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WE CALL IT OUR CAPITOL

This great building with the magnificent dome houses two branches of the national Government — the Legislative and the Judicial. But the great bulk of the Government business is transacted in other buildings.

Life & Health

HOW TO LIVE

EDITORS

L. A. HANSEN

G. H. HEALD, M. D.

VOL. 35

NOVEMBER, 1920

No. 11

EDITORIAL

The Cry of Need

THE dominant voice sounding today from a large part of humanity is the cry of need. From almost all parts of the world come calls for help. In thousands of towns and villages in Europe multitudes have already died of starvation and pestilence. Millions are suffering for want of food, fuel, clothing, and shelter. Those who have been on the ground find it impossible to picture to others the actual distress they have witnessed. The aftermath of war seems worse than the war itself.

In varying degrees the need of material necessities extends around the world. Countries that have not been battlefields are not free from want; scarcely a city or town or neighborhood that does not have its cases of unusual need. Poverty is making itself felt among large classes, and its hurt is more than a pinch. Disease is working destruction among poor and rich alike.

Organized charity is rendering much relief in the famine-stricken regions. While millions have been "done to death" by famine, cold, exposure, and plague, many have been given a chance for life. Much remains yet to be done, and no one knows what the near future may bring to add to this need.

We can well indorse every legitimate relief movement. No one loses by giving ear to any cry for help. Our hearts do well to be stirred by such appeals, and our chords of sympathy need to vibrate to keep in tune. No one can afford the hardening process that takes place in the heart that closes itself to need. Even at the risk of misapplying our gifts now and then, it is better to give than to withhold.

The larger objects of public charity have been quite generally presented by their promoters, and the various avenues through which contributions to these may be given are now well established. Response to these is much a

matter of giving whatever money one can, with the assurance that it is all needed and will be well used.

There are also the more local and smaller objects of charity, now and then, here and there, which make appeal to our generosity. To these we may give with more or less discrimination.

Then there are the poor who are always with us, and the many and varied forms of need that are in almost every community. Among these we find persons who are wholly dependent upon others for life's necessities. Here we or some one else must give, and do so with little question. To do our part in this world we must be charitable.

PRACTICAL HELP

But good sense, judgment, and prudence are also vital virtues, and need to be exercised. They are in accord with true philanthropy, are consistent with kindness, and agree perfectly with the largest liberality.

It is always easier to give with the hand than with the heart.

Thoughtful giving calls for discrimination.

The heartiest charity is the deepest and truest.

The best help is that which helps men to help themselves.

Many a man is in want because of the want in himself.

Many a man loses out because he does not find out what is in him.

Helping a man to be self-reliant helps him to be self-supporting.

Earnings are better than alms.

When a man learns the value of opportunity and industry, he learns to become a helper instead of being helpless.

So, aside from the smaller charity we give out of purse and pantry to relieve want and hunger, there is need of a larger giving. This calls for a personal interest in the individual to discover the cause of his suffering, and an effort to remove the cause. Such giving requires time and energy. It means personal sacrifice. It means giving of oneself, and it is the giving that counts most.

SOME RELIEF MEASURES

Some men suffer because of their wrong view of life and its relations. Some need to be taught that labor is honorable and that it has a reward all its own. Getting a living without work, when one is able to work, is a dishonor that leads to many vices and all sorts of crime.

Those who say that the world owes them a living and who are apparently waiting for it to call around and pay them off, need to know they must themselves collect what is due them. Even the birds have to gather what they eat.

Others need to be taught industry, how to use their strength and time to advantage. Some may be taught trades. Men who are able to establish industries, large or small, where others may be taught useful occupations, may thus do great good.

Some are poor because they are poor managers. Their earning capacity may not be well used. Or possibly the spending capacity is abnormally developed or lacks training. Lessons in wise buying and safe investment may be the great need.

Still others may be wasters, and need to be taught common-sense economy. Helping to make a dollar go twice as far is better than giving another dollar.

The struggle for a meager existence of thousands of the city poor might be turned to enjoyment of life if they could be helped out into the country where there is plenty of work, plain but wholesome food, peace and quiet, and a chance for development. The drift the other way may be too strong to give much hope of turning large numbers toward the land, but something can be done. Individuals or families could be put in touch with openings in the country offering health, a comfortable living, and a better environment.

PURE CHARITY

There is a call to charity that comes strongest of all in its appeal to our sympathy,—that of the wholly helpless. There are the children who have lost father or mother or both. Their very need speaks for itself, even though they cannot tell their wants.

The Father of us all has a special care for the fatherless, and places upon the more favored members of the human family the responsibility of caring for these unfortunate little ones. He has provided food enough for all, and there are homes enough without crowding. The heart that opens to receive the orphan child, receives to itself a large blessing. The home that offers itself is more than repaid. The benefit is by no means one sided.

The widow, left with an uneven load of providing a home, food, fuel, clothing, education, and training for her fatherless ones, should find help from those who know a true man's part. It is here that "pure religion and undefiled" shows itself best.

There are also the needy aged,—honorable, worn-out men and women, who have done their part in life and are nearing the end alone. Nothing that can be done to make their lot brighter or easier is lost. It is due them to receive careful consideration from the younger world which they have helped to make. And in turn they can, from their ripe experience and mature character, give large returns in counsel and benediction.

With human beings all about us crying for bread and other necessities of life, we have reason to place the highest value on whatever we have. We should look upon dollars for the largest good they can do. We should think of the needs of others. This calls for self-denial and economy.

We are responsible for whatever suffering we can relieve and fail to relieve.

L. A. H.



THERE is more in rest than muscular recuperation, or even mental refreshing. It is in rest, peace, and quietness, that we really find strength of soul. Our best thoughts come to us when we have time to think. In the natural world great things are done quietly, such as the moving of the planets, the rising of the sun, the growing of the trees. In the lives of men great things are worked out in quiet. Character grows without the making of noise. Our quiet seasons, therefore, may mean much to us if we will let them. But it should be remembered that while outside conditions affect rest and peace, the soul is their center. We may have a peace that nothing can take from us, that will live amid confusion and turmoil and that will impart strength for more than the ordinary duties of life.

L. A. H.

AS WE SEE IT

Conducted by
George H. Heald, M. D.

TEACH THE CHILD TO RELISH PROPER FOODS

SOME persons seem to think that appetite is a natural instinct, guiding one as regards the kind and quantity of food that he should eat. Probably nothing is farther from the fact than this. Appetite is a matter rather of habit than of instinct. We like certain foods to which we are accustomed, and dislike other foods to which we are not accustomed, though these other foods may be the delight of our neighbors. Some of the foods for which a taste must be acquired, but which are considered as great delicacies by those who like them, are: Limburger cheese, garlic, "ripened" game, to mention only a few. The list is a long one. On the other hand, the taste for sweets does not usually need to be acquired, and for this reason some might think that sweets constitute a natural food, of which large quantities may be eaten with impunity.

Of recent years there have been a large number of theories regarding the feeding of infants and children. Out of the wreck of these theories some facts survive. It is known, for instance, that *good health depends on good nutrition*. No matter how carefully and faithfully other hygienic measures are applied, if the growing child does not receive the right kind of food, it will not develop properly. It will be a weakling, susceptible to every infection that comes its way.

Physical surveys involving a study of thousands of school children have shown that a startlingly large proportion are ill nourished, underweight, inefficient, and subject to colds and other infections. And further, it has been shown that if the ration of these children is supplemented by a proper amount of nourishing food, and if they are given adequate rest periods after eating, they rapidly gain in weight, strength, and mental capacity.

Strange as it may seem, the district that shows the largest proportion of malnutrition may be, not the district occupied by the very poor, but that occupied by those who are in easy circumstances. So we may be sure that in many cases undernutrition is the result, not of poverty, but of pampering—of allowing the children to get such a taste for sweets and the like that they have no appetite for wholesome and nourishing foods.

Specialists in diseases of children are coming to recognize that the ideal diet for the growing child is whole cereal and whole milk. The cereals and the bread should be from the entire grain, and the milk should include the cream.

Unfortunately, it is not easy to get whole cereals. Ask for brown rice, and it is likely that your grocer will not know what you are talking about. From rice to corn, practically all the cereals have been degerminated and decorticated; that is, they have had removed the germ and the outer hull, parts of the grain which are essential to a properly balanced diet. The trouble is that there is not enough call for the whole grains to make it worth while to keep them. Where mothers understand the value of brown rice, as they did in Memphis, they can soon persuade the stores to handle it. And so with other

whole grains. Some of the mail-order houses in Chicago sell brown rice, and Graham flour made from the entire wheat berry.

Very early in the life of the child, fruits are in order. First the child may be given a little fruit juice with cereal, or on bread; then fruit pulp absolutely free from lumps — such as carefully scraped ripe apple, crushed peach, jam, etc., avoiding any berry seeds. Vegetables should be given early in the second year, at first being mashed up thoroughly into pulp without lumps. Cauliflower, well cooked, is good for this purpose.

The child may early express dislike for certain foods he is unaccustomed to. Tactfully, the mother must overcome this dislike, for the “cranky dyspeptic” of older age is one who in childhood formed permanent dislikes for certain wholesome foods. Usually such children have had more than their share of sweets and the like, and they gradually come to dislike any foods that are not artificially flavored. The less a child has of sweets, between meals especially, the less liable he is to form prejudices against wholesome foods.

In some schools it has been found advantageous to the child to give a supplementary meal of milk and bread forenoon and afternoon, followed by a rest period. By this means many an ill-nourished and weakly child has been built up so that he is the peer of the others in his class. But this fact does not in any way support the idea that “piecing” between meals, at odd times, and especially the use of candy, ice-cream cones, and the like are good for the child. These practices invariably make poorly nourished and sickly children.

TO TOLERATE THE RAT IS TO INVITE DISEASE

ON the basis of numerous surveys, the United States Public Health Service has made an estimate, said to be conservative, that there is at least one rat for every person in the United States. Similar estimates have been made for other countries, such as Great Britain and Ireland, Denmark, France, and Germany, which coincide very closely with the figures of the Health Service. In Europe it is estimated that each rat consumes or destroys from \$1 to \$1.80 worth of food every year. Perhaps that is also conservative. Some rats do much more damage than that. If the United States is paying from 120 to 180 millions of dollars a year for the support of its rat population, it is a leak worth the attention of Congress, and especially as this leak is accompanied by the plague menace.

For bubonic plague is a rat disease which attacks human beings only secondarily. Before a human case of the disease is discovered, the plague may be well advanced among the rats, and spread over a large area. When an infected rat dies, its infected fleas find some new host, and thus transmit the disease. It is when these fleas find a human host that there is a human case of the disease.

In former days man was absolutely helpless before the onset of this disease. Now the presence of the disease is the signal for a general clean-up and rat-proofing campaign. It is a blessing to some cities to have a few cases of plague, as this awakens the powers that be as nothing else will; moreover, it secures the expert aid of the United States Public Health Service, and after an anti-rat campaign, the city is cleaner and more sanitary than ever before in its history. It may require a few plague deaths to arouse the public officials, but perhaps it is worth it. It usually requires some crisis or some catastrophe to arouse us.

We are horrified by the sinking of a "Titanic" or a "Lusitania," but we take as a matter of course the Titanic and Lusitania loads of persons who go down every year with *preventable disease*. So when there is a threatened plague epidemic, we deal vigorously with the rat, but we scarcely think of the hundreds of millions of dollars wasted annually by the rat in its regular depredations. Why not, so far as our own premises and our own town are concerned, see that the rat has no harboring place and no food?



WE cannot get around the fact that wrong habits react in the mind. We may get moody and fretful, gloomy and morbid, and feel that things are going wrong when all that is wrong is in ourselves. We may lose out by not being able to make wise, quick, clean-cut decisions, and count ourselves unfortunate, when the whole trouble is that we have beclouded our minds. High values may be lost to us because our sense of appreciation is dulled. How much all this may be true of any individual can be known by him only when he looks at it with a mind free from bias, slant, or indisposition.

L. A. H.

A WORD IN SEASON

ALL around us are afflicted souls. . . . Let us search out these suffering ones, and speak a word in season to comfort their hearts. Let us ever be channels through which shall flow the refreshing waters of compassion.

In all our associations it should be remembered that in the experience of others there are chapters sealed from mortal sight. On the pages of memory are sad histories that are sacredly guarded from curious eyes. There stand registered long, hard battles with trying circumstances, perhaps troubles in the home life, that day by day weaken courage, confidence, and faith. Those who are fighting the battle of life at great odds may be strengthened and encouraged by little attentions that cost only a loving effort. To such the strong, helpful grasp of the hand by a true friend is worth more than gold or silver. Words of kindness are as welcome as the smile of angels.

There are multitudes struggling with poverty, compelled to labor hard for small wages, and able to secure but the barest necessities of life. Toil and deprivation, with no hope of better things, make their burden very heavy. When pain and sickness are added, the burden is almost insupportable. Careworn and oppressed, they know not where to turn for relief. Sympathize with them in their trials, their heartaches, and disappointments. This will open the way for you to help them. Speak to them God's promises, pray with and for them, inspire them with hope.—*"The Ministry of Healing,"* p. 158.

Home-Care Nursing

Susie A. Pulis

HOME CARE" is a term used to describe a kind of work, and the preparation for it, that differs greatly from that of the hospital-trained and the practical nurse. It is designed primarily for the assistance of mothers, and of others having the responsibilities of a home.

The great need of such training is becoming more and more apparent. How best to provide it is being given very careful consideration. Dr. Robinson, health commissioner of the city of Chicago, has undertaken to give such training, during the present year, to ten thousand such nurses.

Florence Nightingale said, "Nearly every woman at some time in her life is obliged to act in the capacity of nurse to the sick." We might well add, "whether or not she is capable of doing so." Unlike most other lines of work, ignorance of nursing does not relieve from responsibility the woman brought face to face with illness in her home and neighborhood during emergencies and epidemics.

Only the physician is qualified to diagnose disease, and only the hospital-trained nurse is capable of caring for the seriously ill. Nevertheless, upon the mother or some other member of the family usually devolves the responsibility of discovering symptoms of approaching illness and of calling professional aid. Therefore alertness in observing such symptoms, based upon some knowledge of disease, its cause, indication, and prevention, is a matter of the utmost importance to every adult.

During the last few years we have heard and seen much of the need of preparedness. Never has such great and rapid preparation been made to meet emergencies. We must quickly rally our forces and prepare for the best possible

service, otherwise we shall fail to improve our opportunities and to meet the demands to be made upon us. The world is awakening to the necessity of imparting health instruction to persons in their homes. Especially must mothers receive a training which will enable them better to conserve the health of the family. This will produce stronger and more noble men and women.

The question of the hour is, How shall we reach the homes of the people with such a practical course of instruction? We are glad that in many places a good beginning has been made. We trust that in the very near future a well-organized plan will be developed. To properly reach these homes, community teaching centers must be established everywhere possible. Each of these teaching centers should be in charge of an especially trained nurse. Institutions can provide a short special course of training to prepare graduate nurses to act as instructors in this particular line of work. Too much stress cannot be placed upon the character and importance of this special training. The ordinary institutional training is not sufficient to qualify a nurse for this class of teaching, because in order to be truly helpful to a tired mother, she must have lived in a private home and be familiar with its limitations and peculiar problems. A moment's serious thought should be sufficient to help us to realize that the work of such an instructor and public health nurse must be radically different from that of those who are engaged in private nursing and in institutional work.

The value of the public health nurse as an educator in the community can hardly be overestimated, and this fact is constantly becoming more appreciated. No greater work can a nurse do for humanity than to educate along right meth-

ods of living, and in the simple, practical treatment of illness in the home.

In various communities the facilities for a teaching center will differ greatly. During the last two years a teaching center has been successfully operated in Greater New York. For the assistance of those interested in that kind of work, the following description of that teaching center is given:

It consists of a small apartment located at 129 East 128th St., which is as convenient as possible for the greatest number of our New York churches. It is very simply furnished, and is supplied with those articles necessary to the sick-room which every woman can use and with which she should become familiar. In addition, there is taught the construction and use of homemade substitutes for expensive articles. The students are divided into classes of twelve persons. The classes are selected from the various churches in Greater New York. Some of our most faithful students come from distances which take three hours or more to cover. Each class meets once a week.

The class periods are two hours each. These periods are divided into recitation, demonstration, and practice work. Classes are conducted every afternoon and evening from Monday to Thursday inclusive. Eight classes, ninety-eight persons in all, receive instruction from one teacher. In the outline of lessons which is provided by the Atlantic Union Conference (and which may be procured from the Medical Department of the General Conference at Takoma Park, Washington, D. C.), will be found a list of the textbooks and helps used in the course. The teaching center is supported upon a missionary basis. The Greater New York Conference provides the apartment in which the teaching is done, pays the instructor's salary (just as it does that of any Bible worker), provides the furniture for the apartment and all those articles and utensils that are used in common by all the classes. Each student supplies for herself those things she will need for use in her own

home, such as textbooks, clinical thermometer, hot water bottle, various utensils, fomentation cloths, and uniforms, and pays a fee of \$5, which is turned into the medical missionary department.

This work is called "The Home Service Division of the Medical Missionary Department." A white cross on a blue shield is the insignia. "In His Steps," is the motto. Our home-care nurses now number 116. In order to direct their medical missionary efforts to the best advantage, it has been necessary to establish a registry for them. Their activities have become so large that the instructor can no longer oversee that work. The supervision of this registry has been turned over to the conference visiting nurse, Miss Addie W. Pulis, and calls for help from church members or others who are ill are given prompt and careful attention.

Each church has organized a Home-Care Nurses' Band, or Helping-Hand Band, of those who have taken training. These bands have a leader, secretary, and treasurer, and meet at stated intervals, as do the other church bands. The reports of the work and experiences of the Home-Care Nurses' Bands are most inspiring.

In order to keep a correct record of the work done, a reporting system has been established, covering all activities of this department. Special report blanks have been provided. These blanks are filled out each week by the home-care nurses, and are sent directly to the supervisor, who forwards to each church a monthly report of its medical missionary activities. Then a summary of the total work of all the churches is sent to the conference missionary secretary.

The self-sacrifice and willingness to help suffering humanity shown in the excellent work done by these women during the epidemic last winter, and also the constant ministry to the sick among our church members and their neighbors, have established in the minds of our Greater New York Conference leaders the inestimable value of the home-care nurses' training for our people.

How to Become a Practical Home Nurse

Mrs. G. B. Thompson

THERE is a growing shortage of professionally trained nurses, and with the demand for qualified graduate nurses for work of many kinds, has come the insistent demand for partly trained nurses to do the simpler kinds of nursing and to assume responsibility for the proper management of the patient at home. So in various parts of the country different methods are being tried to meet the demands of the public and of physicians for workers of this class.

A nation-wide effort is being made to arouse the interest and secure the aid of school officials and teachers in health education, and in the protection of the health of school children. In turn, the teachers are seeking the co-operation of the parents; hence the great importance of educating the mothers to detect the early symptoms of disease in their children and to be able to co-operate with the teachers in their efforts to establish a higher standard of health among the school children.

Neighborhood epidemics might largely be prevented if mothers were more ready to observe indications of contagious diseases and would take proper measures to aid in preventing their spread.

We hear medical men of the world say that good nursing will save more lives than any quantity of drugs. One prominent health officer stated that 100,000 lives could have been saved right here at home—in our own country—if we had had 100,000 more nurses, instead of 20,000,—and a large per cent of them across the seas; and now that the Great War is over, many of them have retired from active service.

Do you know that the terrible war and the influenza epidemic through which

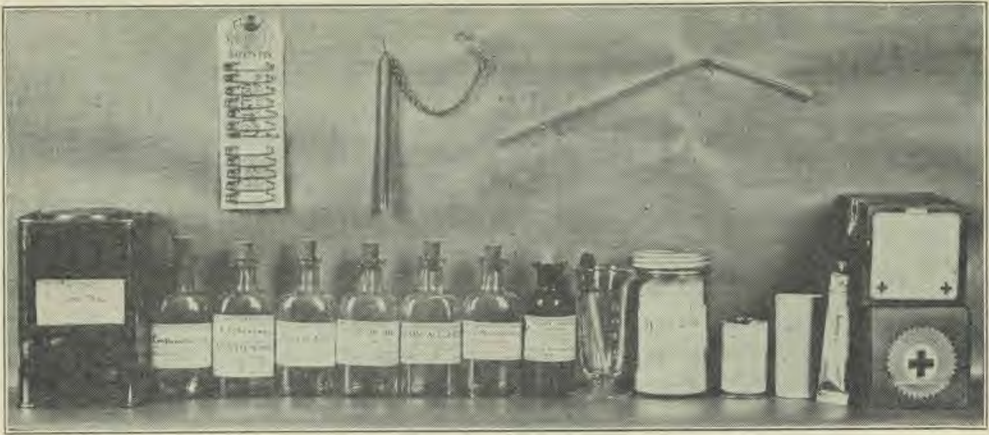
we recently passed, showed the whole world that there were not half enough nurses? Is it any wonder that nursing fees have gone up so that the average person or family cannot get a nurse? Forty dollars a week—with room and board besides—is a very ordinary charge for a good nurse nowadays. But who can pay that? Could you, if you were sick? Why not become an efficient, practical home nurse yourself?

Besides the continual and increasing need for trained nurses, this profession is one of nobility, of dignity and honor. Nature has fitted every woman for the profession of nursing. Through it she exercises the highest instincts of womanhood.

It is the privilege—we might say duty—of every wife and mother to avail herself of every means of preparation for this service. First, that she may be able properly to care for the members of her own household, which is without doubt woman's natural calling, and also that she may go out among her friends and neighbors and instruct them in practical methods of the home care of the sick.

The way to become an efficient, practical home nurse of recognized ability, is easier than you imagine. For those who find it impossible to take a regular nurses' training course at a sanitarium or hospital, there are good schools giving this instruction by mail. The Chautauqua and the Chicago School of Nursing give a strong course of training in every branch of nursing. For those desiring a shorter and less expensive course, the Fireside Correspondence School has arranged a good, thorough course in Home Nursing and Simple Treatments, which

(Continued on page 347)



Household Emergency Supplies

Equipment for Home Nursing

Franke Cobban

WITH the increase of disease and epidemics and the present shortage of nurses, every Christian homekeeper should feel it her duty and privilege to be prepared, in both knowledge and simple appliances, to render help in case of sickness and accident in her neighborhood. We are assured by reputable physicians that the epidemic which has twice passed over our country and taken such a heavy toll of life, will, from time to time, recur; and other diseases which we have not had to meet as yet, will come. Had every woman had the knowledge of the simplest principles of hygiene and home nursing during the outbreak of influenza, many lives could have been saved. Instruction of this kind has never been so easily available as now.

Every home should possess a good set of fomentation cloths, a hot water bottle, a foot tub, and an enema can. Directions for giving fomentations and a footbath will be found in the article "Simple Home Treatments," by J. Greer Hanna. One who has taken advantage of a course in first aid and home nursing and has the simple equipment mentioned in this ar-

ticle, can, in case of accident or sickness, give much help, and may sometimes be able to save life.

If a neighbor is suffering, take an hour's time to go and give some fomentations. The gratitude of the patient for the relief which this will bring fully repays one for the time and effort spent.

Very valuable assistance can also be given if one can go into the home where there is sickness, and without worry or exertion on the part of the patient, change the bed linen, arrange the pillows comfortably, and possibly give a refreshing sponge bath or a general rub. Oftentimes the doing of these things will teach the family how to do them, and will thus add much to the patient's comfort during his entire sickness.

The homekeeper can also be of great help to her neighborhood by example. If her premises are kept clean and in a sanitary condition; the house, and especially the food, screened from flies; every room clean and well ventilated, the influence will be felt in the surrounding homes, even though there is no opportunity to speak a word about health principles.

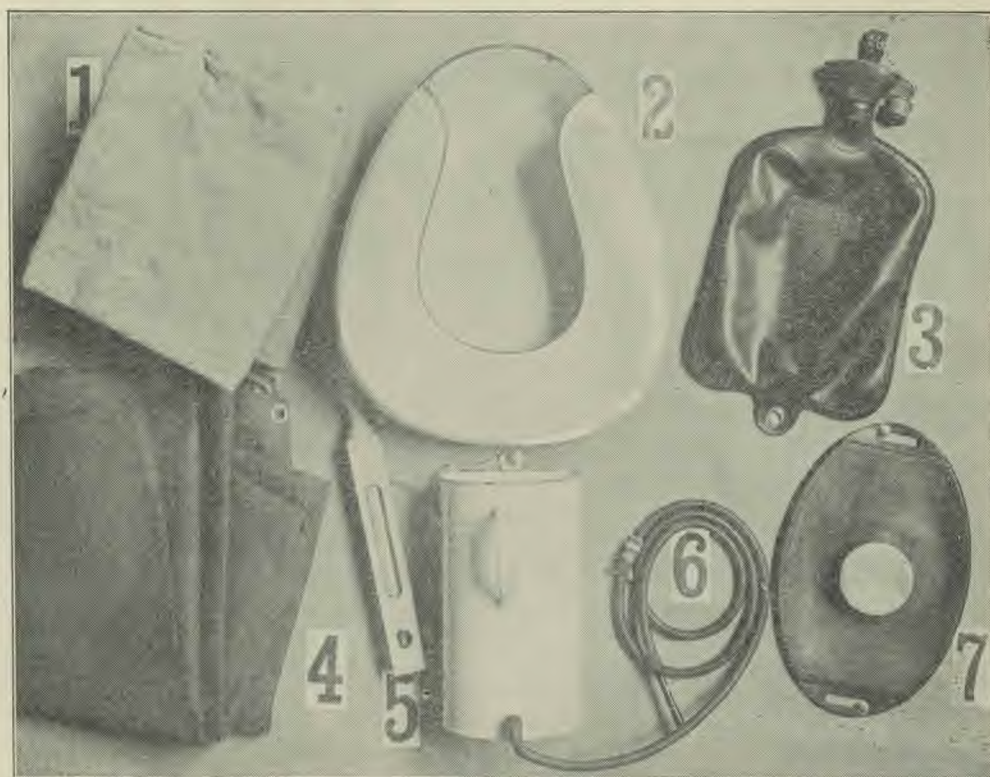
It is well to have on hand some simple disinfectants, such as boracic-acid solution, tincture of iodine, peroxide of hydrogen, and lysol. Boracic-acid solution is made by adding as much boracic powder or crystals to boiled water as the water will dissolve. This is a very mild disinfectant and can be used as an eye wash, nasal spray, mouth wash, or to irrigate wounds. Tincture of iodine, diluted one half with water, can be used to disinfect cuts or wounds. Half a teaspoon of iodine with half a teaspoon of table salt in a glass of hot water makes an excellent gargle. Hydrogen peroxide should be diluted with from one to three parts of water for mouth wash or nasal spray. Lysol, a teaspoon to a pint of water, is useful to disinfect the hands, cleanse bedpans, basins, etc., and is a very good deodorizer.

First-aid dressings may be made from old linen. This should be prepared by thorough washing. Then wrap in muslin in small flat packages, place in a covered

colander over boiling water, and steam thoroughly. Place in a slow oven and bake until very dry, and keep wrapped until used.

Further home equipment might include a fever thermometer, an ice bag, friction mitts, and chest and throat compresses. Every one should be able to use a fever thermometer, and to know when to advise the calling of a physician. Many serious illnesses might be avoided, or at least shortened, were the physician called sufficiently early.

In order to gain the knowledge that will enable the mother to recognize serious illness, or to render first aid or treatment in less serious ailments, it is not necessary for her to leave her home and take a training covering several months or years. Articles in this issue by Mrs. Thompson and Miss Pulis describe the simpler courses that are being provided in many places to enable the homekeeper to get the instruction she needs in home nursing, hygiene, and first aid.



1. Fomentation Cloths. 2. Bedpan. 3. Hot Water Bottle. 4. Rubber Sheet. 5. Bath Thermometer.
6. Fountain Syringe. 7. Ice Bag.

Simple Home Treatments

J. Greer Hanna

FIRST in the list is the fomentation. It is one of the most effective of all home remedies for giving relief from pain, and in combination with other simple treatments, it produces satisfactory results in almost every condition of sickness.

The requirements are four cloths, one yard square, of blanket material, cotton and wool mixed, two to wet and two for dry coverings; a pail or basin of boiling water; a basin of cold water; a towel; and paper or other material to protect the bed and floor.

Have the patient ready and all material on hand before beginning treatment.

To prepare a fomentation, spread one of the dry cloths on a table, and if fo-

mentation is for the spine, fold the cloth to be wet double lengthwise, then double again. Holding both ends of the cloth, dip in the boiling water, keeping about five inches at each end out of the water to hold by, then twist and wring out rapidly and thoroughly, open to about eight inches wide, lay on dry cloth lengthwise, cover with the dry cloth, having only one thickness of dry cloth between the skin and the wet inside cloth. Before laying it on patient, spread a thin towel over the spine, and then apply the fomentation. If too hot, do not remove the fomentation, but rub the hand up and down under it a few times to relieve the irritation. Now get the second one ready. Remove the first and apply the

second. There should be about four minutes between the applications. Three applications of four minutes each are usually sufficient. Finish by dipping the hand or a washcloth in the cold water and giving a short quick rub over the part; dry thoroughly.

To prepare fomentations for the chest, abdomen, or across kidneys, follow similar procedure, only change size of compress to about twelve by eighteen inches.

In cases of severe, deep-seated,



Wringing the Fomentation Cloth

acute pain, five or six applications may be made, then let the patient rest for an hour or so and repeat until relieved. Be careful to avoid burning when giving fomentations to aged or paralyzed persons or to very young children.

In emergencies a hot water bottle, hot brick, hot bag of sand or salt, or hot stove lid may be wrapped in a damp cloth and applied over seat of pain. Care must be taken to guard against burning.

To be effective, a fomentation must be hot, and if administered carefully, it will give satisfaction. Every family ought to provide a set of fomentation cloths as a part of the home equipment and become acquainted with their value by regular use.

But we must not be superstitious. There is no healing virtue in the fomentation cloth; it is only an adaptable method of conveying moist heat to any local area of the body. It is of value in relieving pain and disease; it is also useful in keeping well. Three piping-hot fomentations to the spine, followed by a cold mitten friction, two or three times a week, will stimulate all the organs of the body and give new energy and life to dormant blood cells. Renewed vigor accompanies such treatment and builds up a barrier against contracting colds, influenza, pneumonia, and other diseases. It is of special value in anemic conditions.

To give a cold mitten friction properly, the following are required: Two mit-

tens of burlap or other coarse, porous material, a pail of ice water, four Turkish towels, and paper or other material to protect bed and floor.

After the fomentations to the spine and the bed and clothing are properly protected, put on the mitts, dip in the ice water, squeeze out water, and rapidly rub, with plenty of friction, first one arm then the other, then the lower limbs, then the chest and abdomen, and lastly the back. Dip the hands in the water two or three times for each part, and dry off each part thoroughly after rubbing. A warm glow all over the body should be felt after this treatment. See that the feet are kept warm during the treatment. Do not give such treatment if the skin is cold and clammy or has a goose-flesh appearance. Be careful when giving this treatment to the aged or very young.

When it is not convenient to have the fomentations to the spine, or in case a person is alone, he can stand in warm water in a bathtub or a washtub and take a most effective cold mitten friction.



Folding the Wet Cloth Within the Dry



South Neighbors

Native Washerwomen
Magdalena River,
Barranquilla, Colombia

*A comparatively short trip s
lands where life is primitive in
things which seem to us essenti
say that these peoples on the wh
less they escape the worry and*

Native Indian Women
Washing Clothes at a Spring
near Panama City



TO HERN PORTS

Washing and Bathing in
Stream Fed by Hot Springs
Aguas Calientes, Mexico

by rail or by sea, brings one to
extreme — where many of the
unknown. And yet, who can
be not so happy as we? Doubt-
less the rack of the modern life.

A Street Market Scene,
Port au Prince, Haiti



This treatment is excellent for a morning tonic. It should not be taken at night.

Another useful home treatment is the hot foot bath. It is very effective in congestive headache, in first indications of cold, influenza, pneumonia, insomnia. The requirements are a basin deep enough to hold water to cover feet to ankles. The patient sits on a chair, with wrappings to cover basin, chair, and all. Begin with temperature of foot bath at 102° and gradually increase until it is as hot as can be borne. Continue for about 30 minutes. Keep cold cloth to the head or neck during the treatment. If the patient is perspiring, give cool sponge bath all over the body and keep warm in bed.

The foot bath can also be given in bed if care is exercised to protect the bedding from getting wet. This is a very satis-

factory method in case the patient is very weak and subject to chilliness.

The heating throat compress, which is worn all night, is also an effectual treatment in all forms of sore throat and hoarseness. For the outer covering double to eighteen inches long a piece of outing flannel about a yard long and five inches wide. Wet in cold water a piece of thinner cloth, as old muslin or gauze, about 3½ x 12 inches, wring dry and wrap around the throat, covering snugly with the wider outer covering; pin firmly. In the morning, remove the compress and bathe the throat with cold water, drying thoroughly. In some cases it is helpful to precede the compress with one or two fomentations.

These are efficient home treatments which can be given in any ordinary home, and if carefully and thoroughly administered, will produce satisfactory results.



Giving a Foot Bath in Bed; Using Cloth to Protect from Moisture — an Important Item.

DIET IN DISEASES OF METABOLISM: Rheumatism, Obesity

George E. Cornforth



In Rheumatism

LAST month we considered the diet in diabetes. Other diseases of metabolism are rheumatism and gout. We said that in diabetes there is abnormal metabolism of the carbohydrates in the diet. In rheumatism there is abnormal metabolism of the protein in the diet. Perhaps I should have explained the term "metabolism." Metabolism includes those processes by which food is built into tissue or used for the production of heat and energy, and by which the waste products of life activity are removed. Somewhere in this process, in diseases of metabolism, something goes wrong, leaving in the body a greater amount of some substance than is found in health.

In rheumatism, the end products of protein metabolism are not eliminated as fast as they should be, and there is an excess of uric acid in the blood. Therefore, in this disease the protein in the diet should be reduced, no more than what is actually required to keep the tissues in repair— from 200 to 250 calories a day— being allowed. And all foods which contain uric acid (meats of all kinds) or substances closely allied to uric acid (tea, coffee, and cocoa) should

be entirely omitted from the diet; also alcoholic liquors, vinegar and pickles, rhubarb, fried foods, spices and rich pastries; and beans, which contain small quantities of purins, which are allied to uric acid, should be used very sparingly, if at all.

And, because this is a disease of metabolism, the regulators of body processes—the mineral elements, cellulose, and water— should be abundantly supplied in the diet by the use of vegetables, especially greens of all kinds, lettuce, celery, raw cabbage, vegetable broths, fruits, fruit juices, Graham bread, and bran. Potatoes are especially valuable on account of the abundance of alkaline salts they contain; but they should be cooked in their skins to retain all their valuable substances. A potato from which a thick paring has been removed and thrown away is like white bread, which is devoid of the outer coating and germ of the wheat. And because refined sugar (granulated) contains no minerals, and therefore a diet that includes much sugar is almost sure to be lacking in mineral elements, sugar and sweetened foods should be used very sparingly, if at all. The taste for sweets may be satisfied by sweet fruits, such as figs, dates, raisins, prunes,

pears, sweet plums, because these are not lacking in mineral salts. Vegetables and fruits, being rich in alkaline mineral salts help the rheumatic patient to eliminate the excess of uric acid in the body.

It is a somewhat common belief that persons who have rheumatism should not eat fruits, that they increase the acidity of the blood. This is not true of most persons. They will be benefited by eating apples (unpeeled), tomatoes, oranges, strawberries, and other fresh, ripe fruit, also cooked fruit in which very little sugar is used. Occasionally there is a rheumatic patient who does not derive benefit from eating some, or perhaps any, fruits, his symptoms being made worse by eating fruit.

Water should be drunk freely. Sufficient bran and laxative fruits and vegetables should be eaten to insure a free bowel movement at least twice a day.

The protein part of the diet may be supplied by nuts and milk. In most cases eggs may be used sparingly, in some cases not at all.

And in this disease, as well as in diabetes, exercise and fresh air are important to stimulate metabolism, and to induce perspiration, which will aid in eliminating uric acid; baths are important to stimulate metabolism, especially sweating baths to aid elimination by the skin.

In Obesity

“The body finds some mischief still for idle foods to do.”

Still another disease of metabolism is obesity. In this disease the metabolism of fat is at fault. Fat is stored instead of being used for fuel, therefore in this disease the carbohydrates and fats in the diet are greatly reduced. The total amount of food taken may be reduced to perhaps 1,600 calories a day, but the protein in the diet, which is required to build the living parts of the body, and keep the body in repair, should not be reduced below 200 or 250 calories. And in this disease, also, the body regulators should be abundantly supplied by fruits

and vegetables. In fact, in obesity the bulk of the diet should be made up of vegetables and fruits. Enough of these can be eaten to satisfy the appetite. This will supply an abundance of mineral salts, which are necessary for the carrying on of life processes. From 200 to 250 calories of protein may be eaten in the form of skimmed milk, eggs, cottage cheese, stewed gluten. Sugar, candy, and desserts should be entirely omitted from the diet; starch foods, such as bread, rice, oatmeal, and all cereals, and potatoes should be used sparingly; fat foods such as butter and cream should not be used. And it is scarcely necessary to say that alcoholic drinks must not be taken.

Two hundred calories of protein are supplied by each of the following: $1\frac{1}{2}$ quarts of skimmed milk, $6\frac{1}{2}$ oz. (1 scant cup) of cottage cheese, or 3 eggs. There will be more or less protein in all foods eaten, even in the green vegetables, so that it is not necessary to eat the quantity of milk, cheese, or eggs that supplies 200 calories of protein in order to get the required amount.

And in this disease, also, fresh air and exercise are necessary to help burn up the excess fat in the body. Tonic treatments are valuable to make the body fires burn more briskly.

As little fluid as possible should be taken with meals, but water may be drunk freely between meals about three different times during the day. It is said that drinking a little frequently helps one to gain flesh, but drinking much at a certain few times during the day helps to reduce.

By such simple measures as I have described, a person may safely reduce his weight to as great a degree as is desirable. But it requires will-power. And here is where the difficulty lies. Few people will exercise sufficient self-control. They do not seem able to refrain from occasional indulgences that counteract the effect of all their abstemiousness; and it is too much trouble or too hard work to take the necessary exercise.

(See tables next page)

The following meals suggest the nature of a diet that supplies sufficient protein and mineral salts and not too much total food.

Of course, if the person is short and his normal weight not much over 100 pounds, the total food for a day should be less than 1,600 calories and the protein less than 200 calories.

Breakfast

	Protein	Fat	Car.	Total
2 eggs	52	106		158
2 small potatoes, 8 oz. before baking	21	2	170	193
$\frac{1}{2}$ cup stewed tomatoes, 4 oz.	6	2	19	27
1 large apple, 7 oz.	2	6	88	96
1 orange, 4 oz. peeled	4	2	54	60
	85	118	331	534

Dinner

$\frac{3}{4}$ cup cottage cheese, 3 oz.	73	8	15	96
$\frac{3}{4}$ cup mashed potato, 6 oz.	18	48	126	192
$\frac{1}{2}$ cup string beans, 4 oz.	3.6	11.6	8.8	24
$\frac{1}{2}$ large head lettuce, 4 oz.	6	3	14	23
2 tablespoons lemon juice, 1 oz.			12	12
3 slices Graham bread, 3 $\frac{1}{4}$ oz.	38	18	227	283
1 glass grape juice, 7 oz.			167	167
	138.6	88.6	569.8	797

Supper

1 slice Graham bread, 1 $\frac{1}{4}$ oz.	13	6	76	95
1 bunch grapes, 6 oz.	7	19	100	126
2 fresh tomatoes, 8 oz.	8	2	36	46
	28	27	212	267
Dinner	138.6	88.6	569.8	797
Breakfast	85	118	331	534
Total for the day	251.6	233.6	1,112.8	1,598

These meals supply 250 calories of protein, which is sufficient for the upkeep of the living, vital parts of the body, and only about 1,600 total calories, so that to furnish energy for exercise the body would have to call upon its excess of stored fat.

Breakfast

	Protein	Fat	Car.	Total
1 $\frac{1}{2}$ glasses skimmed milk, 12 oz.	48	9	72	129
2 slices Graham bread, 2 $\frac{1}{4}$ oz.	26	12	152	190
1 large banana, 5 oz.	6	6	83	95
1 large apple, 6 oz.	2	6	88	96
	82	33	395	510

Dinner

$\frac{3}{4}$ cup baked beans, 6 oz.	37	31	103	171
1 medium potato, 5 oz. before cooking	13	2	107	122
$\frac{1}{4}$ cup green peas, 4 oz.	31	36	68	135
2 small slices Graham bread, 2 oz.	21	10	121	152
$\frac{1}{2}$ cup spinach, 4 oz.	10	3	15	28
2 large figs, 2 oz.	10	2	172	184
	122	84	586	792

Supper

1 glass skimmed milk, 8 oz.	32	6	48	86
1 slice Graham bread, 1 $\frac{1}{4}$ oz.	13	6	76	95
1 small pear, 3 oz.	2	4	49	55
2 $\frac{1}{2}$ oz. apple sauce, small dish	1	2	52	55
	48	18	225	291
Dinner	122	84	586	792
Breakfast	82	33	395	510
Total for the day	252	135	1,206	1,593

Again in these menus for one day we have 250 calories of protein and about 1,600 total calories.

Recipes: Meatless Dishes

George E. Cornforth

Swiss Rarebit

- $\frac{1}{2}$ cup mashed potato.
- $\frac{3}{4}$ cup lentil purée.
- $\frac{1}{2}$ cup cream, or sufficient to make it not too stiff.
- 1 onion, grated.
- A little finely chopped parsley.
- $\frac{1}{2}$ level teaspoon salt.

To make lentil purée, boil the lentils till they are thoroughly softened and cooked down dry, being careful not to scorch them, then rub them through a colander.

Mix the ingredients, form into flat cakes, spread nut butter on top of each, and bake till brown.

Lentil Headcheese

- 1 cup very dry lentil purée.
- $\frac{1}{2}$ cup thick cream.
- $\frac{3}{4}$ level teaspoon salt.
- 1 level teaspoon sage.
- $\frac{1}{2}$ level teaspoon summer savory.
- $\frac{1}{2}$ cup bread crumbs.

Mix and let stand one-half hour. Then add 3 eggs, the yolks and whites beaten separately. Steam one and one-half hours. Slice when cold. Brown gravy may be served with it.

Lima Bean Loaf

- 2 cups Lima bean purée.
- 1 cup chopped pine nuts.
- $\frac{1}{2}$ cup zwieback crumbs.
- $\frac{1}{2}$ cup celery chopped fine.
- 1 teaspoon chopped onion.
- 1 teaspoon salt.
- 1 egg, beaten.

Make the Lima bean purée by rubbing through the colander Lima beans that have been cooked down dry. Mix the ingredients well. If too dry, add water or milk to moisten. Pack in a bread tin that has been oiled and sprinkled with crumbs. Pour two tablespoons oil over the top. Bake half an hour. Serve with tomato sauce or brown gravy.

Baked Chick-Peas

Chick-peas can be bought at Italian stores. When cooked, they have a flavor that resembles chicken, and they are therefore enjoyed by persons who have not yet lost their taste for fowl.

Wash well and soak overnight one pint of chick-peas. In the morning put the peas, with the water in which they were soaked, in an earthen bean pot. Add two level teaspoons salt, one tablespoon butter substitute, and one small onion whole. Put the cover on the pot and set in the oven to bake. Continue the baking for twelve hours, or more, if convenient, adding water occasionally to make up for that which cooks away. The peas will be sufficiently tender for eating in from six to eight hours, but they have a richer flavor if baked longer.

Some persons might like chili sauce to eat with the peas, but to get the full benefit of their delicate flavor, they should be eaten without sauce of any kind.

A dish of chick-peas, potato, lettuce, or other vegetable, bread and butter, and a simple dessert, like prune whip, or prunes and cream, or some kind of jelly, like strawberry or cherry, make a nutritious, simple, and enjoyable meal.

Liquor Prescribing

The following resolution, referring to the Eighteenth Amendment, was passed and signed by the entire membership of the Beliot Physicians' and Surgeons' Club: "*Resolved*, That we, the members of the Beliot Physicians' and Surgeons' Club, as patriotic citizens of the United States, do hereby place ourselves on record as absolutely upholding the letter of the law, and do hereby agree not to dispense or prescribe any intoxicating liquors except in cases of extreme need; and that this club will aid the Federal Government in every way possible in the enforcement of this law."

Recipes



W. L. Hook

Mr. Hook, the baker at the Paradise Valley Sanitarium, has contributed a few recipes. His breads are famous. We take pleasure in giving the following:

Graham Bread

- 1 quart lukewarm water.
- 4 cups bread flour.
- 2 tablespoons sugar, heaping.
- 1 level tablespoon Crisco.
- 1 level tablespoon salt.
- 1 cake Fleischmann's compressed yeast.
- 4 cups Graham flour.
- 2 tablespoons molasses.

Dissolve the yeast in the water. Mix together the sugar and 1 level tablespoon Crisco, add salt and rub all together, and add the molasses. Add the water and yeast to these, and then add the white and Graham flour to make a stiff dough. It will take about four cups each of the flour. It is hard to give the exact amount of flour for it never runs the same. After the dough is mixed, knead well and put in a warm place to rise. It will take about three hours for the first time. When light, push it down and let rise about one hour; push down and let rise forty-five minutes; then put it in the pans and let rise till light; bake in warm oven. This makes four large loaves.

Economical Lemon Pie

- 1 lemon, juice and grated yellow part of the rind.
- $\frac{1}{2}$ cup, less 1 tablespoon, flour.
- $1\frac{1}{2}$ cups boiling water.
- 1 cup sugar.
- 1 egg.
- A few grains salt.

Heat together $1\frac{1}{4}$ cups of the water, the lemon juice, lemon rind, sugar, and salt. Stir the flour smooth with the remaining $\frac{1}{4}$ cup of water, and beat the egg into this flour-and-water mixture. As soon as the water-and-sugar mixture boils, stir into it the flour-and-egg mixture, and cook till thickened. Allow to cool, then pour into a crust, cover with a top crust, and bake in a quick oven till

the crust is cooked. Avoid cooking so long that the filling boils out.

All measurements in these recipes are level.

Walnut Cookies

- 1 cup Crisco
- 1 cup flour.
- 1 heaping cup sifted powdered sugar.
- $\frac{3}{4}$ cup walnuts.
- 1 teaspoon vanilla.

Take sugar, Crisco, flour, and vanilla, and rub till they look creamy, then add the walnuts, or any kind of nuts, and mix thoroughly. Then toss out on floured board and roll thin, wash over the tops, and bake in a warm oven. For the wash use a little milk, or egg and milk beaten together.

Bran Biscuits

- 3 cups warm water.
- 2 cakes Fleischmann's compressed yeast.
- $\frac{1}{2}$ cup oil.
- $\frac{1}{2}$ cup sugar.
- $1\frac{1}{2}$ cups Graham flour.
- $3\frac{1}{2}$ cups bran.
- 1 level tablespoon salt.

Dissolve yeast in warm water. Mix together sugar, oil, and salt, and add water and yeast to these. Then add the bran and Graham flour and enough white flour to make a stiff dough. Knead well and let rise till light, then push down and let lie for fifteen minutes. Roll out about one inch thick, then cut any size desired, and place close together. Let rise till light, then bake in a warm oven.

Tobacco in the United States

The per capita consumption of tobacco, two pounds annually at the time of the Civil War, has risen to eight pounds annually at the present time. There will be 914,000,000 pounds of tobacco this year for the consumers of the fragrant weed.

Tobacco and the Medical Profession, --- Then and Now

Daniel H. Kress, M. D.

WHEN first introduced into civilized countries, tobacco was cultivated entirely for medicinal purposes. A sixteenth-century writer, referring to its administration, said: "When the doctors wanted to cure a sick man, they went to the place where they were to administer the smoke, and when he was thoroughly intoxicated by it, the cure was mostly effected." That it was held in high esteem by physicians will be seen from the following: Dr. Edmund Gardner said, "What is a more noble medicine or more ready at hand than tobacco?" Dr. William Barclay, writing in 1614, affirmed, "It worketh marvelous cures." Physicians, it seems, had so much confidence in it, that they did what physicians of today seldom do — *took their own medicine*. They were among the first to become its addicts. One of the early writers said: "Doctors take as much delight in writing of the sanitary uses of the herb as they do in smoking the balmy leaves of the plant." While some physicians still "smoke the balmy leaves of the plant," they no longer write "of the sanitary uses of the herb." Tobacco has no longer a place in the pharmacopœia as a medicine.

How Tobacco Is Regarded by Physicians of Today

Dr. Solly, who for many years was connected with British life insurance companies, where he had an opportunity to observe its effects upon the human organism, in addressing the medical profession, said: "Has the medical profession done its duty? Ought we not as a body to have told the public that of all the poisons it is the most insidious, uncertain, and in full doses the most deadly?"

Dr. I. N. Love, in an article which appeared in the *Journal A. M. A.* of 1903, in referring to this practice, said: "The numerous mental wrecks, youths who have come under my care during the last ten years, whose lives were failures, impressed me that today tobacco stands as the great danger confronting the new century." He added, "The medical profession has a fearful responsibility in educating young men and their parents to appreciate their danger."

E. Stuver, M. D., secretary of the Wyoming State Medical Society, in referring to the more modern practice of cigarette smoking, says: "I regard the cigarette as one of the greatest evils and curses that menaces the health, happiness, and intellectual and moral integrity of our boys and young men." He added, "I lose no opportunity to raise my voice against this insidious and far-reaching vice."

Dr. W. S. Hall, says: "The boy who before adolescence forms the cigarette habit, will lie, deceive, and in other ways show degenerate tendencies. His physical and mental development will be inhibited and his moral tone lowered. He will suffer at times from depression and irritability, thus disclosing an overstimulated and subsequently exhausted nervous system, which seeks relief through the medium of more active agents than tobacco."

The belief exists among a certain class that while tobacco is bad for the boy, its moderate use among men is not harmful. Is there any scientific basis for such a belief? No scientific reason can be given why after sixteen years of age a person can use tobacco without injury. The earlier in life the habit is formed,

the greater is the injury sustained; partly because of the greater delicacy of the brain and nerve tissues, and particularly because a longer time is granted to inflict injury. The real facts are, conceal them as we will, that what is bad for the boy is bad for the adult — not *equally* bad, but *bad*.

Dr. T. D. Crothers, who was a well-known authority, said: "Accounts of persons who have used tobacco for years without injury are found on examination to be untrue. It is doubtful if any person who uses tobacco continuously is not enfeebled in mind and body, although the damage may not appear from a casual examination."

Dr. Harvey W. Wiley, of Washington, D. C., says: "The use of cigarettes is making inroads on the strength of the nerves of all who smoke them. The effect may not be so bad on people of more mature years, but not in any case, no matter how old a man or woman, is smoking helpful."

N. S. Davis, A. M., M. D., LL. D., who for years stood as a leader among medical men, reasoned as follows: "Are not the processes of assimilation and nutrition, by which all the structures of the body are kept in repair to the end of life, identically the same in childhood and youth as in old age, and governed by the same physiological laws? And if the use of anesthetics and narcotics, like alcohol and tobacco, is capable of so far impairing those processes during growth as to render such growth incomplete, will it not as certainly impair the same processes in both middle and old age, and thereby make the nutrition necessary for tissue degeneration and early failure of life? Is not this last question answered affirmatively by the vital statistics of every civilized country, as well as corroborated by the results of life insurance and by daily observation in all classes of human society?"

Every argument used in America to support the use of tobacco by adults in so-termed moderation, has been, and to-

day can be, consistently employed to favor the smoking of opium in China. There can be no scientific reason given for the use of either — any poison habitually taken injures the organism, no matter what that poison may be. In time it will bring about degenerative changes of that organism.

There may be some disagreement among medical men in regard to alcohol's doing serious injury to the heart and arteries, but about tobacco there can be none. All leading authorities are agreed that tobacco smoking injures the heart, arteries, and kidneys.

Dr. Arnold Lorand, in his book "Old Age Deferred," says: "When nicotine is taken for many years, and sometimes even a shorter time, either by smoking or chewing, very injurious consequences from nicotine poisoning may ensue." He says, "Clinically we have observed the great frequency of arteriosclerosis in great smokers. If among those addicted to drink there are many instances of long life, *among smokers* such instances are much fewer."

Hesse, of Germany, in experiments conducted upon young men varying from the ages of twenty to twenty-seven, found that in seventeen of the twenty-five cases the act of smoking one, two, or three cigars was followed by increase of blood pressure, in some cases of a marked character. The rise in blood pressure is due possibly to a spasm of the muscular walls of the vessels and heart due to irritation. From continued use structural changes occur in the walls of the vessels. These changes are gradual, and at first are not perceptible. They ultimately end in arteriosclerosis of an incurable nature.

Sir Lauder Brunton, of England, also said: "I do not know that there is anything that causes such a tremendous contraction of the vessels and raises the blood pressure to such an enormous extent as does nicotine, except perhaps the extract of suprarenal capsules, which has an action almost identical with that of nicotine."

Speaker's Sore Throat

George H. Heald, M. D.

THIS troublesome affection, known also as singer's sore throat and clergyman's sore throat, is more or less common among those who use the voice in public and is due to wrong use of the voice, or at least to wrong use of the vocal muscles.

When the speaking or singing voice is properly produced, there is no strain, no early tiring, no breaking, no unnatural hoarseness, and no soreness resulting therefrom. But unfortunately those who attempt to sing or to speak in public, often either call into play the wrong muscles, or else use the muscles wrongly. Then there is often, perhaps usually, in these cases, a wrong method of breathing.

We all, perhaps, remember seeing some child's first attempt to write, how he grasped the pencil awkwardly, and held it in such a way that if uncorrected, and allowed to become habitual, would have prevented his ever becoming a good penman. One attempting to play the piano must be corrected as to touch, position, technique, else habits are formed which are a permanent handicap, and the acquirement of proper technique is at the expense of months of laborious effort. In nearly everything we may take up there is a right way and possibly several wrong ways; and usually the right way is not selected without expert help. In forming careless habits in writing there may be no serious injury to the structure and function of the hand,—unless writer's cramp is induced,—but with wrong use of the breathing and vocal muscles, there is not only a loss of voice quality, but there is more or less permanent damage to the tissues having to do with voice production.

The preacher, the singer, or the pub-

lic speaker whose voice tires easily and tends to break, who has a raspy condition of the throat with more or less hoarseness, who frequently has to visit the throat specialist or take throat lozenges, is misusing his voice. What he needs more than anything is to begin back at the bottom and learn all over again. It seems hard,—something like a typist trying to learn the touch system, when he has always used a typewriter by the one-finger method,—harder than for one who is beginning for the first time; but it is the only proper way. If the voice is one's capital by which he holds audiences and earns his livelihood, he owes it to himself to begin again—right—and give his voice a fair chance. If he is unwilling to do this, he would better engage in something that does not require the public use of his voice, otherwise failure sooner or later will stare him in the face. Not only will his voice fail him, but he will become a nervous wreck.

Speaker's sore throat is actually a sore throat. There is more or less inflammation, caused by the irritation due to the muscular strain. And like eyestrain, throat-strain may eventually involve the entire nervous system in the mêlée. It is like the Bolsheviks of Russia, upsetting and setting on fire the whole world.

At the bottom of the trouble is first, perhaps, a wrong method of breathing—chest instead of abdominal breathing. Then the tones are "throaty," the resonating apparatus being used so as to produce inferior tones at the expense of an increased strain on the vocal apparatus. Then the principle of breath control is not understood, and much more breath is used to produce a sound than is needed, the consequence being that the tone is inferior quality, and there is

an inability to produce a long tone or to speak a long sentence or sing a long phrase without taking breath.

These things are best learned from a voice culturist; but it should be remembered that there are many so-called voice culturists, some of whom do more harm than good. As one, in order to become accomplished in piano playing, type-writing, etc., needs to get the technique and to spend weary hours in painstaking practice, so does the one who expects to make public use of the voice, either in singing or speaking.

Among the rules of voice conservation to be remembered are:

1. Breathe abdominally, that is, with the diaphragm and abdominal muscles. Take in breath through the nose rather than through the mouth.

2. Always have a large reserve of air,—that is, speak on a full breath rather than on a spent one.

3. Control the exit of the breath, not by the vocal cords but by the muscles of respiration. This is a most important art and is not readily described. It is best given personally by an instructor. One who has proper breath control can sing marvelously long runs or speak long sentences without taking breath.

4. Resonate the sounds in the front of the mouth and not in the throat. This again is difficult to describe. In forming "throaty" tones, the base of the tongue is depressed and there is a stiffening of the muscles in the region of the "Adam's apple." In mouth resonance, the teeth are separated so as to take in two fingers edgewise, the face is broadened as in a smile. In fact, singers usually find that in smiling they can produce a better tone. The lips should be more or less rounded, as in an effort to whistle.

But this voice technique is best got personally from a qualified voice teacher. The point of this article is that any one attempting to make public use of his voice without having learned how, and practised the technique, is liable to be disappointed in the results.

Sometimes singers who find their voice hoarse have recourse to throat tablets or lozenges in order temporarily to clear the voice. This is not a good practice. When the voice needs clearing, it is best to give it a rest and perhaps take special lessons in voice culture. Temporizing with lozenges or similar remedies merely enables the vocal organs to put up for the time being with a little more abuse, the result being that their final breakdown is hastened. There is no medical cure for speaker's or singer's sore throat.

How to Become a Practical Home Nurse

(Continued from page 331)

contains in brief and permanent form the essentials of what a home nurse ought to know. The lessons are so illustrated that the different topics are made plain, and the pupil receives the individual attention necessary to a complete understanding of each subject.

There are many women all over the country who are availing themselves of this practical training course given by these correspondence schools, and you should read the enthusiastic letters they write about the good they are accomplishing, both in their own homes and in the homes of their neighbors. Every woman in the land should be deeply interested in this noble work.

Educating the Rural Districts in Social Hygiene

In line with its purpose of bringing health education directly before the people, particularly in remote rural districts, and of co-operating with all existing public health agencies and societies, the American Red Cross has just appropriated \$10,000 as a donation to the American Social Hygiene Association to aid that organization in establishing a traveling exhibit on social hygiene. The exhibit will be mounted on a motor truck, and will consist of a motion picture machine with films and slides on social hygiene, a fireproof booth that can be set up in schoolhouses or churches, and large quantities of literature and posters. A representative will precede the exhibit into each community in order to line up its special problems so that they can be dealt with specifically.

QUESTIONS AND ANSWERS

ANSWERS THIS MONTH BY G. H. HEALD, M. D.

For personal reply, inclose two-cent stamp, and address Editors LIFE AND HEALTH, Takoma Park, D. C.

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.

Botulism

"What is meant by botulism?"

Botulism is a form of food poisoning caused by the action of the germ *Bacillus botulinus*. This germ grows in the absence of air and is not always killed in the heat incident to the ordinary domestic canning methods. For this reason it will grow on canned foods when all other germ growth is inhibited. As it grows, it produces an intense toxin, which when taken even in minute quantities, produces violent and usually fatal symptoms. Ordinarily it is the home-canned foods that are subject to botulism, but there have been commercial canned foods, such as ripe olives, which have caused fatal poisoning. Usually the foods which are thus poisoned are off taste, or off color, or soft, or they otherwise give evidence of decomposition. Foods which appear suspicious are better thrown to the chickens. It is better to sacrifice a flock of chickens than to lose several members of the family.

Ordinarily the toxin produced by this germ is destroyed by cooking. If one rejects all canned food that appears suspicious, and re-cooks that which is eaten, no matter how fresh it appears, there will be little danger of botulinus poisoning.

Wood Alcohol

"Are there liniments that contain wood alcohol? I have heard of a man who was nearly blinded as a result of rubbing a liniment on his chest."

Wood alcohol, being cheaper and more easily obtained than grain alcohol, is often substituted for the latter in alcoholic drinks, in essences, in perfumes, and probably in liniments.

Owing to its intensely poisonous character and the danger of even a small dose being followed by blindness, and the fact that it is not readily detected, wood alcohol is a most dangerous adulterant, and those who use it for this purpose should be punished by the most drastic penalties the court is capable of inflicting.

One's only recourse is to buy only high-grade articles, made by those whose reputation is above suspicion.

Use of Thyroid Extract

"Kindly send me advice regarding the use of thyroid gland extract and preparations of the same."

It is not wise to use a thyroid preparation except under the supervision of a physician. If used when it is not needed, or if used in too large doses, it is liable to do harm.

Sick Headache

"Have been troubled with sick headache accompanied with violent vomiting, for several years. Must take to my bed. It comes on about the menstrual period, sometimes before and sometimes after. Appetite is good. Belch a great deal. Skin is dry and chafed. There is much pain in limbs, varying from one place to another. My age is forty-three. What treatment would you prescribe?"

You are nearing the change. It is barely possible that this has something to do with your trouble. From the fact that the headaches occur at the menstrual periods, one would judge that they must be in some way connected with this function. I believe, however, that the great majority of persistent and periodical headaches are due to some fault of the eyes, and might be remedied by properly fitted glasses. It may be that in your case it is a combination of pelvic and eye trouble. At your age it is usually necessary to begin the use of glasses, or to have the glasses "strengthened" if they have been used before.

If the leg trouble is a neuritis, this may also come from some pelvic trouble. There are so many possible explanations for your troubles that it would be wisdom on your part to have a careful examination. Here are a few of the questions that should be settled:

1. Are your eyes properly adjusted with glasses?
2. Is there any pelvic trouble that needs attention?
3. Is your diet what it should be?
4. Are you working too hard, or too long hours?
5. Are there domestic troubles — worry, friction, discontent, etc?

Constipation — Poor Nutrition

"Will the continued use of mineral oil be harmful? I am constantly in need of a cathartic. Am underweight. I have acidosis, and sneeze a great deal, and my nose runs water. Am very careful of food combinations, and eat only wholesome food. Oil or soda relieves me at once. Seldom take soda unless I am very bad."

Try olive oil. It will give as good laxative results as mineral oil, and will help you to put on weight. In place of the soda, use milk of magnesia. This is an antacid, and will also act as a laxative.

Yeast Cakes and Vitamines

"Is it true that yeast cakes are rich in vitamines, and if so, would it be advisable to add them to the dietary?"

Yeast cakes do contain vitamines, but yeast is not a food, and one would not care to continue using it indefinitely. It is much better to select foods that contain vitamines, including especially the green vegetables, milk, and the whole grains. See table of foods containing vitamines at the bottom of page 174 in the *JUNE LIFE AND HEALTH*. In this article they are called "accessory factors."

Calomel for External Use

"Is calomel, applied externally, healing to a sore, or is it injurious?"

Calomel dusted on indolent, specific ulcers often gives good results. It is often used in ointment for subacute and chronic eczema. If applied in the acute stage, it may prove too irritating, and if applied over a large surface, enough of the drug may be absorbed to cause salivation. It is well to remember, therefore, that in using calomel externally you may get the same constitutional effects that you would get when taking it internally.

When there is a running ear, the parts may be washed thoroughly with a bichloride solution, then powdered calomel may be dusted in the ear.

Calomel when dusted on a sore probably acts as a mild antiseptic, and also helps to form a scab.

Endows British School

The Rockefeller Foundation has given nearly six million dollars (£1,205,000) to the University College Hospital School, London. This will be utilized in strengthening the present courses of the school.

BOOK REVIEW

Diseases of Children

by John Lovett Morse, A. M., M. D. Third edition, 639 pages, illustrated. Price, \$7.50. W. M. Leonard, publisher, Boston.

This is one of a series of medical books published by Leonard, in which the principles and practice of medicine are taught by the case-history method. That is, by giving an actual example of each disease or condition studied with the history, examination, diagnosis, prognosis, and treatment. It shows clearly the difference between guesswork and the scientific study of a case; and makes plain the fact that if one jumps at a conclusion before going carefully into all the details, he is almost certain to make a wrong guess.

Next to the actual clinical study of cases under such a teacher as Professor Morse, this work ought to give a physician desirous of a more perfect knowledge of the diseases peculiar to infants and children, a satisfactory working knowledge. The ordinary physician in general practice who has not specialized in diseases of children often comes in contact with a case that puzzles him. He may have read something about it in his textbook; but it is one thing to

read the dry description of a disease in the ordinary textbook and another to study the case histories in this book. The one is almost sure to be forgotten, the other is more likely to be remembered.

An opening chapter on the normal development and physical examination of infants and children contains much information that it would be well for every mother to know. In fact, a mother will receive much benefit also, by reading the case histories in the later chapters, for they will give her a better idea than she is likely to get otherwise, regarding what are serious symptoms requiring the immediate attention of a physician, and what are minor symptoms.

The index has been prepared so as to enable the reader to turn to groups showing how cases presenting almost similar symptoms may be differentiated.

As revised, this book is really three in one: a book on the normal child, one on infant feeding, and one on diseases of children.

So while Professor Morse's "Diseases of Children" is intended for the use of physicians, it is a safe guess that any intelligent mother who has access to the book will gladly avail herself of the opportunity to study it.

That Cold!

WILLIE, Willie! Come right into the house. Don't you know you've got a bad cold? Bring the children in here where it's warm.

O Mrs. Jones, so glad to see you! The house looks dreadful, but do come in. All the children in the neighborhood are playing here today. Willie has a bad cold, and I wouldn't let him stay out. He's sneezing all the time! I'll be glad when Monday comes, and he can go back to school! Willie, shake hands with Mrs. Jones.

Willie, did you lose your handkerchief again? Go let auntie wipe your nose with hers.

Willie, there's the doorbell again. It's Mrs. Smith and her baby. You let them in, and talk to them till I get dressed. Kiss the baby nicely.

Now, Willie, be a good boy, my dear. Let Bob have a bite of your apple if he wants it.

All right, stop teasing, Willie. I'll let you go to the "movies" this afternoon if you won't make any fuss about getting clean for Sunday school tomorrow. But bundle up warm before you start. Remember you have a bad cold.

Hello! Hello! Yes, I can hear, daddy. You want to bring Mr. Black home to dinner. Yes, indeed. Come early so he can have a romp with Willie. I can manage. But don't forget that medicine for Willie's cold. His nose is running awfully tonight. Good-by.

Don't play in that cold water, Willie, when you have such a cold. Now go wipe your hands on the kitchen towel.

Willie, let Howard Green blow that whistle just once if he wants to. You've played with it all afternoon.

Willie, don't put those cards in your mouth. You'll get them dirty. Those are for auntie's card club tonight. You mustn't spoil them.

* * * * *

Yes, Mrs. Green, Willie's gone back to school again. His ears are still aching some, but the doctor thinks that the drums won't burst. Pretty bad, though. Every one of us has been sick, but Willie was the worst. How's Howard's cold? Did you hear about poor Mrs. Smith? Her children all have dreadful colds, and the baby almost died of pneumonia. She was here the first day Willie was sick, with the baby, and not a thing on its head! My house was nice and warm, and I told her when she went out to cover up that baby's head, but you can't teach some people. Willie just loves the baby. It was too cute the way he hugged and kissed her that day.

All of Willie's friends have been having colds. Bobbie Black is awfully sick, Willie says. They're going to take out his tonsils as soon as he's better. Such a damp place they live in! Willie says all the children at school are sneezing. It's a drafty old building. Daddy says it's just as bad at his office. He had the first one, and since then all the other men have been sick. Daddy says it's cut down the efficiency of the office by half. Funny, too, in such a nice steam-heated building.

Did you hear what that woman who's just moved in next door said? I've been so mad ever since, I can scarcely look at her house. She had the impudence to say the reason her precious boy had a cold was that he came over and caught it from Willie. I'll see that they don't play together again, I can tell you. I know well enough where he got his cold. Didn't I hear her say that she made him take a bath every day? In this cold weather, too! Next she'll be saying Mrs. Smith's baby caught her pneumonia from Willie.—*Bulletin, California State Board of Health.*

NEWS NOTES

One Cause of Revolution

To stamp out revolution in Hungary the first step was prohibition of the sale of liquor.

Medicine in Germany

On account of the return of physicians from the colonies and the dismissal of medical officers from the army, there are now 4,000 physicians in Germany applying for positions,—some of them applied more than a year ago,—and there are no positions for them. One paper says, "The prospects for the future of the medical profession are consequently the worst that could be imagined."

Veneral Control

The United States Government is co-operating with the governments of the different States (except Nevada, which has not yet taken hold of the work) in a campaign to control the spread of venereal diseases. The campaign includes educational work, curative measures for the infected, and repressive measures. As a result of repressive measures, the open red-light districts are fast disappearing.

Powdered Milk

For several months officers of the United States Public Health Service, together with other organizations, have been investigating the merits of milk powders for baby food. Their complete report may be ready by the time this note is published. Meantime they have given their approval of milk powders for feeding babies in tropical and subtropical countries where fresh milk is difficult or impossible to obtain.

Not All Race Suicide

The reports for 1,252,552 of the births occurring in 1918 contained information as to number of children in order of birth. Of these reports, 345,027 were for the first child born to the mother, 264,964 for the second child, 192,339 for the third, 136,366 for the fourth, and 95,963 for the fifth. In the remaining 217,893 cases, or 17.4 per cent of the entire number for which information on this point was obtained, the total number of children borne by the mother was six or more; in 38,343 cases it was 10 or more; in 1,820 cases, 15 or more; and in 58 cases, 20 or more. The total number of children ever born to the mothers of these, 1,252,552 babies of 1918 was 4,109,309, or 3.3 per family. The reports for 1,189,682 mothers of 1918 contained information as to the entire number of children now living and gave a total of 3,461,110, or an average of 2.9 living children in each family.

Extent of Venereal Disease

The draft, including, as it did, whites and blacks from every section of the United States, city and rural, gave the first accurate information regarding the prevalence of venereal diseases among our population. The first million men showed 3 per cent venereally infected; the second million, 5 per cent. In the first million many of the diseased were rejected, and so were not counted. In the second million, they were accepted (if unobjectionable otherwise) and placed under treatment. The figures indicate that one of every twenty of our young men from twenty-one to thirty-one is infected. This army test was a mere inspection, and doubtless failed to detect many cases that would have been detected by laboratory methods.

Fat-Soluble Vitamine

Experiments with the fat-soluble A (growth-producing) vitamine of yellow corn shows that it is not destroyed by being subjected to steam heat under fifteen pounds' pressure for three hours. In other words, the heat used in the canning process will not destroy this vitamine. In this it differs from the water-soluble vitamine B, which prevents beriberi, and especially from the vitamine C, which protects from scurvy. "B" is destroyed by a moderate amount of heat, "C" by a very slight amount of heat; hence the necessity for giving orange juice to babies fed on Pasteurized milk, orange juice being rich in the antiscurvy vitamine C.

Baby Footprints

In some hospitals the practice has been established of taking footprints of the baby and fingerprints of the mother, shortly after the birth. These are taken on one sheet, and then there is no danger of mixing babies. When the mother leaves the hospital, she can be sure that the baby that is given her is her own baby.

What Americans Eat

Mr. A. C. Bye, in the *Landmark*, states that Americans, except natives of Philadelphia, never eat kidney, calf liver, tripe, or sweetbread, and do not use fish until so old as to be highly flavored and disguised, and that they dislike Brussels sprouts and cabbage. Perhaps this is news to most Americans.

Industrial Research

One of the results of the war has been the establishment in England of a systematic research into the conditions in industry which make for fatigue, and those which increase efficiency.

Wood-Alcohol Poisoning

The Metropolitan Life Insurance Company's report for the first four months of 1920 shows 40 deaths from wood-alcohol poisoning, due to the use of adulterated beverages. During the same period there were 18 deaths from acute or chronic alcohol poisoning.

Public Health Street Car

St. Louis has the distinction of having had the first public-health street car in the United States. It began its work the last of June, standing at designated locations on successive days so that the people of different communities may have the opportunity of visiting it. The exhibit, which is made by the Tuberculosis Society of St. Louis, was visited by 5,000 persons the first week.

Powdered Fruit Juice

Powdered milk has proved an unqualified success, and now we are to have powdered lemon juice and powdered orange juice. The manufacturers of one brand of powdered milk have adopted their process to the dehydrating of fruit juices, and are planning to erect an establishment in Southern California for the manufacture of powdered lemon juice and powdered orange juice. Conceivably the juice of grapes and peaches and other fruits might be prepared in the same way if there is a demand for such product.

The Sane Fourth

It may be remembered that for a good many years there was a campaign for a "safe and sane Fourth," with the intent to do away with the useless and foolish loss of life, limb, and property through the use of fireworks. When the list of accidents was reduced to a minimum, the agitation ceased, and immediately there was a tendency to return to the old condition of carelessness, with quite a formidable list this year of Fourth of July accidents. Probably back of it all is the rapacity of some concern or concerns which see big money in the business of supplying the country with fireworks.

Wood-Alcohol Poisoning

The Public Health Committee of the New York Academy of Medicine, after consultations with representatives of the wood-alcohol business, the National Committee for the Prevention of Blindness, and the section of eye specialists of the academy, has recommended that a Federal law be passed for the control of the manufacture and sale of wood alcohol by the use of license and bond to be required of all who manufacture and distribute it; that the word "alcohol" be eliminated from the name, and that it be given some other designation; that measures be taken to prevent the sale by druggists of pure methyl alcohol (refined wood alcohol), as the crude wood alcohol is not so likely to be taken as a drink, and is not so toxic. There were also suggestions regarding the denaturing of alcohol and the distribution of denatured alcohol. Such measures, properly enforced, would do away with most of the cases of wood-alcohol blindness and wood-alcohol fatalities.

Would See Mexico Dry

It is said that Provisional President de la Huerta has expressed himself as desirous of seeing Mexico dry, but sees difficulties ahead. He is quoted: "I want to see Mexico a dry country, but I realize that it is a long, difficult job to convince the people that it is the best thing for them; and before the September elections and the December inauguration I hardly expect to achieve much in that line. Still I hope to make a start that my successor will continue."

Correspondence School Catalogue

The Fireside Correspondence School catalogue for 1920 is now ready. Besides the usual matter, it contains a new plan for ordering books, an announcement of new studies, and pictures of faculty and board of managers. Send for a free copy. Address C. C. Lewis, Principal, Takoma Park, D. C.

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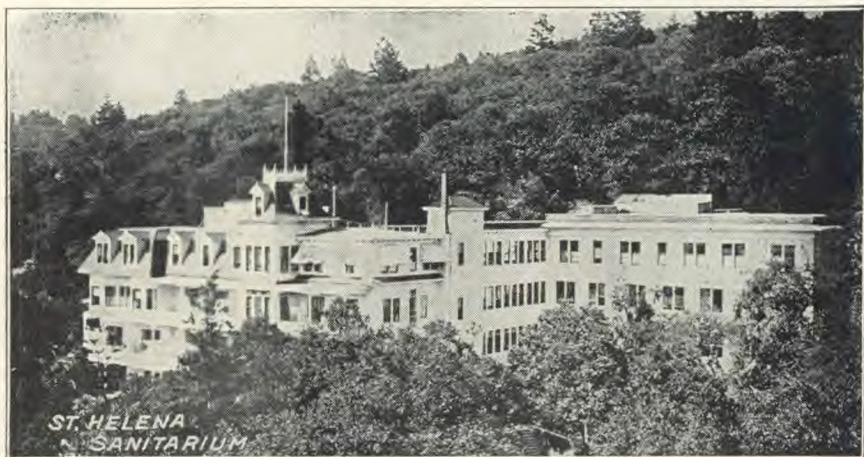
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