THE ORIENTAL WATCHMAN AND HERALD OF

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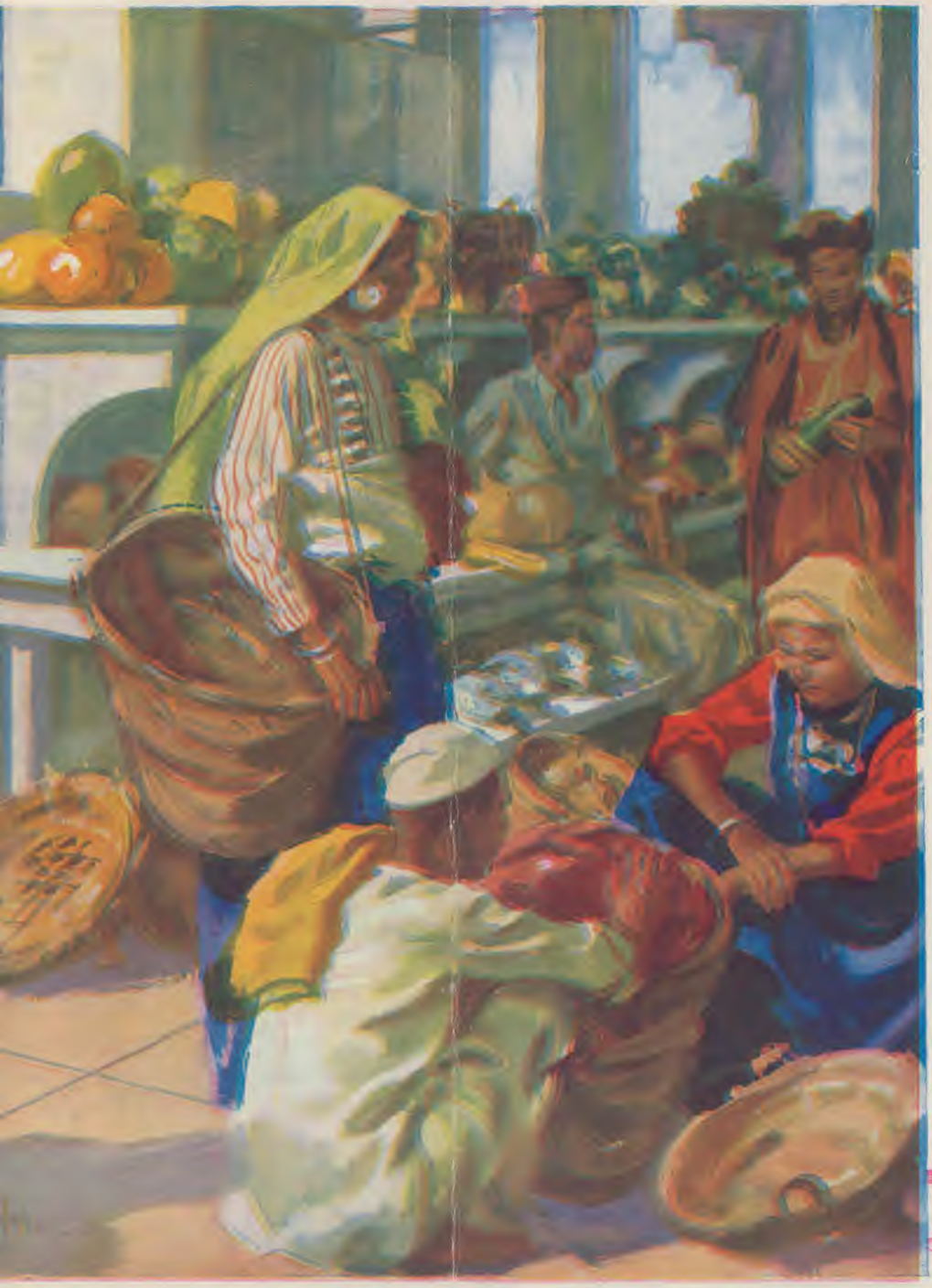
Health

A MAGAZINE FOR HEALTH, HOME AND HAPPINESS



39th Year of Publication

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The Village Market

EDITORIAL

THE JEWISH NATION'S HOME.

THE Jews are a Semetic race, being originally descended from Isaac, the son of Abraham, a powerful and wealthy Chaldean prince who flourished nearly 4000 years ago and who had his palace at Ur. With his family establishment and all his servants he migrated to what is now known as Palestine, where the family prospered. Among Abraham's descendants were some who were treacherous, jealous, and greedy, who, fearing that a young lad named Joseph, a great-grandson of Abraham, might supersede them in the government, sold him to some traders who carried him to Egypt and then sold him as a slave to an officer in the king's army who appointed him to duties in his private house. The boy, then sixteen or eighteen years of age, being dependable, honest, trustworthy, and able, rose rapidly in responsibility of position and office, and later, while still a young man, was made prime minister of the Egyptian government.

Meanwhile a terrible famine in Palestine threatened the extinction of the inhabitants, and Isaac's descendants, then numbering about seventy persons, migrated to Egypt, where, under Joseph's able management, food was to be had in abundance. They were hospitably received by Pharaoh, and were given a piece of territory in the Nile Delta where they were kindly tolerated and lived as a separate people. The descendants of these original Jews prospered for some time, but under succeeding Pharaohs they suffered economic and religious persecution sufficient to annihilate a less hardy race. In spite of this they continued to increase in number so that at the end of about four centuries they numbered five or six million. About 1492 B.C. they staged a serious and powerful rebellion against the government, and migrated *en masse*, thus constituting one of the great migrations of history.

Eventually they invaded the land now known as Palestine where they had to encounter fierce opposition by the various tribes dwelling there. But little by little this opposition was overcome and the original dwellers driven out, so that by the second half of the 15th century B.C. they were in the process of establishing their national government, which continued more or less irregularly as a theocracy and later as a kingdom for some centuries. But invasions by enemies, rebellions, war and turmoil characterized the government for the greater part of the period, until finally the Babylonian invasion under King Nebuchadnezzar almost brought it to an end about the beginning of the sixth century B.C. Jerusalem was almost destroyed, the army decimated, the treasury looted, the government staff arrested and made captive, the glorious temple burned, the walls of the city broken down, and so many of the people carried away captive that only a poor remnant was left, over whom the Babylonian king placed a ruler of his own choice. From that time Palestine, especially represented by Jerusalem, has had a most chequered history. After fifty years of desolation following the destruction by Nebuchadnezzar, Cyrus, the Persian king, caused the city to be rebuilt. He restored some governmental order, but retained the land as a part of

Mr. Ben Gurion Proclaiming the New State of Israel.

W.N.P.S.

the Persian Empire. Subsequently Palestine became a part of the Grecian Empire under Alexander until Rome occupied the seat of world power. Under Roman rule Palestine prospered economically. Jerusalem became a magnificent world metropolis and the Jews enjoyed a degree of toleration and again worshipped in their temple. But they were a rebellious race, living in peace neither with themselves nor their conquerors, in consequence of which they drew upon themselves repeated punishments by the Roman armies, and in A.D. 70 the city was again attacked by the forces of Titus and the marvellous temple destroyed after which it was never rebuilt. In A.D. 135 another chastisement was administered by the Roman Hadrian, and the city levelled to the ground, after which the Jews never had a government of their own.

In A. D. 637 the city passed into the possession of the Mohammedans who held it, with the exception of a couple of comparatively short intervals, until its capture by the British general, Allenby, in 1917. Since then the Jews have enjoyed a freedom in Palestine as a part of the British Empire, which they had not had for eighteen centuries, and it has been the hope of fifteen million Jews in the world to return as possessors of their national home. Are they now about to be re-established there? We do not believe that there is anything in current events to indicate that a Jewish nation would now fare better among the world nations than in the past.

The surprising alacrity with which the United States gave recognition to the "State of Israel" which even at the time of this writing is but a name, is not without significant meaning. Nor is it unimportant that certain other nations followed suit. There is much in current news to indicate that this was not done because of tender love for the Jews, nor because of hearts softened with sympathy over their plight in Palestine.

Britain has gone away bag and baggage, and Jews and Arabs are fighting desperately to cut one another's throats. The destruction and havoc that are concomitants of war are again in full swing. Meanwhile the United Nations, organized for the express purpose of preventing this sort of thing, looks helplessly on and talks, talks, talks, without doing that which would put a stop to what may be the beginning of another world conflict.

We do not believe that any proposed plan for establishing peace in Palestine, while Jews and Arabs are both there as rulers, can succeed. The surprising feature is that astute and experienced political leaders do not realize this. The Jews were but a small minority until they were favoured, helped, and protected by Britain. The proposed re-establishment of a Jewish national home was a plan that had to be originated and promoted from without the country. It was an artificial interpolation of a foreign element into a distinctively hostile Arab situation which continued for a few years only because of overpowering outside protection.

For about 2,000 years the Jews have been scattered throughout the world without a national home. Since they were driven from Jerusalem and Palestine they have never had a land of their own. Their temple in Jerusalem was taken from them, and they have been persecuted, despised and hated of all nations, and the sword has followed them from land to land. After the first great World War when through General Allenby's triumphal entry into Jerusalem as the result of his victory over the Mussalmans, the British proposed to restore Jerusalem and Palestine to the Jews, many believed then that the new Jewish State was about to be established. But what are the facts? See what has occurred during the years that Palestine has been under British mandate. The promises and pledges made to the Jews and Arabs could not be fulfilled, and the government was called upon to preserve peace against elements too strong and too bitter to be adjusted by any means except war. Jews have not gained their national home and Arabs have lost much of theirs, while much British blood has been spilt to preserve an impossible peace.

In recent weeks and months various plans for the control of Palestine have been proposed, but none show any evidence of succeeding. We are not in a position to predict what the final outcome of all these and other proposals may be, but it is clear that at present no elements are at work which can re-establish a Jewish National State. It is to be hoped that at least some local and temporary settlements may be made which will postpone the final conflagration by a few months or years, but even this does not seem to be assured. Meanwhile, in spite of the name, the Jews are without a national land with no prospects of ever having a permanent one again. Their history is against the idea.

The attitude of Jews and Arabs does not have its basis in intelligence or reason, but rather in feeling and emotion against which logic and reason are powerless. Emotion is not dependent on intelligence in order to function. Especially is this true of religious emotion. The attitude of both Jews and Arabs in Palestine has its basis chiefly in religious emotion, for which reason the counsel and statesmanship of political leaders, no, not even of the entire United Nations force, can prevail against it. No plan that does not gratify the aspirations of both sides for the protection and advancement of their own religious interests can effect a permanent settlement. No such plan can be devised by man.

The Jews, now favoured by certain powerful nations with economic and moral help and still depending on promises of being restored to a national home, are ready to accept the partitioning of Palestine as a beginning; they would later bargain for more. The Arabs agree to nothing unless all Zionist groups are dissolved, all emigration of Jews stopped, and unless other nations refuse to recognize a Jewish state.

Outside help offered to either side is not entirely in the spirit of charity. There is oil at stake. Who cares for the Jews who are despised and hated in all lands and only tolerated in some? But the oil is valuable and will make many already rich, a great deal richer. And in order to ensure that the oil does not run away, crocodile tears must flow copiously out of sympathy for the poor Jews, and great care must be taken not to offend the Arabs. The surface appearance of things is but a deceptive indication of that which lies underneath. There are great powers watching this oil. Greed, envy, jealousy, and fear are at work among them, and fearful are the potentialities. We do not believe that any permanent national home is in store for the Jews. Possibly some temporary settlement in Palestine will be made for a few lakhs of them, but with about fifteen millions elsewhere in the world, how could that be called a national home? Neither history, logic, nor the laws that govern human nature, lend any reasonable support to the idea of a Jewish national home in Palestine.

Herald Sun Feature Service

Stores Fill While Some Wheat Waits. Bulk Grain Entering Bulkhead at Dooen, Australia. This Is in Typical Contrast to the Food Position at Present in India.

Using a Turnstile an Instructor at the Seeing-Eye School Teaches a Guide Dog to Judge and Differentiate Between Spaces Through Which the Dog Can Pass But Not His Master. The Training Enables the Dog to Indicate to His Master the Presence of Overhanging Awnings, Tree Branches, and Other Overhead Obstacles That May Endanger His Master's Safety.

Herald Sun Feature Service

The Picture Above Shows Car-loads of Fruit in Australia. Goulbourn Valley Pears Arriving at the Ardmona Cannery, Mooroopna, Victoria. Growers Can Supply the Cannery With Only a Limited Quantity Because Cold Stores Are Limited and Supplies of Sugar Doubtful.

U.S.I.S.

IN THE NEWS

Energy

SCIENTISTS estimate that the eyes consume about one quarter of the total nervous energy of the body, says Better Vision Institute.

Ascorbic Acid

RUSSIAN scientists have discovered large amounts of ascorbic acid (vitamin C) in green walnuts. Vitamin C has also been discovered in green English walnuts, and in the discarded hulls of ripe nuts.

Dust

BAGASSOSIS, a new disease of the lungs resembling acute bronchitis and pneumonia, is becoming a serious industrial hazard in sugar producing areas as reported in *Radiology*. The disease is caused by inhalation of diseased dried bagasse dust.

Breath-Taking

ANY person can probably hold his breath for forty-five seconds. If he breathes deeply and increases his oxygen reserve, he can increase the time. If he breathes pure oxygen he might increase the time to ten or twelve minutes. A premedical student after inhaling deeply for three minutes and taking three whiffs of pure oxygen was able to hold his breath for twenty minutes and five seconds. He said he felt as if he were dying.

Plague Drug

Two internationally known plague experts from India disclosed yesterday that two sulpha drugs and streptomycin had proved effective in treating human bubonic plague victims. In a paper before the Fourth International Congress on Tropical Medicines, Major-General Sir Sahib Singh Sokhey and Dr. P. M. Wagle, of the Haffkine Institute, Bombay, said the death rate in recent tests had been reduced to 3.3 persons per 100 patients when streptomycin was used. Sulphadiazine showed a death rate of only 4.2 and sulphamerazine a death rate of 5.9. Approximately 2,000 delegates from more than forty nations are attending the Congress.

—*Reuter.*

Anæmia

THE development by British medical scientists of a powerful anti-anæmia drug is announced in the current issue of *Nature*.

Tests on eighty patients in the United Kingdom have shown that 1/200,000th of an ounce is the effective dose in cases of pernicious anæmia. The drug not only restores the supply of red cells in the blood but corrects the nervous disorders and deterioration of the spinal cord which are caused by the disease.

The scientist who played a leading part in this discovery is Dr. Lester Smith of the Glaxo Research Laboratories, Greenford, Middlesex, England.

OUR COVER PICTURE

Our interesting cover picture this month was supplied by the Cement Marketing Co. of India Ltd. The clean, sanitary, and orderly market depicted is in contrast to the usual type of disorderly, dirty, and disease-breeding ones to be seen all over India and Pakistan. The cement floor as well as the shelves and bins are easily washed and disinfected, thus preventing them from becoming breeding places for germs that spread disease. Cement is by far the best material available for such purposes, and village elders everywhere will do well to multiply such market facilities.

Dr. C. Ungley, a specialist of Newcastle, found that even the most difficult cases responded to minute doses. Beneficial results were apparent within a fortnight but the feeling of well-being was immediate.

This natural drug is not a "permanent" cure since pernicious anæmia can recur, but the disease will continue to respond to similar treatment. One of the important consequences, however, may be that chemical identification of the substance will help to discover the cause of pernicious anæmia.

Commercial production of this drug is not yet in sight.—*B.I.S.*

Protective Effect of Mass Vaccination Proved in New York

THE New York City Department of Health for months now has been scanning the results of one of the largest mass vaccinations against smallpox ever undertaken. In April, 1947, a lone bus traveller, leaving a trail of smallpox cases behind him, arrived in New York. Some 7,500,000 people thus were in potential danger. Immediately, vaccine was shipped into the city, a mass drive organized and within a few days between 5,000,000 and 6,000,000 New Yorkers were vaccinated at doctors offices, clinics, and improvised vaccination stations.

The most encouraging fact discovered so far in the analysis of this mass vaccination is what did not happen. Going on statistical experience, 28,820 New Yorkers would have contracted the disease and 1,154 would have died, had there been no vaccinations. That didn't happen but the reactions of 25,000 persons—a fair cross section of the populace—indicated that it might well have happened, for they showed that low immunity to smallpox existed in New York at the time.

While the protective effect of the vaccine was well established, medical men are still searching the files for proof of undesirable side-effects of the vaccine's virus compound. However, only forty-five cases of encephalitis (inflammation of the brain), no tetanus (usually due to contaminated vaccine), no signs of hazards to pregnant women or their offspring have been noted. The only warning for more precaution was the death of two infants with skin diseases who presumably contracted cowpox from their smallpox-vaccinated parents.—*USIS.*

Mt. Everest

SINCE 1841 Mt. Everest has reigned as the highest peak in the world. But a few pilots thought they had seen a higher one among the Amne Machin Mountains of West China. In April of this year, one of Chiang Kai-shek's former pilots, fourteen Chinese foreign correspondents, two technicians, and a Chinese crew armed with radar equipment, circled and zig-zagged over the range, but found no peak higher than 22,000 feet as against Everest's 29,000.

NEW LIGHT ON MALARIA PARASITE

Tissue Stage Located in Liver of Monkey

IAN COX

ALMOST important addition to our knowledge of malaria has just been announced by Professor H. E. Shortt and Dr. P. C. C. Garnham of the London School of Hygiene and Tropical Medicine.

While investigating the microscopic parasite that causes monkey malaria *(Plasmodium cynomolgi)*, they have found the developmental stages in the liver of the infected animal, thus establishing the so-called "tissue form" in the life history of this parasite which, although it has been postulated, has never been isolated or seen. *Plasmodium vivax*, which causes human tertian malaria, is very closely akin to the monkey malaria parasite. There is, therefore, a very strong possibility that it, too, will prove to follow the newly discovered developmental cycle.

The significance of the new discovery is that it fills in the last gap in our understanding of the complicated life-history of the parasites that cause mammalian malaria. They are minute unicellular organisms, capable of reproducing themselves with great rapidity and in different forms, at different stages in the life-cycle.

How Fever Results

From the point of view of human discomfort, the most important part of this cycle is spent in the red blood corpuscles of the host. Here each individual (called at this stage a schizont) reproduces itself by successive divisions until the corpuscle breaks up, setting free the new generation (merozoites) and with them the toxins produced in the course of their metabolism. It is these toxins liberated into the blood stream of the host that result in fever—the difference between "tertian" (three-day), "quartan" (four-day) and "pernicious" malarias being the difference in time the three species of *Plasmodium* take to produce and set free a generation of merozoites.

A mosquito of the genus *Anopheles*, sucking the blood of an infected person, will take into its stomach certain descendants of these merozoites which have male and female potentialities. These conjugate by pairs in the gut of the insect and become transformed into an elongated form which burrows through the gut wall and then encysts on the outer surface of the stomach. Eventually it multiplies by division within the cyst, producing spindle-shaped sporozoites which are carried in the mosquito's blood stream to its salivary glands. From here sporozoites are injected into a mammalian host when the insect sucks blood.

A Complicated Cycle

Many years ago an observer claimed to have witnessed sporozoites actually penetrating the red cells of a new host, after which they are said to develop into merozoites as I have described; later work, however, showed that the complete life-cycle was not as simple as this. It was found, for example, that subjects inoculated with blood containing malaria parasites could be cured permanently after infection by quinine, and that if quinine were taken while the parasites were incubating in the blood cells, the infection could be prevented altogether.

If, on the other hand, the subjects were innoculated with malarial sporozoites from a mosquito's saliva, then quinine given during the incubation period failed to prevent an attack of malaria. It was clear then that infection produced by sporozoites differed fundamentally from those resulting from injections of blood in which the parasites were already lodged in corpuscles, and it became accepted that sporozoites, on entering the host, do not go straight to the corpuscles but pass first into the tissues and then undergo further development before they reappear as familiar trephozoites.

Mystery Solved

The problem so far as human, or near-human, malaria parasites were concerned, however, was: what tissues? This question remained unanswered until the end of last month when Shortt and Garnham announced that they had located the tissue stages of *Plasmodium cynomolgi* in the liver of a monkey who had been strongly infected with sporozoites seven days previously. These schizonts show up in stained thin sections of the liver as roughly ovoid bodies with a diameter of up to one-thirtieth of a millimetre. The majority of them are then nearly mature and at a stage immediately preceding multiple division to give merozoites.

Why these "tissue stages" have so far eluded investigators who have been looking for them keenly during the last few years is due, probably, to a variety of reasons. In the first place, very heavy dosages of sporozoites are necessary if the developmental forms are to be found easily; secondly, the practice hitherto has favoured the examination of smears rather more than of thin sections, and parasites are far less readily found by the former means. It is possible too that the tissue forms may be evanescent, the majority disappearing when the cycle within the blood corpuscle has been established.

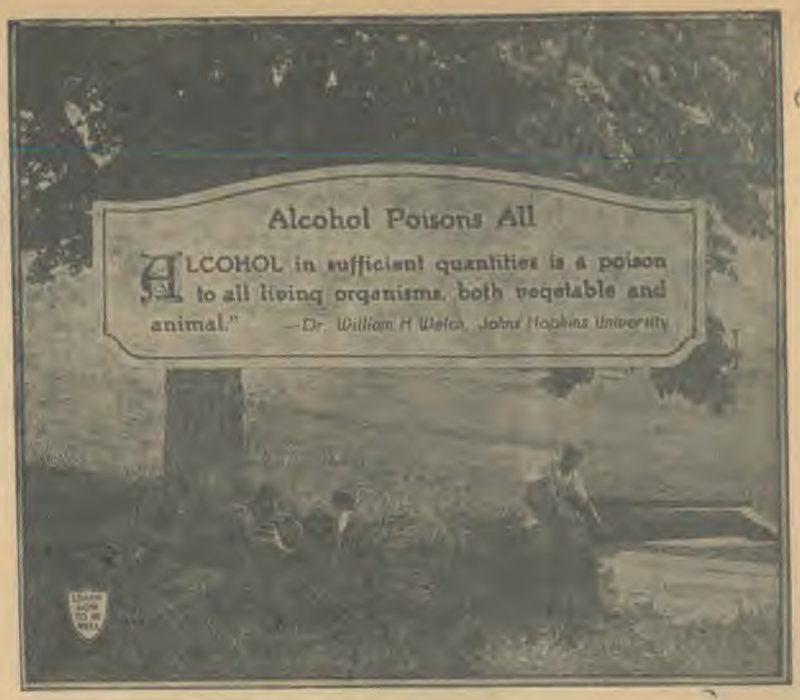
Unrecognizably Large

Another factor that may have led to schizonts escaping recognition is their relatively large size. Already, following on Professor Shortt's demonstration, reports are being published confirming his discovery by the finding of similar parasites in other laboratories.

The application of the discovery to the problems of human malaria may be expected to follow rapidly. The *Lancet*, for example, suggests that *Plasmodium falciparum* (which causes pernicious malaria) develops in the human liver for five to six days in the same general form as *Plasmodium cynomolgi* in the monkey, and that the tissue form then probably dies out soon after infection has developed in the blood corpuscles.

Plasmodium vivax (which is responsible for tertian malaria), it is suggested, develops in the liver for six days, and schizonts probably persist there for one to three years, giving rise at intervals to relapses typical of tertian malaria. The tissue forms of the quartan parasite *(Plasmodium Malariæ)* probably persist for twenty years. Verifications of such suggestions should in the light of the work of Shortt and Garnham prove simple.—B. I. S.

NATURE AND ALCOHOL



THERE is a large family of alcohols, the radical *OH* being their chemical symbol or family name. Methyl, or wood alcohol and ethyl, or grain alcohol are the two kinds used to produce intoxication. Methyl alcohol is not expected to be used internally, but sometimes it is imbibed, and disastrous results follow. It produces atrophy of the optic nerve which leads to blindness. The only non-poisonous alcohol is glycerol.

Physically, ethyl alcohol (the kind found in beverages of alcoholic content) is a fluid closely resembling water in appearance. It has a strong affinity for water; it "soaks it up" readily. It is a solvent of practically everything which water will dissolve. The boiling point for alcohol is 78 degrees centigrade, and the freezing point is 130 degrees centigrade.

Dextrose, or grape sugar, is most readily used for fermentation and formation of alcohol; cane sugar must be treated and changed to invert sugar before it is fermentable. Also used as sources of alcohol are honey, nuts, chicory root, moss, sawdust, and even grass.

Alcohol, because of its solvent properties, is in great demand for commercial purposes, being used in the manufacture of thousands of useful articles. Here, it has a legitimate place and is a benefactor to mankind.

Alcohol within the body acts as a selective narcotic poison, more recently called an anæsthetic because it acts like ether, chloroform, and so forth, by depressing the higher brain centres first, and continuing in a progressive descending action. Alcohol selects one special body tissue as its own particular property. That tissue is nervous tissue. It attacks the nervous system first, and anæsthetizes it.

There is but one medium through which man may communicate with God, and that is through the nervous system. Put to sleep that means of communication, or even dull it to a degree, and you have lessened or destroyed man's opportunity to hear the still, small voice.

Action of Alcohol on the Human Body

When alcohol enters the body, this is what happens. A small amount is absorbed into the blood stream directly from the stomach, the amount thus absorbed depending upon how much food is already there (the more food, the less absorption). Most of the ingested alcohol is absorbed into the blood stream from the small intestine. Only a residual part is absorbed from the large intestine.

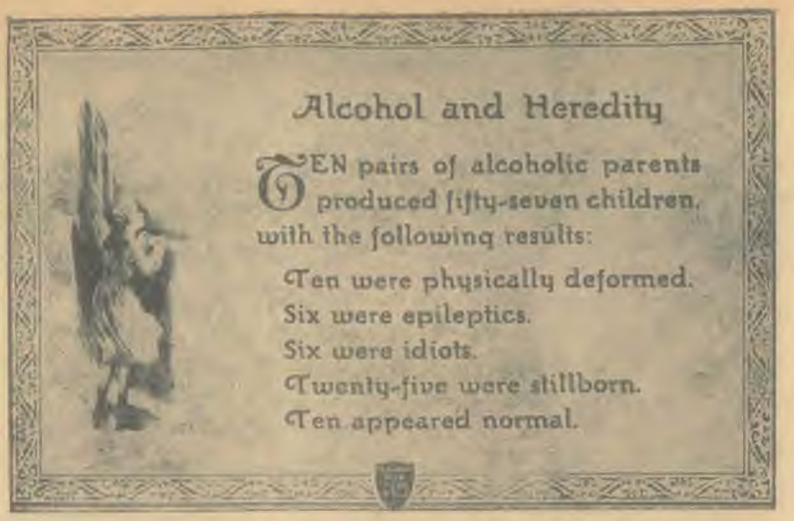
Grace Clifford Howard

The blood stream circulates very rapidly (at the rate of about 55 feet a minute in the large arteries). Soon all the tissues of the body are bathed with the alcohol-impregnated blood. What alcohol does as it passes through the capillaries of the brain will be understood more clearly if the three levels of integration in the brain are considered first.

Roughly speaking, the first and highest level of integration is found in that part of the brain which you cover when you put the heel of your hand over your eyebrows and stretch your fingers backward over your forehead. Here is the cortex of the cerebrum, that superficial layer which is so often pictured as being folded to form numerous wrinkles.

The second level of integration is located near the centre of the brain. The third level is in the brain stem, which is a funnel-shaped part of the brain continuous with the upper part of the spinal cord.

When you came into this world, the third level of integration was already functioning. Your heart was beating and had been, since the fourth week after conception. Your hands, with which you so readily clutched at anything placed in them, had been flexing since the twelfth week; and at once, when you were on your own, your lungs began to function and you could and did cry. All these muscular movements are controlled by nerve cells in the third level of integration, which had been



functioning for several weeks before birth.

With the passage of time you began to learn certain skilled movements, such as walking. Further along, you learned to play games and perform complicated manipulations with your fingers, such as the process of writing, playing musical instruments, learning a trade. The nervous patterns and connections for these skilled, progressive, associated movements are found at the second level of integration.

Judgment, reason, appreciation of the arts, noble sentiments, and spiritual strivings are developed as the individual grows older. These qualities depend on the first and highest level of integration. This is the last part of the brain to be developed. Its development may go on throughout this life, and no doubt, the life to come.

Alcohol and Integration

What action does alcohol have on these levels of integration? The cerebral cortex, highest and last developed level of integration, is the first to be anæsthetized by the imbibed alcohol. Judgment and reason are quickly impaired. Inhibitions are deadened, and the drinker may say and do things which ordinarily he would not.

All people do not react alike under the influence of alcohol, but the general pattern is the same. With a blood alcohol content below .05 per cent, little, if any, evidence of intoxication is noted. From .05 to .12 per cent, the cerebral cortex may be anæsthetized to varying degrees, but as yet, impairment is largely psychological, and physical signs usually do not yet appear. Impairment, so far, is in the highest level of integration.

This is one of the most dangerous stages of drunkenness, because the drinker *thinks* he is perfectly capable of handling his affairs even better than usual. In reality, his performance may be considerably impaired. This is the stage in which the intoxicated driver so often has a motor-car accident because judgment of spatial relations and of time are impaired.

In the United States, when the blood alcohol reaches .15 per cent, the individual is legally recognized as drunk and a menace on the road. In Sweden a driver is considered dangerous to traffic when the concentration reaches .08 per cent. With a .15 per cent concentration the individual has become very self-assured and often exceedingly devilish.

As soon as the blood alcohol begins to exceed .15 per cent, the second level of integration becomes involved and physical signs of drunkenness appear. The skilled movements, such as walking, are now beginning to be impaired. To the former loss of judgment now comes added loss of muscle co-ordination.

When the blood content has reached as high as .3 per cent, a stage of confusion is attained. A loss of the sense of propriety and the power of voluntary attention is noted. The individual now sees two moons in the sky (double vision), a roaring in the ears develops, speech becomes loud (because the drinker cannot hear well), slurred, and thickened. It is at this stage that the policeman asks his victim to say "Methodist Episcopal" "Massachusetts Institute of Technology," just to prove he is not drunk. The inebriate often becomes very sick and dizzy. He staggers; he cannot walk in a straight line or stand erect when his eyes are closed. Now all the world knows him for a drunken person. The physical signs of intoxication are easily seen.

As more alcohol enters the blood stream, a stage of general inertia overtakes the drinker. Unless he is strongly stimulated he lapses into unconsciousness. When more than .5 per cent blood alcohol is present, the person is dead drunk, and because the brain centres controlling the heart-beat and breathing may become narcotized, death may follow. Now even the third and oldest level of integration has become impaired.

Detoxication and Habituation

How does the intoxicated person become sober again? This is brought about through the chemical process of oxidation. The alcohol is brought to the liver, and there it is oxidized, or burned, to form carbon dioxide and water. A small amount escapes through the breath and body fluids, but between 90 and 96 per cent is oxidized. Authorities differ regarding the amount of alcohol that may be oxidized in an hour, but it is generally agreed that the rate is constant until all the alcohol is gone. It cannot be hastened by exercise or by any other means yet discovered. Some authorities say the oxidation rate is ten cubic centimetres an hour.

As a person continues to indulge in alcoholic beverages, he establishes a tolerance for alcohol and can drink more before effects are apparent. He must drink increasingly more, too, to produce the same psychological effects which he formerly got with less. After continued drinking there comes a time when he finds he cannot get along without alcohol. He has formed the alcohol habit.

After approximately ten years of fairly steady drinking alcohol has become a real problem to the drinker, and he finds he cannot give up the habit. He has become an alcoholic. With women this period is shorter than it is with men. It usually takes less than seven years to make an alcoholic out of a women who drinks habitually. The taboos against drinking by women cause them to drink secretly, and secret drinking means heavier drinking than social drinking.

AGING GRACEFULLY

PEARL LEWIS MEADS

"WELL," the young woman was saying, "I guess that is just one of the compensations that come to us when we are no longer young." Compensations for not being young! The thought struck me hard. Like most other people, I suppose, the thought of being middle-aged, of losing the treasures of youth, had seemed to me to be all loss and no gain.

Up to this time, the most that I had done about my attitude toward growing older had been to achieve a sort of grim resignation to the relentless onset of the years. But this remark about compensations started me out upon a new track of thought. If there are any compensations, perhaps even gains, to be had in this stage of my life, I began to think it was high time that I should begin to recognize them and to cash in on them. This new direction in which I have lately been turning my thoughts has opened to me a most interesting and fascinating mental territory. The exploration of its possibilities I am sure are going to be very profitable.

Of course, nothing can entirely substitute for the exuberance and physical re-bound of youth. I think the pollyanna attitude, the "life begins at eighty" idea, is not a realistic or sensible approach to the problems and opportunities that face those past their youthful years. If the "aged athlete" were not a rare article, he would not be the object of so much publicity or admiration. To the average individual, the process of aging inevitably means the gradual loss of youthful attributes and abilities. The stamina, the verve, the enthusiasms of youth wane. To this change we must all bow. Certainly no one could be expected to accept this decline, this passing of the spring-time of life, with rejoicing. But neither should we feel appalled or stymied because of this natural impairment of our former physical powers.

As Dr. George Lawton says in his book *Aging Successfully:* "It is only after the departure of certain youthful pleasures, that the particular pleasures of later maturity can arrive." He goes on to say: "But we must be prepared to exploit all these 'gains' to the fullest. And we must also try to find compensations, substitutes, and indirect satisfactions for the unavoidable 'minus' changes which the years bring."

This sounds like good common sense to me. So lately I have been trying to concentrate much less upon the "minus" factors of middle age and much more upon the "plus" factors, which I am sure must be just as real and a good deal more encouraging to contemplate. After all, it is entirely reasonable to assume that the mature years should offer us many advantages. One cannot live without learning; and if the lessons learned in the first half of life are intelligently applied to the second half, it follows that the latter half must be enriched and improved.

Living in the afternoon of one's life should not be merely a process of giving up one by one the joys and accomplishments of youth. It should be a season of acquiring new interests and activities appropriate to our strength. We can go on building a life, using the fine materials which our early years have provided us: understanding, tolerance, and knowledge of human nature acquired from long contact with our fellow men. We should now be the possessors of many satisfying mental and spiritual gifts that were denied us in our youth because of immaturity and inexperience.

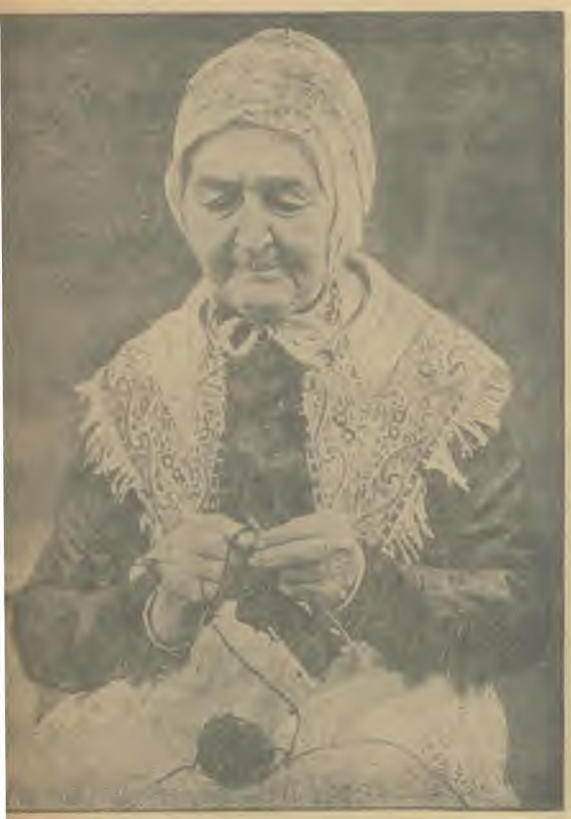
It was at an exhibit of vehicles old and new that I first woke up to some of the advantages of being older. At this display were buggies, traps, wagons, and harness. What an amount and what a tangle of harness! I was interested in watching the reactions of the youngsters around me as they gazed upon these outmoded accoutrements of travel. The young folk looked with wonder and dismay upon all that confusion of collars, bits, checkreins, traces, and the like. But to me, just an old fogy, it was all as simple as A B C. Why, I could have properly ad-

Many Candles on the Birthday Cake

justed most of the harness there. I could have harnessed a horse, a team, or even four abreast and have had every buckle fastened right, every rein snapped into the proper ring. It was a proud moment in my life! "Isn't it wonderful when you stop to think of it," I said to my companion, "that we have been privileged to live in two distinct eras, the horse-and-buggy age and the motor car and aeroplane age?"

Since that time I have enjoyed and appreciated more than ever the marvellous new things and the new ways of doing things that are so different from what we used to have and from the clumsy, laborious methods we used in much of our work. And my age? Well, when I was born, the neighbours peered out of their windows to see Doctor Campbell's rig hitched to the iron post in front of our house—and that was not yesterday. So you can know that I have lived long enough to have seen a thing or two in the way of changes through the years.

And that reminds me that it was not so long ago that I was a little touchy about belonging partly to the nineteenth century. I used to rather avoid discussions that would bring to light the styles I wore at certain ages in my youth. You see, they definitely dated me. But what a lot of good wholesome fun and interesting conversation I missed! "Remember when we used to wear this or that?" I can say now; and we are off to a flying start on a lively and thrilling comparison of times past and present. I realize more and more that my allotted time upon this earth has fallen in the most changeable, the most dramatic age in the history of man thus far. To study it, to appreciate its advantages, is a duty and a privilege that middle age has brought me.



Grandma Is Also Useful

There are harvests to be reaped in the emotional life of the older, mature person. Have not we noticed time and again that incidents that would have upset us terribly, that would have thrown us into a maelstrom of emotional confusion, do not disturb us as they used to? Disappointments, too, I find that I can take more gracefully. Nothing used to vex me so much as to be disappointed, and to be offered a substitute for a planned good time only angered me. I had to get over that. Substitution I have found to be necessary sometimes. Certainly that is better than nothing at all. In fact, it often turns out that the substitution is better than the original idea.

I also find that I have been able to shed quite a burden of intolerance toward others. When I was younger I often felt called upon to pass harsh, and, more than often, premature judgment upon other people, even upon slight provocation. However, the consequent embarrassments and the innumerable retractions that I have had to make because of this propensity have finally driven me to the place where I am not so quick to make adverse estimates of others. For this I am glad—and much happier. The older I become the more I am convinced that only the Creator of humanity can possibly know all the reasons for any given pattern of human behaviour. So only *He* can judge with entire fairness. What a relief it is to turn it over to *Him!*

The audacious self-assurance of youth, I suppose, has its place in the normal process of maturing. But what predicaments this youthful, immature quality can get one into! It took me a long time to learn to consider seriously the warnings and advice of experienced persons whose judgment was not coloured by any emotional involvement in my problem, as my judgment generally was. But it pays, and it pays well, to stop, look, and listen, especially to listen and take counsel before plunging ahead into situations.

Being better able to take criticism is another gain worth mentioning. It used to be that the least criticism would throw me into a mental slough of despond. Now it doesn't discourage me like that. If I think the criticism is justified—and it often is—I try to register that mistake in my mind as one not to be repeated. If I truly feel that it is not justified, I try not to fret and fume about it, as it is impossible for any one person to please everyone with whom he comes in contact.

Yes, there are many compensations and satisfactions to enjoy in the age of "later maturity." The more you look for them, the more of them you will find. Many persons enjoy even better health than they did in their youth. I know quite a number who do. They have learned their limitations and they respect them. They have come to treasure health above everything else and are more careful than they used to be to adhere to the rules of moderation. Youth, you know, is prone to take good health for granted and to take chances with it. We have to live awhile to realize fully that health is man's most valuable possession.

There are beautiful, substantial friendships that only the test of the years can bring us. There is a deeper appreciation of all that living has taught us is good and worth while.

As the years of our youth fade into the past, we find that the more superficial, non-essential things of life lose their importance to us. Spiritual values emerge to be seen more clearly. Our faith becomes more a part of our lives. We learn how to live by it and how to draw strength and comfort from it, not only for ourselves, but also for others who may need help and assurance.

Think of the opportunities to help that now are ours. Only those of us who have lived long enough to understand the meaning of hunger and homelessness can fully realize the need. And, too, many of us now have the time and means that we did not have when we were younger, with which to help. To be able to do something about them brings happiness and satisfaction into the life.

APPETITE CAN BE CONTROLLED

DIFFICULT as the task may be, a morbid appetite can be restored to a normal condition. As it is by indulgence that appetite gains the mastery, so it is only by rigid abstinence that it can be conquered and made man's servant. As in the one case indulgence is the cause, and the debasing rule of appetite the result; so in the other case abstinence is the redeeming cause, and the natural appetite (controlled by reason and conscience), health, and happiness are the glorious result. But the man of strong habits, who undertakes to grapple with and conquer his appetite for fashionable indulgence, may as well understand at the very start that he has a hard battle to fight; and he should count the cost, lay well his plans, and nerve himself for the contest.

And there is a very important fact which we wish here to state for the encouragement of those who feel the need of reforming in habits of life, and who at the same time dread the difficulties in the way, and the suffering they may have to endure. It is this: Proper abstinence will soon give them complete victory; and when this is gained, when simple and natural habits have been established, the delights of taste and the pleasures of existence will far exceed so-called enjoyments found in a gross and unnatural life of hurtful indulgence.

When the drunkard leaves his cup, he suffers inexpressible physical and mental agony until by continued abstinence and proper habits the fire dies out of his blood and brain, and nature restores order. This accomplished, the reformed inebriate has lost his love for liquor, and feels that he is a man again. It is not to be questioned that the man who satisfies his depraved cravings for whisky, feels a momentary pleasure in indulgence; but the enjoyments of existence, with him whose habits are natural and healthful, are almost infinitely greater than with him who is ruled by morbid appetite, and who surrenders to the momentary pleasure found in its gratification.

Here are facts of the greatest importance; and they are not only in harmony with natural law, but are sustained by the happy experience of many a reclaimed drunkard. It is difficult to make the drunkard, even in his soberest hours, see and feel the force of these facts. His friends may wish to help him; but he alone must fight the battle with appetite, or he can never enjoy the victory. The higher powers of his mind are benumbed and enfeebled, having been surrendered to the rule of appetite. He, however, decides to make the effort to reform, and abstains from liquor for a few days. He is in agony; and feeling no assurance that, if he perseveres, the period of his suffering will be brief, he is in danger of yielding to the erroneous idea that abstinence dooms him to a life-long period of mental and physical agony. Oh to get across this, to him, impassable gulf! The fields of delight which lie beyond, he cannot now see; but when fairly across, he may shout victory in the midst of the natural and healthful pleasures of an almost new existence. This is one of the greatest triumphs that mortal man can achieve, and one long step toward heaven. Yet such a victory can be won.

What has been said in the case of drunkenness is equally true of tobacco inebriety. The appetite for tobacco will continue so long as the tobacco poison remains in the system. When the system has been freed from tobacco by abstinence and hygienic treatment, the appetite will cease. Boys have a natural dislike for tobacco, but this they overcome by its use. When their blood becomes thoroughly poisoned, the collision between nature and tobacco ceases. Completely eradicate tobacco from the human system, restore the taste to a natural and healthful condition, and tobacco will be as offensive to its emancipated slave as to the youth before he took the poison into his blood.

Let no one try to overcome the appetite for tobacco by the long, tedious, murderous process of "leaving off by degrees." Victory is seldom, if ever, gained in this way. Total abstinence is the only sure course. Hygienic treatment is of great benefit to those who find this a difficult task. In order to obtain a speedy and certain victory, the poison should be taken from the blood as soon as possible. Water treatment will do this at a rapid rate. We have left tobacco invalids packed in the wet sheet forty minutes, and when they were taken out the scent of tobacco so pervaded the room as to be sensible to the taste, and the sheet itself was discoloured.

What has been said about the liquor and the tobacco habit is true,

E. G. WHITE

in the main, in the case of those addicted to the use of tea and coffee. Total abstinence is the only remedy. When these habits are overcome, and restoration, so far as possible, to natural conditions takes place, whisky, tobacco, and tea and coffee sicknesses, in their many forms, will cease. For example there are thousands of women in our country who once drank strong tea to cure the headache, and it did give them temporary relief; but at the same time it laid the foundation for more severe headache. Now they use neither tea nor coffee, and can bear the joyful testimony that when they had by abstinence overcome their desire for tea, their headache also disappeared.

Those on our side of the question, who have passed through the struggle against the clamours of morbid appetite, and have gained the victory, can appreciate this view of the subject. Those on the other side must pass over to us, and work out their own experience before they can fully understand the matter.

And right here is where the subject of hygienic reform meets one of its greatest obstacles. It is difficult for those under the control of appetite to see anything in the reform but privation and starvation. They sit down to a hygienic dinner—without flesh-meats and highly seasoned gravies—where all the food is, so far as possible, in its natural state, and are disgusted with its tastelessness. They pity us who live upon this diet, and, judging by their own condition of taste, are grieved that we are starving ourselves. But the very dinner they despise, we enjoy with the keenest relish, and do it liberal justice.

To us who have become accustomed to a simple, unstimulating diet, it would be painful to sit down to a fashionable dinner and partake of highly seasoned flesh-meats. The very spices, salt, vinegar, pepper, mustard, and pickles that would delight a fashionable taste, would be very unwelcome to ours. The great difficulty in this subject is, that those who differ with us cannot understand the matter fully until they have, through their own experience, come all the way over to our side of the question.

To all hygienic reformers I would say, Live up strictly to the convictions of your own enlightened mind. Be not led into indulgence by the entreaties of friends. Live the reform at home; and when you go abroad, carry it with you. Live it, and at proper times, in proper places, and in a proper manner, talk its principles. Never let the opposition or the kind entreaties of friends, gain ground on you. Ever hold on your way, and by all proper means labour to impress those around you with the importance of the subject.

A few words to those who are making changes: If you make them all at once, be sure to make a corresponding change in your mental or physical labour. If your circumstances are such that you cannot greatly lessen your labour for a while, or spend a few months at a sanitarium, you should, in matters of diet, make the changes gradually. But do not forget to change. As you prize health and the favour of God here, and a happy existence in His presence in the next world, turn from the violation of natural law. Let it be your study and constant effort to bring your habits of life more and still more into harmony with the laws instituted by the beneficent Author of your being.

AMELLIN—NEW HOPE FOR DIABETICS

MARY JANE KNISELY, M.T.

A MAN I shall call Robert Gilpin—a seventy-five-year-old retired government official in Calcutta—had been diabetic for twenty-five years when he first heard of what promises to be the best treatment yet discovered for his ailment. For sixteen weary years he had been needle-pricked with insulin shots. The last year was a bed-ridden one, during which life lost its savour. But Robert Gilpin had an astounding surprise in store for him.

One of his cronies looked into the despairing man's eyes one evening and unfolded a tale of miraculous things going on at the University of Dacca. It was said that Dr. M. C. Nath had a new treatment for diabetes; that needle pricks were no longer necessary. The old invalid's eyes blazed with a new hope for a moment; then disbelief clouded his countenance. Still, he reasoned, the University of Dacca would tolerate no quackery. It was worth a try.

Eight months later the elderly man had given up invalidism in favour of a walk before breakfast. When he drew his chair up to the table and unfolded his napkin, it was with zest. Now he could eat anything he chose, and as much of it as he liked. Under Dr. Nath's care, Robert Gilpin had once more become a man.

The news spread, and more and more diabetics began appealing to Dr. Nath for help. He has been bringing new health to as many such people as he could in India for the past several years. But the war put chronic disease in the background and retarded communications, and the world has not yet heard much about his work.

For some time medical scientists have not been quite convinced that insulin is the whole answer to diabetes. Why do so many diabetics require more insulin than a normal person's pancreas—the insulin factory—is apparently capable of producing? Why do autopsies on so many diabetics fail to show enough wrong with the pancreas to account for their condition?

Certainly there are times when the liver is at fault in diabetes. It is the body's sugar warehouse—where warehousemen take the molecules of sugar coming in from the small intestine and stack them up in job lots as molecules of glycogen. When the body sends out a call for more sugar, these warehousemen have to unstack the glycogen molecules and send out as much sugar as is on order. It is not surprising if they sometimes get tangled up in their work and send out more sugar than is ordered, more than the body cells can use.

Dr. Nath knew this, and he also knew that many diabetics pour out fractions of protein molecules in the urine, particularly during diabetic

coma. Protein is the framework of our body houses. In diabetic coma it is as though a typhoon has hit within the body, destroying "cell houses" by the score. This wreckage flows downstream, and through the kidneys.

Dr. Laipply and his colleagues at Western Reserve University in Cleveland, Ohio, knew this, too. They investigated the kidneys of diabetics who had died of the disease, and they found that 63 per cent of diabetics had damaged kidneys, while only about 2 per cent of non-diabetics had anything wrong with these organs.

The diabetic also has something wrong in his chemical factory that takes care of fats. In the normal body, fat molecules are torn down step by step and eventually become carbon dioxide and water. But in the diabetic's chemical factory the workmen have forgotten how it is done. They take off a piece here and a piece there, and end up with what is known as "ketones," these are "poison chunks," so far as the body is concerned.

The kidneys do what they can to rid the body of these chunks. But it is as though we were to throw bottles of cyanide in our back yard garbage pails day after day. Eventually our garbage man would be poisoned with cyanide.

In diabetic coma the kidneys—the body's garbage men—are confronted with poison chunks and cell-house wreckage until pandemonium reigns. It is not surprising that so many diabetics have kidney trouble; that so many deaths in coma are associated with a breakdown of these kidney garbage men. And it does not seem surprising that Dr. Shields Warren of Harvard Medical School found that only 25 per cent of diabetics coming to autopsy had anything seriously wrong with the pancreas. It was not the pancreas that was overtaxed, but the kidneys.

In other words, insulin is by far not the whole story of diabetes. For a number of years now scientists have known they can produce diabetes in guinea pigs by injecting "poison chunks." They use a ketone called "alloxan," closely related to the ketones the faulty diabetic body makes in the chemical factory

Scientists also know that diabetes has a high incidence among well-fed meat eaters, and is practically nonexistent among those who eat almost nothing but rice (starch). They also know that, for the most part, diabetics are fat first and diabetic afterward.

The fact that diabetics need more insulin than a normal person's pancreas is apparently capable of producing may indicate that insulin can be destroyed by "poison chunks" or similar toxic products produced by the diabetic body. Things more serious than an insulin shortage are probably afoot.

It is as though the various factories in the body are overtaxed with work —the liver, the kidneys, the fat-breakdown factory, and perhaps the endocrine, or ductless glands. Science does not yet know all the factories that may be out of working order in a diabetic's body. Even the blood-forming organs, for example, seem to lie down on the job in diabetes, producing anæmia.

Dr. Nath thought these factories needed a new and powerful over-lord; a new town mayor with a whip hand. He believed there was no point in appeasing the pancreas alone if other workers were disgruntled, too.

Dr. Nath has not talked much about how he found this over-lord. But he found it in the extract of a plant of the figwort family that grows wild in India. He calls this over-lord, "amellin."

It can be given by mouth, saving the diabetic hundreds of needle pricks. It is slow-acting, and it may be several months before sugar stops spilling over into the urine. Slowly, too, the anæmia which so often accompanies diabetes begins to clear up. Old infections begin to heal, and even the dread gangrene can be cured. Joint pains and neuritis clear up. As the days go by, the diabetic begins to feel like his old self.

As the news of Dr. Nath's triumph spread through India, patients began to flock to the University. Though he isolated the drug amellin in 1940, he experimented with animals for almost three years before he attempted to treat human diabetics.

There was, for example, the forty-six-year-old school-teacher, frantic because he was so weak and because his eyesight was failing fast. He could not recognize his best friend at a distance of ten feet. He had been diabetic for four years before he heard of Dr. Nath. In three months' time his drooping shoulders were straight, he walked with the quick step of a man who is happy with life, and best of all, his eyesight was restored to normal.

Dr. Nath does not starve his patients. Some eat more than 3,000 calories a day, and few take less than 2,000. Dr. Elliott Joslin, America's foremost authority on diabetes, advises about 1,600 calories a day for an adult diabetic taking insulin. Amellin appears to be the mighty over-lord who can keep the body workmen satisfied and doing an efficient job. Or perhaps it neutralizes, as an antidote neutralizes, the poisons produced by faulty factories.

So far Dr. Nath has not been able to study the large number of patients that science requires before accepting a treatment whole-heartedly, but he is hopeful and confident. Every month his records show more triumphs for the new drug.

Amellin is not available as yet, as is penicillin, another worker of seeming miracles. But the old order is changing, and science is seeking something more than insulin for the treatment of diabetes. Who knows but that amellin may open the way to a complete understanding of this age-old disease, and bring, in Dr. Nath's own words, "new hope to suffering humanity"?

LEAVES

(In Basic English, by Cosmas D. Alwines, Jaffna, Ceylon

1

Leaves, leaves, leaves,
Take more leaves,
Leaves, leaves, leaves,
Natural stores of vitamin,
Take them cooked or better green,
Blood, intestines will be clean,
With leaves, leaves, leaves.

2

Leaves, leaves, leaves,
Take more leaves,
Leaves, leaves, leaves,
Teeth so beautiful to see,
Bones quite straight and strong will be,
Bright red blood for you and me,
With leaves, leaves, leaves.

3

Leaves, leaves, leaves,
Take more leaves,
Leaves, leaves, leaves,
Powers of body will be strong,
Nothing will go ever wrong,
Healthy you will be for long,
With leaves, leaves, leaves.

4

Leaves, leaves, leaves,
Take more leaves,
Leaves, leaves, leaves,
Leaves if you will ever let,
Be a part of the food you get,
You will never have regret,
Leaves, leaves, leaves.

GALL—

HAR

GALL-STONES are annoying little concretions that may cause attacks of excruciating pain in the right side of the upper part of the abdomen. Not all gall-stones, however, cause colicky pain.

Sometimes they cause a dull type of distress in the middle of the upper part of the abdomen associated with excessive belching, fullness after meals and intolerance for certain foods. This is designated as gall-bladder dyspepsia and is apt to occur in persons who are spoken of as the "fair, fat, forty and flatulent type."

Sometimes gall-stones are quite "silent" and cause little or no distress. In this case their presence may be discovered accidentally during a routine X-ray examination or by other methods.

Sometimes gall-stones are removed by surgical operation and the person is greatly relieved of his distress. Sometimes they are treated by medical methods for long periods with reasonable comfort to the patient. In the vast majority of cases the removal of the gall-bladder with its stones usually causes considerable improvement in the patient and he is thereafter free from colic; occasionally, however, the distress or the stones or both return, and this raises the question as to what causes the stones to form in the first place.

To understand the problem of gall-stones, it is necessary to start with the beginning, that is, the process by which they are formed in the body. Then comes the programme of treating them both medically and surgically and the results to be expected of each of these and finally the question that is so often asked—whether gall-stones can be expelled from the body without surgical operation.

Formation of Gall-Stones

The formation of gall-stones in the body is unfortunately not a simple process. It would be convenient if it were, for then the control of them would be correspondingly simple.

Three factors are involved in the formation of gall-stones. These are: infection, changes in the composition of the bile and stasis or stagnation of the bile (which is produced in the liver and stored in the gall-bladder). The process is this:

Infection provides a nucleus consisting of bacteria, alive or dead, or body cells sloughed off from the walls of the gall-bladder or bile ducts.

About these are precipitated cholesterol, calcium salts or bile pigments whenever the chemical balance that holds them in solution is upset.

An increase in the secretion of cholesterol into the bile is favoured by conditions including pregnancy, obesity, starvation, high fat diets, hemolytic jaundice. In these conditions, the blood cholesterol is high, and the bile cholesterol tends to rise parallel to the blood cholesterol. A decrease in the bile salt content of the bile favours the formation of stones.

This condition is favoured by inflammation of the gall-bladder or its ducts and by biliary stasis, which favours the removal of water while delaying the removal of bile salts, thus upsetting the concentration and chemical balance of the bile.

Biliary stasis occurs in pregnancy, heart disease, over-weight, inflammation of the gall-bladder, debilitated states and sedentary habits. Under these conditions, gall-stones are apt to form.

Animals Also Have Gall-Stones

Most people are greatly surprised when informed that animals have gall-stones. No fooling, they really have, and some of them are as big as or even bigger than those found in man. Some years ago, workers at the University of Colorado and the Bureau of Animal Industry of the U. S. Department of Agriculture made a survey of several thousand cattle coming to Denver packing houses. They found that one per cent of the animals had gall-stones.

Most of the stones occured in adult cows that had borne calves. One lone bull had the honour of maintaining the position of his sex, while steers (emasculated bulls) make up the remainder. There were no instances of gall-stones among heifers (adolescent females), and this suggested that they had not reached the age for gall-stones. The age of the cattle with gall-stones varied from two to ten years with an average age of seven which represents middle life for cattle.

The purpose of making such a survey is to remove the study of gall-stones from the narrow confines of human behaviour with all its artificially imposed restrictions and habits, and place the investigation on a broad biologic basis thus removing the problem from all the vagaries of man with his bizarre habits, customs and restrictions.

Gall-stones also occur spontaneously in hogs, and dogs, and they have been produced experimentally in rabbits.

In human beings they occur universally among all peoples and all races. They have been known since antiquity. Fifteen hundred years ago, Alexander of Thralles gave an excellent description of them.

A survey of numerous observations seems to indicate that from five to ten per cent of people have gall-stones, that they occur twice as frequently in women as in men, that pregnancy is an important pre-disposing factor, likewise that more people who eat a high fat diet have gall-stones than those who eat a more vegetarian diet; that gall-stones are of lesser frequency among certain tribes in Russia, Japan and India where the diet is more frugal, more vegetarian and poorer in fat; that Negroes have fewer gall-stones than their white neighbours, perhaps for the same reason. As to age, gall-stones have been found in people from infancy to old age, although the great incidence occurs in middle and late life.

No one has yet come out with a clear-cut statement that the tendency to gall-stones is inherited, yet it is a common observation that gall-stones tend to occur in some families more than in others. Many physicians have observed families that have a high incidence of gall-stones. In one type of gall-stones, the inheritance factor has been clearly established, namely in the stones that occur in about half the people who have hemolytic jaundice, which is now generally accepted as an inherited disease.

Behaviour of Gall-Stones

Gall-stones are variable in appearance and occurrence. They will range in number from one single large stone the size of a small egg to hundreds of small sand-like pellets; in colour they are brown, yel-

low, black, green, or a mixture of these; in shape they are round, oval, polygonal; their surface is rough, smooth, granular, shiny or dull.

In behaviour they are equally variable. Generally their behaviour falls into three patterns. (1) They are "silent" and produce no distress; (2) they produce a dull type of upper abdominal distress called biliary dyspepsia: (3) they produce a violent type of excruciating pain called biliary colic.

As to the silent type, little need be said about them since they are of no importance.

The second class gives rise to biliary dyspepsia. Here the person experiences a dull type of distress associated with fullness after meals in the middle of the upper part of the abdomen, also belching and bloating; coated tongue, offensive breath, sometimes nausea and vomiting; sometimes pain under the lower ribs on the right side and radiating to the back; intolerance for certain foods, as fried foods, greasy foods, highly fat foods, onions, vinegar, spices, peppers, alcohol, strong tea

TONES

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and coffee, radishes, cucumbers, chocolate, cabbages, brussels sprouts, raw apples, canteloupe and some others.

The distress usually occurs after meals and conversely the person usually feels better when the stomach is empty; sometimes he gets relief from soda. Constipation is common and the stools may be clay-cloured.

The third type of distress is the biliary colic. Here the person is seized by an attack of excruciating pain, knife-like in character, usually along the lower border of the right ribs. The pain usually radiates to the right shoulder blade, however it may radiate to the pit of the stomach or elsewhere. The duration of such an attack is variable. It may last from seconds to hours.

With an attack, one is severely prostrated, usually takes to bed, doubles up in agony; although occasionally he may pace the floor. He is apt to have a chill followed by a fever; sometimes he has nausea and vomiting. The urine is apt to become darkly stained or even jaundiced while the stool becomes clay-coloured; jaundice may appear in the skin, eyes, lips and other surfaces of the body. Few people can stand the agony of a gall-stone colic without the beneficent help of a powerful sedative.

There is no set pattern for the number of such attacks that a person can have. He may have a single attack or repeated attacks coming on every few weeks. Generally speaking the gravel and smaller type of stones are more apt to produce colic since their small size makes it easier for them to enter the ducts, a position which is the basis of the colic; whereas the larger stones encounter more difficulty in entering the ducts. These accordingly are less apt to produce colic, but they are more apt to produce biliary dyspepsia.

Immediate and Long-Time Treatment

Treatment depends upon the behaviour of the stones in the body. During the stages of colic it is necessary to give the sufferer relief from the agonizing pain. A powerful sedative is necessary. Usually morphine is employed. External heat to the gall-bladder region is helpful.

The appetite as a rule is lost and nausea is usually present, hence a very light or even liquid diet is employed. The use of fluids is to be encouraged. Bed rest is usually employed.

When the acute stage of the colic has subsided, then a more permanent programme has to be considered.

When gall-stones are known to be present either by the evidence of X-ray films or by the excruciating experience of the colic, then surgery is generally considered, with certain specific exceptions which will be mentioned later.

Bile ducts from the liver connect with the gall-bladder and also with the duodenum, where thhe bile enters the digestive tract. Normally the bile does not flow directly into the duodenum but first passes into the gall-bladder, where it becomes concentrated. When the gall-bladder is removed, the bile thereafter follows the direct route and the ducts that carry it dilate, possibly in partial compensation for loss of the gall-bladder.

Most physicians agree that a gall-bladder that contains stones and has caused a biliary colic should be removed. Gall-stones that have caused colic are apt to repeat the performance. Certainly few people wish to repeat the experience of gall-stone colic.

Following the removal of the gall-bladder with its stones, the person should follow the so-called "gall-bladder regime" for some time, perhaps for years. It must be remembered that the factors which produced the gall-stones before are still present and may produce gall-stones again. Removal of the gall-bladder did not remove the causes or the mechanism for the formation of stones.

Over-eating will certainly produce biliary dyspepsia. Hence the need for caution and a controlled programme of living after the removal of the gall-bladder, in order to avoid the recurrence of stones or biliary dyspepsia.

Medical Management

To begin with, over-weight must be corrected if it is present, likewise high fat diets and sedentary life beyond the requirements of the person's physical condition should also be avoided. These all tend to cause the recurrence of biliary dyspepsia. Certainly there is no point to inviting trouble.

Medical management consists of those procedures which experience has shown afford the greatest protection and the maximum comfort to a person with an impaired biliary system, and protect him from biliary dyspepsia.

First is body weight. Gall-bladder patients should not be over-weight. If they are they should get down to their proper weight level. This is done by restricting the food intake to 1,000 to 1,200 calories with proper regard to the intake of protein, minerals and vitamins. Then they should follow the gall-bladder diet, which consists of those foods that cause the least irritation to the liver and gall-bladder while at the same time maintaining the body in a state of adequate nutrition.

The total energy value of the diet should be enough to maintain normal work and normal weight and no more; every additional ounce of food imposes a needless burden upon the liver. Hence the gall-bladder diet consists of 1,800 to 2,200 calories if the person is of normal

weight and if he is performing ordinary work. Allowances are made for those engaged in heavy work.

If a person is over-weight he should follow the reducing diet of 1,000 to 1,200 calories. He may combine the low caloric diet with the principles of the gall-bladder diet. Well-cooked foods are desirable in the diet and so are a generous amount of fruits and fruit juices, but not the hard fruits as raw apples and cantaloupe. Iced foods and beverages are to be avoided.

Other factors come in for consideration in the treatment of biliary dyspepsia. Many people lack a sufficiency of bile in their intestinal tract. Some physicians are of the opinion that this insufficiency of bile is partly responsible for the constipation and flatulence often present; hence it is desirable to give bile in some form to these people. It is usually given as dehydrated bile or bile salts.

Saline laxatives are sometimes employed, so are digestives. External heat and various types of baths are employed to advantage.

However, surgery offers the best all-round treatment and results; nevertheless there are people in whom the ailment must be treated entirely by medical methods. These are persons of advanced years, persons with severe heart or kidney disease and those who refuse surgery.

Can Gall-Stones Be Made To Pass Without Surgery?

What about this talk of passing stones without surgery? In the first place a certain amount of misrepresentation has been practised in the past by some of the cultists in this matter. By prescribing olive oil and soda, or some such combination, they would cause the patient to pass "soft stones" which they promptly claimed were gall-stones. Such "soft stones" were formed in the intestine by the action of the alkali on the oil or fat. They did not originate in the gall-bladder and, in fact, had nothing to do with it.

But gall-stones do pass spontaneously at times during a colic, and the question has arisen whether they can be caused to pass by a controlled programme.

By a system designated as "biliary flush," some doctors have been able to cause the patient to pass stones. The stones so passed are of the smaller size only. It is doubtful if a stone larger than a quarter of an inch can be made to enter or pass through the out-going ducts by the biliary flush method.

Further, the experience of the patient is not particularly pleasant. It is probably little short of the distress caused by a real colic under treatment; further, the passage of one or more stones does not mean other stones have not remained behind to cause further trouble at a later date.

So all in all, biliary flush is not a procedure to be recommended in the routine treatment of gall-stones. Even the writers on this subject recommend that "surgery remains the surest method for the removal and the most effective for dealing with a seriously diseased gall-bladder." The best form of treatment for gall-stones that cause distress is the removal of the gall-bladder with its stones.—*Hygeia.*

BRITAIN'S NATIONAL HEALTH SCHEME

John Rigg

Every family in Britain is now being supplied an official leaflet explaining how they will be able to make use of the new health service which starts in July. Altogether some 13,000,000 copies of the leaflet will be distributed.

The National Health Scheme offers a wide range of services on a larger scale than has ever before been attempted. Every man, woman and child in Britain will be able to make use of medical, dental and nursing facilities free of charge and without insurance qualifications. The National Health Service is not a charity. Everybody bears the cost of the Service mainly as taxpayers.

The public will be entitled to receive advice and treatment from the family doctor of their own choice. All consultations between doctor and patient will remain personal and confidential as at present. Most families will choose to retain the services of their present doctor. Anybody who wishes to change doctors and anybody who is not already on a doctor's list is asked to make a choice now in order that the scheme can start efficiently and smoothly.

Special Services

Besides private treatment, everybody will be entitled to the medical and health services offered by general or special hospitals. Included in these amenities are maternity care, sanatorium treatment, care of mental health and all kinds of surgical operations. Hospital charges will cease on July 5, but accommodation permitting, patients will be able to pay for greater privacy.

Medicines and drugs prescribed by doctors will be obtainable free of charge from all dispensing chemists taking part in the scheme. In the same way, all the necessary appliances will be available without charge to the patient.

At present there are too few dentists to make the full service available straight away, but after July 5 a special priority service for expectant and nursing mothers and young children is being organized by the local authorities. This is in addition to the free dental service at the disposal of all school children Partial dental service, which will come into operation in July, offers free treatment to the general public on the same lines as that provided by the medical service.

Hearing Aid

Special eye treatment will be undertaken by specialists at hospitals and clinics as part of the free hospital service. Several different types of spectacles will be provided without charge

Free distribution of a new hearing aid invented by a special committee of the Medical Research Council will be made shortly to all deaf patients while specialist ear clinics will be established as resources allow.

As soon as possible, it is hoped to organize local Home Health Services throughout the country. Under the direction of local authorities this additional service will provide for advice and care for expectant mothers, and children under five, home nursing, vaccination and immunization services and the appointment of health-visitors to deal with problems of illness in the home.

A total of £150,000,000 (Rs. 199.65 crores) has been set aside to cover the costs of the new health services during the first nine months from the inauguration date in July.

B. I. S.

OF RATS AND MEN

ASHLEY MONTAGU, Ph.D

TWENTY years ago studies of the thyroid gland were being carried on at the Wistar Institute of Anatomy in Philadelphia. The experimental animals used were a genetically identical strain of rats. During the course of these studies the investigator noticed that his animals fell into two distinct behaviour groups. One group of rats presented a consistently high irritability and neuro-muscular tension, while the other group presented a picture of placid, relaxed, well-balanced contentment. The first group were wild and fearsome; the second group were tame and friendly. In view of the nature of the study, it seemed worth while to investigate the possible cause of this behaviour difference in what was essentially a genetically homogeneous group of animals.

Upon investigation it was found that the rats were actually drawn from two different sets of cages. In one group of cages, in which the standard stock of animals was kept, were the rats who received no other attention than to have their cages cleaned at certain periods, and at whom, as it were, food was thrown during each day and the door of the cage banged shut upon them. To this group belonged the irritable, neurotensive rats. In the second group of cages were rats who had received a good deal of personal attention. They had been fed by hand, stroked, and in other ways gentled. They were the placid, friendly animals.

The first group had obviously been frightened and bewildered by the treatment they had received. No one had shown them any real sympathy; but they were instead treated in an off-hand, peremptory manner, which did nothing to make them feel that they belonged to any sort of world at all. This resulted in a state of nervous tension, much like that which men develop under similar circumstances.

The gentled rats, on the other hand, obviously felt secure under the hands of those who fondled them. The laboratory attendants had brought them up on a ration of friendliness and sympathy; and they responded with fearlessness, friendliness, and a complete lack of neuro-muscular tension or irritability.

Observe now what happened when the glands in the neck—the parathyroid and the thyroid—were removed from both groups of animals. Within forty-eight hours of the operation 79 per cent of the irritable rats died, while only 13 per cent of the gentled rats died. A difference of 63 per cent of survivals in favour of the gentled rats!

But this is not the end of the story. When rats taken from the irritable group were put through a course of gentling, of friendly treatment, they lost their fear and became friendly; while their mortality rate after operation was, in the relatively small series studied, reduced to zero.

Here, you will observe, we have a clear demonstration of several important facts which among human beings are not always easy to prove experimentally.

First, among rats, as among men, any experience which produces a mental strain results in a state of nervous tension.

Secondly, neurotensive individuals are less able to stand physical and nervous shocks than calm, well-balanced individuals.

Thirdly, and finally, neurotension is a curable condition.

These observations on rats confirm and give greater force to what we already know about human beings; that is, that the neurotensive state can be eliminated not so much by removing the external conditions which form the original conditions of disturbance as by controlling one's responses to those conditions.

It is true that the conditions of modern life place a great tax upon one's nervous energies in much the same manner as our standard rats were nervously taxed, and that the elimination of these conditions would go a long way toward reducing nervous tension. However, such an improvement in external conditions would by no means wholly eliminate nervous tension. The reason for this is that neurotension is not solely caused by external conditions, but by one's mode of responding to such external conditions. Hence, what we must learn to control are our responses to every one of the conditions constituting the world of events to which we are exposed. The rats could learn to do this only when their external circumstances were changed, when by being gentled they were made to feel that they belonged somewhere, that they were not insecurely alone. But men do not need to change their external circumstances, however desirable this would be, in order to establish a state of happy tranquility within themselves. This they can do by adapting themselves to conditions as they find them; that is, by making the responses best calculated to master them.

When the irritable rats learned to "take it easy," they lost their nervous tension. When you have learned to "take it easy," to relax, you, too, will lose your nervous tension. Before the irritable rats could lose their irritability they had to re-orient

themselves in relation to a new set of social conditions. From an isolated state in which they were left completely alone, they were introduced into a noncompetitive, co-operative environment, an environment which was kindly instead of indifferent and even hostile. In such an environment a rat can feel happy, as part of a universe in which he definitely belongs.

Now, as far as you are concerned, with the exception of your family and your friends, sad as it may be to have to say it, comparatively few persons are going out of their way to make you feel that you really belong to a friendly, co-operative world interested in maintaining your happiness and security. Unfortunately, the truth is that the world in which most human beings find themselves today is one which is rather more hostile than otherwise. It is a world organized upon essentially competitive principles, while the principle of co-operation is left to preachers and idealists to talk about.

Actually, you and I—all of us—are in much the same situation as those ungentled rats. All of us are living in a fiercely competitive world. This was not always so. In medieval times the feudal economic system was based upon the principle of co-operation rather than the principle of competition. Men worked together, not against one another. And religion, then well-nigh universal, gave men a creed upon which to lean in time of stress. With the rise of industrialism and capitalism, the principle of co-operation gave way more and more to that of individualistic enterprise, while an increasing proportion of men began to give up their reliance on religion.

Thus, from both the secular and the spiritual sides, man has become more and more isolated, thrown back upon himself. He was torn lose from a world which had satisfied his need for economic and spiritual security. He was no longer engaged in a common enterprise, but in a competitive struggle for existence, in which he was frequently confronted with the choice of either destroying his competitors or being destroyed by them.

With no creed to support them, with a driving, hostile world continually threatening their security, is it any wonder that, like rats under similar conditions, men develop an uneasiness which expresses itself not alone in neuromuscular tension, but also often in disillusion, cynicism, hysteria, neurosis, and in a feeling of complete defeat?

Under such conditions the pact that men often make with themselves is this: "Well, if society wants it that way, I'll live my life entirely for myself. I'll show 'em. I'll spare nothing and I'll spare nobody." They become for themselves the only object of interest and the sole criterion of value. Their own self-satisfaction and gratification become sufficient aims and purposes of living.

Do you see how much like those insecure, irritable rats we have become? But do you not also see how, like those rats, we may solve the dilemma with which we are faced?

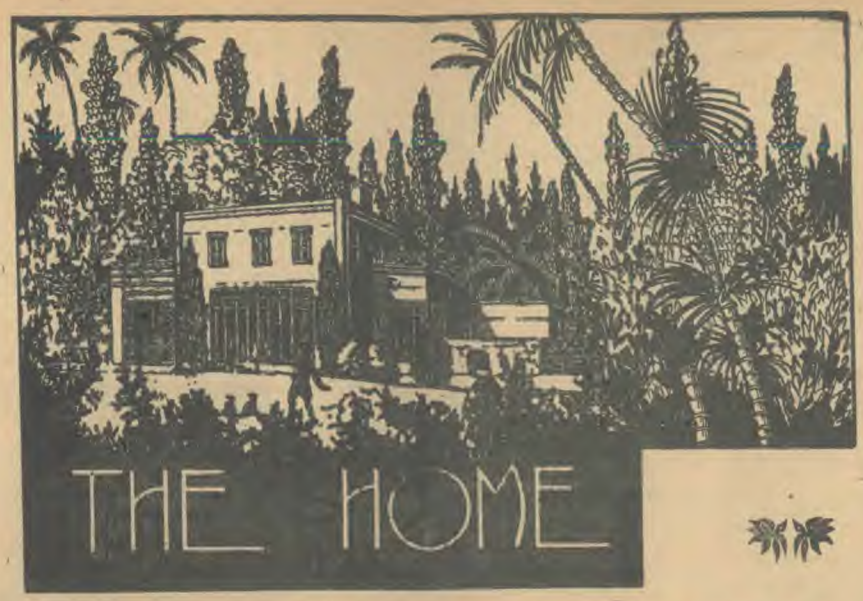
If each one of us will reduce in himself the spirit of competition to the necessary minimum, and reinstate, as a dominant motive and principle, the spirit of co-operation, this will of itself serve to achieve an enormous increase in personal well-being. No time is more propitious for the wholehearted exercise of the spirit of co-operation than the present. The degree to which we learn to co-operate will be to a large extent, the measure of our morale.

Exchange the freedom to be alone for the freedom to be together with your fellow men. Pull together with, not against, your fellows. It is time we fully realized the value of joining hands with our fellows in the common endeavour of achieving the good life.

You will gain measurably by sharing in all the experiences of your fellow men, not cutting yourself off from them. In so doing, you will gain both in understanding and in strength of character, and you will shed that feeling of strain and inquietude which affected you when you felt that every man regarded you as a stranger. You will feel that, because you are of men and because their mistakes, failures, and successes are your mistakes, failures, and successes, you belong in the great fellowship of men, that you are not alone.

Be gentle to others and they will be gentle to you. Don't despair if it doesn't work the first or the second time. Help others to see your point of view—the beauty and efficiency of the spirit of co-operation rather than that of competition. Scratch a competitive, rugged individualist and you'll find a solitary, confused, unhappy soul beneath. Bring him out and make him part of your great co-operative fellowship. It is by your own example that you can best achieve this. Be a co-operator yourself, and you will soon find a great ease of the spirit embracing you. Men, by your example, will be encouraged to imitate you, and you will find yourself, almost automatically, considerably relieved of the nervous tension which may consciously or unconsciously have been plaguing you.

Non-co-operation, Physical or Mental, is Waste of Energy.



HOW HANDSHAKING STARTED

ALICE W. NORTON

HANDSHAKING is a nice custom. Somehow the warm, friendly grip of a human hand has a great tendency to lift our spirits and speed us on our way. It seems to give our step a lighter spring, and even our voices sound more tuneful after we have shaken hands with a friend.

"Silly custom, this handshaking," I heard a modern youth exclaim recently in a bookshop where the three of us were talking, "and I would like to be the one to abolish it."

"You would!" his red-headed companion, evidently another modern youngster, mimicked. "You'd like to abolish a custom whose origin was founded on friendliness. It's you, Bud Crow, who's silly!"

"I-I-maybe I'm talking too fast," returned Bud, "but it does seem so foolish to me to have to practise handshaking with my mother. You know," he went on sarcastically, "she says it must be a firm, glad clasp to mean anything, and—well, anyway, I never seem to have the sort of grip to suit her."

"A good grip is necessary," declared the red-headed youth. "Initiative always has been that way."

"Well," exclaimed Bud, "why don't you tell me what you know on this subject and be done with it?"

"Well, here's the whole thing in a nutshell: "Long ago, when civilization was young, people had to carry swords and sabres to protect themselves against robbers and bandits as well as their personal enemies. For this reason each man kept his right hand on his sword handle, or kept the handle in position to grasp it readily that he might draw it quickly in case of attack, or if he caught sight of an approaching enemy.

"When he happened to encounter a friend he held out his hand to show it was empty of any injurious weapon. Of course, the man he met did likewise, and thus came about the custom of grasping each other's empty hand as a token of friendliness and trust in each other. Of course," the red-headed speaker chuckled, "the custom of carrying swords and sabres to settle disputes of any argument today has vanished, but the old habit of handshaking has lived right on down through generation after generation as a token of a friendly attitude. I like it myself, and I am making a hard effort to learn the knack of clasping a hand in such a way that it carries real warmth and tenderness to those whose hand I clasp."

"Well, now," Bud murmured a bit whimsically, "this story of yours puts a new light on the subject to me. I'm going now to start practising the handshake."

"You might as well begin right here," laughed the red-headed speaker.

And then, to my pleasant surprise, I saw the boys shake hands and go their different ways, but the thought advocated by the red-headed youth lingered in my mind. Real friendly handshaking is a good custom, and everyone ought to do more of it.

KITE LAND

NORMAN C. SCHLICHTER

YOU surely know that by "Kite Land" I mean China, famed for centuries for its wonderful kites.

The variety of Chinese kites seems almost limitless, we are told by those who know. A brief glimpse of the sky in almost any place will show kites shaped like butterflies, fish, insects, hawks, centipedes, and dragons. There are also big human shapes of kites. These portray fierce soldiers, pagan gods, and national heroes. Even popular actors are pictured in kites, and ride the sky dressed in their stage costumes.

The big man-shaped kites are flown by grown people who are as fond of kite flying as boys and girls are.

In larger cities whole streets are known as kite streets, in which nothing but kites are displayed in shop windows, and nothing but kites made in the shops.

Amazing ingenuity is shown in kite construction. For instance, bird kites are made with adjustable wings which can be set at various angles so as to control their flight. Dragon and centipede kites, monsters from thirty to forty feet long, are made with many sections. This gives them a wiggling, snakelike motion in the air. Tiny wind wheels make the eyes in them revolve.

Kites in China are often called *feng cheng*, which means in English, "air harps." This name comes from their giving out humming and singing noises made by small bamboo flutes or bowed strings which are attached to them. These sounds may be heard at great distances from the kites.

There is much night kite flying. Lanterns of many colours are attached to the kites, and families spend many evenings together watching the beautiful sight—to which the kite music adds much delight. Groups of kites at night must look a great deal like rainbows in the dark.

China has lots of split bamboo and many types of extra-strong lightweight paper which are combined to make very sturdy yet very light

kites. Skilled artists are employed by wealthy persons to paint pretty designs on many kites.

No one can tell exactly how old kite flying in China is, for its beginnings have been lost in ancient stories.

We know that the Arabs learned from the Chinese to fly kites as early as A.D. 869. But the Chinese most certainly flew them long before this date. Kite flying spread over Europe by way of the Arabs, but very, very slowly. There is no record of it in Italy until 1589, and the first word about it in English books goes back only to 1634.

If China had had a Benjamin Franklin centuries ago, that land might have been the first leader of the world in scientific progress. It was a silk kite that enabled him to discover electricity, as nearly everyone knows.

RECIPES

THE VITAMINS

EVERY cell in the body is affected by vitamin deficiency. Many people resort to pills and nostrums in order to get the needed vitamin requirements for the health and well-being of the body. Foods rich in these vitamins are better sources than pills. The HEALTH magazine is endeavouring to supply recipes to its readers that supply necessary, vital vitamins: A, B^1, B^2, B^6, C, and others.

The best sources of vitamin A are whole milk, cream, butter or ghee, egg yolk, and vegetables such as carrots, sweet potatoes, squash and pumpkin. All yellow fruits such as papayas, mangoes, apricots and melons contain vitamin A.

Vitamin B and the B complex is found in all the whole grain cereals, especially in the embryo and covering of the grains. Legumes such as peas, beans and lentils contain them in liberal amounts. Milk and green leafy vegetables are also good sources of this vitamin. Ata is one of the best sources.

Vitamin C (or ascorbic acid) is also one of the very essential vitamins. It is found abundantly in oranges; guavas, limes, cabbage, mustard greens, tomatoes and sweet green peppers (capsicum). Potatoes, when baked or boiled in the skin, also contain this vitality-giving vitamin. The water in which potatoes are boiled should never be thrown away but should be saved for soups or gravies.

One of the world's great doctors has said that only under special conditions should it be necessary to get our vitamins at the chemist's shop. If a person is living in a place where plenty of fresh fruits and vegetables are obtainable, with plenty of whole grain foods and milk, it should not be necessary to buy vitamin concentrates.

Vitamin Containing Recipes

PROTEIN NUT ROAST

One cup walnuts, finely ground; 2 cups bread crumbs; 1 onion grated; 2 tablespoons oil or ghee; 2 cups rich milk; 1 teaspoon salt; 1 teaspoon sage; 2 eggs, beaten.

Fry the minced onion in the oil or ghee. Mix all ingredients together and bake in well-oiled pan until done (about one hour). Serve with tomato sauce. Serves six.

TOMATO SAUCE

1 clove garlic; 1 tablespoon minced onion; 2 tablespoons oil or ghee; ½ teaspoon Marmite; 3 tablespoons browned flour (level); 2 cups stewed and sieved tomatoes; salt and a sprinkling of brown sugar to taste.

Simmer the ghee, onion, garlic and Marmite for about five minutes. Add the browned flour and then the tomato

puree. Let boil well, stirring all the time. Add sugar and salt and serve.

SALAD BOWL

1 small head lettuce; 2 firm ripe tomatoes; 1 small cucumber; 4 small spring onions; juice of one lime; 1 tablespoon salad oil; salt to taste and seasoning.

Clean and wash the lettuce in several waters. Shred the leaves fine. Chop the peeled cucumber and onions. Sprinkle over this the seasoned lime juice and oil. Place in salad bowl and top with tomatoes cut in quarters.

DAL AND RICE CUTLETS

1½ cups cooked dal; ¾ cup cooked rice; 1 cup nuts ground fine; 1 tablespoon celery, minced fine; 1 level teaspoon sage; 1 onion minced fine; 2 tablespoons fat; salt to taste.

Saute onion and celery in the fat. Add the other ingredients. Form into cutlets and roll in bread crumbs. Saute in oiled skillet until lightly browned on both sides. Serve with egg sauce.

EGG SAUCE

2 eggs; hard boiled and chopped; 2 cups milk; 2 level tablespoons flour; 2 tablespoons oil or butterfat.

Put fat in a saucepan. Add flour and stir and cook until well blended. Add milk, stirring all the time and when it is boiling well add the chopped egg and salt to taste.

COCONUT PUMPKIN PIE

1 cup brown sugar or gur; ¾ teaspoon cinnamon (ground); ½ teaspoon grated nutmeg; ¾ teaspoon salt; 1½ cups pumpkin, cooked and mashed; 1½ cups rich milk; 3 eggs; ¾ cup coconut, dessicated or scraped.

Mix spice with sugar and salt. Add the egg, pumpkin, and milk and beat well. Pour into an unbaked pie crust and sprinkle with coconut. Bake in hot oven until the coconut is delicately browned and the custard is set. Serves four.

PIE CRUST FOR ONE PIE

1 cup ata or whole wheat flour; ½ cup white flour; ¾ teaspoon salt; ½ cup ghee or oil (very cold); 3 tablespoons cold water. Mix all together and roll out or pat into pie pan. Fill with custard and bake.

TASTY PURRIES

2 cups ata, sifted; 2 cups mashed potatoes, hot; salt to taste.

Mix ata (whole wheat flour) with the hot mashed potatoes, knead well, divide dough into eighteen equal parts and roll out very thin. Cook in deep fat until light brown and puffed. (Cook only one purry at a time). Serve with your favourite curry and curds.

BRINGAL CURRY

4 medium sized bringals, cut in pieces; 1 tomato, minced; 1 tablespoon green coriander, chopped; 1 onion, minced; ¼ ground coconut; 1 teaspoon coriander seed, ground; ¼ inch tumeric, ground; 4 cloves of garlic, minced or ground; salt to taste.

Take two tablespoons of fat and put in a saucepan. Add the minced onion when fat is hot and saute for a few minutes. Add the mussalla and saute again a few minutes. Add the minced tomato and the coconut. Finally add the bringals and cook until bringals are tender. Stir to keep from scorching.

SPINACH LOAF

1 cup cooked and sieved spinach or any other greens such as beet greens, turnip greens, etc. ½ cup rich milk; 1 tablespoon egg powder; ½ teaspoon salt.

Mix all ingredients well: Butter a baking dish or custard cups; fill with the mixture and bake fifteen or twenty minutes in hot oven. Serve hot. Serves two.

THE DOCTOR SAYS

This question and answer service, free only to subscribers, is intended for general information. No attempt will be made to treat disease or to take the place of a regular physician. In special cases, where a personal reply is desired or necessary, it will be given if a stamped addressed envelope accompanies the question. We reserve the right to publish the answers to any questions sent in, if we deem them beneficial to our readers, though no names will be published. Address the Associate Editor (Doctor Says) "Health," Post Box 35, Poona 1, and make questions short and to the point.

ARTHRITIS AND DIABETES: Ques. —"(1) I have been suffering from arthritis of the right hand and shoulder and as a result of this complaint cannot place my hand in my pocket or raise it straight up. A doctor gave me one or two injections and also oral medicine which I continued to take for twelve days, but I became disappointed and gave up the treatment. I then took to Indian Ayurvedic treatment but the physician gave such strong medicine to produce heat in my body that my eyes became red and I passed blood in my urine. I discarded this treatment and took homeopathic treatment but still find no relief. What shall I do? (2) I am a diabetic patient and have been on a restricted diet of non-starchy foods but still have pain and pass large amounts of urine. I am greatly disturbed over my condition. I am fifty-five years old and a strict vegetarian. I will be very grateful for your suggestions regarding treatment."

Ans.—(1) Arthritis is a painful affliction of the joints. It may be due to any one of several causes and each type requires varied treatment. Therefore, you should consult a competent physician for a thorough examination. Only a few cases of arthritis can be cured. Many can be greatly relieved by modern treatment. (2) A careful diabetic may live just as long and useful a life as a normal person. The main characteristic of a diabetic diet is that it is low in cereals and sugar is forbidden while it is quite liberal in vegetables, milk, leaves and ghee. Daily you should take: 1. Two glasses of milk (boiled). 2. One egg (or more milk or curds). 3. One serving of leafy vegetables. 4. Three servings of other vegetables except potatoes. 5. One citrus fruit. 6. Wheat or other whole grain cereal prepared any way you like. Limit this to about half or one-third the amount you usually take. 7. Ghee may be taken freely. 8. Dal. An occasional plantain or papaya or Sapota will not be harmful but one should avoid all cakes, sweets, sweet drinks and puddings, sugar, honey or syrup. If you have a question about any specific food not forbidden or not mentioned here, ask your doctor. And if your doctor suggests an alteration of this diet, by all means follow his suggestions, for he knows much more about your personal case than we do.

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ASTHMA: Ques.—"I am one of your members and have been suffering from bronchial asthma for four years. Every night I have an attack of coughing with expectoration. A wheezing noise also comes from my chest. Kindly advise me concerning medicine and hygienic treatment or diet."

Ans.—Asthma may be divided into three main groups according to its cause. Group one includes a large percentage of cases and this type is caused by sensitivity to some substance in the environment, such as horse dandruff or the dust from a feather pillow or article of diet such as tomatoes or strawberries. The treatment of this type of case depends upon the detection and removal or desensitization to the offending substance. Many patients can tell the doctor fairly accurately to which substances they are sensitive. Sometimes the substances can be located by means of skin tests with various articles. These tests can be done by an allergist for he is the type of doctor who specializes in the treatment of asthma. Group two includes those cases whose asthma is due to some infection within their own body. Ofttimes an infected sinus or infection in the lungs is complicated by asthma. Sometimes some more distant infection in the teeth or gall bladder is responsible. Group three includes all other cases of asthma due to any and all other causes. Most asthmatic persons should be under a doctor's care. It is unfortunately true that only a small percentage can be cured. However, about sixty-five per cent can be relieved by modern treatment. It is hoped that some suitable remedy may be found for the remaining thirty-five per cent.

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TRACHOMA: Ques.—"My brother aged forty-six years has been suffering from trachoma. Since he read in your HEALTH magazine that trachoma leads to blindness, he wishes to die. Is there no way of preventing blindness? Your help in this matter will be greatly appreciated."

Ans.—Trachoma is a disease caused by a filtrable virus. It produces granulations on the inside of the eyelids. These granulations cause irritation of the cornea and this constant irritation often leads eventually to blindness. For this reason anyone who has trachoma or even suspects that he has trachoma should go to a competent physician at once for examination and treatment. Treatment is somewhat uncomfortable and requires several weeks, but it is necessary if one is to preserve one's eyesight.

PERSISTENT ECZEMA: Ques.—"I am in my forty-fifth year and have been suffering from an unknown and incurable disease for the last twelve years. The local doctors call it "eczema." There seems to be no cure for it as I have obtained only temporary and partial relief from their treatments. The affected areas first develop a small red rash of the prickly heat type, which burn and itch. Then in about twelve or forty-eight hours the rash forms into small blisters full of fluid and the smarting and itching increases in intensity. When these burst the area begins to weep and it is months before they finally heal. When they do heal this trouble moves to some other part of my body. The discharge from these sores is highly infectious and infects whatever part of my body with which it comes into contact. If there are any really good skin specialists in India, kindly give me their address."

Ans.—"You are to be complimented upon the acuteness and detail with which you have described your condition. Apparently you have a very resistent case of eczema. Have any of the pathologists you consulted cultured the fluid or skin scrapings for fungus? Have you noticed any tendency of this condition to be worse after you have handled any particular object or substance? I do not know the names of the skin specialists in your area but suggest you apply to the medical school there or to the secretary of the medical society for information as to whom you should consult.

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LACK OF GROWTH; FAINTING FITS: Ques.—"(1) My son is twenty-one years old and his height is only 4' 11". Can you let me know of any method by which he can increase his height by a few inches? What is your opinion about the Ross System or any other system of exercise? (2) He does not suffer from fever or weakness but he has a constant predisposition to catch cold and sometimes he has fainting fits, perhaps one a year or one in two years. Can you suggest any remedy for this?"

Ans.—(1) The normal period of growth is from birth until the eighteenth or twentieth year. After that the possibility of increasing one's height is nil, notwithstanding all the advertisements to the contrary. One cannot hope to be much taller than one's parents and attempts to grow to six feet when one's father was only five feet tall often upset the balance nature placed in one's body. Many sons, however, as a result of better food than their fathers had, do grow to be two or three inches taller than their short parents. The main thing for a boy or girl in their early teens is to live a healthful life, get at least eight hours sleep nightly, exercise one hour each day in the open air, eat a well-balanced diet including plenty of vegetables, fruits, dal, milk, and whole-grain cereals. Between the ages of thirteen and seventeen there is usually a rather rapid gain in height. If a youth does not show signs of attaining adult stature by his sixteenth year he should consult a physician for thorough examination and possible treatment. (2) Con-

cerning the fits. You should consult your doctor about the cause and treatment as it is impossible to diagnose and treat by mail.

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SHINGLES: Ques.—"I have been suffering from shingles since last October and have had two doctors in attendance and also a specialist, but all the latter could suggest was ultra-violet ray treatment. This treatment has had no effect upon my ailment, and I have continual pain, and terrible backache. Is an operation necessary for me to obtain relief from my trouble? I will be very grateful for your advice."

Ans.—Shingles is a painful disease affecting the nerve trunks. It is caused by a specific filtrable virus. The treatment is always towards relieving the pain, for the disease is self-limiting and will disappear of itself. No operation is necessary. You should consult a competent physician for treatment as it is impossible to prescribe and treat by mail.

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INFANTILE PARALYSIS: Ques.—"Could you let me know if any relief or treatment is possible for a victim of infantile paralysis? The boy for whom I ask this information has been treated by several specialists in India with no appreciable success. If you can give me information of some treatment in India or abroad I shall be much obliged."

Ans.—I presume that the boy referred to has recovered from the acute phase of infantile paralysis and has some residual paralysis. In America the most widely known centre for treatment of these cases is at the National Foundation for Infantile Paralysis, Warm Springs, Georgia, U. S. A. I would suggest that you write directly to them as they may be able to aid you in contacting a centre in this country.

?

LACK OF APPETITE: Ques.—"My two-year-old granddaughter has no inclination to eat. She is fed on milk and rice conjee. She shows a desire to eat, but when the food is placed in her mouth she ejects it again. What can I do to improve her appetite and thereby aid her development?"

Ans.—I infer from your letter that your two-year-old is not eating what is put in front of her but is getting enough food at other times to keep her from losing weight, but not enough to cause her to grow properly. There are a few general principles to follow: (1) Establish definite meal times (three or four daily) and allow nothing except water between meals. (2) A youngster of two years old should be getting more than milk and conjee. She should be eating rice and other grains as porridge, all vegetables except cabbage, and she should be eating dal, curds, fruits and eggs. (3) Anyone under three years of age should not be allowed cakes, sweets or puddings, for they will get their energy requirements from these and not eat enough vegetables, fruits and grains to give them sufficient vitamins and minerals to maintain good health.

An outline diet for a two- to four-year-old:

8 a. m. First meal: Fruit, rice or other cereal, milk 6 oz.

11 a.m. Nourishment, orange juice.
1 p.m. Second meal: Rice or potato, dal, green or yellow vegetable, milk 6 oz.
4 p.m. Nourishment, milk 6 oz.
6 p.m. Third meal: Wheat or potatoes, curd, vegetable, fruit, milk 6 oz.

If the youngster has been on no such schedule, there will be considerable friction in getting her used to the idea. There are occasional times when even a well child does not eat as much at one or two meals as its mother or nurse thinks it should, but the child usually makes up for it in the next few meals. If the child persistently refuses food and there is loss of weight or other signs of illness, a doctor should be consulted.

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FREQUENT URINATION; PAINFUL BOWEL EVACUATION; LOSS OF WEIGHT: **Ques.**—"(1) I have recently begun to urinate many more times than a normal person should do in twenty-four hours, and each time the urine passed has been a normal amount. Please tell me the cause of this frequent urination. (2) With every bowel movement I suffer great pain in my legs. What is the reason? (3) I am losing weight and would be happy if you would tell me what treatment and diet to take."

Ans.—(1) Frequency of urination may be due to diabetes, or cystitis, or to kidney disease. You should have a thorough physical examination and a chemical and microscopic examination of the urine. (2) The pain on passage of stool may be due to amœbiasis or to some infection about the anus. You should have your stool examined microscopically to detect any parasites you may have. (3) In order to gain weight one must take in more food than the body actually needs to maintain itself. This can best be done by taking larger quantities of food at the regular meals and by taking extra food, say at tea-time or just before bed-time. Hot Ovaltine made with milk is excellent for these times. It may be accompanied by a few biscuits or cakes if one desires. The foods which give the most energy for the amount of food taken are, first, the fats—ghee, butter and the various oils, nuts of all types, then whole grain cereals, dals, potatoes, grams and carrots. Bananas, sweet oranges, other vegetables, roots and fruits should not be left out but most of them do not give as much food energy per volume of food as the above mentioned things. Lead a very regular life; omit tea, coffee, alcohol and tobacco; take moderate exercise every day and get plenty of sleep. Often an extra hour of sleep every day is enough to bring about a gain in weight.

If no gain occurs after two weeks, one should consult a physician as there may be some physical illness which prevents you from gaining.

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UNACCOUNTABLE PAIN: **Ques.**—"I would be happy for your personal advice regarding the severe pain I have had in my right hand for the past four months. This pain is very severe at certain times (involving the ulna nerve), and I have a dull pain all the time. A skin test was taken and the results were negative. The trouble appears to have started after a slight injury to the third finger of that hand, with the pain gradually working to the base of the palm. I am at present being treated by means of intravenous injections, but the condition has not improved."

Ans.—From the details you give I cannot tell very much about the cause of your pain. Your doctor apparently suspected leprosy at first and has eliminated that by taking a skin biopsy. The next most likely possibility is neuritis and he is giving you suitable injections. There are, of course, other conditions which may cause the pain,

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but if any of them appeared to your doctor to be the cause of the pain, he would undoubtedly treat you for that. Neuritis is often a rather persistent condition in spite of our improved modern methods of treatment, so do not become discouraged too early.

?

DESIRED INCREASE IN HEIGHT: Ques.—"My son is twenty years old and is only five feet tall. He is quite healthy but I would very much like to have his height increased. You have often mentioned that the various advertised medicines for this purpose are useless. Kindly tell me whether the advertised systems of exercise would be effective in promoting my son's growth, and if so, which system should he follow?"

Ans.—The normal period of growth is from birth until the eighteenth or twentieth year. After that the possibility of increasing one's height is nil.

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(Please use block letters)

Old Address

Name .....

Street .....

Town or P. O. .....

District .....

To:

New Address

Name .....

Street .....

Town or P. O. .....

District .....

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notwithstanding all the advertisements to the contrary. One cannot hope to be much taller than one's parents, and attempts to grow to six feet when one's father was only five feet tall, often upset the balance nature placed in one's body. Many sons, however, as a result of better food than their fathers had, do grow to be two or three inches taller than their short parents. Since your son is just at the age when growth usually stops, you should take him to the best doctor in your area for an examination to determine whether it is possible for him to grow any more.

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CHOLERA, TYPHOID AND PLAGUE GERMS: Ques.—"Please inform me how long cholera and typhoid germs live in water, milk, ice, clothing, metals, etc. Also kindly give a good account of plague and its prevention."

Ans.—The germs of both cholera and typhoid can exist in water, ice and milk for several months. On surfaces where they become dry quickly they do not persist so long. Their length of life depends on individual conditions such as humidity, temperature, etc. Plague is primarily a disease of rats and other small animals. It is transferred to man by the bite of an infected rat flea, and may be communicated directly from man to man by coming in contact with infected secretions or excretions of an infected case. Often an outbreak of plague is preceded by a noticeable increase in the number of dead rats seen in a locality. Plague may be of several types: the bubonic, in which there are swellings in the groin, axilla or neck; pneumonic, in which the patient develops a severe pneumonia and expectorates bright red sputum; or septicæmic, in which the patient becomes unconscious or delirious very early. This is usually rapidly fatal. All of these types of plague are caused by the same germ, and all of them have a sudden onset with rapidly rising fever, chills, headache and backache. Anyone who suspects that he may have plague should call a doctor immediately. There is a fairly effective immunization procedure which gives protection against the disease for a few months. This is recommended whenever there is plague in one's locality and is especially recommended for workers treating or caring for plague patients.

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DISCHARGING EAR: Ques.—"From my ears flows a liquid substance. What is the remedy for it?"

Ans.—This condition is caused from an infection in the middle ear which is draining through a perforation in the eardrum. There are several different ways of treating this condition, but you will find that it will tend to recur every time you get a cold. One of the simplest and most effective treatments in my hands has been the use of sulfanilamide, methylated spirits, and boracic acid solution in a mixture to be dropped into the ear. This should be used three times a day. The medicine evaporates leaving the crystals of sulfanilamide and boracic acid in the ear. It is usually better if no effort is made to clean out the pus from the ear. The prescription is as follows: sulfanilamide ½ dram, dissolved in 2 ounces of saturated solution of boracic acid. Then add 2 ounces of ordinary methylated spirits.

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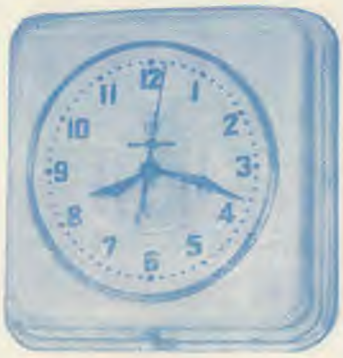

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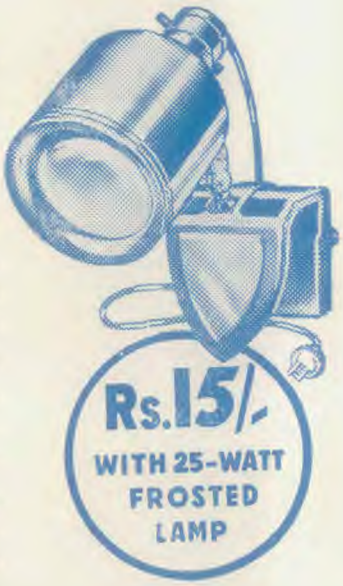

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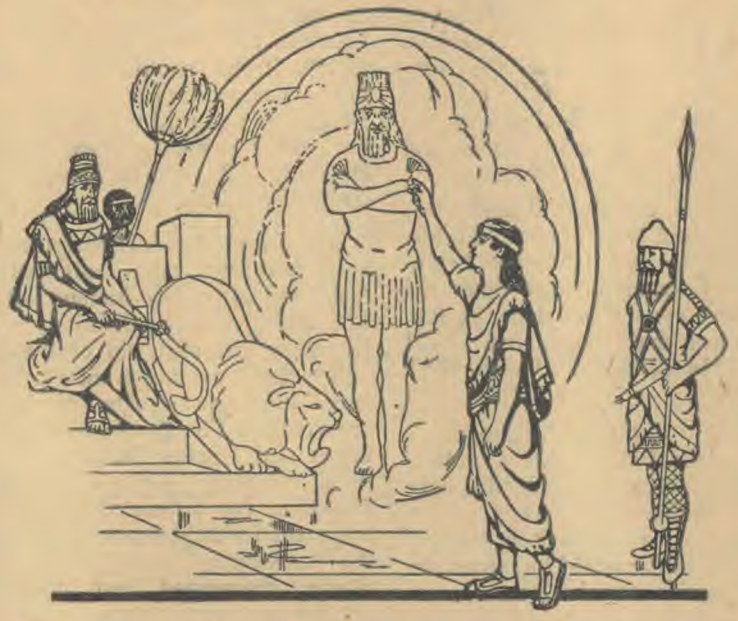
JULY SUPPLEMENT 1948

HISTORY'S MYSTERY

A. S. MAXWELL



ONE of the greatest mysteries ever to puzzle historians is why a highly civilized continent like Europe, with so much to gain from unity of its many diverse nations, has continued divided from the day the Roman Empire collapsed in A.D. 476.

The question was raised again in the *Times* literary supplement of December 28, 1946.

"How has the continent of Europe escaped political unification?" asks the author. "Everything in Europe seems to call for it; everything, that is, except the temperament and traditions of its peoples. More uniform in climate than China, less diverse in religion than India, less diverse in race than the United States of America, Europe has had for centuries a single culture and a common social structure. Landowner and peasant, merchant and banker, factory owner and factory worker, artist and scholar, would nowhere find themselves in an alien world in moving from one part of the continent to another. . . . *For a thousand years men have dreamed of European union; yet for a thousand years this most uniform of continents has defied political unification.*" (Italics ours.)

In Hitler's attempt to dominate the continent, this author sees "a perverse aping of an earlier French achievement," but adds this significant statement: "Yet in the Napoleonic Empire, too, appear the defects —*one is tempted to say the inevitable defects*—of attempting to force Europe into a single political mould."

Napoleon, he reminds us, once defined his imperial aims thus: "I must have a European code, a European Court of Cassation, a common coinage, common weights and measures, and common laws; I have to make of all the peoples of Europe one single people, and of Paris the capital of the world."

But Napoleon failed.

"Europe could not be brought together by destruction and by the rule of a single people, either in Napoleon's time or in Hitler's."

Again: "Europe could not be united on a revolutionary programme; that was the lesson of the failure of Napoleon. Europe could not be united on a conservative programme; that was the lesson of the failure of Metternich and Gentz. Europe prized diversity."

That Europe should be united is generally admitted; but how? The author lamely suggests that the way out is for England and Russia to get together on a basis of "lasting cooperation." As though some such alliance could succeed where all others have failed through fourteen tumultuous centuries!

Thus the mystery remains—and will remain for all who are unaware of the Bible prediction regarding Europe's destiny.

Six hundred years before Christ the future history of the world was outlined by the prophet Daniel to Nebuchadnezzar, king of Babylon. Interpreting the king's dream of a metallic image, he told how there would be a sequence of four universal empires—Babylon, Medo-Persia, Greece, and Rome—but that after Rome fell there would only be division and dissension until the setting up of God's everlasting kingdom.

His most important words were these: "They shall not cleave one to another, even as iron is not mixed with clay." Daniel 2:43.

These words are the solution of the mystery. They tell why Europe has defied all efforts at unification. If Europe ever should be united, either by military or peaceful methods, the prophecy would be broken. And this could not be, for "the grass withereth, the flower fadeth: but the word of our God shall stand for ever." Isaiah 40:8.

Strong, ambitious, daring men have tried again and again to bring Europe under one ruler—yet all have failed. So it will happen again, should any further efforts be made to achieve this purpose. Every such plan will have "inevitable defects."

For some divine purpose God has decreed that the nations of Europe "shall not cleave one to another." So they will not cleave; now, or ever.

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ROY F. COTTRELL

MAN may narrate history, compose poetry, enact laws, produce systems of ethics; but the wisest cannot tell what a day will bring forth or what will occur in the unborn years and centuries to come. Only the Infinite can positively and definitely foretell the future; and the Bible alone presents an authentic, dependable programme of coming events. There was no careless, clumsy guess-work; for the prophecies are a vital; carefully planned part of the great Book; and the whole world is invited to study, test and verify the divine forecasts.

"I am God, and there is none else; I am God, and there is none like Me, declaring the end from the beginning, and from ancient times the things that are not yet done, saying, My counsel shall stand, and I will do all My pleasure." Isaiah 46:9, 10.

In all the libraries and languages of earth, the Bible holds a unique place. It claims to possess the only certified outline of coming events. Let this, too, be emphasized, that no other book in the world has stood the test of specific prophecies.

"Produce your cause, saith the Lord; bring forth your strong reasons, saith the King of Jacob. Let them bring them forth, and show us what shall happen: . . . declare us things for to come. Show the things that are to come hereafter, that we may know that ye are gods." Isaiah 41:21-23.

The Word of God places fulfilled prophecy above all other external evidence of its inspiration. Even Christ based His claim to Messiahship upon the fulfilment of His Word. "I tell you before it come," He declared, "that, when it is come to pass, ye may believe that I am He." John 13:19. Again and again the prophets of old summoned unbelievers to face this crucial test. And today Holy Writ calls upon the peoples of earth to study its predictions and be convinced of their truthfulness.

"Have I not declared unto thee of old, and showed it? And ye are My witnesses." Isaiah 44:8, R. V. "Despise not prophesyings. Prove all things; hold fast that which is good." 1 Thessalonians 5:20, 21.

In this emphatic language the Bible challenges the entire world to watch the unfolding scroll of prophecy as it merges into history. It invites the wise man to duplicate the feat, and write history in advance; but no one accepts the challenge. Among pagan oracles of antiquity, the one at Delphi attained the greatest celebrity. In some instances the voice of the oracle contained wholesome advice; but most of the utterances that dealt with the future were obscure and ingeniously worded to accord with any turn of events. For instance, when Crœsus of Lydia sent to ask if he should undertake a military expedition against Cyrus of Persia, he was told that by so doing he "would destroy a great empire." He truly did; but the empire destroyed was his own.

The prophecies of Scripture are not adroitly and enigmatically fashioned after any human pattern. The Bible speaks as definitely of the future as historians do of the past, and foretells coming events "with the sure, luminous strokes of infinite knowledge." The prophets were confident and fearless in their predictions of coming events, and made no provision for failure or retreat. If the event foretold had not occurred, the spokesman would have been utterly discredited and disgraced, for his statements were so definite and absolute that no explanation would avail.

The Scriptures contain approximately one thousand prophecies, eight hundred of which are recorded in the Old Testament. Many of these have been minutely fulfilled in the subsequent annals of the church, and in the rise and fall of empires. Some are today crystallizing into history, while others apply to the coming judgment and the future homeland of the redeemed. Of the entire number, not one failure can be pointed out. Some have been misinterpreted and misapplied, but no prophecy of the great Book has miscarried or failed.

Visiting the ancient lands of Bible story, and recalling some of the divine predictions given in the long ago, we are astonished at the striking fulfilment. From remotest antiquity Egypt has appropriately been designated "the gift of the Nile." About the delta and in the extremely long, narrow, fertile river valley, the descendants of Ham chose for themselves a home, and established a civilization that has elicited the wonder and admiration of all subsequent generations.

When Abraham visited Egypt, he not only saw a highly developed agriculture, but he found a people who wrote history, romance and poetry; who had considerable knowledge of medicine and chemistry; who possessed unsurpassed skill in the manufacture of glass and in the embalming of the dead; who had made much progress in higher mathematics and astronomy; and whose colossal monuments and triumphs of art then perfected have for four millenniums withstood the ravages of the elements and the vandalism of mankind.

Egypt's well-organized army carried its triumphs to lands afar. Descriptive of their ancient capital, Thebes, these picturesque lines have been preserved for us:

"The world's great empress on the Egyptian plain,
That spreads her conquests o'er a thousand states,
And pours her heroes through a hundred gates,
Two hundred horsemen, and two hundred cars,
From each wide portal issuing to the wars."

Egypt proper was said to contain eighteen thousand cities and towns, and seventeen million inhabitants. Practically surrounded by seas or desert wastes, the most easily defended country in all the world, able to repel with her powerful navy any hostile fleet or to drown an invading army by opening the dikes about the delta, Egypt anticipated no prospect that she would be invaded, despoiled, and doomed to perpetual servitude at the hands of strangers. And what mere man would have risked his re-

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putation to foretell so complete a collapse of Egyptian culture and greatness?

But consider the facts. While the country was still prosperous, the Most High declared: "Egypt is like a very fair heifer, but destruction cometh; it cometh out of the north." Jeremiah 46:20. And again, "There shall be no more a prince of the land of Egypt." Ezekiel 30:13. Soon after these words were spoken, Egypt was forced to acknowledge the supremacy of Babylonia, and has since passed successively beneath the odious sway of Persia, Grecia, Rome, the Saracens, the Turks and Great Britain. True to the divine forecast, twenty-three centuries have now passed without a native prince's being seated upon the throne of the Pharaohs. Even the present king, Farouk I, is of the Albanian race.

During the twenty-first dynasty of ancient Egyptian kings, Tanis, or Zoan, became the national capital, and continued as a great commercial centre until it was finally superseded by the new city of Alexandria. While this metropolis was still in its glory, the divine edict was pronounced: "I ...will set fire in Zoan." Ezekiel 30:14. History tells little of the fate that overtook the once-luxurious capital; but the spade of the archæologist, unearthing palaces, temples and private dwellings constructed in genuine Pompeian style, reveals the havoc wrought by fire in practically every district of this old imperial city.

"Thus saith the Lord God; I will also destroy the idols, and I will cause their images to cease out of Noph [Memphis]." Ezekiel 30:13. As the curtain rose upon Egyptian history, princes and people were intensely idolatrous. Gods and goddesses were almost innumerable, and many animals were the objects of worship. But what a change! Under Mohammedanism and nominal Coptic Christianity, no images of any description are to be found, nor have they been tolerated in the country for more than twelve hundred years.

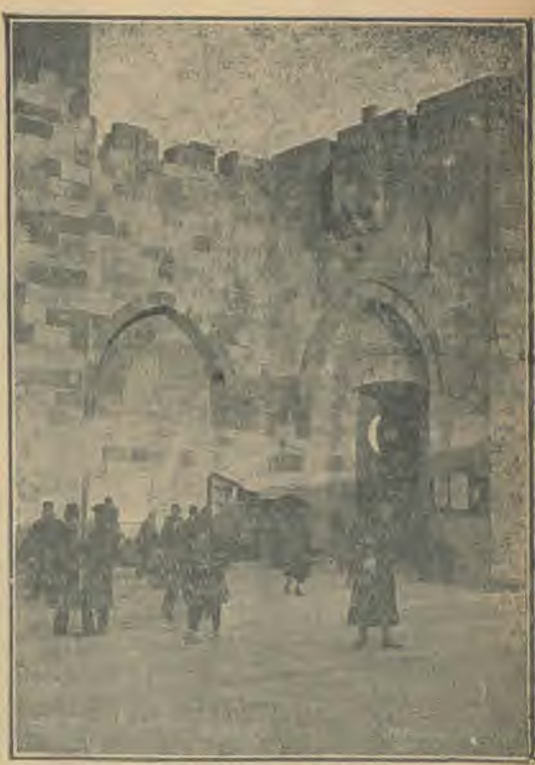
Another singular prediction of the old Book declared: "The paper reeds by the brooks, by the mouth of the brooks, and everything sown by the brooks, shall wither, be driven away, and be no more." Isaiah 19:7. From the paper reeds of the Nile delta the Egyptians manufactured the famous papyrus—the tough, durable writing paper of antiquity. Our words "Bible" and "paper" are both clearly derived from the Greek names of this Egyptian plant, *biblos* and *papyros*. Although it formerly grew in such abundance, this reed has entirely disappeared from Egypt, and is now found in only a few isolated districts of the world.

God makes no mistakes, and Bible prophecy commits no blunders. Human imagination would never have pictured such a complete eclipse of Egyptian culture and civilization, or so tragic a downfall of the country that was justly renowned as "the granary of the world."

Let us turn to the country of Palestine. At the time of its conquest and occupation by the Hebrew people in the fifteenth century B.C., it was declared to be "an exceeding good land" (Numbers 14:7), a "land flowing with milk and honey" (Exodus 3:8 and elsewhere). On condition of obedience, God gave to Israel the promise of great national prosperity; but, declared the divine Spokesman, "If ye will not for all this hearken unto Me, but walk contrary; ...I will make your cities waste, and bring your sanctuaries unto desolation: ...and your enemies which dwell therein shall be astonished." Leviticus 26:27-32. "So that the generation to come of your children that shall rise up after you, and the stranger that shall come from a far land, shall say, when they see the plagues of that land, and the sicknesses which the Lord hath laid upon it; and that the whole land thereof is brimstone, and salt, and burning, that it is not sown, nor beareth, nor any grass groweth therein: ...even all nations shall say, Wherefore hath the Lord done thus unto this land? What meaneth the heat of this great anger? Then men shall say, Because they have forsaken the convenant of the Lord God of their fathers, which He made with them when He brought them forth out of the land of Egypt." Deuteronomy 29:22-25.

Tragic to relate, the chosen people kept not the convenant. For long centuries their beloved country became the scene of war and chaos. The conquerors broke down the cities, denuded the hills and mountains of forests and vegetation, and impoverished the once fertile soil until throughout large sections of the Holy Land the traveller sees little save ancient ruins and desert wastes. In recent years modern methods of agriculture have again demonstrated that the ground of old Canaan is capable of producing delicious fruit and luxuriant harvests, as of olden time.

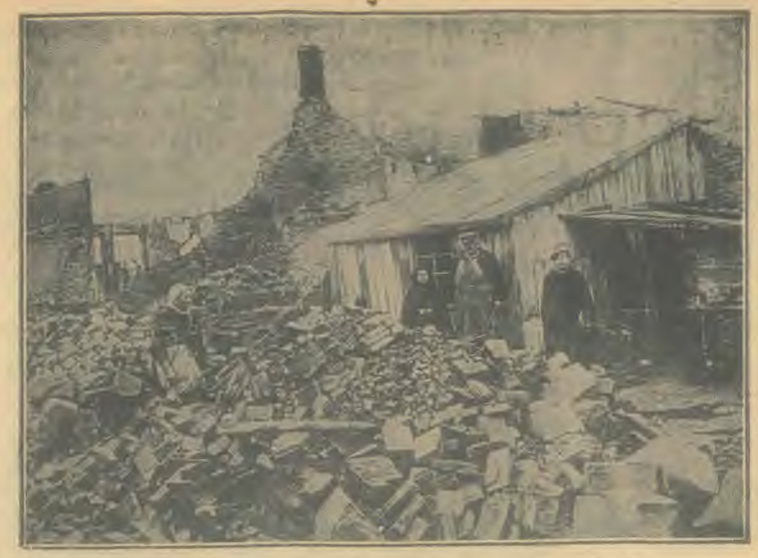
For many centuries Egypt and Palestine have stood as notable witnesses to the marvellous foreknowledge of God. In these paragraphs we have but touched the fringe of Bible prophecy. Hundreds of other divine predictions, definite and literal, have outlined the future of nations, countries, cities and religions; and the march of world events during the past three thousand years constitutes a remarkable response of history to the unerring voice of prophecy.



Jaffa Gate in Jerusalem.

TWO PROPHECIES OF GERMANY

MARIAN M. HAY



Military Might and Statesmanship Do Not Prevent Destruction When God Has Spoken.

AS WE read of the chaos and destruction, both material and moral, that have overspread Germany we are reminded of two prophecies made by Germans which have met their fulfilment in this latest war and its aftermath. The first was written over a hundred years ago by the poet Heine, who pictured the consequences if the German people returned to paganism: "One day our national philosophers will be more terrible through being allied with certain elemental forces in our nature. They will call on the old German gods. They will conjure up our inherent lust for battle.... Christianity rendered a great service by restraining that German lust for war.... It did not destroy it. One day you will see the cross broken, and all the savagery of our ancient warriors resurrected. The cross is a very brittle emblem, after all. One day it will be shattered.... Be you 'ware of those days, neighbour people."

The second prophecy was made by Luther, four hundred years ago when he foretold the terrible destruction that would be visited upon Germany in revenge for her crimes. It is quoted in a new book by a prominent Lutheran minister. Edmund Schlink. "Die Gnade in Gottes Gericht." ("God's Mercy in His Judgment.") Authorities agree that this prophecy of Luther's is authentic. It reads like that of an eye-witness:

"There will come a dreadful manifestation of revenge upon Germany—a revenge so terrific that it is beyond the imagination of the heart of man.... The Lord will remove His gospel from Germany and at that time Germany will know only hunger, strife, pestilence, and bloody cruelties. When that day comes the desolation of Germany will be so outstanding and complete that people will say, 'This locality is the place where Germany once was.' Because of ingratitude towards God, Germany will become heaps of rubble....

"The same fate will overtake Germany that came upon the Jews and Jerusalem, or upon Greece and Turkey. Germany will be sacked in the same way as the Goths destroyed Rome, and all of this will come upon Germany because they have not known the time of their visitation when the Lord wanted by His Word to take possession of the people.... Even if there were at that time ten men as mighty in faith as Moses to pray for Germany, it will not help. I feel this when I pray for my beloved Germany."

Edmund Schlink believes that the present sufferings of Germany are in retribution for the return to paganism on the part of so many of the people, and for their blind faith in Hitler. He says:

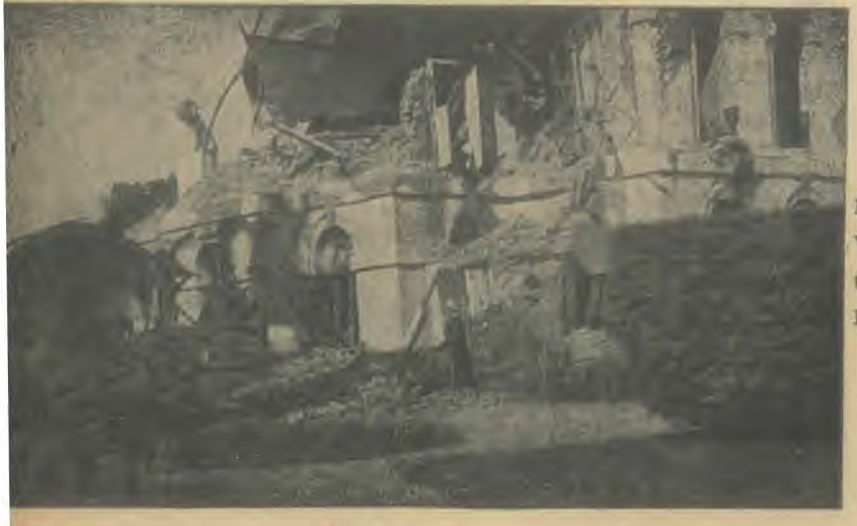
"The breakdown of Germany is not merely the work of man but the work of the Lord. He has not only permitted it; He has done it. He has smashed the proud plans of men and the vain boasting concerning Nazi Germany lasting 1,000 years."

In the solemnizing view of what has befallen Germany it is not for us to sit back in smug self-righteousness and feel that we have been spared because of our goodness. God's standard of truth and goodness is eternal and unchanging. He is no respecter of persons. To nations as well as to men is the warning given:

"Be not deceived; God is not mocked: for whatsoever a man soweth, that shall he also reap." Galatians 6:7.

The fate of Nazi Germany, and of all other God-defying, man-enslaving powers is but a faint picture of the destruction that will finally be meted out to an impenitent world. In view of the lurking evils that prevail in our society today, the warning of Jesus comes: "Except ye repent, ye shall all likewise perish."

We may accept the abundant provision that God has made in the gospel for our salvation, and spread the good news to all within the sphere of our influence, that many might be saved from the impending destruction.



No Nation Will Escape the Final Destruction.