HEALTH AND HYGIENE

OCTOBER 1935

FIFTEEN CENTS

CHIROPRACTIC
What's Wrong With It?

V. M. MOLOTOV ON SCIENCE AND LABOR

MUST WOMEN SUFFER?

TRAGEDY OF SYPHILIS

Fifty-two Doctors write for this magazine!

HEALTH and HYGIENE

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Drawings by Mackey, Rico, Pass.

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FRANK LEONARD, *Editor*

NO PITY WANTED

An Editorial

40,000—But Not "Bums"

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 rolls—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 "bums" 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 unemployed 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 cluck 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 gain for 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 once more 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 in 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 Kirksville, Missouri, the home of Osteopathy, evidently became convinced in a fashion similar to that of the Reverend Still. This grocer had been practising "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 "supermagnetism" 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:—

> ". . . Journal was forced to copyright its contents in order to prevent the use of Osteopathy literature by a lot of unprincipled fakers. . . . There is one fake magnet healer in Iowa who issued a paper devoted to his alleged new system, and who until recently made up his entire publication from the contents of the *Journal of Osteopathy*, changing it only to insert the name of his own practice."

Essentials of Theory

WHAT ARE the essentials of Chiropractic? The spine is composed of 26 bones or vertebrae, set one upon the other. Each of these bones has two openings, one on each side, for the exit of nerves running to various parts of the body. It is the theory of Chiropractic that one or more of these vertebrae become dislocated, and thus impinge or squeeze these nerves. As a result of this loss of "nerve force," disease occurs.

Though D. D. Palmer was the founder of Chiropractic, there can be no question but that his son, B. J. Palmer, a shrewd resourceful business man, was the promoter and exploiter supreme of this cult. Thus an early catalogue of the Palmer School stated:

> "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. Palmer 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 stethescopically 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 up and down the back of a patient would fix the spots where the adjustments should be made. It was estimated that this *neurocalorimeter* could be manufactured for $50. Palmer, however, leased this machine to several thousand Chiropractors for ten years, for sums ranging between $620 and $2,000. When about half a million dollars 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 dislocatitons 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 practice illegally, 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 389 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 vertrebrae is practically impossible. Various 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.

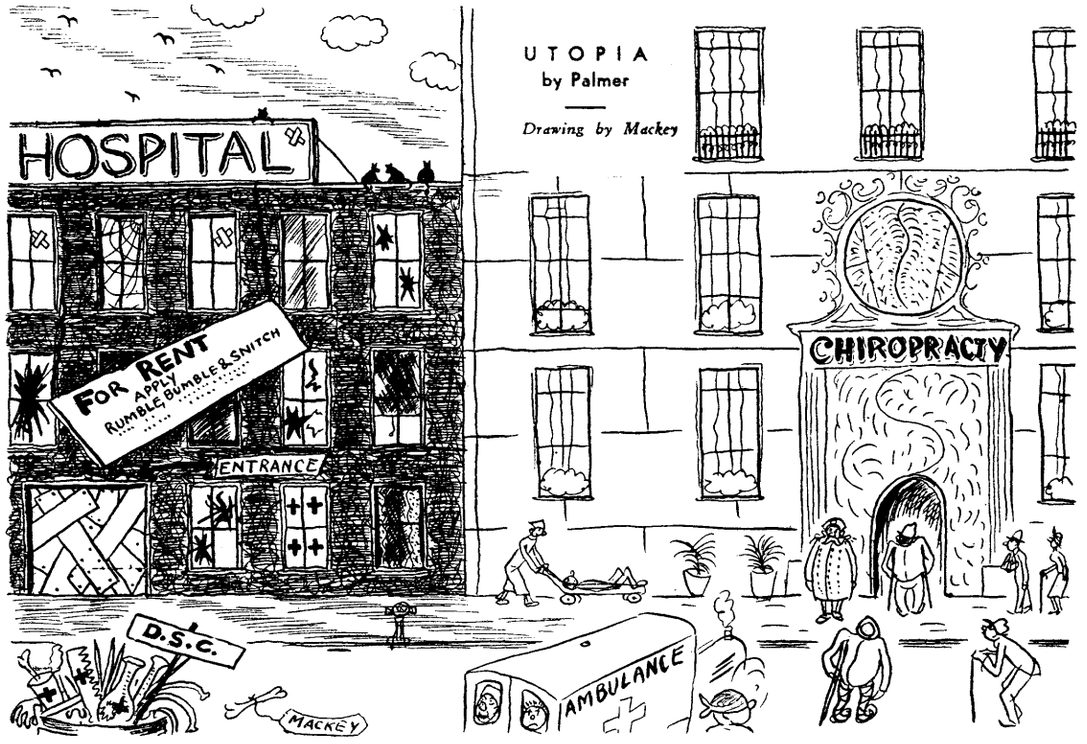
Chiropractic was founded, and given the breath of existence, only under the social system where even the health and bodies of the people at large are regarded as fit game for exploitation.

What should be our attitude to the individual Chiropractor?

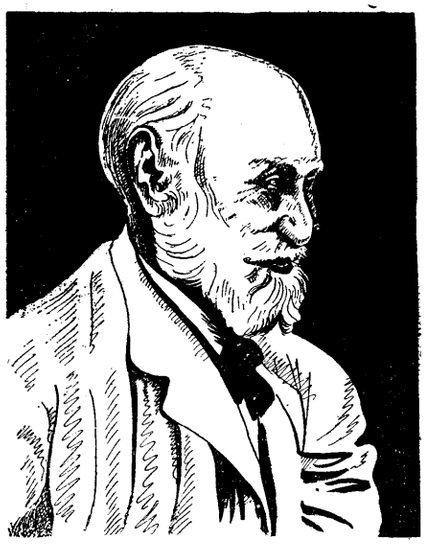
Obviously, our attack should be directed not against the individual practitioner, but against the institution of Chiropracty, and primarily against the social system which makes it possible.

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.



—TO HIM HOMAGE



Drawing by M. Pass

I. P. PAVLOV
—world science bowed to him for his services to the world. . . .

SCIENCE and LABOR

by

V. M. MOLOTOV

PREMIER OF THE U. S. S. R.

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 successes of medicine, making it possible to conduct a really organized and fruitful struggle with diseases, epidemics and so on. The successes of physiology are acquiring an ever growing significance 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 future 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 condition of the scientists have deteriorated considerably in these countries, and in many cases continue further to deteriorate. The agents of obscuritanism 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.

On the evening of August 17, 1935, a historically notable gathering of world renowned scientists gathered in the Grand Kremlin Palace, at Moscow, in the Soviet Union, for a reception tendered by V. M. Molotov, chairman of the Council of Peoples Commissars of the U.S.S.R. This reception was the final event culminating the sessions of the Fifteenth International Congress of Physiology.

Among the scientists at the head table with Molotov was Professor Walter B. Cannon, noted American physiologist, of the Harvard Medical School; Professor Lapicque, of France; Professor Hill of England; Dr. Otto Frank, of Germany; Professor Herlitzka of Italy; Professor Liljestrand, of Sweden—the most outstanding aggregation of great physiologists the world has seen together in many years. And in the center of the table was the man acknowledged by them all as peer—I. P. Pavlov, the Russian physiologist.

Other government officials were there, in addition to Molotov. The latter delivered the principal address of the evening, the address which marked the official closing of the Congress. HEALTH AND HYGIENE *is proud to present this address as an article by V. M. Molotov. The address is reprinted from the report of the Moscow Daily News.*

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.

We have to our credit considerable achievements in the growth of the prosperity of the workers, peasants and all the toilers of our country. Our industry is rapidly growing from year to year and we are standing firmly on the basis of the achievements of modern technique. Our agriculture, once petty and backward, has been transformed into a large-scale, socialized economy and is rapidly absorbing the best achievements of agriculture technique and science. We have no place in our country for economic depression. Our economy is being developed in accordance with a single plan, and all the achievements of its development are immediately reflected in the growth of the prosperity of the toiling masses.

The Soviet Union, uniting Russians, Ukrainians, Uzbeks, Georgians, Jews, Germans, Armenians and other nationalities in common labor and struggle for a happy life, and securing the development of national culture and fraternal assistance to the backward nations, provides an actual example of cooperation among nations.

In the broad masses of the peoples of the Soviet Union is growing enthusiasm for work, strong belief in their future and an invincible conviction of the correctness of their way. This path was outlined by the great leader of the toilers of the U.S.S.R., by the great leader of Communism—Vladimir Ilyich Lenin.

The great promoter of the cause of Lenin leading our country to ever greater victories is the leader of the Communist Party and our country, Comrade Stalin!

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 unloosing 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

• TREATMENT • DESCRIBED

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. To be sure, 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, the diet consists of vegetables and vegetable juices, with a minimum 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 doubtlessly 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 American workers, 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 sputum, how to care for their dishes and clothing—in short, they learn how to protect others. 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.

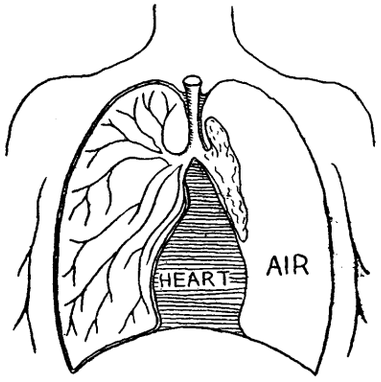
Patients should be warned that it is harmful to be outdoors in the hot sun. Sunlight has its place in the treatment of tuberculosis of the bones, joints, glands and intestines—but *not* in the treatment of pulmonary tuberculosis. Cold weather does no harm, provided one is warmly covered; but comfort 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 sanitarium 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.

The lung 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.



The diagram above shows the view of the chest and lung cavity. On the left we see a healthy lung. On the right, we see the result when air has been pumped into the lung cavity, causing the diseased lung to collapse.

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. For the first two or three weeks, injections are required every three to four days because the air tends to absorb. After three weeks, "refills" are maintained once weekly. After several months, they may be maintained once every two to four weeks.

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 sputa 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.

Other Methods

ARTIFICIAL pneumothorax cannot always be successfully maintained. String-like adhesions between the lung and chest wall may prevent effective collapse. For this obstacle, an operation may be performed in which a tube is inserted through the chest wall into the air space surrounding the lung. This tube contains a cautery, and the adhesion can be burned, thus permitting the lung to collapse better.

Not every case of pulmonary tuberculosis requires collapse treatment. Cases that are diagnosed early can heal merely by submitting to bed rest. The cavity can 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 *phrenicectomy,* 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. Lawrasson Brown, published by Lea Febiger Company, at $1.75. The other is *Tuberculosis and How to Combat It,* by Francis M. Pottenger, 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.

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 ready for the physician to use.

When the child gets diphtheria, and the physician gives it antitoxin, these antibodies immediately begin neutralizing the toxin and 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 gets 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 from death. It is a matter of failing to understand the cause and effect in such cases.

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 whether 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 officals 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 essense 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.

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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 hospitallized when necessary. All necesasry 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.

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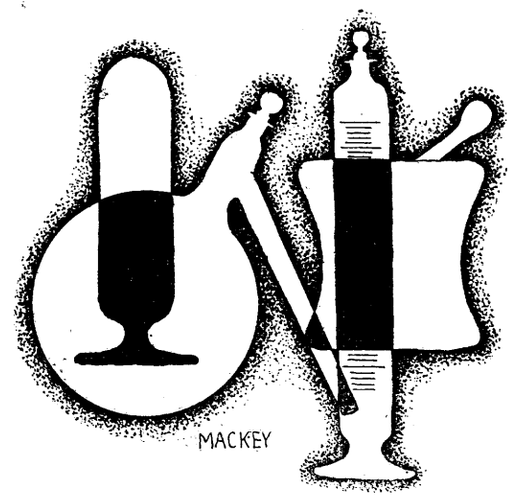
HOW To Treat ANEMIA



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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.

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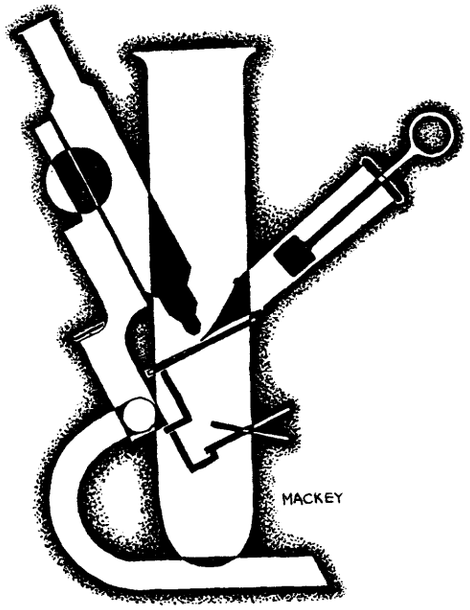

THE TRAGEDY OF Syphilis

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.

Our Puritan press in America dares 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.

By Rico

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 a rash and internal symptoms had come to light before 1493. Studies of the bones of ancient American Indians reveal evidence that syphilis may have originated in America.

There was much confusion as to the exact nature of syphilis, and, in fact, it was believed by some that the disease was only a different form of gonorrhea. It was finally proved, in 1831, that syphilis and gonorrhea were entirely different diseases. The crowning achievements in the history of syphilis occurred in the early part of the Twentieth Century. In 1905, two German scientists reported that they had discovered the germ that causes the disease—the *spirochaeta pallida*. In 1906-1907, three other scientists developed a practical test for syphilis, now known as the "Wassermann reaction." 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.

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 officals and even health officials quite unconcerned.

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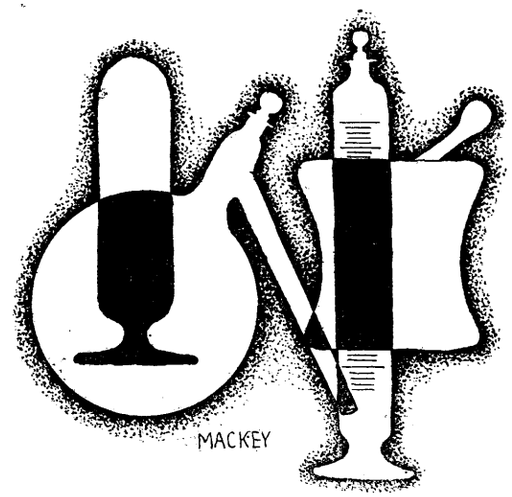

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Some Rackets

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 anemia. Most of these medicines are just plain rackets. The United States Pharmacopeia contains 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 anemics are not as good as these ten simple drugs that do not cost much. Reputable doctors have been fighting these patent medicines for many years but have never succeeded in putting them out of business. The reason is *profits*. As long as the patent medicine business is a big business worth hundreds of millions of dollars each year, it can suppress most activity that the doctors can undertake.

The most important of the standard (U.S.P.) drugs containing iron are (1) Blaud's pills; (2) iron and ammonium citrate, and (3) reduced iron.

The best way to take these drugs is under the care of a physician. The reason for this is not that doctors want to boost up trade for themselves, but because it is dangerous for people to treat themselves. The first point in the treatment of any condition is to diagnose it, and diagnosis can be made only by a physician. Secondly, each patient is an individual, and must be treated differently. The doctor knows how to apply general principles of treatment to each different patient differently, according to the needs of each individual patient.

Many anemics ask us about iron injections. The principle of treatment is to try to give any medicine in the simplest possible way. Doctors always try to give a medicine by mouth. If the medicine is destroyed in the stomach or is not absorbed by the intestines, they inject the medicine into the skin, into the muscle or into the vein. Thus adrenalin (a very good drug) cannot be given by mouth because it is destroyed by the stomach juices. The same is true of insulin for diabetes.

Iron, however, is usually given by mouth. There is rarely trouble in taking iron. Many doctors have never seen any vomiting from taking iron medicine. Iron does produce digestive disturbances (such as diarrhea, constipation, black and smelly stools) but it is up to the doctor to try one drug after another until he uses the proper one.

Too often iron injections are given by doctors for the sake of getting more money from their patients. In 95 per cent of these cases, iron by mouth would do just as much good—and would cost less. But then the patient wouldn't have to come back to the doctor and pay him $2 or $3 for each injection. Again the profit motives comes in to soil what should be—and is in most cases—the fine relationship between patient and doctor. Observe: *most doctors do not do this;* but there are some unscrupulous physicians who do; avoid them.

Avoid Self-Medication

TONICS ARE drugs given to "pep" one up, or as we may say "increase the body's *tone*." The subject of tone is a very interesting one for doctors; but altogether too difficult to explain in this discussion. However, we can go into some of the practical points concerning tonics. Tonics are usually given to correct certain symptoms, lack of appetite, loss of weight, listlessness, tired feeling, dizziness, nervousness and anemia. Because of their use in anemia, they are brought into this article.

Again we must point out that self-medication is very dangerous. A great many serious illnesses start with the above symptoms. A general examination must be done by a physician to rule out any serious illness. This cannot be stressed too severely. Tuberculosis, syphilis, cancer, and all sorts of diseases may and do

begin this way. Of course, we do not infer that if one happens to be tired or listless for a few days it means he has tuberculosis. But if one does not feel well for a longer time than usual, say several weeks, he certainly should see a doctor rather than treat himself. Besides, many people think they need a tonic and ask for one when they are more in need of a sedative, to help them get more rest.

The label of a bottle of any "tonic" will show that it contains 10 or 12 or 15 per cent alcohol. That is the secret of the tonic. Every tonic contains alcohol. Alcohol is a good medicine, an excellent medicine when taken in proper amounts. The alcohol is the important part of the tonic. When taken in proper dose, alcohol is a real stimulant. It is also a food. In this way alcohol is of great use. The other substances usually found in tonics are strychnine, iron, vitamins, and phosphates.

Strychnine is a nerve stimulant, but a very dangerous drug. It can poison a person easily. Because of its danger, the amount of strychnine put in tonics is very small. The manufacturers know that too often the tonics are taken without the direction of a physician. So they are afraid to put in large amounts of strychnine. Therefore they usually put in such small amounts that the strychnine does not harm. However, these amounts are so small that they never do any good either. The same is true of iron. The manufacturers do not want to ruin the reputation of their product by causing diarrhea too often. So they put in small amounts of iron. These amounts are too small to do any good. Therefore the iron and strychnine in the tonic 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 vitamins. 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-glass of whisky three time a day, before each meal. 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 Pharmacopeia 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.

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 many 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.

Vitamin G is plentiful in eggs, milk, cheese, liver, kidney; and in most green vegetables.

Do not worry about special vitamins; eat a well balanced diet, and the vitamins will take care of themselves.

Always have your blood tested before accepting a diagnosis of anemia.

Do not buy special medicines and tonics with iron; use the simple tonics mentioned above—and use them under the care of a physician only.

Iron injections are rarely necessary.

If you have symptoms of weakness, etc., for a long time, see your doctor or go to a clinic.

The best tonic is good food, fresh air, outdoor exercise, and rest.

A good tonic in some cases is a little wine or whisky.

INDIGESTION

• Causes
• Cures

"The cheap, the rough, the spoiled"—that is precisely the kind of food and leads to digestive troubles. Yet that is the only kind of food available to millions in America. A common ailment is discussed simply in this article.

INDIGESTION is a word used to cover many symptoms of a badly working digestive system. These symptoms are: Nausea, vomiting, lack of appetite, belching, heartburn, bad taste in the mouth, abdominal pain or discomfort, diarrhea, constipation. In order to understand properly the reasons for these complaints, one must know something about the nature of food and the changes it has to undergo before it can be used or stored by the body.

Ordinary food, even when properly prepared and cooked, cannot be used by the body in the form in which it is first swallowed. It has to be broken down into simpler substances, which are then absorbed into the blood stream and carried to all the parts of the body. The work of breaking down food into simpler substances is done by special juices in the digestive tract, and this process is called digestion.

There are several types of food which differ chemically from one another, and therefore require different digestive juices to break them up. The main types are: Proteins, found chiefly in foods like meat, peas and beans; fats, such as butter and lard; and carbohydrates—sugar and starchy food. Other important food articles are mineral salts, water, and vitamins; but these are absorbed directly by the body and require no digestion.

Digestion begins in the mouth. Here the food is chewed and mixed with saliva, to form a soft mass that can easily be swallowed. The action of the saliva also begins the breaking up of any starch that the food may contain. The partly-digested mass is passed from the mouth through the esophagus (gullet) into the stomach. Here, a special juice contatining dilute hydrochloric acid and protein-splitting "ferments" is poured out to begin the digestion of proteins.

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 collected in the lower portion of the large intestine 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 so 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 chewing 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

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 mechanism 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 more 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 are vague, so that only the most 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 ulcer 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. Al-

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.

Clean Teeth Do Decay

TOOTH DECAY *cannot* be entirely prevented. Does this sound strange? Is it not seemingly at variance with the many slogans with which we are all familiar, such as "a clean tooth never decays," and with other advertising regarding "pink toothbrush," "the danger line," "film," etc., etc.? Is not dentistry a marvelously advanced profession? Have we not done wonders for the oral condition of our patients?

We cannot prevent the decaying of teeth. It is a process always with us. But we can control decay.

Research into this most vital question is but in its infancy. Ten or fifteen years of research is as much as has been given to this subject—a very short period indeed for so difficult a problem. No specific causative germ has ever been isolated, although several known organisms have always been found in decayed teeth. Therefore, until a microbe can be identified as *the* one responsible for tooth decay, or *caries*, to call it by its rightful name, we cannot even claim to be on the road to true prevention.

What, then, can be done? Surely there must be some regimen we can observe, some means of so comporting ourselves that we are not always as much at the mercy of the disease (for it is that) as civilized mankind has been for centuries.

Caries, then, though it cannot be prevented, *can* be controlled. This, mind you, not in a strict sense of the word, either. For strict control implies definite, never-failing results from certain methods of treatment—a condition impossible in this particular case. We can, however, minimize the ravages of caries to the extent that—while we are always aware of its presence and, indeed, incipience—nevertheless we are able, if not to check it, at least to nullify its effects. In order to get an idea of the methods whereby this is possible, let us review the factors involved in tooth decay.

Caries is a disease process involving the *dentin*, or body of the tooth. This, however, is completely surrounded—in that part of it which is exposed above the gum line—by a substance

called enamel. This enamel, by far the hardest of all animal tissues, is very hard, and unaffected by ordinary changes in environment. Freshly ground enamel is no different, chemically or under the miscroscope, from enamel ground off teeth in skulls that have been buried for centuries. How, then, does decay get under this extraordinarily tough protective layer with which our teeth are endowed?

Decomposing substances do the trick, usually food debris—although various constituents of the saliva sometimes serve as substitutes. This debris collects, as a rule, in two favorite locations around the tooth. One is the groove, or grooves, which run across the biting and chewing surfaces of the teeth. Along these, also, the enamel is often incompletely closed, thus affording easier access to the dentin. The other lodging place for food collection is in the spaces between the teeth, near the gum-line.

Once lodged against the tooth, and decomposition having begun, an acid is formed, to which the enamel is susceptible. In the presence of this acid, the enamel dissolves. Thus, as soon as the enamel has been penetrated, the very small organisms are let into the dentin, or tooth proper, where they proceed with great facility and speed.

This, then, being in very brief the ordinary course of decay: how can it be controlled? The answer to that lies in the factors involved, which may be roughly classed into three main groupings. These groupings are: the inner structure of the tooth; conditions in the oral cavity, and the outer surface of the tooth.

The Tooth-Bud

UNDER the first group, we have the factors of heredity, pre-natal care, diet and environment, plus general body health, habits and care of other structures in the mouth—such as tonsils, adenoids, etc. The last topic is one concerned solely with mouth hygiene.

Let us begin, then, with the tooth in its earliest form, the tooth-bud. This is formed in the foetus, so that when the child is born there are 52 tooth-buds present in the head—20 for the "baby" teeth, and 32 of the permanent set. Remember, also, that when the tooth has erupted, its structure will never change throughout life. In other words, permanent teeth are "permanent" in the true sense of the word. Once formed, the permanent teeth—unless decay sets in—do not *ever* change, even after death.

What, then, can be more important to the teeth than all factors involved in their formation? If we can control the child until the age of 14 or thereabouts, when it has its full complement of teeth with exception of the "wisdom teeth," we shall have gone a long way to solve this problem of caries.

Thus, we insist on a healthy diet for the pregnant mother, so that the tooth-buds receive their share of lime salts and are well-formed and strong. This diet includes all the other food elements advised by the physician, particularly cod-liver oil, or Viosterol, milk, leafy vegetables, cheese, and fruit juices. Let the mother include these articles of food in her diet—and in the diet of the child as it grows up—and there will be no dietary reason for the child to have decayed teeth. Of course, such a diet will also prevent rickets or scurvy, and will make for a strong, healthy child.

The factor of heredity can unfortunately *not* be controlled. Parents, both of whom have bad teeth, or whose families have notoriously poor teeth, should be doubly careful of their offspring's dental condition. Certain types of teeth, shapes of the arch, malposition of the teeth, crowding, etc., thus tending to throw the teeth into abnormal relationship with each other—these are hereditary. Crowding of teeth may cause abnormal spaces, either too large or too small, between the teeth, so that food easily lodges in these spaces, leading to decomposition with consequent acid formation. The result is tooth decay.

The "conditions in the oral cavity," referred to above, would include the health of the individual. It is a known fact that many general body diseases manifest themselves in the mouth, usually in the form of some sort of eruption on gums, lips, tongue, or mucous membrane of the mouth. These are often conducive to the presence of germ-debris which may then easily collect about the teeth.

Then again, we find that certain childhood diseases—chiefly measles, scarlet fever or other fevers—very often leave their mark on the teeth that were being calcified at the time. This accounts for mouths often encountered in which the front teeth have a line of mottled, pitted enamel running horizontally across them. This is due to the general body disturbance of the disease having its effect upon the teeth.

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 suspectible 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 simmered down to 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 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 they do is help you massage your teeth to keep them free from debris. None is necessary. It is the mechanical action of the brush that cleanses. This also applies to mouth-washes. A mixture of equal parts of salt, bicarbonate of soda and borax in a glass of warm water is better than most of them. No mouth-wash can kill all the germs in your mouth; and, even if it did, it could not keep your mouth free from germs for more than a few seconds.

One more factor involved in mouth hygiene is that of the type of foods eaten. This is not strictly a question of diet so much as of mouth hygiene. It has been shown that one of the chief reasons for such widespread tooth decay today is the failure of the art of chewing that followed concomitant with the rise of civilization. Our forefathers, as indeed savages even today, ate rougher foods than we. These foods by their own coarseness, massaged and kept clean the teeth and gums.

Watching the Child

WE HAVE thus far outlined the factors involved in caries. We come now to the responsibility of the dentist and community. Every child should have the opportunity to make a visit to the dentist at the age of 3 or 4, for two reasons. He becomes friendly with the dentist, and is not afraid to go subsequently; also, the dentist at the same time can see if the baby teeth are in good condition. Thereafter, the child should return periodically, at least for examination, no less than twice a year.

The child should be under constant surveillance and the baby teeth should be kept healthy. We are interested in these first teeth only because it has been found by experience that a healthy first set of teeth usually means a healthy permanent set. When baby teeth are decayed, and then extracted too soon, the second teeth very often come in too early and in crooked alignment, leading to accumulation of food debris and caries—as described above.

The question often arises: "How about candy?" For many years it has been accepted as fact that candy, as such, is very bad for the teeth. We are not so sure of that today. In fact, candy is believed to be good for a child, since it supplies concentrated energy, in the form of sugar. However, it must not be over-indulged of course. Furthermore, too sticky candy should be frowned upon. No candy should ever be allowed before retiring, as it then remains next to the 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 clean 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 are 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 will 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 at least be 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 much 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.

Feminine Hygiene

Chicago

TO THE MEDICAL ADVISORY BOARD: I would like to know several things about feminine hygiene. Is it necessary to douche after menstruation? Occasionally I have a discharge which has a strong odor. Is this due to neglect?

F. C.

F.C.—The term "feminine hygiene" is a misleading one. All the advertisements about feminine hygiene claim to cure infections of the female organs. Actually this is a blind for the true purpose—the products are really sold for use in birth control. All of them have shortcomings; some are dangerous; most of them are expensive, and none of them is as effective as methods which the law forbids us to print.

By feminine hygiene, you probably mean cleanliness of the female organs. It is not necessary for the healthy young girl to douche at all. In your case, it will do no harm to douche one or two days following menstruation with a quart of warm water to which may be added a tablespoonful of sodium perborate (a large quantity of which could be bought very cheaply in any drug store). If the hymen is still intact, the nozzle with the single perforation should be used when taking a douche.

"Raw" Treatment

Brooklyn, N. Y.

TO THE MEDICAL ADVISORY BOARD: From 1930 to 1933 I was a laborer, lifting and carrying weights from 100 to 175 pounds. For eight months, in 1933 and 1934, I was in a C.C.C. camp. For six of these eight months, I was clerk; the last two months I was an axeman.

About a year ago, I worked a whole day in my cellar carrying heavy pieces of machinery. In the middle of the afternoon, I felt pains in the small of my back—not a sudden sharp pain. At the end of the day, I could hardly stand up. As an average laborer's day of work, it was not a very strenuous one. Yet that night I could not sleep. The next day or two I lounged around, but every time I got into certain positions I received sharp pains which caused me to fall back at once onto the bed or couch.

It was at this point that I went to the ——— Hospital. I waited about an hour and a half. Finally, I was shown into a small room where a doctor in civilian clothes asked me my story. I recited it, and he advised me to rub in about an ounce of a certain mixture which the hospital gave me free, and also to tie a towel tightly around my waist.

I followed his advice. The result was negative. I live on relief. I became so thoroughly disgusted that I did not go back again until about three months ago—an interval of eight or ten months.

This time I was taped up crosswise, and otherwise. It helped a little. Finally, after six weeks, I decided this treatment was not enough. Upon suggesting this, in a very decent manner, I was told to "shut up or get out"—practically in those words, and in a very aggressive manner.

Just about this time I was sent at my next visit, to a different doctor. He wanted me to do what I had done a year ago. After begging him, he finally gave me a pass to the physical therapy department. I've been there getting lamp and massage treatment twice a week, and still I'm not getting better.

Therefore I went to another hospital three weeks ago, and they advised an x-ray for $3. I couldn't pay, but I demanded this at the first hospital. The doctor told me I am ignorant, and that just because I "get a bug in my head" it does not mean that he will do as I ask. He told me how poor the city is, and how expensive x-rays are. I told him I had gone to the other hospital. He became furious, and threatened to throw my case out. When he saw me stand pat, he cooled down and advised six more treatments.

What do you advise? Should we start a campaign against the dastardly conditions in the hospital? The nurse took me aside later, and fully agreed with me about the rottenness of the treatment I had been given.

A. K.

A.K.—You have undoubtedly been the victim of rotten medical treatment. Along with this, you are suffering from a condition which requires expert care and long treatment.

The doctors, who saw and attempted to treat you, are victims just as much as you, only they lack the political advancement that you possess. Treating crowds of clinic patients superficially and haphazardly, while their offices remain empty, they are backward enough to vent their anger and economic insecurity upon those who were formerly their patients and with whom they should now form an alliance for their mutual benefit.

You are suffering from a weak and painful back which may be due to some postural misalignment of the spinal bones of the lower back, or of an infection in and around that region. It seems to us that what you need most at the present time is a proper x-ray study of the lower spine. After that, it may be necessary to search for a possible source of infection. If, as we suspect, the lower spine is at fault, then a series of well performed massages and baking, plus an adjusted brace or support would be in order. That requires the services of an orthopedic surgeon, as well as of a hospital which is ready to furnish such services. It becomes a struggle for you, therefore, to interest one of the larger hospitals in your ailment and in your economic plight.

Every day the worker and the professional who treats him should become aware of the urgency and necessity for fighting for the Lundeen Bill for Unemployment Insurance and for the Dunn Bill for Health Insurance.

HEALTH AND HYGIENE BOOK SHELF

Child Care

GUIDING YOUR CHILD THROUGH THE FORMATIVE YEARS, From Birth to the Age of Five, by WINIFRED DE KOK. Emerson. $2.

DR. DE KOK is a physician and a mother of two children. Her book is written primarily for the wives of professionals with one or two children, for women not rich enough to have servants but able to afford to have a woman come to the house for two or three hours daily to help with the heavy work. It is to such women that the book will be most valuable. But the working class mother, with her greater burdens, will also find in it a good deal that is helpful and informative.

The book is written with a great deal of charm and tenderness by a woman who loves children, and will therefore be more convincing to many mothers who will feel they can trust such a woman for guidance. It is important to remember that the author is much more the mother than the doctor, and that many doctors would disagree with some of the advice given, for example on thumbsucking. Some of the material is excellent; other portions, if used as a guide, might tend to spoil the child.

There is, of course, much difference of opinion among experts on some of these topics, but one wonders how the author's children, who are used constantly as examples, would get along with other children brought up in a more customary manner.

This is a good book to own if the mother already has "Infant Care" and "The Child From One to Six," both of which can be obtained free by writing for publications No. 8, and No. 30 to the Childrens Bureau, United States Department of Labor, Washington, D.C., and the "New York State Baby Book," New York State, Department of Health, Albany, N. Y.

It would be well to check what the author says with the information in these books, which follow more closely the teachings of most authorities.

The blurb on the jacket of this book, and some of the quoted press opinions, state that the author has had training in psycho-analysis and that the book is written from a psychoanalytic point of view. The latter is untrue, and is not fair either to psycho-analysis or to the author. There does not seem to be much excuse for charging $2 for the book, because it is small and inexpensively gotten up. It would make a good 50 cent paper-covered book.

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 experience and knowledge on the subject of nutrition, and possesses a great deal of dietetic 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 major contributions that have made the study of nutrition a definite science. It mentions the work of Joseph Block, Jacob Priestly, Antoinie Lavoesier, Liebig, Vail and Rubner. Then follow chapters dealing with energy, metabolism, calories, protein, minerals and water, vitamins, vegetables and fruits, fats, sugars and other sweets, etc., concluding with advice on adequate diets and the food and dietary needs of children and adults. The book is written simply and interestingly, and is well arranged, presupposing a simple background in chemistry, physiology, and physics for a complete understanding of the material included. It provides the general public and students in nutrition with a volume giving facts in a systematic form, and represents an example of conservative discussion in the theoretical and practical aspects of the subject.

The book is amply illustrated with pictures, tables, graphs, and photographs which are highly instructive. It is supplemented with bibliographies and an adequate index and appendix. At the back of the book, are valuable tables based on very recent work, one of the tables among them giving the nutritive value of edible portions of food in shares and vitamin units.

In a simple fashion Dr. Rose is able to convey to us what a food is composed of when broken down into its various elements, and how much of the various food products we need, their physiological relation to the body, and how to use them in a menu combining the dietary needs of the child or adult. She illustrates with pictures what happens to the dog, cat and man when one essential dietary element is lacking. For example, lack of Vitamin A produces Xeropthalmia, 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 establishing dietaries in high, moderate and low-income family groups. The author states that families on a low economic level can be adequately nourished only by skillful cookery, knowledge of dietary essentials, and very 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, and have not 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 on 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 faddists like Frank McCoy, Dr. Hays and Macfadden.

Heart Disease

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 underlying treatment are simply but competently presented. There is an interesting chapter of questions and answers where typical questions on exercise, diet, occupation, climate, pregnancy and medication are handled in a brief, simple fashion.

The author becomes somewhat obscure when he attempts to philosophize on various attitudes towards heart disease. The social significance of heart disease is handled with kid gloves, as if each worker suffering were able to provide for adequate care for himself or his family. The suggestion that private philanthropy be supplemented by government aid is gratuitous. Such intelligent investigation as treatment of children with rheumatic fever in Southern regions, in Porto Rico or in the West Indies—the value of which has not yet been decided in a positive or negative fashion — is necessarily omitted because of the author's social attitude.

In spite of this, and in spite of a few minor misstatements relative to the incidence of coronary disease in full blooded Negroes and Chinese, this book is of great value as a handbook of information for the heart sufferer and his family.

Hodgepodge

COMMON SENSE HEALTH, by LUCIUS M. BUSH. Liveright.

LUCIUS M. BUSH is an osteopath. Some eleven years ago Bush advertised in "The Osteopath" that he was the originator of a method to treat certain forms of ear disease, tonsils and adenoids by finger adjustments. No mention was made of the fact that Muncie, 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, Bush is as ignorant as the layman for whom he has condescended 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, Glovers Mange Cure; and for eczema, Unguentine. These corporations may now have the endorsement of Dr. Bush for use in their advertising copy.

Letters to the Editor

"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 to make it. 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 our solution in your next issue it would be appreciated.

We took to the picket line after weeks of broken promises and the run-around by relief officials, and have won a dozen jobs. We do not intend to be satisfied with a bone, and will fight the harder—now that a start has been made—to win many more jobs.

Most of the members of our organization had 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. We have no objection to sympathy, but no one has ever been able to live on that diet.

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 are offered 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 cardiacs, 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 mutual 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 asked to send in their names; they will be sent further details about our meetings.

L. RAZLER
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 devoured HEALTH AND HYGIENE ever since the first issue. It is A-1. 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. Then we can tell at a glance when the new one is out or identify certain articles by the cover color.

E.A.S.

Good Criticism

Valdosta, Ga.

TO THE EDITOR: It's very sweet of you to wind up an excellent article either by telling me to go to a clinic or to work for socialized medicine. Well, the nearest clinic is 175 miles away over rough roads and through swamplands. And if I did bring my four children there, they would not treat them because we are Negroes. As for socialized medicine, I'm for it. But meanwhile?

Mrs. H. H.

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