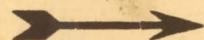


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NOVEMBER, 1937

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HEALTH AND HYGIENE

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Drawings by Chas. E. Colahan and Mischa Richter

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HEALTH AND HYGIENE

Magazine of the People's Health Education League

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Questions and Answers

If you wish to have any health problem discussed write to Health and Hygiene. Your letter will be referred to one of our doctors for reply. However, diagnosis of individual cases and prescription will not be undertaken. No letter will receive attention unless it is signed and accompanied by a stamped, self-addressed envelope.

Should Cousins Marry?

South Bend, Indiana

DEAR DOCTORS:

Is there any reason why first cousins should not marry? I have heard that children of first cousins are likely to be born feeble-minded or diseased.—X. F.

Answer—There is no scientific objection to the marriage of cousins, except when both cousins suffer from the same hereditary disease or defect. For example, if both cousins have diabetes, or come from a family in which diabetes is very common, their children will be more likely to have diabetes, although they will not necessarily have it. However, the probability that their children will have diabetes is not due to the fact that their parents are cousins, but to the fact that they both come from a family with a marked tendency towards diabetes. If they were not cousins, but both came from a markedly diabetic family, their children would be just as likely to get diabetes. If the cousins who marry do not come from a family bearing a hereditary disease, their children will be as normal as any other children. Most of the definitely hereditary diseases are quite rare.

Round Shoulders

Boulder, Colorado

DEAR DOCTORS:

What can be done to correct a tendency to round shoulders in a girl who is twelve years old?—T. R.

Answer—A tendency to round shoulders can be corrected by assuming at all times the best posture possible. This may be done by straightening the spinal curves. In order to gain control of the postural muscle one should practice by standing against the wall, and pulling the pelvis up in front with the belly muscles and down behind with the buttock muscles, so that the hollow of the back will touch the wall.

Round shoulders are often accompanied by a

collapse of the vertebrae of the thoracic region. It is also important that the adolescent girl should be properly nourished, that she should not be overworked, and that she secure sufficient hours of rest.

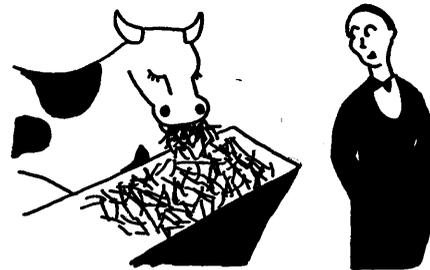
Bran and Roughage

Davenport, Iowa

DEAR DOCTORS:

Is the constant use of bran as a breakfast food likely to be harmful or beneficial to a person who has a tendency to be constipated?—T. J.

Answer—Many persons who are troubled with constipation will be benefitted by the addition of more roughage to their diet. Roughage consists chiefly of cellulose and lignin, and is found in considerable percentages in fruits, vegetables, and whole-grain cereals. Roughage is the indigestible remains of food, the residue that cannot be used by the body and which passes into the colon or large bowel from whence it is excreted as a part of the stool. In some persons roughage is useful in promoting more vigorous muscular contraction of the colon, thus bringing about a more efficient and complete evacuation. When adding roughage to the diet, however, it should be remembered that the intestinal tract of man is not made like that of a strictly plant-eating or herbivorous animal. The intestine of man is able to digest a wide variety of foods, but hardly the diet of a horse, cow, or



rabbit. Most persons can tolerate a fair amount of fruits and vegetables, but any unusually large amount of these foods may cause gas, colicky pains, and other symptoms because of the large percentage of irritating cellulose and lignin that they contain.

Bran consists chiefly of indigestible residue in the form of lignin. Recent observations have shown that the lignin in bran is the most irritating of all the indigestible vegetable residues. Most doctors agree that bran has no place in the normal diet or in the treatment of constipation. Cases have been reported in which bran has accumulated in the intestine and formed balls which have blocked the intestine and caused serious illness and even death. Bran breakfast foods such as *Kellogg's All Bran* and others should be avoided. If roughage is needed it may be obtained from fruits such as prunes, figs,

(Continued on page 164)

A political drama with Congressman Cannon and 450 laboratory rats as chief actors.

Arsenic With Your Apples

By IRVING STURMAN

AN APPLE a day may keep your health away! How come? Well, it's this way.

Apple orchards are sprayed with lead arsenate, a deadly poison, in order to exterminate the hordes of insects, especially codling moths, which prey with damaging effect upon the trees. However, besides killing off the harmful pests, the residues of these sprays on the fruit may also be fatal to harmless human beings.

The usual sources of public information have been guilty of a deep, continuous silence concerning this important subject, but in 1932 that much-needed and excellent book, *100,000,000 Guinea Pigs*, partially awakened the public from its apathy concerning the danger of lead and arsenic poisoning. From this book we learned that most of us are getting small but cumulatively dangerous amounts of poison in our diet, and that occasionally someone dies from eating sprayed fruits. We were all considerably shocked, but then, after a while, we probably forgot about what we had read.

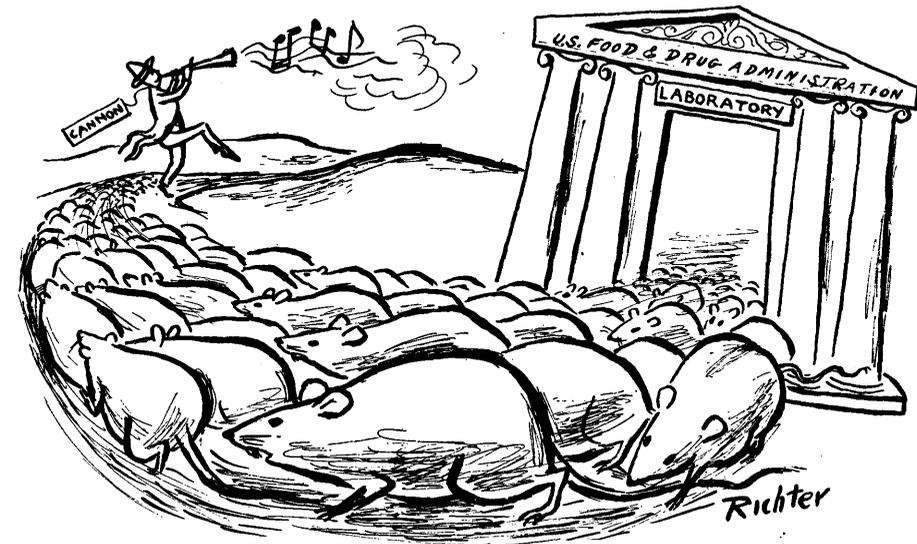
And yet, today, the question of spraying is

as important as ever. From a Department of Agriculture press release dated August 16, 1937, we learn that food officials condemned 26 crates of currants and 10 bushels of apples because they contained amounts of lead and arsenic unsafe for human consumption. On September 27, 1937, another release informs us that 233 bushels of apples, 18 bushels of pears, 29 crates of cherries, and 39 crates of currants, "all carrying dangerous amounts of spray residue," were seized. So now, in 1937, the fruit growers are still shipping cargoes of produce charged with danger and death to human beings. And very often they get away with it, too! This isn't completely the fault of the government inspectors. When choosing apples for analysis they try to pick the ones with the highest poison content. This is about as easy as finding the needle in the proverbial haystack. So, in many cases, apples are sent to market carrying more lead arsenate than is good for the digestion. That's the reason some unfortunate apple-eaters are no longer with us.

Only a short while ago, on July 23, 1937,

Mischa Richter

The Pied Piper of Missouri



the *New York Times* reported the worst Japanese beetle scourge that had ever infested New Jersey, Long Island, and Westchester in the last twelve years. Mrs. M. K. Peters, chief entomologist of the Farmingdale Agricultural School, "recommended arsenate of lead and lime in spray form as the best exterminator, but warned that it would be dangerous to use this spray on grapes and other edible fruits nearing ripeness." This is putting it mildly. To be more accurate, it is dangerous to use the stuff at all, a fact which is supported by the opinion of the best pharmacologists in the country.

SUBSIDIZED RESEARCH

Professor P. J. Hanzlik of the Department of Pharmacology of the Stanford University Medical School sums up the controversy concerning the harmfulness of lead and arsenic spray residues when he says:

What we desire to know is whether our health is really in danger, if we eat such contaminated food. Many expert scientists, who have investigated the possibility, think it is. Some few people, not experts, have claimed these things to be trivial.*

Dr. Hanzlik continues:

Just recently some commercially inspired studies, which are reported to have poooh-pooohed the lead arsenate of spray residues as a health hazard, are likely to create misleading impressions and a false sense of security. Unless and until such reports are submitted to experts capable of assessing their true value, they must be regarded as being at complete variance with disinterested researches conducted by scientists the world over.

In other words, if an apple growers' association wants tests made to show that lead and arsenic in amounts usually present are not harmful, they can easily find laboratories to make such tests. However, subsidized tests of this kind are obviously not to be taken seriously.

It is the opinion of expert pharmacologists that as little as 1/1000 of a grain of lead (a barely visible amount) taken daily for weeks or months can be injurious to health. As for arsenic, 5/1000 of a grain taken daily over similar periods of time is thought to be a dangerous dose. Therefore, based on the amount of these substances normally present in the spray residue of fruits, a person might contract lead poisoning by eating an apple a day for

* *Health Hazards of Chemo-Enemies in Contaminated Foods*, Scientific Monthly, May, 1937.

a period of weeks, and arsenic poisoning by eating three or four apples a day for a similar period. Children would be affected even more quickly than this, for they would ingest more poison in proportion to their body weight.

The youngster who gets a stomach ache from eating green apples is a standard character in popular humor. Today, a child can get much more serious ailments than a stomach ache from eating apples—and the apples needn't be green, either.

The symptoms of lead poisoning are: loss of weight and appetite, weakness, fatigue, anemia, constipation, and, later, pains in the joints and nerve paralysis. It is also believed to cause lowering of resistance to infection and predisposition to disease, and there is some reason to believe that it may be responsible for ailments such as cancer, kidney disease, and hardening of the arteries.

It has sometimes been pointed out by those who wish to defend the use of arsenical sprays that since lead arsenate is not soluble in water it passes through the human system without being absorbed. This is fallacious because lead arsenate is soluble in hydrochloric acid, which is a constituent of the stomach juice, and therefore it is absorbed through the intestine into the system. As a matter of fact, hydrochloric acid is sometimes used to wash spray residues from fruits, but this is a method which is not very practical to follow in the home.

HOW TO PROTECT YOURSELF

About all that the ultimate consumer can do to protect himself as long as fruit and vegetable growers are allowed to use these sprays is to peel all deciduous fruits that are eaten. If fruits are eaten with the skins they should be thoroughly scrubbed with a brush and the skin should be removed around both the stem and the blossom part where most of the residue is likely to be deposited. The peelings of deciduous fruits should not be used in making jellies, jams, cider, or vinegar, nor should they be fed to cattle or poultry.

Similarly, the outer leaves of all leafy vegetables should be thrown away. They should not be fed to livestock or poultry. There are many instances on record of livestock and poultry having been lost because they have grazed and been fed in areas that have been sprayed.

By using such precautions, we can protect

ourselves to a certain extent. However, it is the opinion of those best qualified to know, that ultimate safety will not be achieved until the use of poison sprays is made illegal. When we consider that one valley in the Pacific Northwest has been sprayed with as much as 7,000,000 pounds of lead arsenate annually, and that this poison is absorbed by the vegetable and animal life in the district, much of which is used for food, we may well wish that the government would take drastic action.

It is drastic action that is needed. Sprays of a different kind should be developed and put into use, regardless of their greater cost. It is true that the government now sets a limit to the amount of poison that can be allowed to remain on produce, but these limits have no validity from a health standpoint. Concerning them Dr. Hanzlik says:

Administrative regulations which permit so-called tolerance limits of these poisons on foods, are undoubtedly applied with good intentions, and are legally essential for effective public protection under the present terms of the law. However, they are purely arbitrary and do not meet objections raised by scientists.

In view of the information given above, it is interesting to call attention to a drama of mice and men that has recently been enacted backstage in the theatre of national politics.

The present law allows apples to be shipped with a residue of .018 grains of lead and .010 grains of arsenic per pound. The growers have been and are squawking about the lead tolerance. They want to ship their goods with about .030 grains of lead, and they claim that this would in no way hurt the public. Well, you might ask, doesn't anyone know accurately what tolerance is safe for human beings? Unhappily, the answer is no. However, if it had not been for the political manoeuvres of Representative Clarence Cannon, Democrat from Missouri, we might have had the correct solution to this serious public health problem.

About two years ago Mr. W. G. Campbell, head of the Food and Drug Administration, decided to settle the matter once and for all. With the aid of many scientists, gathered at a sacrifice to themselves, he began an investigation to de-

termine, by comparison, the effects of lead arsenate on human beings. Rats, 450 white ones, were used as "guinea pigs." But those rats have died in vain because Congressman Clarence Cannon threw a wrench into the machinery of the investigation. Here's how he went about it.

Being an influential member of the House Appropriations Committee, he managed to squeeze a clause into the Agriculture Department bill prohibiting any expenditure by the

Food and Drug Administration for "laboratory investigations to determine the possible harmful effects on human beings of spray insecticides on fruits and vegetables." Then, through his influence, he succeeded in inserting into the Treasury Department bill a provision conferring upon the Public Health Service the authority to continue with the investigation he had wilfully sabotaged. But that wasn't all.

In his appearance before the Treasury Department subcommittee on the bill, he withheld the information that the Food and Drug Administration had already undertaken an inquiry into the problem of lead arsenate spraying.

All this manoeuvring on Cannon's part might still have proven ineffectual if the beginning of the fiscal year hadn't been near at hand. Mr. Campbell needed funds which could be issued only at the beginning of the new fiscal year and we observed how Cannon prevented him from getting them by shifting the spray project to the Public Health Service.

THE RATS DIE IN VAIN

When the experiment was thus finally halted there was no further use for the white rats, and they were chloroformed and destroyed because they could not be kept in the laboratory. Why they couldn't be passed on to the Public Health Service with the data already accumulated up to that point is one of those red-tape mysteries which defy solution.

Why was Cannon so interested in stopping the investigation? Clarence Cannon, besides being a Congressman, is also an apple grower. He clothes his true feelings about the matter

(Continued on page 165)



Mische Richter

Going behind the headlines for the true significance of the acts of the sex criminal.

Behind the Sex Crime

A MURDER with a mystery is always news. When it has a sexual aspect as well it becomes the sensation of the day, of equal if not greater importance to the newspaper-reading public than devastating wars and world-shaking political events. After the case is solved and a Hearst reporter with a miniature camera has sneaked the last pictures out of the death house, it lives on feebly for a little while, then takes its place with the forgotten circulation builders of the past.

The term sex crime covers a wide variety of activities, the only common denominator of which is a sexual aspect. Sometimes this sexual aspect is clear and unmistakable, as when a murder follows a sexual assault; at other times it is obscure but none the less real. Kleptomania or the stealing of useless objects, for example, is a crime in which the theft is frequently allied with sexual excitement. The theft is a symbolic expression of sexual activity and may be followed by direct sexual activity of one kind or another. It is usually fairly easy to distinguish between this kind of stealing and the ordinary type. First of all, the objects stolen are generally of no value to the individual. No attempt is made to sell them, or to use them in the customary way. Often the same kind of object is stolen over and over again. One young man who stole fountain pens always threw them away shortly after he had taken them. He belonged to a well-to-do family and had plenty of money, but would never buy a fountain pen; in order to satisfy his particular impulse he had to steal them.

COMPULSION NEUROSES

A girl who stole only pocketbooks would use each new one for a day or two, then discard it as soon as it showed the slightest spot, blemish, or crease. At the same time, she experienced a great deal of guilt over her activities and tried to atone for them by going without lunch after every theft.

What happens when such an individual is caught? If he comes from a wealthy family the matter is usually smoothed over by paying the injured shopkeeper and exerting a little

political pressure. If the thief comes from a poor family he is sent to a reformatory or work-house. But the kleptomaniac is clearly a sick individual and the prison term will have little effect on his future activities. Such a person requires institutional psychiatric care rather than a jail sentence.

However, it is well to remember that only a small proportion of all stealing, certainly less than one per cent, is of this special, symbolic character. Occasionally one meets with a tendency on the part of a psychiatrist or social worker to exaggerate the extent of this disorder and to regard a large proportion of all thefts as symbolic equivalents for sexual activity. While it is true that there are mixed cases which are difficult to diagnose, most true examples of this aberration are readily diagnosed by the psychiatrist.

A FASCIST FIREBUG

Many cases of arson or the setting of fires are likewise symbolic sexual activities, often accompanied by sexual excitement. There is the case of a man who would enter an apartment, ransack the rooms for women's underclothes, fondle them in a state of sexual excitement, then set fire to the contents of the room and dash out to wait in the neighborhood for the fire-engines.

Usually such activities are carried out furtively by a trembling wretch who hides in the shadows. The rise of Fascism, however, has pushed many psychopaths into a position of power where their perverse activities can be carried out on a large scale, at the expense of great numbers of unfortunate victims. In this connection, it is interesting to look at some revealing quotations from *Wings Over Ambe*, an autobiographical account of the Ethiopian adventures of Mussolini's son, Vittorio:

I have never been lucky enough to see a fire. When I see a fire truck dash by, I immediately get on its trail. However, invariably, I am led to the fire house or the charred and wet ruins of a fire that has already been extinguished. Probably someone here [in Ethiopia] was aware of my frustration and therefore some planes of the Four-

teenth Squadron were ordered to effect a bombing in the zone of Adi Abo and to use incendiary bombs exclusively. I do not believe a more important reason existed. . . .

After the mechanical unloading [of the bombs] we began to hurl them by hand. We threw them with abandon on huge tukuls, ghebi, and then I tried to make a hit with a beautiful four pound bomb. . . . It was most diverting: there was a large hut surrounded by trees which I tried to hit three times. I missed. It was necessary to center the straw roof and I succeeded on my fourth encirclement. The wretched inhabitants were inside and saw the roof catch fire dashed out and ran as though possessed by the devil. . . .

I get meager effects [from ordinary bombs] perhaps because I expected giant explosions of the type one sees in American films. Here the small Ethiopian huts made of clay and brushwood give little satisfaction to the bomber. . . . Incendiary bombs give a great satisfaction. . . . Closed in a circle of fire, about five thousand Ethiopians suffered a bad end.

Although some firebugs might sympathize with poor Vittorio for having only small Ethiopian huts to burn, others will probably feel that any pyromaniac who can burn 5,000 Ethiopians alive in one afternoon has no very good reason for complaint.

The kleptomaniac and the firebug are examples of the sex delinquent whose sexual activities are usually not clearly recognized as such because of their symbolic nature. The individuals who commit these offenses, though definitely pathological, are usually not insane in the ordinary sense of the word. They reason clearly, in most respects act rationally, and are not well suited for the State Hospital. Jail does not act as a deterrent. Special institutions exclusively devoted to the treatment of cases of this kind are clearly needed but unfortunately do not exist.

When we come to the crimes that are more clearly sexual in nature we encounter a great many different kinds of offenders. The definitely insane contribute a comparatively small proportion to the total number. Sometimes those who suffer from paranoid dementia *præcox* commit crimes of a sexual nature, but the overwhelming majority of such patients do not.



Sol Libsohn

The mentally defective adult often seeks the company of children, because with them he can feel equal.

Every active case of paranoid dementia *præcox*, however, is potentially dangerous, because one of the basic symptoms of this disease is the belief of the patient that people are harming him in some way. Frequently the patient hears imaginary voices that abuse him with sexual epithets and threaten him, and he may attribute these insults either to members of his family, friends, or strangers. Occasionally he may attempt to retaliate and physically attack a total stranger. When recognized such patients are confined to State Hospitals and treated. Unfortunately, the illness often fails to respond to treatment, but some patients do recover. Recently, good results have been obtained in some early cases by the use of insulin in doses large enough to bring unconsciousness, or with *Metrazol*, a drug containing camphor which induces convulsions in the patient.

Early cases of paresis, one form of brain syphilis, are responsible for another group of sex crimes. The recent case of Ossido, the

Brooklyn barber who killed a little girl after raping her, is an example of this type. Ossido had been arrested five years before he killed the child. At that time he seems to have had syphilis although it probably had not yet reached his brain. Since he did not get proper treatment at the time of his arrest he was released uncured and left to develop paresis. Thorough, adequate treatment in most instances prevents the subsequent development of paresis, and if Ossido had received proper treatment the little girl would in all probability have been alive today. Treatment of the disease even after paresis has already set in often gives excellent results.

INSIDE PRISON WALLS

Persons who are senile, that is, in their second childhood, sometimes commit sex offenses. Such offenses usually consist of exhibitionism before children, or occasionally of ineffectual attempts at sex relations. In such cases the only treatment is institutional care of the patient.

Chronic alcohol addicts whose personalities and mental faculties have deteriorated may act in the same way, though the confirmed alcohol addict often loses his sexual power. As in the case of senility, the treatment of the deteriorated alcohol addict does not give good results, though early cases may respond to treatment. In the earlier cases we are dealing not so much with the prolonged effect of alcohol as with a psychopathic personality with an abnormal craving for drink. The treatment must not merely rid the patient temporarily of the urge to drink, but must cope with those inner difficulties that are responsible for the abnormal craving for the intoxicated state.

Some sex offenses are committed by mental defectives, though the majority of mental defectives are well-behaved in this respect. The mental defective with the body of a man but the mind of a child, may prefer the company of children with whom he can feel equal. He may attempt to seduce children from a lack of understanding of the significance of the act and from a defective ability to inhibit his impulses. Here again proper institutionalization is the chief immediate remedy.

The first line of attack against the menace of sex crimes is early recognition of the condition, with proper psychiatric treatment of the offender. Sending the person to jail has not been found effective as a deterrent. On the contrary, many have learned to become sex criminals as a result of their jail experiences. In

the majority of jails there are at least a few hardened, brutal men known as "wolves." These men force the other inmates to have perverse sexual relations with them. They delight especially in young victims, and as soon as a new youthful prisoner appears they attempt to attack him sexually. When a young boy is thrown into jail for a minor theft the "wolves" first fight among themselves for the privilege of assaulting him. The victor then attacks the boy. Neither cries for pity nor pleas of any kind deter the attacker. Other prisoners are either indifferent or afraid to interfere. The prison administration, which is often politically corrupt, usually maintains a studied ignorance of the situation. The young boy eventually submits because he has no choice. Soon he becomes hardened in the practice and may even become sufficiently perverted to enjoy it. When this happens he is known as a "woman." Such a boy or young man will then try to play his admirers against each other, going to the one who pays him the most in tobacco or other little luxuries. In other words, he becomes a male prostitute.

SCHOOLS COULD HELP

Many parts of the country, and particularly the South, are without facilities for the separate care of young delinquents. On Welfare Island in New York City an investigation a few years ago revealed horrible conditions. Male prostitutes with a liberal supply of cosmetics and women's clothes sold their favors to other prisoners, while the "boss" prisoners took their "cut" of each transaction. The entire situation was under Tammany's political protection, and was another source of income for the political bosses. To the credit of Mayor La Guardia let it be said that he took drastic actions against these frightful conditions.

It is not enough to detect and treat the sex criminal. The basic problem is to prevent people from undergoing distortions of personality, some of which find expression in the form of sex crimes. An increase of facilities for the application of the principles of mental hygiene in schools can help by readjusting the child who is beginning to show the first signs of personality difficulty. Much future mental illness could be prevented in this way. Playgrounds and opportunities for wholesome recreation for children are also valuable. Large-scale expansion of kindergarten and nursery school facilities so that young children of all economic groups may

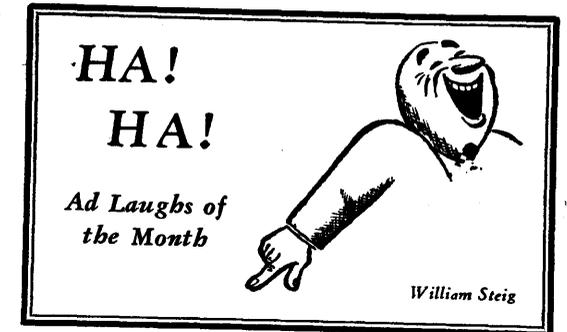
learn to play together under the kind of supervision that is now available only to children of well-to-do parents, would also be a most important factor in reducing juvenile delinquency of all kinds.

Sex education in the schools could be of some help in the development of a more healthy attitude to sex. Here one meets with strong resistance on the part of prejudiced educators. When it was recently proposed to introduce into the public high schools some of the books on sex education already used in private experimental schools, the New York City Superintendent of Schools, Harold G. Campbell, came out with a flat prohibition. He said: "I can say that there is no possibility of our dealing with such problems in the school." In spite of Superintendent Campbell's "no possibility," pressure by interested parents could probably compel him to change his attitude.

SEX PERVERTS IN NAZILAND

None of the measures suggested above, helpful though they would be, would solve the problem entirely. The great majority of sex crimes are committed by persons who have warped personalities, personalities that are especially warped in relation to sex. As long as society warps the relations of its members to each other, in the economic as well as in the sexual sphere, just so long will distorted personalities be created on a mass scale and sex crimes will continue. All social movements that aim to perpetuate and intensify the miseries of our economic order foster still greater personality distortion. What is more, when such movements gain the ascendancy the most distorted individuals become the leaders of society. The example of Vittorio Mussolini has already been cited. The same process is exemplified in Nazi Germany where the highest government positions are in the hands of perverts, sadists, and psychopaths. Goering, a morphine addict who was formerly a patient in the violent ward of a Swedish insane asylum, is now Hitler's right-hand man, and Bernhard Rust, the Nazi Minister for Science, Education, and National Culture, is himself a sex criminal. In 1930, when a member of the Hanover Local Education Board, he asked to be retired on pension, submitting medical certification that he was suffering from insanity. Later, during his trial as a sex criminal, Professor Foerster of Greifswald

(Continued on page 168)



Scientists use a sensitive osmoscope to measure odor . . . Smokers' test shows that White Owls are at least 25 per cent easier on your breath.—*Advertisement for White Owl cigars.*

The Life Extension Institute lists 27 germ diseases hands may spread. But washing hands often—always before meals—with Lifebuoy Health Soap removes germs . . .—*Advertisement for Lifebuoy Soap.*

You'll enjoy the fresh, clean taste of Hoffman's Draught Beer in Bottles!—*Radio Advertisement for Hoffman Beverages.*

Do as your dentist does—use powder.—*Advertisement for Dr. Lyons Tooth Powder.*

Listen here, Nurse! You know my Mummy says you're to rub me every day, after my bath, with Mennen Antiseptic Oil. Looks to me as though you're forgettin' it today. And believe me, I'm going to keep on hollerin' till you remember. You know my skin can't fight nasty germs all alone . . . and you know this Mennen Oil leaves a film of protection all over me that helps kill off these germs.—*Advertisement for Mennen Antiseptic Oil.*

Ex-Lax works by the "Gentle Nudge" system.—*Advertisement for Ex-Lax.*

Washington, Oct. 7.—Madame of the blood-red evening gown and blood-red lips, of blood-red fingernails, and on the beach, of the blood-red toenails, soon may be sporting cigarets giving off blood-red smoke.

Or any other color of the rainbow, for that matter. Otto L. Miller, of Memphis, was granted a patent (No. 2,094,614) by the United States Patent Office on a process for treating cigarets to give off colored smoke.—*News item in the New York World-Telegram.*

We invite our readers to send in contributions to this department.

Are You Safe at Home? II

LAST month we discussed falls on stairways, which, as we pointed out, account for 35 per cent of all falls in the home. Though it may seem strange, almost as many falls take place on floors.

Women are especially susceptible to falls because of their high heels. The higher the heel, the greater the instability of the gait, and consequently the more likelihood there is of a fall. Any doctor will tell you that he sees four times as many women with sprained ankles as men—and this in spite of the fact that men as a class, due to their more active mode of life, suffer accidental injury four times as often as women.

The moral of this is simple: to avoid the accidents that so often befall the woman in the home and elsewhere, shoes must be chosen with an eye to comfort and safety rather than style.

But with high heels or low, no one is safe when small or slippery objects are left lying on the floor. Marbles, beads, toys, grapes, banana peels, grease spots are booby traps for the unwary and they should be picked up or wiped up as soon as their presence is detected.

Bringing linoleum or wooden floors to a high polish with wax may be good for the floor, but it adds considerably to the hazard of falls in the home. Floors should never be highly waxed when there are old or infirm persons in the home, for these are particularly likely to meet with accidents; furthermore, when an elderly person suffers an accident the chances of serious injury are far greater than in the case of a younger person.

The wet surface of recently-washed linoleum is particularly dangerous, and it is unwise to walk on such floors until they are thoroughly dry. Children, especially, should be kept off wet and slippery floors. Caution in this respect must be extended to public places and industrial establishments as well as to the home. When a floor in such places has been washed,

a warning sign stating that the floor is slippery should be put up in a conspicuous place.

Scatter rugs on waxed floors and wrinkled or turned-up edges of carpets are frequently responsible for falls in the home. All rugs and carpets should be fastened to the floor or provided with underlays that will permit them to lie flat on the floor.

Falls in bathtubs are not uncommon, and it is hardly necessary to point out how dangerous they can be. Standing up in the tub and rinsing it out while the used water drains out is a practice that should be discouraged; getting out of the tub and then rinsing it out is much safer. In stepping out of a bathtub the foot should come in contact with a bath mat or towel rather than the tile or linoleum floor. Naturally, caution must be exercised while standing under a shower. Safety can be achieved by using a small

rubber bath mat such as can be purchased in any hardware or department store.

Standing on rocking chairs to nail a picture to the wall or to reach some object in a cupboard or on a shelf is as good a way as any of flirting with the possibility of a broken arm or leg.

Cleaning windows from the outside is

hazardous enough when performed by a professional window washer; when it is done by an amateur the risk is greatly multiplied. Falls from windows, though not as frequent as falls on stairways or floors, result in almost as many deaths as the latter two causes combined. Sitting on the window sill to wash the external surface of the pane is a hazardous procedure, for in case a sash should give way or a window that is stuck should yield too suddenly in the effort to raise it, there is great danger that the person will be precipitated into the yard or street below. Most double-hung windows can be washed from the inside with little trouble or danger.

Young children should never be allowed to lean out of windows. They are likely to become absorbed in something they see, and forget the danger of their position. Although there are instances in which children have fallen forty feet without injury, the practice of dropping from windows is not one to be encouraged.

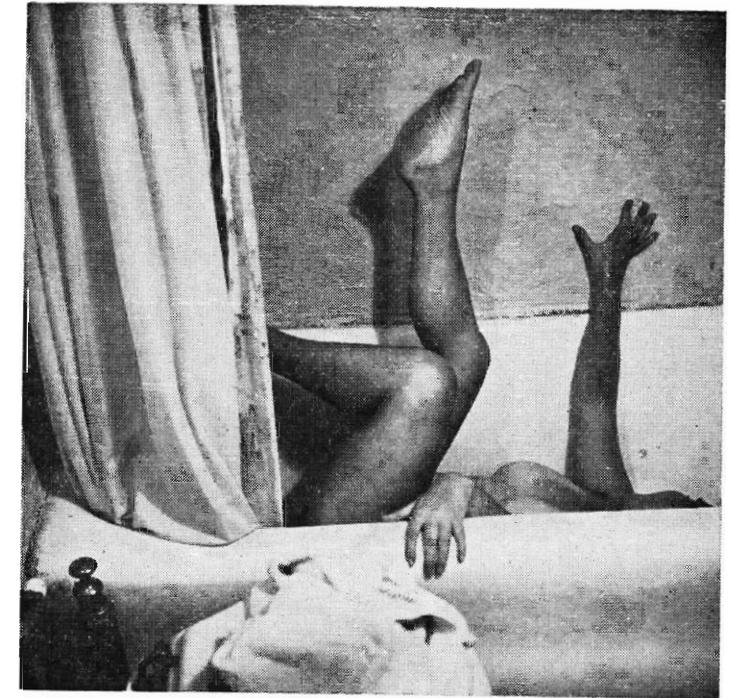
Follow the "Accidents in the Home" series which will appear regularly in HEALTH AND HYGIENE, and learn how you can avoid the domestic mishaps and disasters that befall thousands of people every year.

Steam Inhalations

A Useful Method of Getting Relief from Colds

USE plain boiling water, or boiling water with tincture of benzoin added if fragrance is desired. Tincture of benzoin confers no special virtue to the steam.

For the patient who can sit up an ordinary teakettle or narrow-necked pitcher can be used with a brown paper bag over the spout or mouth. To make an inhaler cut a hole two inches square in the bag. Keep the solution hot by adding boiling water from time to time. Place the inhaler on a low chair or table, and inhale the steam until relief from congestion is obtained. The patient must stay indoors in a warm



Sol Libsohn

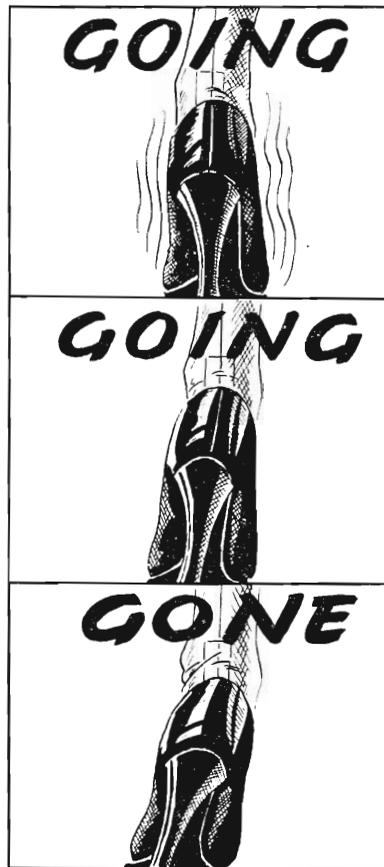
Watch your step while bathing. Falls in bathtubs and showers are responsible for many serious injuries.

room free from draughts for several hours after the inhalation.

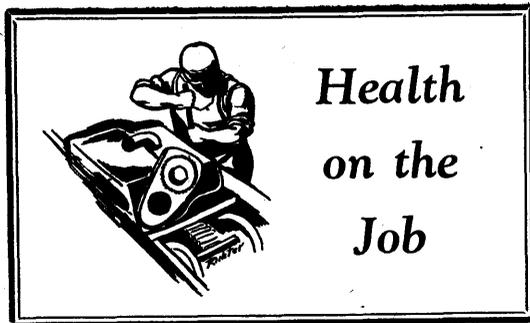
In cases where the air must be kept moist continuously, a croup tent may be arranged. In such cases the patient is usually a small child in a crib. Cover the upper third of the crib—top, sides, and back—with a blanket, which will absorb the steam and prevent burns. Over the blanket pin a sheet. Have the whole tent stretched taut and pinned to the crib with large safety pins. Turn the loose corner folds of blanket and sheet to the back of the crib and pin them.

An electric inhaler is the safest type to use near bedding, and can be purchased quite cheaply at most drug stores. Fill the container, according to directions accompanying the apparatus, with a solution of tincture of benzoin, one teaspoonful to the pint of water. Place the inhaler inside the tent, and at the foot of the bed so that the child will not be burned by the steam. Watch the child closely to prevent any accidents.

To arrange a "croup tent" around a bed, place chairs on either side of the bed and draw the blanket and sheet over them and the head of the bed in the manner described above.



A sprain or perhaps a fractured ankle.



Health on the Job

FUR WORKERS will be interested in a recent study of asthma in the fur trade. It has been known that furriers are particularly prone to asthma; but it has never been clear whether the cause of the asthma was the natural fur itself or the dyes with which the furs were treated. Recent tests have shown that the agent responsible for the attacks in asthmatic furriers is not the natural fur but the dye. The offending chemical is known as paraphenylenediamine. Substitution of a modified form of dye would do much to reduce the incidence of asthma among sensitive furriers.

A recent survey of the hat industry in New York State revealed the most deplorable and dangerous conditions in the factories. Even the inadequate laws governing the sanitary conditions in the factories are being ignored. Machines are so faulty, and the gas connections in such bad repair, that gas is always escaping and can be detected by odor in many shops. An investigator has reported that the carbon monoxide hazard is very widespread. Hatters, through their union, should quickly take action to remedy these intolerable conditions.

A useful hint in the emergency treatment of burns either in industry or at home is the immersion of the burned part in cool water (60-70 degrees F.). The severe pain is considerably relieved in a short time. This does not take the place of medical treatment of the burn by accepted methods such as the tannic acid treatment and other recognized methods. It is simply useful in allaying and relieving unbearable pain before regular methods of treatment are started.

Plastic materials, particularly bakelite, are coming into wider use every day in all branches of industrial work. The health of employees in a bakelite plant was recently studied in a survey the results of which showed that 29 per cent of all workers suffered from eye irritation and 53 per cent from irritation of the nose and throat. The

offending agents were the irritating fumes and dust which pollute the factory atmosphere in plastic plants. Elimination of this health hazard can be effected by simple methods of cleanliness and ventilation. Protection from the excessive heat, adequate washing facilities, and uniforms furnished and cleaned by the employer are some of the necessary steps toward elimination of illness among bakelite workers.

According to Dr. Alice Hamilton, noted authority on industrial poisons, the only efficient way to protect the spray painter is to select coatings that are free from poisonous constituents. Since there are non-poisonous materials available, this kind of painting can be rendered entirely harmless.

Although trade unions and doctors familiar with compensation problems have for years been trying to achieve complete protection for workers disabled in industry, only a few state compensation laws provide "blanket" coverage. These are Illinois, Connecticut, Massachusetts, North Dakota, Missouri, and Wisconsin. In all other states you can present a claim only if the disease you have is on the list of "compensable" diseases. Until recently, silicosis was not listed in many states, and so when a worker got tuberculosis in industry the company doctors would often claim it was silicosis (it is hard to tell them apart in the later stages). In this way the company usually avoided payment. Today, when as the result of much campaigning, silicosis has a high insurance value, in many states the same insurance doctors are trying to call silicosis cases tuberculosis.

The trade unions should be constantly on the alert to see that the propaganda of the casualty insurance companies does not weaken the existing compensation laws. In Illinois, for example, where the law giving "blanket coverage" was passed as recently as last year, there is already a powerful lobby working to amend the law so as to reduce the workers' protection.

"Health on the Job" will appear as a regular feature in HEALTH AND HYGIENE. Each month we will describe briefly the latest developments in industrial hygiene. We invite workers and trade unions to send us material that they feel would be of interest to readers of this department. We also invite queries on the subject of industrial hygiene, and we suggest that the topics discussed in this department be taken up in the meetings of the unions concerned.

*Too many think they have heart disease.
But even if one has, a long life is possible.*

Is It Heart Disease?

HAVE I or haven't I heart disease?" is a question to which no honest physician will attempt a ready answer. Yet every day the methods of diagnosis improve and more and more it becomes possible to answer the patient's question accurately and scientifically.

There are several causes of heart disease, yet the symptoms are generally the same because they are the result of weakened pumping action in the heart muscle. When the heart is not pumping blood in adequate amounts to all parts of the body, the patient finds himself short of breath. Yet no man should be quick to diagnose heart disease because of shortness of breath upon exertion. It is perfectly normal for anybody to get short of breath as a result of moderately severe effort. Jesse Owens, the track star, gets short of breath at the end of the 100 meter dash and you may be sure his heart is perfectly alright. It is only when shortness of breath appears after effort that formerly did not produce any breathlessness, that it is time to see a doctor.

Shortness of breath is the chief symptom of a weak heart muscle, yet it may also arise from many other causes. Anemia, lung diseases, nervous illness, and a sudden increase in body weight will often have the same effect.

PALPITATION OF THE HEART

Another symptom of heart disorder is palpitation, that is, awareness of the heart beat. Again it should not be taken for granted that palpitation necessarily means heart disease. Skipped beats, as well as spells of rapid heart action may, and usually do, occur in people whose hearts are entirely normal. Anyone can become aware of his heart's beat if he concentrates his attention on it, especially while lying on the side. It is only when palpitation appears after mild exertion or while at rest that the patient should seek medical attention. This does not mean, however, that all palpitation occurring while a person is at rest is indicative of heart damage.

Two other symptoms are swelling of the ankles and fatigue after slight effort. If these

symptoms appear in a mild way there is no particular cause for alarm. It is quite usual for the legs and ankles to swell a little in hot weather, as any man who wears garters can testify. Such swelling is usually noticed at the end of the day, and it generally disappears after a night's rest. As for fatigue, it may often be the result merely of overwork.

PAINS AND MURMURS

Among the other symptoms which often alarm patients but which are not due to heart disease can be listed: (1) swollen veins on the back of the hands, (2) pulse-beats on the pillow, (3) pains in the chest, especially on the left side, and (4) heart murmurs. Swollen veins on the hands are quite natural and do not indicate faulty circulation. Pulse-beats on the pillow are entirely normal when the head is lying so that there is a slight pressure on the artery at the temple. Chest pains, which the frightened patient often refers to as "pain in the heart," can arise from such causes as rheumatism, neuritis, stomach trouble, and inflammation of the lining of the lung. As a matter of fact, pains in the region of the heart seldom occur in persons with organic heart disease.

There is a type of chest pain known as angina pectoris (Latin for pain in the chest), which is caused by hardening of the arteries of the heart. In this illness, which most commonly affects men in the forties and fifties, the blood supply to the heart is reduced due to the narrowing and inelasticity of the arteries. Whenever, as a result of exertion, the heart is called upon to do extra work, the blood supply to the heart is inadequate and the result is a pain. Seizures of angina, as it is called, are often promptly relieved by the administration of nitroglycerin by mouth.

Many persons who undergo a routine physical examination become alarmed when the doctor, after listening to the heart action with a stethoscope, remarks casually that he detects a "heart murmur." However, as we will point out, this alarm is in many cases altogether unnecessary. Heart murmurs are of two kinds—

functional and organic—and it is necessary to determine which type of murmur it is before allowing the patient to become concerned about it. A murmur that is functional need cause no worry; one that is organic will require care. At least 50 per cent of all murmurs are functional.

Heart murmurs are a source of great worry to many people who do not know what murmurs signify. Children are often forced into a life of invalidism and fear because at one time or another a heart murmur has been discovered. Yet the truth is that heart murmurs do not necessarily indicate disease; in fact, under certain conditions heart murmurs can almost always be detected in normal hearts. We can see, therefore, that it is not enough to know that there is a murmur—it is necessary to find out what kind of murmur it is.

Certain heart murmurs are important because they give the doctor information concerning the condition of the valves of the heart and help to reveal the presence of such diseases as congenital heart disease (the kind one is born with), rheumatic heart disease, the kind in which the valves are scarred by an attack of rheumatic fever, and syphilitic heart disease. In all these three kinds of heart disease the valves of the heart are damaged or abnormal in one way or another. If any of these diseases are present, proper treatment must be applied. If the murmur is not the kind that shows these diseases to be present, it can generally be ignored with safety.

The fourth and commonest type of heart disease is due to hardening of the arteries. This type produces no murmurs, nor does it cause the valves to "leak."

The layman has come to regard heart disease as inevitably fatal. Yet nothing could be further from the truth. A person with a damaged heart may live a useful life for many years provided he restricts his activities and does not subject himself to undue strain. Another common belief is that heart disease frequently causes sudden death. However, a study made

of a thousand British war veterans who were pensioned because of heart disease showed that only seventy-nine out of the thousand died suddenly during the ten years following their discharge.

Of course, a damaged heart cannot be replaced but much can be done to maintain it in good pumping order, and a heart patient is not necessarily doomed to a life of invalidism. True, activity must be curtailed. There must be adequate sleep and rest. Lie down when you can, sit when you cannot lie. Walk, do not run. Avoid excitement. Take enough but never too much food and drink. No extremes.

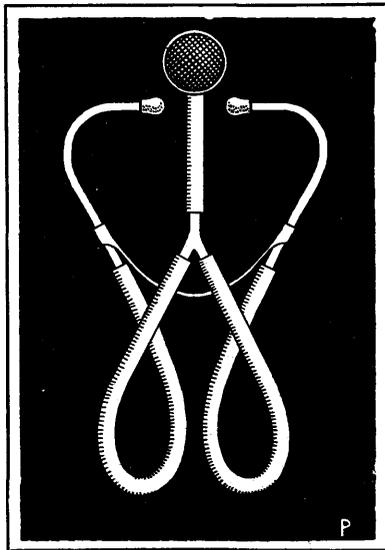
Essentially, the heart patient must alter his entire attitude toward life and substitute ease and comfort for speed and excitement. And there, for a physician who has any social conscience, is the rub. It is simple to prescribe rest and calm, but under present conditions it is a little ironic to prescribe them to the man who depends upon wages for a livelihood. Before such a prescription can be of any use to many of those now afflicted with heart disease adequate social insurance against sickness and disability will have to be provided.

We have said that the person with heart disease must alter his way of life. However, there are many who think they have heart disease when they have not. Such persons should not allow themselves to be made into invalids by undue concern over physical manifestations which may have nothing at all to do with heart trouble.

Diet During Pregnancy

Dr. Claude E. Heaton, authority on obstetrics, writing in *Preventive Medicine*, advocates the following basic daily food intake for pregnant women:

- One pint to a quart of milk.
- Fresh or cooked fruits.
- A raw green vegetable.
- A cooked green vegetable.
- One egg.
- Lean meat, including red meats and liver.
- Cereal.



Editorial:

Public Health and Individual Illness

Science Is Thwarted

Never has the subject of the distribution of health facilities and medical care assumed such importance in the public mind as at present. The reason for this is clear. People have been constantly informed of the tremendous progress of medical science in the conquest of disease and death, and yet they see but little application of this life-saving knowledge in the world around them. In the laboratories science and pure reason reign supreme—with beautiful results; in the outside world of economic realities they are cuffed about unmercifully and disease and death are allowed to hold sway.

It is because of popular resentment at this increasingly obvious contradiction that certain organizations concerned with health activities are at last taking some initial steps in the direction of resolving it. Last summer the American Medical Association, who until then had steadfastly maintained that all was exactly as it should be, made a few feeble and hesitant gestures in the right direction. And now, a few weeks ago, events at the sixty-sixth annual convention of the American Public Health Association, attended by 5,000 public health workers from all over the country, showed that the present inadequacy of medical care is also becoming a matter for concern to this organization.

Heretofore the Association's conventions have been devoted almost entirely to the discussion of the problems of public health methods, sanitation, control of water supply, epidemiology, and so forth. This year these matters were also discussed, but most significant of all is the fact that for the first time the Association took up the problem of *more and better medical care for the average citizen.*

In doing so it has recognized that public health is inseparable from the health of the individual, and that therefore the

government has a direct responsibility in seeing that adequate medical care is provided for the individual regardless of his economic status. One of the suggestions arising out of the convention was that the diagnostic and treatment facilities of state and federal health agencies should be made available to private physicians for use in serving not only the indigent but also the low and middle-income groups, the doctors to be paid for such service by the state. This is not exactly a new idea, but it is one that has been consistently frowned upon by the organized medical profession. The importance of such a step, both in extending the scope of medical service to the people and in educating the doctor to get rid of the bugaboo of state medicine, cannot be overemphasized.

The Poor Go First

Another outstanding feature of the convention was the address by Josephine Roche, Assistant Secretary of the Treasury. Quoting a survey of 75,000 families, she pointed out how consistently disease chooses the majority of its victims from those low-income groups that cannot afford to buy medical service. The death rate from pulmonary tuberculosis is *seven* times as high among unskilled workers as among professionals. Pneumonia kills three and a half times as many unskilled workers as it does professionals. The death rates from cancer and syphilis among the unskilled are twice as high as among professionals. These revelations should provide an effective answer to those who are continually harping on the necessity of maintaining the *quality* of medical care, but who are satisfied to neglect entirely the necessity for increasing the *quantity* of care.

In spite of all the enlivening discussion, nothing very tangible was accomplished by the convention. Certain pro-

(Continued on page 167)

HOW GERMS ATTACK

Unseen enemies inhabit the world around us and make us the prospective victims of a number of diseases. However, science has succeeded in conquering many of man's most deadly enemies.

ONE of the questions which the patient frequently asks the physician is, "How did I get my disease?" "How did I get my pneumonia," or "How did I get the abscess on the back of my neck?" This seems like a desirable bit of information but the question usually irritates the physician. It would seem at first thought that this information is of importance only to the patient. However, its usefulness and importance in the prevention of the transmission of disease to other individuals cannot be overemphasized. The question irritates the physician because usually the one who asks it neither realizes its fundamental importance nor the difficulties involved in giving a correct answer. Consequently, an adequate answer is seldom given.

In a few diseases, however, the answer is of such great importance to the community as a whole that the local boards of health—if they are at all efficient—do everything in their power and spend large sums of money to discover where, when, and how the disease was transmitted to the patient. In the case of typhoid fever, for example, finding the answer to the question may lead to the discovery of a carrier who is preparing food for a restaurant, of a polluted source of drinking water, or of a contaminated shipment of oysters; in a case of diphtheria it may lead to a carrier who is spreading the disease to almost every susceptible child in the community; in a case of streptococcus sore throat it may lead to an infected supply of milk which is being distributed to all the infants in a community. Thus the answer to what often seems an idle question may lead to the saving of countless lives.

Discovering the way in which a disease is transmitted opens up an effective means of preventing that disease. Few people realize that some of the most important discoveries in modern medicine, certainly those with the greatest possible practical application, have arisen directly from the discovery of the means of transmission of diseases. The prevention of yellow fever, cholera, the black plague, malaria, typhus and

typhoid fever, infant tuberculosis, and infant diarrhea, diseases which have plagued and decimated mankind throughout history, has depended largely on the discovery of the means of their transmission to man. Few realize that the tremendous strides taken in preventive medicine and the astonishing increase in the average span of life have come chiefly from the application of this knowledge.

Not all diseases can be transmitted, and we may divide diseases into two important and significant categories: those which are transmissible and those which are not. With the exception of the diseases which are inherited from one's parents, the transmissible diseases are those which are caused by living micro-organisms such as filterable viruses, bacteria, microscopic forms of plant life (fungi), single-celled animals (protozoa), and some larger forms such as worms and insects. These organisms are parasitic to man, that is, capable of living in or on his body. By virtue of their life processes and their multiplication they cause disease. By virtue of the fact that they are alive, that they can multiply and increase, a few, at least, are capable of leaving the sick individual and going to another, healthier human being. Having reached another host the same cycle is started again and kept up *ad infinitum*. In such a way are transmissible diseases perpetuated and epidemics spread.

Transmissible diseases (often called infectious diseases) include only those which are



Discovering the way in which a disease is transmitted makes it possible to combat the disease.

caused by living micro-organisms, organisms which are parasitic to man, and those diseases which are inherited. We will consider only the first group here. Those which can be inherited will form the subject of a subsequent article. Diseases which are transmitted with great facility are usually called contagious diseases. There are all degrees of contagiousness; some diseases like measles and chicken-pox are so contagious that unless one has already had them he will almost certainly acquire them upon the slightest contact with an infected person; while others like infectious arthritis are transmitted by some

obscure means and are apparently not brought about by physical closeness or proximity to infected individuals.

It is nevertheless true of all diseases caused by infectious agents (bacteria, filterable viruses, and living organisms in general) that they are transmitted by some means or other, no matter how obscure, from one human being to another. Infectious diseases do not arise out of nothing.

Inasmuch as means of transmission are necessary for the perpetuation of infectious diseases, it follows that infectious diseases are preventable. They can be wiped out by an attack which destroys their means of transmission or interferes with it. This, of course, speaks very hopefully for the future of medicine; we have the right to expect that as science advances the amount of infectious disease will decrease. But although in theory this problem seems simple, from the practical point of view it is exceedingly difficult. Before any great measure of success can be achieved we will have to put into practice a comprehensive program of medical care such as that now envisioned by progressive leaders in public health, preventive medicine, child hygiene, and related fields, many of whom gave expression to this point of view in the recent convention of the American Public Health Association. Moreover, far-reaching social and economic readjustments will have to be made before such a program can be carried out with any effectiveness.

THE NON-GERM DISEASES

Unfortunately, the other category of diseases, those which are not transmissible, do not present such a hopeful outlook. While it is not the purpose of this discussion to consider this group of diseases at any length we must speak briefly of them. These diseases include those caused by industrial poisoning, which are, of course, preventable; those caused by dietary deficiencies of one sort or another (malnutrition, vitamin, mineral, and iodine deficiency), which are also preventable, and finally an extensive group of diseases for which no cause is really known but which are established as having a non-infectious origin. Those include such important conditions as pernicious anæmia,* diabetes,* hayfever,* asthma,* stomach ulcers, arteriosclerosis (in-

* In the case of these diseases some factors in their causation are known. Therefore rational and extremely effective treatment is possible, but the fundamental causes of the disturbances are not really understood, nor have we the slightest suspicion of their nature.

cluding apoplexy, heart and kidney disease which usually appear after the age of fifty), cancer, some forms of arthritis, and a number of less common conditions. The diseases in this last group are non-transmissible, non-contagious, and, so far as we know, not preventable to any appreciable extent, although they can of course be treated. Bacteria or other living parasitic micro-organisms play no role in their causation.

INCREASING THE LIFE SPAN

It is interesting to note that as the knowledge of the preventable diseases (*i.e.*, transmissible or infectious diseases) has increased and public health measures have been instituted against them, they have decreased dramatically, whereas the non-transmissible diseases have increased almost in proportion. While this seems like an unhappy state of affairs, it is really inevitable and speaks well for the efficiency achieved in the prevention of the infectious diseases. Such a situation is inevitable because every individual must die of some cause, and if the infectious diseases are decreased or eliminated some other diseases must eventually replace them as causes of death. Inasmuch as infectious diseases claim young and old alike, and the non-infectious diseases, more especially cancer and arteriosclerosis (hardening of the arteries), appear to prefer individuals over fifty, the prevention of infectious disease results in an increase in the average span of life.

Transmissible diseases have been defined as those caused by living parasites which by their life processes in man cause disease and death. These organisms must leave their host before he dies and is buried, or they will be buried with him. Some of the disease-producing bacteria or other organisms must leave their host before he dies if the disease is to continue to exist. Thus, they must have a mode of exit from their diseased host. Having left their host they go through an intermediary stage of longer or shorter duration (from minutes to years) during which they are carried or transmitted, and during which they may use almost any tangible thing as a vehicle of transmission. Lastly, there must be a portal of entry into their new host when they find him.

Disease-producing organisms may leave their host by way of the air he expires, his sputum, his vomitus, his urine, his fecal waste, his blood, his skin, the fluid he sneezes or coughs. The method of egress will depend on the nature of

the disease. Having left their host, germs can be carried by air, water, milk, food, dust, dishes, knives, forks, clothes, the earth, rain seeping through the soil, insects, domestic animals, other human beings (carriers), in fact, almost any tangible object that comes in contact with the diseased individual, and directly or indirectly by any conveyance or means of transportation. It is interesting to note that lately the development of airplane travel between South and North America has made it necessary for health officials in this country to take very careful precautions against the importation of the mosquito that carries yellow fever. Thus, as facilities for rapid transportation increase, the problem of guarding the public against germs that normally thrive only in distant places becomes more acute.

Once the organism has been conveyed to a new host it can enter his body either through the broken or unbroken skin, by way of the air he breathes, the food he eats, the water, milk, or other fluid he drinks, or the animals or insects that bite him.

There are, then, three phases to the transmission of disease: (1) a mode of exit from a diseased individual, (2) a mechanism of carriage, or of reaching a new host, and (3) a portal of entry into the new host. A few examples will indicate specifically what happens in typical cases.

HOW DISEASES SPREAD

One of the simplest mechanisms is the transmission of venereal diseases. In this case two individuals provide the mechanism by the intimate and close contact that occurs in sexual congress. The organisms leave through an infected site on the surface of or in the substance of the sex organs of one of the partners and go directly to the other. Here the intermediary stage of carriage is almost negligible.

The bacteria which cause typhoid fever usually leave their host in large numbers by way of the excretion of the diseased person. If the excretion is deposited in the soil, as is often the case in rural districts, the soil becomes infected. Rains may wash through this soil and carry the bacteria to a spring or stream which may be used as a water supply or for bathing. The infected water is then consumed by others who develop the disease. Oysters may live in such contaminated water and pick up the bacteria. People who eat such oysters raw will develop typhoid fever.

The spray in the air resulting from coughing by a person who has pneumonia, a cold, or a sore throat contains the organisms causing these diseases. A second individual may inhale some of this spray and develop a cold or a sore throat or pneumonia, depending on which disease the first individual had.

A person with a running sore on his hand may leave some of the pus exuding from the sore on a door knob, book, towel or any object he touches, and the next person touching the same object may rub some of the bacteria in the pus into his hand through the unbroken skin and get the same sort of infection.

An individual with tuberculosis may cough or spit into the street. His sputum contains tuberculosis bacteria. The sputum dries and the infected dust is kicked up by someone or caught up by the wind. The air now contains dust laden with bacteria capable of causing tuberculosis and some one inhaling a sufficient amount may develop the disease.

A person with a streptococcus sore throat may be milking cows and may cough, spit, or sneeze into the milk. The milk is then distributed to many people over an extensive route and, if the milk is not pasteurized, many people may develop the same disease and some may even die of it.

CARRIERS—HUMAN AND INSECT

There are individuals who are immune to a disease but who nevertheless carry within them the organisms causing it. Such persons are called carriers, and the germs which most commonly inhabit them are those of typhoid, diphtheria, and meningitis. Such individuals spread the disease by contaminating objects or food with which they come in contact.

Lice pick up the bacteria of typhus fever from a sick individual and then creep to someone else nearby, say in a flophouse or in a trench in wartime. They bite a second individual and he gets typhus fever.

A flea bites someone who has the black plague, and as a result picks up the disease. The flea then flits to a rat, giving it the disease by biting it. The rat has many other fleas on its body, who subsequently get the bacteria by biting their host. These fleas in turn flit to a number of human beings, bite them, and give them the plague.

A mosquito bites a human being with malaria or yellow fever, thus obtaining the organisms

causing the disease. The mosquito does not get sick, but the persons who are subsequently bitten do. They get either yellow fever or malaria, depending on the disease which the original individual had and the type of mosquito, for only one kind of mosquito can transmit malaria, and only one, yellow fever.

A farmer with a tapeworm as an inhabitant of his intestine defecates behind a corn shock on one of his fields. The fecal matter contains the eggs of the tapeworm he harbors. They manage to get to some grass. A cow grazing, eats the eggs which hatch and spread to the cow's muscle. The cow is slaughtered and some epicure eats a delectable steak made from its hind quarter. The steak is rare and the tapeworm cysts in the steak are not killed. As a result the epicure gets a tapeworm as a constant companion.

THE "BAREFOOT" DISEASE

A person in the South with hookworms in his intestine defecates in a field for want of a better place. He thus deposits many eggs on the surface of the soil. These soon develop, what with the warm climate, into tiny worms with sharp tentacles. A person without shoes walks across the field and one or more of the little worms bite into the soles of his feet. Then through a devious route through the body they arrive in the intestine and develop into mature hookworms. Their host now has a disease, hookworm. It is in this way that this disease is spread to millions down in the sunny South. As long as the soil is contaminated in this way many people who cannot afford shoes will continue to get hookworm.

MANY SOURCES OF DANGER

These are but a few examples of the many ways in which diseases can be transmitted. Some of the ways are exceedingly simple and some very involved. Some very easy to prevent, some very difficult. The foregoing instances indicate, however, that an individual with an infectious disease is capable of spreading the disease not only to one person but to many, and not only to those who are near but to those far away. They also indicate why epidemics can suddenly spring into being and spread by leaps and bounds.

Of the transmissible diseases which are inherited only a word will be said here, for it is

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How to Gain Weight

IT has been said that the world is divided into two types of individuals: those who want to gain weight and those who want to lose it. Few, indeed, are the persons who are perfectly satisfied with their weights, and a great deal of time and trouble is devoted to becoming either stouter or leaner. Not all of these efforts are carried on in the wisest manner possible, and consequently much effort is wasted and sometimes health is endangered.

One consolation that the person who wants to gain weight can enjoy is the fact that he is not as likely to harm himself in the process as the person who sets out to lose weight.

TO DIET OR NOT?

However, the person who is underweight must bear in mind that not all underweight is due to faulty or insufficient diet. Those who are below average weight for their height and age but who nevertheless feel perfectly well and vigorous, need not worry about their weight; what may be one person's underweight may be another's normal weight. If a person who is underweight does not feel well or is not up to the normal level of vigor, one of two things is wrong: either the underweight is due to improper diet and faulty hygiene, that is, to bad living habits and non-observance of the simple rules of health, or it is due to some disease.

In order to determine whether the underweight is due to faulty diet and hygiene or to some underlying disease—and this must be determined before the proper procedure can be formulated—the thin person who does not feel up to par should consult a physician for an examination. If the physician rules out the presence of disease then the condition may be corrected by following the advice in this article.

A general picture of metabolism, one of the fundamental body processes, will be of help in understanding the weight problem. Metabolism embraces the growth of new body tissue, the breakdown and replacement of worn out tissue, and the transformation of the energy content of food into muscular energy and heat to maintain the body temperature.

The three types of food, protein, fats, and carbohydrates are all transformed by metabolism. Protein is broken down into the so-called amino acids. Some of these are used to build new body tissue and to rebuild tissue that is worn out. Fat is transformed into energy, and any fat that is not needed immediately for energy is stored in the organs and tissues, to be used later by the body if there is need for it. Carbohydrates are also oxidized in the tissues to form energy and are used to aid in the transformation of fat into energy. Surplus carbohydrates are stored in the tissues of the body in the form of fat.

The energy in food is measured in terms of a heat unit known as a calory. Therefore, the fundamental principle in any weight-gaining diet is the ingestion of sufficient calories to maintain the body at normal weight. Any calories over and above what are needed are stored for future use, or, in other words, transformed into surplus fat. A weight-gaining diet must therefore include an abundance of calories.

ESSENTIALS OF GOOD DIET

However, it is also essential that the weight-gaining diet incorporate all the necessary elements of the well-balanced normal diet. Briefly stated, these essentials are:

1. Enough protein to rebuild the body tissues as they are destroyed.
2. Enough carbohydrates and fats to provide heat and energy for the body.
3. Enough minerals to satisfy the requirements of the bones, teeth, blood, and the various organs.
4. Enough calories to maintain the body at normal activity.
5. Enough vitamins to safeguard the system against deficiency diseases.
6. Enough bulk to give a feeling of satisfaction after a meal and to insure against constipation.
7. Enough liquids to aid the body in the elimination of waste matter.

Any diet that contains an ample quantity of lean meat, fish, eggs, milk, vegetables—both raw and cooked—and fruits will be almost cer-

tain to embody all of these essential features. In order to gain weight, therefore, such a diet is necessary, *plus an abundance of calories.*

The foods which are rich in calories and therefore suitable for weight gaining are listed in bold type on this page. The following comments upon some of the foods in this list are in order:

Milk—A well-balanced diet should include a liberal supply of milk. One pint daily is suf-

Cereals—At least two servings of cereal can be served daily. A variety of forms are possible, including cereals in soups, main-course dishes, and puddings. Good cereals to use for gaining weight are oatmeal, whole wheat, macaroni and spaghetti, cornmeal, rice, and tapioca. Choose home cooked cereals rather than the puffed or flaked variety that are sold packaged.

Legumes—Peas, beans, and lentils are both cheap and rich in nutriment, and they can be

To Gain Weight—Eat

Dairy Products—Milk, cream, sour cream, butter, cheese.

Meat and Fish—Fatty meat, including bacon, pork, and delicatessen cuts; fatty fish, including mackerel, halibut, and swordfish.

Vegetables—Potatoes, green and yellow split peas, lima beans, corn, shell beans, parsnips, olives, avocado pears.

Fruits—Bananas, plums, prunes, raisins, figs, dates, apricots, stewed and canned fruits.

Bread and Cereals—All kinds of bread, cereals, and pastries.

Miscellaneous—Creamed soups, soda water, beer, nuts, mayonnaise, candy, olive and other oils, puddings, custards, jams, jellies, and marmalades.

ficient for most persons. It may be served hot or cold in cocoa or chocolate, in sherbets, ice cream, or malted milk. The addition of cream and sugar to both drinks and solid food will help in increasing the calory count. Milk drinks may also be made richer by the addition of eggs. One advantage of milk in a weight-gaining diet is that it can be taken even when the appetite is not sufficiently keen to permit the eating of other foods.

Vegetables—Potatoes and other starchy foods should be eaten in liberal quantities. Tuck an extra pat of butter into your baked potato, or add it to your cooked vegetables. Cream sauces on vegetables add materially to the calory intake. Many of the starchy foods are particularly filling, but the stomach is an elastic organ and you will be surprised at how quickly it becomes accustomed to a greater amount of food.

Fruits—Orange or tomato juice should be served at least once daily. Dried or fresh fruits may also be taken with profit. Fruit juices and fruits can be reinforced with cream, sugar, and eggs. Fruit juices with beaten egg whites are very palatable as well as nourishing. Dried fruits such as prunes, raisins, apricots, peaches, and figs are economical and useful additions to the diet.

Bread—Any kind of bread may be eaten. It should be served thickly buttered.

served in a great variety of forms.

Fats—Foods that are rich in fat are butter, cream, olive oil, egg yolks, nuts, peanut butter, bacon, and salt pork.

Cod liver oil—One or two teaspoonfuls may be taken daily.

Before embarking on a high-calory diet it is necessary to understand the solution of a few problems that may arise. In the first place, if the person is not accustomed to eating very much it may be necessary to resort to ways of increasing the appetite. One way in which this may be done is to insure the presence of enough vitamin B in the diet; this element promotes normal appetite and improves the tone of the intestinal tract. Whole-grain cereal and liberal amounts of fruits and vegetables will augment the supply of the B vitamin.

Food should always be served as attractively as possible. Children will often relish a dish if it is served attractively, even though they may always have disliked it previously. Variety is also an important factor in the enjoyment of meals.

Rest before a meal is an important factor, since fatigue both diminishes the appetite and interferes with digestion. You will be surprised at how much better food will taste if you take time to relax and freshen up a bit before eating.

(Continued on page 166)

Why Hubbell went haywire in the first game of this year's baseball classic.

A Psychiatrist Goes to the World Series

THE first ball Hubbell pitched in the sixth inning was high and inside, and Gomez had to sit down quick and hard in the dirt to save himself from the fate of Mickey Cochrane. Following this Hubbell pitched two balls, then a called strike and one that Gomez fouled, and then a fourth ball, walking Gomez. The rest is history; the murderers' row came up, and before the inning was over the Yanks had registered seven runs and five hits, errors by Bartell and Whitehead contributing to the debacle.

NEARLY A BEAN BALL

The key to the whole situation is the first ball Hubbell pitched—the one that nearly hit Gomez in the head. It obviously unnerved him, and all the sad, sad consequences followed as a direct result. It is a commonplace in competitive athletics that little things of this kind loom unexpectedly large, and that great athletes lose their fine competitive edge in response to them. Moreover, not infrequently the rest of a team is infected as if by a kind of contagion and all the players lose their touch. Take Whitehead and Bartell—known as the greatest second base combination in the National League—and conceded by most sports writers to be the greatest combination in either league. Following the collapse of Hubbell they both made errors which clinched the Giants' defeat.

Hubbell is King Carl, the greatest pitcher in either league, and ranked by many among the immortals with Christy Matthewson, Cy Young, and Walter Johnson. He has made and tied many records, and throughout it all he has been known for his steadiness under fire, his cool judgment, and his ability to turn in one pitching masterpiece after another with clocklike regularity. Heywood Broun wrote a column last year that was positively lyrical in its tribute to the perfection of Hubbell's pitching.

This year, however, all has not been right with Hubbell. He succeeded in making a record of the longest series of consecutive games won, but he had trouble towards the end of the winning streak, and a number of times faltered

and was saved only by the timely help of other Giant pitchers. After he made his record he definitely slumped and lost several games, and since making the record he has not seemed to be the same indefatigable, perfect pitching machine as before.

Suppose we attempt to understand this problem with the help of some psychoanalytic knowledge. Psycholanalysis tells us that competitive games have a symbolic significance, and stand, among other things, for the more serious competition of actual fighting. Numerous commonplace comparisons indicate that people as a whole recognize this unconsciously and often consciously. Thus, we say, "the losing team fought hard," "the Yanks made a *murderous assault*"; likewise, the Yankees are the "Bronx bombers," and "Ruppert's rifles." When we realize the prominence and horror of real bombing in the world nowadays, the fact that such terms should be used to describe play makes the implications ever more obvious. Wellington said that Waterloo was won on the playing fields of Eton. Thus, competitive games are recognized not only as a symbolic fight but also as a preparation for an actual fight.

THE DEAN-CORCHANE AFFAIR

Games, however, are not real fights, and not only the rules but also the general traditions of "fair play" and "sportsmanship" emphasize this. But the desire to win is very strong and, of course, one way to win is to incapacitate your opponent instead of beating him fairly. No one who has ever engaged in athletics can doubt for a moment that the temptation to win in such a way is often present though not necessarily conscious at all times.

This is a moral conflict—though not necessarily a conscious one—and like all moral conflicts may become the source of severe anxiety. Whether or not anxiety actually occurs depends on the degree to which the wish to act immorally becomes conscious. If it becomes fully conscious and is consciously rejected, no anxiety occurs; if it is deeply repressed so that it remains completely unconscious, no anxiety occurs; if it nearly becomes conscious but is re-

pressed with an effort before it is recognized as a wish, then it is likely to cause anxiety. When anything actually occurs to make it seem as if a deeply repressed wish had found an outlet into action—even though this happens to be merely a coincidence—the person is likely to feel great anxiety and be afraid that he will do the wrong thing. Of course, we are not trying to attribute all anxiety in competitive activity to the fear of doing wrong; probably most anxiety in such cases is due to the fear of failure, but then anxiety of this type is recognized and admitted by everyone.

This year two things happened which are important in the background of the incident we are discussing. A very serious accident occurred when Hadley, pitching for the Yankees, hit Mickey Cochrane, the Detroit catcher and manager. Cochrane's skull was fractured, and for a time it was thought he would die. He apparently recovered completely, but his active playing career was ended.

Also this year there was the famous game between the Cardinals and the Giants in which Dizzy Dean lost his temper when a balk was called on him, and started throwing bean balls at the Giants. At the time, it was reported that Hubbell was asked why he didn't retaliate in kind. He is said to have replied that he was not going to do it, that he was going to "pitch to them," and that was just what he did; he went serenely on and won the game. Hubbell was too fine a sportsman to play unfairly. The sports writers all commented on the incident, condemning Dean's poor sportsmanship and praising Hubbell. The accident to Cochrane then came along to emphasize the very real dangers of the bean ball.

HUBBELL CATCHES HOLD

In any world series game the competition is severe and the anxiety about possible failure correspondingly great, but the situation in this particular game was unusual. The competition was very acute psychologically. Hubbell was still King Carl, but he was being opposed by a younger man who had steadily improved throughout the season and was bidding fair to topple him from his throne. Furthermore, Gomez is also known as a very fair player and a thoroughly fine sportsman. Hubbell's anxiety showed itself right at the beginning of the game when he passed Crossetti, the first Yankee to come to bat. Throughout the first inning

Hubbell looked tense and not relaxed, and between nearly every pitched ball he had to wipe his hand and put rosin on his fingers. This could only mean that he was perspiring from the excitement or anxiety. Gomez, on the other hand, seemed relaxed and at ease. Hubbell, however, pulled himself together, and, as the game progressed, became more and more effective. Gomez, on the other hand, seemed to be gradually slipping, and in the fifth inning the Giants got one run and nearly got more. This was the crucial point. Hubbell seemed to have victory within his grasp and then the astonishing thing happened. Hubbell nearly hit Gomez, his chief competitor. From that moment on Hubbell's effectiveness was gone.

HOW THE GAME WAS LOST

In the previous incident at St. Louis, when Hubbell was consciously tempted to play unfairly, he consciously refused to do it and although the circumstances must have been very disagreeable he went on without trouble and won the game. In other words, he had no anxiety, because there was no internal unconscious conflict. In the present game the situation was quite different; the actual competition to win was very great but in addition there was a subtler kind of competition, a competition with an ideal of sportsmanship, which sharpened the moral conflict. Hubbell wanted to win, of course, but more than this he undoubtedly wanted to live up to his ideal of sportsmanship and would far rather have lost the game than to have done anything that could reflect on his reputation as a clean player. Yet at the same time he is just a human being with all the temptations that other human beings have, so we may assume that he *unconsciously* wanted to win at any cost. Now, when he nearly hit Gomez, a coincidence which might happen to anyone since a pitcher can't have perfect control all the time, it must have seemed to his conscience that this was not a coincidence but almost a fulfillment of the immoral striving of his unconscious. The reaction was an immediate flood of anxiety which ruined his pitching and lost the game for the Giants.

We wish to point out that in giving this possible psychological interpretation of Hubbell's action we consider reactions such as those which we have hypothetically attributed to Hubbell to be those of the normal individual under circumstances of unusually severe competition.

HEALTH and HYGIENE'S

Book Shelf

MORELL—Poisons, Potions, and Profits.
SIGERIST—The Great Doctors and American
Medicine.
BECKER—Ten Million Americans Have It.
PARRAN—Shadow on the Land.

POISONS, POTIONS, AND PROFITS. By
Peter Morell, 327 pp., Knight Publishers, Inc.,
N. Y., \$2.

DURING the early days of radio broadcasting development we used to hear a great deal about the radio as an instrument for education and popular cultural advancement. If, after twenty years of listening to the unspeakable inanities and nonsense that issue daily from the broadcasting studios, anyone still thinks that the radio today can be called "educational," a reading of Mr. Morell's book should rid him of the delusion.

"The Antidote to Radio Advertising" is the subtitle of this book which undertakes to examine in the light of reason and authoritative scientific opinion the craftily worded and often beguiling sales talks of the "announcers" on the commercial radio programs which comprise well over 90 per cent of all the programs on the air. One by one, Mr. Morell takes up the various types of products advertised over the air: laxatives, cosmetics, reducing preparations, antiseptics, dentifrices, and foods; the claims made for them are analyzed by reference to reports of government bureaus, consumer organizations, and competent medical authorities; when these analyses have been compared with the advertising claims the only conclusion that can be drawn is that the radio in America today is a vicious rather than a salutary influence.

As might be expected, Mr. Morell did not secure much cooperation from the broadcasting companies in the preparation of his book. Consequently, his only method of getting a permanent record of the radio scripts he needed was to use a dictaphone to record them as they issued from the loud speaker. A considerable part of the book is given over to verbatim transcriptions of various programs, programs which were never intended for print, and which on the printed page seem even more ludicrous than they sound over the air.

Mr. Morell drives home the ironic fact that despite the American public's expenditure of more than seven hundred million dollars a year for its radio "entertainment," it gets precious little of real value in return. Indeed, much of the time it gets information that is indisputably detrimental to its most elementary interests. As for the much

publicized freedom of the air, Mr. Morell shows clearly that such a thing does not exist. To indicate just how much this "freedom" amounts to, it is only necessary to recall that Surgeon General Thomas Parran, the chief public health official in the nation, was recently forbidden to use the word "syphilis" in a broadcast that he wanted to make to the nation. The "freedom" of the air as practiced in America today means the freedom to exploit the radio listener in any high-handed manner that can be devised to sell the sponsoring companies' goods.

Mr. Morell correctly points out that the only way in which this colossal swindle of the air can be successfully combatted is through the organization of consumers who will insist that the radio be purged of the commercial abuses which now characterize. He also points out how successful a role organized labor can play in the housecleaning.

Organized labor [Mr. Morell says] can and should play a dominant role in the fight for real protection for consumers. . . . It is often forgotten by the small minority of organized consumers as well as by organized labor that the trade unions are today the largest and most effective association of consumers. The plain fact is that the consumer and the worker happen to be, in nearly every instance, the same individual. And this dual person has suffered in both of his capacities through lack of organization.

Poisons, Potions, and Profits is both entertaining and enlightening. One thing is certain, and that is that the book will not be well received in the radio and advertising world. All manner of pressure will be applied to restrict its circulation, but we hope that in spite of this the book will receive the wide circulation that it deserves.

THE GREAT DOCTORS. By Dr. Henry E. Sigerist, 436 pp., W. W. Norton and Co., Inc., New York, \$4.

AMERICAN MEDICINE. By Dr. Henry E. Sigerist, 316 pp., W. W. Norton and Co., Inc., New York, \$4.

THESSE two books are by a medical historian who is unique in his use of medical history to interpret the present and throw light on the future of medicine. He recognizes that medicine is merely a part of the general civilization of a country; that medical standards are always determined by the social, political, and economic background. Doctor Sigerist, formerly at the University of Leipzig, has since 1932 been Professor of the History of Medicine at Johns Hopkins University.

In *The Great Doctors* we find the history of medicine dramatized in a series of biographical sketches from the time of Egyptian and Greek civilizations down to the present scientific era. We

understand, reading these pages, that Hippocrates, father of medicine, Harvey, discoverer of the circulation of the blood, Jenner, who developed inoculation for smallpox, and Pasteur, were not accidents. They did not just happen on the scene as isolated geniuses. Bitter opposition to their discoveries was not accidental either.

In 1931, Doctor Sigerist spent six months traveling all over the United States. As a result of this experience he wrote *American Medicine*, which is by far the best book of its kind. The story of the pioneers in surgery, the work of Oliver Wendell Holmes on childbed fever, the discovery of anesthesia, and many other thrilling episodes are splendidly told. But the work goes much deeper than mere biography. In a chapter on the physician and the patient and one on preventive medicine, present lacks and the task of the future are lucidly discussed and the conclusion reached that Medicine must be freed from economic fetters. We heartily recommend Doctor Sigerist's book to both professional and lay readers who wish to understand present-day medicine.

TEN MILLION AMERICANS HAVE IT. By S. William Becker, M.D., 220 pp., J. B. Lippincott and Co., Philadelphia, \$1.35.

SHADOW ON THE LAND. By Thomas Parran, M.D., 309 pp., Raynal and Hitchcock, N. Y., \$2.50.

THESSE two very excellent books supplement each other in strikingly satisfactory fashion. Dr. Becker's volume is a complete, plainly written, authoritative picture of the natural history of syphilis—how the disease is contracted, how its manifestations may be recognized, what its effects are when untreated, and what constitutes adequate treatment. Did you know that the disease was unknown except among the American Indians until the discovery of this continent? Do you know what "innocent infection" is, and how to avoid it? Do you know the meaning of the various types of "blood tests," and when they give the wrong answer? A recognized specialist in the field has written a book that answers the myriad of questions that arise about this highly multiform disease.

Dr. Parran is Surgeon General of the United States Public Health Service, and he devotes his volume to the problem of social control of syphilis. The outstanding fact about syphilis is its needlessness. Medical science possesses fully adequate means for its prevention, its recognition, and its cure. These methods are the gifts to humanity of a series of great men who gave lives of ceaseless effort to the task. What would be the thoughts in the mind of Metchnikoff, if, thirty years after his brilliant work on prevention, he could see that in

the richest country on earth there are close to three-fourths of a million new cases of syphilis every year? What would Wassermann think if he could see that at least one-half of these cases are not even recognized? What would Ehrlich think if he could see that about three-quarters of these cases get either no treatment, or not enough treatment to cure them? One wonders if they would recognize this waste of precious human knowledge as of a piece with the burning of wheat, and the plowing-under of cotton in a land where there is a crying need for these products.

Dr. Parran is not content with merely pointing out these shameful facts. "Look at the Scandinavian countries," he says. For every 100,000 of population we have 796 new cases of syphilis annually, while Denmark has twenty and Sweden seven. In these countries the results have not been achieved merely by wishing for them. They were achieved when an aroused public conscience compelled the government to institute systems of compulsory reporting of cases, compulsory tracing of every case to its source, and compulsory treatment—85 per cent of it in public clinics, conveniently located and timed, and staffed with specialists who receive adequate salaries. Of course, these things cost money. It is time we recognized that public health is purchasable—just as purchasable by any government as a battleship, and vastly more useful.

This book contains a comprehensive review of syphilis control programs in other countries of Continental Europe as well, including the Soviet Union. Each of the countries has modified the essentials of the program to the peculiarities of its own needs and to the temper and habits of its people. These accounts make fascinating reading.

Of some of the elements that make up the syphilis problem, Dr. Parran speaks with fine social conscience and in vigorous terms. It has been noted, for example, that the syphilis rate among American Negroes is about six times that of the whites. Dr. Parran says:

It has been argued that greater sexual promiscuity
(Continued on next page, column 2)

SYPHILIS MUST GO!
Fill
out the
ballot in
the space opposite
this on the
next page.

SYPHILIS MUST GO!

AS announced last month, HEALTH AND HYGIENE, as the organ dedicated to the active support of all progressive public health measures, lends its help in the campaign to wipe out syphilis by initiating a nationwide movement to make free diagnostic blood tests for syphilis available to all who want them.

To date (October 18), 230 affirmative answers have been received to the ballot printed below, and 2,297 extra ballots have been requested and sent out. The requests for free tests have come from 17 states and two provinces in Canada. More and more doctors are daily signifying their willingness to cooperate by taking the blood samples free of charge.

In order to carry out this work on the largest scale possible we ask you to:

- (1) Record your sentiment either in the affirmative or negative on the ballot printed below.
- (2) If you are interested in receiving the free blood test from your own physician or a physician in your community whose name we will provide, write to us so stating. In case you wish your own physician to do the test send us his name and address and enclose six cents in stamps.
- (3) Get as many of your friends as possible to fill out ballots of their own. We will provide you with as many extra ballots as you need—merely specify the number you want in the space provided on the ballot below.

FACTS ABOUT THE BLOOD TEST

- (1) The test is practically painless.
- (2) Only a small amount of blood is required—about a teaspoonful.
- (3) The results of the tests will be strictly confidential. Neither HEALTH AND HYGIENE nor the laboratories which perform the tests can identify the blood samples with the individuals from whom they are taken. The only persons who will know the result of the test will be you and your doctor.

SYPHILIS CONTROL BALLOT

Will you, at no cost to yourself, submit to a diagnostic blood test for syphilis, either by your own physician or by one in your community whose name we will provide? Place an X in the proper square below.

YES NO

Name

Address

City and State

Please send me extra ballots.

Fill out, clip and mail this ballot today with three cents in stamps to

HEALTH and HYGIENE
215 Fourth Avenue New York City

Book Reviews

(Continued from page 161)

accounts for the increased prevalence of syphilis among the Negroes. Even if it were true, and it is certainly not the whole truth, whose fault is it? Promiscuity occurs among the black race, as it does among the white, in groups and communities of the underprivileged. It is the smug citizen, satisfied with the *status quo*, who is to blame for the children, black or white, without moral standards, brought up in the slums, without decent education, wholesome play, or useful work, without ambition because without hope.

Between one-third and one-half of the syphilis in this country is due to direct or indirect infection from public prostitutes. It has been said by those who should know better that this is an irreducible reserve that cannot be eradicated. But Dr. Parran says:

The almost complete liquidation of the commercial prostitute [in the Soviet Union] has helped the problem greatly. There are no professional prostitutes in Russia except those who prefer that sort of life, i.e., the physically or mentally pathological. First, because destruction of the profits from prostitution eliminates the organizers of the traffic. Further, because every woman has or can get a job in a land where women are held back from no trade or profession, and workers in all trades and professions are at a premium.

The book is beautifully written throughout. The temptation is strong to quote at length:

If I tried to paint a symbolical picture of syphilis control in our contemporary American scene, I should show a few green islands of intelligent activity, a good many sand-bars of effort, and the whole surrounded by the vast gray waters of apathy, futility and ignorance. In a world geared to hourly news-flashes; where the picture of this morning's accident is in the noon edition; where the swish of a dictator's sword in Europe this afternoon flutters the headlines tomorrow morning, it is with a mixture of amusement and concern that I find that Ehrlich's discovery of salvarsan in 1910 is news in 1937.

This is the situation in America as the foremost health official in the nation finds it. The Public Health Service which he heads boasts of a long and rich tradition of earnest scientific achievement. Theobald Smith, of that Service, in his work on Texas fever, accomplished the first internationally recognized piece of scientific epidemiology in America. Goldberger, of that Service, gave his life to a gloriously fruitful discovery of the causes of pellagra, that curse of the poor in the South. There is every hope that under Dr. Parran the Service, working with the increased resources that will inevitably be the result of the present public interest in the problem, will do everything in its power to add the conquest of syphilis to the list of its achievements.

How Germs Attack

(Continued from page 155)

far too important a subject to consider superficially. It must be made clear, however, that infectious diseases are not inherited. Venereal diseases which are transmitted from parent to child are not inherited, but are transmitted directly in the womb or during childbirth.

We have seen that there are a great many factors in our daily lives which involve danger from disease—the air we breathe, the water, milk, and soda pop we drink, the food we eat, the clothes we wear next to our bodies, the houses we dwell in, the efficiency of the screens in the windows, the rats, lice, and fleas in our communities, the people who prepare our food, the brush we use in shaving, the furs used in our clothes, the things we touch, the subways and conveyances we use, the people who cough and spit around us, the crowds we mingle with, the places in which we, our neighbors, and even those far distant from us choose to urinate and defecate, the people who milk the cows whose milk we drink, the insects and vermin in our homes and about us, the conditions under which we work, the domestic animals we keep, the toilets and towels we use, and those who have used them before us, the soil we walk on and grow our food in and graze our cattle on, the people we meet, those we love and those we make love to.

PROTECTIVE MEASURES

At first it might seem that the impressive list of possible mechanisms for the transmission of disease would leave nothing for one to do but to isolate himself and become a hermit. This, however, would be futile because it is impossible to isolate oneself entirely from bacteria and disease. Fortunately for all of us, although the mechanisms listed are all potentially dangerous, many of them are already under some control and life is less hazardous than it ever was before.

We have available a great mass of information which can be used in the prevention of the transmissible diseases. It will be noted that the mechanisms for transmission involve exclusively environmental factors, and these, to some extent at least, can be controlled.

Such control involves the water supply, food both at the source and distribution points, protection against rats, insects, and vermin, the regulation of housing, disposal of animal and

human waste, quarantine of the sick, care of domestic animals, inspection of food handlers, regulation of ventilation, sunlight, lighting, theatres, conveyances, proper treatment of all infectious diseases, dissemination of information concerning preventable diseases, educational programs, universal prophylaxis against such diseases as small-pox and diphtheria, and against diseases which may have local importance (endemic infectious diseases), drainage of swamps, screening of dwellings in malarious and yellow fever regions, the provision of shoes for those who walk in infected soil, inspection of ships, quarantine of incoming humans, animals, and plants, the inspection of skins, furs, bristles, and feathers, the proper care of animals that are used for both food and draught purposes, and undoubtedly other factors as well.

AN INTERNATIONAL AFFAIR

These measures are carried out to a variable extent in different parts of this country. In some regions almost none of them have been instituted and these regions are potentially dangerous to the rest of the country, even the rest of the world. Because of the speed of modern transportation, the amount of traffic between different regions of this country and between different nations, and because some bacteria can survive long enough to travel long distances, we can no longer afford to ignore health conditions in distant places.

The prevention of disease which, as we have seen, involves primarily the control of our environment, is a problem in which the individual today is helpless; it is neither an individual nor a local matter. Adequate prevention is a national and an international affair. Insofar as the transmission of disease involves the environment it becomes a social as well as a medical problem. And insofar as the environmental conditions most suited for the transmission of disease are associated with poverty and ignorance it becomes an economic problem.

RESISTANCE PLAYS A PART

It is interesting to note that another factor which plays a large part in the prevention of disease, namely, the resistance of the human organism to sickness, is also directly influenced by the social and economic condition of man. Contact with bacteria or other disease-producing micro-organisms does not invariably result in

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Questions and Answers

(Continued from page 138)

and apples; vegetables such as peas, carrots, celery, cabbage; or whole-grain cereals such as rolled oats or *Wheatena*. If any symptoms of irritation occur, such as gas, colicky pains, loose stools, or piles, the amount of roughage-containing foods should be reduced. Each person should try to determine for himself how much roughage his intestinal tract can tolerate. Constipation is far less of an evil than an irritated or inflamed colon.

Pre-natal Impressions

Fort Worth, Texas

DEAR DOCTORS:

Is it true that birthmarks are caused by pre-natal impressions on the mother's mind?—S. L.

Answer—Since the beginning of recorded history people have believed that the unborn child could be affected by the mother's thoughts and feelings either at the time of conception or during pregnancy. The Bible records the story of how Jacob took advantage of this supposed fact in order to cheat his father-in-law, Laban. Jacob and Laban had agreed that Jacob should have all the spotted cattle that were born to their fold, while Laban should have the unspotted ones; whereupon Jacob set out spotted rods of green poplar in front of the watering troughs, thus causing the cattle who conceived to bring forth spotted offspring. Medieval medical literature is full of stories of human beings who were born with monstrous forms because their mothers happened to look upon or come in contact with creatures of one kind or another.

Conversely, pregnant women have often tried to insure that their children would be strong and beautiful by looking at statues and pictures of well-



formed men and women. In Sparta it was a compulsory eugenic measure for women to do this.

Many pregnant women have had their lives made easier by the widespread belief that if their cravings and desires, especially for certain kinds of food, were not granted, their children would be born with birthmarks or deformities. In 1881 the *Cincinnati Obstetrical Gazette* reported the case of a pregnant woman who was seized with an over-

whelming but unrealizable desire for oysters. Afraid that the inability to satisfy her desire would result in a birthmark for her child, she put her hand on her buttock in the hope that the mark would occur in this relatively inconspicuous region. Sure enough, the child was born with the mark of an oyster in that very spot!

Medical history contains many similar stories, all of which can be characterized by pointing out that when the child is born with a "strawberry mark" the mother is sure to remember a time when she either ate or did not eat a strawberry, when she was hit by a strawberry, or, at least, when she thought of one. If the woman should live in a community where strawberries are unknown the mark will be called a "wine stain" or something else.

Today it is known that all these reports are based on coincidence and that pre-natal impressions of the mother have no effect upon the child. There is no means by which a mental impression on the part of the mother can result in a physical mark on the child. Many of the incidents ordinarily assumed to be responsible for such markings occur late in pregnancy, although we know that the unborn child is fully formed at the age of six weeks and that at this time it already bears any abnormal markings that it may later show.

Arthritis

Fargo, North Dakota.

DEAR DOCTORS:

I have been suffering from arthritis for the past five years. I have consulted several doctors but have had very little relief. What causes arthritis and what can be done to help the condition? I have severe joint pains.—A. S.

Chronic arthritis includes a number of different conditions, but there are two main types: osteoarthritis, the kind that is due to wear and tear and comes on in middle life, and rheumatoid arthritis, which is infectious in origin, is extremely disabling, and comes on characteristically in youth.

Everyone who lives long enough is a victim of osteoarthritis. As a rule this type of arthritis causes little disability, being most troublesome when it affects the spine, where it may give rise to pains radiating down the arms or legs ("sciatica"). Treatment consists of continued activity, local support of the joints concerned, heat, massage, and rest when the symptoms are acute.

Rheumatoid arthritis, or infectious arthritis, is much more disabling. Some people are hereditarily predisposed to this disease, which is precipitated from some focus of infection such as teeth, tonsils, or sinuses. Climatic conditions, overwork, emotional disturbances, and lack of vitamins and good nourishing food may also cause this type of arthritis.

The treatment of this condition consists of: first, a thorough physical examination in order to determine whether any foci of infection are present, such as abscessed teeth, diseased sinuses, chronic constipation, gastro-intestinal disturbances, and so on. If any are present, they must be eradicated. For long-standing chronic constipation, high colonic irrigations twice weekly have proved helpful. A high caloric and high vitamin diet consisting of fresh fruits, citrus fruit juices, fresh vegetables, milk, meats, particularly fresh fish, oysters, clams, broiled or grilled fowl, and liver, should be followed.

If any joint is painful, bathing it for about a half an hour in a tub of very warm water and exercising it while in the water will help to alleviate the pain and stiffness. Heat, either through the baking lamp or hot stupes (such as turpentine stupes—one teaspoonful to a basin of hot water) is of value. In applying stupes immerse a flannel cloth in the hot solution and place it on the affected joint.

We would suggest that you consult an orthopedic surgeon regarding the course of treatment to take after a thorough physical examination.

Syphilis During Pregnancy

Bridgeport, Connecticut

DEAR DOCTORS:

Will the child of a syphilitic mother necessarily be born with the disease?—T. F.

Answer—The child of a woman who has syphilis need not necessarily be born with the disease. The possibility of the child being born healthy depends on the length of time the mother has had syphilis and upon whether or not she receives proper treatment. If the mother acquires syphilis shortly before, at the time of, or shortly after conception takes place, and does not receive proper treatment, the child, if it is born alive, will be almost certain to have syphilis. If the mother has had syphilis for many years the child will have about one chance in six of being born normal.

A syphilitic woman will bear a healthy child if she receives proper treatment during pregnancy. Even if treatment is started as late as the last few months of pregnancy, a great deal can be done to secure the delivery of a normal child. Every pregnant woman should have a Wassermann blood test, for this is usually the only sure method of discovering the presence of syphilitic infection.

Swedish Massage

New York City

DEAR DOCTORS:

What are the benefits, if any, that may be expected from Swedish massage?—S. B.

Answer—Swedish massage is valuable in increas-

ing the circulation to the massaged part, in soothing inflammation, in inducing sleep. Its value depends upon the competent performance of the massage by a trained masseur or masseuse, and especially in



Drawings by Chas. E. Colahan

the prescription of the proper type of massage for the particular condition. Many conditions are not influenced by massage, others require light stroking, and still others the more strenuous forms. Massage is most often prescribed in chronic arthritis, after injury, fractures, in infantile paralysis, and in nervous disorders.

Arsenic With Your Apples

(Continued from page 141)

with vague excuses about resenting the government's meddlesome attitude towards private business enterprise. The real reason is probably that he was afraid of what Campbell and his aides would discover. In all probability the experiment would have proven that the present tolerance is too high, even though the fruit growers want it still higher. Remember that those fruit-eaters who died, lost their lives under the present tolerance. Why make it any higher and increase the possibility of more deaths, not to speak of the danger of slow, cumulative poisoning that is not noticed until disease strikes?

This was the only outcome Cannon had to fear. If the scientists had found the present tolerance to be the correct one, the fruit growers and Cannon still wouldn't have been satisfied. If it had been found that the present tolerance is too low, the growers, and Cannon with them, would have been positively overjoyed. But, regardless of what conclusions may have been reached upon the completion of the experiment, it is a pity that Cannon succeeded in sabotaging it, because you still can't eat an apple without the lurking doubt that it might be unhealthy.

Thus we see that the cooperative energies of the scientists who offered their services and knowledge at a sacrifice were wasted; good tax-

payers' money flung to the four winds; a sincere and worthwhile project thwarted; and governmental agencies and funds juggled. The net result is that we know as much as we did before; the fruit growers are still unsatisfied; our health is in possible danger; 450 rats lie stiff and stark; and Cannon is content.

The only hope left is that the Public Health Service will carry on the project and unearth the facts that Cannon is doing his utmost to suppress. And when the next election comes round, the voters of Missouri should remember that they put congressmen in office to work for their welfare and not to shorten the span of their lives.

How to Gain Weight

(Continued from page 157)

Meals should be served at regular hours and should be eaten in a leisurely fashion. This does not mean that small snacks taken between the regular meals are not to be indulged in. As a matter of fact, such snacks are definitely helpful if a person is eager to put on weight. A mid-morning and mid-afternoon lunch of milk, bread, fruit, or soup is often recommended by authorities in nutrition.

Fresh air, sunshine, cleanliness, freedom from worry, and moderate exercise will not only stimulate the appetite but it will furnish the relaxation and recreation that is necessary in order to get the most benefit out of food.

ENJOY YOUR FOOD

The atmosphere in which food is eaten is another important consideration. Attractive table service, clean linen, and flowers are little details that can make a meal more attractive and appetizing. Family arguments and the discussion of economic difficulties should be postponed until another time if the maximum enjoyment and benefit is to be derived from food.

Finally, if a weight-gaining diet is to be most successful, the person who is undergoing it must also take steps to conserve his energy as much as possible. Remember, food is energy, and energy is what you are attempting to conserve. If you are not getting eight hours of sleep a night, see that you do. Also try to take short rest periods or naps during the day. Ride more and walk less, and sit down when you can instead of standing.

If the foregoing suggestions are carried out faithfully there is no reason why you will not

be able to add a number of pounds and attain your normal weight. By doing so you will, if you are underweight, look better, feel better, and do your work more efficiently. You will be protected more thoroughly against sudden temperature changes, shocks, and illnesses. A well-nourished body is less subject to mental and physical fatigue and nervous disturbances.

How Germs Attack

(Continued from page 163)

disease. The health of the individual and his resistance to disease are very important, and this resistance cannot be maintained satisfactorily under conditions of poverty.

Poverty generally leads to malnutrition, poor housing, poor clothing, over-exposure, filth, vermin, crowding, insufficient ventilation, poor aeration, overwork, excessive childbearing, ignorance, lack of recreation and physical development, and many other environmental factors which are weakening, which tend to make the human being less resistant to the disease-producing micro-organisms when he comes in contact with them in his daily activity.

It is obvious, therefore, that the prevention of infectious disease is a medical, social, and economic problem, the burden of which falls squarely on the shoulders of the government. It requires a program which treats not only the sick and concerns itself with a few modes of transmission of disease (such as control of water, milk, and meat), but an all-embracing program which eliminates poverty, slums, overcrowding, and ignorance and provides for all the opportunities to avoid the environmental factors which make for low resistance and for the transmission of disease itself.

Given such a program, properly carried out, the benefits to be gained cannot be overestimated. It is true that people will continue to be mortal and will continue to die, but the decimation of infants, the slaughter of youth by preventable disease will be brought to a minimum, and the hazards of youth in a society such as ours will be reduced to murder, racketeering, accidents, and war—all of which, as society advances, will also tend to be eliminated. We may then confidently look forward to the time when most death will be caused by those diseases which come as a natural result of old age and the wearing out of the human body.

Purely Personal

Reader-Editor Correspondence

WITH THIS ISSUE HEALTH AND HYGIENE appears under the aegis of a contributing and advisory board of men and women prominent in medicine and allied fields whose names you will find on the first page of this issue. With the help and cooperation of such a distinguished list of advisers HEALTH AND HYGIENE may well look forward to achievements greater than any that it may have to its credit in the past.

THIS MONTH'S PRIZE for the best letter on "Which Article I Liked Best and Why" goes to J. R. of Brooklyn, who writes:

"Since its inception, HEALTH AND HYGIENE has served as a helpful guide to me, and like many of your readers, I would not consider being without it. Your articles on sex and on industrial diseases have offered a rich field of knowledge to me and to my family. Your debunking of highly-advertised products and your warnings about current or common diseases have left me a wiser woman.

"But this month, I think you have outdone yourself in the publication of *Sex Education for Children*, by La Iva Belle Davis. The article, besides being a human and humorous essay, strikes at the root of a great deal of sex misery. What we learn as children colors our lives distinctly, often in indelible paints. The problem treated in the article is one which every mother must face, and it is treated in such a direct and simple manner as to serve as a brief and concise handbook on the matter.

"I have a large number of sisters, mothers of young children. Often they appeal to me, since I am a teacher, with queries concerning how to meet the sexual curiosity of their offspring. Heretofore, I have been able only to give them general and inadequate advice. Now I feel that I can show them this article, answering their questions and selling HEALTH AND HYGIENE at the same time.

"I feel you have done well and should therefore continue to aid mothers in their most sacred duty: health, sex, character and other phases of child education."

LET US HAVE YOUR OPINIONS as to which article or feature of HEALTH AND HYGIENE you like best. Each month we will give as a prize for the best letter on this subject a free autographed copy of either Arthur Kallet's *100,000,000 Guinea Pigs* or Carl Malmberg's *Diet and Die*. When writing please specify which book you would prefer.

THE MAJORITY OF THOSE who replied to our inquiry last month as to whether or not we should continue to punch holes in the margins of subscribers' copies were in favor of discontinuing the practice. Some said that they didn't mind the holes, but that they weren't very helpful since we hadn't provided a binder in which copies could be kept. Now we believe we have solved the problem successfully by getting a binder that does not require the magazines to be punched. We would like to know how many of our readers would like such a binder, since the price will depend on the number ordered. From 85 cents to a dollar will be the cost. This may seem like quite a lot of money, but we shopped around considerably before getting such a price. The binders are strong and handsome, made of sturdy fabrikoid over boards, and embossed with gold lettering. One binder will hold at least 12 issues and will last a lifetime.

We could have gotten a cheaper binder, but it would not have been made by union labor. We ask those who would order such a binder to drop us a postcard, letting us know.

As a result of the answers to our query and the new binders which we will provide, we are discontinuing punching the subscribers' copies.

"I'D WALK A MILE for a *Camel*"—you've heard that one. Well, *Camels* have nothing on us. We just received a sub from W. S. of Greenfield, Mass., who says: "I cannot find your magazine on any newsstand here in Greenfield and have had to drive 26 miles to get it in the past."

READERS WHO SAW Dr. Kingsley Roberts' article on medical cooperatives in the October issue and who wish to have more information about the cooperative movement in medical practice may get it by addressing inquiries to the Bureau of Cooperative Medicine, 5 East 57th Street, New York City. Reprints of Dr. Roberts' article may be had from the Bureau in quantity lots for distribution to organizations. The price is \$2 for 500 and \$3.50 for 1,000.

Editorial: Public Health and Individual Sickness

(Continued from page 151)

gressive recommendations were made, but no real program of action was mapped out. We feel that it is high time that some organization or group of organizations interested in public health come forward with a really comprehensive program for safeguarding the people's health. We have had enough words; let us have some action!

Behind the Sex Crime
(Continued from page 145)

University, examined him and declared that he was not responsible for his actions. In 1933, after Hitler came to power, sex criminal Rust became Prussian Minister of Culture. A few months later Professor Foerster died, officially a "suicide." Shortly afterwards Rust became Reich Minister for Education.

A word should be said about the newspaper publicity given to sex crimes as a factor in their causation. It is true that the tremendous publicity given to sex crimes in the yellow press has sometimes suggested to psychopaths specific ways of carrying out sex crimes. Hearst, who fattens on human misery and filth, is, of course, in the lead in this commercialization of sex crimes as a source of profit. It is important to remember that Hearst, the reactionary, helps to create the conditions which breed abnormalities, while Hearst, the publisher, cashes in handsomely on the abnormal sex interest that he has helped to create.

HYSTERIA AND MOB SPIRIT

Finally, a warning should be sounded against the hysteria which is developing in some quarters on this subject. On a number of occasions, hysterical persons have raised the alarm against perfectly innocent men, who have then been badly manhandled by the easily inflamed crowd. Not long ago a number of W.P.A. employees who were working on a road near New York City were subjected to a brutal attack through the mistaken indignation of a woman residing in the vicinity. The men had not been provided with toilet facilities, and consequently were forced to seek privacy in the adjacent woods. When the woman, whose house stood on a nearby hill, observed them she was horrified and immediately telephoned the police. The men were brutally beaten by the officers, arrested as exhibitionists, and brought to court. The judge sent them to psychopathic wards for observation where they were kept for a few weeks before finally being released.

The public's natural abhorrence of the sex crime has often been used as an economic weapon against workers and minority groups, especially in the South where countless Negroes have been lynched for alleged sex crimes on the flimsiest of evidence, and frequently on no evidence at all. We must constantly be on

guard to prevent a natural reaction against horrible crimes being utilized in this way.

We must also beware of the attempts of professional moralists and anti-vice societies to use the present wave of feeling on the subject as a means of imposing those Puritanical laws which are themselves a cause of a distorted attitude toward sex, and, as such, contributing factors in the causation of the very crimes that they pretend to be combatting.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF MARCH 3, 1933, OF HEALTH AND HYGIENE, published monthly at New York, N. Y., for October 1, 1937.

State of New York,
County of New York, ss.

Before me, a Notary Public in and for the State and County aforesaid, personally appeared Edward Adams and John Stuart, who, having been duly sworn according to law, did depose and say that they are the editors of HEALTH AND HYGIENE and that the following is, to the best of their knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, H. & H. Publishing Co., Inc., 215 Fourth Avenue, New York, N. Y.

Editor, Carl Malmberg, 215 Fourth Avenue, New York, N. Y.

Managing Editor, None.

Business Manager, Sadie Franklin, 215 Fourth Avenue, New York, N. Y.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

H. & H. Publishing Co., Inc., 215 Fourth Avenue, New York, N. Y.

Wesley John, 215 Fourth Avenue, New York, N. Y.

Hyman Colodny, 215 Fourth Avenue, New York, N. Y.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed through the mails or otherwise, to paid subscribers during months preceding the date shown above is (This information is required from daily publications only.)

CARL MALMBERG, Editor.
Sworn to and subscribed before me this first day of October, 1937.
MAX KITZES.

(Signature of editor, publisher, business manager, or owner.)

(SEAL) (My commission expires March 30, 1938.)

Consumers Union

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Also in the current issue—

PORTABLE TYPEWRITERS

Despite the fact that most portable typewriters cost the same, appear to be similarly constructed, and bear the names of widely-known firms, tests run by Consumers Union technicians on six leading makes show substantial differences in quality. Some models are easier to operate, some are more durable, some are better all-round values. The results of the tests are given with ratings as "Best Buys," "Also Acceptable," and "Not Acceptable."

MEN'S HATS

Fourteen brands of men's hats, ranging in price from \$2.95 to \$7.50, are rated on the basis of laboratory tests and examinations. Some of the brands tested are Knox, Stetson, Mallory, Dunlop, Truly-Warner, etc. Will one of the cheapest hats serve as well as a more expensive one? This report will help you to answer this question.

SEWING MACHINES

Should an inexperienced operator buy an electrically-driven or a foot treadle machine? What consideration should be given to second-hand machines? This report answers these questions and rates eight models of sewing machines as "Best Buys," six as "Acceptable," and eight as "Not Acceptable."

ANTI-FREEZES

Which anti-freeze solutions are best for your car? Which should never be used under any conditions? Is a non-evaporating compound, the first cost of which is high, preferable to one which evaporates and needs frequent replenishing but costs only about one-fourth as much? This report answers these questions.

Planned for Early Issues

CIGARETTES

A report on the nicotine content of cigarettes, which will also give the results of blindfold tests and rate leading brands on the basis of such factors as adulteration, mildness, etc.

To make sure of receiving the reports described above fill in and mail the coupon at the right—

Consumers Union of United States, Inc.
55 VANDAM STREET, NEW YORK CITY
COLSTON E. WARNE, President ARTHUR KALLET, Director
D. H. PALMER, Technical Supervisor

IN response to numerous requests from its members for information on life insurance, Consumers Union of United States is publishing, beginning with the current November issue of **Consumers Union Reports**, a series of reports evaluating life insurance policies, life insurance companies, and life insurance systems. The introductory report is written by Edward Berman, labor economist for the Works Progress Administration, former professor of economics at the University of Illinois, author of "Life Insurance—A Critical Examination," and a recognized authority on insurance problems. C.U.'s insurance consultants will follow this up with a series of reports which will —

- compare different kinds of policies
- discuss leading insurance companies by names
- discuss individual insurance problems.

If you find the problem of buying life insurance extremely complex and mystifying and also find that most insurance agents promote rather than dissipate this mystification, read these reports. They will give you a sound, reliable and simplified basis for judging the value of what is offered to you and for making a wise purchase of a policy.

This same issue of the Reports, in addition to the introductory report on insurance, also gives the results of tests and examinations for the comparative value of leading brands of portable typewriters, men's hats, sewing machines, anti-freeze solutions, canned foods and other products. A fuller description of these reports is given at the left.

To receive a copy of this issue fill in and mail the coupon below. The membership fee of \$3 will bring you 12 issues of the Reports and, without extra charge, the 1937 240-page Consumers Union Annual Buying Guide which gives brand recommendations on over 1000 products. You can start your membership with the current issue or with any of the previous issues listed below.

WHAT CONSUMERS UNION IS

Consumers Union of United States is a non-profit, membership organization established to conduct research and tests on consumer goods and to provide consumers with information which will permit them to buy their food, clothing, household supplies and other products most intelligently. Tests are conducted by expert staff technicians with the help of over 200 consultants in university, government and private laboratories. In most cases, comparisons of the quality of products are given in terms of brand names with rating as "Best Buys," "Also Acceptable," and "Not Acceptable." Information is also given on the labor conditions under which products are made. The sound, constructive advice on buying contained in Consumers Union Reports can help keep expenses down at the present time when living costs are going up.

Some of the Subjects Covered in Recent Issues of the Reports

APR.—Autos, Shirts, Cold Creams, Radios, Aminopyrine.

MAY—Trailers, Washing Machines, Moth Preventives, Constipation.

JUNE—Non-miniature Cameras, Radio Tubes, Sanitary Napkins.

JULY — Miniature Cameras, Gasolines, Golf Balls, Motor Oils.

AUG.-SEPT. — Refrigerators, Films, Ice Cream, Inner Tubes.

OCT.—Oil Burners & Coal Stokers, Breakfast Cereals, Auto Radios.



Send me CONSUMERS UNION REPORTS for one year (12 months) starting with the issue. I enclose \$3 for membership, \$2.50 of which is for subscription. I agree to keep confidential all material sent to me which is so designated.

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