

# HEALTH AND HYGIENE

DECEMBER  
1936

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FIFTEEN  
CENTS

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**BROMO-SELTZER ADDICTS**

**PINK TOOTHBRUSH**

**PITY YOUR FEET**

**THE CHRONIC DRUNKARD**

**Methanol - A Hazard in Sixty Trades**

By JOHN L. SPIVAK

*One-hundred Doctors write for this magazine!*

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### Purely Personal

IT IS encouraging to note that physicians are joining the ranks of those who are aiding the Spanish people's fight for democracy. A Medical Bureau has recently been formed by the American Friends of Spanish Democracy, and includes such prominent medical men as Dr. Iago Galdston of the New York Academy of Medicine, Dr. Thomas Addis of Leland Stanford, Dr. Anton J. Carlson of Chicago, and Drs. Walter B. Cannon and Frederick A. Gibbs of Harvard.

PAUL DE KRUIF'S *Why Keep Them Alive?* is having some effect in Detroit. If you read this book you will remember that Mr. de Kruif claimed that the city was letting people die of tuberculosis because its health department could not get the money to provide X-ray examinations of suspected cases. So damning was the indictment against the city that it is already exhibiting signs of a bad conscience, and a campaign is under way to raise the money to purchase the necessary X-ray equipment and facilities.

OUR OFFER of a free autographed copy of 100,000,000 *Guinea Pigs* for eight new subscriptions to HEALTH AND HYGIENE proved so successful that we are now offering *Counterfeit*, also by Arthur Kallet, on a similar basis. Sixteen new subscriptions will bring you autographed copies of both books.

JOHN L. SPIVAK, whose story on methanol (wood alcohol) poisoning appears in this issue, is famous for his ability to get at information that many people would rather have remain secret. Mr. Spivak reveals how the United States Public Health Service under Hoover issued a "whitewash" report on methanol in order that the du Ponts might start selling it. This is not the sort of thing the du Ponts like to have made public, but thanks to Mr. Spivak it's now here for you to read.

BEGINNING with this issue, Carl Malmberg joins HEALTH AND HYGIENE's editorial staff. Mr. Malmberg has contributed a number of articles to past issues.

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Editors: CARL MALMBERG and JOHN STUART

## HEALTH and HYGIENE

*Magazine of the People's Health Education League*

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## What We Expect of Mr. Roosevelt

**Health and Social Security** THE enormous plurality by which President Roosevelt was re-elected is a token of the indomitable strength of democratic feeling among the American people. They voted not so much for a man, but for a program of economic progress to be realized in defiance of the representatives of great wealth.

Public health authorities have long been agreed that in the last analysis the health of the people depends upon economic factors. It is not necessary to look far to see how these factors operate. A well-balanced diet, sufficient clothing, adequate housing and recreation, all essential to health, must be bought. Medical service is a commodity that must also be purchased. Where the income is low, on a subsistence level or contributed by relief agencies, decent medical care cannot be bought. The capacity for obtaining medical care is no greater today than it was in 1929 at the height of "prosperity" when 75 per cent of the total population did not receive adequate medical or dental care and nearly 40 per cent got no medical attention at all. The clinics of our cities are crowded daily with patients who cannot buy private medical service and who must rely upon the hurried and perfunctory services of overworked and unpaid physicians who themselves have difficulty earning a living.

It is most important, therefore, that the people compel the administration to pass measures that will raise their standard of living—that will raise the average income so that an indispensable commodity such as medical care can be purchased by all and not only by a small minority. The Roosevelt administration will not do this unless the people, as John L. Lewis, President of the United Mine Workers, has said, "organize themselves to consolidate their political victory and translate it into material benefits and reforms." They must demand that the administration provide jobs and a living wage and guarantee workers the right to col-

lective bargaining without employer interference so that they can win higher wages in the face of the rising cost of living. When these simple, fundamental rights are won, adequate medical service will be available for many more people than it is today.

**A Real Housing Program** A PROGRESSIVE program must also include provisions for decent housing. Disease flourishes in slums, in congested centers, in overcrowded living quarters. The administration knows these facts. In one of its official journals, *Public Health Progress*, of November 15, 1934, it revealed that "One-third of our countrymen are living in scattered hovels, in clustered shacks, in the squalid flats of congested centers, with common toilets, with dark rooms or foetid shafts" and that "in 64 cities more than 600,000 homes had neither bathtub nor shower and nearly 450,000 were without indoor water closets."

Many of our local and national politicians have spoken all too vaguely about the need for slum clearance and good housing. We want adequate, healthful housing, but we don't want the sort where former slum inhabitants are required to pay higher rents at a sacrifice of purchasing power for food and other necessities. Good housing is all very well but good food is even more important. We don't want to go through the same thing that occurred in Wales, Scotland, and on the Continent, where families dwelling in slums were moved to clean, modern homes only to find themselves worse off in respect to health than they were before, because of higher rents and sacrifice of food, clothing, and medical care. Better housing is important and we must fight for it, but we must combine it with a struggle for a higher standard of living in general.

We heard a great deal about the Social Security Law in recent weeks. Dr. Thomas Parran, Surgeon General of the United States Public Health Service, characterized it fitly as

"the first feeble steps of a people who at last are beginning to realize what they need." The Social Security Law is a shabby, pallid imitation of genuine social security legislation, and its provisions for the aged are the most inadequate of all. An insufficient pension is given the aged, with the necessary revenue obtained to a large degree by taxation of workers. A bill that more adequately meets the requirements of the people is the Frazier-Lundeen Bill which would give pensions to the aged from sixty years at rates equal to former earnings, in no case to be less than \$15 a week, and financed by taxing large incomes and corporation profits.

In the past fifty years the sciences of sanitation, preventive medicine, and public health in its broadest aspects, have developed to the point where we are able to prevent or control the major epidemic diseases. Despite this knowledge and the large, well-trained personnel we witness a disgraceful situation where epidemics of malaria and typhoid fever occur, taking thousands of lives every year, and where thousands of children die every month from infectious diarrhea. Such a situation is a natural consequence of a government which functions chiefly as a protector of private property and in which health conservation is not accorded the major place it requires.

### The Administration's Immediate Duties

THE present administration has taken a few faltering steps in the direction of effective public health work. The government must now be made to proceed more vigorously so that thousands of Americans need not be sacrificed yearly at the altar of economy. HEALTH AND HYGIENE, therefore, proposes the following minimum program of public health.

**Tuberculosis:** Despite the decline in the death rate since 1900, this disease is the major cause of death in the age group between twenty and forty. The incidence of tuberculosis can be reduced by (1) giving adequate wages to young people in industry, especially women, so that they can have good food, rest, and recreation; (2) protection for workers in dusty trades so that no more Gauley Bridge disasters can occur; (3) more sanatoria and better utilization of modern facilities for the treatment of tuberculosis.

**Syphilis and Gonorrhoea:** With an estimate that 10 per cent of the population is infected with syphilis and 15 per cent with gonorrhoea,

the venereal diseases constitute a major disgrace. Sweden, Denmark, and the Soviet Union have shown the way to clean up this plague. It is high time we started.

**Maternal and Infant Mortality:** Deaths of mothers in childbirth and among babies in the first month of life are shamefully high in the United States. By the use on a nation-wide scale of proper methods, the death rate could be reduced one-half in a few years.

**Malnutrition:** "More children and adults alike suffer from faulty nutrition than from any other form of physical impairment except dental defects," said the Surgeon General of the United States, Dr. Thomas Parran. The richest country in the world and millions suffering from malnutrition—another disgrace that could be remedied if all our people had employment, decent wages, and social security.

**Malaria:** More than 100,000 cases of malaria were reported in the United States in 1934. Federal funds must be appropriated to drain and screen marshes and to treat the millions of Negro and white people who are infected with the malarial germ.

**Health Protection for the Negro:** Negroes suffer much more from certain diseases than do white people. In tuberculosis the death rate for Negroes is from five to nine times as high as among whites; in typhoid fever and dysentery about ten times, and in other preventible diseases at least two to three times. Discrimination against the Negro is to be found not only in social and economic fields but also in health services. The government must initiate legislation to prohibit Jim Crowism in public health service, in hospitals, in sanatoria, and in industry.

**Pure Food and Drug Law:** More than \$300,000,000 are spent yearly on patent medicines which are either totally worthless or dangerous to health. The Copeland bill fails to correct the present abuses and, in fact, creates new abuses. The Copeland bill must be shelved and replaced by a measure such as the Tugwell bill which, though not entirely satisfactory, will give the consumer some protection from the frauds of patent-drug manufacturers.

These items are a few of the problems challenging the present administration and which it must be compelled to tackle. The American people must see that their mandate for democracy is carried through. Public health work must become a major function of any government that claims to represent the masses of the people.

# Bromo-Seltzer Addicts

This popular headache remedy will kill the pain, but it may kill you, too. Medical literature records numbers of cases of acetanilid poisoning caused by this and similar products.

WE HAVE repeatedly pointed out that the practice of treating oneself with patent medicines is for several reasons a dangerous one. There is, in the first place, the fact that such preparations are generally advertised for the treatment of *symptoms*, and not the treatment of the underlying disease which produces the symptoms. For example, a patent medicine indiscriminately recommended for all coughs may or may not have the effect of diminishing the cough. If it does, the useful functions served by that cough are lost. It is not because of malice that nature produces this symptom, which was intended either to help us get rid of dead tissue or irritating substances, or to call our attention to some abnormal condition. A cough may be due to quite a number of different diseases, such as tuberculosis, sinusitis, pneumonia, tumors, and so forth. The treatment should obviously be directed towards curing the cause of the cough; and nature has wisely equipped us with a danger signal so that the disease may not advance too far without warning.

Another important objection to patent medicines is that they frequently contain drugs which are not only harmful but in some cases may even be fatal. It is true that in isolated instances, after years of opposition on the part of the patent-medicine interests, the names of dangerous ingredients are printed on the package. But even if the printing is large enough to be easily read—which is by no means always so—how many people know which drugs are safe and which are dangerous? We venture to say that less than one per cent of the patent-medicine consuming public is much enlightened on learning that *Midol* contains pyramidon, or that *Ex-Lax* depends for its action on phenolphthalein. Yet even small amounts of these drugs

have repeatedly resulted in serious illness and sometimes in death. Among the hundreds of different drugs used in medicine, there are very few which may be safely employed without the supervision of a physician.

"Pain-killer" remedies are especially vicious in this respect because they contain drugs having a numbing effect. Such drugs are known as "depressants," and, in addition to their effects on the sensation of pain, they produce other results which are far-reaching and important.

It is quite true that *Bromo-Seltzer* and other such preparations will in many cases relieve a headache—but at what price? In numerous instances they have killed the pain by killing the patient.

Analysis of *Bromo-Seltzer* showed that an average dose contained 7 grains of bromides, 3 grains of acetanilid, and 0.8 grains of caffeine. This is an average dose, but when a drug clerk dispenses the drink from the fountain container, it can hardly be said that the stuff is accurately measured to conform with the average measure.

Bromides are extensively used in medicine as sedatives. The drug is always administered with caution because it may produce very severe cases of acne (pimples), and not infrequently the users develop serious mental symptoms such as confusion, delirium, and even coma. A report of seventy-seven such cases from the Psychopathic Hospital of the University of Colorado will be found in the *Journal of the American Medical Association* of December 6, 1930. This is mentioned here only as evidence of the care required in the use of bromides.

Acetanilid is sometimes employed to lower fever and to combat pain. Unfortunately it may also interfere with the normal action of the heart, even in ordinary doses, and, therefore,

physicians exercise great caution when prescribing the drug. At the first sign of such an effect on the heart, the drug is stopped and stimulants administered. In the chronic type of acetanilid poisoning resulting from use over a period which may be either weeks or years, the patient loses weight, develops nausea and severe vomiting, and becomes so weak and tremulous that he can scarcely walk without assistance. He has a peculiar bluish color due to the poisoning of certain chemical elements in the blood. Mental apathy and stupor are common in this condition.

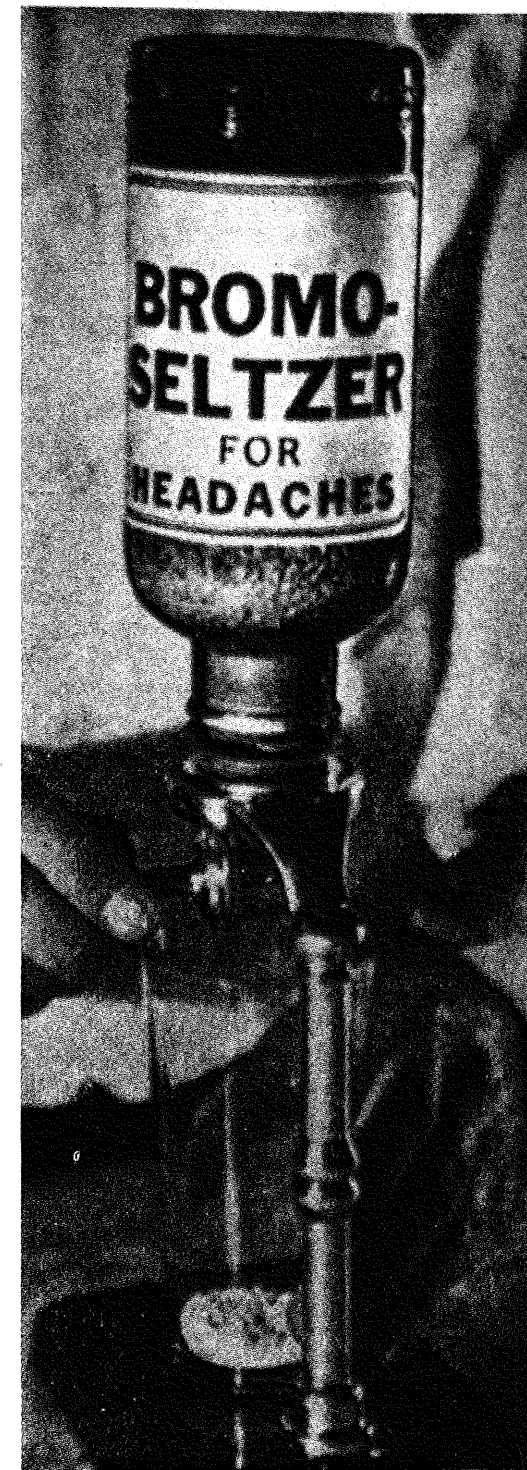
The third ingredient of *Bromo-Seltzer* is caffeine, a stimulant affecting the circulatory and nervous systems. It is used in this patent medicine in an attempt to neutralize the depressing effects of the acetanilid and bromide. If it succeeded in doing this the drug would have no effect, and would therefore be neither beneficial nor harmful.

IT is of the greatest importance to bear in mind that individuals vary greatly in their resistance to drugs, poisons or toxins. There are no absolute rules regarding the size of a dose; a good physician studies his patient to determine whether he is more or less susceptible than the average to the particular medicine being employed.

In the case of acetanilid this fact is especially important. A "normal" dose for one person may be dangerous and even fatal for another. Dr. Payne of Duke University, in a scientific study of various nostrums containing acetanilid, says: "Poisoning may result from relatively small doses." He refers specifically to *Bromo-Seltzer*, and states that "... each week several cases of poisoning by pain-killer remedies are examined in our out-patient clinic." (*Journal of Pharmacology and Experimental Therapeutics*, Vol. 53, p. 401, 1935.)

Dr. Quigley reports (*Journal of the American Medical Association*, Vol. 46, p. 454, 1906) the case of a man who developed acute heart failure after taking *Bromo-Seltzer*, and who "would have died had not his stomach been emptied and stimulants administered."

Less fortunate victims are reported in the same journal (Vol. 47, p. 2158, and Vol. 55, p. 235). In the first case, reported by Dr. Hemenway, a thirty-one year old woman took *Bromo-Seltzer* for an attack of indigestion. She died a few hours later. Because there was some question as to the cause of death, a com-



"Each ounce contains twenty grains acetanilid U.S.P.," says the Bromo-Seltzer package. As little as five grains of acetanilid has caused death, according to a report in the *Journal of the American Medical Association*.

plete autopsy was performed, with the final diagnosis as follows: "Death from acetanilid poisoning from taking Bromo-Seltzer." In the second case, a woman died about an hour after taking a dose of *Bromo-Seltzer* for a headache. She had also taken another pain-killer containing acetanilid, and her death was caused by this heart-depressing drug.

Other cases of severe poisoning or death as a result of the use of patent medicines containing acetanilid—*Bromo-Seltzer* is the most widely used preparation of this type—can be found in the *Health Bulletin* of the North Carolina State Board of Health for September, 1934, and in the *Journal of the American Medical Association*, (Vol. 100, p. 2040, 1933). It is sufficient to state that according to Dr. Fisher, who made an exhaustive study of the problem, death can occur from taking as little as five grains of acetanilid—far less than many users of *Bromo-Seltzer* consume.

LET us now consider another aspect of the use of *Bromo-Seltzer*—the matter of addiction. In reviewing the medical literature on acetanilid one is struck with the frequency with which many writers refer to its habit-forming characteristics. At first the user generally finds it necessary to increase the dose progressively in order to obtain relief from pain or headache, and soon he becomes addicted to the drug for its own sake. For example, Dr. Waugh, in discussing the rashes and other disfiguring skin ailments due to the use of *Bromo-Seltzer*, writes in the *Journal of the American Medical Association* (Vol. 82, p. 1584, 1924). "As usually happens, it required increasing amounts [of *Bromo-Seltzer*] to relieve the headache and satisfy the patient." The patient referred to here was left with a scarred and mottled skin as a result of his use of *Bromo-Seltzer*. He informed Dr. Waugh that *Bromo-Seltzer* was being used as a substitute for morphine, opium, and other drugs by narcotic addicts. Professor Barker, an outstanding physician and professor of medicine at Johns Hopkins, also stresses the fact that acetanilid is habit-forming (*International Clinics*, p. 179, June, 1930). He mentions *Bromo-Seltzer* repeatedly, and states that its users become as much a slave to it as narcotic addicts do to cocaine and morphine. Barker's patient had taken *Bromo-Seltzer* over a long period of time, and, like so many others, had gradually increased the dose until he was taking a large bottle of it each day. In discussing the

delirium which this patient developed, Barker pointed out that he had seen several such case, and expressed the fear that treatment of the patient would be complicated by the fact that the man had been "a victim of drug addiction for many years" and had become so dependent on *Bromo-Seltzer* that breaking the habit would be almost impossible.

Dr. McEllroy, in a paper entitled "Methemoglobinemia Due to Bromo-Seltzer Poisoning" (*Journal of the American Medical Association*, vol. 73, p. 1927, 1919), describes a victim who had been enslaved to the drug for many years. When he came under observation he had been taking twenty-five ounces (almost a quart of the powder) every day. This patient was delirious for more than four weeks, and so violent that he had to be restrained by physical force.

Another case of an addict who had been taking *Bromo-Seltzer* for twenty years before he received medical attention is reported in the *Journal of the American Medical Association*, (Vol. 100, p. 736, 1933). Unable to break himself of the habit, he became confused, tremulous, progressively weaker, and scarcely able to take care of himself. When attempts were made to keep the drug from him he became critically ill, irrational, lost control of his bladder and bowels, and for weeks required the most exacting care. This case illustrates well the dependence of many of its users on *Bromo-Seltzer*, the difficulty with which the habit is broken, and the grave physical complications which ensue from its use.

We have by no means exhausted the medical literature which establishes with such certainty the fact that acetanilid in the doses present in the amount of *Bromo-Seltzer* ordinarily used, can have serious and even fatal results. We have referred to a number of cases in which leading medical authorities at Johns Hopkins Hospital, at Duke University, and elsewhere, have condemned *Bromo-Seltzer* by name, charging it with being as habit-forming as opium and morphine, and laying stress on the great dangers resulting from its use. We venture to suggest that for each case of *Bromo-Seltzer* poisoning recognized and reported, there are many in which the correct diagnosis is not made, or in which the physician does not take the trouble to write an article on the subject.

Let us again call attention to the fact that murder for profit is carried on with weapons other than guns, bombs, and poison gas.

# Inside the Hospital

The patient is not the only one who suffers. Internes, nurses, and hospital employees work under intolerable conditions for meager pay. This article presents the other side of an over-romanticized profession.

TO thousands of hospital employees the word "hospital" brings to mind not a picture of starched efficiency and sweet charity, but rather a story of long hours, low salaries, exposure to disease, inadequate living quarters, and often inferior food. The public has been little aware of the conditions inside our hospitals, both public and private. Hospital administrators have been very successful in surrounding the business of caring for the sick with a magic ring inside of which the ordinary rules governing other fields are not supposed to hold. Every porter is supposed to be a Saint Francis, every nurse a sister of mercy, and every technician an Arrowsmith. It is deemed a great honor to sacrifice one's self and one's family in shouldering the burden of a balanced hospital budget.

When a wage-earner enters the ward of a hospital, he suffers from a good deal more than from his illness. Added to the pains of sickness, worry about his job and the support of his family, is the problem of inadequate nursing care. Not for him are the comforts and relief from pain that come from the skilled attention of an individual day and night nurse who has no other job than making him comfortable. That luxury is reserved for those who can pay the big hospital bills. When he needs an alcohol rub to lower a burning fever or a bed-pan to relieve his discomfort, he must wait his turn. Nineteen other patients must also be waited on. Frequently the patient resents the delay and blames it on the nurse or orderly. Rarely does the patient think of them as employees who work long hours for little pay.

The nurse's day is twelve hours long. On her feet most of the time, lifting, carrying and turning heavy patients, attending to dozens of other duties, tired out before the working day

is over, it is little wonder that the necessary demands of the sick weigh her down. The nurse's fatigue makes her resentful of the patients who seem to demand so much from her. Her economic condition is wretched. Nurses suffer tremendously from unemployment, and when they do work they receive shameful salaries. The long hours, the low pay, and the unemployment take their toll in sickness and death. Tuberculosis, the disease which above all others follows in the footsteps of malnutrition and overwork, takes an incredible number of lives among nurses. A report made by the Relief Fund Committee of the American Nurses' Association in June, 1930, showed that of the 543 nurses who were aided since 1911, 258 or approximately 47 per cent were suffering from tuberculosis. Dr. E. R. Baldwin in an article in the *American Journal of Nursing* of November, 1930, noted that "if any observation is confirmed by experience in this country relating to the nursing in tuberculosis sanatoria, it is that proportionately more nurses break down with this disease in general hospitals than in the special institution for tuberculosis." It has also been pointed out by Doctors Shipman and Davis that nearly 7 per cent of nurses in training, in a particular hospital, developed tuberculous lesions during their three-year course.

UNTIL the Association of Hospital and Medical Professionals and the Hospital Employees' Union, both affiliated with the American Federation of Labor, were organized, the employees of hospitals had little hope of improving their working conditions. The one union is for nurses, laboratory technicians, X-ray technicians, dieticians, staff physicians and other professionals. The other union includes in its membership the very large group

of maintenance workers. The two unions work together on mutual problems. Together they represent the force through which the hospitals will be lifted out of the sweat-shop class.

Their first important task is to convince the public that bad working conditions in hospitals are not only degrading socially but are actually a menace to the welfare of patients. Overworked, underfed, and nervous employees are not the sort of people to give the sick the kindness and consideration necessary to nurse them back to health. An error in medical work is not just another mistake; it may mean a permanent injury or even a human life.

When the unions were less than six months old they had gathered their forces sufficiently to back in the New York State Legislature a bill for an eight-consecutive-hour day for all hospital employees. This bill received the support of many individuals and organizations, but not enough to overcome the opposition of the hospital interests who fought it viciously.

At the present time the unions are concentrating all their forces on the task of gaining passage of the Burke Bill, now in the Committee on Local Laws of the Board of Estimate of New York City. At the request of the unions this bill, providing an eight-consecutive-hour day for employees of the municipal hospitals, was introduced in the Board of Aldermen. Convinced that the small percentage rise in the hospital budget necessary to institute the eight-consecutive-hour day was justified, the Aldermen passed the bill without a dissenting vote. The Mayor has ordered a survey on the probable cost of putting it into effect. Pending the outcome, the unions are hard at work mustering forces among individuals and organizations. They are trying to convince the taxpayers who foot the hospital bill that their money will be well spent and will be returned to them a thousand times in better service and in better health.

**W**HILE all this activity has consumed a large part of their small resources, the unions have a number of achievements to their credit. Vacations are considered almost universally as the due of employees who have given their services throughout the year. Yet in hospitals this is not always the case. A large number of our private hospitals which boast of their philanthropy, allow no time for their employees

to rest and recover strength. The unions have so far succeeded in winning the right to vacation with pay in several hospitals.

The maintenance employees are among the most poorly paid and overworked of any group of workers. In most hospitals, maintenance employees put in from sixty-five to seventy hours a week for which they receive from thirty-five to forty dollars a month and sometimes room and board. During the past few months the unions have won the concession from a few hospitals of one full day off per week for porters and maids where they had been getting but one-half day per week previously.

Last spring a very noted hospital undertook to discourage unionization, which was becoming too popular in their institution, by forcing finger-printing upon their employees. The danger of finger-printing may not be at once apparent but it is none the less real. With the hospitals in possession of finger-print records of employees, it would be a simple matter to match them up with any records the police might acquire during the course of picketing or other activity causing the displeasure of the employers. Names can be changed in emergencies, but fingerprints can black-ball workers and close the doors of employment forever. The opposition to this move was so well organized by the unions that the order was promptly rescinded.

Because the hospitals have for so long insisted on a "hands-off" policy and resisted interference from all sources, there is confusion in many phases of their work. Some of the problems that have been allowed to continue unchecked have grown into a real menace to the development of better hospital service. For example, the substitution of the volunteer system in place of systematic education for laboratory technicians has not only brought economic distress to this group, but is also lowering its professional standards. Volunteer technicians go into hospitals presumably to get practical training. Sometimes these volunteers remain from two to three years. The hospitals never think of paying them. The paid technicians are told, if they have any grievances, that they can be easily replaced by others willing to give their services free.

The problems facing the unions are many. To solve them all will take many years. But the results of the unions' first year's efforts have so encouraged them that they are here to stay.

# Pity Your Feet

Does style mean more to you than foot comfort and safety? Millions of people wear shoes that injure and deform their feet. An orthopedist gives some sound advice on foot problems.

**D**O your feet hurt? If they do there is more than an even chance that your shoes are at fault. A sensible shoe, properly fitted, will alleviate many foot troubles. Dr. William Locke, a much publicized Canadian physician, has exploited this principle and thereby gained a great reputation for treating ailments of the feet. The most impressive, but least effective, feature of his treatment is suggestion through hocus-pocus and the laying on of hands; most effective is the simple and unimpressive prescription of a shoe which conforms to the structure of the foot. However, the cause of foot trouble sometimes goes beyond the shoe.

When the feet hurt it is possible that some disease is affecting the body as a whole, or that the primary cause of the trouble is in some part of the body remote from the feet. For example, overweight throws a strain on the feet which they were not built to sustain. One does not mount a twenty-ton truck on a flivver chassis. Again, during a period of illness the muscles and ligaments of the whole body, including those of the feet, become weak and relaxed through disuse. With the resumption of activity, the feet and legs receive the greatest load and begin to hurt when the strain becomes too great. During the convalescent period the feet and legs should be supported by an elastic bandage, and shoes, not bedroom slippers, should be worn. Rheumatism (arthritis), which affects the body as a whole, may affect any one or all of the twenty-eight joints in the foot. Diabetes and several other diseases, though they do not primarily affect the feet, cause narrowing of the arteries of the legs, which frequently is responsible for pain in the feet. A person suffering from these diseases of the arteries of the legs is usually unable to

walk more than a short distance, generally about three blocks, without experiencing pain so acute that he has to stop and rest. After a short rest period he is usually able to proceed another three blocks, when the pain again forces him to stop. In diseased conditions of the arteries a physician's treatment is essential.

Most feet are built like bridges, that is, strong enough to handle several times the load they are expected to carry. This excess strength is known as the factor of safety. Despite imperfection in structure, the feet of most healthy young persons have, to begin with, a large factor of safety. Such feet can take care of all the work required of them without paining, even though, in addition to normal demands, they may be burdened by overweight, wrong habits of walking (in-toeing, out-toeing), and the almost inevitable faulty shoe. In such individuals the factor of safety is not usually exceeded unless the amount of work required of the feet is suddenly and greatly increased, or until the handicaps enumerated have been present for a sufficient time to reduce the reserve of the foot. A chauffeur who suddenly takes a job as a mail carrier might reasonably expect trouble. The woman who maintains that she is perfectly comfortable in a faulty shoe is squandering her reserve and hastening the day when her feet will be bankrupt. Few women over thirty who persist in wearing stylish shoes can walk a mile uninterruptedly without foot discomfort.

Ordinarily, the first thing that the person with foot trouble thinks of is fallen arches. The fact is, that people whose feet hurt more often have normal or even exaggerated arches than flattened arches. The main factor to be considered about the flat arch is that feet with flat arches have a lower reserve power than normal

feet. The function of the long arch of the normal foot is to act as a spring; indeed, the inner edge of the foot should resemble an automobile spring in shape. The flat foot, and especially the rigid flat foot, does not have a spring-like action, and is therefore likely to tire more quickly than the normal foot. Nevertheless, many people with flat feet have an astonishing reserve power, and do not suffer under ordinary conditions. The foot with the exaggerated arch or high instep (cavus foot) is usually stiff and rigid, and lacks the normal spring-like action. When for any reason the foot is rigid, painful calluses form on the weight-bearing points, either under the metatarsal heads (ball of the foot), or, sometimes, under the heel. This is especially true in the case of the exaggerated arch.

Other examples of mechanical foot imperfections are relaxed foot (weak foot, splay foot, flat foot), short calf muscle, short first metatarsal bone, and stiff great toe joint. The accurate diagnosis and treatment of these conditions requires experience, and cannot be safely entrusted to shoe and drug clerks. If you have any reason to suspect that mechanical imperfections are responsible for any symptoms that you may have you should consult a physician specializing in disorders of the feet, usually an orthopedic surgeon or a graduate podiatrist.

Special attention should be drawn to the pernicious practice of certain shoe salesmen who, with an eye on profits, tell their customers that they have flat feet and should wear Dr. Gazookus's arch supports. No such device should ever be used on a foot that is not causing pain, and only rarely in the more common painful conditions. By limiting the mobility of the joints of the foot and interfering with muscle action, an arch support may produce symptoms where none were present originally. Although such supports may relieve symptoms if applied to feet that really need them, an arch support never cured a flat foot or turned a relaxed foot into a normal foot.

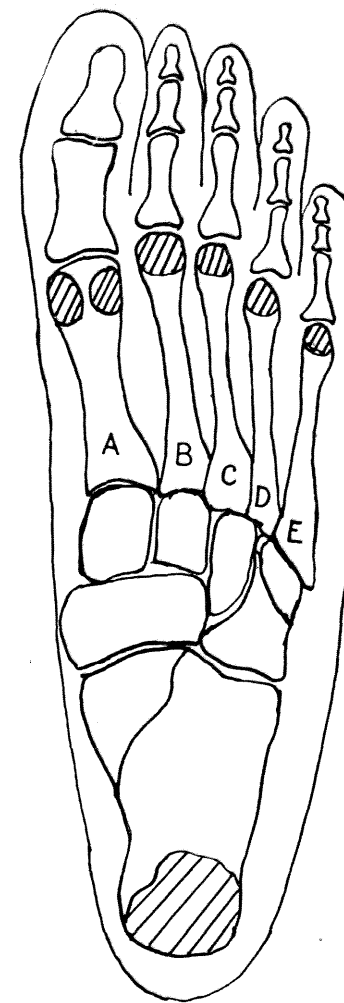
**M**ECCHANICAL defects in themselves account for a relatively small proportion of painful feet; it is faulty shoes that are responsible for, by far, the majority of foot troubles: Women, whose shoes show the most glaring faults, suffer to a much greater extent than either men or children, and primitive people, who wear no shoes at all, do not suffer from

the foot troubles which are common to us. This is because the joints and muscles receive better exercise when unhindered by shoes, and because bare feet are not deformed by ill-fitting shoes.

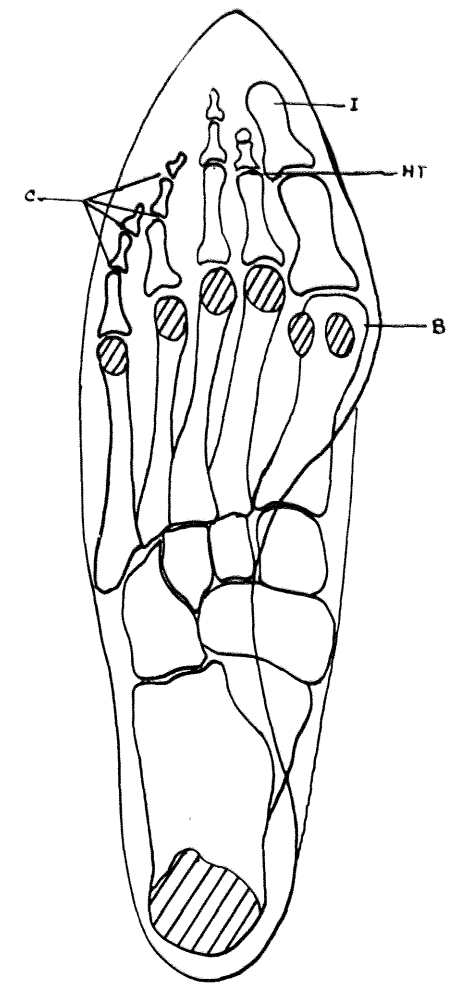
Eighty per cent of the people who come to the doctor complaining about painful feet are women, a proportion that is not surprising when we consider that styles in women's shoes simply do not conform to the anatomy of the foot. Women are not more subject to anatomical weaknesses of the feet than men, but they are slaves to styles in shoes that deform their feet as surely as the foot-binding custom of the Chinese.

Men do not wear high heels or thin soles. Hence, in spite of their active life and the greater functional demand of their ordinary activity, men do not suffer from foot trouble to the same extent as women. But this does not mean that men escape entirely the consequences of faulty shoe design, since manufacturers in their desire to stimulate sales are constantly trying to bring out new fashions. Thus, we witness the periodical return of the pointed toe. This style has recently enjoyed a wave of popularity, and as a consequence we may expect an epidemic of hammer toes with corns and painful bunions, particularly among adolescent boys who admire this fashion.

Children suffer least of all from faulty shoe design, but they do suffer a great deal from the custom of selecting shoes large in order that they may grow into them. The average child wears out a pair of shoes in three months, and except during periods of exceptionally rapid growth the foot does not grow half a size in this length of time. The child's shoe should be fitted to the foot as it is, and not as the salesman expects it will be at some time in the near future. Nothing will tend to accentuate the flat-footed position which the undeveloped feet of children will tend to take so much as a shoe that is too large for the foot. Children with weak feet should first of all be treated by being given a properly fitted shoe. Particular care should be taken to insure that the great-toe joint fits naturally over the inflare of the sole and that the heel counter fits snugly. In a shoe thus fitted the tendency for the ankle to turn in can be counteracted by raising the inner border of the heel with a leather wedge about three-sixteenths of an inch thick. The diet of weak-footed children should be carefully inspected with regard to its vitamin adequacy.



Skeleton of normal foot seen from sole. Weight-bearing points are shaded. Letters refer to the metatarsal bones.



Skeleton of foot deformed by popular shoe last. B—bunions; HT—hammer toe; I—ingrown toenail; C—corns.

**T**HE chief faults in the average woman's shoe are: the high and narrow heel, the narrow, pointed toe, the thin sole, and the short vamp.

The high, narrow heel is especially to be condemned. The narrow area on which the weight of the body rests allows the ankle to wobble from side to side, as can easily be seen by watching women's feet from behind as they walk on the street. Eighty per cent of all sprained ankles are sustained by women. But sprains are by no means the only evil attributable to the high heel. The foot tends to slip forward off the high heel into the shoe, causing most of

the weight to be borne on the forefoot. The forefoot was not intended to bear more than half the weight of the body, and when it does the result is almost always pain under the heads of the metatarsal bones and calluses under the middle metatarsal heads. The pressure on these points is still further increased by the failure of the curled-up toe to support their share of the weight. The short vamp which is necessary to prevent the foot from sliding down off the heel causes the toes to curl and creates corns on their knuckles.

The heel stiffening of high-heeled shoes curves forward at the back of the heel, pressing



into the heel cord in order to prevent the heel from slipping out of the shoe at each step. The pressure and friction thus produced at the top and back of the heel is often responsible for an unsightly swelling and sometimes for a bony overgrowth that has to be removed surgically. The thin sole of the ordinary high-heeled shoe curls up readily at the sides, rocker fashion, making it difficult for the first and fifth metatarsal heads to maintain firm contact with the ground. The weight of the body is thus concentrated on the middle of the metatarsal region, where the formation of a callus is likely to give evidence of the unusual strain.

Shoes which are too pointed are likely, through undue pressure, to create a corn on the knuckle of the fifth toe. A corn formed similarly on the great toe may push the toe outward off the head of the first metatarsal bone, which then protrudes and forms a bunion. Bunions are unusually prevalent among women. Shoe pressure on the great-toe also forces the flesh over the edge of the toenail and produces ingrown toenails, which may become infected. The term "ingrown" toenail is really a misnomer—it is not the nail that is ingrown, but the flesh of the toe is overgrown.

A person can best insure foot health by selecting a sensible, well-fitting shoe. This is not always a simple matter, for one must not only have a clear conception of what a proper shoe is, but must *insist upon getting it*. Strange as it may seem, many women's shoe shops do not even carry proper shoes.

First of all, plenty of room for the outer toes is necessary. If you have a corn on your fourth or fifth toe your shoes are not roomy enough in this region, even though they may be too large in others. The inner edge of the sole should be straight, or nearly so, in order that the great toe may not be deflected outward and form a bunion. The shoe should fit snugly about the heel and middle of the foot, giving a sense of support. The heel should be as low as can be tolerated psychologically, but in no case should it be more than two inches high. Many women will protest that they feel discomfort in the calves of the legs when they wear low-heeled shoes. This is because it is more difficult for the calf muscle to lift the body weight with a low than a high heel. A calf muscle unaccustomed to a low heel will get stiff and sore, like any other muscle, when its work is increased. However, the stiffness and soreness will disappear after a few days. Mas-

sage and stretching of the calf muscle by means of the following exercise will aid in overcoming such temporary soreness:

Stand about a foot and a half from the wall, barefoot, with the toes turned in and the heels on the floor. Keep the heels on the floor and bring the chest to the wall. Go through this exercise three periods a day, doing it ten times the first period, and increasing five times each period until you reach fifty.

Besides being low enough, the heel should have an area of at least four square inches in order to insure proper stability.

The metatarsal pad is a device which is useful in relieving pain in the region of the heads of the middle metatarsal bones, as well as behind the toes. As previously mentioned, high heels cause an abnormal stress at this point, and often a large mass of callus is formed. A metatarsal pad can be inserted by any cobbler. It consists of an oval mass of sponge rubber which should be placed in the shoe so that it fits behind the callused area, and not under it. If it is placed in the shoe so that the callus rests on the pad, the symptoms will only be aggravated. It is unwise, however, to seek relief from a metatarsal pad before a properly constructed and well-fitted shoe has been obtained.

Women who do not feel beautiful unless they are wearing a three-inch heel should consider how irrational are the dictates of fashion. Tradition tells us that several hundred years ago the Empress Taki of China was born club-footed. She grew up with her feet small in proportion to the rest of her body, and required special shoes. In order that a member of the royal family might not bear the stigma of a deformity, a royal order was issued declaring that the degree of nobility among Chinese women was to be judged by the size of their feet—the smaller the feet the greater the nobility. In this way the custom of foot-binding arose among the daughters of the Chinese ruling class. Later it was adopted by the common people, and it has persisted until the present day, though fortunately it is now dying out. Our idle classes may wear shoes that make them unfit for useful physical labor, and which maim the feet as surely, if not as seriously, as the Chinese footbinding, but there is no reason why our workers should imitate them. Some may laugh at the Chinese for following a foolish tradition, but our women are just as foolish in condemning themselves to foot torture and deformity.

## Bowel and Bladder Training of Children

Intelligent attention devoted to this aspect of child training will save parents a great deal of trouble. This is the first of a series of articles on problems of child guidance.

PARENTS would like to teach their children as early as possible not to wet the bed or soil their diapers. The average parent has a regular sequence of wishes in this respect, that is, as soon as the child accomplishes and fulfills one of the things expected of him, the parent begins to think and proceed in terms of the next accomplishment. And at this point it would be well to mention some of the wishes that the parent has in relation to the child inasmuch as these wishes and aims constitute the process of rearing the child.

First the parent wants the new-born infant to drink or suckle enough milk for its development and growth. Before and after each feeding the child is weighed and the difference in weight represents the number of ounces of milk it has gotten from the breast. Naturally, bottle-fed infants do not need to be weighed because the bottle registers directly the amount of milk consumed.

If the parents are satisfied that the child is taking the proper amount of nourishment for its best development (though there are some parents who always have some degree of anxiety about this and accordingly overfeed their children), the parents begin to think of a second problem: does the child have regular bowel movements? A child should not only eat enough but should defecate enough, too.

Even when the child suffering from a mild illness loses his appetite for a short time and refuses food or eats less than usual, he is expected to move his bowels just the same. The parents do not think in terms of "the less the intake, the smaller the output." (A parent would not question the fact that the less coal he puts into his furnace the less ash and residue he would have.) This anxious parent would then use some method, usually a laxative or an enema, to induce the child to have an adequate movement.

Even when the child is apparently healthy and normal some parents still feel that there must be something radically wrong unless there are one or more daily movements. The fact remains, that though one or more movements a day is usual, a child can get along perfectly well with less than an average movement a day. The child simply has a large energy requirement and utilizes almost all of its food. There is not enough residue or ash left to stimulate the intestines each day for evacuation. In a normal child laxatives and enemas for such a condition would merely be throwing a child's normal rhythm out of time. Even if there were slight constipation, such medication would produce only a bowel movement, which is not the same as curing constipation.

AT this very early stage of parenthood, parents normally do not expect a child to refrain from wetting itself. Such expectation they would regard as premature. Yet even at this tender age of the infant they wonder whether it isn't time that the youngster learned to do his "duty in the pot" instead of in his diapers. The idea may have been strengthened by what the parents may have read in some pamphlet or book on the training of children. This is a subject on which much has been written; some of it, written by those who really understand children, shows intelligent and sensible thinking, while all too much of it is trashy in thought and harmful and injurious in application. We will quote from a well-known textbook on nursing which we place in the latter class although the book has some merit in other respects. It is unfortunate that such harmful methods are not only conscientiously carried out by well-meaning parents, but much worse, are sometimes also recommended to them by physicians. No physician who is trained in child mental hygiene or child guidance would make

such recommendations. To quote the book: "One of the nurse's most important duties is to train the infant in the habits of passing the stool and voiding urine at regular intervals and at a definite time. . . . Training cannot begin too early. If the training is begun early the habit of regularity in defecation may be formed by the end of the second or third month and regularity of voiding at the end of the first year. . . . A small chamber is placed between the nurse's knees and upon this the infant is held, its back being against the nurse's chest and its body firmly supported. At first there may be necessary some local irritation, like that produced by tickling the anus or introducing a small cone of oiled paper or a piece of soap, as a suggestion for which the baby is placed upon the chamber; but in a strikingly short time the position is all that is required. . . ."

Let us examine these statements. In the first place, the age of two or three months is much too early to begin bowel training on a pot. No child should be placed on a pot until it is able to sit up without support, which is at the age of six or seven months. But much worse is the irritation of the anus by tickling, with soap or glycerine suppositories, or enemas. These methods are as out of place in training for the anal function as a catheter introduced into the urethra is out of place in training for the urinary function. Such stimulation is from the outside, while the stimulus ought to come naturally from the inside by way of the delicate nerve endings in the mucous membrane of the rectum. Such external stimulation, particularly when resorted to continually and regularly, only serves to make the colon sluggish and lazy in its reaction to its own natural stimulation, because it depends on a stronger stimulation from the outside. Even when suppositories and enemas are given up and followed by laxatives the effect is the same. Such procedures frequently result in bringing about an early form of constipation. They cannot be too strongly condemned.

We may ask ourselves why such methods have been thought of and recommended and all too often practiced by otherwise intelligent parents. Parents are naturally interested in the development of their children and they feel that the sooner the child is clean the "more superior" it must be. They regard cleanliness as evidence of precocity, either mental or educational. But the wish that the parent has in relation to cleanliness does not explain the anxiety that the parent frequently has in regard

to the anal function. This anxiety factor is a most subtle and insidious one and it would be well to discuss it.

**T**HERE are many adults, who, if they do not have their daily evacuation at the scheduled time develop a hypochondriacal attitude towards constipation. The more they fret and worry about the condition the more tense and constipated do they become. There are, of course, various forms of constipation and physical complications do result from them, yet the amount of mental misery which the individual experiences is often altogether out of proportion to the actual amount of physical harm brought about by such a condition. Patients have told physicians that if they missed an evacuation at the usual time, they suffered from auto-intoxication, headaches, dizziness, and so on, and that their whole day was spoiled. Symptoms developing under these circumstances are often the result of a mental attitude toward constipation. Of course, only a thorough physical examination will determine whether there is some organic condition responsible for the constipation. On the other hand, such patients have an unusual sense of well-being when they have a copious evacuation. When such people become parents, they are likely to have the same anxiety about their children's bowel movements as they have about their own. If the child does not have a movement, the parents begin to fret and worry even though their observation tells them that the child appears perfectly healthy, playful, and otherwise happy. These parents will stress the anal excretory function in the child to the same degree that it is a complex in themselves.

How does this affect the child? When the child senses tension, anxiety and impatience on the part of the parent, it too will become tense and nervous and unable to relax, which is an essential preliminary to a bowel movement. Tension of the mental sort causes a contraction of the circular (sphincter) muscles around the rectum and anus and that condition will impede the passage of feces. Many cases of constipation are due to this. At the same time the seeds of obstinacy are being planted in the child, for with laxatives and enemas it is forced to do something which it does not do of its own accord. The child then learns how to worry and annoy the parent by withholding its bowel movements or refusing to go on the pot for the parent. Many of us have witnessed the battle that goes on between parent and child as the

parent attempts to force the child to sit down on the pot or toilet.

**T**HE mother who has handled her child intelligently and with balanced emotional feeling in the matter of feeding and bowel training, avoiding the mistakes mentioned above, will have much less of a problem in the matter of bladder training than the mother who has subjected her child to such harsh measures. In fact it need not be much of a problem at all.

Bladder training may be begun at the age of ten months or a year. The child is already

threats and punishment should never be resorted to.

In order to establish the dry habit at night, pick up the child a little before the time that you have discovered that he usually wets himself. This can be begun around the age of two. The writer does not believe that the child must be fully awakened for this. One should try not to disturb the child's sleep any more than is necessary to attain this end. Occasionally, the parent can let the child sleep through to see whether it remains dry. If not, the procedure outlined above can be continued for a few more



"The child's bowel and bladder training should be carried out in a quiet, matter-of-fact way and threats and punishments should never be resorted to."

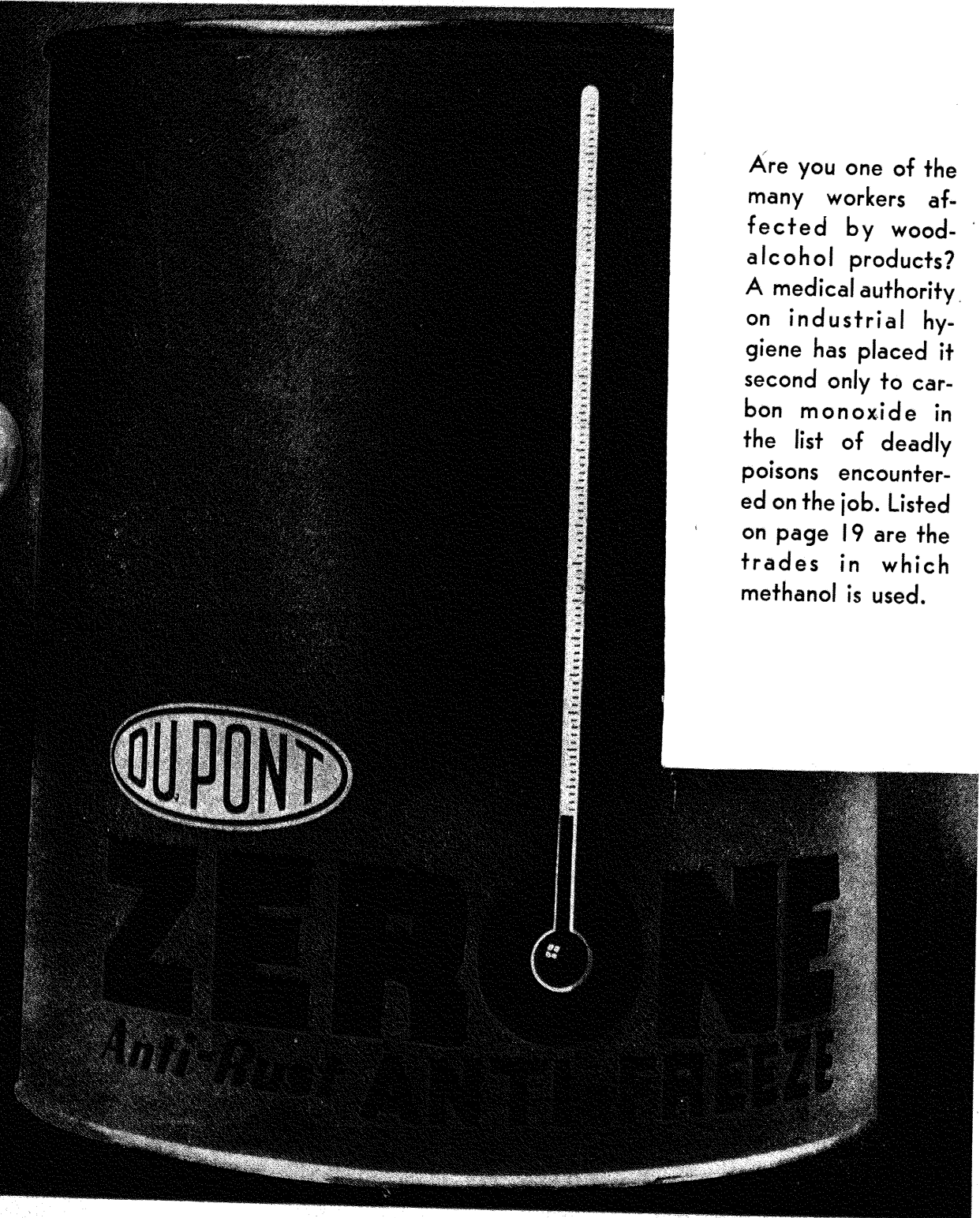
accustomed to the pot and it will show no obstinacy in sitting on it for urination. It also knows how to sit up. Immediately upon waking, before and after being outdoors, and before going to sleep are the best times for urination. Various psychological devices can be used. For example, the parent can utter some sound suggestive of urination. The same expression should be used each time so that it will become associated in the child's mind with the situation and thus eventually be used by himself to indicate that need. All of the training should be carried out in a quiet, matter-of-fact way, and

weeks. A healthy child should thus learn to control its bed-wetting between the ages of two and two and a half years.

In bowel and bladder training one thing must be emphasized—namely, that bowel and bladder training does not exist apart from general personality training. An emotionally stable child will give no marked difficulty in its bowel or urinary training. On the other hand, when the bowel and bladder functions present a marked problem (for the parent), then the child will have a personality problem as a whole. Such a child should receive medical guidance.

# METHANOL - A HAZARD IN SIXTY TRADES

By JOHN L. SPIVAK



Are you one of the many workers affected by wood-alcohol products? A medical authority on industrial hygiene has placed it second only to carbon monoxide in the list of deadly poisons encountered on the job. Listed on page 19 are the trades in which methanol is used.

**M**ORE than 2,000,000 workers in sixty American industries are daily endangering their health and their lives by working with a chemical product manufactured by the largest chemical companies in the United States. This product, methanol (wood alcohol), manufactured by the du Ponts under the trade name of *Zerone*, and by others under different names, has been denounced as a dangerous industrial hazard by the ablest medical authorities.

In putting this dangerous product on the market, the du Ponts, the Mellon controlled Carbon and Carbide Chemical Co., and the Morgan-Rockefeller controlled Commercial Solvents Corporation had the assistance of the United States Public Health Service during the Hoover administration. At the time the approval of the Public Health Service was sought and received for this hazardous product, Andrew Mellon, it will be remembered, was Secretary of the Treasury. The United States Public Health Service is under the jurisdiction of the Treasury Department.

Warnings of the dangers of using synthetic wood alcohol (methanol) in industry have been made by leading scientists the world over. The New York State Department of Labor, the Metropolitan Life Insurance Co., the American Medical Association, and specialists in industrial hygiene have held that it is dangerous. None of this, however, has served to remove the pall of silence that surrounds the deal made between the leaders of the chemical industry and the United States Public Health Service which is supposed to guard the health of the American people.

As far back as 1928, the du Ponts, seeking to manufacture *Zerone*, for use as an anti-freeze in automobile radiators, had their own scientists carry on experiments to determine the hazard to life and health of those who would work with and handle it. The du Pont scientists reported that methanol was capable of producing degeneration of the kidneys and liver, blindness, and death when its fumes were inhaled or when it came in contact with the skin.

Despite this report, the du Ponts sought to get the government's approval of the product, and, in cooperation with the Mellon and the Morgan-Rockefeller companies, gave the United States Bureau of Mines \$10,000 to make an investigation to determine whether or not methanol was an industrial hazard. It was agreed that the du Pont and Mellon companies were to see the report before it was published and that they were also to have the privilege of making "suggestions."

Because winter was coming on and the du Ponts were ready to put *Zerone* on the market they were anxious for the government to rush through a preliminary report which could be used to persuade garage men and gas station attendants that it was not dangerous to handle methanol. As Mr. J. G. Davidson, manager of the Chemical Sales Division of Mellon's Carbon and Carbide Corporation, expressed it in a letter to the United States Department of Commerce on March 14, 1930:

"As you know it (the industrial use of methanol) is becoming a very important matter. Methanol has decreased in price to such a point that considerable saving would ensue if it were used in place of ethyl (grain) alcohol. Before this can be done it is necessary to ascertain the minimum concentration of methanol in air that is apt to cause difficulty from the standpoint of inducing paralysis of the optic nerve.

"The problem, you will realize, is one that has an interest far beyond our own cooperation, for very determined efforts are being made to introduce methanol industrially by at least three very large corporations. We are interested in being able to tell our prospective customers that no difficulty will ensue providing that ventilation is installed so that the maximum concentration of methanol is not more than a given quantity."

In compliance with the wishes of the chemical companies, a Bureau of Mines chemist was put to work, under the direction of the United States Public Health Service, to prepare the report. In order to rush matters to a conclusion as quickly as possible, Dr. H. Wade Rinehart of the du Pont Ammonia Corporation, on September 8, 1930, wrote the following to Dr. R. R. Sayres of the Public Health Service:



# POISON



**CONTAINS OVER 90% METHANOL  
CANNOT BE MADE NON-POISONOUS**

ACC 048 AX

## STATE STATUTORY WARNING

METHANOL (CALCULATED 200 PROOF) IS A VIOLENT POISON. IT IS UNLAWFUL TO USE THIS FLUID IN ANY ARTICLE OF FOOD, BEVERAGE OR MEDICINAL OR TOILET PREPARATION FOR HUMAN USE. IF TAKEN INTERNALLY WILL INDUCE BLINDNESS AND GENERAL PHYSICAL DECAY ULTIMATELY RESULTING IN DEATH. IT SHOULD NOT BE APPLIED EXTERNALLY. AVOID PROLONGED INHALATION.

**ANTIDOTE — 1. GIVE EMETIC OF MUSTARD. 2. INDUCE FREE SWEATING. ADMINISTER LARGE QUANTITIES OF ALKALIZED WATER (SODIUM BICARBONATE).**

A warning on a can of methanol tells the worker of its danger, but nevertheless the worker must handle it. Grain alcohol will serve all the purposes of methanol, but would cost the employer slightly more.

"In connection with the work on the toxicity of methanol the attached copy of an editorial from the August 30 issue of the *Journal of the American Medical Association* has come to our attention and we are attaching a copy of this editorial in the event that you have not already seen it. This is, of course, very damaging to our case and we would like to have your opinion as to whether it would be advisable or possible to do anything about it at this time.

"I understand from Mr. Reid that a meeting of the committee would probably be called the latter part of September. Needless to say we are very anxious to have as early as possible anything in the way of a preliminary report which can be used in support of the use of methanol in automobile radiators."

**T**HE experiments were rushed through as quickly as possible because the du Ponts were in a hurry to get their anti-freeze mixture on the market for their winter trade. On November 17, 1930, Dr. Sayres forwarded the desired "preliminary" report to Dr. Rinehart. "I shall appreciate it if you will review this, sending me such suggestions or comments as you desire . . ." said the government official to the official of the company whose product was being tested.

The du Ponts were not shy about expressing their desires. Two days later, Rinehart, on du

Pont Ammonia Corporation stationery, wrote to Dr. Sayres:

"We certainly feel that this is a splendid report and that you are to be complimented on your manner of presenting the subject. On the whole we subscribe heartily to the report as it now stands but there are, as you might guess, a few points where slight changes or deletions would be desirable from our point of view.

"It would seem to us that the first two complete sentences on page 4 'The products which will be dispensed . . . equivalent to that of one gallon of anti-freeze ethyl alcohol' are not necessary as far as the report as a whole goes and it would be helpful to us if this were omitted. The fact of the matter is that the 76.5 per cent solution may not be continued indefinitely.

"We would also suggest that if it is in accord with your views of the report the first paragraph on page 5 could be omitted. We are a little fearful that this paragraph might be wilfully misconstrued by some of our competitors. The most important sentence of this paragraph reading 'there is no procedure or treatment whereby a layman or chemist can make methanol non-poisonous or even reduce its toxicity' can very easily be included in the following paragraph as the closing sentence, if you feel it is desirable to have that sentence appear in the report. . . ."

Dr. Rinehart feared that the sentence in the report stating that the investigation was be-

ing continued "might be misconstrued to indicate that the report is being made before sufficient data have been accumulated to show that methanol can be used in automobile radiators without question of health hazard." Strange, indeed, since Rinehart himself had asked for "anything in the way of a preliminary report"! However, since Rinehart did fear such a "misconstruction" he suggested a different wording and proposed that this part of the report close with the sentence: "Also, while there are no apparent reasons to believe danger to health, etc."

In addition to these changes Rinehart wanted a number of others. "Our reason," he says, referring to one of these desired changes, "is that this reversal of the sentence places the favorable portion first and permits of no misrepresentation. . . ."

The closing paragraphs of Rinehart's letter are quoted in full to show the extent of its hypocrisy:

"We would like to suggest that your recommendations Nos. 5 and 6 be entirely omitted from this preliminary report on the basis that the present report is preliminary and that a final report will no doubt be written which would most logically contain your recommendations on the matters of handling and exposure. You will appreciate that a great deal of our material has already been placed in the hands of the dealer, some of it uncolored because of the wide divergence of opinion regarding the need for, or advisability of, coloring. It would be difficult to say the least, not only for ourselves, but for some of our methanol competitors, to color material already in the hands of the dealers and since some dealers might have cleared material, a report advocating color, at this time, might embarrass them or lead them to misrepresent the material which, of course, we want to avoid.

"While we have been very free in our criticisms and suggestions above, we want to repeat again that we feel you have done a fine piece of work on this subject and we are certainly much gratified by the report. We can only hope that the revised report will have an immediate release and that we can take it promptly to our distributors, jobbers and dealers in our first real

**The Metropolitan Life Insurance Company has prepared a list of sixty industries in the United States which use the dangerous product, methanol. These industries are:**

ALDEHYDE PUMPMEN  
ANILINE-DYE MAKERS  
ANTI-FREEZE MAKERS  
ART-GLASS WORKERS  
ARTIFICIAL-FLOWER MAKERS  
AUTOMOBILE PAINTERS  
BOOKBINDERS  
BRONZERS  
BRUSH MAKERS  
CALICO PRINTERS  
CEMENTERS (Rubber Shoes)  
DIMETHYL-SULPHATE MAKERS  
DRIERS (Felt Hats)  
DRY CLEANERS  
DYE MAKERS  
EXPLOSIVE WORKERS  
FEATHER WORKERS  
FELT HAT MAKERS  
FILAMENT MAKERS (Incandescent Lamps)  
FITTERS (Shoes)  
FURNITURE POLISHERS  
GILDERS  
HARDENERS (Felt Hats)  
INCANDESCENT LAMP MAKERS  
INK MAKERS  
JAPAN MAKERS  
JAPANNERS  
LACQUERERS  
LACQUER MAKERS  
LASTERS (Shoes)

LINOLEUM MAKERS  
METHYL-ALCOHOL WORKERS  
METHYL-COMPOUND MAKERS  
MILLINERY WORKERS  
MOTTLERS (Leather)  
PAINTERS  
PAINT MAKERS  
PATENT-LEATHER MAKERS  
PERFUME MAKERS  
PHOTO-ENGRAVERS  
PHOTOGRAPHERS  
POLISHERS (Wood)  
POLISH MAKERS  
PYROXYLIN-PLASTICS WORKERS  
RUBBER WORKERS  
SHELLACKERS  
SHELLAC MAKERS  
SHOE FACTORY OPERATIVES  
SHOE FINISHERS  
SOAP MAKERS  
STIFFENERS (Felt Hats)  
STITCHERS (Shoes)  
TYPE CLEANERS  
UPHOLSTERERS  
VARNISHERS  
VARNISH MAKERS  
VULCANIZERS  
WOOD-ALCOHOL DISTILLERS  
WOODWORKERS

effort to protect ourselves against propaganda which has been issued against anti-freeze methanol."

The revised report was issued as requested, and du Pont and the others went ahead putting methanol on the market. Later, a complete report was prepared, but this was apparently unfavorable to the du Ponts' case, for it was never published, and to this day officials of the Public Health Service profess a profound ignorance concerning it. In 1931, immediately following the issuance of the revised report, over 7,000,000 gallons, valued at \$1,500,000, were manufactured. By 1935 production had increased to more than 23,000,000 gallons. The \$10,000 contributed by the chemical industrialists for the investigation were well invested.

**WHAT** of the "propaganda" against the use of methanol which this \$10,000 was spent to allay? From what sources did this "propaganda" issue? In the first place, at about the time that the Bureau of Mines investigation was under way state and local departments of health in a number of places throughout the country were receiving reports of methanol poisoning and issuing warnings against it. Furthermore, reputable medical journals, shocked by the callous attempts of industrialists to deny or minimize the effects of a dangerous poison, were publishing editorials condemning the use of the product. A list of the symptoms of methanol poisoning published by the United States Department of Labor, *three years after the Bureau of Mines preliminary report was issued*, indicates that from the point of view of the workers who were going to handle methanol, this "propaganda" was particularly important. These symptoms include headache, nausea and vomiting, vertigo, irritation of mucous membranes, severe colic, convulsions, paralysis, chilliness and cold sweats, cyanosis, loss of reflexes and sensation, irregular and intermittent heart action, rapid breathing followed by retardation, rapid and marked drop in temperature, affections of sight, including amblyopia, optic neuritis, conjunctivitis, mydriasis, nystagmus, visual hallucinations, and blindness. Cases of workers who went blind or died as a result of using wood alcohol (methanol) in their daily work have been collected by Pro-

fessor William D. MacNally, of the Department of Medicine of Rush Medical College in Chicago. Professor McNally, considered by scientists one of the country's leading authorities on industrial hygiene, stated at the conclusion of his investigation:

"Wood alcohol can be absorbed through the skin or through the lungs, and gain entrance into the blood stream and cause the same train of symptoms as is caused by taking the alcohol internally as a beverage. . . . With the one exception of carbon monoxide, wood alcohol is the most deadly poison used in our daily work."

So much for the testimony of a nationally known medical scientist against the testimony of Dr. R. R. Sayres and one layman who conducted an investigation paid for by the du Ponts and other interests making enormous profits by selling methanol as *Zerone* and under other trade names.

The National Safety Council has published a warning to employers of what methanol means to workers in industry. It states that anyone coming in contact with methanol should immediately wash the skin with plenty of fresh clean water. If the fumes are inhaled, a physician should be called immediately. If the worker is in a room where the ventilation is faulty, he must wear a mask, and if he gets any of the dangerous product on his clothes he should change into dry garments at once. These extraordinary precautions which the National Safety Council tells employers they must take are sufficient evidence of the danger of the product.

It is true that all the dangers involved in the use of synthetic wood alcohol could be avoided if ethyl (grain) alcohol were used instead. But grain alcohol costs more than wood alcohol, and danger to workers means nothing to the du Ponts when dollars are concerned.

The United States Public Health Service, after rushing through a preliminary report on methanol in order that the du Ponts might sell it as an anti-freeze, has had six years to publish the text of the *complete* report. As yet this report has not appeared. Nor has the Public Health Service shown any intention of starting an impartial investigation of the use of methanol in industry—an investigation the report of which would not first be submitted to the du Ponts for approval. The 2,000,000 workers who come in daily contact with methanol are waiting for such an investigation.

# Pink Toothbrush

Four out of five do not have pyorrhea, but many people do have tender, bleeding gums. A dentist tells what conditions this symptom may indicate and what should be done.

**N**ORMAL, healthy gums do not bleed or pain. They may be thoroughly and vigorously massaged with toothbrush bristles, and yet not bleed or cause any discomfort. A pleasant tingling sensation is all that should be felt. In the healthy state the gums are pink, not red, and the gum areas between the teeth are well-defined and occupy all the space between the teeth. Any deviations from this general picture are abnormal. The reasons for unhealthy, bleeding gums range from common causes such as lack of exercise and ill-fitting dental fillings to serious body disturbances such as leukemia, a rare disease of the blood.

One of the chief causes of unhealthy gums in civilized man is the lack of exercise due to well-cooked foods in the modern diet. The primitive man who tore at his food with his teeth did not have trouble with his gums. Today, however, cooking breaks down the tissues of both our meats and vegetables before they are even brought to the table. Consequently, the teeth and gums are spared a good deal of work for which they were originally intended, and the gums, lacking exercise, tend to become soft and spongy. In this condition they are particularly susceptible to irritation from a number of causes.

Lack of exercise for the gums may be partially remedied by eating hard foods which require much chewing. Stale bread, fibrous meats, nuts, apples, and raw vegetables are especially recommended, but the exercise provided by these foods is not of itself enough. Regular massage with a toothbrush is also necessary.

If fillings or gold crowns are incorrectly fitted they may irritate the gums so that they become red, "puffed up," and bleed easily.

A very common cause of bleeding gums is failure to clean the teeth. When teeth are not brushed and the gums are not stimulated by massage with the toothbrush, the food collects on the teeth. This daily accumulation of food aids in the formation of tartar, which also irritates the gums. Usually little or no pain is felt in these conditions.

When there is a slight space between two adjoining teeth, or when they are not in good alignment, even though in contact, there is a tendency for food, and especially strands of meat, to become packed between the teeth. This will also injure the gum tissue, and may result in unusual tenderness and bleeding. Other possible irritants of the gums are dislodged toothbrush bristles which are forced into the gums, excessive smoking, careless use of toothpicks fragments of which are broken off and left between the teeth, and improperly fitted dental appliances.

There is generally an accumulation of tartar on the crowns of the teeth, accompanying any of these irritants. If the patient continues to neglect his mouth and the causes responsible for the irritation are not removed, then tartar begins to collect on the roots of the teeth, and the gum tissue is further damaged. Eventually, the bone beneath the gum becomes affected and is slowly destroyed. The gum then loses its attachment to the root part of the tooth, leaving a space between the gum and the tooth. This space is known as a "pocket," and acts as a reservoir for pus that is secreted from the infected gum.

This destruction of bone, with consequent loosening of the teeth and formation of pus, is the condition known as pyorrhea. However, this form of pyorrhea is a relatively mild one and readily responds to treatment. Such treat-

ment consists of the removal of the tartar from both the crown and root portions of the teeth, stimulation of the gums by massage with the toothbrush, and thorough rinsing of the mouth to insure the removal of all food particles that are loosened by the toothbrush. (The technique of using the toothbrush is fully described in the June, 1935, issue of HEALTH AND HYGIENE.)

**T**HERE is, however, another and more serious form of pyorrhea which is brought about by placing undue strain on the teeth. Such practices as the habitual use of the teeth in biting thread, biting hard on the stem of a pipe, and gnashing or striking the teeth together with more than usual force may induce this form of pyorrhea. In such cases the bone is destroyed and the teeth become loose long before the gums begin to show any sign of bleeding. Usually no pain is felt. This form of pyorrhea responds less rapidly to treatment once it is established, because the "pockets" are much deeper and therefore more difficult to get rid of. A thorough mouth examination, including X-ray, if resorted to in the early stages of such cases will disclose the signs of the disease and make it possible to effect a cure by removal of the causes responsible for the condition. If everyone could afford periodic mouth examinations, most cases of pyorrhea could easily be prevented.

The treatment of the complex type of pyorrhea consists essentially of removing the cause of the strain on the teeth. Thus, people who bite thread while sewing must learn to use scissors instead. If a man cannot refrain from biting down hard on his pipestem, he must get along without his pipe. If the teeth do not come together smoothly and evenly, it is necessary to grind them down with dental stones until they meet in the proper manner. Frequently, after an extraction, the remaining teeth shift their position somewhat, causing an abnormal relationship between them and subjecting them to harmful strain. When teeth are extracted, a bridge should be made promptly in order that the remaining teeth may preserve their normal relationship to each other. Removal of tartar and gum massage are also a part of the treatment for this type of pyorrhea.

Neither form of pyorrhea can be prevented or cured by the use of *Forhan's*. No toothpaste, powder, or mouthwash, among the many that are advertised for use in bleeding gums or

pyorrhea can be of any use as long as the causes of unhealthy gums are present. And after the causes have been removed there is likewise no need to use proprietary products, because nature's healing power and the massage of the gums with a toothbrush will take care of the rest. Do not believe the claims of any of the dentrifice manufacturers who say that their products will cure or prevent "pink toothbrush."

Another cause of bleeding gums is the disease known as trench mouth, or Vincent's Infection, due to a bacteriological invasion of the gum tissue. In its mild form, the only manifestation of this disease may be a slight bleeding of the gums, unaccompanied by pain. In its acute stages the affliction is a serious one which may be characterized by profuse hemorrhage and extreme discomfort. The patient may run a high fever and undergo other complications. Trench mouth is a contagious disease and may be transmitted from one person to another by kissing or by use of the same utensils. This is not the case with pyorrhea, which cannot be transmitted.

**B**LEEDING gums are not always caused by something being wrong within the mouth itself. They may also be the result of a number of body disturbances. Among these are the relatively rare blood diseases, leukemia and purpura, and scurvy, a disease caused by a lack of fresh food. Scurvy causes the gums to become reddish blue, swollen and painful, and to bleed easily. Pregnancy may be accompanied by bleeding gums, especially if the woman is anemic. Treatment of the anemia and proper mouth hygiene will cure the condition.

Workers who handle lead, mercury, phosphorus, and arsenic are very susceptible to bleeding gums. These poisons injure the blood vessels, causing them to bleed upon contact with food, or even as a result of the pressure exerted upon them by the tongue and lips.

From what has been said it is evident that bleeding gums may be a symptom of a number of diseases. Therefore, the condition should not be neglected. When treated early the bleeding can be checked and corrected. Postponement of treatment is unwise. If your gums bleed, see a dentist, and if the condition is due to other factors than those in the mouth, he will refer you to a physician.

*A forthcoming issue will contain an article on dentifrices.*

# Cosmetic Problems

## Hand and Face Lotions

For the many readers who have been asking questions regarding the care of the skin and hair, HEALTH and HYGIENE'S skin specialist will discuss such problems every month. All questions must be signed and accompanied by a self-addressed, stamped envelope.

**T**HERE is no question that some creams and lotions can be of use. A good hand lotion to prevent chapping, or a good cream to soften a dry skin, can be of great service. However, the claims made for most creams and lotions are unadulterated hokum and the products themselves useless, if not actually dangerous.

Housewives and others who use a good deal of soap and water frequently suffer with chapped hands. Many people's hands become chapped as soon as cold weather sets in. The dryness, scaling, and cracking of the skin causes much discomfort. For such people a hand lotion which keeps the skin soft and smooth and which is inexpensive can be of great aid. The following lotion is recommended:

Glycerin .....	64 c.c.
Alcohol .....	24 c.c.
Perfume (white lilac) .....	1 c.c.
Water .....	8 c.c.
Mix thoroughly with <i>Siam benzoin</i>	3 gms.

It is suggested that the preparation be allowed to age for at least a week before use. The lotion should be applied after washing and drying the hands, and *only two or three drops* at a time should be used. Use of larger amounts will make the hands sticky. The mixture should be compounded by a druggist, and should cost between twenty-five and fifty cents, depending on the druggist.

**T**HE lotion suggested is an example of a useful and comparatively inexpensive product. There is, however, a staggeringly long list of formulas for creams and lotions, the claims for which are positively funny. There is ac-

tually a cream advertised which is supposed to make women blush and appear shy and modest. Pat a little blush cream on your cheeks and miraculously you will blush like an innocent school girl. This cream is made the same way that cold cream is, but with the addition of a chemical called alloxan (mesoxalylurea). If too much alloxan is added, your face will look purple instead of a light red.

When Anna Held was in her heyday, her publicity writers let it be rumored that she kept her skin beautiful by bathing in cows' milk. Now one company's copy-writers have gone a step farther and attached the name *Virginal Milk* to an ordinary benzoin cream.

The claims made for honey creams have also interested us. We see no particular use for honey in face creams unless some people are interested in attracting flies. These creams may contain one per cent of honey but are frequently sold without this ingredient. It is worthwhile noting that *Hind's Honey and Almond Cream* was found to contain no honey.

Another cream that attracts customers because of its name is peroxide cream. This cream is of no particular use, though it contains peroxide at the time it is manufactured. It is doubtful, however, if the peroxide exists as such by the time it is used.

Some of these facts may appear ludicrous but one should remember that there is also a more serious aspect to this subject. Thousands of women who work hard for what little money they get are cajoled into buying creams, lotions, and cosmetics which can hardly fulfill the ridiculous promises made for them. When historians come to write the record of our times they will find that robbery was committed in other ways than with a gun.

# The Chronic Drunkard

**Alcohol addiction is the result of emotional conflicts generally due to social or economic maladjustments. Treatment consists of making the patient face the reality which liquor helps him escape.**

**I**N almost every civilized country today great pressure is exerted not only to make people drink, but to make them drink to excess. At one time this pressure was exerted almost exclusively on men, but women are rapidly being given an opportunity for equality in this respect. Many people admire the ability to consume large quantities of alcohol, and the man who can drink his friends under the table gets the homage accorded a hero. Tremendous sums of money are spent every year to advertise alcoholic beverages, and in moving pictures drinking is subtly, but not always so subtly, extolled as one of the major social virtues. *The Thin Man*, a recent movie, is a good example of this tendency to make drinking as glamorous as possible.

In the article *Alcohol Myths Distilled*, in the August, 1936, issue of HEALTH AND HYGIENE, it was pointed out that the chief physiological action of alcohol was its depressing effect on the brain, and that the more highly developed functions of the brain were the first to be affected. Since these are the functions of restraint and self-criticism, the effect on the drinker is a gratifying one. He is released from a feeling of responsibility for his actions, from the tyranny of conscience, and from any concern for the opinions of others. The ultimate goal towards which the alcohol addict is headed is oblivion, the complete submergence of his personality and his personal problems. The drinker's worries pass out long before he does.

But the question of alcoholism is not merely a psychological one; economic and social factors are just as important in producing drunkards. Economic factors create the harsh reality from which the chronic drinker tries to

escape, and society looks on drinking with complacent tolerance as long as the drinker's excesses do not become too flagrant. Thus, society is tolerant of alcohol, but intolerant of alcoholism. Society condemns the drunkard harshly and without compromise, while it is blandly indifferent to the part it has played in making him a drunkard.

The alcohol addict, as well as most other people, believes that the habit of drinking can be broken at any time with the exercise of a little will-power. The formula is usually something like this: "If I really want to stop drinking I can." As it actually works out, the addict is constantly making up his mind to stop drinking some time in the near future. He is always taking his last drink, or confidently announcing that after tomorrow he is never going to touch another drop. Promises are not kept, however, and even a pledge supported by religious authority has little chance of helping the drinker. Defeats and disappointments of this nature, moreover, only add to the difficulties of ultimate cure. Habits are difficult to break, as the average smoker will testify, and habits which are as useful as alcoholism in destroying life's unpleasant realities and which are aided in their early development by social encouragement are almost impossible to break.

The drunkard is a supreme example of surrender without compromise to the so-called "pleasure principle" in life. This is the principle which guides the behavior of children. In the process of growing to maturity the individual learns to modify his behavior in accordance with the demands of what is known as the "reality principle." The names given to these "principles" explain their meaning. One serves

the interests of the instincts and wishes, the other encourages the postponement of satisfactions for the sake of ultimate personal and social benefits. The drunkard, like the child, cannot endure the postponement of his gratifications, and since all mental illness implies a certain degree of surrender of the reality principle, one is justified in regarding alcoholism as a form of mental illness of which drinking is the most striking and obvious symptom.

**A**LCOHOLISM becomes a problem to the individual and a source of concern to his family and friends when it begins to disrupt his human relationships and to lessen his efficiency and productivity. Ask a chronic drunkard's wife why he drinks and she will tell you that he has no will-power, that he has been out of work, that he has been keeping bad company, and so on. These are all possible causes, but as we shall point out later they merely scratch the surface of the problem. However, regardless of the reasons a woman may give for her husband's drunkenness, the husband will probably give the same ones because he has heard them so many times. He has also learned that he is a thorough good-for-nothing, that he has no sense of responsibility, that he ought to be ashamed of himself, and that, in general, he is a total loss as a man, a husband, a father, and a member of society. If, in the course of time, he begins to beat his wife—and he usually shows admirable self-restraint in postponing this method of retaliation—nobody is surprised, and the judge who gives him thirty days will experience a warm glow of satisfaction in thinking of the good he has done the man.

In general, threats and punishments are the usual methods of treating the alcohol addict. Besides being perfectly useless from a practical point of view, such methods are absurd from a purely medical standpoint. In *Erewhon*, Samuel Butler envisages a society where illness is treated by punishment in the form of a jail sentence. In our society we would readily recognize the absurdity of sentencing a man to prison because he had the misfortune to contract pneumonia, and yet we are doing exactly this sort of thing when we sentence the alcohol addict, who is just as much a victim of illness, to a penal institution. This absurdity has unfortunately had the effect of preventing the development of any adequate provision for institutional care of the alcohol addicts who hap-

pen to be poor. In New York State, for example, it is illegal to commit an addict to a state hospital unless he is suffering from definite alcoholic insanity. However, patients who are not insane may be sent to a private hospital by means of a procedure known as "inebriate commitment." In other words, if you are a wealthy alcohol addict your friends can see to it that you get adequate psychiatric treatment; if you are poor you are simply out of luck.

Alcoholism differs from morphinism and other drug addictions in that withdrawal symptoms are not pronounced. In other words, there is no excessive craving or physical distress when alcohol is taken away from the chronic drinker. It was thought at one time that the withdrawal of alcohol might cause delirium tremens in a chronic drinker, but this is no longer the prevailing opinion among specialists in this field. There has been a tendency to classify separately the so-called "chronic alcoholic" and the spree drinker or dipsomaniac. Actually, most spree drinkers drink more or less regularly, a period of excess following one in which relatively little or nothing is consumed.

**W**HAT are the specific factors responsible for this very widespread ailment which in France is grouped with tuberculosis and syphilis as one of the modern "plagues"? Since it is a commonplace that not every drinker is an "alcoholic," one is impelled to look to the individual for the answer to this question.

Of one thing we may be certain—alcoholism is not inherited. An alcoholic father is not a biological handicap, but he is very definitely a psychological handicap. A tendency to use alcohol as a means of postponing the solution of emotional conflict may be transmitted from father to son, not through any hereditary mechanism, but because the son uses his father as a pattern in forming his own experiences. Even this transmission, however, cannot be regarded as a specific factor in the cause of drunkenness. Often enough the children of alcoholic parents are confirmed teetotalers who, if they succumb to emotional conflict, will deal with it in some other way, as, for example, by developing some other form of mental illness.

The term "alcoholism" is really misleading. It tends to make us think of the disease as an entity. It is unfortunate that the illness has been named after its chief symptom—the excessive use of alcohol. We would have a com-

parable situation if tuberculosis were called "coughism" because the patient coughs a great deal. This is important, because in alcoholism the use of alcohol is usually accidental in the sense that the individual need have no special craving for liquor, but merely uses it as a means to an end. The accidental factors which prepare the way for alcoholism vary greatly, and depend on the family and social situation of the individual. The alcohol addict does not drink because his particular type of personality makes him turn to drink. The associated personality traits are the result rather than the cause of the addiction, and are due not so much to the action of the alcohol as to the attitude society takes towards the chronic drinker. The same thing can be said of drug addiction. The traits are usually increasing irresponsibility and untrustworthiness in business and family relations, at first only when under the influence of the liquor or drug, and, later, at all times. Since society disapproves more strongly of drug addiction than of alcoholism, one would expect the drug addict to show the more pronounced development of these personality traits, and this is actually the case.

The alcohol addict may, therefore, be suffering from any of a number of personality dislocations and emotional upheavals, or he may be exhibiting the symptoms of a serious mental illness which will later lead to his commitment to a mental hospital. In drinking, he is trying to escape the pressure from within, and the drinking in no way indicates the nature of his conflict. In treating alcoholism the important problem, therefore, is not to determine why the patient happened to turn to alcohol for relief, but what the distresses and frustrations are that made it necessary for him to seek relief at all. The object of the treatment is to help the patient face the problems which he has been evading by the use of alcohol.

The treatment may be carried on in the psychiatrist's office or in an institution. The latter course is much to be preferred since it is practically impossible to keep the patient away from liquor unless he is confined in an institution. However, simple confinement is not enough; it must be accompanied by a program of psychotherapy. Furthermore, alcoholism is not cured in a day or a week, but may require treatment over a period of many months. Even under the best possible conditions, less than

fifty per cent of the cases treated are cured.

From what has been said, it should be obvious that there is no drug or medicine that can cure chronic alcoholism. It is true that drugs may be used during the treatment as a temporary aid in controlling a symptom such as sleeplessness, which may be present, but drugs cannot solve the conflicts which are basically responsible for alcoholism. Many thousands of dollars are wasted yearly by the relatives of alcohol addicts on drops which they are told they should put into the patient's coffee. Such drops are advertised as working wonderful cures, but actually they have no effect whatsoever. The manufacturers of such products are exploiting the misery suffered by thousands of unfortunate families.

**WHAT** can be done to prevent the suffering caused by alcoholism? Prohibition was tried and proved itself a failure. Temperance campaigns, with their counsel of moderation, are in themselves equally futile. The problem of chronic alcoholism is a part of the basic problem of mental hygiene, of the prevention of nervous disorders. Where human suffering is great, where hope for the future is small, drunkenness must be all too common. Persons with weak personalities seek an easy escape from their troubles. As the difficulties in the outer world increase, causing greater inner stress, more and more people turn to drink. Along with economic troubles must be included the important problem of whether life makes any sense or has any meaning. The idle son of a rich man may turn to drink in order to fill an empty existence. Cynical or discouraged members of the middle class, seeing no way out of their troubles, swell the ranks of drunkenness. Any effective attack on alcoholism must have its basis in the creation of a reasonable society, where people can have an opportunity for work and self-expression. In such a society even potentially weak persons would be able to get along without cracking under the strain. More important still, such a society would develop far fewer potentially weak persons. Such social psychiatry, however, is in itself an involved subject to which we will devote attention in a future article.

# Consumer Briefs

As a regular feature, this department will give information on foods, drugs and cosmetics which make false advertising claims, or are dangerous, defective or adulterated, or which sell for a price entirely disproportionate to the actual cost of the product. NJ (notice of judgment) plus the file number indicates that the information is derived from the Federal Food and Drug Administration; FTC, from the Federal Trade Commission; PR plus date, from a release of a federal agency.

## Helena Rubinstein Products

**T**HE Federal Trade Commission has charged *Helena Rubinstein, Inc.*, with misrepresenting the properties and effects of a wide variety of facial creams, cosmetics, and toilet article. The FTC does not believe—and neither do we—that any of these preparations "feed or nourish the skin or lips, restore youth to the skin, prevent crow's feet and wrinkles, and contain hormones or living sparks of life." To say that these claims are exaggerated and false is to state the case mildly. It has been repeatedly demonstrated that advertising claims for cosmetics, drugs, and so forth, bear no relation to the truth. The claims are determined solely by the imagination of the copy-writer, and not by qualified medical workers.

Some of the products concerning which the FTC charges the Rubinstein company with making false claims are: *Marienbad Slenderizing Bath Salts, Eye Lotion, Eyelash Grower and Darkener, Hormone Scalp Food, and Youthful Herb Mask.* (FTC, PR 2939).

\* \* \*

## Olive Oil

**O**N June 23, the *Cosmos Food Co.*, of Lynn, Mass., was found guilty of adulterating its olive oil with a much cheaper product, teaseed oil. Manufacturers and distributors have adulterated olive oils with a great variety of plant oil, thereby keeping a few steps ahead of the entirely inadequate forces which exercise some slight check on such frauds. It was necessary in the *Cosmos* case to devise new chemical tests for teaseed oil and demonstrate these tests to a jury before the case was won by the Food and Drug Administration.

## Tomato Products

**W**E have not come across the recipe recommending molds, but *Snyder & Company* apparently has, because over 400 cases of its *Cocktail Sauce* contained considerable quantities of it. The product was in an advanced stage of decomposition. If the food and drug inspectors had not seized this particular shipment, you might be eating the stuff. Of course, we have no idea of the amount of other moldy food the inspectors have been unable to examine. (NJ 25336)

The *Uddo-Taormina Company* was fined \$25 for distributing tomato pastes and tomato purees which were defective in quality and misbranded. On another occasion a fine of \$200 was imposed because the tomato puree was moldy and decomposed. (NJ 25281, 25325)

\* \* \*

## Eczema Lotion

**B**AUER AND BLACK'S *Eczema Lotion* was found to be dangerous, although the company advertised the product as being safe enough for new-born babies. A large quantity of this lotion was destroyed, and the company's false advertising attached. (NJ 24684)

\* \* \*

## Edrolax

**T**HE preoccupation of the public with real or fancied constipation is reflected in the number of fraudulent preparations offered for the relief of the condition. HEALTH AND HYGIENE has frequently reported specific instances of false advertising for such products. The FTC now places *Edrolax* in the same category—and the company manufacturing it shyly admits that deceit and lies have been freely used in its advertising. (FTC stipulation 01276)



# Our Doctors Advise:

The doctors of the People's Health Education League, including specialists in almost every field of medicine, will answer readers' questions on health and personal hygiene. No letter will receive attention unless it is signed and accompanied by an addressed, stamped envelope.

## Forcing the Child to Eat

Montreal, Can.

DEAR DOCTORS:

Although the doctor has recommended that I feed my year-old baby fish and meat, she refuses to take these foods. Is it necessary to force her to do so, or will her diet of fruits (fresh and stewed), cereals, eggs, vegetables, and milk make up for the lack of the fish and meat?—K. T.

*Answer*—A child one year of age or over may eat fish or meat. However, it is never advisable to force a child to eat any food. It is best to develop good feeding habits along sound medical lines. This means training for the mother as well as for the child. The mother must prepare food in a palatable manner, must offer new food very slowly, and must be guided by the response of the child. She must also give balanced portions so that no one food is given in excess at the expense of another food. It is always a temptation for a mother to give a child large quantities of food that the child likes. This is often true in the case of milk, cereals and desserts. A well-balanced diet should consist of milk, fruit juices, eggs, cereal, vegetables, fruits, butter, meat or fish, and desserts. One or more foods may be disliked by the child. In that case, one should substitute another equivalent food. Cereals, crackers, puddings, bread, spaghetti, macaroni and noodles are interchangeable. Vegetables and fruits may be substituted for one another. Eggs, meat, fish, jello, junket, and cheese (pot or cottage cheese) are protein foods and one may be used in place of another. Often a child may refuse a given food for a time and then later acquire a liking for it. In the meantime substitutes may be used.

\* \* \*  
**What Is Pus?**

Lancaster, Pa.

DEAR DOCTORS:

Will you please explain the nature of pus and how the body rids itself of it.—G. B.

*Answer*—The formation of pus involves the question of inflammation. Whenever parts of the body are injured in any way, inflammation follows. This may be brought about by mechanical means, such as blows or cuts, strong chemicals, burns, and infection with germs. Regardless of the original

cause, all inflammations have several common features, namely: pain, swelling, redness, and restricted motion of the affected part. Pus is a later stage of the process and is composed of serum (the watery part of the blood), dead body cells, and germs which caused the inflammation.

A frequently seen type of inflammation is the boil. Germs are present on all normal skins. When the resistance of the skin is lowered by friction, injury, scratches, or any other form of irritation, the germs are enabled to grow and produce poisons which start inflammation. The blood vessels enlarge, causing the redness, swelling and pain. A special type of cell from the blood accumulates in large numbers and further increases the swelling. These cells are white cells (phagocytes or scavenger cells) and their purpose is to kill and digest the germs, as well as to remove the dead tissue cells destroyed by the germ poisons. This mixture of white blood cells, dead tissue cells, serum and germs is pus.

After some time, a yellowish or whitish spot appears in the center of the boil, bursts, and pus is discharged. This is of creamy white or yellowish or greenish color. After all the pus and dead tissue is discharged, the boil heals.

Unfortunately, all pus is not produced in such a simple manner, nor is its cure as easy as that of the simple uncomplicated boil. If infection occurs in internal organs, such as the appendix or mastoid bone, the disease is much more serious and the treatment must be more radical, but is also directed toward removal of the pus. This must be done by operation.

## Whooping Cough Injections

Sheboygan, Wis.

DEAR DOCTORS:

Will injections prevent a child from getting whooping cough? My child was recently injected against whooping cough and I would like to know what the outcome will be.—K. N.

*Answer*—It is still too early to judge the merits and true value of whooping cough vaccine. The newer preparations, which are given in larger quantities than before, have been in use only a few years. More time is required and more children will have to receive these injections before a correct evaluation can be made.

However, on the basis of reports appearing in medical journals and of opinions expressed by physicians using the vaccine, we can give you a tentative statement. These indicate that the majority of the children receiving such injections are protected against the disease. This protection occurs three or four months after the inoculations. The duration of this protection is still undetermined. However, a significant minority of injected children contracted the illness. Many of the latter had the disease in a milder form. Whether the injections were responsible for the mild cases is difficult to say. We can, therefore, say that to date whooping cough vaccine in adequate doses was effective in more than half of the injected children.

At the present time, pending further and more complete studies, our advice would be against injecting children in good health who are four years or older. Whooping cough in these children, except for the cough and vomiting, runs an uneventful course as a rule. However, younger children and particularly those under two years, may acquire one of the serious complications of whooping cough. It is these young children who ought to be protected against contacts with cases of whooping cough. Where there is impossibility of isolating the young child from such children or where living conditions are crowded, whooping cough vaccine may be advisable. One has everything to gain and relatively little to lose by such a procedure.

Whooping cough occurs throughout the year but it is more frequent during the late spring, summer and early fall. Since it takes four months to obtain protection, the vaccine should preferably be taken during the fall or winter season. Comparatively large quantities must be given. It is for this reason that two injections into different sites are given three times, at weekly intervals. Reactions may occur, but ordinarily they are not marked. Ten dollars by a private physician is a reasonable charge. If one cannot afford this expense, one may obtain it at a much reduced charge at some local health departments.

## Lump in the Throat

Stockton, Cal.

DEAR DOCTORS:

There always seems to be a lump in the back of my throat. When I expectorate, a white mucus-like substance comes out. What do you think is the cause of this lump and what can I do to get rid of it?—O. L.

*Answer*—There are several common causes for the presence of a "lump in the throat." Perhaps the commonest cause is the presence of a sinusitis of varying degree, which is the source of a discharge of mucus which accumulates near the back of the throat and trickles downward where it causes the sensation of a lump.

Another very frequent cause is improper breathing. Where mouth-breathing exists or where there is a considerable inequality in the amount of air going through both nostrils, there is a tendency for drying of the mucous membrane at the back of the nose or beginning of the throat. This dry area has a sensation of "slight sore throat," or "lump," or even gives the sensation of constant irritation.

Another very common cause of a lump in the throat is worry or nervousness. An unusually apprehensive person will exaggerate the smallest amount of normal saliva because of the choking sensation due to nervousness and the acute awareness of even the slightest change in the throat. Any good nose and throat specialist can distinguish among these possibilities and a number of other conditions which have not been mentioned because they are less common.

\* \* \*  
**Syphilis**

Portsmouth, Va.

DEAR DOCTORS:

I would like to know the answers to the following questions:

1. Does the use of bismuth and salvarsan in the treatment of syphilis have any harmful after effects?

2. After a hard chancre is completely healed is it safe to have intercourse?

3. How does a person with syphilis know when he is cured?

4. How is syphilis contracted if there are no skin openings before or shortly after intercourse?

5. What hygienic rules should be followed in the course of this disease?—C. S.

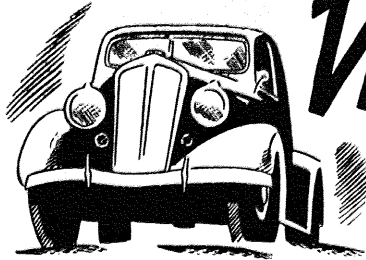
*Answer*—Any harmful effect after treatment with bismuth or salvarsan is likely to follow immediately after injection, or a few days later. There is very little danger of any harmful effects later in life.

It is not safe to have intercourse after the chancre has healed. During the secondary stage, which occurs about two to six weeks after the chancre, the syphilitic organisms are usually present in the semen.

Before being pronounced cured, a patient should have a negative Wasserman test (blood test) for at least two years after the termination of treatments. The tests should be made three or four times a year. It may be necessary in some cases to continue these tests once a year, even after the two year period is up.

While it is true that intact skin is a safe barrier against syphilitic organisms, infection may take place even when there is no visible open sore present. The germs may easily gain entrance through a microscopic abrasion in the skin or mucous membrane.

Hygienic measures will vary during the course of the disease. In the first stage, when the chancre



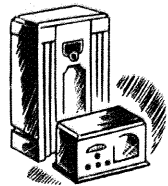
# Which Brands are BEST BUYS?

## 1937 AUTOMOBILES

Everyone who is considering the purchase of a new car during the coming year should first read the technical appraisal of the new models by Consumers Union automotive consultants appearing in the current issue of **Consumers Union Reports**. It will be followed, in an early issue, by ratings of the different makes as "Best Buys," "Also Acceptable" and "Not Acceptable."

## 1937 RADIOS

"Tone quality only fair. . . . Hum level high. . . . Dial calibration spotty. . . . Tuning eye insensitive and useless. . . . Obviously this receiver had never been adequately inspected. . . ." This excerpt—from the report on 1937 radios also in the current issue—refers to one of the ten models listed as "Not Acceptable". Over thirty models (including Philco, Emerson, RCA, Midwest, etc.) are rated—many as "Best Buys" or "Also Acceptable."



## CHILDREN'S SHOES

A report on children's shoes in this issue tells which brands wear best and gives medical experts' advice on fitting the child's feet, how much to allow for growth, etc. Twelve brands, including Thom McAn, Edwards, Pediforme, and Endicott Johnson, are rated—two of them as "Best Buys."

The current issue of the **Reports** also rates leading brands of imported and American wines and electric toasters; and gives you money-saving information on other products, too. The labor conditions under which many of the products are made are also described.



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**AUG.**—Oil burners and stoves, hosiery, white breads, laundry soaps.

**SEPT.**—Shoes, tires, whiskies, women's coats, rubbers.

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