals in a naturalistic way, has been the popular and almost universally accepted explanation of the origin of our present system of land and water and of the animals and plants now inhabiting our world.

In the days of Lyell and Darwin it was universally assumed by scientific men that remains of plants and animals are even now constantly being buried in our seas and oceans. It was said that the rivers are constantly bringing down sediments of sand and mud into the lakes and oceans, and that the tidal waters and the ocean currents are likewise spreading out deposits over the ocean bottom. Hence it was said that if the ocean bottom were but lifted up above the sea so as to form the mountains and plains of our dry land, we would find the beds thus made in the ocean quite full of fossils, just as we now find rocks containing fossils in the mountain ranges of every continent on earth. It was furthermore assumed by Lyell that parts of the earth are constantly subsiding or rising in a slow, gradual manner, thus effecting an exchange of land and water here and there all over the globe.

But modern discoveries have not been kind to these theories of Lyell and the Uniformitarian geologists. First, the "Challenger" Expedition (1872-76) sent out by the British Government, began the work of examining the bottom of the ocean, which up to that time was wholly unknown to scientists. It was discovered that the ocean currents do not extend more than a thousand feet

or so below the surface, and that all the bottom waters of all the oceans are in a state of absolute calm. Over all the ocean floor there is no sand, no clay being shifted or moved; all the materials lying on the bottom of the ocean are in a state of absolute repose. It has been found that a fine soft ooze covers all the ocean floor, this material itself being proof that there are no currents there to disturb it. Thus there is no method by which a stratified or bedded formation could be produced at the bottom of the ocean under the present conditions. And thus the stratified beds found in our mountains and over all the continents must have been produced in some other fashion than those methods formerly supposed by the Uniformitarian These strata of the mountains and geologists. rocks now found high and dry above the sea are often found to be filled with sea creatures which are found living only in the deepest parts of the ocean, but to have them buried in limestone and shale, as we find their fossils have been buried, would seem to require a convulsion of the world and a disturbance of the ocean to its very bottom. In this way a catastrophic explanation of how these fossils were buried would seem to be the only adequate scientific explanation.

In still another way the modern discoveries have tended to refute the evolutionary theories regarding the burial of the fossils. The former view that the coasts of all the continents are rising in some parts and subsiding in others, seems in the light of our modern knowledge to be quite inaccurate. We have had instances where changes of level have occurred within historic times, but all such changes which we have observed have been sudden and abrupt in character. Some marks were placed upon the rocks on the shores of the Baltic and the North Sea nearly two hundred years ago to serve as a means of measuring the changes of sea level. But these have proved to be quite worthless as a means of scientific measurement because of the many uncertainties which enter into the problem. It has been found that these waters, which are little more than inland lakes connected with the sea, fluctuate considerably between wet seasons and dry; even a wind will pile up the waters of the Baltic many feet above the normal level and will maintain this difference of level for many days. On account of these and other facts which might be mentioned Professor Eduard Suess, one of the foremost of modern geologists, has declared that the measurements made around the coasts of the northern waters are completely untrustworthy in estimating possible changes of level. He discards entirely the idea that the coasts are rising in some places and subsiding in others. Speaking of the measurements around the waters of the north of Europe he says, "Even in these seas, displacements susceptible of measurement have not occurred within the historic period." ("The Face of the earth," Vol. 2, page 497.) And he writes the epitaph of the old evolutionary scheme of geology in the following words, "Thus, as our knowledge becomes more exact, the less are we able to entertain those

theories which are generally offered in explanation of the repeated inundation and emergence of the continents." (Vol. 2, page 295.)

The work from which I have just been quoting is a scholarly and elaborate discussion of all the problems regarding the causes which have produced the present condition of our earth. It was issued in the form of an Euglish translation from the German in four large volumes, and was published by the Oxford University Press, 1904-1908, and is without doubt one of the most scholarly works on geology issued in modern times. But it is a complete refutation of the Uniformitarian theories upon which the geology of Lyell and Darwin was built.

But there is another way of studying this subject. For the fossils themselves are often found under tell-tale conditions which give us quite clear ideas of how they were buried. I have already mentioned the fact that sea creatures which live only in the deeper waters of the ocean are often found embedded in the rocks. The crinoids and the brachiopods will serve as examples of what I mean. A crinoid is often called a "sealily." It is a creature somewhat like a star-fish, with many branching parts almost like the flower of a lily, and it is attached to the bottom with a long stem, both stem and the calyx part being composed largely of limestone. The crinoids are found only in the deeper waters of the ocean, usually a mile or more down; and it would require an awful convulsion to bury great quantities of their remains in well-stratified rocks, as we find them in England and America and over all the other continents. Remains of crinoids are even found interbedded between seams of coal both in Europe and America. the coal being the remains of plants living on the land. The brachiopods, too, are bivalve shellfish which also live chiefly in the deep waters of the ocean; but they also are very commonly interbedded with sandstone or even between the coal seams themselves in America, Europe, Asia, Africa and Australia.

The fishes are also found in enormous numbers in the rocks, buried in such a way that they must have met a sudden and violent death. Over all the continents we find rocks packed full of fishes extending over great areas, even many square miles in extent. In many places they have saturated the rocks with their oily remains in such a fashion that the rocks will burn almost like coal. Indeed I have a book written by a professor in the University of Pennsylvania only a few years ago which is entitled, "Fishes the Source of Petroleum." And this author makes out a very strong case for the theory that the remains of fishes buried in uncounted millions are the chief source of the vast deposits of mineral oil found here and there over the globe.

These are only some of the many proofs that might be mentioned to prove that in the long ago some dreadful catastrophe must have happened to the earth in such a way as to bury the creatures of both the ocean and the land in those rocky beds in which we now find (Turn to page 30)

## The Cause of Arteriosclerosis

By M. S. King, M. D.

Y to cer tak

blood pressure.

Y the term arteriosclerosis we mean certain degenerative processes that take place in the walls of the arteries which cause them to lose their normal elasticity. The walls of the blood

vessels are the most elastic tissues of the body. There is more or less of a relationship existing between arteriosclerosis and high blood pressure although a person having high blocd pressure does not necessarily have arteriosclerosis. By the term blood pressure we mean the force that is necessary to send the blood through the arteries. The blood stream is maintained under a certain degree of tension all the time. The principal factors upon which this pressure depends are the force of the heart beat, the elasticity of the arteries and the volume of the blood. As the blood stream in the arteries fluctuates with each beat of the heart, it becomes evident that the pressure varies accordingly. The maximum pressure as the heart contracts is called systolic pressure and measures the force of the heart beat. The pressure at the end of the contraction at the lowest point of the pulse wave is known as diastolic pressure and measures the resistance of the arteries.

We can imagine something of what the arteries are called upon to do when we realize that the blood constantly passes through the walls of the large arteries at a speed of about ten inches a second and the walls of the arteries are subject to a distending force of about twenty-five pounds per square inch, about 100,000 times in twenty-four hours. A constantly maintained high blood pressure causes extra strain on the arterial walls and tends to make them sclerotic and vice versa, sclerotic arteries tend to raise

A person's blood pressure is more or less of an index of his general condition. A life insurance company will refuse insurance when there is abnormal blood pressure about as quickly as they will for anything. It is a common expression that a man is as old as his arteries. The homely statement is none the less true. The normal arteries are very elastic and offer little resistance to the blood flow, but when for some reason degenerative changes take place in the arteries which impair the freedom of the circulation, to that extent is the health impaired and the life endangered. The elasticity of the arteries gradually changes the intermittent flow of the blood as it comes from the heart into a constant current.

Generally speaking, the systolic pressure as measured in the brachial artery when the individual is at rest measures between 90-105 in childhood, 130-140 in middle life and 150-160 after the sixtieth year. A pressure over 150 at any time is too high. In women the systolic pressure runs 5-10 degree lower than in men. The diastolic pressure should be about two-thirds of the systolic

pressure. The blood pressure under normal conditions varies quite a bit during a day's activities. It is lowest when sleeping and is increased by any form of mental or physical activity. When the blood pressure remains permanently abnormally high the condition is known as arterial hypertension. This condition is one of the most common as well as one of the most difficult clinical entities that we have to deal with in modern medicine. It is rapidly on the increase. The most common age at which it occurs is from forty to seventy. Two thirds of all cases occur between the ages of fifty and sixty. The most common type of individual to have high blood pressure is the stoutly built tending toward obesity, especially those who are inclined to be on a nervous tension. They are oftentimes people of apparently robust health. Because of the nature of their occupations it is more common in men than in women.

We are often asked the question, "What is the cause of arteriosclerosis and high blood pressure?" I wish I could answer that question satisfactorily. Though arteriosclerosis has been recognized for a long time and much painstaking effort has been expended in an attempt to discover the mode of production, we are to-day far from a clear understanding of its process. No one single cause can be held responsible for the condition. In some cases one condition, and, in other cases another factor seems to be the dominating influence. Undoubtedly there are several factors which euter into the cause of arteriosclerosis.

Probably the principal cause is to be found in our modern methods of living and the nervous tension and worry connected with it. The extremely tense spirit of the age and the irregularities attendant upon our modern civilization tend to cause such a condition. We live as much in one year as our fathers and mothers did in four or five. The shocks, thrills and excitement of our modern life is fast breaking down our mental equilibrium. The exigencies and strains of modern business and professional life are in no small measure responsible for the occurrence of arteriosclerosis. By nervous strain I do not mean the normal mental activity that a person uses in carrying on his everyday business because mental activity without nervous tension is harmless. Mental efforts even prolonged and arduous does not seem to be as much of a factor as worry and constant nervous tension. Particularly prone are those who are bearing the responsibilities of large business and financial interests. There is a tendency to burn the candle at both ends. Too often the modern business life is supplemented with social activities and indiscreet habits of eating and drinking and smoking. Much hard work can be done during the day if an adequate amount of sleep can be obtained at night. It might be said that arteriosclerosis is no respecter of persons, and

the physician, because of the strenuousness of his programme, is just as likely if not more so, to suffer from arterial disease as anyone else. It seems an unfortunate fact that to succeed in modern professional life it is necessary often to sacrifice health to reach success. Some people become tense under the slightest provocation. Their blood vessels contract and their blood pressure rises, while others remain unaffected under the most trying circumstances. The jazz-mad age in which we are living does not help the blood pressure of the highly-strung nervous individual. Hypertension occurs more frequently in that type of individual than in the man or woman of placid disposition.

The diet is undoubtedly another important factor in the production of high blood pressure. A diet high in proteins, especially meats, is usually supposed to be one of the main etiologic factors in the production of arteriosclerosis. It is true that the Oriental peoples who subsist largely upon rice and eat very little flesh food are not frequently subject to this condition. There is a great tendency to overeat and this tendency is not improving with the years. The man who is doing hard physical labour is able to take care of a heavy diet. Physical exercise aids in the proper digestion of food and promotes proper circulation of the blood. Most of us now-a days live more or less sedentary lives but our appetites go on just the same. Any form of toxemia is conducive to a high blood pressure. Just how much alcoholic liquor has to do with it is somewhat of a disputed question. There are some who think it has very little, others maintain that it has a great deal to do with it. Although we have had ten or twelve years of prohibition and arteriosclerosis has increased rather than decreased, I connot believe that the use of alcoholic liquors does one's arteries any good. I believe, however, that the use of tobacco is worse on circulatory disturbances. We are a nation of tobacco-users, in fact, smoking is almost a universal habit. Twenty years ago it was quite unusual to see a woman using tobacco, but pathetic as it may seem, it is a common thing now. Another almost universal habit is the use of tea and coffee, and I do not think we have any room left to doubt the effects of this habit upon the circulation.

It is also true that people whose occupation entails constant physical overstrain are frequent sufferers from arteriosclerosis. It is quite common among certain classes of labourers such as stokers, freight handlers, truck drivers, ice men, coal miners, iron workers and blacksmiths. It might be well to mention that the more violent forms of athletic exercise such as wrestling, boxing and long distance running, if excessively indulged in, have the same effect.

In recent years as our knowledge of infectious diseases has increased, it has become more and more apparent that severe infection stands out in important causal relationship to arteriosclerosis. Of all these infections, the most important is syphilis. Syphilis affects the arteries, especially the aorta, more than any other part of the body.

It is also quite evident that rheumatic infection, diphtheria, scarletina, pneumonia, influenza and other severe infections are responsible for arterial changes. In late years focal infections have become of great importance and chronic intoxication resulting from infection in the teeth, tonsils, nasal sinuses, appendix, gall bladder, prostate or pelvic organs may be a causative or contributing factor in the production of arterial changes. We often notice that the removal of abscessed teeth or infected tonsils has been followed promptly by a lowering of a previously persistent arterial blood pressure.

Chronic constipation and the resulting autointoxication is another form of toxemia which is
very much on the increase as a result of modern
irregularities and which must be taken into consideration. Thus it appears that the cause of
arteriosclerosis is a sort of hydra-headed monster.
At any rate, a return to the simple life, regular
habits, and an early to bed early to rise programme
of our fathers and grandfathers, is conducive to a
normal circulation and a normal blood pressure.

## Beside All Waters

May Carr Hanley

"Hush, my babe, lie still and slumber, Holy angels guard thy bed"



HE strains of the old, familiar lullaby sent a thrill through Mrs. Granger's heart. "Surely I am dreaming! I can almost see mother's face as she used to sing that sweet song in the twilight to

my baby brothers. That music is too backhomey to belong out here in these redwood mountains. Come, children, let's go and find the pretty music."

Fellowing the sound, they came into an opening in the forest. A cabin similar to the one Mrs. Granger now called home stood back in the clearing, and, seated on the low porch, a woman sat crooning to the sleeping babe in her arms. Her eyes had a far-away expression which implied that her thoughts were also a-winging, and were not on the words of her song.

The crackling of the twigs beneath the feet of Mrs. Granger and her children awakened the sleeping dog, and he sprang into action to defend his family.

"Shep, come back here! Where are your manners, sir? He is really very friendly," smiled the lady. "Won't you come in?"

"We are your new neighbours. We have just

settled ourselves over by the old mill site."

"Oh," laughed the lady, with a happy catch in her voice, "I'm so glad! I thought that we were the newest. We've been here only two weeks. And you have children? Won't that be lovely for each of us! I must lay the baby on the bed and find Bertie."

After such an easy introduction, the two mothers were soon deep in the mysteries of child rearing and housekeeping. (Turn to page 28)

# The Millennium—World Peace or World Catastrophe?

Most people have a faulty idea of what the millennium is; but the Bible teaching is plain.

EDWIN K. SLADE

TTACHED to the world millennium is one of the greatest delusions of all time. So deep-seated is the belief that it stands for, or is the name of, a future period of peace and perfection in this world that the word has become

tion in this world that the word has become practically synonymous with such words as righteousness, peace, and perfection.

The word has been adopted to name the period mentioned in the first, second, and third verses of the twentieth chapter of Revelation, which reads: "I

saw an angel come down from heaven, having the key of the bottomless pit and a great chain in his hand. And he laid hold on the dragon, that old serpent, which is the devil, and Satan, and bound him a thousand and cast him into the bottomless pit, and shut him up, and set a seal upon him, that he should deceive the nations no more. till the thousand vears should be fulfilled; and after

that he must be loosed a little season."

Taken alone, the passage has been supposed to teach that Satan is forced to discontinue his wicked work and that, as a consequence, all men become good and amiable and unwarlike. This has led to the conclusion that the world must be growing better, and all other scriptures have been interpreted to conform to this basic error.

That the trend of the world is downward is evident from every viewpoint. Speaking of last-day conditions immediately before His second coming, Jesus said: "As it was in the days of Noe, so shall it be also in the days of the son of man. They did eat, they drank, they married wives, they were given in marriage, until the day that Noe entered into the ark, and the Flood came, and destroyed them all. Likewise also as it was in the days of Lot; they did eat, they drank, they bought, they

sold, they planted, they builded: but the same day that Lot went out of Sodom it rained fire and brimstone from heaven, and destroyed them all. Even thus shall it be in the day when the Son of man is revealed." Luke 17:26-30.

The Lord has taken these two incidents of outstanding wickedness and ungodliness, which called for punishment and purification by flood and by fire from heaven, as a means of conveying to us a correct knowledge of conditions that would exist just preceding His second coming. The

conditions that existed just before the Flood are thus described: "God saw that the wickedness of man was great in the earth, and that every imagination of the thoughts of his heart was only evil continually." Genesis 6:5.

In the face of a peace-and-safety movement, the end is to come. "Of the times and the seasons, brethren, ye have no need that I write unto you. For your-selves know perfectly that the day

you. For yourselves know perfectly that the day
of the Lord so cometh as a thief in the night. For
when they shall say, Peace and safety; then sudden
destruction cometh upon them, as travail upon a
woman with child; and they shall not escape."
2 Thessalonians 5:1-3.

Wickedness and war will be at their height at the time of the judgment hour and Jesus' coming, as seen by the words of God's spokesman: "The nations were angry, and Thy wrath is come, and the time of the dead, that they should be judged, and that Thou shouldest give reward unto Thy servants the prophets, and to the saints, and them that fear Thy name, small and great; and shouldest destroy them which destroy the earth." Revelation 11:18.

"They are the spirits of devils, working miracles, which go forth unto the kings of the earth and of the whole world, to gather them to the battle of that great day of God Almighty. Behold, I come as a thief. Blessed is he that



The Destruction of Sodom

watcheth, and keepeth his garments, lest he walk naked, and they see his shame." Revelation 16:14, 15.

Thus we find that the conditions in the world are to be directly opposite to what is hoped for and looked for by those who have been deceived and deluded by the false theories of a millennium.

It is not difficult to determine the location of the millennium, for there are five great events marking the beginning of that period, and five more that occur at its close.

Just before Christ's return the seven last plagues are poured out as predicted in the sixteenth

chapter of Revelation.

The second coming of Christ follows, and, associated with that event is the resurrection of the righteous dead, as stated in the following passages: "As in Adam all die, even so in Christ shall all be made alive. But every man in his own order: Christ the first fruits; afterward they that are Christ's at His coming." 1 Corinthians 15:22, 23. "The

Lord Himself shall descend from heaven with a shout, with the voice of the Archangel, a n d with the trump of God; and the dead in Christ shall rise first: then we which are alive and remain shall be caught up together with them in the clouds to meet the Lord in the air: and so shall we ever be with the Lord."

1 Thessalonians 4: 16, 17.

It is at the time of the second coming of Christ that Satan is bound, for it is then that the the first resurrection occurs, which takes place

at the beginning of the thousand years.

One of the results of the coming of Christ is the death of all the unsaved. Paul makes mention of this in these words: "Then shall that wicked be revealed, whom the Lord shall consume with the spirit of His mouth, and shall destroy with the brightness of His coming: even him, whose coming is after the working of Satan with all power and signs and lying wonders." 2 Thessalonians 2:8, 9.

Also, at the beginning of the thousand years, all the saved are translated. This includes those who are living, who meet the Lord in gladness when He comes, as well as those whom He calls from the grave at the first resurrection at that time. "The Lord Himself shall descend from heaven with a shout, with the voice of the Archangel, and with the trump of God: and the dead in Christ shall rise first: then we which are alive and remain shall be caught up together with them

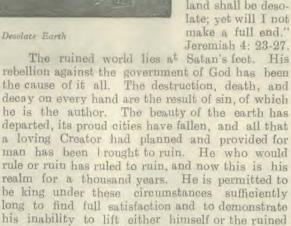
in the clouds, to meet the Lord in the air: and so shall we ever be with the Lord." I Thessalonians 4:16, 17. "In My Father's house are many mansions: if it were not so, I would have told you. I go to prepare a place for you. And if I go and prepare a place for you, I will come again, and receive you unto Myself; that where I am, there ye may be also." John 14:2, 3.

It is made very plain that from the beginning of the thousand years the world is without inhabitants. The wicked are all stricken dead. Only the righteous are called from their graves, and they, with the living righteous, are taken to

spend the millennium with God.

That there may be no misunderstanding concerning the condition of the world in this time which begins at the Lord's coming, we quote the following scripture: "I beheld the earth, and, lo, it was without form, and void; and the heavens, and they had no light. I beheld the mountains, and lo, they trembled, and all the hills moved light-

ly. I beheld, and, lo, there was no man, and all the birds of the heavens were fled. I beheld, and, lo. the fruitful place was a wilderness, and all the cities thereof were broken down at the presence of the Lord, and by His fierce anger. For thus hath the Lord said. The whole land shall be desolate; vet will I not make a full end."



During the whole period of the millennium the world is without inhabitants, for we read: "The rest of the dead lived not again until the thousand years were finished." Revelation 20:5. This situation brings Satan's work of tempting and deceiving to an end until the conditions are changed. There is no one to tempt or to damage or to deceive. His activities in this line are made to cease. He is bound by the (Turn to page 27)

world from this terrible downfall.



Sa: an Bound on the Desolate Earth

## Your Gallbladder

By Lester Whitaker



E have seen that improper eating habits or conditions associated with severe diseases or infection of the gallbladder with bacteria may result in damage to that organ. The trouble

originates almost always from one of two sources: (1) from gallstones produced as a result of abnormal function, or (2) from infection increasing to the point at which the gallbladder becomes severely,

perhaps dangerously, inflamed.

When gallstones form they may vary in size from minute dustlike particles to masses the size of an egg. Strange as it may seem, the smaller stones are more productive of evil than the larger ones. The small stones when pushed out of the gallbladder along with the bile by contraction of its muscle produce severe irritation of the passages through which they are forced. This results in the terrible gallstone colic. But more dangerous to life is the pessibility that one or more of these smaller stones in passage down the ducts may lodge at the restricted portion of the main bile duct just above its entrance into the intestine.

Obstruction thus produced not only prevents normal discharge of material from the gallbladder but also blocks the passage of bile from the liver. The bile then backs up into the liver and is there taken into the blood stream and carried throughout the body. Thus a yellow discolouration of the tissues called jaundice is produced. Bile, being a mild poison to the tissues, damages them more or less and of course lowers the vitality of the patient. Also the clotting power of the blood is reduced. For these reasons surgical operation on patients with obstruction to the bile passages is somewhat more dangerous than on patients without obstruction.

Nevertheless, an operation must almost always be done sooner or later to save the patient's life. How to prepare the patlent for it and when and how to do it is one of the nice problems of surgery.

In addition to the colic and the mechanical obstruction of the bile passages from small gallstones there is another type of disease of the gallbladder that may be quite as serious. The infection of the gallbladder previously mentioned as a probable cause of gallstones may increase in severity until the gallbladder is acutely inflamed and filled with pus, or the gallbladder itself may even become gangrenous. Gallstones, large and small, remaining in the gallbladder may play a part in this process by long continued irritation of the wall of the gallbladder, since they are churned about through its muscular contraction after

When the gallbladder becomes acutely inflamed the patient of course has fever, as from any other infection, and pain, generally in the upper part of the abdomen. The stomach, being closely associated, may express sympathy with the gallbladder through vomiting, thus stopping digestion and putting the whole alimentary tract including the gallbladder into a state of rest—a state most favourable under the circumstances.

The trouble must of course be dealt with. If the disease has progressed only to the stage of acute inflammation, the attack may subside with rest and proper care; if the gallbladder is filled with pus this must be removed surgically sooner or later, otherwise it may rupture into the abdominal cavity; and if the gallbladder is gangrenous operation should be done at once or the gallbladder may explode like a bubble, spreading infection throughout the abdominal cavity and resulting in death of the patient from peritonitis.

The decision as to when and how to operate in these cases of inflammation of the gallbladder is another one of the nice problems of surgery.

Obviously in patients with obstruction of the bile duets from stones or with acute inflammation of the gallbladder from infection the condition should have been treated and the danger averted before it became so serious. Modern medical and surgical knowledge now makes this possible.

While gallstone colic is the major symptom of disease in the gallbladder it is not the only one; in fact it may not occur. There may be cases in which no definite symptoms are noted. Such cases are likely to be those in which only large stones are present in the gallbladder. They are too large to produce symptoms by passing down the ducts and are prevented from damaging the gallbladder by the bile in which they float.

But usually disease of the gallbladder is indicated by general digestive disturbances—discomfort after meals, food remaining like "lead in the stomach," poor appetite, nausea, gas formation and belching (coming in attacks after taking indigestible food or coming more or less regularly after meals), vague, dull, dragging pains in the upper part of the abdomen, in the "pit of the stomach" or to the right, going around the right side to the back. There is often tenderness in these areas.

It is interesting to speculate on the direct cause of these symptoms. Some believe they arise from irritation due to inflammation of the gallbladder. This is possible but they may also be due to the passage of small particles or stones down the gall ducts, which is brought about by contraction of the gallbladder after meals. It is notable that foods which most effectively produce contraction in the gallbladder, such as rich, fatty foods, are usually those which aggravate symptoms of gallbladder disease in patients.

In disease of the gallbladder the patient may also have attacks of fever indicating a flare-up of the infection, or jaundice (Turn to page 20)

## CHRIST IS COMIN

By



ESUS is coming again. He came to earth nineteen centuries ago, and after a sojourn of thirty-three years He returned to heaven, where He has been ever since. But He is coming

the second time. He is coming to finish the work He began on His former visit,—the great work of

human redemption.

Some nineteen hundred years ago, when "the fulness of the time was come" (Gal. 4:4), Jesus our Lord appeared, and by His life, His ministry, His death, and His resurrection provided the groundwork of human redemption. Having paid the price of human redemption, He was exalted to the right hand of God in heaven, "to give repentance" and the "forgiveness of sins." Acts 5:31.

During all the time since then, He has, by His priestly intercession, ministration, and mediation, been applying this redemption to human beings, transforming lives, bringing lost souls to a rebirth, and thus preparing those who receive Him as Lord and Saviour to become subjects of the eternal kingdom over which He is to reign as King. And He is coming again to receive these subjects to Himself, to establish His everlasting kingdom, and to reign over it as King forever. His first coming was the sowing of the seed; His second coming is the reaping of the harvest.

When He was here nineteen centuries ago, He spoke of His second coming. He said He would come again. He admonished His disciples to be prepared for His return, He instructed them regarding the time of His return, He commissioned them to preach the message of His second coming, and He encouraged them to look to that event as

the consummation of all their hopes.

In that wonderfully tender, comforting talk with His disciples just before His crucifixion, when He admonished them, "Let not your heart be troubled," and pointed them to His Father's house and the many mansions there, Jesus said, "I go to prepare a place for you. And if I go and prepare a place for you, I will come again, and receive you unto Myself; that where I am, there ye may be also." John 14:1-3.

In Matthew 25:31 He speaks of the time when "the Son of man shall come in His glory," and in Matthew 26:64, after the high priest at His trial had angrily commanded Him to say whether He was the Christ, He replied, "Thou hast said; nevertheless I say unto you, Hereafter shall ye see the Son of man sitting on the right hand of power, and coming in the clouds of heaven," And again in Luke 21:25-27, after foretelling signs of His return, He said, "Then shall they see the Son of man coming in a cloud with power and great glory."

Not content with these plain statements, our Saviour reiterated the fact and certainty of His return in the parables He gave. In the parable of the talents, in Matthew 25:14-30, the going away of the Saviour to heaven is indicated by the man who took his journey into a far country; and the words, "After a long time the lord of those servants

cometh, and reckoneth with them,' teach the long absence of Jesus from the earth, and His ultimate return to reckon with His servants at the day of judgment. Then again, His return is indicated in the parable of the pounds, in Luke 19:11-27. Here the Lord said : "A certain nobleman went into a far country to receive for himself a kingdom, and to return. And he called his ten servants, and de-livered them ten pounds, and said unto them, Occupy till I come." The nobleman, representing Jesus, was not only going away. bnt he intended to return. His servants were to have continually in their minds the thought that it was not his purpose to remain away always, but that at some future time he would again appear. The charge given them was. Occupy till I come."

After Jesus had completed His earthly ministry and had gone back to heaven, His apostles constantly set forth the fact and certainty of His return the second time to this earth. Paul writes to the Philippians (3:20), "Our conversation



is in heaven, from whence also we look for the Savid He writes to the Colossians (3:4), "when Christ, who our life, shall appear, then shall ye also appear with in glory." To the Hebrews (9:27,28) he wrote, "As

## THE SECOND TIME

. Havnes



"Now, little children, abide in Him; that, when He shall appear, we may have confidence, and not be ashamed before Him at His coming." 1 John 2:28. John is shown the return of the Lord in a vision, and cries out, "Behold,

appointed unto men once to die, but after this the judgment: so Christ was once offered to bear the sins of many: and unto them that look for Him shall He appear the second time without sin unto salvation." And again (10:36,37), Ye have need of patience, that, after ye have done the will of God, ye might receive the promise. For yet a little while, and He that shall come, will come, and will not tarry." Here Paul is so positive of the return of the Lord the "second time" that he speaks of Him as "He that shall come," and says of Him most positively that He will come."

Peter, too, emphasizes the second coming of our Lord. He speaks of the scoffers of the last days who mockingly inquire, "Where is the promise of His coming?" These scoffers in their blind unbelief and willing ignorance are able to see no signs of His return, yet Peter assures his readers that "the day of the Lord will come as a thief in the night. 2 Peter 3:4,10.

John, the beloved disciple, also writes often of his Lord's return.

He cometh with clouds, and every eye shall see Him, and they also which pierced Him." Rev. 1:7. Again John represents Jesus as speaking to him, and saying, "Behold, I come quickly." Rev. 22:12. Truly Jesus is to return. The Bible so teaches. The certainty of His return is well established. There is, there can be, no doubt about it, for His word cannot fail.

The Bible not only sets forth the certainty of Christ's return, but it makes plain the purpose of it. Men may do things aimlessly and without purpose; God does not. The second coming of His son has definite objectives, as did His first coming. He is coming to raise the decd. Those who have died are to be made alive. Those who sleep in their graves are to be awakened. Those who have fallen down in death are to be raised up.

"Marvel not at this: for the hour is coming, in the which all that are in the graves shall hear His voice, and shall come forth; they that have done good, unto the resurrection of life; and they that have done evil, unto the resurrection of damnation." John 5:28,29.

Myriads of the faithful people of God are cold in death. One object of Christ's second coming is that He may raise the blessed dead. They are to to be raised at His coming.

"As in Adam all die, even so in Christ shall all be made alive. But every man in his own order: Christ the first fruits; afterward they that are Christ's at His coming."

1 Cor. 15:22,23.

"The Lord Himself shall descend from heaven with a

shout, with the voice of the archangel, and with the trump of God: and the dead in Christ shall rise first." 1 Thess. 4:16.

'At that time shall Michael stand up, the great Prince which standeth for the children of thy people: and there shall be a time of trouble, such as never was since there was a nation even to that same time: and at that time thy people shall be delivered, every one that shall be found written in the book. And many of them that sleep in the dust of the earth shall awake, some to everlasting life, and some to shame and everlasting contempt." Dan. 12:1,2.

So it is when "the Lord cometh out of His. place to punish the inhabitants of the earth for their iniquity," that the earth "shall disclose her blood, and shall no more cover her slain," Isa. 26:21. It is when the trumpet shall sound at the coming of Jesus that the dead saints are to be raised incorruptible, and the living saints shall be changed, in a moment, in the twinkling of an eye.' and be made immortal. 1 Cor. 15:51,54.

When Jesus returns, it will be to judge the world. There is to be a judgment. The Bible makes that plain.

"The Lord will judge His people." Ps. 135:14.

"God shall judge the righteous and the wicked." Eccl. 3:17.

"God shall bring every work into judgment."

Eccl. 12:14,
"We must all appear before the judgment seat of Christ." 2 Cor. 5:10.

"Every one of us shall give account of himself to God."

Rom. 14:12.
"The Lord knoweth how to deliver the godly out of temptations, and to reserve the unjust unto the day of judgment to be punished." 2 Peter 2:9.

The time of judgment will be when Jesus comes. To sit as judge on the throne of eternal justice is one of the objects of His return. God

"hath appointed a day, in the which He will judge the world." Acts 17-31, "The word that I have spoken, the same shall judge him in the last day." John 12:48. This "last day" is when Jesus comes. At that time the world will be judged. Then it shall be known whether or not our lives have been lived in vain.

Of Christ's second coming it is said :

"He cometh to judge the earth." Ps. 96:13.

"He cometh to judge the earth." Ps. 96:13.

"Our God shall come, and shall not keep silence...He shall call to the heavens from above, and to the earth, that He may judge His people." Ps. 50:3,4.

He "shall judge the quick and the dead at His appearing

and His kingdom." 2 Tim. 4:1.

Then, too, when Jesus comes, it will be to give rewards. "Behold, I come quickly; and My reward is with Me, to give every man according as his work shall be." Rev. 22:12. It is then that the righteous are to be rewarded for their faithfulness. It is then He will make up His jewels. He will send forth His angels, and they shall gather together His elect. Crowns will be placed on worthy brows, the redeemed will be arrayed in white, made immortal, and will joyfully enter upon their happy existence in God's kingdom, where nothing will ever come to molest, to mar, or to cause unhappiness. The trial of their faith is to "be found unto praise and honour and glory at the appearing of Jesus Christ," 1 Peter 1:7. It is when the Chief Shepherd shall appear that His people are to receive a crown of glory that fadeth not away.

And, lastly, when Jesus comes, it will be to redeem the earth. Not only the race, but the earth itself has been lost and is under a curse. God gave it to man at the heginning. Man sold himself and his dominion of the earth to Satan. The earth was subjected to the curse, under which it still groans and travels. It is out of order, torn, tossed, and racked like a sick man. A great malady is upon it. But harmony and beauty are yet to be restored. The second Adam will completely obliterate the works of the first Adam. Christ has purchased the earth. We are now waiting for the "redemption of the purchased possession." Eph. 1:14. When Jesus comes the second time, He will bring the earth back to its former beauty. It will then shine with more than its original glory. For when He comes, then shall take place the "restitution of all things...spoken by the mouth of all His holy prophets." (See Acts 3:20,21.)

"We according to His promise, look for new heavens and a new earth, wherein dwelleth righteousness." 2 Peter 3:13. "The meek shall inherit the earth; and shall delight themselves in the abundance of peace." "The rightcous shall inherit the land, and dwell therein forever." Ps. 37;

And in order to fit it for the dwelling-place of His people, the Redeemer will redeem it when He comes again. The Bible not only makes plain the certainty of Christ's return and the purpose thereof, but also sets forth the manner of Bis coming. His reappearance will be no secret, hidden manifestation. When He comes, He will come in person, He will come literally, He will come visibly, He will come in the open sight of all the world, He will come accompanied by a demonstration of glory and power never before witnessed on earth.

God poured out His Spirit on the day of Pentecost in a wonderful way; but that was not the return of our Lord. From that first outpouring until now the Spirit has been with true believers; but this is not the second coming of Christ. Jesus has been with His church for these nineteen centuries to aid, to comfort, and to bless, in fulfilment of His gracious promise, "Lo. I am with you alway;" but this is not His oft-predicted return.

The same Jesus who was crucified ; the same Jesus who was literally raised from the dead; the same Jesus who said, 'Handle Me, and see; for a spirit hath not flesh and bones, as ve see Me have" (Luke 24:39); the same Jesus who, in the clear sight of His assembled disciples, was taken bodily up into heaven and received into a cloud,-this same Jesus is to-return to earth in the sight of all its inhabitants, and in the same bodily form in which He went away. When He departed, two angels came and said to His disciples, standing on Olivet, "This same Jesus, which is taken up from you into heaven, shall so come in like manner as ye have seen Him go into heaven. Acts 1:11. And Paul, with equal force and positiveness, says, "The Lord Himself shall descend from heaven." 1 Thess. 4:16. Not a spirit, but "this same Jesus; "not a dispensation of Providence, but "the Lord Himself."

The whole heavens will flash with the awful splendour of our Lord's divine presence. shall come in His own glory, and in His Father's, "The Lord and of the boly angels." Luke 9:26. Jesus shall be revealed from heaven ... in flaming fire." 2 Thess. 1:7.8. When He came before, He was a weak babe in Bethlehem's manger; now He will be an all-conquering King. Before He was "despised and rejected of men;" now His lightnings will enlighten the world, and all the earth shall see and tremble. Before He was a sacrifice, and died on Calvary; now He comes as a judge sitting upon "a great white throne." Before His enemies crowned Him with thorns; now there will be on His head "many crowns," and His friends will "bring forth the royal diadem, and crown Him Lord of all." Before He came in humility and weakness; now He comes in radiant glory exceeding the brightness of the sun, and in the full exercise of all power in heaven and earth.

Down the pathway of the glory-gilded skies the Lord of glory will come, the keys of death and the grave hanging at His side, His head crowned with a halo before which the sun pales, His flowing robes more beautiful than the rainbow. He has gathered the finest clouds of the universe about Him, and with other clouds composed of myriads and myriads of angels, the immortal Conqueror, the eternal King, comes to receive to Himself His own. In a manner entirely befitting Him as Creator, Redeemer, Prophet, Priest, and King, He will be accompanied by a splendid retinue of shining seraphim. These brilliant bands will fill the glory-flashing firmament. How magnificent will be the advancing pageantry of the skies : How sublime will be the Lord Jesus when He "shall be

revealed from heaven with His mighty angels"! 2 Thess. 1:7.

He will come suddenly and unexpectedly. "In such an hour as ye think not the Son of man cometh." Matt. 22:44. When the wicked world is dreaming of pleasure; when the people are all unready; when the false cry of "Peace" is sounding over the earth, He will come. As the blinding glare of lightning from the heavens, so Jesus will come. Matt. 24:27.

"Behold," said our Lord, "I will come

quickly." "Not slowly, slowly, like twilight, Nor like the cold, creeping tide, Or bark, from its distant offing, Moving on o'er the waters wide; But instant! like sudden lightning In the depths of a tranquil sky, From west to east, in a moment The havor descends from on high. "The day of the Lord it cometh When the virgins are all asleep, And the drunken world is lying In a slumber yet more deep; Like the sudden lurch of a vessel, By night, on a sunken rock, All earth in a moment reeleth, And goeth down with a shock." -Bonar.

Christ is not only coming sometime. That is true, as has been plainly shown. But that is not all the truth. He is coming soon. He is coming quickly. He is at the door. His foot is on the threshold, His hand on the latch. Soon, and suddenly, He will come. Decades will not become centuries, and the centuries run on into millenniums, before we witness the fearful scenes of the end. But quickly, quickly, Jesus will come; speedily, speedily, He will return; soon, soon, He will be here, while men and women are putting far off the evil day, while they are trying to think it cannot come in their lifetime suddenly, oh, how suddenly, a change will come over the spirit of their dream, and they be awakened by the very voice of the Son of God as it rolls through the earth, speaking life to the righteous dead, but bringing terror and despair to those who are living in their sins.

Jesus, when on earth, not only said He would return, but explained how His people might know the time of His return. He foretold the conditions which would prevail just before His second coming; He gave signs which when they should occur, were to be understood as harbingers of the coming of the end of all things earthly. He told His people to watch. He gave evidences of the nearing of His coming. And then He said:

Now learn a parable of the fig tree: When his branch is yet tender, and putteth forth leaves, ye know that summer is nigh: so likewise ye, when ye shall see all these things, know that He is near, even at the doors." Matt. 24:32,33, margin.

Indeed, all through the Word of God there is set forth in the predictions of prophets and apostles the condition of the world and its various activities at the time of the ending of earthly affairs. And the condition of the world now

betokens that the end is near. The fulfilment of these divinely inspired prophecies gives reason, as never before, to expect the immediate coming of our long-absent Lord.

Surely we may know when harvest time has come by noting the condition of the ripening crops. When the full ears of grain hang ripe, the skilled husbandman does not wait long to gather them. None of us by ourselves could know what constitutes a ripeness for the eternal harvest, but this God Himself has revealed. The Lord has shown in His Word what is to be the condition of the world just preceding the time when He is to return. The crop of humanity and of human guilt has been a long time ripening. It is at last where the heavenly Husbandman will delay no longer.

There are evidences all about us, significant evidences, showing that we are truly nearing time's end. We see them in the abounding wickedness; in the coldness and lukewarmness of a formal, lifeless church; in the vast, warlike preparation of the nations; in the alarming increase of crime and lawlessness; in the strange phenomena in the heavens; in the fateful crash of the earthquake's shock; in the unparalleled development of human knowledge; in the growth of false religions; and in the steady advance of "this gospel of the kingdom" into all the earth.

Twelve of the great signs of the return of our Lord will be set forth in future issues. To a candid careful study of these, and their present significance, we earnestly invite the reader.

### The Healing Virtues of Cold Water (Continued from page 4)

health-giving beverage but that also it has distinct cleansing effects that are just as important for the inside of the body as a cleansing wash is for the skin. Drinking cold water then has the double effect of purifying the body and eliminating waste matter and of acting also as a genuine tonic. If a person is very weak and feeble and in a state of semi-collapse, and if the heart is so weak that it seems as though it were going to stop, sipping cold water is one of the best means of resuscitation known. The administration of an internal bath of cold water just before or just after taking the cold external application is of equal importance. Both acting together serve to give a fine start to the living machinery of the body and both, if possible, should be taken before the morning meal. After these cold applications, suitable exercise indoors or outdoors is the next step. Deep breathing exercises accompanied with swinging of the arms forward and upward or sideways and upward over the head or backwards for five to ten minutes, combined with other muscular exercises, serve to complete the physical treatment that would benefit most of us in the morning. Cold water should be taken not only in the morning before breakfast but also between the meals and during the day.

"How much?" someone says. It is difficult to lay down a fixed rule but the vast majority of people would certainly benefit by taking anything from five to fifteen glasses of water daily according to weather conditions and the general state of health. In some famous water cure institutions patients are ordered to take as much as twenty or even thirty or more glasses per diem, and they seem to benefit by doing so.

Let us further emphasize the great advantages of a tepid cool or cold morning bath of some description. Special facilities are not really necessary for this fine procedure for beginning the new day, but, of course, a modern bath room with its conveniences is undoubtedly an advantage. All that is really necessary is a basin of cold water and active administration of the same over the entire body, beginning with the face and then the neck and chest down to the feet. This entire procedure should only occupy a few seconds, less than a minute, and then one wraps up in a large turkish towel or sheet and dries one's self vigorously. The temperature of the water can easily be graduated according to one's experience in taking the bath. At first it might be ninety degrees and then gradually lowered to eighty degrees and seventy degrees and sixty degrees. If one has a bathtub, it is an advantage and a help to run about three or four inches of hot water in the tub to stand in, and then proceed with the cold application as already mentioned above.

Perhaps the most common disorder to which man is prone is the so-called "cold in the head" or some form of acute catarrh of the nose and throat. This is now so common that most people look upon it as inevitable and fail to realize the seriousness of these colds. It is a well established fact that colds are frequently the beginning not only of a simple catarrh of the upper respiratory passages but also of some serious inflammation, such as pharyngitis, bronchitis, pneumonia and other infections. It will be interesting to quote in full the experience of a Doctor Gross who visited Graefenberg for the inveterate "cold in his head." He describes the result of his brief visit in the following interesting fashion:

"As regards myself, who have left Graefenberg, after a stay there of sixteen days (a short time, but which will ever remain profoundly engraved on my memory), I am entirely cured of the cold in my head; but I nevertheless continue the external and internal use of cold water; and although far from scrupulous and still less we ided to any minute diet, I endeavour to be moderate in the enjoyments of life. If at all indisposed, I fast rigidly, and continually drink cold water. This manner of living affords me the satisfaction of keeping in perfectly good health, of feeling strong, gay and lively, and of being as young as anyone can boast of at fifty-three years of age."

Most people suffering from acute or chronic indigestion also complain of loss of appetite, that the food doesn't taste right and that if they do

take it they suffer from more or less stomach ache and other abdominal distress. Such patients also complain of a foul breath, a bad taste and a coated tongue. Of course, it is true that many of these cases require special medical attention. but the more simple forms can undoubtedly be relieved by the cold water cure if wisely applied. Most of such patients would benefit by taking two or three or even five or six or more glasses of tepid or lukewarm water on rising and thus giving their alimentary canal a thorough washing out. At the same time, or rather before drinking the water, they should clean the teeth thoroughly and also clean the tongue using for this purpose a brush soaked in water and well supplied with a good tooth paste. Then after cleaning the mouth, drink water freely. Some are able to take the water quite cold, and if so, the tonic effect seems to be still more noticeable. If such patients have too much acid in the stomach, they usually benefit by taking water rather freely with the meals, but at the same time they must not neglect to chew the food well. During the day they should drink a glass of water every half hour, taking it cold unless the effect is too chilling. In combination with the internal use of water the brief application for a few seconds of cold compresses to the stomach will give further aid in relieving the indigestion. Such brief applications of cold water aid materially in promoting the digestion and assimilation of the food. It is always wise to consult the family physician before resorting to cold water baths or applications to ascertain whether they would be suitable or safe for the individual case.

### Your Gallbladder

(Continued from page 15)

resulting from temporary blockage of the main bile duct with stones.

From a thorough study of all these signs and symptoms the physician may be fairly certain that the patient has a diseased gallbladder. He may become more certain and also learn more of the exact conditions by employment of a valuable new x-ray test known as cholecystography, which was devised by Drs. Graham and Cole and their associates of Washington University, St. Louis.

A substance containing the dense element iodine is injected into the vein of the patient or given by mouth. This substance is taken cut of the blood by the liver and thrown into the bile. We have seen that bile from the liver collects in the gallbladder during fasting. We have also seen that this bile is concentrated in the gallbladder by absorption of its water. Thus after the patient takes this substance iodine is stored in the gallbladder in rather large quantity. Dense elements, such as lead, iron and iodine, and dense materials, such as bone, have the power of checking the passage of x-rays, producing shadow forms on exposed photographic film. (Turn to page 25)



### Making Home Homely By Marie Blanche

Decorations, Comforts, etc.

THERE are many decorative jobs in the home that can be done by one or the other of the family without calling in professional assistance. Such things as painting wood-work, staining floors, and even papering walls, only call for a little care and patience. If you are enterprising and artistic you can even decorate your ceilings, or colour-wash them according to fancy. Nor will you be the first woman to undertake such a job. Many of us, since the war, have become our own house decorators, and that with conspicuous success. What you need is plenty of time, a good courage, and an enveloping overall; added to this, if you propose whitewashing a ceiling, you will need some sort of cap to cover your hair and a pair of protecting goggles. Splashes are inevitable no matter how neat a worker you may happen to be.

Colour is an important point. It plays an enormous part making rooms cheerful and homelike. But beware of a haphazard use of primary tones. Nothing must clash, and no beauty can be achieved by dabbing bits of red, blue, and vellow at every point of the compass. A random use of raw colour can only produce a jarring result and, as the psychologists and colour students warn us, violent and crude mixtures have irritating and destructive influences upon the nerves of those with ultra-sensitive susceptibilities. Once you have planned your colour scheme launch out. Don't be afraid of clear direct tones. They are far more effective than the so-called art and pastel shades, and most fabrics now are rendered fadeless. Remember, too, that all colour should be used largely and with a definite intention not peppered or sprinkled out in a tentative, hesitating way. You do not want to get an "all overish" effect, so try to cultivate a largeness of vision, even though your rooms happen to be small, and distribute your colour with a bold, free hand. This is the way to escape a patchwork effect, and to arrive at a well balanced result.

Comfort in the home is vital. It is all very well to harden and keep one's "vile body in subjection," but life shorn of all ease and comfort is not our idea of home in these days. In summer we may not think about these things, but when chilly days come along most of us like an easy chair, a cheery fire, soft slippers, and thick draught-excluding curtains. It is only the very young who turn up superior noses at the mention of a cosy dressing gown and fleecy sleeping socks. Of course we have all heard folks roundly abusing the hot water bottle as unhealthy, unnecessary, and even injurious. Well I am dead against all coddling. I hate props. But circumstances alter cases. For instance, old folks who have a poor circulation and cold blood need extra warmth at the extremities, if they are to sleep comfortably.

And so if you have an aged father or mother in your home circle don't try and convert them into Spartan warriors, don't urge them to harden and endure, because if you do, you will probably hasten them underground long before the fates have decreed that they should go there. Health specialists and reformers of the younger school may argue that hot water bottles, night caps, and sleeping socks are unhealthy fads. But I have never yet come across an octogenarian who, having with advancing years experienced in his own person the need for these little home comforts, had anything but praise and appreciation for them. When you and I reach eighty years we shall probably pocket our grand theories and be thankful for comforts, all and sundry, that come our way. And so let the old members of the family have all the home comforts we can give them, all the warmth, and rest, and ease they need. They will repay us with a gratitude that will make our little trouble very much worth while.

And don't you think that the presence of old people in the home makes for homeliness? A dear old lady, or a cheery old gentleman tucked up in an easy chair by the fire always seems to me to give the same effect as the purring cat or singing kettle. A distinct touch of homeliness.

Good Health, England.



### Miss May and Her Class By Belle Wood-Comstock, M. D.

MARY Smith, what is the body like?" "It's like a plant, because it grows." "Johnnie Jones, what do you say the body is like?"

"I think it's like an automobile, because it runs."
"And Jimmie Brown, what do you think?"

"Why, I think the body is like a house, because—because—we build it."

'Fine. Those are all good answers. And, children, are a set of teeth, a pair of eyes, of hands, of feet, worth as much as a saw, a hammer, a rake, a shovel, or a hoe?''

'Oh, they are worth much more.' "And which is more important, to take care of the body, or to take care of a plant, an automobile, or a house?"

"We ought to take care of all of them; but it is most

important to take care of the body."

"All right, then. Now, Mary, what is the most important thing a plant does?"

"It grows.

"Surely! That's right. Now I wonder if you ever thought about when your body plant does most of its growing. Listen while I tell you: It is when you are asleep. Now ing. Listen while I tell you: It is when you are asleep. Now let us call the body an automobile. When does the body automobile lay up for its daily repairs. It is during sleeping time. And if your body is like a house, when does it do most of its building? While you are asleep. Well, then, sleep is a pretty important thing, isn't it? And not to get enough of it, would be a serious matter, wouldn't it? The body plant wouldn't grow enough: the body automobile couldn't be kent in proper repair; and the body house could. couldn't be kept in proper repair; and the body house could not be built as strong as it should be.

What time do you go to bed, Johnnie?"

"Oh, I always hate to go to bed, Miss May: and I stay up as long as I can, sometimes until nine or ten o'clock.

"What time do you get up, Johnnie?"

"It is awfully hard to get up in the morning. I stay in hed until sometimes I have to miss my breakfast or be late to school."

'Well, Mary, how about you?"

"Mother has an awful time getting me to bed. I am supposed to go to bed at eight, but it is most always nine."

How about getting up?

"Oh, I am always sleepy in the morning, and it makes me feel cross to have to get up: and sometimes when I cry and won't eat my breakfast, Daddy says I must have gotten up out of the wrong side of the bed. I never could see what he means by that.

"And Jimmie, how about you?"

"Why, mother tells me that if I want to be bigger than the other boys and get my lessons fine, I must go to bed early; so I begin to get ready at a quarter to eight, and run a race to beat the clock and be in bed when it says eight.

"Oh, yes, I like to get up in the morning to have breakfast with Daddy before he goes. Sometimes I wake up at half-past six; but when I an extra tired, I sleep till nearly seven. Mother says it is easy to be a good boy all day if I sleep until my eyes open themselves, and that when they do that, I have had all the sleep I need for one night."
"That is fine, Jimmie. I have noticed how bright your

eyes always are every morning, and how rested and happy you always look, and how quietly you study every day. Now, children, how many hours are there in a day?"
"Twenty-four."

"That is right. Did you know that while one half of the twenty-four hours are spent in study, work, and play, nearly all of the other half should be spent in sleeping and growing. And did you know that it is during the twelve waking hours that the body gathers in the things it needs for repair, for growing, and for building, but that it is mostly during the sleeping time that it is able to use these things? Most children do not get enough sleep. This is often the reason why they are cross and fretful; and many times, it keeps them from having the strong well-built bodies they body plants they might have by sleeping ten to twelve hours every day, they would be asking to go to bed early, instead of teasing to stay up late."

''Miss May, I'm going to be in bed by eight o'clock this very night." would like to have. If children only knew what excellent

"That is fine, May. And Johnnie?"
"I'll beat her one. I'll be in bed by half-past seven."

## "Honesty is the Best Policy"



IMMIE'S face was pressed close to the shop window. "This Bicycle Only £2," said the sign. What a fine one it was! How the nickel shone! For months Jimmie had been saving to buy a bicycle. Now he had been saving to buy a bicycle.

just 24s. How could be earn the rest?

At last he turned away from the window and started off with Pete at his heels. Pete was Jimmie's dog. Just then a tall man hurried by. Jimmie wasn't sure, but he thought it was Mr. Watson, a man his father knew. Suddenly Jimmie stopped. What was that on the path? In a moment he had it in his hand. A crisp, new £1 note, Now, who could have lost it?

But what was the matter with Jimmie now? stopped again. And what a queer look he had on his face. First he stared down at the note, and then after the man, but still he did not move. An ugly thought had come into Jimmie's head. £1! Just what he needed to buy his bicycle.

"Well, why can't I keep it?" he said to himself.
"P'r'aps that man didn't drop it. I didn't see him.
P'r'aps it wasn't Mr. Watson, after all. And there! He's

gone, anyway !"

Jimmie drew a long breath, and then he put the money into his pocket. For a while Jimmie forgot all about the tall man. He whistled to Pete, and raced him home to

'To-morrow I'll race you with the bicycle, Pete," he

Father and Jimmie had dinner together. Poor Jimmie

had no dear, good mother to love and help him. But he had father, and Jimmie thought father was just right. He was going to tell how he found the wonderful note. Then he stopped. "What will father say?" he thought.

stopped. "What will father say?" he thought.
Ah, yes! Jimmie knew what father would say. He
would ask, "Do you know who dropped it?"
Somehow after that, Delia's chocolate pudding didn't
taste good. Jimmie wasn't hungry.
"Not eating to-day, Jimmie? What is the matter?"
asked father. "We'll have to buy that bicycle, and get you out into the fresh gir."

That made Jimmie feel worse than ever. After dinner he started out for the barn. Just then he saw someone coming in the gate. Could it be? Yes, it certainly was Mr. Terry, the policeman. Jimmie made one dash. He reached the barn and scrambled, panting, up to the hayloft. He crept along on his hands and knees until he came to a big crack in the wall where he could look out. Yes, the policeman had gone to the door and was talking to Now he had gone inside. Jimmie threw himself down on the hay. What should he do? Oh, what should he do? Only last week he had heard a man say that father was the straightest, most honest man in town. "And he said that I was like him. But I'm not. I'm not. I st-stole. And now the policeman is coming to put me in g-gaol."

Again Jimmie heard voices. He peeped through the crack once more. The policeman was coming out.

he come to the barn?

No. Jimmie could hear him saying to father, "If you'll step down the street and tell them what to do—" He had come to see father on business. He didn't want Jimmie at

That night, after supper was over, a very sober little boy came to father and held out the pound note. "Why, what's this for ?" asked father, laying down his paper.

"I—I found it," answered Jimmie.
"Do you know who lost it?"

"N-no, Yes. I mean I think it was a big, tall

"A big, tall man? There are a great many big, tall

men, son."
I think—he looked like Mr. Watson," said Jimmie,
"Oh! Now tell me all about it." And father took

even Jimmie's fright about the policeman.
"Well, Jimmie," he said, "it doesn't make us happy
to go wrong, does it? Now, to-morrow you must make all this straight. We'll go together and give the money to Mr. Watson. I'll show you how to earn enough for the bicycle, but we don't want to keep that note."

## What is a Boy?

HE is a person who is going to carry on what you have started.

He is to sit where you are sitting, and, when you are gone, attend to those things you think are so important.

You may adopt all the policies you please, but how they will be carried out depends upon him.

He is going to sit at your desk in the office, and occupy your place in the government.

He will assume control of your cities, and of your nation,

He is going to move in, and take over your prisons, churches, universities, and corporations.

All your work is going to be judged and praised or condemned by him.

Your reputation and your future are in

All your work is for him, and the fate of the nation and of humanity is in his hands.

So it might be as well to pay him some attention, -Anon.



## OUR BIBLE READING

"The entrance of Thy Word giveth light"



### Was Man Created Immortal?

#### J. A. Stevens

1. By whom were all things created?

"In the beginning was the Word, and the Word was with God, and the Word was God. The same was in the beginning with God. All things were made by Him; and without Him was not anything made that was made....And the Word was made flesh, and dwelt among us, (and we beheld His glory, the glory as of the onlybegotten of the Father,) full of grace and truth." John 1:1-3, 14.

John 1:1-3, 14.

"To make all men see what is the fellowship of the mystery, which from the beginning of the world hath been hid in God, who created all things

by Jesus Christ." Ephesians 3:9.

"Unto the Son He saith, Thy throne, O God, is forever and ever...And, Thou, Lord, in the beginning hast laid the foundation of the earth; and the heavens are the works of Thine hands." Hebrews 1:8-10.

What was God's purpose in the creation of the world?

"Thus saith the Lord that created the heavens: God Himself that formed the earth and made it: He hath established it, He created it not in vain, He formed it to be inhabited: I am the Lord; and there is none else." Isaiah 45:18.

"Thou art worthy, O Lord, to receive glory and honour and power: for Thou hast created all things, and for Thy pleasure they are and were

created." Revelation 4:11.

3. What place in God's plan was man to

occupy ?

"God said, Let us make man in Our image, after Our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepth upon the earth. So God created man in His own image, in the image of God created He him; male and female created He them." Genesis 1:26-28.

"What is man, that Thou art mindful of him?

"What is man, that Thou art mindful of him? and the son of man, that Thou visitest him? For Thou hast made him a little lower than the angels: and hast crowned him with glory and honour. Thou madest him to have dominion over the works of thy hands: Thou hast put all things

under his feet." Psalm 8:4-6.

#### 4. How was man created?

"The Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul." Genesis 2:7.

5. Upon what condition was life to be eternal?

"The Lord God commanded the man, saying, Of every tree of the garden thou mayest freely eat; but of the tree of the knowledge of good and evil, thou shalt not eat of it; for in the day that thou eatest thereof thou shalt surely die." Genesis 2:16,17.

"Ye shall therefore keep My statutes, and My judgments: which if a man do, he shall live in them: I am the Lord." Leviticus 18:5.

6. What terrible consequence would follow disobedience of God's commandments?

"Of the fruit of the tree which is in the midst of the garden, God hath said, Ye shall not eat of it, neither shall ye touch it, lest ye die." Genesis 3:3.

"Behold, all souls are Mine: as the soul of the father, so also the soul of the son is Mine: the soul that sinneth, it shall die." Ezekiel 18:4.

7. How does the Bible define man's nature?

"Shall mortal man be more just than God?
shall a man be more pure than his Maker?"
Job 4:17.

"So when this corruptible shall have put on immortality, then shall be brought to pass the saying that is written, Death is swallowed up in victory." 1 Corinthians 15:54.

8. With whom is inherent immortality?

"Now unto the King eternal, immortal, invisible, the only wise God, be honour and glory forever and ever. Amen." 1 Timothy 1:17.

"The blessed and only Potentate, the King of kings, and Lord of lords: who only hath immortality." 1 Timothy 6:15,16.

9. How may we become immortal?

"Who will render to every man according to his deeds: to them who by patient continuance in well-doing seek for glory and honour and immortality, eternal life." Romans 2:6.7.

"This is the will of Him that sent Me, that every one which seeth the Son, and believeth on Him, may have everlasting life; and I will raise

him up at the last day." John 6:40.



Do persons engaged in hard brain labour require an extra amount of food?"

The interesting and exhaustive researches that have been carried on by Benedict and others, have shown that the amount of food required by a person doing the very hardest kind of brain work is scarcely more than that required by the person who simply loafs, doing nothing at all. It appears from these experiments, and those of Rubner and other European investigators that the amount of food required depends first upon the amount of heat lost, since two-thirds to three-fourths of all the food eaten is consumed in maintaining bodily heat, and second upon the amount of muscular work performed. The actual amount of food required by a sedentary person engaged in mental work, during ten hours a day is not more than two-thirds the amount needed by a person engaged for the same length of time in vigorous muscular work.

"In what cases is the use of dried thyroid gland indicat-

Persons whose thyroid glands are inactive-the condition of so-called hypothyroidism, are benefited by the use of dried thyroid gland (sheep's thyroid). There are numerous indications of this condition, among which are dryness of the skin, pigmentation and atrophy of the skin, and falling of the hair with other symptoms. It is important, however, to note that when taking dried thyroid a thoroughly anti-toxic diet must be adopted. Fresh vegetables and especially uncooked fruits and vegetables should be freely used. Tonic baths, an outdoor life and free water drinking are other measures important in such a case.

"Is sugar normally found in the blood, and in what quantity?'

The normal blood contains about one part of sugar in one thousand.

When the amount of sugar is greater than this, sugar appears in the urine. In cases of diabetes, the amount of sugar in the blood may become three or four times the

In diabetes the sugar of the urine may be made to disappear while an excess of sugar in the blood still remains.

"What is the difference in the amount of oxygen present in the air on a mountain top and at sea level?'

The density of air depends upon the weight of the overlying atmosphere. It varies slightly at different times of the year, and in different parts of the world, and with the amount of vapour which it contains,

The air becomes rapidly less dense, as one rises above the sea level. At an elevation of two and seven-tenths miles, the amount of oxygen contained in a given quantity of air will be proportionately lessened, one-half what it is at sea level. It is calculated that at a height of 100 miles the pressure is one one-millionth of that at the earth's surface. The boiling point which at sea level is 212 F., diminishes one degree for every 350 feet of elevation above sea level At the top of Mount Shasta, water boils at about 170° F

"Maybe you can tell me some causes for a humming noise in my right ear. It is quite annoying at times. I do not hear a thing. What would cause my temperature to be

The humming noise may be due to middle-ear trouble, or to internal-ear trouble. An examination by an ear specialist or perhaps your doctor can determine which. There are some fifty different conditions that may cause

Perhaps your body fires are burning low. This may be from a lessened function of the thyroid gland, or it may indicate a beginning tuberculosis or perhaps something else. There are a good many things that will cause subnormal temperature various kinds of poisoning, various heart conditions, and various affections of the nervous system, including neurasthenia. Your doctor who examines you will have to determine which it is in your case.

"What foods have little or no waste matter, but are thoroughly digested after being taken into the body? How treat constipation caused by overuse of physic?'' Why would you want foods with no waste? Nature

seems to have put waste in foods for a purpose. It is the waste matter-the roughage that prevents constipation. Very few people who eat freely of roughage suffer from constipation. It is the refined foods, white bread, etc., that cause constipation.

White sugar is nearly 100 per cent pure. It comes about the nearest to being pure nutrition of any food we have. There is practically no waste. But that does not mean that sugar is a desirable food except in very small

quantities.

Milk has no waste (except the water) and so tends to be constipating. It is about the only natural food that leaves no residue. Cornflour and the various other starches, such as tapioca, are digested with little or no residue. But be assured that a diet made up of such foods would be a very poor diet. Possibly I do not understand your question.

A person who has been long addicted to physic will have to be patient in the effort to overcome the habit. The procedure is rather lengthy for a letter, but it should include the free use of laxative foods, figs, dates, an abundance of fruits and vegetables, but avoid foods that cause the forma-

It may be necessary to use some mechanical aid, such as agar, mineral oil, or one of the mixtures of the two, sold in the pharmacies. There must be very free water drinking, say eight to ten glasses a day, beginning with two glasses on

rising in the morning.

"What can be done for infection in the bones? It acts much like inflammatory rheumatism. Is an operation necossary? What treatment will help? Will medicine be of any permanent benefit?"

How do you know you have infection in the bones? The first thing to do would be to learn exactly what is the matter. If you have infection in the bones, you probably need surgical attention; but perhaps what you have is something else, and that would have to be determined by a careful personal examination.

It is possible that hot treatments applied directly to the part may benefit you, at least temporarily. Try a hot fomentation; and if that does not do, try alternate hot and

cold applications.

There is a possibility that you have some infection as a result of diseased teeth or diseased tonsils. In that case remedying the condition in the mouth, that is, taking out all the teeth that are in any way diseased, and possibly removing one or both tonsils if they are diseased, may be what is needed to stop the process in the bones; or it may be that your nasal sinuses (the air passages in connection with the nostrils, located in the bones of the head) may be infected and the infection is spreading from there to the bones in other localities.

You need a thorough examination to determine what is the matter. An attempt at treatment without such examination is a waste of time, and may do you more harm

than good.



### Your Gallbladder

(Continued from page 25)

If a key is placed on a photographic film and then exposed to x-ray the outline of the key will be clear and white where the x-rays have not penetrated the iron, while the film about will be black from the effect of the rays. Thus the gallbladder containing iodine, placed there for purposes of the test, will show up as a shadow form like that of the key on the film.

Thus from symptoms, physical examination and the aid of special tests, the physician can learn not only that the gallbladder is diseased but in what way it is diseased and from this knowledge may be enabled to treat it properly. If the symptoms are slight and tests show the gallbladder to fill and empty fairly well there is a possibility that proper medical treatment and care with diet will cure the disease. But if the gallbladder contains stones too large to pass through the ducts or is too much inflamed to fill and empty properly the only possible cure is by surgery.

There is no possible method other than surgery of removing gallstones too large to pass the bile duets. Any person who claims to be able to dissolve gallstones is a menace to human life. It cannot be done. The stones will simply remain a future source of trouble.

In case some one denies this, let him consider what follows. One of the chief constituents of gallstones, calcium carbonate, can only be dissolved by some strong acid like nitric, and the other, cholesterin, only by chloroform or some related solvent. In order to dissolve the stones these chemicals would have to reach the gallbladder through the blood. A teaspoonful of chloroform or nitric acid injected into the blood stream of a cat or dog would result in quick death. Medical treatment may be employed, then, in mild cases of gallbladder disease but surgical treatment must always be used in severer forms.

Some patients are fearful that removal of the gallbladder will injure them in some way. While the gallbladder does have a definite function it is only an accessory function and not a vital one. The liver without the gallbladder furnishes sufficient bile for digestion.

The prevention of gallbladder disease consists, first, as in all other diseases, in maintaining a high state of vitality by proper regulation of life and care of the body, in order that all its functions including that of the gallbladder, may proceed with vigour. More particularly the function of the digestive tract and the gallbladder should be kept active by proper dietetic care—avoidance of stuffing, eating too frequently or between meals, eating without appetite and over eating of rich, fatty or irritating foods.—Hygeia.

#### MEATLESS RECIPES

#### FRUIT SOUP

Strawberry or other juice, 1 cup Lemon juice, 1 tablespoon Pineapple juice, 1 cup Sago, 1 tablespoon

#### Sugar, 1 tablespoon

With the strawberry or other juice cook the sago in double boiler; add the pineapple and lemon juice and sugar; cool, and serve in sherbet cups with chipped ice.

#### MOCK TURKEY WITH DRESSING

Dhal, 1 oup Walnut meats chopped 1/2 cup Milk 1 cup Salt

Bread orumbs Onion minced 1/4 cup Celery chopped, 1 cup Eggs, 2

#### Bread, sliced

Thoroughly wash the dhal, boil slowly until tender, and run through a colander. Add the walnut meats, one egg, and the minced onion browned with the chopped celery in a little oil. Add salt and sage to taste, Thicken with bread crumbs. Bake in oven.

#### DRESSING No. 1

Stale bread, 1/2 loaf Eggs, 1 or 2 Cold Milk, 2 cups Butter, 1 tablespoon Crumb the bread, and soak in the milk. If the bread does not take up most of the milk, pour off some of it. Stir in beaten egg, add season with salt, sage, butter, and onions.

#### DRESSING NO. 2

Eggs, beaten, 2 Onion, large, 2 Stale bread, crumbed, 1 cup Parsley, chopped, 2 tablespoon Milk 3/4 cup Butter 1/4 cup Milk 3/4 cup Sage, 1 tablespoon Salt to taste

Peel and parboil the onions. Drain, and chop fine. Soak the bread crumbs in the milk, then mix all the ingredients together. Bake until set. Serve a slice of roast with a spoonful of dressing on one end and jelly on the other.

#### COMBINATION SALAD

Wash and prepare lettuce and tomatoes. Shred lettuce and cut tomatoes in quarters. Add two or three sliced hard-hoiled eggs and a few garden peas if in hand, a finely-sliced onion or a few spring onions; also a little cucumber. Over all pour a mint sauce made from finely-chopped mint in lemon juice diluted with an equal quantity of water. Only a very small quantity is necessary so as not to make the salad too wet.

#### FAVOURITE SALAD DRESSING

Butter 1/2 dessert-spoon

Flour, 1 heaped dessert-spoon, salt Lemon juice, 1/4 cup Melt the butter in saucepan, but be careful not to brown it. When hot, stir in the flour, and the hot lemon juice, diluted with one-fourth cup of water. Beat in thoroughly the egg yolk, salt to taste, and remove. When cool, stir this dressing through the vegetables, and serve on a garnish of crisp lettuce.

#### STRAWBERRY SHORTCAKE

Cream 1 cup

Flour to make a medium soft dough Yeast, 1 tablespoon Warm the cream to about seventy degrees, and add the salt, yeast, and about two cups of the flour. Mix thoroughly, cover, and set in a warm place to rise. When well risen and lively, add the rest of the flour, and knead until perfectly smooth. Roll out about half an inch thick. Put into greased pans, brush the top with melted butter, let rise until about double its original size, and bake. Split, and fill with whole or crushed berries, sprinkled with sugar. Two teaspoonfuls of baking powder may be used instead of the yeast, mixing it with the flour.

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## The Millennium—World Peace or World Catastrophe?

(Continued from page 14)

circumstances that exist during the thousand

years

A fitting comment on the binding of Satan is found in these words: "God spared not the angels that sinned, but cast them down to hell, and delivered them into chains of darkness." 2 Peter 2:4. "The angels which kept not their first estate, but left their own habitation, He hath reserved in everlasting chains under darkness unto the judgment of the great day." Jude 6.

The end of the millennial period is marked by the following events: the resurrection of the wicked, known as the "second resurrection;" Satan is loosed or unbound; the holy city descends; Christ and the saints appear; and Satan and the wicked are destroyed as they seek to wage war against

the holy city.

The record is very specific in saying that the angel laid hold upon the devil and "bound him a thousand years," and that he "cast him into the bottomless pit, and shut him up, and set a seal upon him, that he should deceive the nations no more, till the thousand years should be fulfilled," and that "after that he must be loosed a little season." Revelation 20:3. As the removal of all mankind from the earth "bound" Satan and stopped his deceiving the nations, the peopling of the earth again would serve to "loose" him.

The seventh verse of Revelation 20 reads: "When the thousand years are expired, Satan shall be loosed out of his prison." Just how is it that he is loosed at the end of the thousand years? The fifth verse, by unmistakable implication, tells us what happens, in these words: "The rest of the dead lived not again until the thousand years were finished." At the end of the thousand years, "the rest of the dead," or the unsaved of the earth, are raised to life for a short period. This is how it is that Satan is "loosed a little season" to again take up his work of deception and temptation at the end of the thousand years. So we see that the millennium is definitely located as to time, clearly bounded as to beginning and ending by these many great events, and unmistakably described as to its nature.

The unsaved dead of all time are called from their long sleep at the termination of the thousand years. We read: "The sea gave up the dead which were in it; and death and hell [the grave] delivered up the dead which were in them." Verse 13. A vast company, "the number of whom is as the sand of the sea," is given just this "little season" with their leader and deceiver, prior to the final punishment for sin, the "second death." The hour has arrived for the purification of the earth and for the final punishment for sin. The righteous who have had a part in the judgment are to witness this closing scene: "When the wicked are cut off, thou shalt see it." Psalm 37:34.

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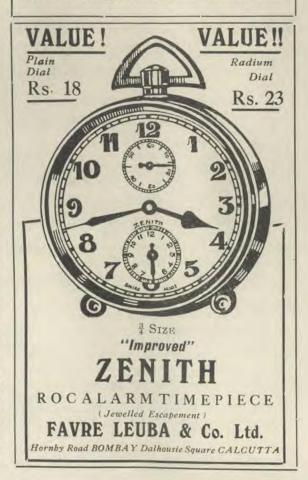
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Christ, with the saved who have spent the thousand years with Him in the "place" which He had prepared for them, returns to execute the judgment that has been fixed. The last stand of Satan in this great controversy and warfare against God and His government, His truth, and His people, is briefly mentioned in these verses: "When the thousand years are expired, Satan shall be loosed out of his prison, and shall go out to deceive the nations which are in the four quarters of the earth, Gog and Magog, to gather them together to battle: the number of whom is as the sand of the sea. And they went up on the breadth of the earth, and compassed the camp of the saints about, and the beloved city: and fire came down from God out of heaven, and devoured them." Revelation 20:7-9.

This scene quickly follows the millennium. The men of earth of all ages are witnesses. The vast throng of the unsaved are with Satan and the fallen angels. The saved are with their Redeemer, safely sheltered in the New Jerusalem. All heaven is watching to see if there is any change in the purpose of Satan, if the thousand years of ruin and desolation have led him to turn from his rebellion and his warfare against God; and if the numberless host of fallen men have come forth from their graves with any desire to turn to God. It is not a second chance or an extension of probation, but all the intelligence of the universe are permitted to see the uselessness of a second probation. No sign of repentance is manifested. No purpose to turn from their rebel leader is seen. The same old spirit of hatred and war leads to a rallying of all forces to continue the fight against God that was interrupted by death. It is made clear to all that the Lord is justified in the destruction by fire that immediately follows.

### Beside All Waters

(Continued from page 12)

Andrew and Marjory helped Bertie make a harness of string for Shep, and the dog patiently dragged an old box after him as they played horse with him.

Mrs. Granger was fairly bubbling over with joy when she greeted her husband upon his return from school. "Oh, Doc! I've found the loveliest neighbour! And she has two little boys. And, Doc, she's educated—and refined—and cultured. It seems so wonderful to find some one like that up here."

here."
"Catch your breath, Lizzie, and tell me how she came to be here."

"Exactly what brought us here. They experienced the grasshopper invasion in Kansas, and there was nothing left, so they starved out just as we did. They had relatives in California who induced them to come out here. Her husband has been very sick. He's a Civil War soldier and carries many wounds, and a few bullets. They came up into the mountains for his health. He works in the woods marking shingles,—they call them 'shakes,' here. He can't do very much yet,



and I imagine that they are having a hard time. She is so cheerful, though, and our little visit today encouraged me beyond words."

"I'm wondering if they are church people?" asked Mr. Granger thoughtfully, "It would be such an inspiration to meet some one who loves the Lord and desires to study His word."

"Yes, I found that out also; and that is the best part of it all. She belongs to the Presbyterians,—the same as I do,—and he belongs to the Baptist Church, along with you. They want us to come over this very evening. Will you go, Doc?"

"Yes, indeed, I must meet your newfound friends. I think that I shall take those Signs of the Times over with me. They would be interested in that article on the word of God, I'm sure."

When Mr. Granger drew the papers from his pocket in the neighbours' cabin, Mr. and Mrs. McCulloch exchanged glances, and exclaimed, simultaneously, "Oh, he's found you!"

"Who is that?"

"Why, Mr. La Rue. They say that he never misses a person, young or old, with those papers of his."

"Who is he, anyway?" asked Mrs. Granger curiously. "One of the workmen told-me that he had a very interesting history."

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"He has. The mountain people in this valley care more for drink, and tobacco, and gambling—I hope that I'm not hitting you, Mr. Granger; but I have no use for anything that lowers my physical standards or my morals," said Mr. McCulloch frankly.

"I agree with you there," warmly affirmed Mr.

Granger.

That's good! Well, this Mr. La Rue is a Christian man and lives out the principles of the Christ life before his associates—poor man—and he gets nothing but ridicule from them in returo. They never fail to offer him a drink of whisky or a 'chaw of terbaccy.' But he doesn't seem to mind it. Last night he rode up to the post office on his little black pony. The crowd poked fun at him as usual. When they asked him, 'If you don't drink or smoke or play cards while you are herding sheep, how do you bear the loneliness,' he drew a pocket Bible from his pocket, and answered reverently, 'This has been my company for eight years.' He gives papers to every one, whether people care for them or not."

"Yes," broke in Mrs. McCulloch, "we have reason to be thankful, haven't we, Alonzo, for that? We first moved away up on the mountain side where my husband and his cousin were cutting wood. It was very lonely for me, and I read and reread everything that I could find. One day I lay down on the bed to put Baby George to sleep. The walls of the rude log cabin were covered with papers tacked on, hit-and-miss, upside

down, any way, to keep the cold out. It gets cold up on that mountain at night. Well, I began to read idly, trying to decipher the title of a paper that was upside down clear up near the roof,—I won't say ceiling, for the log cabin was unceiled. You know how one will read anything when the eye wanders. It tantalized me until I finally got up there and pulled the tacks out carefully, and found to my joy that the paper was complete. The title was the same as the one you hold in your hand. I read it and reread it."

"Tell us, though, how that paper was ever tacked on the wall. I treasure mine," broke in

Mrs. Granger enthusiastically.

"The man to whom this paper was given evidently did not," continued Mr. McCulloch. "At any rate there it was, and so high up that it wasn't even soiled or torn. I told wife that it appeared to me as though Providence meant for us to get that paper. It set us to thinking and studying. Mr. La Rue comes quite often now with tracts and papers. The poor, old man is so delighted when any one manifests an interest in religion that I couldn't refuse to take them if I didn't believe all that I read."

"Why! I haven't read a word that we as good orthodox Christians could not indorse," ex-

claimed Mrs. Granger.

"We have; don't you say so, Mollie?" Mr.

McCulloch questioned his wife.

"Yes; at first it seemed that way, but I find that the texts and quotations can all be found in Vol. 5

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the Bible, and we do accept that, all of us. Is that not true?" and she looked questioningly at her hearers.

They responded with an emphatic affirmative

answer.

"Couldn't we study together?" suggested Mr. Granger, rather anxiously, a bit fearful that the neighbours might misunderstand his fervent desire to study the Bible without argument or thought of his own aggrandizement.

And so it was agreed that the two families should begin regular Bible studies, meeting first at the home of the Grangers a few nights later.

### How the Fossils got into the Rocks

(Continued from page 10)

"The crust of our globe," wrote their remains. Louis Assissiz many years ago, "is a great cemetery, where the rocks are tombstones on which the buried dead have written their own epitaphs." In the light of modern discoveries we can now read these epitaphs far better than could be done a hundred years ago, and we find that the record is almost always that of a violent and sudden death. We might deal with the huge dinosaurs, a race of land animals which must have become extinct in some sudden and mysterious way. Or we might point to the mammoths (really similar to the Indian elephants) which are found frozen in the ice of northern Siberia, where they have been preserved in cold storage for many thousands of years. But in all these cases the tell-tale conditions under which we find these fossils are proof that they were buried in some sudden and catastrophic manner. And the Bible record of a great universal Deluge in the early days of our world offers by far the best explanation of these facts.

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