

How's Your Circulation?

Fine, we hope. So is ours. But here's a plan to give them both a little stimulus—

You secure from 2 to 8 subscriptions to HEALTH and HYCIENE. We send you the book you choose from the lists to the right—FREE. We send the magazine to the people you name. The frank and fearless exposés and constructive articles save them from a lot of needless worry and useless doping. They thank you for introducing them to such an honest and dependable magazine.⁶ They send us more subscriptions from friends they want to save from worry and patent cure-alls. We send them books, FREE, too, if they qualify. Thus we reach more and more people with important health and hygiene information which they can't get anywhere else.

If this challenge doesn't send the blood rushing through your veins, and you rushing to your friends to sign them on the dotted line, you must be suffering from slight case of cold feet, and what you need is a subscription to Health and Hygiene yourself.

> • A remarkable bargain at the subscription rate of \$1 for 9 months or \$1.25 a year. (\$1.50 a year for foreign and Canadian subscriptions.)

USE THE COUPON for single subscriptions, or the Free Book Plan-NOW!

I enclose \$..... for which please send HEALTH and HYCIENE to the people listed on the attached sheet. (List names and addresses to which magazine is to be sent, as well as the length of time each subscription is to run, and attach list to this coupon.) Please send the FREE book to me at the address given below.

HEALTH and HYGIENE, 215 Fourth Ave., New York City

Name of Book	
My Name (PRINT)	
Address	
City	State

If you wish only one subscription for yourself, enclose \$1 or \$1.25 (depending on whether you want subscription for 9 months or 1 year) and fill in name and address.

FREE

with 2 subscriptions to HEALTH and HYGIENE

Any of the following books in National Health Series

> The Common Cold Venereal Diseases Diabetes Why the Teeth? What You Should Know About the Eyes

> > . (

FREE

with 5 subscriptions to HEALTH and HYGIENE

100,000,000 Guinea Pigs

By Arthur Kallet How the American public is dangerously exploited by the manufacturers of well-

exploited by the manufacturers of welladvertised health and food products.

Diet and Die By Carl Malmberg

For all stout people who want to reduce.

Poisons, Potions, and Profits

by Peter Morell

Radio advertising examined in the light of reason and scientific information. A billion dollar swindle exposed.

e de la de

FREE

with 8 subscriptions to HEALTH and HYGIENE

- A Marriage Manual
- By Drs. Abraham and Hannah Stone

A good book for the married or those contemplating marriage. Information about birth control, sexual relations, masturbation and similar subjects.

Modern Motherhood

By Dr. Claude E. Heaton An excellent book for prospective mothers.

Growing Up

By Karl de Schweinitz

An outstanding book on sex education for children from ten to thirteen.

TRICHINOSIS FROM PORK

AND HYGIENE

FEBRUARY, 1938

15 Cents

WHAT NOT TO DO FOR A COLD -And What To Do

Diet and Sex

Help for the Stutterer

a Psychiatric Approach to Speech Disorders

Have Sun Lamps Any Value?

The Popular Health Magazine Written by Doctors

Coming in the March Issue of Health and Hygiene

• Beware of "Drugless" Drugs The truth about so-called "natural" products such as Serutan, Hood-Lax, etc. This article is not merely an expose, but also an explanation of what constitutes a drug, how drugs act, what they can do, and what precautions must be taken with them.

• The Baby's Formula

How can you determine the best milk formula for your child? How much cod liver oil and orange juice should the infant have, and when should it be given? A pediatrician answers these questions which will be of interest to all mothers.

• Syphilis in Industry

Today the public is Wassermann-Test-conscious. Proposals have been made that all industrial employees should undergo compulsory Wassermann tests for syphilis. What is behind these proposals, and how may trade unions make sure that such tests are not used for discriminatory purposes?

• The Medical Societies and the Co-ops BY KINGSLEY ROBERTS, M.D.

The story of three blind mice and one not so blind. How three county medical societies are fighting to crush the cooperatives, and how one society, being more far-sighted, has given the cooperatives its approval.

• Freeing the Life Impulses BY BURRILL FRIEDMAN

Is your will to succeed hampered and kept in check by exaggerated "individualism"? An article that will help you to realize and make the most of your abilities.

And other interesting and helpful articles and features.

Don't Miss the MARCH ISSUE of

HEALTH and HYGIENE 15c at newsstands \$1 for 9 months

\$1.25 a year

Read

DIET AND DIE

B_V CARL MALMBERG

Editor of Health & Hygiene

Unanimously recommended

in the Medical Press

\$1 postpaid if ordered from

HEALTH and HYGIENE

. 5

CONSUMERS' SERVICE

LUXUR PHARMACY 220 East 170th St., Corner Sheridan Ave. JErome 7-1272

KRAMER-LERNER CHEMISTS Successors to Schumann Pharmacy Aldus Street Corner Hoe Avenue INtervale 9-0733-9095-9316

PAUL CROSBIE 25 Years' Experience Frequent Savings

135 William St., New York. Telephone: BEekman 4-5242

CARL BRODSKY-All kinds of insurance for organizations and individuals. 799 Broadway. ST. 9-5557

BROWNSVILLE PEOPLE'S BOOK SHOP-Sells Health and Hygiene, New Masses, Soviet Russia Today, Fight, New Theatre, etc. Circulating library. 365 Sutter Avenue, Brooklyn, N. Y.

TRACHTMAN'S I.W.O. DRUG STORE-4301 10th Avenue, Brooklyn. Windsor 7-8745. Phone and mail orders promptly delivered.

WE FILL MAIL ORDERS for medicine recommended by Health and Hygiene at reasonable prices. Dinnerstein Pharmacy, 658 Rockaway Ave.. Brooklyn, N. Y.

BORO PARK PEOPLE'S BOOK SHOP-Lates popular and labor books. Circulating Library, Sex, Health Books. 1309-44th Street Brooklyn. Windsor 3-9301

PROSPECT PEOPLE'S BOOKSHOP and up-to-date

Circulating Library moved to 920 Prospect Avenue, near subway station.

RESORTS

THE GOOD LIFE FOUNDATION has unique ocean front resorts where \$15 weekly is all-inclusive. Mile square Sea Island near Savannah and isolated key near Venice, Florida. For details write Box 107. Port Royal, S. C.

TO ALL SUBSCRIBERS

If you are planning to move, please notify us of your new address as early as possible in order that you will not miss a single issue. The postoffice does not forward magazines, and duplicate copies will not be sent out.

KATZ COTTAGE SANATORIUM LIBERTY, N. Y.

A sanatorium for the treatment of tuberculosis situated in the foothills of the Catskill Mountains, within easy reach of New York City by rail, bus, or auto. Fully equipped including fluoroscopy, x-ray, and pneumothorax where indicated.

Bernard Katz, Supt.Dr. Harry GolembeTel. Liberty 1235 or 28Medical Director

Contributing and Advisory Board

EDWARD K. BARSKY, M.D. Head of American Hospitals in Spain

NORMAN BETHUNE, M.D. Sacred Heart Hospital, Montreal Head of Spanish-Canadian Blood Transfusion Institute

PAUL DE KRUIF, Ph.D. Author of "Microbe Hunters," "Why Keep Them Alive?" etc.

W. HORSLEY GANTT, M.D. Associate in Psychiatry School of Medicine, Johns Hopkins University

Louis I. HARRIS, Dr. P.H., M.D. Former Commissioner of Health, New York City

ARTHUR KALLET Director, Consumers Union of the United States

JOHN A. KINGSBURY, LL.D. Former Commissioner of Public Charities, New York City

HENRY E. SIGERIST, M.D. William H. Welch Professor of the History of Medicine and Director of the Institute of Medical History, Johns Hopkins University

GEORGE T. STAFFORD, Ed. D. Professor of Physical Education University of Illinois

FRANCES STERN Chief of Food Clinic, Boston Dispensary, Boston, Mass.

HANNAH M. STONE, M.D. Medical Director, Birth Control Clinical Research Bureau, New York City

FRANK THOMAS WOODBURY, M.D. U.S. Army, Retired Associate Editor of *Clinical Medicine* and Surgery and Executive Secretary of the Medical Bureau to Aid Spanish Democracy

RACHELLE S. YARROS, M.D. Executive Secretary of the Illinois Social Hygiene League

Each member of the advisory board assumes responsibility only for his or her own signed articles.

HEALTH AND HYGIENE

In This Issue

FEBRUARY, 1938

VOLUME 7, NUMBER 2

Questions and Answers Readers' Medical Questions Answered	34
Have Sun Lamps Any Value? Home Use of Ultra-Violet Rays	35
First Aid for Winter Sportsmen	38
Childbirth Through the Ages, III	40
Ha! Ha! Ad Laughs of the Month	41
Health on the Job Notes for Trade Unions	42
Help for the Stutterer A Common Speech Defect; by I. P. Glauber, M.D.	43
The Proposed Baby Health Law	47
Trichinosis from Eating Pork	48
What Not to Do for a Cold	52
Diet and Sex Are Certain Foods Aphrodisiacs?	55
After the Sanatorium—What? The Discharged Tuberculous Patient	5 <i>7</i>
Health and Hygiene's Bookshelf Latest Popular Medical Books Reviewed	58
Who's Who on Our Advisory Board	61

Drawings by Chas. E. Colahan and Mischa Richter

CARL MALMBERG, Editor SADIE FRANKLIN, Business Manager



Magazine of the People's Health Education League HEALTH AND HYGIENE is published monthly by the H. & H. Publishing Co., Inc., 215 Fourth Avenue, New York, N. Y. Subscription price \$1.00 for 9 months or \$1.25 for 12 months; Canadian and foreign, \$1.50 for 12 months. Single copies, 15 cents. Copyright, 1937, by the H. & H. Publishing Co., Inc. Entered as secondclass matter March 27, 1935, at the Post Office at New York, under the Act of March 3, 1879. Text may not be reprinted without permission. HEALTH AND HYGIENE is a non-profit, cooperative organization and does not pay for articles. Subscribers are informed that no changes in address can be effected in less than three weeks. Please send old address along with the new.



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

Nujol and Saraka

Evansville, Indiana DEAR DOCTORS:

Will you kindly advise me which is the better product to take for constipation: *Saraka* or *Nujol*? I have had good results from both, but I would like to know which one to take since I have to take something.—F. B.

Answer—Many persons who think they need a laxative do not actually need one. We suggest that you read the article entitled *The Constipation Complex* in the January, 1938, issue of HEALTH AND HYGIENE.

However, if you feel that some form of laxative is needed, we would not advise you to use Saraka, as with this as well as other bulk-producing laxatives there is a danger of irritation and damage to the intestine. Nujol, on the other hand, is simply a trade name for ordinary mineral oil. You can buy a good medium or heavy mineral oil from your druggist that will be just as effective and cheaper than Nujol or similar proprietary products. Ask for mineral oil U.S.P.; this will ensure the quality of the product.

Heartburn

Pensacola, Florida

DEAR DOCTORS:

What are the causes and remedies for heartburn?—S. Z.

Answer—Heartburn is a symptom, not a disease. Its causes are many, some serious, others not so. First among the more serious causes is ulcer of the stomach or duodenum (the first section of the small intestine). Gall bladder disease is also frequently associated with heartburn.

Faulty eating habits often give rise to the distressing symptom of heartburn. Overeating, excess of sweet and rich foods, rapid eating, and eating too much fried food may be causative factors. People who are nervous, "high strung," or given to excessive worry often have heartburn associated with nausea, a feeling of fullness, and loss of appetite.

It is harmful and useless to seek relief by the use of baking soda and the various proprietary products of which this drug is the chief ingredient. To do so is to fail to seek, discover, and remove the cause of the heartburn, whatever this cause may be. And removal of the cause is the only reasonable method of treatment.

It is therefore necessary for the heartburn sufferer to have a complete physical examination by a competent physician. Often, x-rays of the stomach and intestines are necessary in order to make a diagnosis. Only after the cause has been found can the proper treatment be advised.

Beauty Masks

DEAR DOCTORS:

San Antonio, Texas

Can you tell me if the beauty masks made of clay are of any value in removing wrinkles or toning up the skin?—M.T.

Answer—There is no need for masks of any kind, regardless of whether they consist of clay,



mud, or oatmeal. Such preparations serve only one purpose, that of enrichening the manufacturer and seller. The only benefit to the user is derived from the vigorous washing and scrubbing that is necessary to remove the mask from the face. The same effect can be achieved by washing the face with soap and water and then applying hot and cold water alternately to the face, either by splashing it on or by the application of wet towels.

Replacing Missing Teeth Danbury, Connecticut

DEAR DOCTORS:

When I was twenty I lost the first lower left molar and a bridge was put in. At forty-three the bridge was removed and the second molar extracted. The dentist said I would have to wait three months before a new bridge could be made. Now the three months have elapsed, and I feel I get along very well without the bridge. Besides, there is a (Continued on page 61)

FEBRUARY, 1938

Does the body need artificial sunshine in winter? Which lamps are safest and best?

Have Sun Lamps Any Value?

CUNSHINE plays an important role in our Dlives, both directly and indirectly. The importance of sunshine has been stressed and exploited to such a degree that people in this country, at least, have unconsciously founded a religion of sun-worship. Today, bread, milk, cake, candy, face creams, and many other preparations are presented to the public not as foods or beauty preparations but as vehicles for "Sunshine Vitamin D." A visit to the beach in summer reveals hordes of sun devotees in ardent and solemn pursuit of the solar rays. As near 100 per cent of the human body as the law allows is exposed to the sun, and every precaution is taken to insure a thorough and even tanning of the skin.

This mania for exposure to the sun can be easily and cheaply satisfied in the summer, but what happens in the winter when such opportunity for systematic exposure is lacking? Advertisements tell us emphatically that sunshine or its commercial substitute, ultra-violet light, is necessary twelve months out of the year. It is stated that during the winter months the ordinary person who cannot afford a trip to Miami or Pasadena is likely to find his body

"A sun-worshipper, eh? Well, who ever heard of a sun-worshipper getting an electric bill?" starved for lack of vitamin D, the "sunshine vitamin." Consequently, a bronzed body, obtained through careful though usually sedentary exposure to the sun or an ultra-violet ray lamp, is considered an unmistakable sign of good health.

What is the truth concerning all these claims? Are they to be taken at face value or do they represent misstatement and exaggeration?

A TANNED SKIN

The truth may be stated in a few words. Ultra-violet light will bring about the formation of vitamin D in the body. Vitamin D is useful in preventing rickets, a disease which causes malformation of the bones in children. Children, therefore, should have an abundance of vitamin D, and this may be supplied by proper dosage of cod liver oil. However, since the normal mixed diet contains enough vitamin D to insure the health of the adult individual, we can dismiss the necessity for the sun lamp as a means of protection against deficiency disease. Briefly, the situation may be stated thus: if you can afford a sun lamp you can also af-



HEALTH AND HYGIENE

Mischa Richte

ford the food that will render one unnecessary; if you cannot afford the kind of diet that will protect your health, you have no business spending your money on a sun lamp.

There is no definite proof that ultra-violet light will prevent colds and build up immunity or resistance to infection. It is true that ultraviolet rays are used in the treatment of a number of diseases. This, however, brings us into the field of medicine which is the province of the physician. Home treatment of definite disease conditions by means of ultra-violet light is to be strongly discouraged.

So it all comes down to this simple fact: the use of the sun lamp at home is valuable only in tanning the skin. And, since we do not know that a tanned skin is any healthier than an untanned skin, the ultimate value of the sun lamp rests on pretty flimsy grounds. It depends pretty much on whether or not you find a tanned skin attractive enough to warrant spending the money necessary to buy a good lamp.

TYPES OF LAMPS

Suppose, after due consideration of this question, you decide that you do want a sun lamp. Then, what kind should you buy? There are several different kinds on the market, and they vary considerably with regard to price, effectiveness, and safety. We will discuss the lamps briefly with these points in mind.

Carbon arc lamps have been exploited the most because of their cheapness. In this type of lamp two carbon rods are connected to the electric outlet by means of a resistance mechanism which reduces the voltage. When the carbon rods are struck together and then separated, an electric arc is formed. The ends of the carbon rods become white hot, and the light produced is very rich in ultra-violet rays as well as in the other rays present in sunlight. The heat from the arc is intense.

The efficiency of the carbon arc lamp depends on the size of the carbon rods. The size of these rods in turn determines the amount of current which will be used. 13 mm. (about $\frac{1}{2}$ inch) carbons, using about 30 amperes of current, produce at 30 inches the equivalent of mid-day June sunlight. 10 mm. carbons, using a 15 ampere arc, produce about onequarter as much ultra-violet light as the 30 ampere light, and a lamp with 6 mm. carbons produces one-tenth as much. The smaller lamps which are sold in drug stores for a few dollars and which use about 5 amperes of current produce so little ultra-violet light that an exposure of several hours is necessary to approximate the results obtained by a short exposure to sunlight. These lamps are practically useless as ultra-violet ray generators and the claims made for them are usually fraudulent. The larger and more efficient lamps are expensive and usually require special electric lines in the home. The place for these larger lamps is really in institutions.

A more efficient type of generator for home use is the mercury vapor or hot quartz lamp. The light given off by these lamps is blue and very rich in ultra-violet rays. The lamp consists of a fused quartz tube about 6 inches long, containing a pool of mercury, with electrodes for conducting the electrical current into the tube. Once the mercury is vaporized by the heat, the vapor itself becomes the conductor, acting as the filament of a light bulb. It takes from five to ten minutes before the lamp begins to operate at full efficiency and treatment may be started.

These burners deteriorate with use. There is a 20 per cent drop in ultra-violet intensity after 100 hours, and a loss of from $33^{1/3}$ per cent to 50 per cent after 1,000 hours of use. The large professional model of hot quartz lamp is used by physicians. A smaller type is made for use in the home. Some models of this latter type are widely advertised in lay magazines and newspapers.

THE COLD QUARTZ LAMP

This type of lamp is not recommended for home use. The cost is high (about \$100), the burners deteriorate with use, and the tube may crack and allow hot mercury to spill over the body. Such accidents are rare, but they must be considered when the lamp is operated by an unskilled person.

The cold quartz lamp is similar to a neon tube except that the tubing is made of quartz and contains a drop of mercury in addition to the neon gas. There is a bluish glow when the high voltage electricity is passed through the tube. These lamps operate when cold, and are at full efficiency in about one minute. The burner does not deteriorate with use and there is no mercury to spill if the tubing should break. The ultra-violet rays given off are highly gerChildren need an abundance of vitamin D. The sun lamp is one way of providing it, though by no moans the cheapest way.



Manny Blake

micidal and will cause reddening of the skin, but will not tan. These lamps have no application for home use. However, a new lamp of the cold quartz type has been perfected by the Bristow Company, which will produce a tanning of the skin. This lamp is recommended for this purpose because the operating cost is low, the burner will not deteriorate, and the original price is about \$50, or half the cost of the home model hot quartz lamp.

Another type of lamp uses a tungsten filament. The bulb is made of Pyrex which absorbs the shorter ultra-violet rays not present in sunlight. Inside the bulb is a filament and a small amount of mercury. The hot filament vaporizes the mercury, then a mercury vapor arc is formed between two tungsten electrodes. With this type of lamp, the average person will tolerate exposure for from 10 to 20 minutes at 30 inches distance with the S-1 lamp, or at 24 inches with the smaller S-2 lamp. These lamps are made by the General Electric Company. The S-2 lamp costs \$24.95 and the S-1, from \$39.95 to \$74.50, depending on the model. However, there is no essential difference between the various models of the S-1 lamp.

It is quite impossible to give instructions here that will adequately insure safety in the home use of an ultra-violet ray lamp. However, in determining the proper dosage the following factors must be considered:

1. Apparatus used.

2. Distance of patient from lamp-doubling the distance decreases the intensity by one-

quarter; similarly, halving the distance increases the intensity four times.

- 3. Duration of exposure.
- 4. Skin area exposed.

5. Frequency of treatments—too frequent exposures may interfere with favorable results.

6. The patient—persons with fair complexions, the very young and old are especially sensitive to ultra-violet light.

As indicated above, the use of a sun lamp is not without risks. The dangers arise from overdosage, exposure of a sensitive individual, exposure of an individual with a disease not suited for light treatment, and improper and careless use of the apparatus.

RULES FOR SAFETY

Overdosage may cause a skin burn similar to a severe sunburn. Blisters will form and in addition general symptoms will develop such as headache, nausea, fever, irregular heart action. The severity of these symptoms will depend on the size and intensity of the burn. Deaths have been reported from ultra-violent ray burns. Some persons are extremely sensitive and will develop severe symptoms, even after a short exposure. In order to be safe always start the first exposure at the farthest distance and the shortest time advised in the instructions.

Ill effects may also develop from exposing a person with a disease not suited for ultraviolet treatment. Thus, quiescent cases of tuberculosis may be aggravated; certain skin (Continued on page 64) Practical advice concerning the injuries that are not uncommon on the snow and ice.

First Aid for Winter Sportsmen

E VERY sportsman may be called upon at some time or other to render medical assistance. The tie of comradeship that A physician's aid should be sought as soon naturally binds skiers to each other in remote mountain or hill districts should not depend on good will alone. An injured person's condition can be made much worse if nothing but good will is brought to his aid.

SPRAINS AND DISLOCATIONS

In order to avoid causing more harm or adding uneccessarily to the sufferer's pain, it is necessary to know what kind of injury is being dealt with and some of the principles of first aid. However, even without such knowledge one is forced to do something. Some form of first aid is essential, and even though one fears to take the responsibility for action it is out of the question to leave a skier lying in the snow with a broken leg until, after hours of wandering, a doctor or someone who knows what to do is found. Freezing to death would be the probable result of such neglect. Similarly, a man who has cut an artery with a splintered ski must be helped at once or he will bleed to death.

The sprain is the most common skiing or skating accident. In a sprain the ligaments around the joint are strained or torn, the blood vessels are lacerated, and the blood pours into the joint so that it swells. This effusion of blood shows through the skin, blue at first, then dark red, and later as the blood is absorbed in the tissues, yellow and blue and brown.

When a sprain has been sustained the joint should be bound rather tightly in order to stop the internal bleeding. The painful joint must be placed in a restful position, put in a splint if necessary, and relieved of the performance of its normal function. The skiers one sees returning to the city on a Sunday evening, hopping on one foot and supporting themselves on the shoulders of a companion, are doing the right thing if no form of conveyance is at hand.

As soon as possible after the injury the joint should be raised and cooling compresses of

as possible, for without an x-ray examination it is often impossible to tell a sprain from a fracture.

Dislocations are more serious accidents in which the joint ligaments are ruptured and the bone displaced. Only those who know how should attempt treatment, otherwise the ligaments will be torn still more and the bone may be broken. The sooner the setting is done by an expert hand the more successful it will be. A dislocated limb should not be forced back into place. In bringing the injured person back to where aid is available, the injured limb should be given every possible support.

The effects of a dislocation may last a long time. A well-known ski jumper who once dislocated his shoulder can now jump only when the affected arm is bound to his body, for the violent swinging of the arm during the jump would pull it out of the socket again. Such recurrent dislocations require surgical treatment.

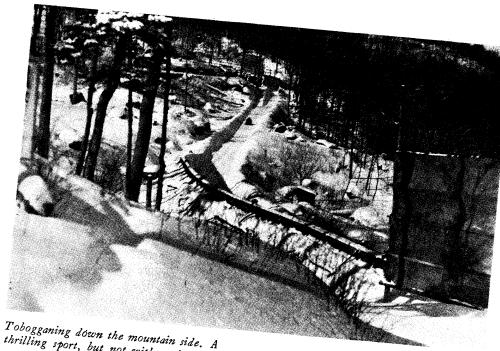
Torn muscles require splinting, and if the tear is at all extensive surgical repair is necessary.

BROKEN BONES

A spill with skis, toboggan, or bob-sled frequently results in broken bones. In the case of a simple fracture the skin is not broken and care must be taken to prevent the bone from puncturing the skin and causing an open wound. The limb should be pulled upon in order to prevent shortening and pain due to the jagged end of the bone piercing the soft tissue. Clothing should be removed from the injured member. In the case of a broken arm the sound limb is first slipped out of the coat and shirt, then the injured limb. One person puts on a temporary splint while the other carefully maintains the pull on the hand or foot. One should never let up on this pull until the splint is adjusted.

One of the best splints for the leg is a ski

FEBRUARY, 1938



thrilling sport, but not without its risks.

stick. Any stick, pole, a rolled up newspaper, or folded article of clothing can, however, serve the same purpose. It is important that the splint be well padded so that it will not cause pain or bruises. Cotton wool, any soft garment, or moss will do for padding. The padded splint is tied to the injured member with handkerchiefs, bandages, or belts.

In transporting a wounded person an emergency stretcher may be made by putting a stick through each sleeve of a jacket. Another method is for two helpers to clasp four hands in such a way as to make a seat, or to use two clasped hands as a seat and two as a back rest, with the patient's arms, if possible, around the necks of the carriers.

TREATMENT OF WOUNDS

In compound fractures there is an open wound and in some cases the broken end of the bone sticks out. Therefore, iodine must be put on the wound, and an emergency dressing applied before the limb is splinted. The wound must not be touched with the fingers.

The first principle in the treatment of wounds is hands off. Fingers bring dirt and germs to a wound. Mud or earth can be removed with some clean snow if there is no boiled or pure spring water at hand. A protective bandage of clean linen or lint may be laid on but the part of the bandage that comes in contact with the wound must not be handled or soiled in any way. Everyone who goes in for winter sports should carry sterile dressings, bandages, and the medicines mentioned in this article in his emergency kit.

Germain Bros

A heavy snow storm can expose an overtired sportsman to the danger of freezing. When a frozen man is brought in he must be thawed out and warmed slowly. Sudden warmth may cause serious injury to the blood vessels and result in immediate death. The frozen person should be taken into a cold room and bathed with cold water. When consciousness has returned small doses of stimulants such as warm coffee or tea may be carefully given. Then the patient should be put into a cold bed and covered lightly.

Alcoholic drinks should never be given to a frozen person while he is still out of doors. Small doses may be administered after the patient has been brought inside and consciousness has returned.

The freezing of single parts of the body is shown by whitening of the affected parts. (Continued on page 64)

Concluding the series of articles on the care given women during pregnancy and labor.

Childbirth Through the Ages, III

THE care given to women during childbirth has evolved throughout the centuries from mystery and magic to a highly skilful technique. Each step forward was a painful and halting one in the face of great opposition. Version or turning the body, the use of forceps, anesthesia, control of infection—all went through a process of trial and error and always there was considerable delay before these new methods were generally accepted.

Cesarean section is an operation in which the baby is delivered through a cut in the abdominal wall. The popular belief was that Julius Caesar was born in this manner. At that time, however, the operation was never performed on the living woman. Furthermore, Caesar's mother, Julia, lived many years after her son's birth, as we know from his letters to her. The operation was probably originally known as "Caesarean" because under the Roman law of

the Caesars or emperors it was stipulated that the child should be removed from every woman who died in late pregnancy even though the child might not survive, so that mother and child might be buried separately. The procedure gained the support of the Catholic Church at a late period because it gave an opportunity to baptize the baby.

Cesarean section is of undoubted antiquity. It is mentioned in the Talmud. Jacob Nufer, a sow-gelder, is credited with operating successfully on his own wife in 1550. There are authentic cases of women who in desperation have performed the operation on themselves with favorable outcome. Jesse Bennett, a practitioner in the Valley of Virginia, performed the first successful Cesarean section in America, operating on his wife in 1794.

to death.

An old cut depicting the birth of Julius Caesar by the so-called "Caesarean" method.

dici, was an able woman who was the first midwife to write a book on obstetrics. But the vast majority of women had no such skilful help.

child.

Before the days of anesthesia and control of

infection. Cesearean section was undertaken

as a last resort in cases where the mother's

pelvis was too small to allow birth naturally.

The risk was great and few survived. Even in

recent times the mortality has been high. It is

not an operation to be taken lightly but in

skilled hands the risk is not great. Under cer-

tain conditions it is an indispensable procedure.

that for centuries prejudice prevented the practice

of obstetrics by men. Male physicials who en-

tered the birth chamber were sometimes put

THREE OUT OF FOUR DIED

lying-in room, physicians could learn very little

about the birth process. They were just as igno-

rant about new-born babies. During the early

dren died in infancy. No

progress could be made

so long as an uninstruct-

ed and often supersti-

tious midwife delivered

and looked after the

midwives of exceptional

ability. Loysa Bourgeois,

for example, who served

the royal family of

France for 27 years and

attended Marie de' Me-

There were a few

As long as men were excluded from the

In previous articles in this series we showed

*

The change which occurred in the 18th century in the case of mother and child was due to many complex social and economic factors. The true story of medical progress is not merely the story of certain "great doctors" inspired by genius to make wonderful discoveries. Social change and advancement also plays a great part in all medical and scientific progress.

The 18th century was a revolutionary period in which the common man began to find himself. The growth of the democratic idea led to an upsurge of the humanitarian spirit. From this sprang the infant welfare movement. A new feeling appeared about the value of child lifeeven the life of the foundling. It is worthy of note that artists of the period gave their work social content in an effort to improve the conditions of children in the London slums. Hogarth, the painter, helped and Fielding wrote a great social novel about Tom Jones, a foundling.

At the same period the obstetrical forceps enabled doctors to be of use in the lying-in room at abnormal or difficult births. Beginning thus to deliver babies, the man-midwife set about the study of how to feed and clothe them. Infant mortality began to be reduced.

PRE-NATAL CARE

But too many children still died in the first few weeks of life. Thoughtful doctors began to ask what else must be done.' Gradually the idea dawned on them that the baby's health should be protected long before birth. Thus the concept of pre-natal care originated. Years passed, however, before the idea of protecting the health of the mother and unborn child was fully worked out. For example, it is only lately that any widespread attempt has been made to teach the importance of testing every expectant mother's blood for syphilis in order to protect the baby.

Pre-natal care or complete medical supervision of the pregnant woman did not get under way until 1900. Dr. Budin of Paris and Dr. Ballantyne of Edinburgh were the fathers of pre-natal care. Constant watchful supervision throughout pregnancy is to be looked upon as a type of preventive medicine.

In the 20th century we are far ahead of the 18th century knowledge but not so far ahead in the application of what we have learned. We know what maternity and child care consist of and our technique is splendidly developed. But we fail miserably in making this technique available to the majority of mothers. Of 7,537 women who died in fifteen of our states, 54 per cent had no pre-natal examination by a physician and in only 1 per cent "was the care given up to the standard that it is (Continued on page 64)



Sixty per cent of women were born blonde. But time darkens and dulls blonde hair. You can still be a natural blonde with Marchand's .- Advertisement for Marchand's Golden Hair Wash.

Pomay is presented as a mild, simple, safe compound which, when applied to the skin, induces copious perspiration at comparatively low temperatures. Its purpose is to reduce by perspiration (coupled with sensible dietary suggestions). Wanamaker's does not guarantee that you will lose a fraction of an ounce. We are not medical authorities. We are not chemists. We are merchants. ... The \$10 jar contains enough for 7 treatments. -Advertisement of Wanamaker's department store for Pomay reducing cream.

Bromo-Quinine tablets are expressly a cold treatment! They are made for colds and nothing else.-Advertisement for Grove's Laxative Bromo-Ouinine.

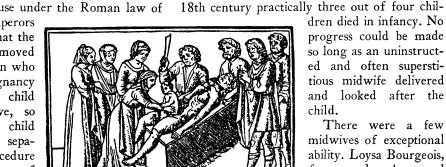
An appetizing dish has a fuller flavor when a Camel keeps it company. There's no denvingsmoking Camels at mealtime helps digestion!-Advertisement for Camel cigarettes.

And Squibb has prepared two scientific dentifrices. Squibb Dental Cream and Squibb Tooth Powder. They do more than clean teeth. Squibb dentifrices contain an antacid that neutralizes the bacterial acids that cause decay, whenever it comes in contact with them.-Advertisement for Squibb dentifrices.

Stripped of its mystery at last, dandruff stands revealed for what it really is-a stubborn germ disease calling for persistent treatment with Listerine Antiseptic.-Advertisement for Listerine Antiseptic.

A madcap fragrance . . . leads you into temptations you do not wish to resist.-Advertisement for Impromptu perfume (Lucien Lelong).

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





Mortality Among Workers

IN HER RECENT SPEECH BEFORE the American Public Health Association, former Assistant Secretary of the Treasury Josephine Roche gave some startling figures on health conditions among the working class. For seven of the ten most important causes of death in this country, the death rate mounts steadily as income goes down. Infant mortality takes fourteen deaths out of every hundred live births in the poorest classes. Respiratory tuberculosis is seven times as prevalent among wage workers as among the professional class. Pneumonia is three and one-half times as common and cancer is one and one-half times as common as among professionals.

The Japanese Boycott

THE SPREAD OF THE BOYCOTT OF Japanese silk is leading to a rapid expansion of the artificial silk industry, with the result that health safeguards will be ignored if the workers are not on guard. In the making of artificial silk the chief hazards are hydrogen sulphide and carbon disulphide. Both of these are very poisonous and strict safety regulations, especially with reference to ventilation should be enforced.

Sprains

WHEN A WORKER RECEIVES a sprain on the job the usual tendency is to disregard it. Future swellings, pains, and sometimes serious harm result. In acute joint and muscle pains pressure should be applied to limit the swelling and the injured area should be protected to prevent further damage. For all chronic and serious sprains a doctor should be consulted.

Printers Live Longer

"THE TYPOGRAPHICAL JOURNAL," organ of the International Typographical Union, reports that from 1892 to the present the average age at death of the Union members has increased from 41 to 61.85 years. This increase in the life span of

printing workers is in a large degree due to shorter hours, increased wages, and improved working conditions brought about by the International Union.

Silicosis in Pottery Industry

SILICOSIS IS COMMON among workers in the pottery industry. A recent study gives an average of 9.3 deaths per 1,000 workers annually, with the rate in some trades running as high as 20 deaths per 1,000. The dust responsible is pulverized flint which is used in placing the clay-ware for firing. A search for a satisfactory substitute revealed that aluminum dust could be used instead of flint. A follow-up survey on workers exposed to aluminum dust showed them to be free from silicosis or other lung and organic diseases after exposures of from five to thirty-nine years. Although aluminum is not completely harmless to workers, it is so much less toxic than flint that it should be substituted for flint in the manufacturing process.

On the Road

MIGRATORY WORKERS ARE DEPRIVED of social security rights as well as protection from accidents and diseases on the job. These workers are among the most oppressed in the entire country and there is no justification for this discrimination.

Weil's Disease

THE INADEQUACY of health protection for workers in this country is illustrated by reference to Weil's disease. In Europe considerable attention has been devoted to the study of this disease which affects sewer workers, miners, butchers, and fish workers, and compensation is awarded to those workers who contract it.

The disease is caused by a germ of the spirochete variety, and the death rate from it is as high as 50 per cent. The reason the disease is not recognized in this country is that no laboratory has the facilities to make the needed tests. Yet, when rats (which are attacked by the same germ) were examined in several large cities, large numbers of them were found to be infected.

In order to protect workers who may be exposed to this germ it is essential that some government agency undertake to make tests whenever the disease is suspected. In France and other countries Weil's disease is treated. There is no reason why workers in this country should not be treated for this deadly occupational disease, and compensated in case of injury or death.

We invite workers and trade unions to contribute to this department.

....

Modern science offers a new approach to the solution of a common speech defect.

Help for the Stutterer

By I. P. GLAUBER, M.D. Psychiatrist, National Hospital for Speech Disorders

S TUTTERING is that familiar speech defect which is characterized by hesitancy and repetition. The smooth flow of language is disturbed by spasms of the speech muscles and muscles controlling breathing, as well as by spasms of other muscles in the body far removed from the organs of speech.

Stuttering is mentioned in the earliest historical records. In modern times it is known to occur all over the civilized world. At the White House Conference on Child Welfare it was stated that one per cent of the general population of this country or about a million and a quarter people, were stutterers. Of this number about half are children.

Those who work in clinics where stutterers are treated, and who see large numbers of them, are impressed by the incalculable economic waste for which this disorder is directly responsible. Educators cannot fail to observe the waste of educational facilities involved, since the painful emotions aroused by his faulty speech is the greatest obstacle in the way of the stutterer's scholastic progress. The intellectual powers of the stutterer are, however, usually normal. The majority of stutterers encountered in speech clinics suffer from a neurosis of the inhibiting type. They are overawed by authority and the complexity of the social scene.

THE CHILDHOOD YEARS

About 90 per cent of those afflicted begin to stutter before the age of ten, and of these the majority begin before the age of five. The beginning of school is frequently the time when stuttering is first noticed, since this is the time when the first major social adjustments begin.

Boys are affected from four to eight times as frequently as girls. Although there is as yet no general agreement as to the explanation of this difference, the following considerations have been offered. Speech becomes comprehen-

HEALTH AND HYGIENE

sible among girl babies earlier than among boy babies. Females, too, seem to have easier facility in speech than males throughout life. On the other hand, it has been pointed out that the element of social competition enters into the life of even the youngest boys to a much greater extent than it does into that of girls. The frequent attachment of a neurotic mother to her son, which tends to shield and thus weaken him, is a further handicap in a social environment in which the pugnacious elements of masculinity are already overrated.

Now what understanding or conception of stuttering does modern science offer? Although there is as yet no general agreement as to the nature of this condition, one approach is now gradually developing as the dominant one. This is the psychiatric point of view.

THEORIES ABOUT STUTTERING

A few prefatory remarks may make the development of this point of view clearer. 2,000 years ago Hippocrates, the father of medicine, taught that in order to understand man, in health as well as in sickness, he must be viewed as a whole. Not only the structure of the body was considered important, but the function as well; not only the function of different parts but the function of all parts as one whole, the relation of the different parts to each other and to the whole. It was not enough to know what disease a man had; it was also necessary to know what sort of man it was who had the disease.

This point of view was replaced by both the mysticism of the Middle Ages and by the profound scientific discoveries in medicine's greatest age, the second half of the nineteenth century. As a result of the discovery of cellular pathology, almost any disorder that was not associated with diseased tissue found at autopsy or seen under a microscope was likely to be minimized, and the patient treated as a malingerer. The germ theory, for all its importance and value, was nevertheless another great obstacle in the path of new research. The same may be said of the "machine age" in medicine which brought with it a vast array of physical apparatus and chemical tests. Some of these are indeed of transcendant importance, but here again attention was centered on minute parts of structure or function.

These developments in medicine, still strongly entrenched today, did not help the stutterer much, because they did not yield an understanding of his affliction. Different insignificant changes in his anatomy or physiology were regarded from time to time as the cause of the affliction, but these theories were discarded one after another. In more recent times a number of significant findings relating to the stutterer were brought to light. To cite one example, it was observed that in one group of stutterers the ratio between some of the components of the blood stream is slightly different than in other individuals. However, some of these findings came to be regarded as causes of stuttering instead of, what is more probable, as results of stuttering and perhaps of other disorders as well.

Another school of thought based on Pavlov's work considers speech a conditioned reflex. It is alleged that speech, being a highly involved pattern, is insecurely established in early childhood and therefore particularly susceptible to inhibition. It is further stated that children in whom the reflex is particularly weak show a tendency to develop into real stutterers if subjected to certain negative stimuli. This view is probably true neurologically, but it does not explain why the reflex is weak in some children, what special kind of children these are, how they evolved as such, nor why certain stimuli inhibit them.

RIGHT OF LEFT HAND?

Another group of workers in this field explains stuttering on the basis of the confusion which results when a left-handed child is compelled to write with his right hand. This group postulates a speech center in each of the two hemispheres of the brain, with one center more dominant than the other. Both speech centers, they point out, are in close proximity to the centers which control the movements of the arm and hand. Smooth speech is pos-

sible if one center is sufficiently dominant to be in complete control. A change in handedness, it is alleged, equalizes the two speech centers by strengthening the weaker one, thus leading to lack of clearly defined dominance and to stuttering. It is true that a certain number of left-handed stuttering children who have been forced to use their rights hands have ceased stuttering after they have been allowed to use their left hands again. But such improvement may also be explained by the removal of the tense emotional conflict in which there are elements of fear, resistance, and insecurity incident to the change. The "handedness" theory is doubtful on the basis of theoretical considerations which cannot be explained here; but more important, the practical results of treatment based upon this theory are not convincing.

THE PSYCHIATRIC APPROACH

What, then, is that more comprehensive conception of stuttering, already alluded to, which is being developed today? It is the modern psychiatric point of view which interprets symptoms in terms of the personality as a whole and thinks of the mind and the body as an inseparable unity. This point of view regards stuttering as a neurotic disorder involving the entire personality and not merely a speech defect. It should be noted that every stutterer, no matter how bad his speech is, does on certain occasions speak perfectly normally. For example, he may speak quite well while talking with a child or to a pet animal. Nor does he stutter when he is singing. This fact should dispose of the suspicion that there may be something physically wrong with the organs of speech-tongue, lips, throat, larynx, lungs, or diaphragm. Neither is there anything wrong with the structure of those parts of the brain which control the speech organs.

What then is wrong with the stutterer? We get our first insight into the problem when we stop to consider the purpose of speech. Speech is perhaps the most important instrument of inter-personal contact. For reasons which will be explained later the great majority of the day-to-day social situations in which the stutterer-to-be finds himself become distorted by the intrusion of many painful emotions, chief of which is anxiety. Because of this intrusion his instrument of contact, speech, becomes burdened with additional, unnatural functions highly charged with emotion, and stuttering results. The speech disturbances at any one moment serve as an accurate index of the emotional disturbance brought on by social contact. Thus, stuttering is, as it has been aptly called, a contact neurosis.

From a study of neuroses in general it was found that one neurotic manifestation seldom, if ever, stands alone. It may, like stuttering,

be the most prominent manifestation, but on further examination other less dramatic but none the less serious neurotic symptoms or unhealthy character traits are found.

We shall now at-

*

tempt to describe the development of stuttering from the earliest family history of the child and conclude with the fully developed adult stutterer. Examining the family histories of stutterers we find, first, that many of them have stutterers among their immediate relatives, and secondly, that even a larger number have a history of neuroticism in the family. This does not mean that stuttering as such is necessarily in-

herited, but rather than in some families the tendency or predisposition to stuttering is greater than in others. However, although such a predisposition may be present, it is not sufficient in itself to produce a neurotic disorder. Far more important is the environment into which the person is placed during the early years of his life.

Demosthenes, the Greek orator, is said to have

cured his stuttering by putting pebbles in his

mouth and reciting by the sea. This is a far

cry from the modern methods.

It has been truly said that the fundamental evil of a neurotic environment is invariably a lack of genuine warmth and affection. Much has been made of the injurious effects upon the child of such acts as occasional beating, sudden weaning, and sexual experiences. But the child can resist much that is harmful as long as he feels inwardly that he is wanted and loved. Needless to say, he can distinguish clearly between genuine and false love and cannot be fooled by faked demonstrations of affection. The reason a child does not receive enough warmth and affection lies in the parents' incapacity to give these things because of their own neuroses. A basic lack of warmth is very often disguised as oversolicitude, or discipline, or the self-sacrificing attitude of the so-called "ideal" mother. The neurotic parent either

> indulges or deprives the child, or swings between these two extremes without being able to strike a constant happy medium. Thus the foundation is laid for a basic feeling of profound insecurity.

A feeling of security is essential for the normal development of the child. When the sense of security is continually impaired very serious consequences follow. Nature has provided the child with a protective device against the utterly crushing feeling of his own helplessness as a child in a complex adult world. This device is the well-known tendency to live in a world of make-believe, i.e., the rich fantasy life of the

child. There are many manifestations of the existence of such a fantasy life, but perhaps the most important is that in which the child annexes to himself the strength of both of his parents by means of identification with them. The identification is made possible only if there exists a feeling of security in the parent. This feeling is guaranteed the child only by an atmosphere of genuine affection. Serious impairment of the feeling of security exposes the child to the devastating realization of his utter helplessness, with the result that his own picture of himself, his ego image, becomes dwarfed. He become self-conscious. This awareness of self grows with the increasing years and interferes with his life activities. Re-

FEBRUARY, 1938

HEALTH AND HYGIENE

lationships with people that require a forgetting of self and a merging with the group, become disturbed. The child begins to watch himself constantly. By the same token, different psychic and motor functions—speech is one of them—that are performed best when not watched, becomes halting when watched.

Furthermore, neurotic parents frequently interfere arbitrarily with the most legitimate wishes of the child by disturbing his friendships, ridiculing independent thinking, or spoiling his interest in his own pursuits.

Thus, there is produced in the child a dwarfed picture of his own ego, and at the same time a distorted picture of the outside world. He comes to regard his environment as a hostile place filled with harmful forces; in turn, the child begins to feel hostile and suspicious of his environment. He becomes fearful lest his hostility be discovered and retaliation meted out to him. Fear and anxiety gradually penetrate into all his social relationships. It should be emphasized, however, that although he may be more or less aware of this anxiety he is totally unconscious of its origin.

THE ROLE OF ANXIETY

Under such circumstances speech ceases to be a mere instrument for conveying an idea or asking a question. Instead, it becomes converted into a self-assertive, self-conscious act in an environment which gives rise to emotions of hostility and fear. Simple social situations in which speech is required, unconsciously becomes testing grounds for possible social combat. The hesitation that results from the conflict between the rational impulse to speak and the irrational fear of speaking becomes crystallized as stuttering. Psychologically the process is no different from the occasional stuttering of the normal child or adult. The difference is only quantitative. A vicious cycle is soon established. Speech is an instrument for the mastery of the environment, as it is through speech that the child acquires knowledge and experience and tells of his needs for affection and reassurance. As the need for the mastery is urgent, and as every effort in this direction is rendered ineffectual by fear and hesitation, more efforts are required and more anxiety produced.

At first, the child is hardly aware of this warping process. Even before the onset of

stuttering or the subjective feeling of anxiety, all that may be noticed are such expressions of tension as slight muscular incoordination or clumsiness. Later on, this incoordination may increase and interfere with such functions as playing the piano, using a typewriter, or driving a car. Gradually, however, the child becomes more and more aware of social anxiety, but as its causes are unknown to him he associates it with his stuttering speech. He states that he feels anxious in speech situations because he is afraid he will stutter. The fact is, that he stutters in speech situations because of his social discomfort and anxiety. However, it is also true that the unwise handling of stuttering at this early stage adds to his vague fear of social situations the more definite fear of speech itself. Anxious parents who are afraid of having an imperfect child or of being blamed for having one, often threaten, shame, humiliate, or punish the child in an effort "to break the habit." The worst thing to do when stuttering begins is to allow the child to feel that anyone thinks there is anything wrong with his ability to speak.

Å

نه

With the child's attention now fixed on his speech, a train of secondary symptoms follows, further crippling both his speech and personality. Speech becomes a conscious process, and like other normally automatic processes such as walking and sleeping, the more conscious effort made the more it is disturbed. The child develops a host of devices or tricks to avoid the bugaboo word or words. He may substitute other words or add extraneous words to help him over difficult spots. He may develop ways of momentarily releasing anxiety by distractions of all sorts, such as pinching himself, talking in a mechanical tone, or by rhythmically swinging his arm. Some of these methods may be taught him by persons who have a superficial view of stuttering. At best, such help is momentary and inconstant; at worst, it is harmful because it fixes the attention of the sufferer on his speech, whereas the cure lies in the realization that the difficulty is one of maladjustment to the group and not merely a speech defect. Fixing the attention on the speech produces further personality distortions, such as avoidance of group activities, hypersensitivity, shyness, envy and a feeling of inferiority.

(This article will be concluded in the March issue)

= Editorial =

The Proposed Baby Health Bill

Protecting The Twomey-Newell baby the Child health bill requiring doctors and others who attend preg-

nant women in New York State to test their patients for syphilis is another step forward in the fight against venereal disease, and it merits the support of all progressive people.

It has been estimated that this bill will save 13,000 babies who are born dead or deformed each year because they are borne by syphilitic women who have not received proper treatment. It is true that the bill would do much to end this useless sacrifice. However, the publicity that the bill has received is likely to cause many people to overestimate the good it can achieve.

A syphilitic woman who gets a full course of treatment during pregnancy has ten chances out of eleven of bearing a perfectly healthy child. A woman who gets treatment after the fifth month of pregnancy has three chances out of five of bearing a healthy child. From the fifth month of pregnancy on, the child's chances grow less as treatment is postponed. A woman who receives no treatment at all will, five times out of six, give birth to a child that is either dead or diseased.

So the answer seems relatively simple: When a woman who is going to have a child goes to the doctor, let the doctor take a blood test. If the test is positive, treatment can be started and the baby saved.

But those who would solve the problem in this relatively simple way lose sight of one important consideration: What about the many expectant mothers who do not see a doctor until they are ready to give birth, and often not even then?

In a study of maternal mortality made by the New York Academy of Medicine it was revealed that about 12 per cent of the childbearing women in the state are attended by midwives, not doctors. The midwives, who when well trained often do good work in the actual delivery, are usually called upon only when labor pains have begun, so that there has been no chance to recognize the disease in time for adequate treatment. The Academy's study also showed that in New York City less than 40 per cent of pregnant women get adequate pre-natal care. Of the number that do not get adequate care, a large proportion undoubtedly do not get the kind of care that would make possible, even under a Twomey-Newell law, the discovery and treatment of syphilis at a stage early enough to do any real good.

Pre-Natal The lesson to be Clinics Needed drawn from these

facts is plain: The problem of infant mortality due to syphilis is not to be solved as simply as some would have us believe. Thirteen thousand babies will not be saved annually simply by making blood sests by attending physicians compulsory. These babies will be saved when the State and City of New York make it possible for every woman to get the kind of pre-natal care that will bring about *early* treatment of diseased individuals.

Such pre-natal care involves the establishment of a state-wide network of free maternity clinics, conveniently located, open in the evening as well as during the day, and adequately staffed by physicians who are paid for their services. The maternity clinics in existence today do not begin to fill this need and therefore mothers can hardly be blamed for not patronizing them.

As we said above, we are for the Twomey-Newell bill. But we do not want people to overestimate its results and thus, perhaps, be lulled into a feeling that if and when this bill is passed the job will be complete.

TRICHINOSIS FROM EATING PORK

Meat from garbage-fed pigs is a real menace to the nation's health. The proper safeguards explained.

N the garbage that the city of Los Angeles sells to pig farmers for a dollar a ton may lurk the tiny worms that will strike you or your child down with trichinosis

If Los Angeles were to burn its garbage it would cost the city a dollar and a half a ton. Instead, by selling the garbage to pig farmers the city treasury is enriched by \$450,000 a year.

We choose Los Angeles for the illustration merely because it is typical. It is a common practice for American cities to sell their garbage rather than incinerate it. Furthermore, it is a practice that causes one out of every eight Americans to be afflicted with the parasitic worm disease, trichinosis.

Thus we have 17,000,000 people more or less ill with trichinosis, some suffering acutely, some hospitalized, thousands dying, all suffering a drain on their vitality and a reduction in their earning capacity. The situation is particularly disgraceful because it affects chiefly the young and because it is *entirely preventable*.

The listless child, lying in bed with fever and swollen eyelids, need not have contracted trichinosis if two simple preventive measures had been taken—one economic and the other domestic.

FROM THE HOG TO YOU

Before the youngster recovers completely there will be a half year of suffering during which the child's muscles will be infested with small worms, less than one-twenty-fifth of an inch long, called *trichinae*. During those six months nature will gradually take its course. The doctor will be able to do little more than try to make the child comfortable. And always in the background will be the grim possibility of death, a not uncommon finale in severe cases of trichinosis.

But suppose the child does pull through. Even then it will carry the effects of the disease buried deep within its body. It may be handicapped for life, for the trichinae are known to invade and attack every organ, the heart, the lungs, the central nervous system, and the muscles of the eyes.

We began with pigs and garbage. What's the connection? Those savory pork chops you eat for lunch tomorrow may be so good you'll want another portion. If the meat has been properly cooked, any trichinae it may have contained are probably dead, so you needn't worry about getting trichinosis. But if it hasn't been cooked long enough and at a sufficiently high temperature, then beware----

First of all, you don't know whether the pig from which that pork came was healthy. You don't know because you have no way of telling.

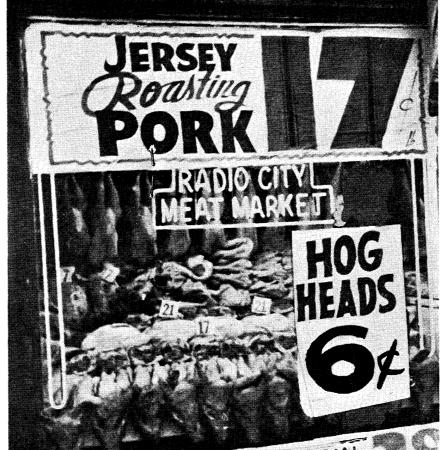
Millions of Americans eat pork every day from pigs that have been raised on garbage. About one out of every ten

such animals in the United States is infested with trichinae. These little worms live in the hog's muscles, and if they're alive when the pork goes into your stomach they'll soon spread to your muscles.

If you eat infected pork raw or before it has been cooked long enough, the live trichinae end up in your stomach. While in the hog muscle, they're surrounded by a cyst or shell. These encysted trichinae are the young form or *larvae*. When the juices of the human stomach go to work on the pork, they digest not only the pork but the cyst or shell as well. This sets the larvae free. Their next step is to pass into the intestinal wall, where they grow up or mature.

When the worms are old enough, sexual

FEBRUARY, 1938



Even government inspected pork may have the dangerous trichinae in it. Proper cooking is essential for safety.

union takes place and eventually new larvae are produced. These larvae work their way through the intestinal wall and pass into the blood stream. Then they go swirling through the body with the blood, landing finally in the muscles, where they bury themselves. Once buried in your muscles, the larvae surround themselves with a shell or cyst and become calcified, that is, impregnated with lime. The results of this process are two-fold: the young worms are effectively buried and at the same time the person harboring them is protected from the toxins or poisons they produce.

If the worms became encysted quickly, it

would not be so bad. Unfortunately, the process takes from six to nine months, and during this time the patient is at the mercy of the toxins.

There are three stages of the malady as it affects human beings. In the initial stage, when the trichinae are in the stomach or intestine, there are symptoms of intestinal disturbance such as nausea, vomiting, diarrhea, and colicky pains. These result from the inflammation produced by the growing worms.

When the larvae pass through your intestinal wall, are carried around by your blood-stream, and settle down in your muscles—you have reached the second stage of the disease. Now the muscles become inflamed and painful. The pain interferes with work and makes play distasteful. Fever is usual during this stage of the illness.

OFTEN DIAGNOSED AS OTHER DISEASES

During the third and most serious stage the chief symptom is swelling. If little Jane has trichinosis her mother is not going to find her face pleasant to look at. Absorption of poisons thrown off by the larvae causes the patient to lose strength. In severe cases, there is often delirium, unconsciousness, and, finally, death. If the case is a light one the symptoms will gradually disappear. Recovery keeps pace with the gradual calcification of the larvae; as they become encircled, the patient will improve slowly.

Many of the less severe cases of trichinosis are probably never diagnosed as such. Patients are often said to be suffering from the grippe, typhoid fever, meningitis, sinusitis, kidney disease, or rheumatism, when actually they are down with trichinosis.

To make the diagnosis properly, the doctor has to look not for one symptom, but for *several*. A positive diagnosis is secured when trichinae are found in a bit of muscle which has been removed and examined under the microscope. If the worms or their larvae turn up under the microscope in the patient's stool, blood, or spinal fluid the diagnosis is likewise conclusive.

What is the treatment for trichinosis? Sorry, but as we said earlier, there isn't any specific treatment yet. Efforts are being made to find a way to speed up the calcification process and thus render the trichinae relatively harmless, and research has also been devoted to discovering a serum that will combat the poisoning that occurs. However, no great success has been achieved along these lines, and so there is only one effective way of fighting trichinosis: by preventing it before it begins.

The great goal of modern medicine is prophylaxis. It could accomplish wonders with this malady.

Just as men, women, and children get trichinosis by eating infected pork, pigs get it by eating garbage which contains infected pork scraps. We Americans stand only fifth in the list of the world's meat consumers, but we throw more food into the garbage can than any other nation in the world. This is especially true of meat. When you bear in mind that from thirty to forty million hogs are killed each year in the United States and that one out of every five meat scraps thrown into the garbage can has live trichinae buried in it, you begin to realize the enormous danger of infection.

The United States government inspects about two-thirds of the nation's meat. However, the present method of inspection for trichinae is generally regarded as useless. The young worm or larva are so small that any attempt to spot them with the naked eye is futile.

INSPECTION IS IMPRACTICAL

It may be argued that what you can't see with the naked eye, you can see under the microscope. True. But to examine a section of hog muscle *adequately* for trichinosis, you must have many unbelievably thin slices of meat, cut with a special slicing device. You must mash these slices, put the meat into a flask, and pour artificial "gastric juice" over it. This will "digest" the meat and the cysts of any trichinae the slices may contain. This finished, you pass the mess through a screen with a very fine mesh to catch any trichinae that are present. The residue is put on glass slides and the latter go under the microscope.

Then the fun begins. You must search every one of those slides until you spot a worm. If you do find one you know the pig is infected. The worst part of it is that if you don't spot any trichinae or their larvae, it still does not mean that the pig you took the muscle samples from is healthy. It may merely mean that the

particular bits of muscle that you sliced out of the hog contained no trichinae. Different samples, on the other hand, might be infested with them.

Consequently the cost of inspecting even a single pig is prohibitive. It is for this reason that our government, and other governments, too, have given up trying to eliminate trich-inosis by inspecting hog meat—even micro-scopically. More fundamental steps are needed.

STOP GARBAGE-FEEDING!

Until the practice of feeding pigs garbage is ended—not merely curtailed, but ended—the only safe way to prevent trichinosis will be to cook all pork products thoroughly. All public health authorities agree on the following: the only *absolutely* reliable method is to *boil* pork and pork products for a period of half an hour for every pound of meat.

Perhaps you go in for dry or summer sausage which is usually eaten without being cooked. It is considered safe only if it has been prepared in a plant operating under Federal or other equally competent inspection.

Do not eat processed pork products unless there is a stamp or tag attached saying that they have been inspected by the government authorities.

Many small epidemics of trichinosis have gotten under way during the annual hogslaughtering in villages or farm districts where fresh sausage is looked upon as a delicacy.

When the doctor thinks of preventing trichinosis, the dollar sign stares him in the face. He realizes that the cause of trichinosis is in a large degree economic. So will be its prevention.

When a farmer feeds his pigs garbage, thus making you or your child sick and putting both of you in imminent danger of death, he is not doing it through malice. With the present low prices on hogs it may be necessary for him to sicken or poison your child in order to provide bread and butter for his own. The packers take the lion's share of the profits in the meat industry today. In order to exist, the farmer must cut his costs down to the limit.

The farmer knows that the best possible feed for his hogs are corn and other grains. From the standpoint of trichinosis control, too, grains are infinitely superior to scraps of doubtful garbage. In fact, they *are* the solution. In the Georgia "cracker" country hogs are turned loose to forage in the woods. Their chief if not sole sources of food are acorns, and grass grains. According to the official United States Public Health Reports trichinosis is practically unknown in this region.

The farmer on the Coast and in the Middle West, where most pork comes from, is torn between two harassing difficulties: the economic necessity of feeding his hogs garbage because the price he gets from the packers is

so low; and the government's endeavor to raise the price of corn and other grains by cutting down the supply (crop control). Thus, if the farmer were to feed his pigs anything *but* garbage, he would land on relief in no time. The fact that he probably will anyway, is no consolation to him.

To top if off, there is the *apparent* conflict between two sets of farmers: the stock-men and the corn-growers. Under the present set-up, a rise in the price of corn will undoubtedly help the corn-growers. But the crop restriction which this entails will force more and more hog farmers to resort to garbage-feeding.

However, if the practice of feeding hogs refuse were discontinued, many people who are

now disgusted by the idea of eating pork from garbage-fed pigs would come over to the pork side. Four advantages would accrue: the packers would sell more pork and pork products, the farmers more hogs, the corn-growers would find a market for much grain that they are now forced to sell at impoverishing prices, and, finally, the consumer would be safeguarded against trichinosis to a great extent.

Of course, this would not prevent the packers from continuing to take the hog's share of the profits on pigs. It is evident that millions of isolated farmers competing against each other cannot hope to dictate prices to the packing trusts. To remedy this situation, united action by farmers is necessary.

That the problem of trichinosis grows in importance year by year is seen by the large

number of articles on the subject in leading medical journals. While the problem can best be approached on a national scale, local communities and community bodies can safeguard themselves by sending out vigorous warnings on the dangers of contracting trichinosis from improperly cooked pork. Let local health departments put up appropriate posters, send out press releases, and urge the managers of local radio stations to feature talks by health officers

and doctors on the dangers of the disease. Sending speakers to trade unions, civic groups, and women's clubs to explain the problem and its dangers would also be very useful.

The public must be made aware of the situation. Thinking people will ridicule the health official who claimed that "it will serve no useful purpose to frighten the public by newspaper publicity about a situation tl at has existed for years." We are sure that the public wishes to be protected, even if certain individuals

must be frightened out of their lethargy.

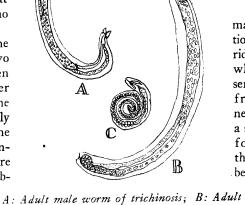
Ban garbage-

feeding and in twenty years' time trichinosis would probably become a rare disease. It would mean the liberation of much human energy, the curtailment of much illness and discomfiture, and the saving of not a few lives.

In the meantime, there is a sinister sequence from the garbage dump to the hog-farm, into the pig's muscle, through the meat-packing plant, and into your pot. You can break that sequence here and now, so far as you and your family are concerned, by seeing to it that your pork is properly cooked.

TO ALL SUBSCRIBERS

If you are planning to move, please notify us of your new address as early as possible in order that you will not miss a single issue. The postoffice does not forward magazines, and duplicate copies will not be sent out.



female worm giving birth to larvae; C: Young

worm or larva, enlarged 660 times.

(After Faust.)

50

What Not To Do for a Cold

TY this time most of us have already experienced, or are about to experience, a none-too-delightful series of bodily sensations which characterize the onset of that recurrent winter pest, the "head cold." And with the first feeling of fullness in the head, sneezing, running nose, teary eyes, roughened throat, and general bodily aches, most of us will make a bee-line for the medicine chest or for the corner drug store. Everyone has worked out his own system for breaking up a cold, and generally swears by it. The gambler at Monte Carlo also uses a "system" to break the bank and, like the cold victim, he doesn't like to be told that it isn't scientific.

Both "systems," alas, usually meet with about equal success. We are going to tell you that your system doesn't work.

Before taking up the various popular schools of thought on the "sure-thing" to prevent or to cut colds short, a few facts about the head cold brought out by years of scientific investigation are in order. The germ which causes the common cold remains undiscovered and it is mainly for this reason that no sure way of immunizing people against colds is as yet at our disposal. But we are on the trail of the culprit; closer to him now than ever before.

It is pretty definitely established that the "cold" germ is a filterable virus, that smallest of invisible organisms which, scientists tell us, lies in the limbo between the animate and inanimate, the living and non-living. Further work is necessary before the virus is finally tracked down, but the outlook is really hopeful.

SERIOUS COMPLICATIONS

Colds are important. It is a mistake to underestimate their importance. It is this mistake which brings so many people to grief every winter. Neglect a cold and you open wide the door to the many diseases that are ushered in by a cold. It has been shown that 70 per cent of lobar pneumonia has as its onset the common cold. Ear and mastoid infections are known to be not uncommon complications of the simple cold. Dr. A. R. Dochez, who has

worked on this subject for many years, believes, too, that colds may be considered among the principle contributing causes of arthritis, neuritis, and myositis (commonly known as "rheumatism"). Persons with chronic diseases such as asthma, rheumatic heart disease, and diabetes may get severe relapses following a cold. So much for the medical importance of colds. What about the economic aspect of this ailment?

The United States Public Health Service has estimated that one-half of all disabling illness in industry is accounted for by respiratory ailments, of which the cold is the most common. The common cold causes an average loss of three full working days annually per worker. This means a loss in time of 108,000,000 days and a monetary loss of \$494,836,363 annually.

SUDDEN CHILLING

Colds are most common during the winter months and generally reach the peaks of frequency in October and again in January. A study of the influence of weather on colds has shown that the most important factor is a sudden drop in temperature. People generally do not or, in many instances, cannot dress warmly enough, and the body is chilled. Such chilling, especially in the fatigued and overworked, seems to catch the heat-regulating mechanism of the body off guard and allows the cold virus and, later, other germs which inhabit the nose and throat to invade the body and cause illness.

The New York Ventilation Commission has found that colds among school children were definitely more frequent when the schoolroom was allowed to get stuffy from lack of air movement or when the temperature of the room exceeded 69 degrees Fahrenheit. Overheating of rooms during the winter months is thought to be an important factor in increasing the incidence of colds, but the other extreme of no heat at all, which many of the indigent and unemployed have to suffer every winter, certainly contributes to the abnormally high rate

of respiratory illness among this large part of the population.

Every winter we are sure to see in the rotogravure sections of the Sunday newspapers the pictures of "human polar bears" frolicking about in the ocean at sub-zero temperatures. Even looking at them is enough to give one a chill. Less spectacular but much more common is the person who adheres religiously to the practice of taking a cold shower or a cold bath immediately upon getting up in the morning.

THE COLD SHOWER BATH

All of us have a secret admiration for the hardiness of the "cold water" addict, and many of us have wondered whether we weren't being sissies in not joining these people in their apparently salubrious ritual. No, we are not sissies; we are just being sensible. For investigations have shown that the "polar bear" ordeal doesn't diminish a person's susceptibility to colds one iota. The next time you meet a human polar bear, just smile and stay comfortable.

Now, let us examine the claims of those products which are used in an attempt to prevent colds. Foremost in this field is the use of vitamin A and vitamin D in various forms. Tests have shown that the use of these vitamins in the form of haliver oil had no effect on the number of colds per year and only a slight effect on the severity of colds among a group of nurses. On the other hand, the physicians of the Eastman Kodak Company report that the administration of five tablespoonsful of cod liver oil weekly to a group of 3.031 employees seemed to cut down the number of colds per year when compared with the number of colds among employees who did not receive the cod liver oil. The results were checked over a five-year period, and it was found that those who took cod liver contracted fewer colds with each succeeding year. However, the colds could not be entirely prevented.

Many others, who have studied this aspect of the subject have been unable to report any good effects, and most investigators feel that cod liver oil does not in any way influence the number or severity of colds contracted.

Another method used in an attempt at building up resistance against colds is the "sun

HEALTH AND HYGIENE

lamp" or ultra-violet irradiation. These lamps tan the skin but they have no effect on the body's resistance against colds. In fact, one investigator found that among a large number of people so treated the incidence of colds was greater than among people who received no treatment at all.

Attempts to vaccinate people against colds haven't met with any too brilliant results. In a small percentage of people the vaccine seems



Each winter you see pictures

like this in "cold cure" advertisements. Save your money.

to have the effect of diminishing the severity of the colds, but most people are not helped at all. An interesting illustration of the psychological effects of such innoculations is reported by a medical director of a large mercantile establishment. One group of workers was given the anti-cold vaccine injections and another group was given injections of plain water. Each group was told that they were receiving vaccinations against colds, and behold, there was a 70 per cent reduction of colds in both groups! The recent efforts to perfect a vaccine which can be taken in the form of a capsule have met with dubious success. Further trial will be necessary before any worth can be ascribed to this method of cold prevention.

The huge number of patent medicines which claim to prevent and check colds as well as a

host of other unrelated ailments is evidence enough that none of them can do the trick. We have often exposed the nonsensical claims of the advertisements for nostrums such as *Alka-Seltzer*, which assure you that by pushing you over to the "alkaline side" a cold can be routed at its onset. "Acidity" has no relation to colds and the only one to feel better after you take an "alkalizer" is the patent medicine manufacturer who pockets the handsome profit from your purchase.

WHAT ABOUT LAXATIVES?

Some persons will take a laxative as soon as they feel a cold coming on (Sal Hepatica, Bromo-Quinine, et al.). Others will take large amounts of fluids, especially fruit juices. Still others will rub Vick's Vapo-Rub or some other medicinal-smelling salve on the chest. Sometimes an "antiseptic" gargle or spray of some sort is used, or the throat may be swabbed with argyrol. None of these measures has any affect on the cold.

A *dangerous* practice is the use of oily nose drops. This is particularly hazardous in children and deaths from pneumonia have been recorded following the use of such drops. The oil may gain access to the lungs, particularly during sleep, and a fatal type of pneumonia results. Clear your medicine chest of oily nose drops!

AND NOW-WHAT SHOULD YOU DO?

To minimize the chances of catching cold certain precautions can be observed. Avoid chilling. The opportunities for chilling are especially common in industries where the conditions of work make it necessary to leave a hot work room, often with sweat-soaked clothes, and to face the sudden cold blast of the weather outside. The trade unions in many parts of the country have seen to it that locker rooms where the workers can change their clothing have been provided. More such rooms should be established.

People working outdoors should be warmly dressed and should have adequate protection against wet weather. In the home, stuffiness as well as drafts should be avoided.

When once a cold has started, protect your family from contracting your cold by using separate towels. Sneeze and cough into a handkerchief or tissue. Glasses and eating utensils should be thoroughly washed in hot water and soap suds.

The ideal way to shorten a cold and to prevent complications is to get into bed for a day or two until the cold clears up. Unfortunately, for practically all of us such a stay in bed is an impossible luxury. Bed rest is imperative if there is fever. Regarding drugs, a combination of codeine and papaverine has been found to be the most effective treatment. Small doses of this combination of drugs taken during the day has relieved over 70 per cent of patients within from thirty-six to forty-eight hours. This remedy, however, can be obtained only on a physician's prescription since it is an opiate.

Aspirin is also very widely used. It is beneficial in relieving the headache or general bodily ache that often accompany a cold, but it does not influence the course or duration of the illness. High dosage with aspirin is to be avoided.

Many persons find relief after taking a hot foot bath. (For instructions see the January, 1938, issue). Others submerge the entire body in a hot tub. The thing to remember is to keep warmly covered on the way back to bed and to use plenty of blankets in bed in order to avoid chilling. A hot drink with or without the addition of whisky has its adherents but the effects are dubious at least as far as the cold is concerned.

A few drops of a watery solution of the drug neo-synephren instilled into the nostrils will do much to relieve the local discomfort which follows upon the congestion of the nasal mucous membranes.

SOME SATISFACTION

If all this sounds somewhat inconclusive, perhaps the thought that some of the best medical minds in the world are trying to discover how to rid us of this troublesome ailment will be of some comfort to you the next time you are unlucky enough to catch a cold. The chances are, however, that this knowledge will do little to alleviate your misery. Until the day that medical research really enables us to cope with the problem about the only satisfaction you can have is in knowing which remedies and methods *not to put faith in*. Such knowledge, in a world where so many people are taken in by buncombe and charlatanry, is at least something.

FEBRUARY, 1938

Diet and Sex

IN ALL countries and in all historical periods many theories have been held concerning the relationship between certain foods and sexual activity or potency. Men have tried by eating certain foods to restore waning sexual powers or to stimulate normal powers in order that they might emulate the Don Juans and Casanovas whose exploits and amatory conquests are set forth in such glowing detail by poets and historians.

"LOVE APPLES"

The idea that certain foods have aphrodisiac or sex-stimulating properties is still widely believed today. One remarkable fact that is evident when we study this subject is that the foods that are supposed to have aphrodisiac (sex-stimulating) powers change from generation to generation. Thus when potatoes were first introduced into Europe they were thought to be powerful sex stimulants that would inflame the passions of those who ate them, but later when they became cheap and common in the diet they lost this erotic quality. Havelock Ellis remarks in this connection that the Irish peasantry, whose diet consists largely of potatoes, are thought to have an unusually small measure of sexual feeling. Similarly, sixty and seventy years ago tomatoes were called "love apples." They were also thought to be poisonous, but the probability is that they were first considered sexually stimulating, and then called "poisonous" in order to keep youth from indulging in them.

Now that tomatoes are both plentiful and cheap they are no longer regarded as a food which disposes the eater to venery and lustful pursuits. However, other foods are still thought of as stimulating to sexual appetite and potenty —e.g., onions, eggs, celery, asparagus, oysters, clams, and caviar.

Indeed, there is hardly a food that has not at one time or another been placed in this class. However, careful observation has shown the fallacy of all these beliefs, and at present science does not know of any food which is definitely aphrodisiac. This does not mean that

HEALTH AND HYGIENE

certain drugs do not have an aphrodisiac effect, but that foods, in the ordinary sense of the word, do not.

If we ask, "Why were such and such foods believed to be aphrodisiacs?" we find an explanation, first of all, in the psychological reasons for such belief. People want to believe that aphrodisiacs exist, just as they want to believe that there is an infallible cure for cancer, or that prosperity is just around the corner-such beliefs solve a lot of problems very simply. If he can find a food to help him, the aging man will no longer have to accept the fact that he is getting old and adjust himself to it; he can solve his problem by eating caviar. The neurotic ascetic woman who doesn't think she ought to have any sexual feelings, can avoid them by leaving onions, asparagus, and oysters out of her diet, or if by chance she is troubled by such feelings she can blame it on "that celery I ate at Mrs. Jones'" instead of on her own natural instincts.

But this doesn't explain why certain foods have been supposed to have more power in this respect than others. It is clear that the scarcity and expense of a food has always been a factor; the more expensive and difficult to obtain, the more desirable it seems and the more likely people are to think that it is an aphrodisiac. When, as in the case of potatoes cited above, the food becomes inexpensive and common, the reputed power disappears.

MEATS AND VEGETABLES

People living in a state of semi-starvation or on a deficiency diet are likely to have relatively little sexual drive because their general vitality is necessarily low. Restore these people to a more plentiful diet, whether with potatoes, meats, beans, or any other food, and their sexual capacities and desires will rise rapidly with their general health. In such a case the particular food used may then be thought to be sexually stimulating. The plain fact is that physically healthy people have good sexual capacity unless a nervous difficulty of some kind is present.

54

55

Probably the most important factor in determining which foods people will consider aphrodisiac, however, is much more complicated than any we have discussed so far. It is a fundamental trait of human nature to believe that the characteristics of a thing are acquired by eating it. Thus many primitive people believe that they acquire the qualities of the animals they eat. To be brave a man should eat a lion's heart, because a lion is a fierce and brave animal. Some American Indians believed that if they ate the flesh of a brave enemy it would make them brave also; on the other hand they carefully avoided eating the flesh of an animal as timid as a rabbit for fear that it would make them timid. This theory has even been used to explain animals' characteristics. Thus a tiger is supposed to be fierce because it is a flesh eater, while a deer or rabbit is timid because it is vegetarian. The fallaciousness of this type of reasoning is readily seen when we realize that there is no animal fiercer or more dangerous than the ordinary bull, and that other strict vegetarians such as elephants, buffalo, rhinoceroses, and moose are extremely ugly customers.

SEXUAL SYMBOLISM

The foods which will most readily be thought to be sexually stimulating are, therefore, those most closely connected with sex, namely testes, ovaries, and eggs (including fish eggs or caviar). After these come foods which in some way or other suggest or resemble parts of the sexual organs. Thus asparagus and sometimes celery are chosen since they are thought to resemble the male organ, while clams and oysters are selected because they are thought in some vague way to suggest the female organs. Incidentally, these fancied or real resemblances are sometimes responsible for the otherwise inexplicable aversions some people have for certain foods.

In the foods discussed so far the factors responsible for the supposed stimulating quality have been entirely psychological, although the believers naturally have thought that the effect was directly physical or physiological. There are, however, certain substances which do have a direct physical or physiological action in this respect. The commonest of these is alcohol. Alcohol in moderate quantities usually seems to stimulate sexual feelings. Actually this is not a direct stimulation but rather a partial paralyz-

ing of the inhibitions. Many persons think that their sexual desires are slight or absent, not because they actually are, but because their inhibitions keep the desires so deeply repressed that they either do not reach consciousness at all, or reach it only to a slight degree. Paralyze the higher mental functions, which include the inhibitory functions, with alcohol, and the desires come frankly into consciousness and are more readily acted upon. Note that we said *moderate* quantities of alcohol; large quantities of alcohol paralyze or narcotize more and more of the nervous system so that eventually any sort of activity is impossible.

THE EFFECT OF DRUGS

A drug which is often mentioned as an aphrodisiac is cantharides or "Spanish fly." This is an irritant, and sometimes apparently stimul tes sexual desire by the irritant effect it has when it is excreted in the urine. It is, however, a dangerous drug. It often causes severe kidney damage, and should never be used for the purpose of stimulating sexual activity.

Opium and opium derivatives, also in small doses, sometimes seem to have a stimulating effect, and this is probably produced in the same way as alcohol. The habit-forming effects of opiates are so dangerous that they should, of course, never be used for this purpose. The prolonged use of opium actually leads to a lack of interest in sex.

At the present time research on the ductless glands (which include the testicles and ovaries) is progressing rapidly and it may very well be that hormones will be discovered which will have a specific sex-stimulating effect. Products have been found which have definite effects in experimental animals but it is doubtful if these results can be very simply applied to man.

Thus, we see that all popular notions about the effect of various foods on sexual activity and powers are based on superstition. The sexual instinct is an integral part of every healthy person. It needs no stimulant. If something seems to be wrong with it the remedy lies in improving the general health, or in treating the deficiency as a psychological problem by psychiatric methods. The commonest causes of sexual difficulties are psychological and most sufferers need to be treated from this point of view.

A desperate situation confronts many tuberculous patients after they are discharged as cured.

GERDA F. CLAUSEN,

Executive Secretary.

After the Sanatorium – What?

As the magazine which has been in the forefront

of the fight for progressive health measures, as well

as one of the very few common meeting grounds

for progressive lay people and socially-minded doc-

tors, we think that HEALTH AND HYGIENE and

its many readers will be interested in this statement

Sincerely yours,

Association for the Aid of the Tuberculous,

TO THE EDITOR:

of the aims of our organization.

2386 Valentine Avenue,

New York City.

T WAS not so long **ago** very that tuberculosis of the lungs was among the diseases in which medical treatment was of little avail in restoring the afflicted person to health. Now this situation has been radically altered. Tuberculosis can be cured, and more people leave the sanatorium on the

road to cure than ever before.

Today patients live! Science and the surgeon's steel, combined with the will to live, bring about a gradual improvement until one day the incredible notation "arrested case—ready for discharge," finds its way into the chart. And the second stage of battle has arrived.

A UNIQUE ORGANIZATION

Our organization, the Association for the Aid of the Tuberculous is, we believe, unique in that it represents the first spontaneous effort on the part of patients who have recovered from tuberculosis to voice their demands in an organized way, on a health problem which has hitherto been almost entirely neglected by both governmental and private health agencies—post-sanatorium care.

As a result of much research great advances in the treatment of pulmonary tuberculosis has been made in the past two decades. It is but recently that publicity has been given to the shocking failure to make this valuable knowledge available in the form of treatment to the people who contract the disease. The lack of hospital beds and sanatoria, and the poor standards of operation prevailing in many of our tuberculosis institutions, have at last become evident to our governmental health authorities, and, as a result, some feeble beginnings towards correction of this bad situation are evident today. But in calling attention to this sore spot, another aspect of the tuberculosis problem has been entirely overlooked.

Tuberculosis requires prolonged treatment in most instances. It is by no means unusual to spend two or three years at a tuberculosis institution before successful "arrest" of the disease is achieved. The cure, however, is not completed upon leaving the sanatorium. Unless the patient is slowly and carefully rehabilitated and given a chance to live a normal life he is always in danger of breaking down again, and then the entire treatment and the expense it has entailed have been wasted. In other

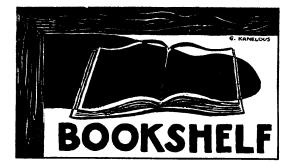
words, unless the patient can be returned to healthful living quarters, unless he can get a nutritious diet and adequate mental and physical rest, unless he is slowly and carefully adjusted vocationally by means of graduated work under controlled conditions, his chances for staying well are considerably reduced. Such rehabilitation provisions following discharge from the sanatorium are just as important to the patient as the treatment at the sanatorium, and unless an organized program of after-care is observed the aim of treatment, which is to return the afflicted person to society as a socially useful individual, must remain a pious wish rather than a reality.

There is no doubt that throwing the discharged patient back into the miserable environmental conditions which were, for the most part, originally responsible for his contracting tuberculosis, adds a very considerable amount to the expenditures devoted to the upkeep of these institutions.

PHILANTHROPY BREAKS DOWN

In New York City there is only one organization which does effective work in the field of rehabilitation of the tuberculous, the Altro Shop. This shop is run by voluntary contributions and works at a very small deficit. Unfortunately, less than 100 patients can be accommodated every year and hundreds upon hundreds are in need of this type of care. Private philanthropy refuses to undertake the building of more shops of this sort.

Briefly, our organization, the Association for the Aid of the Tuberculous, aims to secure legislation and to obtain city, state, and federal aid for a thoroughgoing program for rehabilitation of the (Continued on page 60)



ALFRED OWRE: DENTISTRY'S MILITANT EDUCATOR. By Netta W. Wolfson, 331 pp., University of Minnesota Press, Minneapolis, \$4.

In the development of its personnel, dentistry has contributed much to progress. It is only fitting that a new profession emerging from the traditionloving, conservative medical art should develop rebels—those keen anticipators of the future. The most outstanding by far of these was Dr. Alfred Owre, dentistry's foremost educator. A product of the working class, he remained true to his ideals that dental education should not produce a small group of aristocrats to care for the wealthy, but rather should provide dental care for the great mass of people as a whole.

Owre left a successful practice to enter dental education. The story of his struggle to elevate the young profession is an enlightening one. As early as 1910, Owre sought to eliminate the proprietary dental schools and diploma mills. This was the beginning of a great uphill struggle in which he not only sought to improve dental education but tried to solve the contradictions of the practice of dentistry in a profit-motivated society. In 1927 Owre left the University of Minnesota to become Dean of the Columbia School of Dentistry. At this time he was in the midst of a struggle against the despots of dentistry. So in the Columbia School of Dentistry he was to try to make dentistry a specialty of medicine where he thought it belonged, and to establish a "clinic" where the middle class could secure good dentistry at reasonable fees. His ultimate aim was to develop "oral technicians" who would be supervised by dental specialists, and thereby increase the service of dentists to all the people.

Owre soon became convinced that socialized medicine was the solution to the entire problem. With this announcement the "vested interests" consolidated their forces to oust Owre. His struggles with the dental societies and the "cheap politicians" of the dental profession reached its height in 1932 when his resignation was demanded by the voting faculty of Columbia University. Nicholas Murray Butler refused to accept his resignation, but extended a leave of absence and a sabbatical year to Dean Owre.

Owre visited the Soviet Union and was profoundly impressed by what he saw there. He wrote to a friend, "I approached the U.S.S.R. with my mind a blank page... Their 'ideal,' of course, is dentistry for all the people." Shortly after this Dr. Owre died.

It is not strange that after his return from the Soviet Union the university did not want him, particularly after his statement, "Dentistry in the Soviet Union is my dream come true." The bioggraphy of Alfred Owre is the life story of an honest intellectual whose struggle against the reactionary influences in dentistry led him to conclude that the only ultimate solution was socialization. It is indeed unfortunate that Alfred Owre did not survive so that he could present his case to the rank and file of the profession and the people of America as he had planned.

SOCIALIZED MEDICINE IN THE SOVIET UNION. By Henry E. Sigerist, M.D., 378 pp., W. W. Norton & Company, Inc., N. Y., \$3.50.

F^{IVE} years ago, while he was finishing his book, *American Medicine*, Professor Sigerist decided to make a similar study of Soviet medicine. Since his announcement of this decision progressive doctors, health workers, and others interested in learning the truth about medicine in the Soviet Union have eagerly awaited this book. The market is flooded with books by tourists, including medical tourists, who have made hasty visits to the Soviet Union and written their impressions. A thorough study of Soviet medicine by the world's leading medical historian was, of course, something entirely different. Five years was a long time to wait for this study to be completed, but the book was well worth waiting for.

Let no one be frightened away by the research and scholarship which went into the making of this book. It is true that there are plenty of figures and charts—accurate and thoughtful ones. But there is also a warmly written, exciting story of how 170,000,000 people have decided to remove the obstacles to good health and how they are succeeding.

Dr. Sigerist is fully aware that Soviet medicine cannot be understood apart from a knowledge of Soviet society and how it works. Accordingly he begins the book with a remarkably clear explanation of the meaning of socialism and how it came into being and developed in the Soviet Union. He then gives a fascinating account of the history of Russian medicine up to the time of the revolution. He tells of the many outstanding discoveries in medical science made by the pre-revolutionary Russians, and at the same time draws a graphic picture of the

FEBRUARY, 1938

appalling prevalence of disease among the Russian masses who had no access either to the doctors or the mode of life necessary for good health.

He tells of the complete collapse of the public health system during the eight years of world war and civil war, saying: "Anyone in 1914 who undertook to reorganize the public health system of Russia would have had to face tremendous difficulties. When, after eight years of imperialist and civil war almost all medical facilities of the country were broken down, when famine and epidemics were ravaging the land with unheard-of violence, the task seemed almost hopeless." Dr. Sigerist then describes how the Soviets undertook this task and how and why they succeeded.

The basic principle of Soviet medicine is that the health of the people is one of the most important concerns of the people; therefore it must be one of the most important concerns of a people's government. To insure their health and prevent disease, the causes of disease must be attacked, the factors making for the maintenance of good health must be strengthened, and medical care must be freely available to the sick. As Dr. Sigerist explains:

We have recognized that general education is important for the welfare of a nation, that a democracy is impossible unless the population has reached a certain educational level. The logical consequence was to make education, at least elementary and secondary education, available to all, free of charge.

The socialist state went one step further by declaring that a people's health is equally essential for the welfare of a nation. If society is to function successfully it requires healthy members. Besides, health is one of the goods of life to which man has a right. Whenever this concept prevails the logical consequence is to make all measures for the protection and restoration of health accessible to all, free of charge. Medicine, like education, is then no longer a trade; it becomes a public function of the state...

Another very characteristic feature of Soviet medicine is that it has done away with the traditional distinction between preventive and curative medicine. As a matter of fact the entire system is based upon the idea of prevention. Prophylaxis is in the foreground of all medical considerations. . . This attitude is not surprising. It is only rational and logical. Every child knows that prevention is better than cure and that it is infinitely cheaper besides. . . .

The general idea is to supervise the human being medically, in a discrete and unobtrusive way, from the moment of conception to the moment of death. Medical workers and medical institutions are placed wherever anyone, in the course of his life, is exposed to dangers. Medical supervision begins with the pregnant woman and the woman in childbirth, proceeds with the infant, the child, the adolescent, and finally the man and woman at work. . . .

The Commissariats of Health are not alone in their fight against disease. The Trade Unions seeking to improve working and living conditions of the population, the Council of Physical Culture endeavoring to develop a strong and healthy generation, the Commissariats of Education preparing the people to accept scientific medicine—all these agencies work in the same direction, all powerful allies of the medical corps. . .

In such a society health means more than the absence of disease. It has become something positive, a joyful attitude toward life.

Dr. Sigerist describes in detail the measures taken against industrial disease and hazards, pointing out the important role that the workers themselves play in the fight against industrial dangers. He tells of the tremendous physical culture movement in which over 25,000,000 people are taking part. Though many fine teams perform before large audiences, the players are all workers and farmers developed in sports clubs that all can join.

The story of the Soviet fight against venereal disease is particularly timely now that newspapers are writing on this subject. Of the venereal disease dispensaries Dr. Sigerist writes:

The great problem of the dispensaries is how to attract patients. This is accomplished by providing the best possible service and by making the whole procedure as easy as possible for the patients. No one has to wait. After the first consultation each person comes by appointment. The dispensary is open from early morning until late at night in order that patients may visit it before and after working time. Secrecy is preserved by giving every patient a number. After the first visit he has only to show the number and need not reveal his name. The attitude toward venereal diseases has changed so radically that they are no longer generally considered something of which to be ashamed. For those people, chiefly former peasants, who still feel embarrassed about going to such a dispensary, everything is done to put them at their ease.

On the role of prostitution he says:

In the spread of venereal diseases prostitution plays very important part. No prostitute can escape infection, and once contaminated she becomes an active disseminator of the disease. Prostitution is primarily the result of economic conditions, and every state that is not able to provide work for all its citizens will always have prostitutes. In some capitalist countries, prostitution is regulated. Girls are registered, and they practice prostitution with the sanction of the state which takes its share of the profits through taxation. In other countries prostitution has been forbidden by law with the result that it flourishes underground. The Soviet Union was the first country to attack the problem in a rational way and its success in fighting prostitution is to a large extent responsible for the reduction in the incidence of venereal diseases.

A particularly interesting chapter is that on the protection of mother and child. Included in it is a complete account of the Soviet attitude towards abortion.

Dr. Sigerist's conclusions concerning medicine in

both the United States and the Soviet Union are:

The rise of scientific medicine in America was particularly brilliant. In less than half of a century America not only caught up with European medicine but even surpassed it in many respects. And yet, in spite of the fact that the United States today possesses the best hospitals and laboratories in the world and has a very large number of well-trained physicians and nurses, the medical problems of the country are by no means solved. There are still large sections of the population that do not receive the medical attention they need. Splendidly equipped technically, American medicine is still backward socially and the result is that, at the present time, medicine has infinitely more to give than the people actually receive. The causes of this maladjustment are obviously to be sought in the whole economic and social structure of the country. . . .

At the end of my book on American medicine, I expressed the view that the future of medicine will largely depend on what will be done in the United States and in the Soviet Union. I still hold the statement. American medicine today is superior as far as the technical equipment is concerned. However, if it wants to compete successfully with Soviet medicine in the long run, great social adjustments will have to take place. . .

I have approached this study as a historian, in the same detached manner in which I have studied developments and conditions in other countries and in other eras of history. And I have come to the conclusion that what is being done in the Soviet Union today is the beginning of a new period in the history of medicine. All that has been achieved so far in five thousand years of medical history represents but a first epoch: the period of curative medicine. Now a new era, the period of preventive medicine, has begun in the Soviet Union.

For what are we medical men fighting? We know that there will always be suffering in the world because there will always be love and hatred, frustrated ambition, and other causes for grievance. But we believe that in a civilized society no man should be allowed to die from such elementary and primitive causes as hunger, cold, poverty, or preventable diseases. Since I have studied the Soviet Union, I know that there is a future for mankind; that whatever may happen to the Western world, there is a future for human civilization. And I know, in addition, that our highest medical ambitions are not utopian but may some day be realized.

This is a book that will not be welcomed by the medical tories and reactionaries. However, coming from a historian of Dr. Sigerist's caliber, it is hardly one that they will be able to ignore. Moreover, attempts to refute the book will have to be more convincing than the recent editorial in *The Journal* of the American Medical Association in which Eugene Lyons, of all people, was set up as an authority to prove that Dr. Sigerist had overrated Soviet medicine! When *The Journal* of the A.M.A. has to draw upon the writings of a news-

paper reporter in order to refute a recognized scholar and authority in his own field, it can only mean that Editor Fishbein cannot find among scientific writers the sort of evidence that he wants. Dr. Sigerist's book is indispensable for anyone who wants to understand what a people can do to safeguard its health. It will be an inspiration to all those who are working in this country to make

Even Our Food

good health freely available to all.

Every DAY brings to light more and more the the difficulties that will need to be faced if London or any other large city suffers a gas attack. The Air Raid Precautions Department has now revealed that foodstuffs readily absorb poison gases and probably cannot be decontaminated.

Practically speaking, only hermetically-sealed containers of glass or tin, protected from danger by high-explosive shells, can be considered really safe.—Medicine Today and Tomorrow. (London.)

Bronx Wonder

HEALTH AND HYGIENE 215 Fourth Ave. New York, N. Y. Gentlemen:

Come meet the healthiest old man in the world. His name is Goliath Messiah. He is 71 years old. Body and strength of a 20 year old athlete. He possesses all his own teeth. Has jet black hair and has never been sick in his life.

He is the man with the balloon lungs. The only man in the world who can work up a sweat from head to foot.

This Sunday, Dec. 26, 1937, at 2 P.M. he will run five miles around Bronx Park. He will run on the balls of his feet, his heels never touching the ground. He will begin at 2108 Mohegan Ave., corner 180th St.

Very truly yours, P. SMACKEY.

After the Sanatorium—What?

(Continued from page 57)

tuberculous. Ourselves, ex-patients, we call upon your progressive-minded readers to aid us in calling this intolerable situation to the attention of our governmental authorities. A far-sighted governmental program will in the end be less expensive than the inadequate relief set-up of today. An adequate governmental rehabilitation program will give the word "cure" real meaning for the tuberculous patient!

Who's Who on Our Advisory Board Paul de Kruif

PAUL DE KRUIF is famous for making unknown or little-known benefactors of mankind live again. He has a passion for finding out who really stamped out some great scourge, or made a great discovery which civilization now takes for granted. To do this he goes straight to original sources with an energy and thoroughness that is intolerant of half-way measures.

Dr. de Kruif was born in 1890 in Zeeland, Michigan. He holds the

degrees of Bachelor of Science and Doctor of Philosophy from the University of Michigan, where he was, at 26, assistant professor of bacteriology. During the War he was in France as a Captain in the Sanitary Corps of the Medical Department of the U. S. Army. While in France he worked at the Pasteur Institute and at



PAUL DE KRUIF

Questions and Answers

(Continued from page 34)

certain amount of relief in not having these foreign materials in the mouth. What I would like to know is whether there are any hidden penalties that are likely to result from not having a new bridge put in.—P.P.

Answer—There is no doubt that failure to replace missing teeth involves the risk of definitely harmful results.

When chewing is done on one side of the mouth only, the opposite side has no work to do. As a result, there is a tendency for the gums on the unused side to become soft, spongy, and subject to a pyorrhea condition. On the other hand, if chewing *is* done on the side of the mouth where teeth are missing the remaining teeth are subjected to abnormal strain and may easily be injured.

There is also another danger; when missing teeth are not replaced the teeth in the other gum, opposite the empty space, do not remain stationary but tend to move farther out of the gum in which they are placed and into the empty space. If this process is not arrested it will continue until the teeth become loose, and extraction will be necessary.

There are other possibilities of danger to the mouth when missing teeth are not replaced, but

PAUL DE KRUIF is famous for making unknown or little-known benefactors of mankind live again. He has a passion for finding out who really stamped out some great scourge, or made

> Through all this, Paul de Kruif was more and more driven by a desire to know the human side of highly technical work, so he began to study lives and people as well as bacteria, and in 1926 published *Microbe Hunters*, the story of fourteen

pioneers of bacteriology and their fight against disease. His next book, *Hunger Fighters*, is the story of a few forgotten men who struggled with nature to maintain and increase the North American food supply. *Seven Iron Men* tells the story of the discovery of the great Me-sa-be Iron Range. *Men Against Death* is about modern microbe hunters. His latest book, *Why Keep Them Alive?*, tells of the marvels of modern science that are not applied because the necessary money is not provided.

(Next month: Dr.W. Horsley Gantt)

those named are sufficient to emphasize the necessity of being supplied with a proper bridge.

Hardening of the Arteries San Francisco, California

DEAR DOCTORS:

I have a relative who, according to his physician's diagnosis, has "hardening of the arteries." Will you please advise whether there is any cure for a condition of this kind?—L. K.

Answer-""Hardening of the arteries" is the common name for arteriosclerosis. It affects all parts of the body, but not to the same degree at the same time. In some people the coronary arteries of the heart are chiefly involved, in the others the kidney arteries, and in still others the brain arteries.

"Hardened" arteries are not as efficient as normal arteries. As a result the organ or organs supplied by such arteries get an insufficient supply of blood, and function poorly. Arteriosclerotic blood vessels or arteries cannot be cured or even made better by any means known to modern medical science. The best that can be done is to relieve the burden normally placed on the affected organ or organs.

The man with damaged coronary arteries must do less physical work and suffer less mental strain

61

in order to spare his heart. The sufferer from kidney arteriosclerosis must guard against overburdening the kidneys.

Iodine in Food

Bangor, Maine

DEAR DOCTORS: Do salted herring and other sea foods contain iodine, and if so how many salted herrings does a man of twenty have to eat in a week in order to



get the required amout of iodine? What other foods besides sea foods contain iodine?-A.L.

Answer-The amount of iodine in food depends on the condition of the soil or water in which the food grows, not on the type of food. In Ohio and Michigan, for instance, the soil and water are poor in iodine, and therefore the plants, fish, and animals grown there do not contain much iodine. Ocean water contains a relatively large amount of iodine and therefore sea foods do too. All foods that are grown along the eastern seaboard of the United States contain fair amounts of iodine, as does the drinking water. Therefore, a normal person living in Maine will get enough iodine if he eats a mixed diet of ordinary foods. Only a small amount of iodine is needed by the body.

He's Wrong

St. Louis, Missouri

DEAR DOCTORS:

A friend of mine claims he has reduced twenty pounds by applying a solution made of one pint of rubbing alcohol and two squares of gum camphor. The camphor is cut into small pieces and put into the alcohol. You then use the mixture on the part you want to reduce.

Please tell me if it is safe to use this application and if it will reduce fat.--R. L.

Answer-Camphor in alcohol does only one thing-it reddens the skin on which it is placed. But it does not cause weight reduction. No external application will cause weight loss, and it is not possible to lose any appreciable weight in particular parts of the body. If your friend lost

twenty pounds by such applications, that loss was caused by something other than the preparation used. It may have been that he was on a reduction diet at the same time. It is also possible that he is suffering from an illness, and that the illness caused the loss.

Those Blood Spots

Last month we acknowledged the error made in regard to blood-spotted eggs in the December issue. A number of readers had written to us, calling attention to the error and giving what they held to be the correct explanation of the blood spot. Not all of these explanations were the same, however, and, wishing to get the matter settled authoritatively, we wrote to the State of New Jersey Agricultural Experimental Station at New Brunswick. We received the following reply from Willard C. Thompson, Poultry Husbandman of the Station:

"Producers and handlers of table eggs often find 'blood spots' when candling eggs. Such spots appear as darkened areas before the candle. On opening the eggs they may be found to be of any one of three types: first, a clot of blood located on and adhering to the vitelline membrane which encloses the yolk material; second, a clot of blood freely floating in the white or albumenous part of the egg; or third, unclotted blood mixed with the more liquid portion of albumen.

"The first type is due to a rupture of a tiny blood vessel in some part of the ovarian tissue or upper end of the oviduct occurring at the time that the developed ovum leaves the ovary and enters the oviduct. It is merely a tiny clot of blood which sticks to the vitelline membrane. It has nothing whatever to do with the development of the germ of the egg.

"The second type of blood spot is due to a rupture of a blood vessel farther down in the oviduct. The clot in this instance is enveloped in the denser portion of the albumen and does not have a chance to readily mix with the albumenous material.

"The third type is simply the emptying of a small amount of blood from a ruptured blood vessel into that portion of the oviduct in which the watery albumen has been secreted.

"To connect the occurrence of blood spots with germ development is erroneous. It has remained, however, as a popular idea and explanation of blood spots. This is not to be confused, of course, with the possibility that a darkened area under the candle will also be shown due to the development of the germ. When the egg is broken, however, the difference between the real blood spot and germinal development is very evident. In the vast majority of darkened spots seen under the candle the cause is the simple explanation above referred to. The chances of finding germinal development in table eggs at the present time are rather remote."

PURELY PERSONAL



THE SYPHILIS CONTROL BALLOTS continue to come in steadily. To date (January 18) we have provided 2,213 persons with the names of doctors who have agreed to give free Wassermann tests. More than 18,000 extra ballots have been requested by our readers for distribution among their friends.

The Crony Organization, Inc., 3008 Neptune Ave., Brooklyn, continues to send in the largest number of ballots. Thus far they have sent in over 450, and are working rapidly towards their goal of 1,000.

Any one who wants to have a free Wassermann test done by a private doctor may do so by filling out the ballot at the bottom of this page and mailing it to us with 3 cents in stamps. We will provide you with the name of a doctor in your community who will do the test.

A SUBSCRIBER IN DETROIT who signs himself "Ardent Supporter" says: "I have often been minded to write you a letter of commendation and I am making this one a vehicle for my convictions as well as a pat on the back to your wonderful publication.

"I found particularly interesting and informative you articles on sex and mental hygiene. Having been brought up by an oversolicitous mother who arbitrarily picked my friends and studies I was constantly rebelling and kicked over the traces rather late by leaving home not once but several times. I was extremely shy about girls and thought I would never make an adequate adjustment. I was beset with all kinds of mental difficulties, but I was firmly resolved to take my life in my own hands and I did so by going out and leading my own existence. In this difficult formative period I had to have something to hold onto, some voice of authority, and I found it in H. AND H. Manv doubts and worries that grew while I was cloistered at home and that had seemed insurmountable, I conquered by going out, setting up my own home and business and friends, and many articles in H. AND H. served to answer my problems. I am indebted for my present ideas on many points to your publication. It has helped me over a tough spot in my life."

THIS MONTH'S PRIZE for the best letter setting forth a reader's reaction to HEALTH AND HYGIENE goes to H. B. of Cleona, Pa. H. B. writes:

"I am a typical American laborer, earning a low wage. This means that I must try to get the most for my money in everything I buy, including reading material. It is known that reading is the world's chief recreation. In fact a person is himself plus what he reads.

"Now my family and I really do enjoy good reading material, so we decided to subscribe to one or more magazines. But we planned to buy a sample copy of lots of magazines, read them all and then choose the best giving consideration to the type of magazine, articles with their authors and the subscription price. It certainly did not take long to choose the one we want. HEALTH AND HYGIENE topped them all. We read every word from cover to cover and could hardly wait to tell our friends about this discovery. Yes, I said discovery because it was like finding a gold mine.

"After seeing the names of the advisory and contributing board we knew we were reading facts and could place faith in the articles.

"Now you would like to know which article or feature we liked the best. I must admit you've got me there. They are all so very good, but if I must choose one article then I'll say Is It Heart Disease? in the November, 1937, issue. I choose this article because personally I am a sufferer from heart disease, but I never really knew just what it meant to me or where I stood. Your article told me all I wanted to know in a simple manner.

"Your second best feature is the Questions and Answers. This feature alone is worth the price of several magazines, but I won't attempt to say all that I would like to say. Instead of praising your magazine to you I will do all I can to circulate this fine magazine in my locality."

EACH MONTH WE WILL GIVE a free, autographed copy of Arthur Kallet's 100,000,000 Guinea Pigs or Carl Malmberg's Diet and Die to the reader who sends us the best letter telling us what he likes - or doesn't like - about HEALTH AND HYGIENE, and why.

SYPHILIS CONTROL BALLOT

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

|--|

Please send me extra ballots.					
City and State	· · · · · · · · · · · · · · · · · · ·				
Address	· · • · · · · · · · · · · · · · · · · ·				
Name	· · · · · · · · · · · · · · · · · · ·				

Sun Lamps

(Continued from page 37)

diseases may be made worse; children may suffer a decrease in the hemoglobin content of the blood when treatment is continued for months.

With improper use burns of the eyes may be produced. It must also be remembered that sun lamps are electrical instruments and must be handled so as to avoid shocks.

To summarize briefly: there are very few indications for the home use of sun lamps. There is no definite proof that general health will be improved or winter infections prevented by exposure to ultra-violet light. Tanning of the skin is the only definite result that can be expected. In view of the dangers of over-expossure, careless handling, and indefinite continuation of treatment, any ultra-violet treatment, especially in the home, should be under the supervision of a physician, just as the administration of drugs should be under competent medical supervision. The physician will give definite recommendations as to the type of lamp to use and the proper method of use.

An outgrowth of the craze for sunlight is a special window glass which, unlike ordinary window glass, transmits ultra-violet light. However, the amount of ultra-violet light in sunshine is influenced by geographic location, time of day, season of the year, the presence of dust, smoke, and moisture. During the winter months when the amount of ultra-violet rays in sunlight is markedly diminished these windows are useless, since there is very little ultra-violet light to be transmitted. In summer, on the other hand, they are not needed. It is a waste of money to install this special glass in windows.

Sunshine is still the cheapest and most satisfactory form of ultra-violet light.

Winter Sport Injuries (Continued from page 39)

After thawing there is redness or blue discoloration. In bad cases blisters or swelling arise and the limb "dies." Frozen limbs have to be thawed slowly, too. Immersing them in cold water is an excellent remedy and smearing them with ointment, butter, or oil, and then covering them with a bandage is also good. Chilbains may be relieved by painting them with tincture of iodine.

Frozen persons and skaters who have broken through the ice and nearly drowned may require artificial respiration. This may be applied by laying the patient on his belly, with one arm overhead, the other bent at the elbow, and the face turned outward so that the mouth and nose are free for breathing. The person administering aid straddles the patient's hips, places his hands in the small of the back with the fingers resting on the ribs so that the little finger touches the lower rib. The weight of the body is then thrown forward slowly from the waist so that the weight is brought to bear on the patient. This forward swing should take about two seconds. The pressure is then removed by bringing the body back to an upright position and after two second the downward pressure is again applied. This process should be continued for hours, if necessary, until the patient is again breathing naturally or until he has been pronounced dead.

Accidents will happen especially in such active and robust sports as are followed in winter. However, if the above rules are observed, the chances that your winter sport enjoyment will be marred by really tragic accidents will be considerably diminished.

Childbirth Through the Ages (Continued from page 41)

the right of every pregnant patient to have and to demand." (U.S. Department of Labor, Children's Bureau, Publication No. 221.)

As this issue goes to press the Conference on Better Care for Mothers and Babies, called in Washington by the Children's Bureau, is urging the government to concern itself actively with better maternity care for the mass of women. This is a good sign.

For the next chapter to be written in the history of childbirth through the ages, future students will turn to the Soviet Union. According to the eminent historian, Prof. Henry E. Sigerist, the Russian Revolution liberated women in all spheres and if it "had achieved nothing else, this alone would be enough to make it an event of great historic significance." For a detailed account of maternity care in a socialist state, the reader is referred to Prof. Sigerist's book, Socialized Medicine in the Soviet Union. [This book is reviewed on page 58 of this issue.-Editor.]

A Report on LISLE STOCKINGS

with ratings of 14 brands

What are the "Best Buys" in non-silk bose? Which brands compare most favorably with silk stockings in appearance and in wearing aualit v?

How do lisle and rayon bose compare in wearing quality?

These questions are answered in a report in the current (January) issue of Consumers Union **Reports** giving test results on lisle and other non-silk hosiery. More than 14 brands are rated by name as "Best Buys," "Also Acceptable," and "Not Acceptable" on the basis of wear and laboratory tests. There is also a supplementary note on the labor conditions under which these brands are made.

Other reports in this issue cover:

HOME BUILDING and BUILDING MATER-IALS The first of a series of reports intended to supply a "layman's technique" for buyng or buldng a home. If you want the cold facts about home ownership read this report.

STORAGE BATTERIES This report rates 13 makes of storage batteries for comparative quality, naming those which will get a car going most readily in cold weather.

MEN'S SHIRTS and SHORTS Of the 14 kinds of broadcloth and madras shorts tested and reported upon in this report only two are rated "Best Buys." Undershirts are also rated.

VITAMINS and COD-LIVER OIL This report also the first of a series -deals with vitamins and in particular with Vitamin D and cod-liver oil. The series will attempt to give a summary of what is actually known about vitamins, and to estimate the value of vitamin products

- **.**. 1 To secure a copy of this issue fill out and mail the coupon below. The membership fee of \$3 will bring you 12 issues of the Reports and, without extra charge, the 1938 250-page Consumers Union Annual Buying Guide which will appear

LIFE INSURANCE This report-the third in a

series which aims to supply a sound basis for

judging the value of insurance policies-exam-

ines three representative contracts: renewable

term, ordinary life, and 20-year endowment.

early in 1938 and which will contain ratings of over 1500 products. Membership can be started with the current issue or wth any of the following previous issues: JULY Miniature Cameras, Gasolines, Motor Oils; AUG.-SEPT. Refrigerators; Films, Ice Cream, Inner Tubes; OCT. Oil Burners and Coal Stokers, Breakfast Cereals, Auto Radios; NOV. Life Insurance, Portable Typewriters, Men's Hats; DEC. 1938 Radios, Cigars, Lipsticks, Electric Shavers.

WHAT CONSUMERS UNION IS Consumers Union of United States is a non-profit, membership organization established to provide ultimate consumers with accurate and disinterested information on the products they use, based on laboratory and use tests by competent technicians. The results of these tests are reported monthly in Consumers Union Reports, in most cases with ratings of the products tested by brand name as "Best Buys," "Also Acceptable," and "Not Acceptable." Information is also given on the labor conditions under which

ARTHUR KALLET, Director D. H. PALMER, Technical Supervisor

To: CONSUMERS UNION OF U. S. 55 Vandam Street, New York, N. Y. Send me Consumers Union Reports for one year (12 issues) starting with the issue. I enclose \$3 for membership, \$2.50 of which is for subscription. I agree to keep confidential all material sent to me which is so designated. Name Street City Occupation H-1

CONSUMERS UNION of UNITED COLSTON E. WARNE, President

products are made. If you cannot afford to spend money unwisely read **Consumers Union Reports.**

Coming in

FEBRUARY

RATINGS OF THE

1938 AUTOMOBILES

STATES

		þ
FEBRUARY,	1938	l