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THE NATIONAL HEALTH MAGAZINE

December 1916

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LIFE AND HEALTH

December, 1916

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AN ALGERIAN WOMAN AT THE WELL

VOL. XXXI
No. 12

Life & Health
THE NATIONAL HEALTH MAGAZINE

DECEMBER
1916

AIM: To assist in the physical, mental, and moral uplift of humanity through the individual and the home.

G. H. HEALD, M. D., Editor

L. A. HANSEN, Associate Editor

THE COST OF LIVING

FLOUR is going up, so is milk, so are potatoes, so is about everything except wages. The contents of the weekly pay envelope will not purchase nearly so much as before the war. The dollar bill of the laborer has shrunken in value. Visions of harder times loom up before those who heretofore have had just a comfortable margin. Apparently many will have to adopt a lower standard of living, seeking poorer quarters, and doing without some of the comforts of life. It is a forlorn prospect.

* * *

But perhaps it is only an apparition. Increasing prosperity has begotten wastefulness and mismanagement. Even the very poor are sometimes wasteful. To the knowledge of the editor, some families who were in ill health for want of some things they should have had, were spending money foolishly for what they did not need. All of us are to an extent guilty of such mismanagement. Many families — yours included, perhaps? — could, with careful management, live on as high a plane as in the past, notwithstanding the increase in prices.

* * *

The editors are planning to present in each issue during 1917 valuable suggestions regarding how to make the pay envelope go farther, so that a subscription for LIFE AND HEALTH will not be an expense, but a good investment.

* * *

If your subscription is about to expire, and the times are hard with you, so that you do not see how you can afford the dollar, there is the more need for you to renew; for LIFE AND HEALTH is going to show you how you can save that dollar, and other dollars too. If you are not a subscriber, now is the time to become a member of the LIFE AND HEALTH family. Send immediately, so as to secure the entire series of articles on the cost of living.

Publishers of "Life and Health,"

Takoma Park, D. C.

THE NATURE, CAUSES, AND TREATMENT OF CONSTIPATION — NO. 4

G. H. HEALD, M. D.

This is the concluding article of the series. Previous articles have considered the anatomy and functions of the digestive tract; the nature, causes, and accompaniments of constipation; the general treatment of constipation; and diet and exercise in the treatment of constipation. In order to meet the desires of those who have requested the series in booklet form, it has been planned to publish a booklet, to be issued as a premium to LIFE AND HEALTH.

Massage

MASSAGE is an excellent treatment for constipation. It is best administered by a trained assistant, but the patient can give himself efficient massage.

The position to assume for massage is lying on the back, with the knees partly drawn up, in order to flex the abdominal muscles. Kneading movements should follow the general course of the large bowel. It will be remembered that the colon begins at the right groin, goes upward to near the lower border of the ribs, then across to the left, and finally down the left side to the left groin.

As the kneading operation is an attempt to force the bowel contents along so as to make way for those above, the kneading should begin at the left groin, the effort being to strip the bowel of the contents, driving them toward the rectum in the center.

Next, the descending colon should receive attention, the kneading being so directed as to force the fecal matter down to the left groin. Then the transverse colon should be stripped by kneading movements tending to drive the contents to the left.

Finally the ascending colon should receive attention.

Another form of massage is reflex massage, performed either with a feather or the finger nail or a finger tip touching the skin very lightly. If a circle is thus described around the navel, the tickling sensation will be accompanied by movements of the underlying muscles, and also by movements of the intestinal muscles.

Owing to the fact that it is difficult for one to practice deep kneading on his own abdomen, some patients make use of a cannon ball for this purpose. A six-pound iron ball is about the right size. It should preferably be covered with leather. To use it, the patient lies on his back, and rolls the ball in a circle clockwise over the abdomen, following approximately the course of the colon. Deep and effective pressure can thus be made without great exertion.

Electricity

Doubtless the stimulation of the abdominal muscles by electricity tones up the functions and helps in the cure of constipation. Two sponge electrodes may be used over the abdomen, kneading with one or both. A flat electrode may be placed at the back or feet, or a special fusiform electrode may be inserted in the rectum, and a sponge electrode may be used to knead the abdomen. The faradic current, or better, the sinusoidal current, may be used. On the whole, however, as good results may be obtained by other measures as by the use of electricity.

Mind Cure

And right here will the reader permit a word in favor of "mind cure"? However men may scout the idea, the mind has an appreciable effect on the bodily functions. It is owing to this fact that so many fraudulent remedies — such as a tin can tied to the ankle by a string — have performed undoubted cures. Even a tin can tied to a dog's tail seems to cure it of any tendency to idle around — a case of undoubted mind cure. While taking any exercise or massage, the patient should keep in mind the object of the treatment, and try to picture it accomplishing the de-

sired end. This visualizing the cure is not without its effect.

Laxatives

Medicinal laxatives are best avoided in constipation. It is claimed by some that cascara sagrada does not require increasing dosage. However, medicinal means may in nearly all cases be dispensed with entirely. If a laxative effect more energetic than is obtained by the foregoing measures is needed, it may be secured by the use of a mechanical laxative, such as agar-agar. Agar is a vegetable substance made from a Japanese seaweed. It has the property of absorbing water and of swelling, but it is insoluble in the digestive juices, and consequently passes through the digestive tube unchanged,— a jelly-like mass, — furnishing bulk and stimulation to the intestinal walls, and by its affinity for water preventing the absorption of all the water into the blood current, and the consequent drying out of the intestinal contents. The use of agar results in the formation of larger stools, which are neither watery nor hard. Agar is, perhaps, best used chopped up fine on a breakfast food. It should not be cooked in the food. The dose is usually two to four teaspoonfuls a day. Each person must determine from the effects how much he needs. Those who have long been accustomed to a medicinal laxative sometimes add a few drops of cascara or some other laxative to the agar, but ordinarily this is not necessary.

As agar is not in general use, it is not kept in stock by many of the drug stores, and sometimes those who desire to try it have difficulty in obtaining a supply. All cities have their bacteriological laboratories for the study of the infectious diseases. These laboratories always use agar, and perhaps the one in charge can inform the inquirer where the laboratory supply is obtained. The agar used by laboratories is usually in long strips, and should be chopped up fine. Some of the manufacturing drug concerns put up agar in cartons, chopped up fine and flavored for use as a laxative. Any druggist who is assured of a continuous trade in agar would carry it in stock.

Another mechanical laxative is mineral oil, sometimes called liquid paraffin. If the oil is too light, such an oil as is used in spraying the nose, there is apt to be an unpleasant leakage of oil from the lower bowel. The heavier oil should be used. Much has been said about the importance of using Russian oil; but as the oils are now refined, the Russian oil has practically no advantage over that produced in this country. This refined mineral oil is perfectly harmless. It is not absorbed, but traverses the entire length of the bowel, keeping the contents in fluid condition and the tube well lubricated. Its action as a laxative is entirely mechanical.

Summary

The various methods of relieving constipation discussed in this series are: —

1. Forming a habit of regularity.
2. Regulation of the clothing.
3. Laxative diet.
4. Water drinking.
5. Fruits as laxative on arising.
6. Calisthenic exercise.
7. Imitative exercises.
8. Breathing exercises.
9. Diaphragm exercises.
10. Panting exercise.
11. Electrical treatment.
12. Mental therapy.
13. Laxatives —
    - Mechanical.
    - Drug.

Constipation in Childhood

Most adults who suffer from obstinate chronic constipation can trace the source of their trouble to very early childhood. In fact, many cannot remember when they were not constipated. Not even infants are exempt from this condition. The little ones may make no complaint, and if the condition is not observed by parents or those in charge, it becomes chronic, the children growing up vic-

tims of a bowel inactivity which is made worse by the cathartic or the enema habit. Among the causes of constipation in childhood are painful evacuation, a diet deficient in coarse material, neglect of nature's calls, and insufficient physical exercise.

The child may be suffering from anal fissure — a painful break or sore in the mucous membrane lining the lower end of the digestive tube. It may be impossible for mother or nurse to detect any sore, but every evacuation causes so much pain that the child, in dread, postpones bowel movements as long as possible. This makes the matter worse, for the hardening of the feces makes defecation more painful, and increases the extent of the fissure. Such a condition, if not remedied immediately, soon becomes serious. If a child gives evidence of pain at stool, the doctor should be consulted at once.

Constipation in children is sometimes the direct result of an ill-chosen dietary. Babies who after weaning are continued on a diet consisting largely or wholly of milk, or of foods containing little or no "roughage" or residue to stimulate bowel action, are liable to be constipated. The remedy in this case is obvious. Graham bread from real Graham flour, — not the so-called Graham bread so often furnished by bakers,— fruits, vegetables, and the whole cereals should be gradually added to the diet as baby grows older.

School children are sometimes unwilling to take time from their play for defecation. If parents do not guard this point and give proper instruction, the children may thus form a habit of neglect that tends to grow with age.

It is wise to help the child to establish early a habit of regularity by having it observe a set time each day for bowel movement. It should be taught to go to the toilet and remain there until defecation is completed. The time chosen should be one not likely to interfere with the child's regular duties or pleasures. If it be after breakfast, and the child knows that he must hurry up or be late to school, or if it be at a time when his fellows are likely to want him to join in a game, his mind will not be in a condition conducive to good bowel action. The time chosen should be preferably after a meal, for at that time there is a natural stimulation of the muscular walls of the intestines. Immediately after the evening meal may be the best time, if there is not ample time after breakfast.

In some cases, constipation seems to be due to a lack of physical exercise. Griffith tells of city children, obstinately constipated in wintertime, who had no trouble while living a natural life during their summer vacation in the country. Perhaps a little more fruit, more vegetables, more sunlight, and especially more exercise in romping in the woods and fields, helped to make the difference.

A Group of Sanitarium Nurses

SAFETY FIRST IN CARING FOR THE SICK

OLIVE C. WHITE, R. N.

IGNORANCE in caring for the sick has doubtless cost many lives; therefore every individual should acquaint himself with the simple methods of treating the sick in the home. It has been correctly stated that a little knowledge is dangerous. Carelessness in exercising a little knowledge has added untold suffering to those already afflicted.

A few incidents which have come under my observation have taught me the necessity of observing the utmost precaution in the treatment of the sick. Let us notice a few dangers of administering treatment, and a few examples of the results which carelessness and inattention to duty have brought about.

The most common accident in giving home treatment is a burn. Patients who are unconscious, or those whose tissues are edematous, and sufferers who are irresponsible because of excruciating pain or helplessness, are not infrequently the victims of deep burns, as the following cases will illustrate: —

A woman suffering from uremic coma, whose tissues were filled with fluid, was placed in a blanket pack for the purpose of free elimination. The attendants who gave the treatment were anxious that it have the desired effect, and consequently gave it very hot. Before placing the patient in the pack, however, the temperature was tested, and thought not to be too high.

The patient resisted the treatment, and declared she was being burned, but the attendants thought these statements were due to her irresponsible condition, and did not remove her immediately. A few minutes later, on being taken from the pack, it was found that her back and arms were deeply burned. While the patient was doomed to die, no doubt the burns hastened her end, not to mention the suffering added to her affliction.

A second incident occurred in a Western hospital. A patient still under the influence of ether was returned to her bed after a serious operation. The nurse in charge placed a hot water bag at the patient's feet, and apparently thought no more of it until the patient became conscious of the fact that her feet were burned.

Upon examination it was found that the bottoms of the feet were blistered, and it became necessary to dress the wounds. Owing to the lowered vitality, the tissues did not heal readily, and the patient was again taken to the operating table, where skin was grafted on. However, this was not a success, and the shock caused the untimely death of the sufferer.

Had the hot water bottle been properly placed outside of the dry blanket, and had the nurse faithfully attended to her duty, the accident would have been avoided, and the result would have been entirely different.

We might go on and mention many more accidents, but the above should be sufficient to warn all to whom the care of suffering humanity is intrusted. The following precautions will eliminate most of the dangers in giving home treatment: —

1. Wring all fomentations and pack blankets as dry as possible. Then steam them and wrap carefully in dry woolen cloths.

2. Always test the temperature with the arm, before placing an unconscious or edematous patient in the pack. In hot water treatments use a thermometer for testing the temperature.

3. Avoid the use of leaky water bottles, and place all reënforcements of heat outside of the dry blanket. Watch carefully.

4. In giving a pack do not wrap the hot blanket too closely about the body.

5. It is important to keep the head cool by the use of iced cloths applied across the forehead and about the neck. Bits of chipped ice are allowable where there is a tendency to nausea.

6. If the patient feels faint, it is well to apply an ice bag over the region of the heart for a few minutes.

7. Take the pulse frequently, that you may know how the treatment is affecting the heart.

"Safety first" should not only be the slogan for railroads and manufacturing plants, but should be strictly adhered to in treating the sick.

Courtesy Chalmers Company.

FALSE TEETH AND THEIR USE

MARTIN WENDEL

WE pity a man with a wooden leg, while we scornfully look at a person wearing false teeth; and yet one deserves pity as much as the other.

Wearing false teeth is not a crime; it is not abusing nature, it is *assisting* nature.

False teeth are not so good as the natural product, neither can a wooden leg compete with one of flesh and bone; but both appliances are far better than none at all.

Natural teeth should be replaced by false ones only when it is absolutely necessary; for the latter are not only expensive, but also offer great difficulties, especially in the beginning.

The first set of teeth, whether it be the upper or the lower or both, should be rather moderate in price; for the reason that the gums, particularly the lower, constantly keep shrinking; and within two or three years the teeth will not only be too loose and not fit any more, but the lower ones will be found to have sunk to such a degree that they will be no longer visible during speech, thus impairing articulation, as sound is partly produced by the teeth. In eating, there will be too little room in the mouth for the food and the tongue, because the lower jaw comes too close to the palate.

When the gums have reached this stage, a new set of teeth should be procured; the old ones, however, should be kept, for there will be occasions when they again have to be pressed into service. As the second set causes the gums again to pain and to swell (though in a lesser degree than the first), the old set may be worn alternately with the new, till the gums are entirely accustomed to the latter. The old teeth can further be made use of, during repair, in case the new set should get broken.

Wearing False Teeth

First of all, the teeth must fit before leaving the dental parlor. If, in biting together, some teeth touch before the rest, or if one side meets before the other side, insist that the dentist grind down the highest ones until all the teeth touch at the same time. Should the upper ones incline to drop, bite together firmly a few times; this expels the air and the saliva between the plate and palate and causes a close contact; if on opening the mouth they still drop, they do not properly fit; but a patient and persistent person can make them stay in place by wearing them several weeks, as the palate will assume the shape of the rubber plate.

If people think they can leave the dentist with their first new set of teeth and go home and eat a beefsteak, or even a piece of bread, they are mistaken. Were false teeth for the looks only, it would be a pleasure to wear them; but we want to make use of them also, we want to eat with them, we *must* eat with them, and to eat with and hold them in place is a trick that has to be learned.

Eating with False Teeth

At the beginning, the food should be cut into small pieces, and with the tongue carefully distributed to both sides of the jaws; as by chewing on one side only, the other side will rise, causing particles of food to slip underneath, which makes further eating impossible. This applies particularly to the lower set. Every effort should be made to keep the teeth from rising while eating; once this difficulty is overcome, the rest will be easy. Never, whether at the start or in later years, make an attempt to bite a big chunk out of an apple, a thick sandwich, or a similar thick article, as this necessitates a wide opening of the mouth, which loosens the teeth from the gums.

The pressure in such a bite, being wholly confined to the front gums, makes them sore and causes them to swell, and may delay further use of the teeth for at least two weeks. Edibles of a crisp nature, such as crackers and toasted bread, are the easiest eaten with false teeth; while those of a tough nature, like lean meat, are the most difficult.

On all occasions avoid opening the mouth very wide while eating; for this reason but little food should be put into the mouth at a time. Drinking liquids with a full mouth should be avoided.

Further Use of False Teeth

It is almost certain that after a few days' wear of the first false teeth, the lower gums, if not the entire lower jaw (the upper jaw gives little trouble in this line), will begin to swell and pain; and to avoid a serious inflammation, the teeth should be taken out, and left out until the gums are completely healed. They may then, but not till then, be worn again. This alternate wearing and removing should be kept up till the gums no longer get sore.

It may occur, however, that after the gums are thoroughly accustomed to the teeth, swelling and pain will still arise on certain places without any particular cause. This is due to this reason: The gums gradually and continually shrink, at some places slower than at others; those parts shrinking slower will naturally be higher, and as the teeth keep their original shape, the pressure is confined to the highest places. This can easily be remedied. After locating the exact spot, a little of the rubber should be scraped or cut away with a sharp penknife, and carefully smoothed with very fine sandpaper; the wearer, with a little ability, can perform this operation very well, as he knows just where the "shoe pinches;" those who have not the ability or courage to do this operation should consult their dentist.

False teeth should, if circumstances allow, be cleaned after each meal, though a thorough cleaning once a day will be sufficient. People who decline the use of tooth powder for sake of economy, can secure the desired result by using powdered chalk, or even whiting.

It would be utterly wrong to try to kill the germs by boiling false teeth, as vulcanized rubber can stand only a certain degree of heat without getting pliable and drawing out of shape.

To take the teeth out overnight is useless, if not wrong; for not only do the gums assume a different shape, but also the toothless condition of the mouth interferes with a sound, quiet sleep.

OUR COLLEGE GAME

LIMITING THE FOOD SUPPLY TO A SUFFICIENCY

HARRY CAMPBELL, M. D.

To one fact the warring nations have awakened; namely, that in the consumption of food civilized man has formed habits of gross extravagance. Civilized man has been accustomed to eat more than he needs, when he has the means to pay for it, and the excess consumption represents, on the whole, an enormous waste of wealth, a waste not realized during prosperous times, but bulking up very large now that the peoples of the belligerent nations and their posterity must pay for the unprecedented expense of the present world war. Not only is over-consumption economically expensive, it is just as expensive physiologically. The more unnecessary work is placed on the organs of digestion and elimination, the sooner they will wear out. That would seem to be almost axiomatic, and the experience often repeated has proved the truth of it.

Harry Campbell, M. D., F. R. C. P., Lond., has given in the London *Lancet* a paper in which he discusses the subject of "Food Economics: the Limitation of the Quantity of Food to a Sufficiency," from which the following is taken. What is said here is as good for the people of neutral nations as it is for the people of belligerent nations. And if we cannot learn the lesson of moderation in eating in any other way, it might even be a blessing to us to have some catastrophe similar to the European war. A nation, like a patient, needs a whip-like tonic to stir the lagging powers to activity. After a cold plunge one feels fresher. After the Civil War this country began to grow and prosper much more rapidly than before. San Francisco may date her greatness from the earthquake of 1906. Have we again come to that condition of ennui where we must undergo the chastening of some great catastrophe or affliction in order that we may be stimulated to our best? Must we go on wasting our resources at the table and in other foolish ways, until some dire calamity threatens to take away our resources? But to quote: —

MANY people eat more than they require; not a few as much as would suffice for two, nay, even three persons. A saving of wealth running into millions could be effected if only those who exceed were to reduce their rations to the actual needs of the body. Excessive eating not only constitutes a waste of national wealth, it also injures the health. It is a trite but true saying that more people die from overeating than from overdrinking. The transgressor in diet, moreover, is less efficient as a citizen. . . .

I am convinced that the quantity of food required to maintain in health a person not engaged in strenuous muscular exercise is much less than is generally supposed. Young adults need more food than other people,— our food requirements diminish with advancing years,— yet it is surprising how small an amount of food even young people leading active lives can thrive on. . . .

The two chief factors which make for excessive eating are the appetizing nature of the food and the softness of the vegetable (especially the farinaceous) portion of it. The object of the cook is to make her dishes as tasty as possible, and so to arrange their order that the appetite shall not flag throughout the meal. As to the second factor, it is obvious that soft farinaceous foods, such as porridge and milk puddings, which rapidly find their way into the stomach, are more likely to be taken in excess than firmer food, such as crusty bread, which calls for thorough mastication. The more completely farinaceous food is masticated, the smaller is the quantity that will be needed to satisfy the appetite.

Another cause of excessive eating depends upon the principle that "appetite increases by what it feeds on." The more one accustoms oneself to eat largely, the more clamant does the appetite become. Excessive eating, indeed, tends to beget an actual craving for food not unlike the morbid craving for stimulants. When the mealtime comes round, or even before, there is felt a sinking or other uncomfortable sensation at the pit of the stomach, or perhaps a feeling of lassitude. These feelings being relieved by food, it is erroneously concluded that they indicate the need for a restoking of the vital engine.

That this view is entirely wrong is shown by the fact that many a healthy person, expending a good deal of muscular energy and consuming but a moderate quantity of food, can forego a meal without inconvenience. Even more sig-

nificant is the fact that the habitual overeater generally feels brighter and more vigorous after enforced abstinence, such as may be necessitated, for example, by a bilious headache or an attack of gout. The machine is found to work better when the stoking ceases.

The fact is, the unpleasant feelings referred to are not due to the lack of nutriment and do not indicate the need for more. The "sinking" results from the absence of the wanted mechanical stimulus afforded by a bulky meal; the lassitude is due to a poisoned state of the blood brought about by chronic overeating, and is removed temporarily by the absorption of the more diffusible, stimulating elements of the food. In this way the effects of the blood poisoning are for the time masked.

The overeater, like the alcoholic inebriate, rarely realizes that he is indulging in an injurious excess. In deciding whether too much food is being taken or not, the body weight affords useful help. If a person's weight is not above the normal, the probability is that he is not eating too much; but if he is decidedly stout, he very probably is overeating. This test is not, indeed, infallible; we occasionally meet with thin people who eat abundantly, and stout people who are moderate eaters.

What is so frequently forgotten is the fact that the amount of food taken should be proportioned to the amount of muscular energy expended. If a person takes little exercise, he requires proportionately less food, just as it requires less gasoline to drive a car five miles than fifty. When a person who takes little exercise gets fat, his fatness should not be put down to the lack of exercise, but rather to the fact that his supply of food is in excess of the amount of muscular energy expended. . . .

All those who on reflection have reason to suspect that they may be eating superabundantly should, alike in their own and nation's interest, cautiously begin at once to cut down their rations. In this way they can improve their health, render themselves more efficient citizens, and save the wealth of their country. It is not suggested that a large reduction should be made suddenly. Rather should an attempt be made to accustom the body gradually to do with less and less food. To this end the food should be plain, not too appetizing, and well masticated.

Efficient mastication, among other advantages, makes for economy in food, inasmuch as it promotes normal digestion, and in this way reduces the amount of food needful to sustain the body. It is not generally known that it is essentially the vegetable portion of our food which demands mastication. The carnivora do not masticate their food, as any one who has observed a dog bolt a piece of meat can testify; their teeth interlock and do not admit of any lateral grinding action. On the other hand, all the vegetable-feeding mammals are laborious masticators. This is because vegetable food consists of a cellulose framework more or less dense, which it is necessary to break up, so as to liberate the contained nutrient particles and allow them to come under the action of the digestive juices. . . .

Before man learned to prepare his vegetable food artificially by maceration, grinding, and cooking, he had to subject most of it to a prolonged natural milling with his teeth. Our teeth have been to a great extent relieved of this laborious work by the miller and the cook. The saving of the work of mastication thus effected has certain manifest advantages, but these are largely discounted if the farinaceous food is rendered so soft that it is swallowed without being subjected to any but the merest pretense at mastication; for then not only is it not properly mixed with the saliva, but the teeth and the salivary glands are cheated of their normal work. Now, unfortunately, in this country we consume all, or nearly all, our vegetable food in soft, pappy, pultaceous, and spongy forms, with the result that we have come to be a nation of veritable food suckers, with atrocious teeth, misshapen jaws, and none too good digestions.

CARE OF THE BABY TEETH[1]

S. A. HORNING, D. D. S.

MANY parents who bring their children to me think that because the baby teeth are replaced by permanent ones, the sooner the baby teeth are gone the better. Baby teeth have their function, and they must remain in place until this work is accomplished. The life and strength of the permanent teeth that follow depend upon retaining the baby teeth in place until they are naturally ready to leave the jaw.

Starting with the eruption of the baby's first two lower incisors, at about six months old, the full set of twenty teeth, ten to each jaw, are erupted rapidly, until the last baby molar is in place at two and one half or three years of age. Do not allow a baby hard things to bite on, nor rub his soft, tender gums with a thimble, as I have heard mothers tell of doing, to cut the tooth. As growing corn will come easier through soft ground, so a tooth will erupt with less pain through tissue not hardened by rubbing.

It is very cute to see a baby with his mouth full of fingers; but if the habit is continued, great harm is sometimes done. The bone tissue in the child is very pliable, and a finger sucker naturally pulls the lower teeth forward, and a thumb sucker will, by the pressure of the thumb on the lower teeth, press the lower teeth inward and the upper teeth outward.

Mouth breathing when asleep should be stopped. It is unnatural; and if persisted in, the cause should be ascertained. It will doubtless be found in the nasal passage, free nasal breathing being prevented by adenoid tissue. This should be at once remedied; for the muscles of the face, being on tension, draw inward the upper jaw and teeth, thus forcing them out of shape, making the face through the nasal region contracted, and the arch of the mouth so constricted that the larger second teeth, which come later, do not have sufficient room to erupt in their proper place, so come one behind the other.

A baby's mouth with its teeth in place does not look large enough to accommodate the full set of thirty-two permanent teeth, which are to follow, nor is it; but by the time the child is ready to lose those first two small teeth on the lower jaw, you will find the jaw has grown wider so that spaces appear between the teeth. This is to make room for the much larger second tooth to take the place of the baby tooth. At this time, about six years of age, there appears behind the last baby molar a very large tooth, the first permanent molar, which does not have any baby tooth previously in its place.

The order of the eruption of the second teeth is the same as that of the baby teeth, so the last baby molar should remain in place until the eleventh or twelfth year. If the baby teeth are erupted at six months of age, the sec-

[1] Taken substantially from an article which appeared in *Public Health* (Michigan), June, 1916.

ond teeth begin to erupt correspondingly early, at about the sixth year. If the baby has no teeth until eight or nine months old, the second teeth are likewise very late in coming. The maintaining of these teeth till nature casts them off is of the utmost importance, for both the health and the appearance of the child when grown; also for the nerves of the mother. I frequently hear, "This child has cried all night with toothache, Doctor; I want you to pull the tooth out." Poor child! it has my sympathy. The mother assumed no responsibility because she did not know the tooth was decayed, or at least she thought the tooth would last only a short time anyway.

First Teeth Should Not be Extracted Too Soon

If a baby tooth is extracted too soon, it leaves unobstructed the way for the second tooth to come through, which it does before it has accumulated sufficient lime salts to make it proof against the action of the fluids of the mouth; and as a result you find the tooth attacked by decay, and sooner or later, usually sooner, broken down. Sometimes a baby tooth is extracted before the jaw has widened enough to let the second tooth come in its proper place; as a consequence the second tooth will come in a malposition.

I venture to say that there is not one baby in ten thousand with its teeth in a malposition, and I will also say that the nine thousand nine hundred and ninety-nine may have even, regular teeth, if they receive the regular daily attention they are entitled to. This care might not always prevent decay, because of other interfering influences.

Allow the child to chew the hard foods. It helps to clean the teeth. Bread crusts, which children so dislike, should not be eaten by mother. Insist on regular feeding hours, both for the baby and also for the child. Nothing disturbs a child more than irregular mealtime, or the piece between meals. The forty-chews-to-the-swallow theory is for the child as well as for the grown person.

Every child requires sweets in some form. Pure candy is good for children. It is the candy that remains in the mouth around the teeth that does the harm. After each meal the mouth and teeth should be cleaned, so that nothing is left for the germs always present in the mouth to work on.

The only proper method of cleaning the teeth with the brush, is down on the upper teeth, inside and outside, and up on the lower jaw. Don't try to clean the whole side of the mouth with one sweep of the brush, but see that the brush touches each tooth on all sides. The natural tendency is for food to crowd between the teeth; and the brush, used lengthwise of the tooth, not only cleans these spaces, but is a stimulant to the gums in between the teeth. The continued use of toothpicks will crowd the gum out from between the teeth, and of course leave a space for the food to enter. These spaces thus formed will in time become diseased areas, and a menace. For removal of any food you are not able to remove with the brush, use dental floss.

It is much better to prevent the destruction of tooth substance than to repair the decayed and broken-down part. This is the age of sanitation and hygiene, and may our children when they arrive at maturity find that we have not been lax in our efforts for their welfare.

A CONFESSION AND ADMONITION

The following is given as it was related by one who believes he has profited by some dear experiences. He hopes that what he relates may help some readers to avoid some of his mistakes.

THE arguments against the use of ice cream did not appeal to me. "Cold stops digestion"? Why is it, then, that some patients who have been unable for hours, perhaps days, to retain ordinary food, find that they can take with relish and retain a dish of ice cream, and immediately begin to mend? If cold stops digestion, why does it act so well with a digestion enfeebled by disease?

There were other grounds upon which ice cream was condemned: as, it contained too much sweets; it was too rich a mixture; it was a combination of milk and sugar; it was commonly used as a between-meal titbit. In view of experiences in which ice cream was well received by patients in serious condition, these objections did not have much weight with me.

There may have been another reason. I was quite partial to a good dish of ice cream, and I could not see that an occasional indulgence in a dish of the frozen dainty made the least difference in my health, though it was not unusual for me to have trouble after eating so harmless a thing as an apple.

Why, I inquired, should one not depend on his own experience, particularly when it is known that one man's food is another man's poison? If ice cream poisons my neighbor, is that any reason why it may not be a wholesome food for me? Is it not more reasonable to believe that the supposedly harmless apple, which nearly always causes me annoying symptoms when I eat it, is more harmful to me than the ice cream which I can eat without any apparent ill effect? Such was the course of reasoning, natural enough, perhaps, which I followed.

But experience has finally taught me that one cannot always judge of the ultimate effect of a certain course from the immediate effect. I have been a long time learning this lesson, and in learning it I have probably paid the price of a number of years of life. Will what I say benefit any of my readers? I fear that too many, like myself, must learn the lesson for themselves; but for the sake of the few who may have the wisdom to profit by the mistakes and the experiences of another, I'll go ahead with my story. Those who are "from Missouri" must get the experience themselves.

Without going into a multiplicity of more or less tedious details, it may suffice to state that I have learned, among other things: (1) That there is a vast difference between hunger and appetite — between the physiological demand for plain nourishment and the willingness to enjoy the pleasures of taste; (2) that much that is eaten is taken to please the appetite rather than to appease the hunger. In fact, some persons so cater to their appetite that they never know what it is to be hungry. They are ready to eat *anything* that tastes good at *any time,* even if it is less than half an hour after a full meal. Candy or knickknacks or some favorite dish is in order any time, and the three regular meals are thus supplemented by numerous irreg-

ular meals; (3) that food taken to please the appetite and not demanded for nutrition, while it may furnish some nourishment to the body, is very liable to cause harm; (4) that those who give social suppers and treat to confectionery, ices, and the like, as a means of showing friendship and hospitality and of affording their friends a temporary pleasure, are manifesting this hospitality and affording this pleasure at too great a cost, for it necessitates a borrowing from the vital resources of the future; (5) that such high living is not most conducive to eventual high thinking.

For a time these things may not be apparent. There is a certain psychic influence that goes with good company and a lively time, that makes for health. "A merry heart doeth good like a medicine." And as between those who eat carelessly yet happily, and those who are always worrying about what they eat, the chances are with the former. But is it not possible to plan social functions without making every such function center around something for the stomach? Has the human animal not yet risen sufficiently above the sensuous to make it possible to enjoy a social gathering without an appeal to the palate?

Senator Tillman, given up to die about six years ago, learned that he must take care of his health. He is still doing good work. Yet Congressmen and Senators, mostly younger than he, have been dying during that six years at the rate of one every six weeks. And according to Senator Tillman's observation, they have succumbed to the good eating and the hospitality of Washington society. They were brainy men, many of them, but not strong enough to resist the pleasures of appetite or to stand against the customs of society, and by their early death they have paid the forfeit.

To the man who would make something of himself, I say: Conserve your health. To do this, (1) do not neglect regular exercise, which should be in the open air as much as possible, and pleasurable. There is little exhilaration or benefit from exercise taken as a duty; (2) eat rationally, for strength, and not primarily for pleasure. That which is eaten merely for the pleasure it affords, and that which is eaten without pleasure, from a sense of duty, and with, perhaps, a fear that it may not "agree," are equally liable to prove harmful. Every normal person should find pleasure in the use of foods which are foods, and not merely a mixture of tastes gotten up by the skill of the expensive chef. The person whose eating has degenerated into a search for new surprises to the palate is preparing for the early onset of a degenerative disease.

GIRLS' RECREATION GROUNDS, CADBURY WORKS, ENGLAND

HOME COOKING SCHOOL

YEAST BUNS

GEORGE E. COENFORTH

TO make buns one may use any of the recipes given in previous articles for one loaf of bread.

Plain Buns (about One Dozen)

Allow the dough to rise twice, then divide it into one-and-one-half-ounce pieces. With the palms of the hands roll each one of these pieces on the bread board into a round, tight ball. Place the balls about one eighth of an inch apart on an oiled baking pan. Set them in a warm place to rise. Allow them to rise lighter than bread is allowed to rise, or till, when pressed with the finger, the dough responds very weakly, if at all. Have the oven a little hotter for baking buns than for baking bread.

Sweet Buns (about One Dozen)

1 pound white-bread flour, or whole-wheat flour, or part whole-wheat and part white
1 cup and 2 tablespoons lukewarm water
1 cake compressed yeast
1½ teaspoon salt
⅓ cup sugar
3 tablespoons oil

Buns are nicer if the dough is made a little softer than it is made for bread. It is well to use more yeast in buns than in bread, as the sugar hinders the action of the yeast.

When the dough is light the first time, punch it down in the middle, fold in the sides to make a tight ball, turn the dough over, and allow it to rise a second time; then mold it into one-and-one-half-ounce balls. Place on an oiled baking pan, allow them to rise till they weakly respond to the touch, then bake them. While the oven should be hot for baking buns, care should be taken not to have it too hot for baking sweet buns, because they are more liable to scorch on account of the sugar they contain.

Currant Buns

1 pound white-bread flour, or whole-wheat flour, or part whole-wheat
1 cup and 2 tablespoons lukewarm water
1 cake compressed yeast
1½ teaspoons salt
⅓ cup sugar
3 tablespoons oil
¾ cup dried currants

Look over the currants, and wash them thoroughly. Mix them with the liquids, and proceed to make the dough as in making bread. Knead thoroughly, and proceed as in making sweet buns.

Walnut Buns

1 pound white-bread flour, or whole-wheat flour, or part whole-wheat
1 cup and 2 tablespoons lukewarm water
1 cake compressed yeast
1½ teaspoons salt
⅓ cup sugar
3 tablespoons oil
3 ounces or about ¾ cup coarse chopped walnut meats

Proceed as in making currant buns.

Parker House Rolls

Use either the recipe for one loaf of white bread or the recipe for sweet buns. After the dough is risen the second time, mold it into one-and-one-half-ounce balls, laying the balls out on the floured bread board. After all the dough is formed into balls, take one of them and flatten it by pressing it with the palm of the hand; with the edge of the hand make a crease a little to one side of the diameter of the roll. Spread the smaller side with a little oil, and fold the larger side over the smaller side. Place, small side down, on an oiled baking pan. Proceed to form all the rolls in the same manner, placing them about one-fourth inch apart. Set them in a warm place to rise. Do not allow them to rise quite so much as other rolls or buns. Bake them when they respond slowly to the touch. If they rise too

much before baking, they will lose their shape.

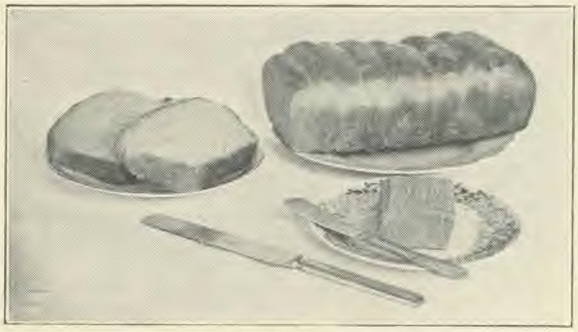
Corn Parker House Rolls

¾ pound white-bread flour
¼ pound corn meal
1 cup and 1 tablespoon lukewarm water
1 cake compressed yeast
1½ teaspoons salt
¼ cup sugar
3 tablespoons cooking oil

Mix the flour and corn meal, then proceed according to the direction in the preceding recipe.

Finger Rolls

Use the recipe for Parker House rolls, but instead of flattening the rolls and folding them over after they are rolled into balls, roll each ball on the bread board, with the palm of the hand, into a small cylindrical roll about four and one-half inches long. Place side by side on an oiled pan to rise.



TEA ROLLS

Tea Rolls

After the dough is formed into balls as in making finger rolls, form each ball into a roll as long as the width of a bread tin, and place them side by side in an oiled bread tin, close enough together so that there will be ten rolls in the tin. Set in a warm place to rise. When risen till the dough responds slowly to the touch, bake. When baked, this will look somewhat like a loaf of bread, but can be pulled apart into flat rolls or biscuit.

Salad Rolls

Proceed as in making plain buns or sweet buns, but place the buns one and one-fourth inch apart on the tin when set to rise. When risen, press the edge of the handle of a silver knife nearly through each roll, then bake.

Whole-Wheat Buns

1 pound whole-wheat flour
1 cup and 2 tablespoons lukewarm water
1 cake compressed yeast
⅓ cup warm molasses
1½ teaspoons salt
3 tablespoons oil

Proceed as in making sweet buns.

Superfine Buns

1 pound white-bread flour or whole-wheat flour
1 cup and 2 tablespoons lukewarm water
1 cake compressed yeast
1½ teaspoons salt
⅓ cup sugar
3 tablespoons oil
1 egg, beaten

Dissolve the yeast cake in the water. Add the salt, oil, sugar, and beaten egg; mix well. Turn this mixture into the flour, and mix to a dough. Knead thoroughly, and then proceed as in making sweet buns.

Rolled Oats Rolls

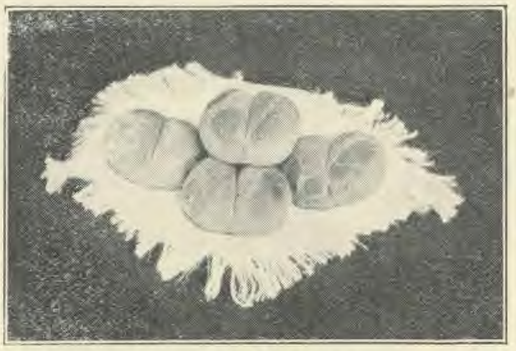
1 pound sifted whole-wheat flour
1 cup raw rolled oats
1¼ cups lukewarm water
1 cake compressed yeast
1½ teaspoons salt
⅓ cup sugar
3 tablespoons oil

Mix flour and rolled oats. Dissolve the yeast cake in the water; stir in the salt, oil, and sugar. Turn this liquid mixture into the flour and mix to a dough. Knead thoroughly, then proceed as in making other buns.

Whole-Wheat Potato Buns

1 pound whole-wheat flour
½ cup mashed potato, to which add sufficient of the water in which the potato was cooked, to make 1⅓ cups mashed potato and water together
1 cake compressed yeast
1½ teaspoons salt
¼ cup sugar
3 tablespoons oil

Have the potato-and-water mixture lukewarm, and dissolve the yeast cake in it. Add the salt, sugar, and oil, and turn this liquid mixture into the flour. Mix to a dough and knead thoroughly, then proceed as in making other buns.



SALAD ROLLS

Orange and Coconut Buns

1 pound whole-wheat flour
1 cup and 2 tablespoons lukewarm water
1 cake compressed yeast

⅓ cup shredded coconut
⅛ cup candied orange peel cut into small pieces
Yolks of 2 eggs
¼ cup sugar
1½ teaspoons salt
3 tablespoons oil

Mix flour, coconut, and orange peel. Dissolve the yeast in the water. Stir in the egg yolk, salt, and oil. Beat well together. Then turn this liquid mixture into the flour mixture, knead till the dough is smooth, then proceed as in making other buns.

Graham Parker House Rolls

1 pound Graham flour that is a real wheat meal
1¼ cups lukewarm water
1 cake compressed yeast
¼ cup sugar
1½ teaspoons salt
3 tablespoons oil

Dissolve the yeast cake in the water, add the sugar, salt, and oil. Turn this liquid mixture into the flour, and mix thoroughly with a spoon. It will be too soft to knead, but after it has risen once, it will not be so soft. Then proceed as in making plain Parker House rolls.

Citron Buns

1 pound sifted whole-wheat flour
1 cup and 2 tablespoons lukewarm water
1 cake compressed yeast
1 egg, beaten
1½ teaspoons salt
3 tablespoons oil
⅓ cup sugar
½ cup raisins
¼ cup citron cut into small pieces
1 teaspoon lemon flavoring or grated yellow rind of one large lemon

Dissolve the yeast in the water. Then mix in the beaten egg, salt, oil, sugar, raisins, citron, and flavoring. Stir this into the flour and mix to a dough. Knead well, then proceed as usual in making buns.

Crumb Buns

¾ pound whole-wheat flour
1 cup coarse-ground zwieback crumbs
1 cup and 2 tablespoons lukewarm water
1 cake compressed yeast
1 teaspoon salt
⅓ cup sugar
3 tablespoons oil

Mix the crumbs and flour. Dissolve the yeast in the water; add the salt and sugar, and stir this liquid mixture into the flour and crumbs. Take out onto a bread board, and knead till the dough is smooth and free from lumps except the pieces of crumbs, then follow the usual method in making buns.

Currant and Nut Rolls

1 pound sifted whole-wheat flour
1¼ cups lukewarm water
1 cake compressed yeast
1½ teaspoons salt
1 tablespoon sugar
3 tablespoons oil

After the dough has risen till it falls when given a sharp tap with the backs of the fingers, punch it down and form it into a hard ball; turn it over, and let it rise again; then take it out onto a floured bread board and with a rolling-pin roll it into a long strip about one-half inch thick and five inches wide. Brush it over with oil, sprinkle chopped nuts on it, then some currants that have been washed and dried, then brown sugar over all. With the palm of the hand firmly press the sugar, currants, and nuts down into the dough, then roll the dough up like a jelly roll. Cut the roll into slices one inch long, and place the slices close together, flat side down, on an oiled baking pan. Allow to rise till, when pressed with the finger, it responds very weakly, then bake.

Unless buns of all kinds are kept warm, 75° F. to 80° F., it would be better to mix the dough in the evening. If it is mixed in the morning and not kept warm, it will rise so slowly that the buns may not be ready to bake till some time in the night.

MANUFACTURE OF CANE SUGAR, WEST INDIES

RECIPES

GEORGE E. CORNFORTH

FOR those who would like to try something else besides the bun recipes, we suggest the following:—

Legume and Vegetable Soup

¼ cup Lima beans
2 tablespoons green split peas
1 cup chopped carrots
1 cup chopped cabbage
2 tablespoons chopped celery
½ cup chopped turnips
2 tablespoons okra (fresh or canned)
1 small onion, chopped
¼ cup chopped parsley
2 quarts water
¼ cup unroasted peanut butter or very finely chopped raw peanuts
1 tablespoon salt

Wash the beans and peas, and put them to cook in the cold water. Prepare the vegetables, and put them, except the parsley, to cook with the peas and beans. Boil slowly five hours. At the end of four hours' cooking add the chopped peanuts or the peanut butter thinned with hot water. After another hour's cooking add the salt, chopped parsley, and boiling water to replace what has boiled away. Serve with croutons, made by cutting stale bread into one-half-inch dice and toasting it in the oven till dry and nicely browned.

Vegetable Pie

1 cup stewed Lima beans
1 cup diced carrot
1 cup diced turnip
1 cup canned peas
1 cup canned corn

Stew the carrot and turnip in a small quantity of water so that little water will be left when they are tender. Add to them the cooked beans, peas, and corn, two tablespoons cooking oil, milk to make of the proper consistency for pie, and salt to taste. Put into a basin, and cover with pie crust, in which several slits have been cut; bake the pie till the crust is thoroughly cooked. Serve as the main dish at dinner.

Bran Cookies

⅙ cup brown sugar, pressed down
⅓ cup of a hard vegetable shortening
2 teaspoons molasses
⅓ cup currants
⅓ cup walnut meats, cut fine
1 egg
¼ cup sifted pastry flour, shaken down
¾ cup bran
A few grains salt

Rub the shortening to a cream. Add the sugar, molasses, and salt, and beat till it is light and creamy, then add the egg, and beat well. Stir in the flour and bran, nuts, and currants. Oil the hands, and form the dough into balls with the hands. Lay the balls on an oiled pan, flatten them to a thickness of one-fourth inch, then bake them.

PRIMITIVE BREAD MAKING

Poisoning from Animal Proteins

THERE has long been a suspicion that in some way many persons are poisoned, sometimes acutely, often chronically, by means of animal proteins or their products. Some students, like Combe and Metchnikoff, believed that the poison results from a bacterial decomposition of the proteins in the intestines. Haig has long taught that the evil from the use of such animal proteins is from the uric acid which is retained in the system. Vaughan has spoken of the toxic effects of split proteins.

Robert Curtis Brown, M. D., himself apparently of gouty diathesis, has been studying the effect of animal proteins in the gouty. "Typical gout," he says, "is but an episode in the life of a gouty person. Indeed, a man may suffer all his life from gouty manifestations and never have an attack of true gout." He calls attention to the experiment by Horsley and Scheff which showed that if the thyroids of herbivorous animals, like sheep, are removed, the animals are not affected. If dogs have their thyroids removed, they may survive for some time on a bread-and-milk diet, but if fed roasted meat or meat juice, they will die in convulsions. The proof seems plain that meat contains a poison which the thyroids counteract. Dr. Brown advances this hypothesis: —

> "The animal protein in our food contains a poison for which the human body has certain defensive agents which neutralize it and render it harmless. If the protein is given in excess, or if it is given to an individual who is especially susceptible by having been born into a gouty family, certain manifestations are produced."

Among the manifestations he finds in an examination of more than one hundred susceptibles, are certain changes in the ductless glands, as simple goiter, exophthalmic goiter, oversecretion of the adrenals leading to arteriosclerosis. Other manifestations of protein poisoning were hay fever, bronchial asthma, migraine, gouty pains, and various skin lesions. Headache, he says, is the most frequent manifestation of protein poisoning. It may take the form of migraine or neuralgia. "Headache that is not due to eyestrain or sinus trouble, is usually due to protein poisoning."

> "There are various neuralgias, myalgias [muscular rheumatism], and pains in the joints which can be experimentally produced in a susceptible subject by taking an excessive amount of animal protein. By a susceptible subject I mean one who has either consumed a large amount of animal protein during his own life, and so become susceptible, or who has inherited (and this is most always the case) the susceptibility from his ancestors, who were also subject to protein poison manifestations."

Among other manifestations he mentions periodic turgescence of the nasal mucous membrane (such persons are subject to hay fever, which he believes occurs only in families with a gouty history), periodic sore throats, bronchial asthma, chronic bronchitis, follicular tonsillitis (the latter he recognizes as an infection, but believes it is favored by the gouty condition); in the digestive tract, hyperacidity (cankers disappear within a short time after withdrawal of all animal protein), ulcer of stomach and duodenum, periodic intestinal colic, periodic diarrhea, mucous colitis.

In the skin are many manifestations of protein poisoning, such as urticaria,

eczema, ichthyosis, and psoriasis. "Urticaria frequently follows an excess of protein in the diet, and certain individuals seem especially susceptible to special proteins, as fish, white of eggs, etc. . . . The children of gouty parents often have eczema, which can be cured by the withdrawal of animal protein from the diet. . . . Acne is an example of a skin affection, when the infection is secondary to the irritation caused by the elimination of the protein poisoning. Acne is found almost entirely in gouty families, and in connection with it one can also find other evidences of protein poisoning. In my own case I found that the acne which I always had on my back would disappear entirely on my abstaining from animal protein."

I cannot in this article follow Dr. Brown in all the manifestations he has observed of protein poisoning. The above will serve as a hint to sufferers from any of these troubles as to how they may escape. Dr. Brown concludes his article by saying: —

"I am sure that any physician will find dozens of cases in his own practice which will support my contention that animal protein is the cause of almost all disease not due to infection, and that these diseases are merely manifestations of damage done to the various tissues of the body through the inability of the natural defenses of the body, of which the ductless glands are among the principal ones, to neutralize or render harmless a poison which is in animal protein."

Let the reader consider these facts shown by numerous investigators: (1) That animal proteins contain some principle poisonous to the body; (2) that though many persons have a fairly well-developed mechanism for antagonizing this poison, there are large numbers whose mechanism is imperfect, as manifested by numerous cases of chronic nose-and-throat, gastric, skin, and other symptoms; (3) that though a person may have a mechanism capable of neutralizing this poison, it may be put out of service by an overdose of the poison. Considering it all, do you not think those who have adopted a diet largely vegetarian are on rational ground? Think it over.

Value of Blood Pressure Tests

In a carefully prepared article in the *Medical Record* of Sept. 16, 1916, based on the study of thousands of blood pressures, Dr. George Van Ness Dearborn, instructor in psychology in the Sargent Normal School, Cambridge, Mass., says:

"The origin of the present fad in regard to blood pressure appears to be, in part, the old-fashioned notion, almost a proverb, that one is as 'old as one's arteries;' in part, the common fear or phobia of apoplexy, which is now very commonly known by the laity to be due to the 'bursting' of an artery in the brain; partly from the attention given Metchnikoff's decadent theory as to a means of keeping the arteries elastic; and finally, in part from the very wide medical advertising of blood pressure gauges."

His observations show that in normal persons the pressure constantly varies, according to mental condition, time of day, period of digestion, position, and some twenty other factors. He asserts that we do not yet know enough regarding the blood pressure test to make practical use of it: —

"The first thing we come to in discussing the blood pressure fad, as we know it at the present time, is the mode of action of the mechanism for locally changing the diameter of the arterioles. Vasomotion, it is certain at the present time, is a very complex and elaborate set of adaptations, which *requires careful and extensive study before we can know anything worth while about the true meaning of blood pressure.*"

He asserts that "twenty minutes instead of one should be used in determining blood pressure," and that "the procedure should be carried out on several days instead of on one day only, as is the common custom."

"In general, we may say as a *conclusion*, too wide to be quite accurate, but perhaps, none the less, of some significance: blood pressure measurements, as they are taken at present by the majority of busy practitioners, are apt to be more misleading than significant; it is only by repeating the measurements each minute (or each two minutes) for a half hour or less, and on several successive days, care being taken in interpretation to avoid all known sources of high pressure, that one can be sure of having a significant set of measurements."

The italics are Dr. Dearborn's in all the quotations.

Too many persons have been given a chronic worry by being told as the result of a brief examination that they have a "high blood pressure," and the worry is one of the surest methods of raising the pressure. Until more is known about the validity of the blood pressure test, physicians should be careful not to frighten patients unduly by this process. Perhaps in some cases it may help to enforce advice about smoking and big dinners; but if it replaces them by a condition of chronic worry, little has been gained.

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Stop Using Drugs; We'll Take Them Over

TRULY the doctors are in a bad way. They have taught the people to depend for health on something in a bottle or pill box. But some of the more far-seeing physicians have come to realize that drugs do not have any miraculous healing powers. Drugs may temporarily change certain body functions, applying the whip or putting on the brake, and incidentally making a few undesired changes at the same time. But physicians know that no drug will restore a leaky heart valve, or build up a worn-out heart muscle, or soften hardened arteries, or restore hairs to a bald head. The last is so obvious that not even the laity expect it now. The others are becoming patent to observing physicians, who realize that the future of medicine lies in the prevention of disease. But the people have been so thoroughly inoculated with the belief that there must be some potent medicinal remedy for every ill, that the patent medicine men continue to wax wealthy; and a large part of the druggist's business, aside from the soda fountain, is the sale of patent or proprietary remedies.

Here is the doctor's dilemma. If he does not believe in drugs, if he tells the patient to be a little more careful regarding his eating, and get more sunlight, fresh air, and exercise, the patient will immediately set him down for a fool, and going to the nearest drug store, will ask the man behind the counter to give him something for his tired feeling, or headache, or whatever ails him. And the knowing druggist will hand out something that gives prompt relief. What more should the patient want? When the trouble returns, he knows where to go to get another supply, and he no longer needs a doctor's prescription. He has learned how to economize.

But has he? Suppose it is a headache which he has relieved at intervals. He probably gets a dose of acetanilide, which deadens for the time his sensibility to pain, and incidentally weakens his heart. Every dose of acetanilide he takes is a distinct injury, though he may not know it. All he knows is that it relieves his distress. Not a few persons have been killed outright by taking headache tablets, and it is safe to say that those who survive receive more or less permanent injury.

The medical profession is somewhat on the fence. Its past history has been one of using drugs. It now finds the people so educated that they feel able to make their own selection of drugs without a doctor's prescription. The more advanced among the profession depend largely on nondrug methods; but there is a reactionary element which continues to laud the virtues of drug remedies. Meantime the pharmacists are a unit in the belief that drugs are useful. It is their business. They are saying, in effect, to the doctors who are becoming doubtful as to the permanent efficacy of drugs, and who are too conscientious to use them just in order to make the patient feel better for the moment, "Stop using drugs, we'll take them over; we'll dispense drugs at the counter if you refuse to write prescriptions for them." And they feel confident of winning out, for they know that what the average patient wants is something that will make him feel better for the present; and Mr. Druggist knows how to do that.

What is the poor doctor to do? The man-in-the-street is more than apt to

treat himself by means of some patent medicine dope, or to ask the drug clerk for something to give him relief. It would seem that the doctor's work should be to teach people that drugs cannot cure disease, and that unless skilfully used by a man who is a master of human physiology and pathology, they are certain to do more harm than good. They should teach people that good hygienic advice is much more valuable to them than a prescription written in bad Latin. They should teach people to select physicians as medical advisers to prevent rather than to cure disease. I should judge from the way Mr. Rockefeller has improved in health in the last few years that he has learned that the true function of a physician is in the line of prevention.

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Why Doctors Cling to Drugs

AT the Detroit meeting of the American Medical Association, Dr. E. L. Eggleston read a paper showing that the various medical colleges in the United States devote a very small part of the curriculum to the study of nondrug methods. Discussing the paper, Dr. Walter E. Simmonds, of Chicago, said in part: —

"For the last two years I have been engaged in teaching this work [nondrug treatment]. I have only sixteen hours for all practical instruction in hydrotherapy, electrotherapy, phototherapy, and mechanotherapy. A lecture course is given by the head of the department. He worked for years to secure some kind of equipment for a laboratory in which to give this instruction, but was unable to secure an adequate appropriation for this purpose. All that could be obtained was seventy-five dollars, and, of course, we could not obtain a very complete equipment for this amount. I maintain that the same time should be given to laboratory instruction in physical therapeutics as is given to pharmacology."

Is it any wonder that physicians, thus taught, continue to cling to drug treatment, and thus keep up the delusion in the minds of the common people that they can be cured by something in a bottle?

Dr. B. Fantus, of Chicago, discussing Dr. Eggleston's paper, said: —

"This paper brings out the important fact that we are properly teaching only one half of the therapeutics we should teach in our medical schools. When the practice of a hospital or a successful physician is examined, it will be found that medicinal therapeutics constitutes only one half or less of treatment, and that the other half is made up of physiologic, psychic, and dietetic measures: and this in spite of the fact that most of us have never had adequate instruction in these measures."

Medical schools are proverbially conservative. Nearly all the progress in medicine originates outside of the schools, and is forced into them after two or three decades of success on the outside. The successful practitioners who are using the various nondrug methods have learned them practically outside of the medical college.

The success of osteopaths and other mechanotherapists has led some physicians of the regular school, particularly Dr. Albert Abrams, of San Francisco, to make a special study of the spinal reflexes, and the effects of their manipulation in the control of disease. The result of this and similar studies will be a long time filtering into the regular medical curriculum.

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Why Many Succumb So Easily to Disease

IN an editorial article on "The Morbidity of Drug Intoxications," in the issue of September 9, the New York *Medical Record* says: —

"The resistance of the body is reduced by such things as alcohol, tobacco, narcotics, occupational poisons, and syphilis. While alcohol leads the list of drug intoxicants in being the most prolific cause of the degenerative conditions, both of the body and of the central nervous system, it rarely operates alone, being usually accompanied by dissipation of other kinds, and the 'strenuous life' and syphilis often add their effects."

It is the man whose resistance has been lowered by these and other causes, who is most liable to fall victim to some infection. The article proceeds: —

"Moreover, quite apart from the increased use of strong alcoholic beverages, there has been an enormous increase in the manufacture and

consumption of patent medicines. The public is persistently dosing itself with drugs of various kinds and of various actions. Some are stimulants, some sedatives, and some combinations of both, and the taking of them is often a fad or a pure habit, the consumers not knowing really why they take these medicines. To be sure, many of these patent medicines are really alcoholic, and the effect is that of alcohol. With all of them the body is put to the trouble of eliminating highly irritating substances which have the tendency to reduce the vitality of the eliminating organs, as well as positively injuring them. It is through such injury that the general fibroid changes [old-age changes, "arteriosclerosis"] are often set in motion."

But are not the doctors themselves largely to blame for this state of affairs? Every intelligent physician knows that drugs are not curative in the sense believed by the laity. Drugs may modify function, and when skilfully used may so modify as to enable nature to get a grip on herself and start the human machine in a right direction again; but when taken promiscuously, as in the use of patent medicines, or when a person gets "something for a headache" at the drug store, such use of drugs can be only pernicious, and the medical profession is partly responsible for this popularity of drugs.

Physicians who love humanity should persistently teach that drugs do not cure. There are certain specifics which appear to be an exception, as when a drug has a specific toxic action on a pernicious parasite, for example, quinine on the malarial parasite. But aside from a few such drugs, the use of drugs is only a temporary expedient, and after all, the cure must be made by establishing normal conditions of living. The tonics, the sedatives, the hypnotics, the cathartics, while they may all produce immediate effects, and for the time seem to be successful, are a delusion and a snare, and only hasten the day of the final tragedy.

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Patent Medicine Advertising Assailed in Report

The Retail Merchants Association of Washington, D. C., has an advertising vigilance committee whose function it is to make war on all fraudulent advertising. As far as possible it will work with local and other newspapers and publications to secure the elimination of objectionable advertising.

At a meeting of the association this committee submitted a report prepared by Dr. L. F. Kebler, of the United States Department of Agriculture, condemning the advertising methods of many of the patent medicine concerns. According to the report, "a large proportion of the so-called patent medicine industry has been built up on the credulity of the public, especially the suffering sick and susceptible, by some of the cleverest and most ingenious advertising." The report discussed the methods of so-called "specialists," and cited specific instances illustrating the callous indifference with which they operate. The activities of the "blood poison specialists" were particularly condemned.

But the reform in patent medicine advertising progresses slowly indeed. The very papers that gave an account of this report against fake advertising contain in every issue patent medicine advertisements that are an insult to the intelligence of their readers.

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Acidosis and the Food Value of Alcohol

It has been known for some time that some of the severe symptoms in diabetes are the result of a diet in which the carbohydrates are reduced to a minimum. The condition is known as acidosis. Urinary analysis shows the presence of certain abnormal acids and other pathological products which the kidneys have been removing from the blood. But notwithstanding this effort on the part of the kidneys, the blood is in a condition unfavorable for the proper nutrition of the body.

Experimental work on animals and on persons suffering from acidosis indicates that it can be produced by a diet free from carbohydrates. It has been supposed that alcohol could be utilized in

such cases to take the place of the carbohydrates and prevent the acidosis. If this were possible, alcohol would be a valuable adjunct in the treatment of diabetes.

A number of investigators have lately published an account of investigations[1] of normal men in which an acidosis was produced by giving a diet that was adequate in all ways except that the carbohydrates were absent.

In addition to the clinical evidences of acidosis there were certain subjective symptoms, including "loss of appetite, lack of energy, heaviness of the head, and a peculiar feeling of malaise."

"Contrary to the expectations," the *Journal A. M. A.* comments, "alcohol, given to the subjects on the carbohydrate-free diet, in dosage comparable to that used for clinical purposes, failed to stop the progress of the acidosis." In other words, the alcohol in no way took the place of carbohydrate food in normal subjects taking a carbohydrate-free diet. The subjective symptoms were in part actually increased with the use of alcohol. Immediately after the first carbohydrate meal was eaten, "all the symptoms were promptly alleviated, and the subjects began to feel much better." The *Journal A. M. A.* adds the comment: —

"The contrast was most striking, and is not without interest in relation to the much discussed food value of alcohol."

Evidently alcohol cannot be made to take the place of carbohydrates in metabolism. The fact that a certain amount of alcohol may be oxidized in the system with the production of heat, thus loses its significance.

The Trend in Hygiene — Views Changing and Moderating

IT is much easier to pass unfavorable criticism on a book than to write a better book. This may be the reason why the writer finds it so easy to detect defects and inconsistencies in the average book on hygiene. However the little book "How to Live," published under the direction of the Hygiene Reference Board of the Life Extension Institute, does not come in for the usual amount of criticism; for the authors have been particularly fortunate in avoiding unwarranted and exaggerated statements. The book is one of the evidences of our escape from the fogs of old-time prejudice. The following paragraph is a characteristic example of the conservative manner in which the book teaches the newer hygiene: —

"A chief and common error of diet consists, then, in using too much protein. Instead of ten calories out of every hundred, many people in America use something like twenty to thirty. That is, they use more than double what is known to be ample. This excessive proportion of protein is usually due to the extensive use of meat and eggs, although precisely the same dietetic error is sometimes committed by the excessive use of other high-protein foods, such as fish, shellfish, fowl, cheese, peas, and beans, or even, in exceptional cases, by the use of foods less high in protein when combined with the absence of any foods very low in protein. The idea of reducing the protein in our diet is still new to most people."

Two Causes of Hay Fever

THE generally accepted theory regarding hay fever is that it is caused by pollen coming in contact with the nasal mucous membrane. On the other hand, some physicians claim success in the treatment of hay fever by the use of bacterial vaccines, indicating that hay fever is a germ disease. Medalia, in the *Boston Medical and Surgical Journal*, has an explanation which seems to indicate that there is truth in both theories. He finds that, previous to an attack, the nasal and eye secretions of hay fever victims contain germs which may, by breaking up the pollen protein, cause it to act more violently. When the germs are not present, he believes that the pollen may cause temporary discomfort and sneezing; but if the germs are present, the pollen causes a real attack of hay fever.

[1] Higgins, Peabody, and Fitz, *Am. Jour. Med. Research*, 1916, Vol. XXXIV, p. 263.

The Cause of Baldness: Has It Been Discovered?

HAVING been convinced that baldness is caused by defective breathing, Dr. Delos L. Parker has for thirty years been working to obtain conclusive proofs in support of his theory. From time to time he has read papers on the subject before medical societies, and has published the papers in medical journals; but thus far his theory seems to be as little known as if he had tried to keep it secret. This is not at all surprising. Nearly all revolutionary medical teaching, unless it comes from some recognized source, is usually received with extreme conservation and indifference.

Dr. Parker believes that in shallow breathing certain parts of the lungs, especially the apices, are not properly ventilated, and the air, instead of being constantly renewed, becomes stale. This stale residual air accumulates poisons. These poisons, when injected into the blood, are capable of damaging the hair, especially the hair on top of the head, where the circulation is feeble and the nutrition consequently poor.

Parker proved that expired air, when kept chambered in the presence of warmth and moisture, "invariably undergoes change and develops a soluble poison that is capable, when present in the blood, of exerting a disturbing effect upon hair growth." He argues that "absence of upper-chest breathing is the fundamental cause of baldness." In proof of his theory, he offers the following: —

1. Observations on thousands of persons, extending over a period of many years, developed no exception to the rule that persons affected with common baldness do not employ chest breathing.

2. During a long period, successive groups of persons suffering from common baldness were directed to practice upper-chest breathing. The results seemed to be "satisfactory in direct proportion to the thoroughness with which the treatment had been applied." After a week of careful breathing, dandruff (present in eighty per cent of the cases) disappeared; then in some five or six weeks new hair began very slowly to make its appearance. The growth is very slow. Interruption in the practice of chest breathing was followed by corresponding interruption in the growth of hair.

The greater part of Dr. Parker's paper, however, is given to a description of the isolation of the poisonous principle ("trichotoxin," he calls it), and to the animal experiments performed with it. Injection of the poison into pigeons caused the dropping of feathers, which were renewed after the cessation of injections.

Dr. Parker is still pursuing his investigations, and has in preparation the manuscript of a book on the subject, which he expects to publish.

READY FOR MARKET

The TEMPERANCE MOVEMENT

THE POSTER CAMPAIGN

A. B. OLSEN, M. D.

Far-seeing men in all the warring countries realize that the war will be decided by national efficiency; that national efficiency is nothing more than the personal efficiency of the men and women who make the nation; and that alcohol is a chief destroyer of personal efficiency. In France, in Russia, in Germany, those at the head have realized that the consumption of alcohol must be diminished in order to win the war. In England there has been drastic legislation to restrict drinking, especially in the neighborhood of munitions plants. Meanwhile the temperance and total abstinence societies continue their campaign of education by poster. Dr. A. B. Olsen, of Caterham, England, has kindly copied a number of such posters for the benefit of LIFE AND HEALTH readers.

THE following statement by the late Lord Kitchener made, in our opinion, one of the most effective poster bills that we have seen: —

"Your duty to your country can only be achieved by hard work and strict sobriety."

Another poster reads: —

"The sober workman fights for Britain. The unsteady workman fights for Germany."

Impairs Efficiency

Philip Snowden, M. P., has summed up with great brevity, the effect of alcohol upon physical efficiency. He states: —

"Drink enfeebles the physical strength of the workers."

Sir Thomas Barlow, Bt., M. D., F. R. C. S., has made a still broader and terser statement. According to this eminent authority —

"Alcohol makes a man less effective."

Field Marshal Lord Methuen was a stanch abstainer, and no one recognized better than he the disastrous effect of alcohol upon the human system. He said:

"Drink ruins body and mind alike, besides being intensely degrading."

And then we have the striking statement of Dr. Forbes Winslow, M. B., D. C. L.: —

"Drink, crime, and lunacy go hand in hand."

Drink and Submarines

It was the late Chancellor of the Exchequer who made the following statement about the damage of drink: —

"Drink is doing more damage than all the German submarines put together."

The Irish Temperance League of Belfast is responsible for the following statement: —

"Drink is a greater enemy than Germany and Austria."

Minister of Munitions Lloyd-George, in his famous speech more than a year ago, said: —

"We are fighting Germany, Austria, and drink, and as far as I can see, the greatest of these three deadly foes is drink."

We may well summarize these statements by the following from M. Emile Vandervelde, M. P., the famous Belgian statesman: —

"It is our bounden duty to declare war against alcohol."

The "Black Spot"

The late Sir George White, M. P., made the following terrible, but none the less true, indictment against alcohol: —

"Drink is the greatest black spot on our civilization."

The Bishop of Lincoln has said: —

"Drink is a universal mischief-maker."

Dr. Legrain, a famous Paris physician, also has a grave indictment against alcohol. He has said: —

"Alcohol is the brain poison most to be feared."

And at this point we might add a statement from Mr. John Burns, late president of the Local Government Board. He has said: —

"Seventy-five or eighty per cent of our pauperism is directly or indirectly due to drink."

The following poster appeal is quoted from the *Westminster Gazette*: —

"The human wreckage wrought through strong drink is sufficiently appalling to justify almost any attempt to reduce it."

Brings Disease

Some of the posters emphasize the pernicious effect of alcohol in rendering the body more liable to sickness and disease. The following is a statement from Mr. E. Brown, M. R. C. S., L. R. C. P.: —

"Alcohol renders a man more liable to the inroads of disease."

The Glasgow municipal poster emphasizes the danger of alcohol with regard to the great white plague, in the following statement: —

"Alcohol increases the risk of consumption."

Treating

We have again and again been counseled by the higher authorities not to treat our soldiers with alcoholic beverages. One poster reads: —

"The duty of civilians is to abstain from treating soldiers and sailors with intoxicating drinks."

Mr. Arthur Henderson, M. P., member of cabinet and labor adviser to the government, makes the following exhortation: —

"Let the workers free themselves from the drink, and they will soon cure the social and economic evils of which they have been the victims."

The advice of Sir Arthur Conan Doyle, M. D., is: —

"Don't drink alcohol!
"You will be happier without it!
"Healthier without it!
"Richer without it!"

And then we have the excellent advice of Prof. G. Sims Woodhead, M. A., M. D., LL. D., F. R. S., of Cambridge University: —

"The best advice to those men who think of taking alcohol is, Don't."

Finally we quote from the most lengthy poster of all, statements which summarize a good many, but not by any means all, of the evils of alcohol: —

"There is nothing to be said in favor of alcohol.
"It is a drug; it is not a food; it is not even a stimulant.
"It impairs the action of the heart, the liver, the stomach, and the kidneys.
"It congests the blood vessels.
"It lowers the temperature.
"It aggravates the effect of shock.
"It spoils brain control.
"It retards the rapidity of mental action.
"It plays havoc with the muscles and with the nerve centers. In the emotions it destroys ideals.
"It produces callousness to moral obligations, and —
"It multiplies lunacy and crime."

Lastly: —

"It gives an entirely delusive sensation of increased efficiency. These statements are not arguable. They cannot be challenged. Its results on the conduct of the war are notorious."— Arnold Bennett.

ITEMS OF INTEREST

Early Closing

As a result of a recent election in New South Wales, public houses are to be closed after 6 P. M.

A Significant Change

The following figures, compiled from reports of building operations in the United States given in the *American Contractor*, tell an interesting story. The figures represent the amount expended for structures erected in the years from 1905 to 1915: —

Year	Breweries	Churches	Banks
1905	$14,449,078	$ 5,159,940	$ 5,002,087
1906	14,578,000	5,632,731	8,008,696
1907	10,181,262	12,999,130	17,376,296
1908	2,082,000	13,426,080	7,955,951
1909	2,341,750	16,102,523	10,235,480
1910	5,787,422	18,778,884	10,510,570
1911	5,249,180	18,058,212	11,492,121
1912	2,937,783	14,870,506	37,073,524
1913	3,606,000	21,295,111	16,336,919
1914	1,329,000	19,362,336	17,150,785
1915	429,500	16,458,476	20,762,204

British Columbia Dry

Out of 25,000 votes cast September 14 in British Columbia there was a majority of 8,000 for prohibition. The new law will become effective July 1, 1917. At the same election there was an overwhelming majority for woman's suffrage.

Colorado Penitentiary

According to the warden, the penitentiary from May 1 to July 15, 1915, received 137 persons. The State was then wet. From May 1 to July 14 this year, with the State dry, the penitentiary received only 44 persons — less than one third of last year's record.

Lethbridge Jail Obsolescent

Under prohibition conditions the provincial jail at Lethbridge, Alberta, is emptying of prisoners as sentences expire, for no new recruits are coming in. The prison authorities were perplexed, owing to the fact that they did not have sufficient labor to care for the crop on the prison farm.

The American Conscience

Reinhold Niebuhr, in the July *Atlantic Monthly*, states that "the prohibition movement has come to express the most enlightened conscience of the American people."

Drunkenness Disappearing

Since prohibition went into effect in Manitoba, June 1, there has been a reduction of eighty per cent in drunkenness in the city of Winnipeg, and of ninety per cent in the province as a whole, while the reduction in crime amounts to fifty-eight per cent.

Prohibition

The Yukon territorial legislature in July passed a bill ordering a referendum election on the subject of prohibition in Yukon Territory, to be held not later than Sept. 1, 1916. The bill prohibited the manufacture and sale of all kinds of alcoholic liquors, and made no provision for importation for personal consumption. Provision was made for the importation of alcoholic beverages for medicinal purposes. The bill was defeated by a small majority.

New Campaign Against Habit Drugs

The New York State Anti-Drug League is planning an active campaign in the legislature this winter to secure more drastic legislation to stamp out the use of habit drugs. Efforts in this direction were defeated at the last legislature after a bitter fight. It is stated that in New York City alone there are 100,000 drug victims, and that 50 per cent of the State prison convicts owe their downfall to the use of drugs. Perhaps this is too liberal an estimate.

Against Alcoholism in France

A delegation at the Ligue Nationale Contre l'Alcoholisme, presided over by Professor Debove, has just drawn the attention of the ministry of public instruction to the importance of antialcoholism teaching in the schools, and the desirability of issuing a circular drawing the attention of the teaching staff to the importance of the matter. The ministry has promised to send out such a circular, particularly to the primary schools. The same delegate submitted to the ministry of the marine a complete program for antialcoholism propaganda among the personnel of the fleet and the workmen of the dockyard. The Ligue Nationale Contre l'Alcoholisme intends also to undertake a campaign in the country in favor of total prohibition. On the other hand, the hygiene commission of the Chamber of Deputies, believing that the project adopted by parliament to suppress the privileges of the small distiller and to impose a surtax on alcohol is insufficient, has charged its reporter, Mr. Schmidt, to prepare a bill establishing the monopoly of the wholesale and retail sale of alcohol. This proposition is inspired by the example of Russia, where there is government monopoly of the manufacture of alcohol, and at the commencement of the war its sale throughout the empire was prohibited.—*Journal A. M. A., Sept. 2, 1916, p. 758.*

The Colonel and Drink

Colonel Roosevelt is credited with this statement: "There is nothing more absurd than the belief that the closing of the saloon will cause workingmen to lose their jobs. There are few things more important to our social advancement than the loosening of the grip of the liquor interests upon the labor movement. The saloon always represents economic loss."

Where is the Prosperity?

In dry Kansas there are 131 towns, it is said, of 1,000 population, which own electric light plants, water and sewer systems, sidewalks, and public schools; and they have no revenue from liquor. Missouri, the neighboring State, with all its liquor revenue, has scores of towns with from 1,000 to 4,000 population which have no such public improvements. Please explain it.

And This is Motherhood!

A Maryland mother had been in the habit of giving her baby whisky toddy for colic. Giving an overdose, she killed the child. The coroner's jury exonerated her from all blame. Perhaps the loss of her child was punishment enough; but will she learn the lesson so as to avoid a like fatality with the next one? Or would it not be better for the child to die than to grow up with an overmastering appetite for alcohol?

Labor Sees Through Fraud

At the labor headquarters, San Francisco, there is an amusing exhibit, consisting of a picture prepared by the "Wets," showing a crop of grapes being harvested by white men, and beside it, a photograph of actual conditions, namely, the grapes being harvested by Japanese. The campaign picture had evidently been copied from the photograph, the Japanese figures being changed to resemble whites. The photograph gives the lie to the other picture, which was intended as an appeal to the labor vote to save the vineyards and thus save the jobs to the white men. Underneath the two pictures is the legend —

IT IS TO LAUGH.

Cigarettes and the Boy

J. Stanley Brown, of the Township High School, Joliet, Ill., one of the leading high schools of the country, has succeeded in almost eliminating cigarette smoking among high-school boys. This has been accomplished, first, by showing the evil effects of using cigarettes, and following this information by a request of pupils to sign an agreement to use no cigarettes during their high school period. This agreement is signed by both boys and girls. Similar efforts have been made in all grammar schools and Sunday schools of the city. Then, all the corporations in Joliet employing a great many boys and girls have agreed that no user of cigarettes shall be employed. Finally, the enforcement of the State law against the sale of cigarettes has been accomplished through the efforts of the school attorneys of the city.—*M. V. O'Shea, in The Mother's Magazine.*

CURRENT COMMENT

Ineffective Appendectomies

So many ineffective appendectomies [useless removals of the appendix] are done upon a basis of incomplete diagnosis, that some of us must call a halt. The matter is getting to be a scandal. During the year a number of cases are sent in to my service in the hospital, with a wrong diagnosis of appendicitis. Some of these are believed to be cases of acute infection of the appendix, but a larger number are sent in with a statement that the appendix has given trouble for a considerable time and requires removal. I have not kept notes relating to the proportion of these cases which are not really ones of appendicitis, but it corresponds pretty closely with what I hear of patients operated upon without results, so far as appendicitis symptoms are concerned.— *Robert T. Morris, M. D., in New York Medical Journal, May 20, 1916.*

The Circle Narrows

Some of the leading advertisers in America have formed an Association of National Advertisers. These advertisers are spending enormous sums every year in bringing their products before the public through the instrumentality of printer's ink. Should the public lose faith in their printed word, the members of this organization would find their business seriously crippled. Being reputable concerns and having meritorious products, honestly and truthfully advertised, these advertisers desire that advertising shall stand for a hundred-cents-to-the-dollar in the eyes of the public. When the Association of National Advertisers met last spring, it adopted a declaration of principles. It went on record as being opposed to advertising of the following kinds: —

All advertising that is "fraudulent or questionable."

All advertising that is "indecent, vulgar, or suggestive."

All advertising that is "ambiguous in wording and calculated to mislead."

All advertising that makes "false, unwarranted, or exaggerated claims."

All advertising to laymen of "products containing habit-forming or dangerous drugs."

All advertising that makes "remedial, relief, or curative claims, either directly or by inference, that are not justified by the facts or common experience."

All advertising that may "cause injury in health or loss of confidence in reputable advertising and honorable business."

One might almost be excused for thinking that the Association of National Advertisers had the "patent medicine" business specifically in mind when it drew up its declaration of principles. Certain it is that practically all "patent medicine" advertising must be declared guilty on one or all counts in the association's indictment. It is impossible to escape the belief that the Association of National Advertisers hasn't much use for the nostrum fraternity.

But the association did not stop with the mere declaration of principles. It backed up its words by declaring that its members, so far as they were able, would "direct their advertising to those mediums which made the observance of these principles their rule and practice." No wonder the "patent medicine" interests are loudly proclaiming their willingness to be good.

"The devil was sick, the devil a monk would be; the devil was well, the devil a monk was he!"

At present the nostrum industry is far from healthy.— *The Journal A. M. A., Sept. 9, 1916.*

Personality and Practice

The astonishing way in which some men who leave their school with seemingly the least knowledge of medicine, suddenly spring into practice, usually seems quite unaccountable. It is like the success attained by the less sincere and the less acquainted with medicine — the quacks. To the more earnest and thorough student, it seems puzzling that the superficial student should succeed so well. There is one explanation that covers it all. The success is due to the peculiar personality of the practitioner.

Every man has, of course, a personality. In what does this attraction for others consist? It would certainly be difficult to analyze this peculiarity that we style strong personality. It differs according to the group of persons to whom it appeals. In general it consists of a set of qualities, mental, often backed by physical, which produce upon a number of people an impression of power, knowledge, kindliness, and assurance of a happy issue out of present difficulties. The number of people to whom a given person appeals may be large or small, and one group as a whole may differ very widely from another in the way it is impressed.

The fact, then, is a psychic phenomenon, and depends on a certain background of strength, power, and assurance. It, of course, must be backed by some mental quality, or it loses its interest in the long run. But no matter how brilliantly skilful a surgeon or physician may be, if he lacks those general qualities which appeal to men, he will be limited to a smaller circle than he would otherwise have reached.

A great deal of medical influence is, after all, psychic or sympathetic, and it is no wonder that one who does not possess the requisite personal adjustment should fail, while many of lesser mold, scientifically speaking, have all they can do. It is no wonder that so many cures based on suggestion, flourish.— *Editorial in New York Medical Journal.*

OUR WORK AND WORKERS

THE CALL OF NORTH AFRICA

R. T. E. COLTHURST

WE are living among the Mohammedans, yet are in a modern French city, which has closed round the old Arab quarter and spread along the coast east and west. Algiers is a city of recent rapid growth. Splendid new boulevards, with beautiful white five-story houses lining them, have sprung up along the principal thoroughfare. Owing to the fact that the city lies along the seashore and spurs of the table-lands, which culminate in the double-range mountains, expansion southward is a climb uphill. I wish you could see this city as one arrives from the north, across the bright blue Mediterranean, at the moment that the rising sun turns its searchlight on the still distant view. Gradually, as one approaches, there rises out of the opaline mist that which looks like the walls of a huge marble quarry on a black hillside, which as the focus changes is suddenly seen to be piled-up buildings set tier upon tier against the background of highland slopes wooded with pine or with the somber gray green of the wild olive tree.

From the wharf to the old Government Square is up a steep flight of stairs; and as one goes deeper into the city, one rises from street to street by flights of stairs, the long continuation of which between the streets is often called a boulevard if shaded by trees, or a street if narrower. The ubiquitous tramcar meets you at the top of your first climb; and if you are bound for the residential quarter, with its lovely Moorish houses or modern French villas and expensive hotels, you will have a two- or three-mile ride and a continual rise in altitude after the first half mile.

The red fez, worn by many of the tram men, first reminds you that you are in a Mohammedan city. At one of the stops you become aware of a slight commotion, and perceive a large amount of cotton and light woolen fabric appearing in the doorway of your car. Out of this protrude two sturdy-looking ankles and feet fitted with a pair of brown or black leather house shoes of irreproachable French make. Running your eye upward, you catch sight of two pale-gray or black eyes, and of two strands of golden or black or brown hair inclosing them on each side, and then more fabrics. If it were not that there is order and method in the arrangement of the Mohammedan woman's street dress, which is intended to cover absolutely every elegance of taste in clothing or beauty of feature, one could imagine a big wash basket of sun-dried laundry being emptied into the train.

This description is not for the globe trotter, who has lost his "first impressions," for by habit he usually omits to notice half of what he sees; but for the person who feels he would like to imagine his first introduction to this, to him, very novel and ungainly costume. It is a man's idea of how women ought to dress, and Mohammed certainly had his chance and used it. But feminine taste and love of display was not to be outdone. Another costume was secured, one for the home. And truly the prices paid for some of the garments are equal to those paid by women for fancy furs or articles of adornment.

If you look about you and are observant, you will mark many differences of Mohammedan costume which will puzzle you. One article of clothing, however, does not vary in style, and that is the men's lower garment. Cut off short, at the calf, and bound round with braid, this garment, from which usually protrude

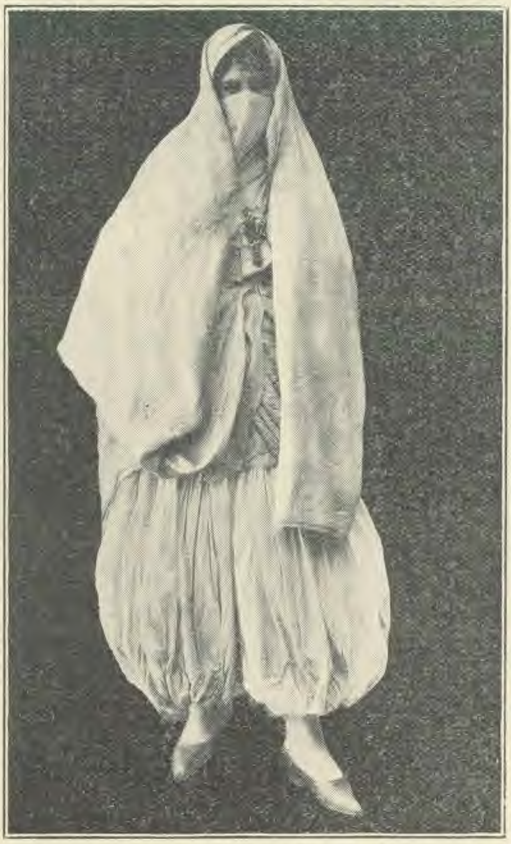
AN ALGERIAN WOMAN IN FULL DRESS INDOOR COSTUME

bare legs, makes one wonder how many yards of material go to compose its voluminous folds. Whether the wearer be a student or a desert Arab, an Algerian city dweller or a Turk, the pattern is almost uniform. The Kabyle, however,— the son of a people who are believed to be of Vandal-Roman origin, but who became impoverished and Mohammedanized by their Saracen-Arab rulers,— is another sort of individual. One sees his European descent in spite of his Eastern dress, and his tastes cause him to Europeanize readily with the smallest encouragement, though, like his master the Arab, the love of the free, uncivilized life is a spell from which all his efforts cannot free him, and to which he finally and inevitably returns, however long he may have lived in European service. Then there is the black cap of the Mussulman, similar in construction to a fez, and also of felt. These last, barring the caps, are dressed in European style, and are easily distinguished.

But the main part of the city's population is of European origin. Naturally a race has sprung up which may be called "Algerian." The race is of extremely mixed stock. The origin of this folk is

a real Mediterranean mix-up,— Arab-French, Kabyle-French, Arab-Spanish, Arab-Italian, Franco-Spanish, Franco-Turkish, and Franco-Germanic,— with brown complexion, aquiline nose, and dark hair, not unlike the Gypsy folk one usually can recall. In style they tend toward the European forms of dress, but in texture and color retain the Arab love of light fabrics of soft yet bright tints, and silver or gold ornaments.

Last of all, one notices the ruling caste, the Frenchman. The variety of districts which have sent their sons to this "department" of the French Republic has brought about a pooling of the different tones of voice which each produces, resulting in a clear, melodious, and generally correct local pronunciation which is pleasing enough to hear.



AN ALGERIAN WOMAN IN VILLAGE COSTUME

From Algiers there is a continuous stream back and forth across the Mediterranean at all seasons, which is served by three different lines of packet boats. Yes, Algeria is not a colony, as one would think, situated in North Africa, but is honored by inclusion as an actual province of France, composed of three departments, each having its chief city, of which Algiers is the largest, and stands aspiring to the name of "the capital of North Africa."

And now the reader will think we have reached the end of the description of the heterogeneous crowd inhabiting this white city. Not at all. We have mentioned only three great divisions of the populace; there yet remains a fourth, which, strange as it may seem, is actually commercially dreaded by the Frenchman over here. I allude to the tide of Spanish emigration which is rolling over North Africa from the west. These folk are mainly agricultural and artisan, which last includes the man of commerce and the architect — the builder. Yes, talk of peaceful penetration, and come here to see a sample of it. Being accustomed to penury and serfdom, the Spanish people compete with the French, who came here mostly to reap money rather than to earn it. The artisan avenues of gain are hence being surely and silently transferred to hardier hands.

The moral result of the admixture of all the foregoing peoples, is that the city of Algiers possesses a generally brainy population, whether as men of learning or as men of money; that pleasure, in its varied features, is the only object in life considered desirable; that cash is the only god worshiped; and that truth stands outcast and reviled within her gates.

And since we speak of truth, we unwittingly ask ourselves, What religion do these Algerians practice? — Nominally four, actually, however, and

mainly, but one, "Self." Mohammedan, Jew, Catholic, and Protestant are fast replacing the fervor of their former religious feeling by an easy complacency and supineness which have paved the way for every sort of innovation and man-made doctrine. But has not the war brought about a great change?—Outwardly, yes. The Roman Catholic priesthood is making a grand show. The sale of candles must be enormous, and the confessional is merrily prescribing pilgrimages to its local shrine at "Notre Dame d'Afrique" for all and every one. And poor women are vowing away their children's bread to get a longed-for husband back from death, or to pay his way from hell to Paradise.

WOMEN INHABITANTS OF A DATE OASIS IN FULL DRESS

But God's holy work of teaching, "Love one another, as I have loved you," remains unheeded, and yet not unheard; for in the midst of this white city the members of a faithful little church called from these very peoples of every Latin tongue and tribe, who live God's precepts and love and obey his commandments, are calling the attention of the people to the commandments of God. Together with their missionaries they are earnestly seeking to lead gay and careless passers-by to heed the call of the loving Saviour; guiding them to a Friend who can be trusted, pointing them to the only safe road,—by the light of God's Holy Word,—yes, pointing them, while gliding down the stream of history, to the signs marked out by the Creator's hand; warning them to fear the current that is growing faster, faster, as it nears the falls.

"This world must be awakened to know the love and sacrifice of Jesus." "I, if I be lifted up from the earth, will draw all men unto me." Were not these his words? Oh, lift him up, ye men! Show him forth in all his glory as Creator and Redeemer, as Sacrifice and as Intercessor, God's holy High Priest; for "he is before all things, and by him all things consist" and have their being.

Algiers, this worldly, careless city, with its population of French-taught freethinkers and atheists, of Roman Catholic women devotees, of confessional and rosary, or of society and pleasure, with its poor Spanish artisan class and Mohammedan substrata, is dying in sin, in utter need of the gospel, despite all its outward beauty.

Algiers, North Africa.

Photo by Moffett, Chicago

Dr. David Paulson

Born October 27, 1868 **Died October 15, 1916**

Dr. David Paulson

It is with the deepest regret that we record the news of the death, at Asheville, N. C., of our dear friend and coworker, Dr. David Paulson. His death took place on Sunday, October 15. At his bedside was his faithful wife, with a few friends. Mrs. Paulson has our sincerest sympathy in this hour of her affliction. She sorrows, but not as those who have no hope.

Dr. Paulson was a good man. The world can ill afford to lose such as he. It was my privilege to form his acquaintance when he was but a boy. He came from the farm to Battle Creek in search of knowledge. After entering college, in order to meet his expenses he worked as night clerk at the Battle Creek Sanitarium. During a part of the day he worked in the kitchen or wherever work needed to be done. I have heard him say that there was not a foot of floor space in the old sanitarium building that he had not scrubbed on his knees. He was never idle. He always carried with him a book to employ the time when not at work with his hands. When a boy he put just as much of himself in what he did as he did later in life. It can be truthfully said of him, that whatsoever he did, he did with all there was of him. I have heard the matron of the sanitarium say that no boy had ever been in the employ of the sanitarium who worked more faithfully than did he; that when she wanted anything done, and done well, she assigned the work to David.

His faithfulness and his studious habits were recognized by the sanitarium board, and David was later encouraged to take up the medical work, for which he had for some time felt a burden. He was a member of the first class sent by the sanitarium to Ann Arbor, and was graduated in 1904, with the first four-year medical class turned out by the school. It was while at Ann Arbor that I in a special way became acquainted with him.

A home was conducted for the benefit of this class of students, of which Mrs. Kress and I had charge. The work in the home, in order to save expense, was done by the students. It fell to our lot to assign the work each should do from month to month. I cannot recall that one word of complaint ever escaped David's lips during his entire stay at Ann Arbor. It did not matter whether it was washing the dishes, or going out into the country two miles each morning at 5:30 with a wheelbarrow to get twenty quarts of milk, he did everything well and cheerfully.

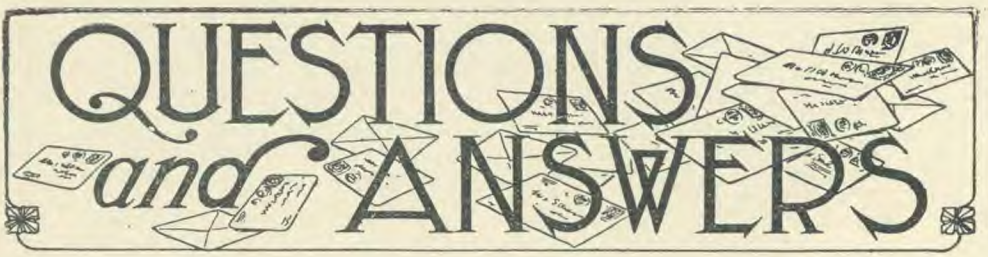
After graduation we worked together in the Battle Creek Sanitarium as physicians for several years. Naturally we became very closely attached to each other. Whenever we had difficult cases under our care, David would either come to my office or I would go to his, and we would have a season of prayer for these cases. In this way we counseled and prayed and labored together. The time came for us to separate. David went to Chicago, and I to England and then to Australia. He at first worked chiefly for the poor.

After a short stay in Chicago, a former patient encouraged him to open a small medical institution at Hinsdale, a suburb of the city. It was a hard task, but with the aid of his companion and by reliance upon God, a beginning was made. In a most remarkable manner, but not without much personal sacrifice, the work has grown to its present splendid proportions. The Hinsdale Sanitarium is known all over the United States. Dr. Paulson has left behind him a monument erected by his own hands to testify of his faithful adherence to the principles of truth which he all his life had so ably advocated by voice and pen. So, being dead, he still speaketh.

The one fault that his friends accused him of was, he worked too hard, and failed to take the periods of relaxation and change which he so much needed. This was unwise, it is true, and possibly Dr. Paulson might be with us still had he practiced in this respect what he, all during his medical career, urged by voice and pen. "He saved others," can be said of Dr. Paulson. In doing so he sacrified his own life. He has fought a good fight.

By inheritance Dr. Paulson had a weak constitution and a tubercular tendency. His clean life and careful habits enabled him to live sufficiently long to build up a work that will continue to live even though he is dead. His influence for good exerted upon those whom he trained for the same service to which he so earnestly devoted his energies, will go on and on and on. His age was nearly forty-eight.

D. H. KRESS, M. D.



Questions accompanied by return postage will receive prompt reply by mail.

It should be remembered, however, that it is impossible to diagnose or to treat disease at a distance or by mail. All serious conditions require the care of a physician who can examine the case in person.

Such questions as are considered of general interest will be answered in this column; but as, in any case, reply in this column will be delayed, and as the query may not be considered appropriate for this column, correspondents should always inclose postage for reply.

Rheumatism

"For several weeks I have been troubled with rheumatism, especially in the right upper arm — a dull, heavy ache of those muscles between the shoulder and the elbow. Now the ache seems to be centralizing, and there is a sharp pain, making it more difficult to use the arm. Moving those muscles as I write, causes pain. I keep the affected part wrapped in flannel; have used liniment on it, and have taken Humphrey's Homeopathic remedy for it, but it did no good. My husband wants me to take salicylic acid tablets."

Better than the use of either the salicylic acid or the lithia, I think, would be the use of an enema with two teaspoonfuls of washing soda (sodium carbonate, not bicarbonate) and a tablespoonful of salt to the quart of water. If the bowel is not empty, better empty it previously with a simple enema. Hold the soda enema as long as convenient. Enough of the soda may be absorbed to remedy any acidity of the blood without injuring the stomach. You may find it advantageous to repeat the enema twice a week for a few times.

A diet consisting largely of milk, with cereals and vegetables, but a minimum of fruit, may be a help.

Gentle massage to the joints and muscles will relieve the soreness.

One of the following may be a cause of your trouble: a damp house, too many shade trees, cotton undergarments, sudden changes in weather requiring special protection at times, bad teeth.

Gas in the Stomach

"I am seventy-six years old, and much troubled with gas in the stomach, and have a feeling of smothering. The gas seems to affect the heart. Kindly give directions regarding diet."

Your trouble may be due, not to the food you eat, but to heart and circulatory trouble. Often stomach trouble is secondary to heart trouble, and will not yield to dietetic treatment.

Another thing that might have an influence on your condition is bad teeth. Where the teeth are decayed or loose, or where there are other bad mouth conditions so that the food entering the stomach is infected, it is impossible to have good digestion, no matter what kind of food you eat.

As I know nothing about what you have been eating, I could not judge as to whether your food might be the primary cause of the gas. I may say, however, that sweets are more likely to cause gas than other foods. So, without knowing more about your condition, I should advise, first, that you give careful attention to your mouth; second, that you avoid all foods containing sweetening. And it might be better for you to take starchy foods in a dextrinized form. Have your bread well dried, possibly slightly browned; and if you eat potato, have it mashed and browned. It is possible that you will do better on some of the breakfast foods than on mushes and soft foods.

Overwork and Rheumatism

"I am thirty-two years old, have five children, the oldest eight and the youngest one and a half. Have lived carefully, and had good health until recently. This spring I had an attack of chronic rheumatism affecting hands, limbs, and feet. Am constantly overworked and am very irritable, entirely unfit for my household duties. What climate is best for rheumatism?"

It is unfortunate that while trade unions and eight-hour laws protect men, they do not protect the wives of men, who very often have to work twice eight hours. Possibly, if you were entirely rested, you would have less trouble with your rheumatism.

Regarding climate I can say very little, for the reason that there are so many things that go under the name of rheumatism. But in general it is perhaps safe to say that a dry, not too changeable, climate would be better than one that is damp and changeable.

One who has a family that is increasing at a rapid rate and has to slave for the family, cannot hope to be well. The treatment may need to be applied on the other side of the family.

Various Symptoms

"Please give cause and remedy for the following: aching legs, especially before a windstorm; numbness of fingers, with pain up the arm; perspiration on awakening; continual belching after eating; continual roaring of the ears; spells of dizziness without unconsciousness; craving to chew tender white rags. What food will keep the digestive tract sweet and clean? What can be done to keep the white blood corpuscles from eating the red corpuscles?"

Your letter asks for the cause and treatment of a number of symptoms. Now a symptom usually has a number of causes, and an examination must be made in order to know which cause is operative in the present case. For instance, roaring in the ears may be due to an excess of quinine or of salicylic acid, or to hardened earwax, or to disease of the middle ear or of the internal ear. An examination by an ear specialist might be necessary to determine the cause in this case, and to prescribe the necessary treatment, though the ordinary physician might in most cases determine what the trouble is.

So with nearly all the symptoms you have mentioned. If the symptoms are all in one patient, I should most earnestly advise the patient to put herself under the care of a competent physician who is capable of making a right diagnosis — not by feeling the pulse and looking at the tongue, but by making a thorough examination of all the organs, a urinary test, a blood test, a blood pressure test, and any other tests that might be necessary in order to learn the exact condition. Such an examination might cost ten or twenty dollars, but it would be worth it. You would then have something definite to treat. To treat symptoms is to neglect the cause, which all the time may be getting more serious.

It is easy to treat insomnia by means of hypnotics; pain, by anodynes; "that tired feeling," by "tonics," etc.; but all such treatment is a makeshift, taking the patient's money for something that is worse than nothing.

There are no foods that will keep the digestive tract sweet and clean. It is a matter of avoiding certain foods, and this will differ with different individuals. Some persons cannot use fruits without having a "rotten" stomach. Others cannot eat sweets of any kind. Tomatoes will cause a violent souring in some stomachs, and potatoes are offensive to others, while milk or eggs may be objectionable to still others. In general, perhaps the average person will get along better with not too much starchy food, and with very little sweets, and by taking the protein in the form of milk rather than other animal foods. Sour milk is often better than sweet milk.

Another important rule is to eat one kind of food at a meal, as much as possible. A dish of rice and cream for breakfast, nothing else, might be a good example. Mixtures tend to ferment. Then for dinner, say 3 or 4 P. M., two glasses of milk sipped slowly, and nothing else. Try such a diet for a week, and then if the stomach is in better condition, you might add a little bread and butter, string beans, carefully masticated, noting the effect of each addition; but avoid pastries, puddings, and the like, and gradually add one dish after another, but maintaining a simplified diet.

The various symptoms mentioned in your letter, if they belong to one person, indicate a condition that demands careful attention. It is of no avail to say, "I can't afford it," or, "I can't be spared from home." When one gets clear down, she has to be spared, and it is quite expensive too, and funerals are not economical by any means. It is much more economical to treat illness in a right way and not by guesswork. First have a complete examination, and then have your trouble treated in a right manner, whatever the cost. Why not go to your nearest sanitarium?

Who said that the white corpuscles are eating the red corpuscles? How did you determine that?

Psoriasis

"Kindly suggest a treatment for a long-standing case of psoriasis which does not seem to yield to treatment."

A New York physician has had great success in this trouble by placing his patients on a diet containing no animal food except butter — not even milk. His diet was rice and butter three times a day, nothing else. This treatment has cured many persons where everything else failed. Sometimes patients returning to a mixed diet have found that their skin trouble returned.

Mucous Colitis

"What do you advise for a case of mucous colitis?"

Mucous colitis is sometimes nervous in origin, and requires some other treatment than diet. In case the trouble is dietetic, I should advise the use of a milk diet; and if milk disagrees with you, then skimmed milk; and if this disagrees, then sour milk, preferably soured by means of Bulgarian bacillus.

In a desperate case you might try albumin water, made by stirring up white of egg in water. Avoid sugar and starch. Use the juices but not the pulp of vegetables, and possibly a little fruit juice. After a week add gradually a little rice, bread and butter, and vegetables in the form of purée, etc., trying one new dish at a time.

But with mucous colitis you should be under the care of a physician.

Diet for Muscular Rheumatism

"Kindly prescribe a diet for muscular rheumatism."

There is no diet that is specifically advantageous in muscular rheumatism. There are certain foods that one would best avoid. These might not be the same with each individual. The foods that ferment and cause digestive disturbance would be the ones most likely to cause rheumatic trouble.

You would do well to avoid the purine foods, tea, coffee, and meats.

Human Physiology; a Textbook for High Schools and Colleges

by Percy Goldthwait Stiles. Cloth; illustrated. W. B. Saunders Company, Philadelphia.

An examination of Professor Stiles's "Nutritional Physiology" (reviewed in the August number) prepared us to expect in the present volume a book of unusual merit, and we were not disappointed. The author certainly has a happy faculty of making physiology plain to the beginner. Though the book is not by any means an elementary textbook, it takes little for granted, and makes the various complicated processes of physiology plain to the student, without conveying the impression that the subject is simple, and that there is nothing more to learn about it. It should give the student a good working knowledge of physiology, and yet create a desire to pursue the subject further.

The book is worthy of commendation in that it considers the newer discoveries in a conservative way, not ignoring them, but not taking for granted theories which have not been substantiated. One serious lack is the absence of any reference to the physiology of reproduction. No biological study is complete without it. It can be understood why such study might be omitted from books intended for the grades, but why should high school and college students be supposed to be incapable of properly understanding the subject of reproduction in a right sense, except that we have the Anglo-Saxon traditions and prejudices? The book does not omit to say some good things regarding sex hygiene.

A Manual of Infantile Paralysis

by Henry W. Frauenthal, A. C., M. D., and Jacolyn Van Vliet Manning, M. D. Copiously illustrated; 374 pages; $3 net. F. A. Davis Company, Philadelphia.

The authors, in language containing as few technical terms as is practical, record their personal experience with poliomyelitis, based on the treatment of 3,000 cases, describing the epidemic appearance, symptomatology, diagnosis, and method of treatment.

Frauenthal and Manning do not accept the generally received theory that poliomyelitis is caused by a filtrable virus, as their investigations go to confirm the theory advanced by Dixon in connection with the Pennsylvania epidemic of 1910, that the specific cause of the disease is a protozoan, transmitted probably by some blood-sucking insect. There are certainly some strong arguments in favor of this viewpoint.

The symptoms and directions for diagnosing the disease are given in plain language, and the chapters on physical therapy and manipulation treatment are given so that parents may understand what is needed for a child patient, and why.

The photographic and X-ray illustrations showing various forms of paralysis, before and after treatment, are well chosen, and add materially to the text.

Among the questions this book undertakes to answer according to the most recent knowledge of the disease, are the following: —

What causes infantile paralysis? What are the symptoms? How may this disease be distinguished from others? What are the possibilities, as to death, permanent deformity, or complete recovery? What may be done to prevent an attack? What are the most approved curative measures?

Fight for Food

by Leon A. Congdon, M. S. Price, $1.25 net. J. B. Lippincott Company, Philadelphia.

Many sensational articles regarding the problems of pure food and food adulteration have appeared in the popular magazines. The more pyrotechnics in a muckraking article, the more it boosts circulation. The author of this book has attempted to divest the food problem of all sensational exaggeration, and to this end he has utilized original sources for his information. Having served as State chemist in two States, and as chief of the division of foods and drugs in a third, he is in a position to give authoritative information regarding foods.

The book considers the problem of pure foods, adulteration, falsification, mislabeling, etc.; the relation of foods and drugs to the public health; milk and public health; the sanitary handling of foods in the home; rural sanitation; important phases of the food problem; the high cost of living and food economy; vital forces in our food (a very important chapter); flavor and the grading of food products; and added poisons and drugs in our food.

We can say without hesitation that the information regarding foods is worth many times the price of the book to any family.

The Swiss Army System

by Capt. Remy Faesch of the Swiss army. Heavy paper; price, 25 cents. G. E. Stechert & Co., 151-155 West Twenty-fifth St., New York. 2 to 100 copies, 20 cents each; 100 to 500 copies, 15 cents each; 500 or more, 10 cents each.

This book was prepared in order to inform the people of the greatest of republics how the people of one of the smallest of republics protect themselves against the inroads of their powerful neighbors. The American is liable to think his bigness and his isolation a protection against the encroachment of other nations; the Swiss knows that eternal vigilance is the price of liberty.

Man an Adaptive Mechanism

by George W. Crile, F. A. C. S. Cloth; 387 pages; price, $2.50. The Macmillan Company, New York.

Dr. Crile in this work attempts to show experimentally that the human body is a mechanism which has reached its present state of efficiency through a continuous struggle to adapt itself to surrounding conditions; that the phenomena of disease, as well as those of health, are the result of the age-long interaction with an ever-changing environment. The keystone of Dr. Crile's hypothesis is *the kinetic system.* In the chapter describing this system he says: "The adaptation of man and kindred animals to environment is secured by a series of physical and chemical reactions which are the outward expressions of a transformation of energy, by which the forces latent in food products that have been appropriated and stored in the organism are released to produce heat and motion."

The kinetic system, briefly, consists of the brain, thyroid, adrenals, liver, and muscles, which are called strongly into action in response to fear, anger, or other strong emotion, or in times of stress, and which in general govern the rate of transformation of food energy into muscular or other forms of bodily energy. The kinetic system, thus postulated, is a means of preservation and protection of the body; but, however, when acting "abnormally," it may work injury to the body.

The volume is one of a series of contributions being made by various physiologists to the *new physiology* — destined to displace the physiology now being taught in the schools. Though the kinetic theory is in some measure only tentative, there is strong probability that the main teachings regarding the functions of the kinetic system will be a permanent addition to our knowledge of physiology.

Expression in Singing

by H. S. Kirkland. Price, $1 net. Richard G. Badger, The Gorham Press, Boston.

This little volume, written by a man of seventeen years' experience in teaching in the Philadelphia Musical Academy, aims to give practical instruction in the art of singing. The author rightly believes that the singer should be an artist and not an artisan; should give true expression to real emotional states, and not merely follow set formulas and rules. He says, "No man can really sing without enlisting all his mental faculties, especially those of imagination and sympathy."

There are elocutionists and elocutionists. Some attempt to teach certain conventional means of expressing certain conventional emotions or ideas. Others more rationally attempt to develop in their pupils the power to give natural expression to emotions actually experienced.

The author uses the latter method in teaching the art of singing. He attaches much importance to color as a means of expression. "No other means," he says, "is more quickly grasped by the average student, nor applied with greater gratification to his instinct for truthfulness of expression." He believes that singing should be more definite than it usually is, that "the ideas which the majority of singers attempt to express are those vaguely suggested by the music, while the definite ones indicated by the text receive little or no attention."

The Mother and Her Child

by William S. Sadler, M. D., and Lena K. Sadler, M. D. Illustrated, 8vo., 454 pages. Price, $1.50. A. C. McClurg & Co., Chicago.

The authors, who are parents as well as physicians, have produced, out of their years of experience, observation, and study, a book containing just the information which mothers, fathers, and others having the care of children should know.

Part I deals with the mother until the birth of the child; Part II with the infant until the weaning period; Part III with the problems connected with the care and bringing up of the child until adolescence.

Written largely by one who is a mother as well as a physician, it is a veritable "Ladies' Guide," but more practical, more complete, more up-to-date, more convenient to handle, more reasonable in price.

The Woodcraft Girls at Camp

by Lillian Elizabeth Roy. Price, 1.25 net. George H. Doran Company, New York.

Without a "plot," without a love affair ending in a happy marriage, without any of the devices of the most popular fiction, this wholesome story of the adventures and experiences of a group of healthy girls under wise leadership is likely to hold the interest of the reader to the end.

It is the story, we are told, of the experiences of an actual camp of Woodcraft girls on a woodland farm in New Jersey. We can heartily second Ernest Thompson Seton's recommendation of the book: "It would be a great thing if every girl in the land could absorb and be guided by the principles demonstrated in this book."

Toys and Things

by Herbert Booth. Price, $1 net. George H. Doran Company, New York.

The son of General Booth having been invited to deliver in a London church a series of sermons preceded by ten-minute talks to children, gave a series of talks on toys, which were popular not only with the children, but so popular with adults that often there was scarcely room for the children. The old folks seemed to appreciate the talks because they could understand them, and yet Dr. Booth did not "talk down" to the children. He realized that they had alert minds, and could appreciate great truths when properly illustrated.

His talks on toys were enthusiastically received, not only where originally delivered, but elsewhere; and it was in response to a demand that he has prepared the talks for publication.

Among the talks are, "Dolls," "Tops," "Balls," "Guns," "Kites,"— twenty-one altogether,— each serving to illustrate some great spiritual principle.

Ninety, and Never Wore Corsets

Mrs. Lottie G. Wiltbank, of Georgetown, Del., who recently celebrated her ninetieth birthday, attributes her continued good health to the fact that she has never worn corsets. Mrs. Wiltbank has had few sick days, and still has the use of all her senses, being able to read and hear as well as any one.

Increase in Degenerative Diseases

"The mortality rate of persons in the United States over forty-five years of age is increasing. Lack of health-giving exercise, superfluity of diet, lack of restoring sleep, overstimulation, the race for power, wealth, and position, bring early decay. The goal is reached; honor, position, and power are just being grasped when the apple of accomplishment turns to the ashes of dissolution. The brilliant mind becomes clouded, the steady hand is no longer accurate, the eye which once gazed fearlessly on the whole world is dimmed, and it is not long before the final break-up occurs."

Intensive Study of Malaria

The International Health Board of the Rockefeller Foundation is conducting two sets of experiments to determine how effectively malaria may be controlled under conditions prevailing in typical communities in the Southern States. At Bolivar, Miss., under the auspices of the Mississippi Board of Health, the attempt is being made to detect carriers of the disease and free them of the parasites. In Arkansas the Rockefeller Foundation, coöperating with the United States Public Health Service, will test the practicability of malaria control by a combination of relief measures. In neither case will the experiment include the wholesale extermination of mosquitoes. The object seems to be to determine whether it is possible to control malaria where the mosquitoes cannot be effectually controlled.

Diet for Young Children

J. H. Mason Knox, in the *Journal A. M. A.*, Aug. 15, 1916, states that the average food requirement of a child of two years is ninety-four calories per kilogram; for a child of four years, eighty-two calories; and for one of eight years, sixty-seven calories. The actual amount of food increases gradually from infancy to maturity, but relatively to the weight of the body it decreases. Little is known, he says, as to the required proportions of protein, fat, and carbohydrates for children; but if sufficient fat and carbohydrate is supplied, relatively little protein is needed. Not more than about four grams of protein per kilogram of body weight for children under eight, and about half that amount above that age; about half from animal foods under eight, but more proportionately from vegetable foods as the child grows older.

Memorial to Dr. Murphy

It is said that the $500,000 memorial to be erected in Chicago to the renowned Chicago surgeon, Dr. Murphy, recently deceased, will be in the form of an institution for surgical research. This certainly would be appropriate. Perhaps with the possible exception of the Mayos, no surgeon of this generation has added more to surgical science and practice than Dr. Murphy.

The Simple Life

Other things being equal, it is the man who leads the well-balanced life who lasts the longest, whose work to the end is uniformly the best,— he who neither overworks nor overplays, neither overeats, overdrinks, nor oversleeps,— he who maintains a standard of simple, healthy diet in moderation, who offsets mental work with physical recreation, who is as honest with his own body as he is with his own business. When success comes to such a one, his physical and mental condition is such that he can enjoy in peace of mind and contentment of body the fruits of his labors.

Inspected Pork Not Safe

The *Public Health Reports* issued by the United States Public Health Service, states, in the issue of July 7, that "experience shows that the microscopic inspection for trichinæ conducted in some countries is weakened by such an incidence of error and uncertainty that it is untrustworthy, and that it eliminates from the trade only part of the trichinous meat. On account of the uncertainty and untrustworthiness of this microscopic inspection neither meat-inspection systems nor meat dealers are in a position to give scientific assurance that pork, even if inspected microscopically, does not contain this infection."

Cause and Treatment of Pellagra

Yarbrough, to whose article in the *Southern Medical Journal* we have already referred, has another article in the *Medical Record* of September 2, in which, as a result of further treatment of many cases of the disease, hospital and private, he reiterates his belief that pellagra is caused by fermentation of carbohydrates, and that it is best cured by the elimination of all carbohydrate and alcohol from the diet, and the administration of dilute nitric acid (thirty drops in water three times daily and at midnight). He claims much more rapid recoveries than are obtained by Surgeon Goldberger's method, which is merely dietetic. He believes that pellagra is an acidosis, but how the administration of nitric acid can correct such a condition he confesses is a mystery. The fact is, it does.

Quack Sentenced

An impostor in New York City, for selling a bag of cedar shavings, claiming it to be a cure for infantile paralysis and advertising it in the newspapers, was sentenced to a term of thirty days in jail and a fine of $250. The bags were sold for ten cents each, and were said to prevent an attack of infantile paralysis.

Music as an Anesthetic

In Indianapolis the health authorities were inoculating the school children against typhoid fever. There is some pain and discomfort connected with the operation. In order to mitigate this, a phonograph was brought into requisition, and as 260 pupils in one of the schools were being inoculated, the phonograph sent out stirring music. Under this influence not a pupil shrank from the ordeal, and none suffered ill effects.

Antituberculosis Week

The week beginning December 3 was set aside by the National Association for the Study and Prevention of Tuberculosis for special antituberculosis work all over the country. The association urges the coöperation of every church, school, lodge, and public health organization to launch a continuing campaign for educating the people to prevent disease. December 6 was selected as medical examination day, every man, woman, and child being urged to undergo a medical examination on that day to discover physical defects and tendencies toward disease. December 2 was appointed children's health crusade day.

Interesting Facts About Children's Play

From careful observation of 33,122 children in 14 different cities, varying from 22,000 to 500,000 in population, 45 per cent of the children were loafing outside of the school hours — doing nothing, "because there is nothing to do;" 43 per cent were in the streets and alleys, only 24 per cent in private yards, 7 per cent in vacant lots, and nearly 4 per cent in public playgrounds. But motion pictures, dancehalls, poolrooms, burlesque shows, and pleasure houses had an average weekly attendance exceeding the entire population. These are grimly significant facts, and hold true for most cities.— *Child Welfare Bulletin, Peoria, Ill., August, 1916.*

Leprosy Remedies

The number of preparations whose claims have been advanced during recent years as cures for leprosy indicates that, at present, we have not found a specific for this disease. Chaulmoogra oil was one of the earliest in the field, and it still has a number of adherents. Though its ability to cure the disease is open to grave doubts, it does appear to retard its progress. Being a gastrointestinal irritant, its use is attended with many drawbacks, but recent improvements in methods of administration have removed most of these. The active principle of the oil is gynocardic acid. Quite recently Sir Leonard Rogers has put forward a claim that salts of this gynocardic acid give very much better results than treatment with the crude oil. — *Practical Medicine, August, 1916.*

Drastic Venereal Laws

Western Australia has passed a law providing that any one contracting a venereal disease must place himself under the care of a physician within three days, and must remain under treatment until he obtains a certificate of cure. Heavy penalties are prescribed for failure to comply with the law. Any one not a regular physician who attempts to treat a venereal case, is subject to a fine of $250, or imprisonment for six months.

Tuberculosis Hospital Not a Nuisance

The city of Northfield, N. J., attempted to prevent by injunction the erection of a tuberculosis hospital in the city. The New Jersey Court of Chancery ruled against the city on the ground that there is lack of evidence that a tuberculosis hospital is a source of danger, and on the principle that the mere interference with market value of adjoining property is not sufficient grounds for an injunction. Doubtless when the superstition that a tuberculosis hospital is dangerous to the health of the community is overcome, there will be no trouble about the market value of surrounding property.

Tissues Made Transparent

A new method of giving medical students instruction, which, it is said, will largely obviate the necessity of dissection, will be put into practice at the Hahnemann Medical College, Philadelphia, at the beginning of the next term. Physicians and surgeons connected with the department of anatomy are now perfecting the process, which originates through the recent discovery by a French scientist of a fluid by the use of which the human body can be rendered transparent. The fluid, which is composed of several oils, turns the flesh into a sort of transparent jelly when injected, enabling the students to study the veins, muscles, and bones far better, it is asserted, than if they resorted to the dissecting knife. It is said to be one of the most valuable discoveries in medical science of late years.— *Practical Medicine, August, 1916.*

Hypophosphites and Tuberculosis

The manufacture and sale of hypophosphites for the cure of tuberculosis is a flourishing business in this country and Europe. The Council on Pharmacy and Chemistry of the American Medical Association has issued a statement to the effect that the introduction of hypophosphites into medicine was due to an erroneous and now discarded theory as to the cause of tuberculosis, of which one Dr. J. T. Churchill, of London and later of Paris, was the promulgator and propagandist. The theory was that the so-called tuberculous diathesis was caused by a deficiency of phosphorus in the blood. It is now known that tuberculosis is not due to a deficiency of phosphorus. Moreover, little of the phosphorus in the hypophosphites is assimilated by the body — far less than from ordinary food. Partly from force of habit, partly because they are misled by the advertising, some physicians continue to prescribe hypophosphites for tuberculosis. They are as verily practicing quackery as are the manufacturers of these nostrums.

Whisky and Brandy as Medicines

At the meeting of the American Pharmaceutical Association the query was raised whether whisky and brandy can be dispensed hereafter as medicines, inasmuch as they have been left out of the new pharmacopœia.

Typhus Fever in Mexico

A typhus fever epidemic is reported in the state of Zacatecas, Mexico. A number of physicians from Mexico City have gone to help control the disease. It is now known that typhus is a filth disease, being spread by the bite of infected body lice.

Praise for American Research

A recent issue of the London *Lancet* calls attention to the world's debt to America for its discoveries relating to the prevention of disease. Among the instances cited were the discovery of the cause of yellow fever by Reed, Carroll, Lazear, and Agramonte; namely, that the disease is transmitted by the "bite" of an infected mosquito and in no other way. Other important work performed in America was the discovery of the American hookworm, the research into the cause of pellagra, and the discovery that exanthematous typhus fever is transmitted by the bite of the body louse. Although antityphoid inoculation originated in England, it was first carried out on a large scale in America.

Dietary Cause of Pellagra

E. B. Vedder, in *Archives of Internal Medicine,* asserts a certain similarity between pellagra and known deficiency diseases; namely, beriberi and scurvy. There is a demonstrable deficiency in the diet of most pellagrins. (Note that word "most." If pellagra has one cause and that is a dietetic deficiency, the fact should be demonstrable in the diet of every pellagra patient.) Vedder believes that the essential dietetic error on the part of pellagrins is the too exclusive use of wheat flour in association with corn meal, salt meats, and canned goods, foods that are known to be deficient in vitamines. He believes the changes that have taken place in the diet of a large proportion of Southern people in the last ten years will explain the rapid increase in pellagra.

How was This for a Quack?

A Frenchman, Pierre Teillon, aged sixty, was in court because he had caused the death of a patient. He had been treating all kinds of disorders by administering sulphuric acid (a sort of French Radam's Microbe Killer). His defense was that molds growing on the inside of barrels are completely destroyed by sulphuric acid. He had noticed in a dictionary that Pasteur recommended an application of sulphuric acid for the bite of a rabid dog. From this he concluded that sulphuric acid, when applied to the human body, is capable of destroying noxious principles of the blood which he believed to be different kinds of molds. He made some experiments on his horse, then on himself, then on his sister. All these, he said, were cured. Then he began to treat with acid all who came to him. He got three months in prison as a reward for his brilliant discovery.

Value of Oysters

Stutzer maintains that it takes fourteen oysters to contain as much nourishment as one egg, and two hundred and thirty-three to equal a pound of beef. Their cost is triple that of beef [and more than triple that of some other proteins].—*New York Medical Journal.*

The Dangerous Tin Can

The malaria experts of the United States Public Health Service give earnest warning against the danger of allowing old tin cans around to collect rain and become breeders of mosquitoes. The species of mosquito that transmits malaria is particularly liable to breed in neglected tin cans. If cans must be dumped on the premises, holes should be punched in them so that they cannot hold water.

To Prevent Spread of Infantile Paralysis

Quarantine and other measures, some of them very drastic, have been adopted in numerous communities in order to keep out infantile paralysis. It is questionable whether those communities which have adopted the most drastic measures can show better results than other communities. Of course it is wise to do all that can be done to prevent the spread of the disease; but the most rigid of present methods seem to be without effect. The fact that the disease is sharply limited by the advent of cold weather would seem to point to some intermediate carrier, such as an insect, whose activities are confined to the warm weather. The great prevalence in country districts points in the same direction.

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TO
LIFE AND HEALTH
For 1916

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Note.—The twelve numbers begin with the following pages, respectively: January, 1; February, 51; March, 101; April, 151; May, 201; June, 251; July, 301; August, 351; September, 401; October, 451; November, 501; December, 551. Subscribers may obtain missing numbers as long as they last, to complete their files, at 10 cents a copy.

Articles marked (C) are contributed; (E) editorial; (e) editorial notes and comment; (Q) questions and answers; (A) matter appropriated from other publications, and usually abstracted or abbreviated.

LIFE AND HEALTH Takoma Park, Washington, D. C.

Home-Grown Dates

The experiment station of the University of Arizona, which has more than two hundred thriving trees, grew 22,000 pounds of marketable dates last season. The price received was 17 cents a pound, or $3,740 for the crop. It has been conclusively proved that date growing can be made profitable in the Salt River Valley and in other places where soil and climate are similar.

Treatment of Pellagra

According to E. M. Perdue in *Texas Medical Journal*, August, 1916, pellagra can be prevented by drinking water containing a sufficient quantity of the bicarbonates of calcium and magnesium. It can be cured, he says, by administering a simple and suitable alkaline carbonate or an organic alkali (by which, perhaps, he means an alkaline salt of one of the organic acids, as citrate of potash) convertible into a carbonate.

Blinded Soldiers Taught Massage

Two schools are operating in France, preparing blinded soldiers who have the use of their hands, to be masseurs. In order to teach the requisite anatomy, relief charts are used. In learning their future trade the men act alternately as masseurs and patients.

Away from Drugs

The tendency of modern medicine is to progress away from internal medication. Witness the gradual diminution of the pharmacopœia, the vogue of the psycho-analysts, the popularity of nature cures, radium, and the X ray, and the marvelous growth of surgery. The influence of sunshine on tuberculosis, the action of the X ray on malignant growths, and the beneficial effects which hydrotherapy has in certain nervous disorders, are all instances of the replacement of such drugs as creosote, arsenic, and the bromides by external therapeutics.— *Editorial in New York Medical Journal, Sept. 9, 1916.*

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Christiania Health Home, Akersgaden 74, Christiania, Norway.

Friedensau Sanitarium, Friedensau, Post Grabow, Bez. Magdeburg, Germany.

Kimberley Baths, 7 Cheapside, Kimberley, South Africa.

Lake Geneva Sanitarium (Sanatorium du Leman), Gland, Ct. Vaud, Switzerland.

Natal Health Institute, 126 Longmarket St., Pietermaritzburg, Natal, South Africa.

River Plate Sanitarium, Diamante, Entre Rios, Argentina, South America.

Skodsborg Sanatorium, Skodsborg, Denmark.

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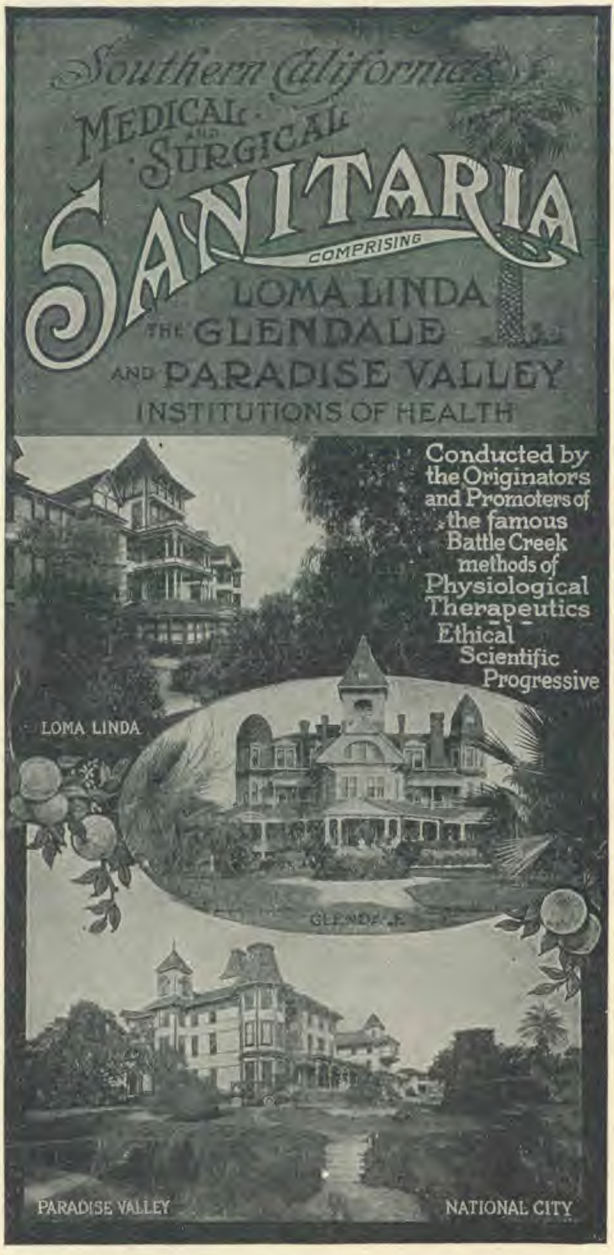

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