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LIFE AND HEALTH

April, 1917

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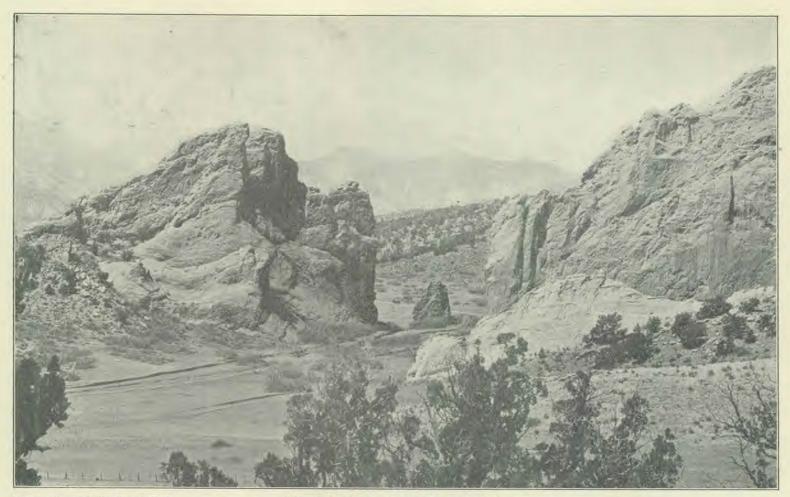
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GATEWAY TO THE GARDEN OF THE GODS
Pike's Peak in the distance. The altitude of the snow-covered peak is 14,109 feet.



A PLEA FOR HOME HYGIENE

UST as there has been a complete renovation of the doctor's remedial equipment, resulting from the advanced knowledge gained the past two or three decades, so must the family medicine cabinet, stored as it has been with a dozen or more bottles of proprietary medicines, be replaced by a more carefully ordered equipment, in order that the principles of hygiene and sanitation may be fully exemplified in the home life.

It has been proved that many of the supposedly reliable remedies which physicians so faithfully prescribed are in fact of no effect; and since the medicine saddlebag of one to two hundred vials has been replaced by an extensive diagnostic outfit which physicians bring to the home, it seems inconsistent for the family to cling to cure-alls which the medical profession consider as the least important of all the old-time remedies. One of the greatest evils of the family medicine cabinet is that it leads to carelessness concerning the things that cause disease,—such as poor ventilation, inadequate diet, improper eating, and faulty clothing,—and to the neglect of cleanliness, bathing, disinfection, and other details of personal hygiene. The average layman usually has within his grasp the knowledge whereby most of the common ills which have caused so much recourse to the medicine shelf, can be entirely prevented.

It is a matter of common experience that many individuals are hindered in their struggle for prosperity, as a result of sickness. It is not the sum paid for the medicines in the family medicine cabinet, nor is it the money paid to the doctors, that is the heavy drain upon the home of average means. It is the loss of time and earning ability, and the ultimate weakness resulting from bad hygiene and neglect of the laws of health, that today constitute the greatest drain upon the human race.

Through the absence of quarantine laws and public sanitary measures in past years, we were exposed to the diseases from which our neighbors suffered, so that the greatest mortality rates in those days were due to contagious and infectious diseases; but today, while protected by the exacting quarantine regulations provided for every town and community, we are showing even greater mortality from diseases contracted within our homes as a result of neglect of personal hygiene and home sanitation.

A great deal of disease is the result of bad cooking. Few have given serious consideration to the proper preparation of food, and to the proper combination of foods to be taken at a meal. The knowledge of this subject, by enabling one to obtain adequate nutrition, increases the bodily resistance against disease. A large number of the common diseases, including rheumatism, Bright's disease, diabetes, appendicitis, constipation, arterial hardening, and apoplexy, are frequently due to improper nutrition. These diseases increase the mortality of the race to a marked and even an alarming degree.

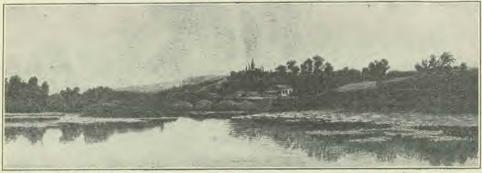
The physician would not minimize the influence of heredity as a factor productive of disease, but his observation has convinced him that much of the stomach trouble, rheumatism, and other chronic illnesses that seem to run in families, is the result of bad hygiene, to which all the members of the particular families are exposed. I have observed that adopted children and boarders seem to have the weaknesses common to the family in which they live. In fact, I believe that the children partake of the physical weakness of the father and mother because they eat of the same cooking, sleep in the same poorly ventilated quarters, and suffer from the same lack of care and cleanliness and other poor hygienic conditions, rather than because they are victims of a transmitted blood inheritance at birth. Heredity is a factor worthy of consideration, but should not be made responsible for many ills acquired from the constant neglect of health principles.

Overwork and worry often result primarily from neglect of order and system in the home life. Many, by improper methods of clothing, unnecessarily expose the body, and then crowd into poorly ventilated, superheated sleeping-apartments. These practices do much to increase the doctor's income.

The home emergency and home treatment equipment should constitute a part of the essential furnishings of a successful home. Privileged as we are, in a roomy land with many beautiful sites for homes, with annual betterment of the public highways, and with cheap and rapid transit within the reach of almost every one, it seems particularly unfortunate that there should continue to be such a tremendous trend toward overcrowding in compact apartments and tenement houses, often having rooms with no exposure to the sun. While such environments are disadvantageous to the well, they are disastrous to the ill.

We commend to the reader some of the suggestions in this issue as to how a home may be made an environment conducive to health. And as the foundation of every great national movement must be based upon improved home organization, so we may say that any national health propaganda must involve the inauguration of a campaign to render every home a model of hygienic and sanitary principles.





Etching by J. M. Millspaugh

SYMPOSIUM: HOME TREATMENT

MEETING HOME EMERGENCIES

H. W. MILLER, M. D., SUPERINTENDENT WASHINGTON (D. C.) SANITARIUM

HE first great essential in any accomplishment that requires immediate attention is self-possession and composure. which will give such confidence and composure will be the knowledge of what to do, learned previous to the time of any emergency. Many people are greatly excited at a large fire, some crying one thing and some another, some running one way and some another in confusion, no one knowing exactly what to do. Firemen trained for such emergencies are composed and self-possessed because they are familiar with fire; they have no dread of it because they have previously anticipated and planned for just the things they will have to do in each emergency.

The accidents that most frequently occur in a home are so limited that it is within the range of every one to become acquainted with the things to be done first in any emergency, and the first aid that might be rendered by any member of the home is generally all that would be possible for one of more skilled training to do at the time an accident happens, owing to the fact that physicians ordinarily do not carry with them emergency equipment, and without their equipment they would do essentially the same thing as any layman would do.

It quite often happens that when a physician is sent for, he is given no definite information as to the nature of the difficulty, so that he is not prepared to do the thing necessary, and must either return for further equipment or send the patient to the hospital.

In any accident the procedure will vary according to the character of the injury. A few only of the most common accidents can be referred to particularly in this article.

Foreign Body in Eye

Even a very small particle, be it sand, iron filing, small splinter, whether lodged in the front of the eyeball or lying under the lid, rubbing against the forward surface of the eye, not only becomes very painful, but may in a short time cause severe inflammation and injury to the eyeball. Nature at once endeavors to rid the eye of this foreign material by washing out the particle with the excess flow of tears. The simplest measure for getting rid of this foreign particle is to draw the upper eyelid down over the margin of the lower eyelid, allowing an abundance of tears to After a moment or two accumulate. lift up the eyelid, and probably the dust particle or cinder will be washed away and the irritation relieved. Any particle that can be seen embedded in the eyeball, or that cannot be easily wiped from the surface of the ball, or from under the surface of an eyelid by a little cotton or the end of a toothpick, should be let alone. A cold compress should be applied over the eye, not permitting it to be rubbed or irritated, and a physician should be called immediately.

Lime splashed into the eye will very quickly burn the surface of the eyeball. Sugar dissolved in water is a quick antidote for lime burn. If sugar is not at hand, it should be remembered that lime or any strong alkali or acid fastening on the tissues of the body should be diluted immediately by copiously irrigating the surface with water.

Foreign Body in the Ear

It frequently happens that children playing with small articles, such as grains of corn or small shot, get some foreign particle in the ear canal, which may become extremely painful. The only thing permissible for a member of the family to use in dislodging such foreign particles is a little current of warm water directed into the opening of the ear. If an ear syringe is not available, the family fountain syringe may be used for this purpose. Never endeavor to dig out with a wire, hairpin, toothpick, pin, or needle any foreign particle lodged in the ear or nostril. In case of failure to dislodge a foreign particle by the use of water, one who is expert in dealing with such conditions should be consulted.

Swallowing Foreign Body

Members of the family are often thrown into great distress because the baby or the smallest member of the family has swallowed a penny or a safety pin, or, as I have known, an entire necklace, and their fear causes them to stand the child on its head, give strong medicines, and use drastic measures. This fear is usually unwarranted, for few children have any great difficulty in passing any small body they may happen to swallow. That portion of the intestinal tract from the mouth to the stomach is usually the narrowest portion, and whatever passes through that will s fely go through the rest of the intestinal tract. In the case of a child that swallowed a necklace, the writer was consulted by the mother and her attending physician for an operation on the stomach to remove the necklace, but sufficient time had elapsed before he was called, for the necklace to pass down into the large intestine, where we located it by the use of the X-ray, and the necklace was recovered the next day, after being passed through the natural channels.

Cuts and Lacerations

I wish especially to call attention to the necessity of care even of small cuts. The danger of a cut is not the extent of it, as a general rule, but the conditions under which such an injury was inflicted. Almost all cuts and abrasions can readily be cleared up by surgery, and seldom prove fatal unless in the more vital regions of the body, or where very large blood vessels and visceral organs are lacerated; but the danger of cuts and bruises is in infection. Every wound must be cleansed as thoroughly as possible. Those wounds that bleed most freely, usually heal with the least infection, as the bleeding itself cleanses the tissues on which the cutting or abrading instrument deposited its infectious material.

The most dangerous of the infectious organisms is the tetanus, or lockjaw, germ. This germ is very prevalent. It usually lives in the dirt, and any wound caused by an article which has been in contact with dirt or dust, can be looked upon as a possible source of infection with the tetanus germ, and the only safety in such cases is the use of tetanus antitoxin, which should be administered by a physician. There are many wounds, however, that, because of the slight injury caused by them, are never brought to the attention of a physician, and it is in these cases that tetanus is often developed.

Hemorrhage occasionally proves fatal; and when there is hemorrhage internally, it is usually manifested by a condition of intense thirst, marked restlessness, and very rapid pulse, a blanched condition of the patient, with chilling, and especially paling of the lips. The patient should be kept warm. A bandage drawn tightly around each arm and leg will often retain within the extremities a large amount of blood that might otherwise be lost. With the slightest evidence of internal hemorrhage the greatest urgency should be used in securing medical aid.

Poisonous Bites

Injuries by poisonous reptiles or vicious animals must be dealt with immediately, and those who are liable to sustain such injury ought themselves to be acquainted with the appropriate firstaid measures. Where the flesh is torn and opened by the fangs or the claw of a poisonous animal, a rapid destruction of the poison is the object in view, as the absorption of a very small quantity of

this poison may in a very short time result fatally. Crystallized permanganate of potash is the most useful of all agencies to have at hand, the crystals being rubbed into the wound. If the bite is by a dog which may be suffering from rabies, instead of killing the dog, he should be isolated and observed, and if he proves to have been infected with rabies, the Pasteur treatment should be resorted to as a secondary measure.

First Aid to the Unconscious

Individuals are frequently found in an unconscious condition, with nothing in evidence to show what has caused the unconscious state. A few of the conditions that cause unconsciousness in those who have been apparently well, are epilepsy, fainting, sunstroke, hemorrhage of the brain, heart weakness, uremia (disease of the kidneys), anesthesia, drug poisons (especially opium and alcohol), suffocation from illuminating gas, and concussion of the brain (a fall or blow upon the head). The circumstances may in some cases give a clue as to the cause.

The first thing to be observed is whether the patient is living. The presence of a pulse and of breathing must be depended upon to determine this point. An unconscious individual may properly be removed to a bed or to a private room, but the dead should not

be molested, pending the coroner's inquest. It is often well to look over the individual for external injury, then next to observe the mouth and nostrils for any evidence of suicide. A bitten tongue or cheek may give a clue to epilepsy. Very marked contraction of the pupils frequently reveals opium poison. Efforts should be made in any case to keep the surface of the body warm by the application of heat to the extremities, care being taken not to burn the patient, and to surround him with an abundance of fresh air. Apply artificial respiration when necessary, and loosen the clothing. If the eyes are congested and very red, apply cold compresses to the head, and give plenty of fresh air.

If the breathing is very feeble, shallow, or irregular, institute artificial respiration, and do not leave such a person for a moment, but ask some one else to call a physician. The patient should be very carefully observed, in order that when the physician arrives all the information possible may be given him intelligently and in an orderly manner, revealing to him the conditions under which the patient was found, and all that has transpired during the time of the observation. Even the information that the patient raised one arm, and which arm it was, might be all the clue that a physician would need for an immediate diagnosis and treatment.



LEE MANSION, ARLINGTON, VA.

HOME EQUIPMENT IN THE CARE OF THE SICK

LOLA G. FRENCH, R. N., SUPT. OF NURSES, WASHINGTON (D. C.) SANITARIUM

W

E recognize that the ideal in the care of the sick today is to have the trained, skilful nurse by the bedside, faithfully mak-

ing observations for the attending physician, and carrying out his orders in an intelligent manner. Not every home, however, can afford the services of a trained nurse, nor would the number of nurses graduated from the various sanitariums and hospitals be adequate to meet such a demand. Therefore it would seem advisable for every mother. or some member of the family, to become as intelligent as possible in regard to the essentials required for the care of the sick, so as to exercise discretion as to when the physician should be summoned, since unnecessary calls are an expense of some consideration to the average family, and might be eliminated if definite information concerning the pulse, temperature, respiration, quantity and appearance of excretions, temperament, etc., could be given him at once.

It should be understood that what to do is the doctor's part, and how to do is the part of the mother or nurse; and it is the object of this article to set forth some of the things that can be done, and

how to do them, in order that more valuable service may be rendered the sick.

The home-treatment cabinet should contain simple drugs and appliances for use in the ordinary illnesses and emergencies of family life, but not for the purpose of drugging "internally, externally, and eternally," with little knowledge of results, any member of the family who may be indisposed.

The following is a suggestive list of sick-room appliances, which will be found useful:—

Hot-water bag
Ice bag
Fountain syringe
Clinical thermometer
Bath thermometer
Medicine dropper
Measuring glass
Drinking tube
Safety pins
Adhesive tape
Absorbent cotton
Castor oil

Epsom salts
Vaseline
Iodine
Alcohol
Listerine
Boric acid
Sterile gauze
Bandages
Camphorated oil
Carron oil
Flaxseed meal

In case of one who may be confined to the bed, a rubber sheet is needed for the protection of the mattress; and a bedpan, four fomentation cloths, and two blankets for use in giving treatments. In practically every illness four things are essential; namely, that the patient rest, that he have a carefully selected



HOUSEHOLD EMERGENCY SUPPLIES

Articles as outlined in list given above. (See also illustration on next page.)

diet, that the bowels and kidneys be kept active, and that such treatment be administered as is indicated by the condition of the patient.

In acute illness, unless it is definitely known that the disease is not contagious, the patient should be isolated in a sunny, well-ventilated room not directly connected with the living-rooms of the family, and preferably near a bathroom. In any case, rest is needed, and the patient should not be required to entertain the various inquiring friends. Except in case of such diseases as scarlet fever or measles, in which the eyes may be affected, plenty of light and sunshine should be allowed to enter the room.

It is quite essential that the pulse, temperature, and respiration be taken regularly three times a day, and a record kept of the same for the benefit of the physician. These "three vital signs" maintain a certain ratio to each other which is significant, and for that reason

they should be taken at the same time each day.

The pulse may be easily felt on the thumb side of the wrist, about an inch from the base of the thumb, and should be counted for a full minute. The normal pulse ranges from seventy to eighty beats a minute. Note should also be made of the regularity of the pulse.

The respiration is best taken when the patient is not aware of it, by watching the chest rise and fall. The normal rate in adults is sixteen to eighteen a minute, in children twenty to twenty-four a minute, and in infants twenty-four to thirty a minute.

The clinical thermometer is used in taking the temperature either by mouth, axilla, or rectum. In taking the temperature by mouth, shake the mercury down to 95°, and place the thermometer under the patient's tongue. Instruct him to keep the lips closed for at least three minutes. The thermometer should



Fomentation cloths.
 Bedpan.
 Hot-water bottle.
 Rubber sheet.
 Bath thermometer.
 Fountain syringe.
 Ice bag.

then be read, and cleansed immediately with soap and water — never hot water. The temperature of infants and children may be taken more accurately and safely by rectum. The normal temperature ranges from 98° to 99°.

Many times a fever may be readily lowered by the use of a laxative, - castor oil or Epsom salts,- or by a warm, cleansing enema. It is also essential to lighten the diet - perhaps giving only liquids for a day or two, and plenty of water to drink. Some treatment that aids elimination through the skin is very beneficial, and should be given in a warm room free from drafts. This may be a foot bath as hot as can be borne for about ten minutes, at the same time applying fomentations to the abdomen and cold compresses to the head, being careful to protect the bed from dampness. This will induce perspiration, aid in the elimination of poisons, and regulate the heat mechanism of the body, which for some reason has been disturbed. Following this treatment a tepid sponge bath or an alcohol rub should be given, during which the patient should be kept warm and well protected.

In giving an alcohol rub, use equal parts of alcohol and water. Bare the arm to be treated, dip the hands in alcohol, and stroke the arm from hand to shoulder and back to the hand again, covering the entire surface. Laying the arm down, stroke from shoulder to hand until the surface is dry. In the same manner apply the alcohol to the other arm, the chest, the abdomen, the legs, and the back, exposing only the part necessary for treatment.

In giving fomentations, four cloths about thirty-six inches square are needed. These may be cut from a single blanket, preferably half cotton and half wool. The two cloths to be used for the wet fomentations are each folded three double, making them thirty-six inches long and twelve inches wide, and are wrung out of boiling water. When necessary to wring the fomentation cloth by hand, partially twist it, holding it by the

ends, dip in the boiling water, keeping the ends dry, twist tightly, pull the ends apart until it is sufficiently dry, release one end, when it will quickly untwist, wrap it in the dry cloth, and apply. Three or four applications should be made, placing one fomentation as the other is removed. It is well to finish with an application of a cold towel, before drying the surface. If such a procedure does not lower the temperature and bring about normal conditions, a physician should be called, as there may be developments of a serious nature.

A few of the common ailments that are usually of short duration are colic, convulsions, indigestion, and croup. At the onset of colic it is always safe to give a laxative and an enema. Some form of heat applied to the painful area will usually give relief. Gentle massage or light stroking to the abdomen may be found beneficial.

Convulsions are usually caused by indigestion—sometimes by worms, in children. Dentition is a common cause, also sudden fright. An enema and a warm bath should be the first measures used. If approaching a chill, or continued for any length of time, it is well to summon a physician.

Croup is very common in children, and needs immediate attention. A fomentation to the chest will often succeed in relieving the tightness in the chest. An emetic of salt in warm water, also an enema, are measures to be used early; and last of all, steam inhalation may be found of benefit. This is made by using a teaspoonful of tincture of benzoin compound to a pint of boiling water, and inhaling the steam. In treating very young children, flaxseed poultices may be substituted for fomentations.

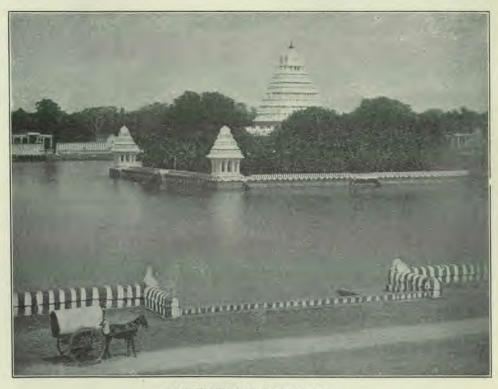
In every illness the mouth should be well cared for — the teeth brushed, and the gums and tongue cleansed with some good antiseptic solution, such as boric acid or listerine. When there is a discharge from the eyes, they should be cleansed with boric acid applied with cotton or a medicine dropper. In throat affections, a gargle made up of one part listerine to three parts water may be used three or four times a day with benefit.

In case of burns, a soothing dressing may be made by saturating gauze with carron oil (an emulsion of equal parts of limewater and linseed oil).

For bruises where the skin is broken, and for cuts, unless they are so extensive as to require stitches to be taken, the wound may be painted with iodine, and protected with a dry sterile dressing, which is much to be preferred to the various ointments and salves commonly used.

Considering the frequent need and use of such equipment as has been mentioned, the small expense involved in providing the same, and the help it will be to the comfort and safety of the home, it would seem that the above should be the minimum equipment. It may be added to as interest in this subject develops and familiarity with the means for home treatment of the sick increases.

Takoma Park, D. C.



HINDU TEMPLES, SOUTH INDIA

THE PREPARATION OF FOOD FOR THE SICK

GEORGE E. CORNFORTH, DIETITIAN NEW ENGLAND SANITARIUM, MELROSE, MASS.

HE body is dependent on food for energy and for the maintenance of life itself, whether in health or disease. In sickness it is chiefly from food that the body gets its power to recover. But in disease the body's ability to get from food that which it needs is lessened. For this reason the food given to the sick—its kind, its preparation, the manner of serving it—is of the greatest importance. The very life of the sick one depends upon it.

When a person is confined in bed, the natural stimulants to the appetite, fresh air, exercise, and interesting and cheerful companionship, are lacking, and the taking of food becomes the chief event of the day. For this reason too much care cannot be bestowed upon its preparation and service, that it may please the patient, stimulate appetite, and be easily and well digested.

Liquid food is given to the very sick because it can be digested and assimilated with little labor on the part of the body. But liquids should not be diluted to such an extent as to be lacking in nourishment, and cause the patient to become tired of swallowing before sufficient nourishment has been taken.

The constituents of food which specially give the body the power to recover from sickness are the mineral elements. These are found especially in fruits and vegetables. For this reason fruits and fruit juices stand at the head of the list of foods suitable for the sick. Raw fruit juices are to be preferred, such as orange juice, apple juice freshly pressed from clean, sound apples, the juice pressed from fresh grapes, fresh raspberries, and fresh blueberries. There is something very valuable to the body in raw foods that is destroyed to a greater or less degree by cooking. But along with the raw juices, the juices of cooked fruit are good, such as grape juice, blueberry juice, raspberry juice, pineapple juice, and strawberry juice. The juice drained from canned fruit may be used. Only sufficient sugar should be added to make it palatable. Preserves and jellies are not suitable for the sick. They contain too much sugar to be wholesome, and in them the health-giving properties of the fruit have been destroyed.

Another quality of fruit juices that makes them specially good for the sick is the fact that the nourishment they contain, that is, the nourishment other than that which is due to the cane sugar added to them, is in a predigested form and does not tax the digestive organs. Still another valuable constituent of fruit juices is their acids, which have power to destroy disease germs, and are very refreshing and cleansing to the digestive tract, as well as stimulating to the appetite.

When the sick one can take solid food, the more easily digested fruits may be given him, as well as fruit juices, such as mellow apples, pears, peaches, strawberries and other berries. Bananas are usually too hard to digest to be given to the sick, though if they are thoroughly ripe, the skin having dark spots, or perhaps entirely turned brown, and the flesh is mealy, they may be used in some cases, especially if they are mashed to a pulp. Or they may be baked. They are among the most nutritious of fruits. I once knew a typhoid patient who could not take milk, to be given bananas, but this would not be recommended in all cases.

The thought comes to me that I ought to say, lest some one gain a mistaken idea, that fruits and fruit juices alone cannot be depended on to sustain life, because they supply only heat-and energy-producing food besides their mineral constituents. Building food must be supplied by such foods as eggs, milk, bean and pea broth, and gruels. Nutrition is sometimes added to fruit juices by beating egg with them, either

the whole egg or the yolk alone or the white alone.

Vegetables also are valuable principally for their mineral elements. Therefore raw vegetables, such as lettuce, celery, cabbage, and tomatoes, are good for those who can take them; and vegetable broths prepared in such a way that they contain the mineral elements of the vegetables have health-giving properties that are valuable in sickness. Raw vegetables are sometimes chopped very fine, and the juice pressed from them in a fruit-juice press. This juice is far more valuable for its medicinal and health-giving properties than the juice pressed from raw meat. baked potatoes are easily digested, and contain mineral constituents that help to increase or maintain the alkalinity of the blood.

The following recipe makes a broth of special value for its health-giving properties:—

Vegetable Broth

1 pint finely chopped celery 1 pint finely chopped carrots ½ pint finely chopped turnips

½ pint finely chopped beets
4 sprigs parsley or 5 spinach leaves or outside leaves of lettuce, chopped

1 quart cold water

Put all the ingredients into a double boiler, and cook five hours. The use of the double boiler keeps the temperature of the cooking vegetables below the boiling point. By reason of this the mineral elements in the vegetables are changed less, and less that is valuable in the vegetables is lost, than when the vegetables are boiled. At the end of five hours turn the vegetables into a fine strainer or jelly bag to drain off the juice, and press well to extract all the goodness. Serve hot or cold, seasoned with salt or with salt and cream.

Cream Asparagus or Spinach Broth

Season the water in which asparagus or spinach has been cooked, or the water from canned asparagus or spinach, with cream and salt. Serve hot. It may be necessary to dilute the broth with a little water, that it may not be too strong to be palatable.

A specially nutritious broth is made as follows: —

Bean or Pea Broth

Thoroughly wash one pint of pea beans, Lima beans, or split peas, and put them to cook in two quarts of cold water. Bring them to the boiling point slowly, and simmer gently for several hours, adding boiling water, if necessary,

till the water in which the beans or peas are cooking becomes rich. Drain off the water, of which there should be not more than one pint; season with salt or with salt and cream, and the broth is ready to serve.

Eggs and milk are specially valuable in feeding the sick on account of the mineral elements they contain,—the lime, phosphorus, and iron,—and also on account of the easily digested protein and fat, and because they contain no cellulose or indigestible matter, which the alimentary tract is unable to deal with in sickness.

Besides soft cooked eggs the following are acceptable preparations of egg for the sick:—

Fruit Eggnog

2 egg whites A few grains salt

1 teaspoon to 1 tablespoon lemon juice

2 tablespoons sugar 1 teaspoon egg yolk

Add the salt to the whites and beat them stiff. Beat in the lemon juice and sugar. Save out about one tablespoon of the beaten white. Beat the egg yolk into the remainder, and put it into a glass. On top put the egg white that was saved out. Part of the mixture may be colored with fruit juice, as grape, raspberry, blackberry, or orange. Or a few fresh or stewed raspberries or a little diced orange may be stirred into it.

Cream Eggnog

2 eggs

2 tablespoons cream

A little sugar, if desired

Beat the whites and the yolks separately. Add the cream to the yolks. Put most of the beaten white into the glass. Pour the yolk mixture over it so it will run down around the white. Put the rest of the white on top. If the sugar is used, part of it should be beaten into the white and the rest into the yolk mixture. A little vanilla flavoring may be added.

Milk Eggnog

1 egg

cup milk, or part cream

2 teaspoons sugar

4 drops vanilla

Beat the ingredients well together, and serve in a glass.

Dainty thin slices of bread thoroughly dried, and toasted to a delicate brown throughout the slice, make a wholesome and easily digested form of bread to offer to the sick.

As to the quantity that should be given to the sick I would say that not less than eighteen hundred calories should be given during a day. And to give some idea as to how much food would supply that quantity of nourishment, I will give the following table of food values (by one glass is meant a glass three fourths full, the amount that would be served):—

	CALORIES
1	glass milk
1	glass apple juice 100
1	glass grape juice, unsweetened 100
1	glass grape juice, sweetened 150 to 180
1	glass orange juice 100
1	glass other fruit juices, approximately 100
1	egg, according to size 60 to 70
1	cup vegetable broth 12 to 15
1	tablespoon sugar 60
1	tablespoon thin cream (18 per cent) 29
3	glass thin cream
1	slice bread
1	thin slice toasted bread 50
1	glass gruel 50 to 75
1	medium baked potato (about 3 oz.) 75
	apple (5½ oz.)
	serving of lettuce, with & lemon, about 10
1	tablespoon butter 110
1	tablespoon olive oil

The desires and tastes of the sick one should not be ignored. Tact should be used in discovering the likes of the patient without asking him, and then effort should be made to suit the food to his taste as far as is consistent with supplying wholesome food and that which is suited to his condition. In attractiveness and palatableness, each meal should be as much of a surprise as possible. Odor from cooking food should not reach the patient. Hot foods should be served hot, but not too hot to be eaten or drunk. Cold food should be served cold, but not ice cold.

Gruels, when properly made, are easily digested and nutritious, but not when made by simply stirring some cereal into boiling water. The cereal

from which gruel is made should be cooked in a double boiler as thoroughly as if it were to be eaten as a cereal. It should then be thinned with hot milk, cream, or water; strained, to be sure it contains no lumps; seasoned with salt, and served hot. A gruel should be of such consistency as to have a rich taste, not thick like gravy nor thin and watery.

Scrupulous neatness and care are required in cooking and in serving food to the sick. Some seemingly trivial, careless act may be sufficient to take away the little appetite a patient may have. The tray on which food is served should be covered with a clean white napkin, and the silverware should be bright. If there are in the house dainty china and pretty little glass dishes, this is the time to put them to good service. Anything that suggests heaviness is fatiguing to the sick. If possible, broth should be served in a thin, light cup, partly filled: milk and fruit juice in a thin, light glass; the bread should be thinly sliced, the toast should be thin and crisp, crackers and ready-to-eat cereal foods freshly toasted, the fresh fruit cut and arranged in some new and unexpected way. A straw placed in a cold drink may make it more palatable. A sprig of leaves, a flower, a quotation from Scripture, or a pretty verse may bring pleasure. While a patient may be too sick to mention or apparently to notice such little services, it is said with much truth, I think, that a sick person feeds through his eyes as well as through his lips, and these little attentions will, no doubt, in almost every case bring a bit of brightness to him, and help to break the monotony of his long and weary day.



EXERCISE IN THE TREATMENT OF VARIOUS ORGANS

J. W. HOPKINS, M. D., CHIEF PHYSICIAN, WASHINGTON (D. C.) SANITARIUM

XERCISE has beneficial effect on every organ and tissue of the body; systematized exercise exerts a beneficial influence on

the body as a whole, and by careful planning can be made to influence the different organs directly. In persons of sedentary habits, the circulation becomes sluggish and the blood is more or less stagnant, being retained in the internal organs, and causing a congestion in them and in the brain. The extremities are deprived of their proper share of blood, and as a result they become cold. The skin is dry, cold, and scaly, and oftentimes more or less pigmented. Because of the congestion of the internal organs and the stagnation of the blood, they become sluggish in their action. General exercise equalizes the circulation, brings fresh oxygen and life to the blood, and so vitalizes it and the tissues through which it circulates; the extremities become warm, and the brain receives its share of the vitalized blood; the mind is invigorated; the individual becomes more cheerful, and looks upon life from a different standpoint.

In order to produce a direct effect upon the circulation of the brain, general exercise is indicated. Any work which increases the general circulation will enliven the brain. Head bending and turning exercises with movements which develop the breathing are also indicated. General work, as walking, gardening, or sawing wood, will bring a healthful glow to the skin, open its pores, and thus aid in eliminating many impurities by this channel, and remove the excessive burden from the liver, lungs, and kidneys. To directly influence the liver, the movements which bend the body sideways should be used. These exercises should begin with the hands and the hips, as in Exercise 9 of last month. The work should be increased from day to day and from week to week, by taking a greater number of

bendings, or by moving the hands to a different position as to the stretched position sideways, or placing them on the shoulders. In either position, the chest should be kept elevated and the head well up, and breathing should be carefully combined with the movements.

These exercises will stimulate the torpid liver, and cause it to do its share of the work, taking part of the burden from the kidneys and lungs. To develop the stomach and intestines and to increase their activity, the abdominal exercises are necessary. These are taken with the patient lying on the back, and consist in either raising the legs, or with the feet fixed, raising the body to a sitting position. This work should be done moderately, and the severity of the training gradually increased from day to day. The viscera need daily exercise that they may rightly perform their functions, and they must be properly exercised in order that the machine may be well balanced; so the daily program should include measures which directly affect the stomach, liver, and other organs, as well as movements which strengthen the muscles. This program should not be carried to the point of exhaustion, but there is a vast difference between weariness and exhaustion, and it will not injure any one to work to moderate weariness. A healthful tire is beneficial. The daily plan of exercise for this month is increased in severity over that of last month.

Exercise 1: Standing with the heels together, and the balls of the feet rotated outward, so that the feet are at right angles, (a) raise the arms forward and upward to vertical, rising on toes and filling the lungs. (b) Lower the arms sideways, exhaling, the heels coming back to the floor. Do this from eight to fifteen times.

Exercise 2: Standing with arms at the sides and the hands clenched, (a) raise the arms sideways to shoulder height, extending the fingers, and bending the knees to right angles. (b) Lower the arms, clenching the hands and straightening the knees. Repeat this from fifteen to thirty times.

Exercise 3: Standing with the hands on the hips, thumbs well back, (a) bend the head well backward. (b) Raise the head, drawing the chin in. Inhale on (a), exhale on (b). Do this exercise from ten to thirty times.

Exercise 4: With the arms extended sideways, palms down, (a) bend the trunk backward, breathing in, and turning the palms upward. (b) Raise the trunk, exhaling, and turning the hands to beginning position. Do this exercise three to ten times.

Exercise 5: With the arms bent, finger tips on shoulders, and elbows pressed strongly to the side, the left foot advanced one step forward, (a) extend arms upward as high as you can reach, rising on toes. (b) Bend arms to original position, heels sink. Inhale on (a), exhale on (b). In the original position keep the hands pressed well backward, the head and chest up. Do this five to twenty times.

Exercise 6: With the hands on the hips, the thumbs backward, and one foot advanced one step before the other, (a) rise on toes. (b) Bend the knees, going well down to a squatting position. (c) Extend the knees. (d) Heels sink. Do this five to thirty times.

Exercise 7: With the arms extended forward, shoulder height, and palms down, (a) fling arms sideways as far back as you can reach, placing left foot forward one long step, and bending the forward knee. (b) Replace foot, arms coming to initial position. (c) Repeat arm flinging, charging forward with right foot. (d) Resume initial position. Do

this ten to twenty times, keeping the heels on the floor, and head raised.

Exercise 8: Lying on the back, with hands behind the head, and the elbows pressed to the floor or bed, (a) raise both legs upward, keeping the knees straight, and pointing the toes toward the ceiling. (b) Resume original position. Repeat this exercise two to ten times, breathing deeply.

Exercise 9: With arms extended sideways, palms down, and the feet separated sideways about two feet, (a) bend trunk strongly to the left. (b) Resume beginning position. (c) Bend strongly to right. (d) Resume initial position. Repeat four to ten times, to each side.

Exercise 10: With the hands on the hips, walk on toes in place from forty to sixty steps.

Exercise 11: With arms bent as for running, run on toes in place from ten to one hundred steps.

Exercise 12: (a) Turn the head strongly to the left, filling the lungs as you turn the head. (b) Turn the head forward, exhaling. (c) Turn the head strongly to the right. (d) Turn the head forward.

Exercise 13: With the hands on the hips and one foot placed forward about two foot lengths, (a) bend the body forward, keeping both knees straight, the head up, and the chest elevated. (d) Raise body, exhaling.

Exercise 14: Repeat breathing exercise of Exercise 1.



MONUMENT ERECTED TO MEMORY OF PASTEUR, PARIS

A DANGEROUS SHORT-CUT TO HEALTH

L. A. HANSEN

HEN it comes to giving advice on the home treatment of disease by the "patent medicine" method, there is one thing to ad-

vise,—DON'T. Not only is the possibility of real relief from the use of a nostrum as uncertain as the promises contained in its advertising matter, but the possibility of danger from such use is about as certain as death itself.

The expenditure of millions of dollars annually for proprietary nostrums is not the greatest folly involved in this form of self-treatment. Although the money thrown away may mean sacrifice and poverty to the victim, the financial side of the question pales into insignificance

when compared with the misery and loss of life that follow.

The term "patent medicine" is really a misnomer, for nostrums are not patented. obtain a patent it is necessary to publish the formula, and that is just what the promoters of these nostrums want to avoid. Names of nostrums may be protected as trademarks by law, their preparation being based on private formulas. These secret preparations flourish on the strength of the extravagant claims which are made

for them, their use resting largely on a blind confidence in their mysterious composition and a belief in their hidden virtues.

Bear in mind that in medicine good remedies are not kept secret. The code of ethics and the highest honor of the medical profession demand that any discovery of value to humanity must be freely given for the use of all lawful practitioners. It is thus that all the worth-while discoveries in medicine have come to us. Contrast with this ideal the scheme of the nostrum vender, who attempts to conceal the "secret" he claims to have discovered, and then by claims which any thinking person must know are exaggerated, exploits his "discovery" for personal gain. The very basis of the nostrum business is one of charlatanry deception and mercenary profit.

EXTRACT CANNABIS INDICA IS GRAIN PER OUNCE. CHLOROFORM 5 MINIMAS PER OUNCE.

"BEFORE AND AFTER"
The Food and Drugs Act has wrought a marvelous change in labels.

ening conscience on the part of a few periodicals and to the activities of federal and State the authorities, cloak of mysticism is being torn from this fraudulent practice, and these nostrums are made to stand out for what they truly are. With the passage of some laws a few restrictions are placed on the claims that may be made in the labels. and the presence of certain poisoningredients ous be stated. must Newspaper advertisements and circulars may still be used, and are used.

Thanks to an awak-

for the exploiting of false claims; indeed, ninety-five per cent of the potency of the nostrum delusion is said to lie in the printer's ink. Valueless and even dangerous preparations are offered to the public through advertising that is sensational, extravagant, deceptive, and frequently horribly offensive. Such advertising is generally suggestive of physical calamities to come upon those who fail to use the particular mixture advertised. It is usually so worded as to deceive the well into believing that they are suffering with ailments

claims go unchallenged. Little or nothing is said about the composition of their remedies, but everything within the limits of the rather lenient law is said of what they will do. All are familiar with the common newspaper advertisements, standing out in bold type, offering positive relief to sufferers from the most serious disorders. "I cure fits," says one; another, "I cure can-

The Federal Food and Drugs Act

This Act, usually called the "Pure Food Law," is a federal statute intended to protect the public against fraud in the sale of foods and drugs. Here are its powers and limitations regarding the sale of "patent medicines."

IT DOES

Prohibit "false or misleading" statements, on the trade package, regarding composition and source of origin of a "patent medicine,"

Prohibit "false and fraudulent" statements, on the trade package, regarding the curative effects of a "patent medicine."

Require "patent medicine" makers to declare the amount of Alcohol, Morphin, Opium, Cocain, Heroin, Eucain, Chloroform, Cannabis Indica, Chloral Hydrate and Acetanilid in their nostrums.

Exercise a certain degree of control (as mentioned above) over all "patent medicines" that cross state lines (interstate commerce).

IT DOES NOT

Prohibit false or misleading statements (made about the same product) in newspaper advertisements, circulars, window displays, etc.

Prohibit any kind of a lie regarding the curative value of the same product, when that lie is told in a newspaper advertisement or elsewhere than on the trade package!

Require, "patent medicine" makers to declare even the presence of such deadly poisons as PRUSSIC ACID, ACONITE, ARSENIC, STRYCH-NIN—nor any of a hundred other dangerous drugs—in their nostrums!

Exercise the slightest control over "patent medicines" that are sold in the same state in which they are made (intra-state commerce).

they do not have, and to induce them to rely upon a certain so-called remedy for relief.

The fact that most "patent medicines" are made from secret formulas and sold under trade-marked names, makes it possible to claim almost anything for them. People who have no medical knowledge whatever, and who show in their very statements the grossest ignorance of health laws, put forth claims that, by the use of some concoction for which the strongest declarations are made, they can cure diseases that baffle the highest medical skill; and their

cer;" another, "I cure consumption;" still another, "I cure catarrh;" "I cure dropsy;" and so on and so on. These false statements appeal to the sufferer, who grasps at anything that offers hope. An answer to the advertisement means the exchange of good money for worthless stuff, disappointment, greater despair, and the probability of dangerous or fatal procrastination.

Next to printer's ink, the gullible and overcredulous disposition of many people helps to make the "patent medicine" business a financial success. What matters it that the news column tells of the death of some one from using a headache powder? The advertising section finds new victims. People who would think of tinkering an old clock will take any concoction, without a thought as to its effect on the delicate mechanism of their bodies. Some who exercise care in the selection of material for building a house, who use caution to secure a good water

supply, who are anxious about the purity of the milk they use, and shout for pure food laws, will without question swallow bottle after bottle of stuff about which they know absolutely nothing, and about which they take no pains to ascertain anything. They take the word of some one whose reputation for truth and veracity is unknown to them, and accept statements which on their face bear evidence of being worthless.

That the use of "patent medicines" must prove disappointing and often dan-

gerous, is apparent when we consider the fact that in the treatment of disease it is of utmost importance first to know what is the real trouble, and underlying cause. This is usually the most diffi-The cult thing. patient is probably the one least able to determine it. When years of the best of medical training and the

SECRECY AND MYSTERY

are the backbone of the "patent medicine" industry

Take away the element of secrecy and it makes it more difficult for the "patent medicine" maker to lie about his product.

Why are nostrum makers opposed to printing the names and quantities of the active ingredients of their preparations on the labels? Because, as one of their spokesmen has said, if they do they "will be supplying evidence which may result in their own undoing."

If you are going to prescribe for yourself you have the right to know, what you are going to pour down your throat!

THE NAMES AND AMOUNTS OF THE ACTIVE INGREDIENTS OF EVERY MEDICINE SHOULD BE DECLARED ON THE LABEL.

use of the most precise methods are required to arrive at a correct diagnosis, how futile to depend on the suggested symptoms of a nostrum advertisement or the form blanks supplied by a mail order system!

To depend on an advertised mixture to cure a serious ailment is surely poor policy. Prompt and skilful care, so essential to a cure, are neglected, and thus the malady is not

only allowed to develop, but is often made worse by the use of the nostrum. Such preparations are the more dangerous when, by either the stimulants or opiates which they contain, the victim experiences temporary relief. Encouraged by a vain hope, the patient continues the use of his new-found remedy, the disease meanwhile progressing until a cure is impossible. The use of rational means, which, taken at the first might have effected a cure, is deferred until it is too late for a recovery.

The ease with which almost any disease may apparently be cured, according to the average nostrum advertisement, offers considerable couragement for the continued violation of health laws. Dosing takes the place of health rules. Little or no attention is required to the principles of hygiene or of temperance.

A Bag of Fertilizer and a Bottle of Dope

One is for a plant.

One is required by law to print its ingredients on the package.

One can be used intelligently, in accordance with scientific knowledge regarding the effects of the substances on plants.

One thrives upon openness and public intelligence.

One defrauds with difficulty.

For the one, the government, knowing its composition, can furnish the consumer exact information as. to its effects. The other, for a child.

The other is not required to disclose its ingredients.

The other cannot be used intelligently, in accordance with scientific knowledge regarding the effects of the substances on human beings.

The other thrives upon secrecy and public ignorance.

The other defrauds with

For the other, the government, not knowing its composition, cannot furnish the consumer any statement regarding its effects.

Is it just and right that the farmer may know what he gives his plants, and unjust and wrong to allow the parent to know what he gives his child?

Gains 17 Pounds After Every One Gave Her Up.

Miss Ida Schultz had a terrible case of consumption, together with catarrh and bronchitis. With this terrible complication, given up to die, she took the Hill Treatment. She is now cured.

Amherst, Wis.

Dr. J. Lawrence Hill, Jackson, Mich.

Dear Doctor: I have been gaining rapidly. Have gained 17 pounds; weigh 150 pounds now and am getting quite strong, too. I wish you could see me. You would be surprised. I look just fine. Everybody says they never thought L gold get well. I can't thank you enough for it. I am feeling just fine, so will close.

Yours truly. MISS IDA SCHULTZ.

"Eat what you please," "No change of your habits required," and "No restrictions necessary," help to lure victims to nostrum doping and abuse of health.

That many "patent medicines" contain nothing of real medicinal value in the treatment of the diseases for which they are recommended, is not the only

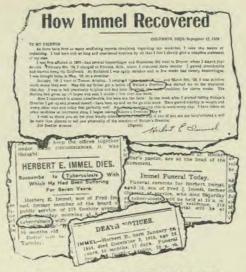
I. Ilage sod City	County of Talese	F CERTIFICATE OF DEATH—LOCAL REGISTER
in Esoh Town, Milas	City of City an infant not named by a fantly name)	Registered No. It death occurred is a hospital or institution give its NAME instead of street and number.)
frae	PERSONAL AND STATISTICAL PARTICULARS.	MEDICAL CERTIFICATE OF DEATH
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FOR B	Age 2 Y years, 9 months, It days	that I had saw to est alive on Buy 17 1909
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76. 1910	as it appears on there reads. m	referred to

Above is a testimonial from Miss Ida Schultz, that she had been cured of tuberculosis. Below is her death certificate, showing she died of tuberculosis. Numerous testimonials of this kind have been used after the death of the patient.

indictment against them. They often contain ingredients that are decidedly harmful, especially to the sick. Many contain alcohol or other narcotics, or dangerous drugs. In some the percentage of alcohol is higher than that of many intoxicating beverages. Morphine and opium are the principal active agents in a number of vaunted preparations.

Even though the labels state the presence of dangerous drugs, the average person is wholly ignorant of the physiological action of such drugs. If these drugs are indicated in any disease, it remains for the skilled physician to determine the dosage and the manner of using. Obviously it is unsafe to trust to an indiscriminate use of a fixed amount as recommended in the "Directions."

One of the strongest charges against proprietary drugs is that they create drunk-Men, enness. women, and children are given an . appetite for drink by the use of alcohol taken in socalled remedies. To such a large extent do some of these preparations answer as intoxicants that in prohibition some States their sale is forbidden. The nostrum business is also responsible for the formation



Another of numerous instances of fraudulent use of testimonials.

of drug habits. Soothing sirups that soothe the little ones by means of opiates. cause many to become drug fiends in later life. Catarrh remedies, so called, have been used in great quantities because of the cocaine which they contain. The constant use such a potent drug is a source of great danger. concerning which the careful practitioner

would do well to warn his patients.

One of the worst forms of this fraud is that perpetrated on women. Persons posing as philanthropic lady physicians offer, through newspaper advertisements, help to "suffering sisters." One suffering with ailments peculiar to her sex, and prevented by a feeling of false modesty from consulting her physician, writes "in confidence" to a "lady doc-

tor" for advice. Her letter, instead of receiving the personal attention of a trustworthy and honorable woman physician. more than likely falls into the hands of a number of silly young men. A form reply is sent to her, accompanied by a request for so much per box or bottle of a "vegetable compound" or some other worthless stuff. When the sufferer stops remitting cash, her letter is sold or



rented to other concerns through a regular letter brokerage business.

But what about the testimonials that are given in proof of the healing qualities of these preparations? That is a phase of the "patent medicine" business which is of very easy solution. Some testimonials have been given by people who, in the first flush of stimulation or under the quieting effects of opiates, have thought they were better. Some have been obtained from persons supposed to have been cured of troubles which they never had. Still other testimonials have been used long after the writers died from the effects of the disease of which they were supposed to be cured.

The list of fraudulent preparations is too long to give here. It is being constantly lengthened, according to the publications showing violations of the Pure Food and Drugs Act. It is practically useless to attempt a discrimination between the good and bad in "patent medicines." Perhaps the best thing about any of them is the instruction on the label advising to "Keep tightly corked."

It is safe to employ simple home measures in trifling ailments, and to consult a reliable physician in serious ailments; but it is never safe to resort to any of the so-called cures put out by unscrupulous men who have no other interest in view than the financial returns, and who will stop at nothing to gain their ends.

Please Do Not Ask Us

Whatis

Any Old Patent Medicine

Worth?

For you embarrass us, as our honest answer must be that

IT IS WORTHLESS

If you mean to ask at what price we sell it, that is an entirely different proposition.

When sick, consult a good physician. It is the only proper course. And you will find it cheaper in the end than self-medication with worthless "patent" nostrums.

A sign displayed by the Economical Drug Company, Chicago, Ill.



A GERMICIDE HARM-LESS TO THE TISSUES

It is generally believed that a substance capable of killing bacterial cells is liable to be injurious to the body cells, but until recently no very definite attempt had been made to determine whether there are any germicides harmless to body tissues.

The method of growing body tissues in nutrient media, just as we might grow roses or ferns in a flowerpot, has made possible a comparatively easy way of determining whether germicides in certain strength will kill tissue cells.

Dr. Robert A. Lambert, working in the pathological laboratory of the Presbyterian Hospital, New York, has tested some of the more common germicides to determine in what concentration they would kill cells and bacteria. Of a number of such germicides, the only one which killed bacteria more easily than cells was iodine, which kills bacteria in a strength of 1 to 2,000, but not in a strength of 1 to 1,250, but not in a strength of 2,500.

It seems a pity Lambert did not make his figures more comparable, but it is presumable that a dilution of 1 to 2,500—that is a grain to 5 ounces — would make an efficient and at the same time safe mouth wash; that is, as efficient as any germicide could be which is in contact with the bacteria for so brief an interval.

The study was made with a view to the discovery of some germicide that might be employed safely and efficiently in wounds. But inasmuch as iodine

¹ Iodine, gr. 1; potassium iodide, gr. 2; water, oz. 5; or tincture of jodine 10 drops, to water ½ cup.

possesses the power of rapidly dissolving fibrin, it would probably prevent nature's method of plastering the wounded surfaces together by means of a semisolid substance, under and in which the healing process can proceed advantageously. So Dr. Lambert is still looking for an ideal germicide for wounded surfaces.

Dr. Lambert's paper is given in the Journal A. M. A., Oct. 28, 1916.

G. H. H.

ONCE A SYPHILITIC ALWAYS A SYPHILITIC?

Such seems to be the pronouncement of Warthin in a paper ¹ giving the results of laboratory examinations in eleven cases of supposedly cured syphilis, five cases of clinically active syphilis, and twenty-five cases which, because of absence of symptoms, and denial of infection, were supposed by the doctors not to be syphilis. In all these cases specific lesions, and the specific germ of syphilis, the *Spirochata pallida*, were found to be present. Dr. Warthin's article begins:—

"Between the pathologist and the clinician [practicing physician] there is always a certain antagonism of attitude with reference to the curability of any disease. The clinician is, and naturally must be, more or less optimistic as to the results of therapy; and only with the greatest reluctance is he convinced of the weakness or total failure of his therapeutic means and methods. The pathologist, with the opportunities afforded him by tissue examination and autopsy, has the advantage of the very last word; and he becomes pessimistic as to ultimate cure because of his constantly recurring experience of finding evidences of active disease in cases clinically cured. The clash of opinion,

^{1&}quot;The Persistance of Active Lesions and Spirochetes in the Tissues of Clinically Inactive or 'Cured' Syphilis," Alfred Scott Warthin, Ph. D., M. D., in the American Journal of the Medical Sciences, October, 1916.

clinical and pathological, is not shown elsewhere to such a degree as in the case of the venereal diseases, gonorrhea and syphilis."

This statement will come as a distinct shock to those who have been assured by their physicians that this disease is curable.

Dr. Warthin is professor of pathology and director of the pathological laboratories in the University of Michigan, Ann Arbor. His paper is the result of careful work done in the pathological laboratory at Ann Arbor. Dr. Warthin says of the lesions found in the three classes:—

"In all these forty-one patients the lesions of active syphilis were practically of the same nature, whether in cases that had been treated, or were being actively treated, or had received no treatment at all."

Dr. Warthin's final word, which should serve as a warning to all who are contemplating marriage with persons "cured" of venereal disease, follows:—

"The therapeutic lesson is evident. Promises of cure within definite time limits can never be safely made, and our advice as to treatment must include the possibility of treatment extended over many years. The syphilitic must be treated as a germ carrier. The latency of infection seems to be the same in many untreated cases as in those receiving good treatment. Our present-day treatment seems only to succeed in rendering the infection latent rather than curing it. Clinical cures may not be cures at all, as shown by the autopsy. From the standpoint of eugenics, it may also be said that absence of symptoms, or even of history of infection, and negative Wassermann reaction cannot be taken as an absolute criterion of freedom from latent syphilis."

The italics are supplied. The lesson for the young man is obvious. If he is daring and must take a risk, let it be that of sudden death in an aeroplane or on a motor race track, or let him go "to the front" and face the shells and shrapnel. The lesson for the young woman is equally obvious. The apple that has once begun to decay will never be sound again.

Many unfortunate wives spend years in miserable invalidism, never dreaming, perhaps, that their sufferings are the fruitage of some youthful escapade of the husband. Many an invalid child owes its sickly career and early death to the loose early life of the man it calls father.

G. H. H.

TREATMENT OF CARBON MONOXIDE POISONING

Ir has generally been taught that carbon monoxide forms a stable compound with the hemoglobin of the blood cells, rendering them permanently useless. Recently Yandell Henderson (Journal A. M. A., Aug. 19, 1916) has made the assertion that the compound between carbon monoxide and hemoglobin is not stable, and that the efficiency of the blood cells can be restored by subjecting the blood to a large amount of good air, or of air enriched by oxygen. He does not believe that bleeding is an advantage in carbon monoxide poisoning, but rather a disadvantage. He says:

"Thus it appears that about all that can be done in cases of carbon monoxide poisoning is to administer artificial respiration when the patient's own breathing has failed or is feeble; to administer oxygen for half an hour (longer is useless); to keep him warm if his temperature has fallen; to supply water to the system, preferably by a Murphy drip; and otherwise give him good nursing and such symptomatic treatment as may be called for."

Henderson also believes that the intravenous administration of sodium bicarbonate may be of value in combating coma, which he conceives to be of the nature of an acidosis.

In view of the fact that carbon monoxide poisoning is not uncommon in cities which use water gas, and may occur when a gasoline engine or a gas engine is run in an inclosed place, as when the engine of a motor car is allowed to run while in a garage, Henderson's suggestions are timely, and worth consideration.

OUR WORK AND WORKERS

FROM THE KAREN DISPENSARY

MARY GIBBS

OME with me for a dispensary call to a jungle village. At first you ask where the village is, as there are only two or three

houses against the dense forest entwined with undergrowth and tropical vines. Do you see that opening where a path enters the bamboo tangle? Follow the girl with the bamboo water carriers strapped on her back, and you will find another group of houses, and beyond that others. There are no streets or roads, and you seem to be surrounded by an impenetrable jungle, but be sure you can make no movement unobserved.

It is night. The patient and her twins have been made as comfortable as possible in their tiny bedroom. There are too many tigers and other wild beasts in the woods to dare try to return to the mission until morning. My camp cot has been set up on an open veranda communicating with the main room of the house. A feeble blaze flickers up from a few bits of bamboo on a bed of ashes.

The floor slips threateningly whenever I try to walk, as the bamboos are not fastened down, and my shoes do not conform to the corduroy surface as do bare feet.

The cries of night birds and other sounds of a tropical night reach our ears. But listen! What is that weird wail that rises, steadily strengthening, then falls to a moan, only to rise again? One of the brown faces, reading my puzzled looks by the light of the fire, says they are worshiping the devil (Moo-Kaw-Lee).

Previous attempts to interest them in some story of Jesus had failed to arouse any interest; but now every one in the room leans forward to catch every word as I tell them in their own tongue the history of Satan. All their lives they have known him only to fear him, but never have they heard anything about his beginning or end. As the story goes on to the end of his career, the new earth is introduced.



THE OPEN-AIR OPERATING-ROOM AT THE KAREN DISPENSARY, BURMA

These people are simple cultivators of the soil, so the description of beautiful gardens where all the fruit is good, where no one is tired or ill, where no wild beasts make them afraid, appeals to them mightily. Until a late hour they listen to the story of redemption. It is so hard for them to think that God loves them. At last we try to sleep, but the air pulsates with dismal sounds, and we cannot forget those eager, bright eyes peering out of the darkness of night. As the day dawns, we pray earnestly that the Sun of Righteousness may arise even for this people who have never heard of him.

17 Abbott Road, Lucknow, India.

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SANITARIUM NEWS NOTES AND PERSONALS

LOMA LINDA SANITARIUM

On December 1, on Boyle Heights, in Los Angeles, there occurred an important event in the history of the College of Medical Evangelists of Loma Linda. Drs. Newton G. Evans and A. W. Truman, with several others of the faculty, together with a number of conference officials, were present to participate in the formal ceremony of breaking sod for the erection of the first unit of The Ellen G. White Memorial Hospital. The president of the college, Dr. Evans, lifted out the first shovelful of earth as a beginning of this much-needed adjunct to the college. It is stated that the hospital and students' dormitories will be built immediately. Appropriate remarks were made by Elders B. E. Beddoe, W. F. Martin, J. O. Corliss, and others.

Mrs. G. W. Owens, a graduate nurse who has for some years been connected with the Loma Linda school, has started treatment-rooms in the Chamber of Commerce building, San Ber-

nardino, Cal.

Twenty-one students who left the medical college the last of November for dispensary work in Los Angeles, will continue there until March, 1918. Upon their return they will have three months' final work at Loma Linda in preparation for their graduation as doctors of medicine. The members of the class are E. F. Berkenstock, of South Africa; F. H. and J. M. Bulpitt, of California; D. L. Burgeson, of Michigan; Arthur Coyne, of Florida; H. R. Edwards, of Michigan; R. J. Elvin, of Canada; I. M. Feldkamp, of California; S. T. Johnston, of Indiana; Alma S. Larson, of Minnesota; Walter Lenker, of California; W. P. Magan, of Tennessee; R. W. Maker, of Oklahoma; E. R. Morlan, of Iowa; C. E. Nelson, of New Mexico; A. R. Roos, of Washington; A. D. Schlotthauer, of Washington; C. E. Steen, of Washington; F. M. Stump, of Arizona; Ruth J. Temple, of California; and Mabel M. Wirt, of Indiana.

COLLEGE VIEW SANITARIUM

Miss Ida Johnson, matron and head nurse, left College View the first of the year to take to Denmark a patient who had been in the institution for some time.

Miss Elizabeth Coleman, who has been chosen to act as head nurse in Miss Johnson's absence, is highly respected by the sanitarium family. The sanitarium has made arrangements for the installation of a new system of water pressure in the treatment-rooms, which will give even pressure and temperature and absolute safety.

GLENDALE SANITARIUM

Dr. H. F. Rand has connected with the Glendale Sanitarium as medical superintendent. Dr. Julia A. White also has accepted a place on the medical staff of the institution.

ST. HELENA SANITARIUM

The patronage at the sanitarium continues good. The institution carried through the holiday season an exceptionally large family of patients, and has at the present time about seventy-five or eighty. The total volume of business for the year will aggregate about \$125,000, passing every yearly record but one in the history of the institution. The new building has proved to be a good investment, and is serving a good purpose in attracting and holding patients.

Wm. J. Johnson, M. D., formerly of the Paradise Valley Sanitarium, National City, Cal., has connected with the St. Helena Sanitarium, and writes that he is enjoying his work very

much. .

NEW ENGLAND SANITARIUM

The X-ray outfit has, during the first year, more than paid for the outlay. This machine has been a great aid in diagnosis.

The renovated and improved diet kitchen, with equipment, blackboards, charts, etc., is a valuable addition to the training school. Beginning this year, two classes in dietetics will be given in the three-year course.

The nurses who passed successfully the State board examination in October were: Misses Ella Whitman, Ethel Dean, Frieda Bangs, Delilah Briggs, Ruth Williams, and Gladys Leland, and Mrs. Lillian Grimm-Bailey.

Under the auspices of the New England Santarian and Mrs.

Under the auspices of the New England Sanitarium a school of health was conducted in Tremont Temple, Boston, February 12-15. Dr. W. A. Ruble gave lectures on "The Work of the Digestive Glands," "Preparedness Against Disease," and "The Advantages of a Fleshless Diet." Dr. W. E. Bliss gave a lecture and demonstration on "La Grippe and Colds—Their Prevention and Cure." Mr. George E.

Cornforth gave demonstrations on "A Twentieth-century Dinner," "Salads and Their Health-giving Properties," and "Cutting the High Cost of Living."

WASHINGTON SANITARIUM

The Washington Sanitarium held its annual constituency meeting in the new gymnasium, Jan. 28, 1917, and reported the best year's work since its opening. During the year 1916, the institution enjoyed an increase in patient patronage of twenty-five per cent over the pre-

vious year.

The institution has also completed, during the past year, a beautiful natatorium and a very completely equipped gymnasium, and is at present installing men's bathrooms under the east wing of the main building. These treatment-rooms will be equipped with modern appliances, having both the upright and the reclining Burdick Electric Light Cabinets, which are perhaps the most up-to-date electric light bath cabinets on the market. These treatment-rooms will be ready for use about the first of March.

The sanitarium is at present filled to its capacity with guests, among them being members of the families of three Congressmen besides many prominent business men and government officials from Washington and near-by cities. We have recently had the pleasure of entertaining Dr. Cary T. Grayson, physician to the President, and L. D. Brandeis, judge of the Supreme Court.

A complete line of equipment for medical diagnosis has been installed in the institution, and the medical staff are offering to patients the complete examination, including X-ray work, cystoscopic work, various laboratory tests, and special tests of the eye, ear, nose, and throat.

CHAMBERLAIN SANITARIUM

Mr. and Mrs. C. E. Babcock, who for the past year and a half have been connected with the office work of the Chamberlain Sanitarium and Hospital, were recently released, at their request, having accepted a call to connect with the tract society work in the Western Washington Conference, Mr. Babcock as assistant manager, and bookkeeper, and Mrs. Babcock as stenographer.

Mr. E. J. Nelson, a graduate of the commercial department of the Danish-Norwegian Seminary, who was connected for a time with the tract society work in the Minnesota Conference, has recently accepted a call to connect with the Chamberlain Sanitarium and Hospital, to fill the vacancy made by the resignation of Mr.

and Mrs. C. E. Babcock.

GENERAL

Ethelina Elma Heynemann and Albert Victor Heynemann, of Blyth, South Australia, being British subjects, have renounced the name "Heynemann" and have adopted the name Hillier.



ST. HELENA SANITARIUM, ST. HELENA, CAL.



CONDUCTED BY J. W. HOPKINS, M. D., CHIEF PHYSICIAN, WASHINGTON SANITARIUM

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If apersonal reply is desired, inclose a two-cent stamp.

If you are not already a subscriber, send also the subscription price with your question.

Replies not considered of general interest are not published; so if your query is not accompanied by return postage for a personal answer, it may receive no attention whatever.

Remember that it is not the purpose of this service to attempt to treat serious diseases by mail. Those who are sick need the personal examination and attention of a physician.

State your questions as briefly as possible, consistent with clearness, and on a sheet separate from all business matters. Otherwise they may be overlooked.

For prompt attention, questions should be addressed to J. W. Hopkins, M. D., Takoma Park, D. C.

For prompt attention, questions should be addressed to J. W. Hopkins, M. D., Takoma Park, D. C.

Scalp Disease

"I have an itching scalp, and have tried several remedies with no relief. I have some dandruff and falling hair. The trouble is of long standing. I should like to know something about the remedy published in the November number, page 546."

Resorcin appears to be a very good germicidal agent on the scalp. I have not had any personal experience with the recipe given on page 546 of the November issue, but from its composition I judge it to be a meritorious prepa-The soapbark is used to make the preparation lather. I believe that this preparation would be as good as anything you could use for the cure of dandruff.

As you have already noticed, the dandruff has a tendency to cause the hair to fall, and if you do not succeed in curing it, your hair will gradually become thinner until it will be necessary to supplement your own with something

If you find it difficult to dry your hair after washing it daily, it might be better for you to have it cut quite short and made into a switch, but if you have the advantage of an electric fan or good sunshine, you may be able to take this treatment frequently. One thing to remember, as an important part of the treatment, is the rubbing, which will facilitate the circulation of the blood in the scalp.

Soda in Beans

"Are beans made more healthful by parboiling them in water to which soda has been added? I pour off the soda water, then rinse them in boiling water."

Soda is used in cooking beans, in order to soften hard water. There is a disadvantage in the use of soda for this purpose, the same as in its use in cooking. You do not know how much soda is needed to neutralize the hardness of the water, and the consequence is that some of the soda is cooked into the beans, rendering them more or less indigestible. Hard water unites with the casein in the beans, rendering them indigestible. It is better to soften the water by boiling it, and then soak the beans for some time in it before cooking them.

Vegetable Oils

"Which is easier to digest, olive oil or cottonseed oil? What is the relative food value of each, and the relative medicinal value?"

I do not know that there is any great difference in the digestibility of cottonseed oil and olive oil. Olive oil, of course, is a much nicer and pleasanter preparation to take, and when one can afford it, it is well worth the difference in price; but as to food value, digestibility, and medicinal value, I am not aware that one is superior to the other. I refer, of course, to the purified cottonseed oil.

Tongue Sucking

"What can I do to cure my boy of sucking his tongue? He formed the habit at the age of four, and is now eight."

The tongue sucking should be cured if possible. It may be rather difficult, being of so long standing. Possibly the child is nervous and "fidgety," and feels the necessity of doing something of this kind. It will be well to do all in your power in a quiet way to break the habit, yet if too much attention is called to it, you may make the child self-conscious, and thus add to the trouble.

He should have plenty of exercise and play in the outdoor air, with a diet of whole grains, vegetables, fruits, and milk, and but very little sugar. His vitality should be increased in every possible way. It would be well to give him some tonic treatments, as hot and cold to the spine, and tepid and cool sponge baths. Offering a prize in the way of a certain number of pennies a week or a book, will often aid in breaking these bad habits.

What Is the Matter with Baby?

"Baby is eighteen months old, active in mind and apparently healthy, but makes little effort to creep or walk. He now has nine teeth. I am anxious to know if he is having proper diet. He has been troubled with hiccough from birth. As he has indigestion, we have hesitated to give him heavy food. He has had cow's milk with corn flakes, whole-wheat bread, and a small quantity of oatmeal gruel thoroughly cooked; also the juice from an orange halfway between his morning feedings."

It is possible that your boy is slow in development, and that he will be normal a few months later. Some children are slow in learning to walk and to talk, and yet when they do learn they are as competent as more forward children. If the child appears healthy in other ways, and well nourished, you perhaps have nothing to fear. If he seems poorly nourished and anemic, or lacking in strength, you would do well to consult some physician who makes a specialty of children's diseases. It is possible that he has had a mild attack of infantile paralysis.

Constipation, Baby

"Baby is fourteen months old, has been fed nothing but diluted and sweetened cow's milk with a little lime water, and Graham crackers. Her bowels were exceptionally well regulated until two months ago; she has been more or less constipated since."

Possibly you do not give her enough water to drink. You should correct the bowel inactivity, as far as possible, by the use of laxative foods, such as bran gems and stewed prunes, and by natural rather than artificial methods.

Practice kneading the abdomen daily at a

Practice kneading the abdomen daily at a regular time, preferably after breakfast, following the course of the large colon, up the right side, across, and down the left, making a circular movement to press the contents forward. This should be done gently, so as not to be disagreeable to the child.

An occasional injection of oil to soften the

hard masses may be advisable.

Try orange juice in small doses before breakfast and between feedings in the forenoon,

gradually increasing the amount. In addition, a little refined oil, in doses of one or two teaspoonfuls, might be given at night. By the use of the little vessel, the child should be trained to acquire the habit of moving the bowels in the morning every day.

If these methods do not succeed, try the use of milk of magnesia with the child's milk, in-

stead of lime water.

Many Troubles

"I have consulted several doctors who have not agreed regarding my case. For two years I have been weakening, and am now nearly exhausted. My symptoms are general weakness, indifference, and nervousness. I sometimes drink a gallon of water a day, sometimes not more than two quarts."

Worry is favorable to disease, and there is a possibility that you have been studying your case considerably. If instead of studying your disease, you can take up the study of health, and look at it from the positive rather than the negative side, it will be a help to you. This is the great advantage of many physical culture systems. Undoubtedly some of the exercising specialists in physical culture benefit their patients, and I believe that it is owing to the fact that they are able to keep the patient thinking along the line of the exercise and of health rather than on symptoms and disease.

Fletcher chewed himself back into health because his faith took hold of the idea, and he lived it out faithfully. The same is true of numbers of others who have had their health restored.

The conditions of which you complain, are oftentimes due to sluggishness of the stomach, liver, and bowels. You will get much benefit by adopting an antitoxic diet, and obtaining regular movements of the bowels. You probably drink too much water. Ten glasses of water is probably enough for you to drink, and this should not be taken closer to your meals than one hour following or thirty minutes before.

Canker Sores

"Please advise what to do for canker sores, which I have had for four years. I can get no relief, although I have consulted three or four doctors."

If your trouble is what is ordinarily called canker sore, it should be relieved by the use of burnt alum. A lump of ordinary alum may be placed on some hot surface, such as a stove lid, until it turns white and powdery. This process dries off the water of crystallization. The alum in this form is much more intense in its action than ordinary alum. A little of this burnt alum powder applied to the affected surface is usually sufficient to remedy the condition. If it is not remedied by this means, you probably have some condition more serious than what is ordinarily known as canker sore. Canker sores usually accompany digestive disturbances (a sore mouth probably represents a sore condition in other parts of the alimentary tract), and if one avoids such foods as cause fermentation and other digestive disturbances, he will be more likely to avoid canker sores.

Leg Stiffness

"Please suggest a remedy for leg stiffness, a rheumatic condition which settles in the knees; also suggest curative exercises. Will lying on the back and gently raising and lowering the legs be of service?"

It has now been determined that rheumatism comes very largely from some focal infection,—from diseased tonsils or loose or decayed teeth, or from some chronic suppurative condition in the sinuses about the nose following chronic catarrh; that is, there is somewhere about the nose or throat a place where the germs incubate, which, when distributed to the joints, produce the rheumatism. And they not only affect the joints, but also the arteries and the heart.

So one important thing for you to do is to make certain that all focal infection is remedied. You may get some temporary relief by the use of wintergreen compresses. After fomenting the knee, a moist compress to which oil of wintergreen has been added, may be wrapped around the limb, and around this some flannel to keep in the heat.

I do not know that any exercises are curative. Sometimes they seem to increase the rheumatism, although I believe that mild exercises are a benefit. I think the ones you suggest would be as good as any.



Iodine in Foods

According to a number of investigators who have reported in the Ohio State Bulletin, iodine was not found in seven kinds of nuts examined, and there was none in sixteen samples of table salt. The more important sources of iodine in human foods are the garden vegetables, though some is found in the cereals. Iodine is a constituent of the thyroid glands; and when it is completely absent from the food, there is disarrangement of the thyroid functions.

The Treatment of Wounds

Walther reports results obtained from the use of soap as a chief remedial agency in the treat-ment of wounds. With hands disinfected, pieces of white Marseilles soap were dissolved in lukewarm distilled or boiled water. Pledgets of sterile gauze dipped into this were used to wash the raw surface. Next there was copious irrigation with soapy water, then one or more compresses of gauze, sixteen to twenty layers thick, were dipped into the solution and rubbed against the soap until saturated. The gauze was then rolled and squeezed between the palms until a fine, abundant froth was obtained in the interstices, rendering the dressing porous. The recesses of the wound were covered with this dressing so as to be at least one centimeter thick everywhere. Over this was placed a thick layer of absorbent cotton, and the whole bandaged. This dressing was renewed every two or three days. The immediate effect of the first application was disappearance of the pain. soap froth failed to adhere either in or around the wound, and when removed did not cause bleeding. The wounds healed rapidly.

Grafting Frog Skin

H. W. Kendall, who in 1886 employed with excellent success fresh frog skin for grafting indolent leg ulcers, has again made use of the method in the present war. He gives a report of fourteen cases thus treated, - two unsuccessful, twelve healing with remarkable rapidity. He advocates the method, as it is simple, and the material abundant and easy to obtain fresh. The skin is free from hair. Healing is hastened, and cicatricial contraction is reduced. He cleans the wound with antiseptic, dries the surface, and lays on pieces of skin taken from a living frog, the under surface next to the wound. Over the graft is laid a strip of guttapercha tissue, coated with mild, nonirritant emollient, and this is fixed with adhesive plas-ter. Dry dressing is then applied. In three days the entire dressing, including the guttapercha, is changed; and after a second similar interval the dressing may be made without the tissue, the wound surface being covered with boric acid ointment or other bland preparation.

The Control of Tuberculosis in France

The tuberculosis condition among noncombatants in France has been so serious that the Rockefeller Foundation has requested that an American physician of wide experience be sent there to conduct a campaign of eradication. In response to this request, Governor Whitman of New York has granted State Health Commissioner Hermann M. Biggs leave of absence.

Anthrax Among Tannery Workers

Anthrax is not a very common disease in this country. It is a cattle disease, which, fortunately, has never had a firm foothold here. It is ordinarily transmitted to man by handling the hides of infected cattle. In man it is generally localized, forming what is known as a "malignant pustule." During the early part of 1916 Massachusetts had its most severe outbreak of anthrax. As recently reported by the United States Public Health Service, there were, out of twenty-five cases, twenty-three who had handled hides, twenty of them from a cargo of "China" hides. Of these cases four were fatal.

The Campaign Against Trachoma

The United States Public Health Service, combating trachoma, or "granular lids," a dangerous infectious eye disease, now maintains six hospitals for the care of trachoma,—three in Kentucky, one each in Virginia, West Virginia, and Tennessee. Not only are these institutions accomplishing much in relief of victims, but they are educating the various communities in such sanitary preventive measures as the avoidance of public towels, public washdishes, etc. One hospital, in Hindman, Ky., has done its work so well that there is no longer any demand for it, and it is to be abandoned. The region which it has served was in 1913 heavily infected with trachoma. Now it is practically free from the disease.

Foot-and-Mouth Disease

The United States Department of Agriculture has recently published statistics regarding the 1914-16 epidemic of foot-and-mouth disease which threatened to sweep the country. The disease was reported in twenty-two States and the District of Columbia. In the campaign of eradication, 172,222 animals were slaughtered at a cost to the federal government of \$9,000,000, a small sum compared to what the loss would have been to the country had the disease been permitted to run its course. The last of the quarantine regulations for this disease were rescinded June 5, 1916. Congress has appropriated \$1,250,000 to be held as an emergency fund for the eradication of cattle diseases.

Milk and Infantile Paralysis

The remarkable way in which the spread of the malady is affected by the atmospheric temperature; the experiments detailed in reference to growth of the organism at temperatures known to prevail when the disease is at its height; and its ready growth in milk and resistance to the Pasteurization process, together with the case incidence among the children of milk-drinking age, all strongly indicate that milk may be a very important factor in the spread of poliomyelitis. — Horace Greeley, M. D., in Medical Record, Jan. 13, 1917.

To Protect Milk Supplies

The commissioner of public safety and the health officer of the city of Rochester, N. Y., required that all applicants for licenses to sell milk submit to a blood test to determine whether or not they were possible carriers of the typhoid bacillus. An applicant for renewal of such a license refused to permit the test to be made, and applied to the courts for a mandamus to compel the commissioner of public safety to renew his license. The court refused to compel the renewal of the license. In the opinion, Judge Rodenbeck said: "It is important . . . to the whole community that the supply of milk and cream should be kept clean, pure, and wholesome, and should not be contaminated with impurities or infected with disease; and it is the duty of the health authorities to see that this is accomplished, by the establishment of such reasonable regulations as may be necessary to meet existing conditions or to ward off impending dangers to the public health."

Some Enemies of Sleep

According to the Ohio Bulletin, sleep, as a rule, is within the grasp of all of us, but indoor life, tea, coffee, tobacco, and excitement are the enemies of sleep. Outdoor physical exercise, especially in the evening before retiring, followed by a warm bath, will cure or amelio-rate temporary conditions of insomnia.

.........

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A homelike atmosphere is maintained, and to this end patients of a disturbing character, and those having contageous or other diseases of an objectionable nature, are not received.

The Sanitarium may be reached by Baltimore & Ohio Railway, or by trolley lines. Phone, Columbia 1097.

For further particulars address

Washington Sanitarium, Takoma Park, D. C.



MAIN BUILDING

The Melrose Sanitarium

The Sanitarium estate, consisting of forty-one acres, is situated in the midst of Middlesex Fells, a State park of thirty-five hundred acres, preserved in its original, natural beauty. Although the health retreat is but seven miles from Boston, the grounds are surrounded by this veritable wilderness of woodlands, rocks, and rugged fells, with its placid lakes, rippling brooks, and cooling springs.

The rural location of the Sanitarium affords abundant opportunity for the best of all recreations,—communion with nature in her varied forms. In addition, there are golf links, tennis courts, archery, croquet grounds, quoits, and other facilities for outdoor exercise. The roads through the park in all directions are unexcelled, giving opportunities for delightful walks, drives, and automobile rides. The many places of historical and literary interest in and around Boston afford diversion to guests. Automobiles may be hired at moderate rates, and ample accommodations are provided for those who bring their own cars. The ocean beach is but six miles away, and readily accessible by trolley or automobile.

The service of the institution is equal in every way to that of a first-class hotel. An unconventional spirit is maintained, which immediately gives one the feeling of being at home.

Beautiful illustrated catalogue sent on request. Address New England Sanitarium, Melrose, Mass.



ANNEX

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