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NO PITY WANTED

An Editorial

WITHIN THE last month, General Hugh S. Johnson, Works Progress Administrator for New York City, and Chief Bull-dozer of the unemployed of the U.S.A., let a cat out of a bag, tried ineffectually to bag the cat again, got himself thoroughly scratched—and taught the American workers a lesson which HEALTH AND HYGIENE hopes will stick.

The blustering General announced one day that the new W.P.A. is progressing so well under his administration, and giving out so many jobs, he was afraid "all the bums in the country" would come to New York to seek jobs. A few days later, he announced that one-sixth of New York City's workers on Home Relief roles—these are the unemployed he had called "bums"—had been so undernourished on their Home Relief diets that they were too ill to work. Forty thousand two jobs too ill to work!

Such, Indeed, the Ravages

THE GENERAL had merely confirmed what other investigators, more careful than he and much more honest, had already disclosed. HEALTH AND HYGIENE cited in its editorial last month an address by the ex-President of the American Medical Association who had estimated that there are 20,000,000 people in America "near or below the threshold of nutritive safety."

The General's office, annoyed by the Chief's careless admission that 40,000 New York un-employed were too ill to work, tried to muster statistics to prove that the General "labored under some misapprehension." Mrs. Anna M. Rosenberg, assistant to General Johnson, stunned by her boss's brutal boasting of the fact that so many people had been incapacitated for further enjoyment of life to the full, could only clutch pitifully: "Such have been the ravages of the depression."

Organization Is Essential

SUCH, INDEED, have been the ravages of the world-wide crisis for all workers on doles and for many workers who are employed but paid starvation wages. Neither Mrs. Rosenberg's pious pity, nor General Johnson's blustering admissions and retractions, can alter the facts in the case.

Only the organized strength of the American workers can give them better, more decent conditions. Support of the Workers' Unemployment, Old Age and Social Insurance Act, H.R. 2827; and support of the Workers' Health Insurance Act, H.R. 5549, will help give the workers greater security and greater protection against such ravages.

For Genuine Social Security

HEALTH AND HYGIENE calls upon its readers to rally behind these two bills. The Congress of the United States closed its last session without enactment of any bills giving the workers genuine security. The so-called "security" program of President Roosevelt does not even promise any immediate benefits. For those who are unemployed, only the starvation wage of W.P.A. is offered.

For the 40,000 New York whom Johnson calls "unemployable," for the 20,000,000 whom the American Medical Association recognizes as malnourished, for the many other millions of workers in America—only united efforts of all the working people can effect a genuine program of social security and health insurance, leading to real socialization of medicine.

chiropractic—What's Wrong With It?

WHEN ANDREW STILL, a free lance doctor among the Shawnee Indians, "flung the banner of Osteopathy to the breezes," on June 22, 1894, his brother, the Reverend James M. Still, would have nothing to do with his venture. A few years later this same brother wrote a letter stating "Hallelujah, Drew, you are right; there is money in it, and I want to study Osteopathy."

In 1895, D. D. Palmer, a grocer in Davenport, Iowa, 150 miles removed from Kirkville, Missouri, the home of Osteopathy, evidently became convinced in a fashion similar to that of the Reverend Still. This grocer had been practicing "magnetic healing"—while retaining his trade in fish, eggs, and the like. "Magnet healing" was too individualistic to compete with Osteopathy, inasmuch as it was founded upon the "super magnetism" which was present in D. D. Palmer's body, and which was released by the placing of Palmer's hands upon the sufferer's body. This cured all. At this time, however, Palmer "discovered" that, through the partial dislocation of one or more of the spinal bones, the "nerve force" in the various organs was interfered with and disease occurred. Supposedly this "discovery" came about through the curing of a Negro porter who had been deaf for 17 years and who ceased being deaf when a lump on his neck had been adjusted by Palmer.

Actually, however, there is reason to doubt this inspiration. For, as has been pointed out, both healing cults had a distinct time and place sequence. Osteopathy believes all disease due to impeded circulation of blood. Chiropractic teaches all disease as being due to obstruction of "nerve force." As additional proof, we may quote from the Journal of Osteopathy of August, 1897:

"And we do not waste valuable time in observing healthy and morbid tissue under the microscope. We do not bother with the compounding of chemicals, or the analysis of secretions and excretions. Palmers School of Chiropractic students save time and money by omitting these useless studies. The Chiropractic does not take the temperature, the sputum is not examined, he never taps the chest or stethoscopically listens as in auscultation...he never looks at the tongue...in fact he makes no diagnosis or examination."
Then, again, an advertising folder soliciting students, stated:

"The field of common labor is crowded. In Chiropractic there is an increasing demand for those who are qualified. There are any number of persons who want to do hard work. Let those who are anxious have it. You fit yourself for a profession."

In 1923, B. J. Palmer introduced a machine known as the neurocalorimeter. This machine was supposed to make Chiropractic infallible. The theory behind this device was, that impinged-upon nerves gave off a different temperature than normal nerves. Running this instrument and its promoter.

$2,000 had been added to Palmer's coffers, rumblings of protest arose, and the Hoosier Chiropractic Association denounced both the machine and its promoter.

"Mixed" School

UNTIL recent years, B. J. Palmer and his School of Chiropractic dominated the practice of Chiropractic. He was unalterably opposed to the weakening of the fundamental teaching of Chiropractic by the introduction of new concepts as a cause of disease. His influence waned, however, and the "Mixed" School of Chiropractic is predominant at present. At least one school teaches now that not only dislocations of the spinal bones, but any other bone dislocation in the body, may cause disease. This, of course, is a bid for allowing Chiropractors to treat any and all parts of the body.

As another deviation, we find the chairman of the Bureau of Research of the National Chiropractic Association asserting his belief in the existence of germs, but hastening to add that spinal adjustments maintain the body in a state that would not allow these germs to invade the various organs and tissues. In line with this break from the Palmer School, most of the larger chiropractic schools have added medical diagnosis in their teachings, giving the symptoms of various diseases as medical textbooks do.

It has been estimated that there are 16,000 chiropractors in the United States. Since many illegal practice, this number is an underestimate by at least a couple of thousand. In 32 states, they are licensed to practice within the confines of specific laws—which are not adhered to. Six states—Delaware, Louisiana, Massachusetts, Mississippi, New York and Texas do not license chiropractors as such. Nevertheless, in New York City alone there are three schools of Chiropractic, and there are 369 Chiropractors in New York City who regard themselves as sufficiently secure to advertise in the telephone directory.

What's Wrong?

WHAT IS incorrect about the theory of Chiropractic? Unquestionably it is eclecticism and sophistry of the worst sort. Vertebrae are rarely dislocated to the minute extent which Chiropractic maintains. Even if this were so, the nerves are so small in comparison with the bone openings, and the nerves themselves so well padded, that direct pressure upon them by the vertebrae is practically impossible. Finally, x-ray views have been taken of the spines of people who had these adjustments, and no change was demonstrable either before or after treatment.

The chief function of spinal nerves have to do with motion and sensation. They have little to do with the functions of the heart, lungs, kidneys, liver, stomach and so on. Even where injuries, as demonstrated by x-rays, have produced dislocations of the vertebrae, these organs have remained unaffected. Then, again, the causes of many diseases are definitely known, and these are not embraced within the "science of Chiropractic." Thus, even blindness and deafness is treated by Chiropractic—despite the fact that the nerves to the eyes and ears do not even leave the skull.

The adjustments which Chiropractors used for the reposition of so-called dislocated vertebrae unquestionably carry with them a large element of suggestion. The sufferer is informed with fervor that all his or her troubles are due to one thing—When the manipulation produces a sudden crack in the spinal column, many feel as if the trouble has been found and corrected. In this respect, Chiropractic may be compared to the many faith-healers who, every once in awhile, are acclaimed in newspaper headlines for their "miracle" cures.

There is no question, however, that some patients—who have been buffeted about from doctor to doctor—find temporary solace from their complaints, imagined and real, in the hands of the Chiropractor. These patients are victims, essentially, of social maladjustments which find expression in some physical complaints. They include also those who suffer from ailments which demand continued investigation and treatment; since such a course is frequently expensive, the Chiropractor seems to offer a solution to their economic and medical problem.

Chiropractic does not train its practitioners to differentiate between one disease and another. It is applied indiscriminately to all disease. Even if it does not do any harm in certain illnesses, other conditions—such as acute appendicitis, cancer, diphtheria, lockjaw, syphilis, hemorrhage, bone infections, epidemic meningitis and many others—may, by the use of Chiropractic treatment, result in death.

CHIROPRACTIC is a symptom of the economic and social system under which we live. Founded by a mystic and supernaturalist, it was quickly exploited for the profit it would bring.

The secretary of the National Chiropractic Association has estimated that, until 1932, 30,000 students had graduated from various Chiropractic schools. Many have been unable to make a living at this "profession" which promised them release from the category of common laborer.

Chiropractic was founded, and given the breath of existence, only under the social system where even the health and bodies of the people at large are regarded as fit game for exploitation.

What should be our attitude to the individual Chiropractor?

Obviously, our attack should be directed not against the individual practitioner, but against the institution of Chiropracty, and primarily against the social system which makes it possible.

Except for the few wealthy exceptions, the Chiropractors make only a meager living. They are as much the victims as those whom they, in their small way, victimize.

There is no reason why the individual Chiropractor cannot join in the struggle which would liquidate his profession—yet give him an opportunity to work at a job that would be more noble because genuinely useful.
THE FIFTEENTH International Physiology Congress carried out its work with tremendous attention and sympathy of the broad Soviet public. Not only specialists, not only many thousands, but millions of people in our country, listened attentively to the voices of physiological scientists, who at the congress shared important scientific results, who demonstrated their latest scientific achievements and latest experiments.

It is not difficult to understand this attitude of the Soviet public to the work of the congress. Modern physiology, which is essentially materialistic, in penetrating deeper into the nature of the life processes of the human organism, into life processes of animals and plants, accomplishes at the same time, along with the development of other sciences, a great emancipatory work for the intellectual development of man in freeing him from all the cobwebs of mysticism and religious survivals. The achievements of modern physiology are the basis for the development of industry and agriculture.

In our country, where the socialist revolution has created the conditions for a tremendous advance in the material well-being and the culture of the toilers, the masses of the people are particularly closely interested in the successes of a science such as physiology. We are proud that Soviet physiologists hold an ever increasingly prominent place in the ranks of the men of science, that in our country there work in this field men who are unquestionably world authorities in natural science like Academician Ivan Petrovich Pavlov and a number of other most prominent scientists, that in our country the young cadres of physiologists are growing with unprecedented speed. The success of their work is insured by the support given them in every way by the Soviet Government and the wide opportunities that exist for truly free scientific creation.

At the same time, the Soviet public well understands the anxiety that is felt for the position of scientists in capitalist countries and for the success of world science, an anxiety which was expressed in the very first report at your congress by the outstanding American scientist Cannon. The really destructive economic depression in all these countries has reflected itself in a most oppressive way in the position of workers, in the position of all toilers, notwithstanding all the wealth which has been accumulated by the ruling classes. The position of science and the working conditions of the scientists have deteriorated considerably in these countries, and in many cases continue further to deteriorate. The agents of obscurantism and ferocious nationalism have really raised their heads with the support of the ruling cliques. This position can bear witness to anything except that ruling cliques express the real interest of the people and are representatives of a developing culture and social progress. No, in this we see evidence of the insecurity and inevitable doom of this policy.

The Soviet Union holds a peculiar position in the world development at the present time. We have only laid the basis for the new socialist society and we have not even roughly completed our house. But every impartial person, the more closely he examines the simple facts and penetrates the history of the development of our young social organism, the more clearly he will see the great distinguishing characteristics which are the essence of the Soviet social order. These distinguishing characteristics find their expression in the close union of labor and science in our country. The toiling masses, having freed themselves from the domination of the parasitic rich, see their bright future in the development of the culture of peoples of all nationalities and races, in the flourishing of Soviet and world science.
Now that the basis for a new society has been laid down, the strongest aspirations of the toiling masses and particularly of the Soviet youth find their expression in a tremendous attraction to culture, for the mastery of technique and science. You already know that the Soviet Government renders powerful aid to the development of culture and science in our country. The material basis of scientific institutions in the U.S.S.R. is being strengthened in every respect. The palaces formerly belonging to rich people are now placed at the disposal of scientific and cultural institutions and new palaces are being constructed in accordance with modern requirements. Cadres of scientific workers are growing, and from among them an ever increasing number of new outstanding workers of science come to the fore. The development of the cultural demands of the masses is evidenced by the particularly rapidly growing demand for literature on technique and natural science, witnessed during the recent years. In accordance with the growing demands of the toiling masses, the construction of new schools and hospitals is being rapidly extended, and we set before ourselves the task of tripling the appropriations for the construction of schools and doubling the appropriations for the construction of hospitals in the coming year as compared with the present year.

Science in Authority

YOU DELEGATES to the congress were able to convince yourselves how great is the authority of science in our country, how deeply interested in science are the toiling masses of the Soviet republic, and how great is the belief of the masses in the power of science and its future. The very attitude of the toilers to the present congress and to its delegates is evidence that the union of labor and science achieved in our country makes the interests of international science understandable and close to the toiling masses of the U.S.S.R. The important role played by international scientific congresses lies in the fact that they raise the authority of science in the eyes of all nations of the world and give new stimulus to the further development of world science for the benefit of all mankind.

The interests of science and peace are particularly and inseparably connected in the present epoch. The danger of new imperialist wars has now become an exceptionally real danger. In plain view of all, preparations are being carried on for new wars and imperialist attacks. The ruling classes of certain countries think of finding a way out of their internal difficulties by unleashing new imperialist wars. Opposed to all this is the consistent peace policy of the Soviet Union, the determined struggle of the Soviet power to secure universal peace. The very existence of the U.S.S.R., and particularly its growth and strength, is a powerful bulwark of peace. We are proud of the fact that the Soviet Union has become a mighty bulwark of science and peace, that bound up in its successes are the best hopes of the masses of the people and the best representatives of science.

'T. B.' Is Curable

ABOUT forty-five years ago an Italian physician by the name of Forlanini did a daring thing. He stuck a needle through the chest into the imperceptible space between the chest wall and the lung of a patient suffering from pulmonary tuberculosis. He then injected air into the space. The air collapsed the diseased lung, so that it no longer functioned—and the patient was able to overcome his infection by the tubercle bacillus. This procedure, considered foolhardy and dangerous by many physicians of the time, was the beginning of the modern treatment of pulmonary tuberculosis.

The "foolhardy" thing that Forlanini did was really a very simple and rational procedure. He was carrying a step further what was already practiced in the treatment of consumption—the practice of putting the patient at rest in bed, so that the work of the diseased lung should be reduced. Forlanini reduced still further the work of the diseased lung by collapsing the lung itself—by putting it at absolute rest through the injection of air into the space between the lung and the chest wall. A broken leg will never get well if permitted to dangle about. On a splint, it has a chance to knit because it is at rest. A diseased lung, collapsed by air or by artificial pneumothorax, as it is called, is also splinted and thus given a chance to heal.

To heal? But isn't tuberculosis incurable? Tuberculosis is curable, but not by medicine, serum or vaccine. It is curable through the conscientious application of rest treatment only—rest in bed, and rest by the method pointed out by Forlanini. Drugs are of some value, but only for the relief of symptoms such as severe cough, pain in the chest, etc. Drugs are only accessories to the fundamental method of cure of tuberculosis—rest treatment.

In some sanitariums, especially in Europe, injections of gold salts are given. There is no proof, however, that the injections are more helpful than rest alone. In still other sanitariums, though very few, a special dietary system is used together with rest treatment. Essentially, this is a system of balanced, and very几乎没有, a special dietary system is used together with rest treatment. Essentially, this is a system of balanced, and very little or no salt permitted. It is heroic treatment; but the results have not proven worthy of the discipline required.

Why a Sanitarium?

WHAT SHOULD a worker do when he learns that he has pulmonary tuberculosis? He will doubtless be urged by his physician or clinic to apply for admission to a sanitarium. Treatment, it is true, can be carried out in the home under the direction of a physician experienced in tuberculosis. However, the housing conditions of the worker, and the high cost of expert medical care, make this impossible for 99.9 per cent of those ill with tuberculosis. Besides, the patient learns certain things in a sanitarium that he cannot learn readily at home. He learns how to live the kind of life necessary to cure the disease. In the sanitarium, everything is planned for the one purpose of helping the patient to win his battle. He learns how to rest properly. Doctors and nurses are on duty to attend to him. Specialists and instruments, such as x-ray, are close at hand whenever needed.

The sanitarium is a training school where the patients learn a way of life that will aid in the cure of the disease. They learn how to dispose of their spumon, how to care for their dishes and clothing—in short, they learn how to protect themselves. Even the patients who do not fully recover may return to their homes with the assurance that they will not endanger their relatives and friends, if they practice what they have learned.

Of course, not all sanitariums fulfill these functions in an ideal way. Workers cannot afford to enter private sanitariums where conditions are good. Often, municipal and state sanitariums have many disadvantages in the way of poor food and inadequate medical attention. Usually, however, these disadvantages are not so great as to make it inadvisable for a worker to enter a public sanitarium. He will at least get that minimum of care that he cannot get at home.

Ideal Climate

ONE HEARS very little about climate in the treatment of tuberculosis these days. The reason is that, although a change of climate is nearly always good for the patient, it can rarely be purchased by the average tuberculosis patient.

The ideal climate for the average patient is one in which the extremes of temperature are not great; with only rare fogs, or none at all; with the purest possible atmosphere; with relatively little humidity; with much sunshine, and with all conditions that permit the patient to live comfortably outdoors the greatest number of days out of the year, and the greatest number of hours out of the twenty-four.

Patients should be warned that it is harmful to be outdoors in the hot sun. Sunlight has its place in the treatment of tuberculosis of the bones, joints, glands and intestines—but not in the treatment of pulmonary tuberculosis. Cold weather does no harm, provided one is warmly covered; but comfort is what the body needs in its fight against the germ. Air that is clear, cool, and in slight motion, is fresh air—so far as health is concerned.

Collapsing the Lung

BECAUSE OF improvements in the modern treatment of tuberculosis, that began with the work of Forlanini, the value of the sanatorium has been greatly increased. These improvements have to do with lung collapse, and methods for securing artificial rest of the lungs. Lung collapse can be properly achieved only in...
A sanitarium, where x-ray and other necessary equipment are available, may be thought of as being made up of thousands of tiny air-sacs or balloons, each opening into a minute air tube, all of which finally connect with a larger tube, known as the trachea, or wind-pipe. By putting outside pressure on the lung, the air in the air-sacs and tubes can be squeezed out—as one might squeeze the air out of a balloon. In this compact state, the lung cannot breathe. It is put at rest; and, as there is no movement, healing can take place.

If collapse of the lung is successful, it must be maintained for about two years or more after the sputum becomes free of tubercle bacilli. A word about sputum examinations. A single negative sputum does not mean that the lung has been successfully collapsed and that the cavity is closed. A dozen or more examinations should be carried out at intervals of a few days or a week. If these are negative, then it is probable, though not certain, that the cavity is closed. Certainty can be acquired only by the application of all available techniques. These include frequent x-rays of the chest (one every three months at least), fluoroscopic examination before each refill, and the use of blood sedimentation rates. The last is not used as extensively as it should be in the sanitariums of the United States: it is a very valuable guide in determining the progress of a case of tuberculosis.

Lung collapse, when successfully done, quickly improves the patient's condition. Tuberculosis destroys lung substance, and leaves cavities partially filled with dead tissue and tuberculosis germs. Lung collapse closes up such cavities. The germs die, and can no longer be spread to other healthy parts of the lungs or expectorated in the sputum and spread to others. Meanwhile, the healthy lung easily carries on the work of breathing. One lung, or even half of one lung, is quite enough to supply all the needs of the body for air, particularly if the patient remains at rest.

The most common method of collapsing the lung is called "artificial pneumothorax." This simple operation has already been described. A hollow needle is pushed between the chest wall and lung, and air under slight pressure is injected. The cavity can then close, leaving little or no trace of the disease. Other cases, whether diagnosed early or late, show no improvement on bed rest, and even get worse. Such cases may be suited for collapse treatment of the lung, especially if the disease is limited to one lung. When there is disease of both lungs, collapse treatment may still be achieved, though of course with greater caution. There are many patients who receive artificial pneumothorax on both sides, and who recover completely.

When artificial pneumothorax cannot be used because the diseased lung is adherent throughout to the chest wall, and no free space exists into which air can be injected, there are other methods available for collapsing the lung. One of these is known as phrenicocotomy, and consists of crushing the phrenic nerve which supplies the big breathing muscle, the diaphragm. The diaphragm is paralyzed, and the lung is thus partly put at rest. The value of this operation is still disputed. It is likely that only a very small percentage of cases are helped by this operation—so small that many sanitariums have given up the operation entirely.

Another method of collapse is known as thoracoplasty. Large portions of the ribs on the diseased side are removed. This causes the chest wall to cave in and press down upon the diseased lung. This operation causes a permanent collapse; but, when it is properly done by a skilled surgeon, it causes little deformity and does not interfere with normal activity.

Function of Sanitarium

Most patients require residence in a sanitarium for at least six months. Here the patient should receive expert medical and nursing care. He should receive good food—food that is nourishing, easily digested, and in amounts that his body can use. In the sanitarium, he should learn how to adjust his daily life so as to overcome his handicap. The sanitarium should enable the patient to be at ease, free from worry about the mortgage, the job, or illness at home. All these things the sanitarium should do.

Unfortunately, there are few sanitariums in the United States that can do this—not because of any defect in the sanitarium idea, but because these institutions share the same abuses that are prevalent in other social organizations, abuses that are due to a lack of social purpose in our existing system of society.

Recognizing these abuses, the tuberculous patient must try to make the best of things. Studies that were previously broken off can be resumed. New ones can be undertaken. A systematic reading course should be planned. New friendships and contacts can be made. A sense of collective struggle against a common enemy can be acquired which will be of great use when the patient leaves the sanitarium and is preparing to resume in part his everyday activity.

When the patient is discharged from the sanitarium, the disease is not necessarily healed. It may be merely arrested or quiescent, so that the sanitarium routine must still be practiced at home in whole or in part. Patients receiving artificial pneumothorax must visit the clinic for refills and x-ray of the chest. Others, with or without collapse treatment, must likewise have examinations at intervals decreed by the doctor. Physical examinations are not enough. X-ray of the chest should be taken several times a year, during the first two years after apparent recovery.

It is necessary for one who would get well and keep well that he have a very clear and exact knowledge of what he should do and what he should not do. This education should be acquired from authoritative sources. Two books can be recommended to the tuberculous patient for acquiring sound information. One is Rules for Recovery from Tuberculosis, by Dr. Lawrason Brown, published by Lea Febiger Company, at $1.75. The other is Tuberculosis and How to Combat It, by Francis M. Potter, published by the C. V. Mosby Company, at $2. Either book is valuable equipment in the struggle toward recovery from tuberculosis.

This article concludes a series of three articles discussing the subject of pulmonary tuberculosis. The first article, entitled "T.B.—Workers' Plague," was printed in the issue of July, 1935. The second article, on "The Cause of T.B.," was printed in the last issue. Back copies containing the first two articles are available upon application.—Editor.

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OCTOBER, 1935

HEALTH and HYGIENE
SERUMS and VACCINES

- The Second of
- Two Articles

IN ORDER to understand how serums are made, it is best to consider a specific example. Diphtheria is one of the diseases for which there is both a vaccine and a serum. The serum, like the vaccine, is made in a laboratory but in an entirely different manner. The diphtheria germs are grown in large glass flasks which have in them liquid food for the germs. As the germs grow, they secrete large quantities of their toxin, which goes into the liquid and soon saturates it. The liquid is then filtered (like emptying a can of peas into a sieve); this filtering removes all the diphtheria germs, but allows the toxin to pass through with the liquid.

The liquid, saturated with the diphtheria toxin, is then injected into a horse; a little at first, then more and more. Immediately the tissues of the horse begin to manufacture antibodies which are called antitoxin. After several weeks, the injections are stopped and some of the blood is taken from the horse. The blood is collected in clean containers, and allowed to clot. From the clot is squeezed a clear yellow liquid which is the serum.

In this serum are millions of antitoxin antibodies which the tissues of the horse have manufactured. The serum is then purified and tested to determine how rich in antibodies it actually is; it is put into little glass tubes, and is read for the physician to use.

When the child gets diphtheria, and the physician gives it antitoxin, these antibodies immediately begin neutralizing the toxin in this way cause the diphtheria germs to stop growing. Sometimes other animals such as sheep, goats and rabbits, are used to make antitoxins, but the horse is used most of the time. Diphtheria serum is the most effective treatment for combating this disease which the physician has at his command.

The serum for scarlet fever is made in almost the same way. The horse is also used here. Other diseases for which serums are made are pneumonia, meningitis, tetanus (lockjaw), botulism and gas-gangrene. These are also made in the horse.

Another kind of serum is sometimes used by the physician for treating certain infectious diseases. This is called convalescent serum. It is taken from the blood of humans who have recovered (usually recently) from a particular disease. Scarlet fever, measles and infantile paralysis are often treated by convalescent serums. Sometimes, when a child has measles, or has been exposed to it, whole blood from one of the parents who has had measles is injected into the child with very good results.

It might be asked: why give vaccines, when one may depend on serums to furnish antibodies already made in case one get's the disease? The answer is: in the first place, when the antibodies are most needed, the serum may not be available. Secondly, serums cost more than vaccines. Also, antibodies from serums stay in the body a little longer than three weeks, while antibodies which our own tissues manufacture after being injected with vaccines protect us over a much longer period of time. It is always preferable to prevent a disease when possible. But when that cannot be done, and a person comes down with an infection for which there is a serum available, the physician should be allowed to use that type of treatment.

Some Complications

THERE ARE persons who have the idea that giving serum to children may cause paralysis. This is because of some experiences some parents have had in a child with diphtheria or perhaps lockjaw. If a child, sick with either of these two diseases, is not given the antitoxin before the poison has time to injure the nerves, the child may show signs of paralysis. The parents, then, are likely to think that the antitoxin was the cause. As a matter of fact, the serum with the antitoxins probably saved the child from a worse case of paralysis or even death. It is a matter of failing to understand the cause and effect in such the child.

There is finally, one important point about serums which needs to be explained. When diphtheria antitoxin (or toxin-antitoxin) prepared from horse serum is injected, the body reacts to the horse serum by becoming "sensitive" to it. It takes about two weeks after injections have been stopped for the sensitivity to develop. Now if at any later date, horse serum is again injected, the patient will have a reaction which may result in sudden collapse or, rarely, death. More usually, about two weeks after the injection, the patient develops "serum sickness," the chief symptoms of which are fever, an extremely itchy hive-like rash, and headache. These complications may be avoided or lessened by "desensitizing" the patient by injecting very small quantities of serum at first and gradually working up the dose.

Because of this "sensitivity" phenomenon, certain serums are now being prepared from goats or other animals. Nevertheless it is important that, whenever a child receives an injection, the parents should ask whether a vaccine or a serum is used; and if a serum, from what animal. Thus, if a child has previously been immunized against diphtheria with toxin-antitoxin prepared from horse serum, and later in life should develop some such condition as pneumonia or lockjaw requiring serum treatment, the mother can warn the doctor that the child is probably "sensitive" to horse serum. With this knowledge, the doctor is in a position to avoid any serious complications due to "serum disease."

Public Health Axioms

NOW THAT preventive medicine has had many years of experience with vaccines, certain facts may be stated almost as public health axioms. A few of these are:

- With few exceptions, every child should be vaccinated for smallpox before it starts to school—and preferably before it is 1 year old.
- Every child should be given diphtheria toxoid before it is 6 months old. This preventive should be followed in six months by a Schick test to ascertain whether or not the vaccine has been effective. By means of this test, the physician can tell in such the child has manufactured enough antibodies to protect him against diphtheria. Immunization usually lasts at least 12 years.
- Typhoid vaccines should be available to people exposed to conditions which make it possible for them to contract typhoid fever. These conditions are: unsafe water supply, vegetables irrigated with untreated sewage, unsafe milk, and such emergency conditions as flood, hurricane and drought.
- When people are unable to pay for these vaccines, it is the responsibility of the community to see that they are given free.

It is to be regretted that scarlet fever vaccine has not been perfected so that it can be given as simply and as effectively as can that for diphtheria. The last year has been a high scarlet fever year; an effective, cheap vaccine for this disease would have saved many lives and prevented much illness.

It must be said, however, that no matter how complete the immunization program is for any community, that program should only be supplementary to other health and hygienic conditions under which the people are forced to live. When people are exposed to typhoid fever, for instance, they are likewise exposed to amoebic and other forms of dysentery for which there are no known vaccines. When there is a poor public health set-up in the community, all communicable disease control is weakened—and the individuals who have to stay in the community suffer unnecessarily.

Despite opposition to the use of vaccines and serums, it must be stressed that without their use disease control is weakened and death-rates increased. And it can be stressed also that the fullest and most effective use of vaccines and serums can be realized and enjoyed by the masses of our population only under a changed social order—a planned order that can reap the benefits of medical science irrespective of the individual's ability to pay.
duce a cure and prevent the serious consequences of the disease, little has been done in this direction in this country.

There are hundreds of thousands of sufferers of this disease in the public hospitals and clinics; and the cost of maintaining them is very great. With the incentive of saving money, one would think that effective methods would be adopted to control the spread of the disease. It can be done; and yet, we find public officials and even health officials quite unconcerned.

Actual figures on the prevalence of syphilis in this country are not available. We know that the exact number of cases is far beyond the number actually reported by the various public health departments. Official sources reveal that about 700,000 cases of syphilis are constantly undergoing treatment in this country. This figure does not even consider those cases not receiving treatment or undiagnosed. In New York City, about 50,000 new cases are reported yearly to the Board of Health. We must also remember the large number of cases treated by private physicians which are never reported.

Responsible health authorities have pointed out time and again that syphilis is increasing in this country, while facilities for treatment are generally decreasing due to economy in municipal and state budgets.

Reasons for this state of affairs are not hard to find. Moore, an authority on venereal disease, makes this statement:

“There are already available the weapons with which it might be, if not entirely stamped out, at least reduced from a major to a minor problem within a generation; and though these weapons have been available for a decade or more we are progressing not forward but backward. Syphilis is actually increasing, not decreasing. . . . Money or its lack is the rock on which even the best instructed medical profession splits, in the practical management of the syphilis problem.”

These two statements contain the essence of the reason why syphilis is spreading in this country. Syphilis is an expensive disease. The average worker cannot afford a thorough course of treatment. He must seek the free clinics which are woefully inadequate and which, in some parts of this country, do not even exist.

When we realize that thousands are incapacitated by the ravages of syphilis; and that it is the direct result of negligence, graft, and petty economy by crooked politicians who have denied the people the benefits of early treatment—we can then more clearly visualize the need for a socialized medical system conducted for the benefit of the masses.

Dr. Parran, a distinguished American authority on public health, points out as the most desirable system for caring for syphilis, the following:

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This plan as outlined is an ideal system for any country, and yet is far from attainment in the United States. In the Soviet Union, with its system of clinics, hospitals, shop clinics and farm clinics, this plan is not only carried out but is greatly improved upon. Workers receive free medical care at all times, and are hospitalized when necessary. All necessary drugs are supplied, laboratory facilities are at hand, and specialists are available—all at no cost to the worker. Only in this way, together with education of the people, can syphilis be controlled.

In summing up the factors necessary for the control of this disease, the following stand out as essential:

1. Ease and availability of treatment, not only in large cities but in rural areas.

2. Adequate diagnostic facilities, with great stress on periodic blood examinations of all workers.

3. The elimination of the financial burden of the cost of treatment from the worker.

4. Greater and more intensive publicity on prevention and treatment of syphilis brought directly to the masses; and elimination of the stigma of venereal disease.

HEALTH and HYGIENE

A number of articles on the blood, its composition, and its diseases, have been printed in HEALTH and HYGIENE. While each article in this series can be read profitably by itself, the entire series is of importance and interest. Consult the index to Volume One, printed in this issue, for the numbers in which articles on the subject have been printed in the past. Back copies of HEALTH and HYGIENE are available.

THERE ARE three factors that are foremost in importance to the anemic patient, from the viewpoint of greater ease in helping his own condition. These factors are diet, iron, and tonics. Blood transfusions, liver injections, or splenectomy (cutting out the spleen from the abdomen) can be undertaken only by the physician or surgeon. But the anemic person should have a full knowledge himself of diet, iron and tonics.

In previous discussion of the subject of blood, we have stressed the importance of building enough hemoglobin in our bone-marrow for the prevention of anemia. The body needs protein and iron for the building of hemoglobin. The proteins are present in meats of all kinds, in fish, milk, eggs, beans, peas, nuts and many other foods. The iron is present in most vegetables and fruits. Iron is particularly abundant in spinach, beet-leaves, peas; in bananas and grapes; in most berries, but especially in blackberries and raspberries; in oatmeal and whole wheat products; in nuts and in eggs; and in meats—especially in liver.

We should have these foods in our daily diet. There are also certain other substances which we need to make the bone-marrow work well. Properly working bone-marrow takes the protein and iron, and makes hemoglobin out of them. These substances are liver and vitamins (vitamin G and vitamin C). Vitamin C is present in oranges, lemons, peas, tomatoes, etc. We should have these in our diet as well. Vitamin G is present in eggs, liver, milk and cheese. Not much iron and vitamins are needed. You don’t need ten oranges or five pounds of green peas. A portion of green peas once a day, or a small glass of orange juice, is enough for these substances.

It is not necessary to buy vitamins sold by drug houses. The ordinary person takes enough vitamins every day if he eats a balanced diet. He doesn’t need extra drugstore vitamins. They are not used up by the body. All they do is make the owners of the big drug houses wealthier.

We do not imply that all doctors who give their patients special vitamins are quacks. Some sick people need extra vitamins. But the ordinary healthy person does not have to go looking for his vitamins. He gets them in his regular diet.

There are a few faddists concerned with the use of iron. One may read all sorts of advertisements about special brands of foods, allegedly containing a great amount of iron. To buy these is a waste of money. These special foods are absolutely unnecessary. If one eats the plain foods that contain iron—that is all that is necessary for the body in prevention of anemia.
THE TRAGEDY OF Syphilis

What is the history of this dread disease of syphilis? What are the symptoms of the disease? What are the best treatments for it? The article discusses the subject fully.

SYPHILIS is believed to have appeared for the first time in Europe at the end of the Fifteenth Century, and immediately spread in epidemic proportions. The disease was contracted by the Spanish sailors of Columbus’ fleet from Indian women in the New World, and was brought back by them to Spain. These Spanish mercenaries joined the army of Charles VIII of France, which had set out on a campaign to conquer Naples. After capturing this city, a plague broke out among the armed forces, necessitating a hurried retreat from Italy. The army disintegrated, and the demobilized soldiers scattered all over Europe, spreading the disease which soon became known as syphilis.

Reports of the disease appeared in France, Germany and Switzerland in 1495; in Holland, Portugal and Greece in 1496; in England and Scotland in 1497; and in Russia and Hungary in 1499. The Portuguese sailors carried the disease to Africa and to the Orient. The ancients were acquainted with local genital diseases, but no statement of a genital disease accompanied by the symptoms of this stage is known to history. The Wassermann reaction was finally, in 1909-1910, science introduced arsphenamin (salvarsan or “606”), the medicine which revolutionized the treatment of the disease.

Syphilis holds tragic possibilities. It is contagious in its early stage and, worse, it is hereditary. Unless parents are properly treated, their children may be born with the disease. Children who sleep in the same beds with their parents may acquire the disease in its contagious stage. It is believed that, in this stage, the disease may spread by the use of the common drinking cup, common towels, etc.

Three Stages

The disease may be roughly divided into first, second and third stages. The first stage is marked by the appearance of a small sore. While usually found on the sexual organs of the male and female, it may appear on the lips, breasts or other parts of the body. The sore is unlike common bruises and pimples. It is a small, hard and fairly deep painless ulcer. A special examination (the dark-field examination) of the secretion from this sore will show the presence of the spirochaeta pallida germs, and thus prove the diagnosis of the disease. Sometimes, unfortunately, no sore (or chancre, as it is correctly called) is noticed because it may lie hidden in the internal parts of the genital organs. The chancre may last six to eight weeks unless it is treated, and is very soon followed by what is known as the second stage.

The second stage is marked by the appearance of the rash which may be one of several types. The rash is usually reddish brown in color, and does not itch. Peculiar sores (mucous patches) may appear in the mouth and throat. There may be some loss of hair from the scalp, producing a moth-eaten appearance, and finally the patient may have pains in the joints and feel generally sick. Often, the symptoms of this stage are so mild that they may be overlooked. The Wassermann test is of no help, as a rule, until about three or four weeks after the appearance of the chancre. It is the dark-field examination which is important in the first two weeks of the disease.

The third stage is marked by symptoms which indicate that damage has occurred in the bones, heart, liver, brain or spinal cord. Any organ—or all—may be involved, and the symptoms vary according to the parts damaged. The symptoms of this stage may appear very early in the disease, or may not appear for years. Most authorities believe syphilis is not contagious in this stage.

Syphilis can be cured, but the probability of cure depends on how early in the course of the disease proper treatment is started. In recent years, the original salvarsan, or “606,” has been greatly improved. In conjunction with the use of bismuth, mercury and potassium iodide, salvarsan offers an effective means of curing the disease. It is usually necessary to give at least four courses of salvarsan (ten injections each) and bismuth (fifteen injections each). The exact timing of the injections depends on the method adopted by the physician in charge of the case.

Our Puritan press in America does not even mention syphilis by name. There is little effort to educate our people properly on such a vital subject. HEALTH and HYGIENE, as usual, does dare.

Variations in the medicines used, in the number of injections, and in the methods of treatment depend on the stage of the disease and also on the response of the patient to the treatment. One can be considered cured when the proper type and amount of treatment has been received. And when the blood and spinal fluid examinations at the end of the course of treatment are negative.

The question of undertaking marriage and having children is important. The “Hoffmann” rule which is followed by most conservative European and American physicians calls for three years of treatment with salvarsan and bismuth or mercury, and two years of symptom-free observation before marriage. This freedom from symptoms would include repeatedly negative blood and spinal fluid examinations from the end of the first six months of treatment.

Problem of Prevention

The problem that we face in syphilis today does not lie in diagnosis or treatment. This is said with due consideration of the costliness of the treatment. The great problem lies in the prevention of this disease. Although it is known that syphilis is preventable, and further, that adequate treatment in the early stages will pro-
duce a cure and prevent the serious consequences of the disease, little has been done in this direction in this country.

There are hundreds of thousands of sufferers of this disease in the public hospitals and clinics; and the cost of maintaining them is very great. With the incentive of saving money, one would think that effective methods would be adopted to control the spread of the disease. It can be done; and yet, we find public officials and even health officials quite unconcerned.

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We need to make the bone-marrow work well. Properly working bone-marrow takes the protein and iron, and makes hemoglobin out of them. These substances are liver and vitamins (vitamin G and vitamin C). Vitamin C is present in orange, lemon, peas, tomatoes, etc. We should have these in our diet as well. Vitamin G is present in eggs, liver, milk and cheese. Not much iron and vitamins are needed. You don't need ten oranges or five pounds of green peas. A portion of green pea once a day, or a small glass of orange juice, is enough for these substances.

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There are a few racketeers concerned with the use of iron. One may read all sorts of advertisements about special brands of foods, allegedly containing a great amount of iron. To buy these is a waste of money. These special foods are absolutely unnecessary. If one eats the plain foods that contain iron—that is all that is necessary for the body in prevention of anemia.
Once a patient has anemia, there are some rackets we must warn him about. In the first place, no doctor should treat a patient for anemia before he takes a blood test. Nobody, not even the best doctor, can be sure whether a patient has anemia or not by just looking at the patient. He should test for the amount of hemoglobin and for the number of red blood cells present in the blood. These tests cost only $2 to $5 in most places. If one cannot afford these tests, they can be done in a clinic. Without these tests, the diagnosis of anemia is not justified. The doctor who treats a patient for anemia without taking these simple blood tests is not doing the right thing by the patient.

The next thing to be warned about is iron as a medicine. In almost all private medicine chests, one could find some patent medicine containing iron and used for anaemia. Most of these medicines are just plain rackets. The United States Pharmacopoeia lists about ten different preparations of iron. These drugs cost little, and are the best drugs containing iron. All the patent medicines advertised, and taken by some patients, are not as good as these ten simple preparations of iron. The best way to take these drugs is under the supervision of a physician only. Otherwise, they are usually worthless, because there is too little of either of these drugs to do any good. The vitamins can be bought much more cheaply by buying fresh foods. They contain all the vitamins we need. About the phosphates, we can say that their effect is doubtful.

We are left therefore with the following facts. The most important part of a tonic is the alcohol and strychnine. Therefore, if one wants a tonic he should buy a bottle of wine (sour or bitter wine, preferably), or whisky. He should drink a half to one wineglassful of wine or a half to one whisky-glassful of whisky three time a day, before meals. This is the best and cheapest tonic from a bottle.

However, if one insists upon getting a regular "tonic," he should get the regular United States Pharmacopoeia tonic called "Iron, Quinine, Strychnine Tonic Solution." One teaspoonful should be taken, three times a day, before meals.

It is the cheapest tonic on the market, the best supervised, and just as good as any other.

We are not naming all other various tonics one might buy. There are thousands of them. None is as good as the simple one mentioned above; and they all cost much more.

\[ \text{\textbf{Avoid Self-Medication}} \]

\[ \text{\textbf{Specific Advice About Anemia:}} \]

To prevent anemia we need proteins, iron, vitamin C and vitamin G.

Proteins are plentiful in all kinds of meat and fish; in milk, cheese, eggs and other dairy products; in nuts, peas and beans, and in many others foods.

Iron is plentiful in some vegetables, especially in spinach, beet-tops, beets, peas and beans; mushrooms and chard; in most fruits, especially bananas, grapes, blackberries, raspberries, raisins, apricots and prunes; in most nuts; in oatmeal and whole wheat in all its forms; in most meats, and particularly in beef liver.

Vitamin C is plentiful in many raw fruits and vegetables, especially in oranges, grapefruit, lemons, pineapple, strawberries, lettuce, tomatoes; and in peppers and cabbage when eaten raw.

HEALTH and HYGIENE
INDIGESTION

- Causes

The cheap, the rough, the spoiled—that is precisely the kind of food available to millions in America. A common ailment is caused simply in this article.

The flow of stomach juice is stimulated before food enters the stomach. The appearance, smell or taste of food, or even thinking about a good meal when one is hungry, all lead the stomach to begin secreting juice which is especially rich in ferments and is known as the "appetite juice."

When the food has been in the stomach about three to four hours, it is passed gradually into the small intestine. Here the digestive work is completed, and the proteins, fats and carbohydrates are reduced to substances simple enough to be directly absorbed into the blood stream. This is brought about by the action of the intestinal juice, the bile, the juice from the pancreas. The indigestible parts of the food which are left over, following complete digestion and absorption, are passed onto the large bowel where water is absorbed and the solid waste-product is to be eliminated in the stool by bowel movement.

The orderly movement of the food along the digestive tract, and the stages of digestion, are controlled by a special part of the nervous system called the involuntary nervous system. This behaves independently of the will of the person. (This is unlike the movement of the arms and legs, for example, which is voluntary, under the direct will of a person.)

Diet Is Important

FROM THIS description, it is evident that many things can cause disturbances of the digestive tract. First of all, the kind and amount of food eaten may be at fault. Overeating, insufficient food, and improper balancing of the diet can lead to trouble. Excessive amounts of protein or fat or carbohydrates, or too little of them; inadequate intake of minerals, vitamins or water—all can lead to symptoms.

Too little water may delay the digestive work, cause the bowel to be sluggish, the waste products to become hard, and may result in constipation. The lack of foods containing vitamins, which are essential substances found in many fresh foods, not only prevents proper growth and interferes with general health but also so affects the digestive system that it cannot handle the foods that are eaten.

The excessive use of fried or greasy food, pies, pastries, hot breads, sweets, condiments like pickles or mustard, or foods that are too hot or too cold, often cause disturbances of appetite, sour belching and abdominal distress.

Too much coarse food, containing an excess of roughage, can result in constipation or diarrhea. Many serious cases of indigestion are caused by the use of bran, which is irritating to all but the sturdiest digestive tracts. Stale or spoiled food, or unclean milk, may result in violent infections of the bowels. Spoiled meats, doctored with sodium sulphate to make them look fresh (which much of the hamburgers are made of), can cause illness—especially after prolonged use. The cheap, the rough, the spoiled, the food to which much of the working class is limited—this is precisely the food that leads to digestive trouble. (Try and eat a balanced diet on Roosevelt's $19 a month!)

Bad food habits, such as eating too fast, improper chews of foods, eating at irregular hours, are often the cause of difficulty. Rushing through breakfast to get to work on time, rushing through lunch to get back to the machine, delaying supper because of long hours—these disturb the normal working of the digestive tract.

Fear and Worry

OCTOBER, 1935

ONE OF THE largest groups of digestive troubles is due to mental and emotional factors. Both the secretion of the digestive ferments and the muscular movements of the gastro-intestinal tract that propel the food from the one end to the other are strongly influenced by the emotions. Fear, anger, sorrow, can quickly throw the digestive system out of gear. Many people, when badly frightened or after a fight, develop cramps, diarrhea, nausea or vomiting.

More important than these acute upsets are the long drawn out troubles, which put a constant strain on the system. Worry with its many causes is responsible for many digestive disorders than any other single factor. Fear of losing the job, worry about sickness in the home, quarrels between husband and wife, all kinds of uncertainty about the future, can result in the production of an unusually sour stomach juice, with more than the normal amount of hydrochloric acid, and give rise to such symptoms as heartburn, belching and bringing up of small amounts of sour food. It often also results in cramps or spasms of the stomach and intestines, with severe pain.

When the cause of the worry can be removed, excellent results are obtained in these cases. Since most of the causes for uncertainty and worry are rooted in the present economic system, this is easier said than done.

Actual disease of some part of the digestive tract will naturally result in symptoms. Inflammation, ulcer, cancer, chronic disease of the gall bladder are frequent causes. Sometimes the symptoms of these conditions are so typical that a diagnosis is easily made. At other times, even when the disease is very serious, the symptoms may be so vague that any careful study will lead to a correct diagnosis. Even in these organic diseases, the mental and nervous sides are very important. In some cases, they may so overshadow the picture that the entire blame is put on them, and the real cause is overlooked. In other conditions, like ulcers of the stomach, the nervous strain may be an important part of the cause of the organic condition.

It is important to realize that disease in parts of the body other than the digestive tract may give the indigestion symptoms. Diseases of the nose, throat and sinuses often result in the swallowing of infected mucus, and irritation of the lining of the stomach.

In the acute infectious diseases, poisonous products are formed which cause loss of appetite, nausea and vomiting. Tuberculosis of the lungs, diseases of the kidneys, anemias—all can have digestive symptoms as the first or most prominent indication. One of the most common forms of heart disease of middle age is a disease of the coronary arteries—the blood vessels that supply the heart muscle with blood. Abdominal pain, nausea and vomiting may be the chief symptoms of heart attacks due to this condition, and may easily be attributed to acute indigestion.

Avoid Drugs

IT IS NOW apparent that a person with the complaint of indigestion may be suffering from any one of a great many diseases.
though the majority of cases are "functional" in origin—that is, due to poor working of the digestive tract, rather than to a definite organic disease—yet the most serious causes can give the same symptoms as the less serious ones.

For this reason, before any case can be called "functional," the more serious causes must be definitely eliminated. This means a thorough medical examination and usually involves the study of the stomach contents, the urine, blood and stool. Often only x-ray of the stomach and intestines will reveal the cause of the trouble. All of this takes time, costs a good deal of money and is unavailable for the great majority at the present time. Most clinics are greatly overcrowded and proper service cannot be obtained in them.

Because proper medical treatment is not available, the worker turns to patent medicines with their false promises of quick relief for every symptom that troubles him. The worst of these medicines contain dangerous drugs that may do great harm. The best of them contain a few simple drugs like bicarbonate of soda and peppermint, put up in a fancy package and sold at a hundred times their cost. Their use is a menace to health, for they give a false sense of security, and often delay necessary treatment until the disease becomes far advanced.

Obviously, with such a varied number of causes for digestive symptoms, no patent medicine can fulfill the claims made for it. In the treatment of digestive disorders, where complicated procedures are often necessary, the need for socialized medicine, administered by workers and doctors, makes itself felt with striking acuteness.
Mouth Hygiene

FINALLY we come to mouth hygiene. This is where we can do most to control the ravages of decay. For it is undoubtedly true that, while there is no proof that "a clean tooth never decays," there is no doubt that a clean tooth is many times less susceptible than a dirty one. At a recent meeting of several dental societies in joint session, a symposium on this very topic caused an animated discussion which finally dawned upon the statement made in the previous sentence. The dentists agreed that, while we cannot be sure definitely to prevent decay by keeping the teeth clean, at least we can minimize decay, and decrease the chances of its ever happening, by proper toothbrushing.

Nor, by the way, does this mean that an expensive tooth-brush and well-advertised dentifrice is the best way to keep the teeth clean. A small, straight, stiff-bristled brush with no more than three or four rows of bristles set in a straight line about an inch long, with no fancy curves or tufts, is the ideal brush.

And no dentifrice is better than the rest; all are equally good. A mixture of equal parts of salt, bicarbonate of soda and borax in a glass of warm water is better than any of them. At any rate, one may well have the intact gum line, to use a term that is becoming very popular, of one's teeth untouched all night—affording excellent opportunity for development of tooth decay.

The growing child then, under the watchful eye of his dentist, eating proper food, having good hygiene habits and observing rigid mouth hygiene will have any harmful effects of decay controlled from the very beginning. As he gets older and passes through his teens—which is a very susceptible years, as far as tooth decay is concerned—he may even have to see his dentist more often than every six months. X-ray pictures for the average person of such cases as this should disclose small cavities that the eye cannot see, and these can be filled before they become dangerous.

Thus we conclude that, although dental decay cannot be prevented, it can be at least controlled by the observance of diet, environment, and mouth hygiene habits. These steps, with the cooperation of the dentist, should result usually in better, healthier teeth in healthy individuals.

However, we are well aware of the factors which make it impossible for workers to act upon many of our advice under present circumstances. In the near future, we shall devote a special article to the subject of dental economics affecting both the dentists and those millions who should benefit by adequate dental service.
NUTRITION

THE FOUNDATIONS OF NUTRITION, by Mary Schwartz Rose, Ph. D. Macmillan, $3.

The advances in nutrition have made the study of food interesting and of importance for all of us, Dr. Rose has a great deal of dietary information. The fourth edition of this work, reviewed here, has been revised and brought up to date.

The book starts with a historical introduction, and describes the various dietary elements lacking in the diet. The dog, cat and man with one essential dietary element is lacking. For example, a deficiency of vitamin B12, Xerophthalmia, an eye disease resulting in blindness. This is illustrated by actual photographs of dogs and rats suffering from this deficiency.

The question of poverty in relation to diet is indirectly touched upon by giving methods and tables of dietaries in high, moderate and low-income family groups. The author states that families on low economic level can be adequately nourished only by skillful cookery, knowledge of dietary principles, and careful planning and buying! Unfortunately the masses of workers on Home Relief, or subsisting on low income, have not been able to study dietetics at Teachers College of Columbia University, where Dr. Rose is Professor of Nutrition, haven't been trained in skillful food preparation or in a knowledge of dietary essentials. Consequently, it is practically impossible for them to be adequately nourished on a low income or in relief allowances.

The book should be a valuable adjunct in all workers' libraries for use in giving valuable information. It would serve to enrich workers in the knowledge of food and it would help prevent workers from being misled by faddies like Frank McCoy, Dr. Hays and Macfadden.

HEALTH LIVING ALONG WITH HEART DISEASE, by Dr. Louis Levin. Macmillan, $1.50.

This is a simply written book for the patient and his family, telling about the kinds of heart disease, its symptoms, and in a general way its typical course.

High blood pressure, heart pain and sudden death are discussed in fairly great detail. The principles of the treatment of heart disease, the social significance of establishing dietaries in high, moderate and low-income family groups, are touched upon by giving methods and tables of dietaries in high, moderate and low-income family groups.

The author becomes somewhat disillusioned, with keeping with our present system. Bush argues that one of the first steps of a physician is to decide whether or not to treat a certain form of disease, that he was the originator of a method to treat certain forms of ears, tonsils and adenoids by finger adjustments. No mention was made of the fact that Muncle, a fellow osteopath, had preceded him in this "remarkable discovery!"

"Common Sense Health" is a book which is naturally in keeping with Bush's training and scientific background. It is evident that the author, in writing this book, took hold of a medical dictionary and put down an opinion about disease in alphabetical order. Hence the result is a hodgepodge of misinformation, unproven statements and attempts to justify osteopathy while deprecating medical treatment by innuendo.

Bush attempts a strong argument against medical treatment by asserting that there must be something wrong with a practice that has changed many of its treatments from those of thirty years ago. There is no need to discuss that!

On many subjects in relation to human ailments, Biss is as ignorant as the laityman for whom he has con­descendingly to write. With reference to certain commercial values in keeping with our present system, Bush is not so ignorant. Thus, for diabetes he advises a certain Culture Bacillus manufactured by a company in New York for dandruff, Golvers Mange Cure; and for eczema, Unguentine. These corpora­tion tricks only serve to expose the shrewdness of Dr. Bush for use in their advertising copy.

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HEALTH and HYGIENE

M. BUSH, Liveright.

UCIUS M. BUSH is an osteopathic physician. Some eleven years ago he was introduced to Dr. Rose, and now he is the originator of a method to treat certain forms of ear disease.
"Handicapped" Fighters

New York City

To the Editor: I read the questions and answers in your September issue, regarding Spastic Paralysis, and really consider your treatment very unsatisfactory.

It is not nearly as complicated as you wish it to be. A job for the person would solve his problem to a large extent. The League for the Physically Handicapped would like to get in touch with him. If you could give your solution in your next issue, it would be very much appreciated.

We took the picket line after weeks of broken promises and the run-around by relief officials, and have won a dozen jobs. We do not wish to make it. A job for the handicapped is a matter of some importance.

A job for the handicapped is a matter of some importance.

Very unsatisfactory.

Most of the members of our organization have exactly the same problem, and jobs are the real solution. We can adjust ourselves to our affliction, but not to being a burden on others without self-respect and without any security.

The person in question, from the description given, is fully able to hold a position. The hundreds of thousands in this country, who have the same problem, have a right to look to the government for the required assistance.

The physically handicapped person is given plenty of one thing only—and that is sympathy. No one has ever been able to live on that.

The League for the Physically Handicapped has been formed by a group of handicapped persons with one thought only in mind. That is to gain for all handicapped persons the right to live as men and women having their self-respect and some security.

We will not burden a relative for the rest of our lives, or take tin cups and beg. The tin cup was offered the handicapped 2,000 years ago, and today we offer the same tin with variations. The variations are a run-around at the employment agency, or $2-per-week-positions at the Institute. We are trained to do work, and then refused the opportunity of putting our training to any use by private and government discrimination. Our League has fought the government policy for months, and has brought its problems to the open in spite of the newspapers calling us names and the police arresting us. We have gained much ground, and with help will win our fight. We realize that not every handicapped person will picket, but there are many other ways they can assist us by contacting cardinals, tuberculars, etc.

Our greatest problem at present is to overcome the self-consciousness and inferiority complex of the handicapped that their present treatment inspires. Some of us do not get together because we are reminded of our own affliction; but we must stop kidding ourselves, come out of a dream world and face facts.

Only together will we solve our problem.

The League has proven that handicapped persons can and will act together, that they can fight for their rights as well as anyone, and the time is drawing to an end when we will be satisfied with the usual "soft soap."

We are planning a series of open meetings, where anyone may express his opinion on our problems. Persons interested are cordially invited to send in their names; they will be sent further details about our meetings.

L. BAZLER

For the League for the Physically Handicapped, 35 East 19th St., N.Y.C.

Thanks, We Will

Buffalo, N.Y.

To the Editor: I have devised Health and Hygiene ever since the first issue, It is A-I. Keep it up! I save all copies. How about your putting out a binder to hold 12 or 24 issues? This would make a great medical encyclopedia. The present cover, as on the September issue, is perfect. The medical insignia in the upper circle is a good idea. But change the color each month.

Can tell a glance when the next one is out or identify certain articles by the cover color.

E.A.S.

Good Criticism

Valdosta, Ga.

To the Editor: It’s too bad of you to wind up an excellent article either by telling me to go to a clinic or to work for the hospital. Well, the nearest clinic is 175 miles away over rough roads and then the last example and did bring my four children there, they would not treat them because there are Negroes. As for socialized medicine, I’m for it. But meanwhile.

Mrs. H. H.

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