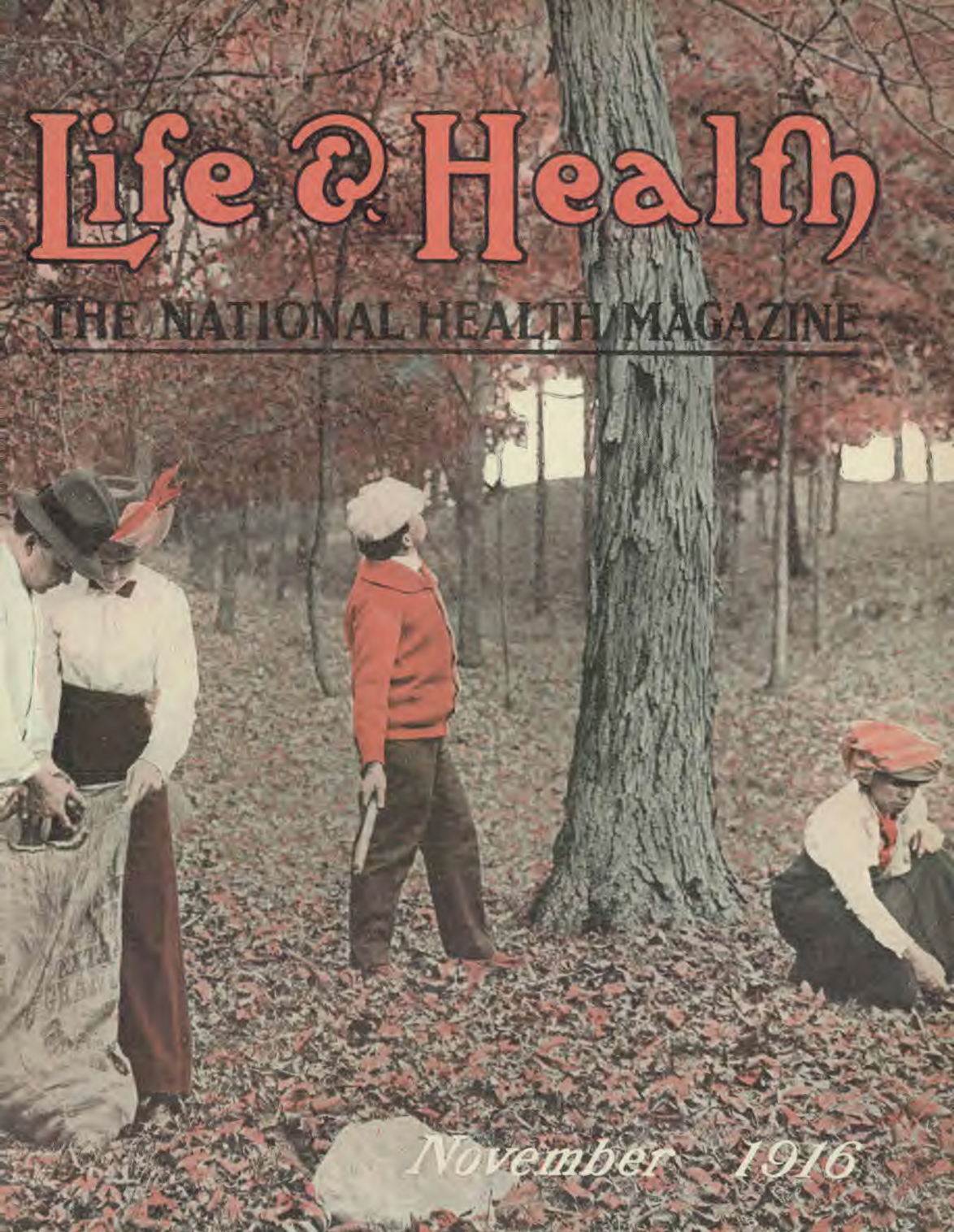
Life & Health

THE NATIONAL HEALTH MAGAZINE



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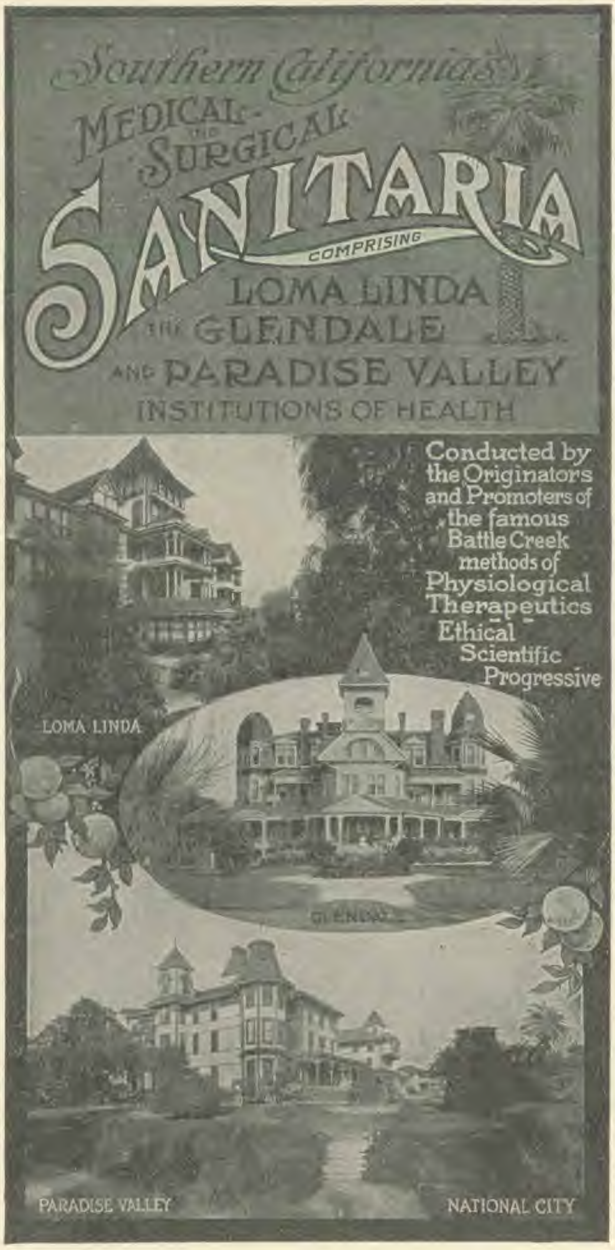

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LIFE AND HEALTH

November, 1916

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THE SACRED FALLS, HAUULA, OAHU, H. T.

The carving done by this waterfall, as revealed by the successive watermarks, must have taken many years.

VOL. XXXI
No. 11

Life & Health
THE NATIONAL HEALTH MAGAZINE

NOVEMBER
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

Do You Know That

Slouchy postures menace health?

The careless spitter is a public danger?

It's worry, not work, which shortens life?

Health brings happiness; sickness, sorrow?

Pneumonia kills over 120,000 Americans each year?

Rural sanitation is a health protection to the city dweller?

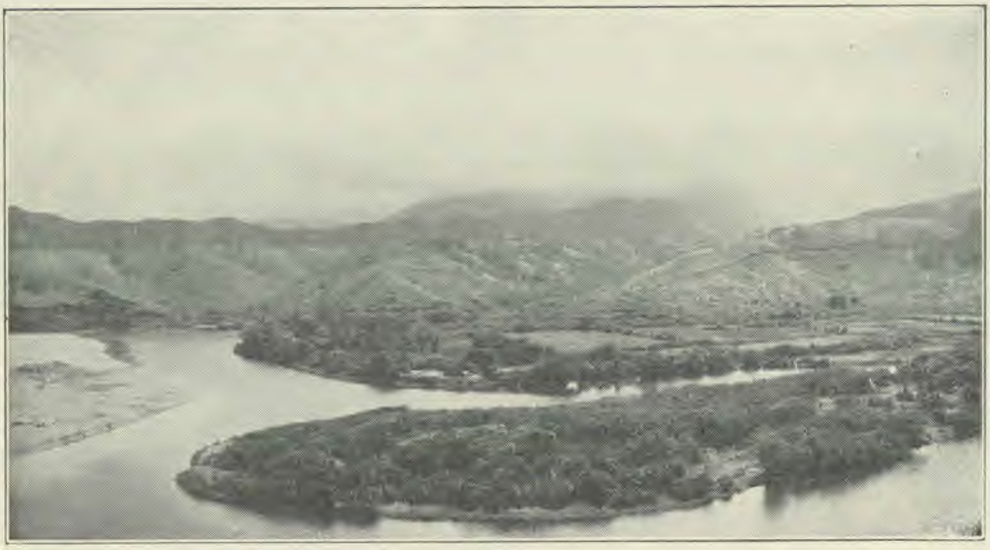
Bad teeth and bad tonsils may be the cause of rheumatism?

A cold bath every morning is the best complexion remedy?

Clean water, clean food, clean houses, make clean, healthy American citizens?

The U. S. Public Health Service has reduced malaria 60 per cent in some localities?

The death rate from typhoid fever in the United States has been cut in half since 1900?



HAWAII FOR HEALTH

MRS. R. J. McKEAGUE

NO part of the world holds a monopoly on the opportunities for health, or for wealth, or for happiness. These things depend much on the individual. But wealth most often, and happiness always, are dependent upon health; and that country is most contented and prosperous when nature does not demand eternal vigilance and unceasing toil as the price of a comfortable home and a sound body. Such a land is Hawaii, "the paradise of the Pacific."

Contradictory as it may seem, Hawaii has one of the most diversified climates in the world, due to altitude and the trade winds. High mountains and tablelands form the interior of all the islands, Mauna Kea and Mauna Loa, on the island of Hawaii, rising to almost fourteen thousand feet. On these mountains, snow falls heavily in winter. Three miles from the post office in Honolulu, at an elevation of about sixteen hundred feet on the shoulder of Mt. Tantalus, the thermometer shows a constant variation of ten degrees lower than at the sea level. This is one of Honolulu's favorite picnic places, and the site of a constantly growing colony of summer homes.

For nine months the fresh, and in many places strong, trade winds constantly renew the atmosphere. As a consequence contagious diseases are infrequent, and epidemics, when they occur, are usually of a mild type. The porous quality of the soil favors rapid removal of moisture, thus lessening the development of disease germs.

Except in the months of March and April, the rains are usually so light that they are scarcely noticed. You will see gauzy clouds hanging over the mountain tops,— there are few cloudless days,— and while the sun shines bright overhead, the fresh breezes will fling down the slopes drops of moisture so tiny and rainbow-hued that they are as "liquid sunshine."

The temperature near the seashore seldom rises as high as 88° at any season, nor drops much lower than 60°. If you like the steady warmth of the lowlands, you may live on the seashore or in any

of the seaports. If you like the bracing cold of higher altitudes, such as the slopes of Mauna Kea afford, where log fires are welcome, you may have it. Of course, for those of us whose duties and circumstances keep us in the city all the year round, the climate is quite enervating; and though the comparatively small range of the thermometer prevents the bracing effects derived from striking contrasts, yet the variation is such as to call for decided changes in clothing during summer and winter months.

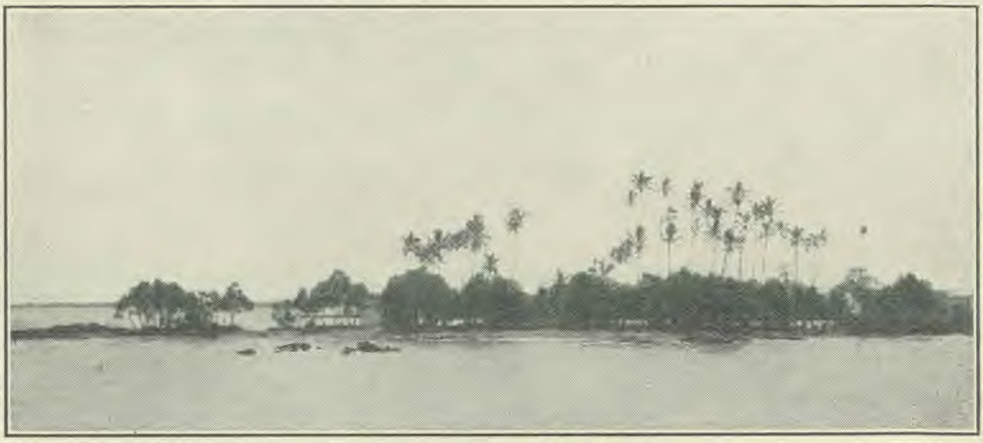
Hawaii never becomes hot, as we Easterners know the term. Sweltering heat and sunstroke are unheard-of things. No fog, no frost, no tornadoes, no electric storms, come to mar the glories of the landscape, and always one sees Hawaii decked in rainbow colors, "a gorgeous picture set in a frame of reefs and summer seas."

These happy isles afford a sanitarium for those of delicate constitution, and feeble elderly people find here a safe home and long years of life.

Now, I have written my opinion of the climate and scenery of the islands, which are their most attractive and striking features, I believe. But let us take a little trip out among the islands, for each has a charm of its own. We may take the interisland steamer "Mauna Kea," or, if we choose, a larger boat; and if you are a good sailor, you will not mind the rough passage in the channels. Less than twenty-four hours will bring us to Hawaii, the largest island, where by stage or automobile we shall take "one of the world's best trips" to the largest active volcano on the globe, Kilauea. For thirty miles the machine sweeps along between rows of trees overrun with tropical vines; and gigantic tree ferns from ten to fifteen feet in height, wild fruits and flowers, and gay-colored birds are seen everywhere. Then suddenly the automobile dashes around a curve, and the scene changes to one of awful grandeur as we view the steaming, smoking pits of boiling lava. At least a week may be spent at the "Volcano House," visiting the different craters; and indeed this is a trip which no one should miss.

Before leaving Hawaii, we must see the "boiling pots" of water and the Rainbow Falls. Then as our good ship starts off for Maui, the next island in size, we catch a glimpse of sixty waterfalls along the rocky coast of "the big island."

Scarcely less wonderful than Kilauea is the remarkable mountain of Halea-



COCONUT ISLAND, HILO, HAWAII

kala, the largest extinct volcano in the world. "Haleakala" means "house of the sun," and each morning the bright ball rises from behind this sleeping giant, and at night sets in beautiful Iao Valley. The climate is so bracing on Maui that our energy revives, and we enjoy a good long walk up into this tropical jungle, with no fear of snakes or wild beasts, for not one can be found in all the islands. We are exceedingly troubled, however, with all kinds of ants and many destructive insects.

We must also see Kauai, the "Garden Isle," which is unique in many ways for natural scenery. Then there are the islands of Molokai, Lanai, Niihau, and Kahoolawe, seldom visited by the *mahlihini,* or stranger, but nevertheless deserving of attention.

But we must return to Oahu and visit the many places of historic interest in

COAST SCENE, KAUAI

For aught one could determine when standing on one of these beaches, he might be on a continental beach.

VOLCANO HOUSE

The crater of Kilauea is in the distance, at the left, under the cross.

the capital city. At the wharf we are greeted, in the cordial Hawaiian way, with the beautiful flower *leis,* or wreaths, and welcomed with *Aloha oe*—"Love to you."

One of our first trips is sure to be a climb up the extinct volcano Punchbowl, from a mere village of frail, thatched structures, destitute of trees and shrubs, to the prosperous and beautiful city of today. Honolulu is truly "an American city in an Oriental setting," for about half of its sixty thousand inhabitants are Orientals. All nationalities seem

WAINIHA VALLEY, KAU, HAWAII

which rises up in the very heart of the city, and from whose slopes may be seen the verdant landscape of Honolulu, stretching over a large area, from Diamond Head to Moanalua Park. We are led to wonder at the rapid transition quite at home here, and observe their festivals and holidays much as they do in their native lands. The ancient ceremonies and customs of the Hawaiians are being revived for the entertainment of strangers, and something of interest

VOLCANO OF KILAUEA, HAWAII

Though not so spectacular in its performances nor so costly in human life as some other volcanoes, this is the largest living crater, and at times it affords a magnificent spectacle.

VOLCANO OF KILAUEA

Tourists scorching post cards in lava cracks.

takes our attention often, such as the observation of the centenary of King Kamehameha III or the Mid-Pacific Carnival.

Living expenses are high here, but, of course, this condition prevails in many countries. The one thing I miss most is fruit, for in a warm climate one naturally craves fruit much of the time. All kinds of fruit, such as are grown in the United States, were once raised here, but owing to the invasion of the Mediterranean fly, Japanese beetle, and other pests, it is now difficult to mature even native fruits. We have pineapples, big, delicious ones, in abundance; also bananas of various varieties. Papayas take the place, partially, of muskmelons, and alligator pears are by far the best native fruit of this season, but expensive, unless one is fortunate enough to own the trees. The mangoes are so infested with worms now that they are not to be relied upon. A few strawberries are grown, but are so inferior and expensive as to be impracticable for common use. All

HALEWA HOTEL

THE NUUANU PALI, HAWAII, 1400 FEET ABOVE SEA LEVEL

Hawaii's historic peak, which affords a most impressive view.

other kinds of fruit are shipped from the mainland, and should we indulge in the *luxury* of them once in a while, we are likely to be disappointed in their lack of natural flavor. The market always abounds in good vegetables, but even some of these "come from home." The native people are content with their "fish and poi," and the scarcity of fruit probably never troubles them.

One great joy of Honolulu is the sea bathing, for the Waikiki beach is one of the safest and best bathing places anywhere. Only three miles from the center of town, it is easy of access, and one good feature is the well-equipped, free bathhouses. There is no fear of sharks, for they never cross the coral reef into the quiet waters of the lagoon. Some enjoy sea bathing by moonlight, and the water is never too cold. Only at Waikiki may one witness and partake in the sports of surf canoeing and surf board-riding. Frequent dips in the cool sea brine are both a necessary tonic and a pleasure, in the summer season especially.

There is plenty of room for delightful motor trips out into the country, where the handiwork of the Master Artist is best viewed,— passing through sugar cane plantations, pineapple fields, or rice paddies, with the rainbow-covered mountains on the one side and the broad Pacific on the other.

Honolulu, Hawaii.

LANDING OF KAMEHAMEHA I

Floral parade and carnival week, held in February every year.

THE NATURE, CAUSES, AND TREATMENT OF CONSTIPATION—NO. 3

G. H. HEALD, M. D.

Two articles have preceded this, the first having to do with the anatomy and functions of the digestive tract and the nature of constipation, the second with the causes of constipation and its general treatment. The present article considers diet and exercise in the treatment of constipation.

Diet

THE victim of constipation should change to a diet that will give an abundant intestinal residue.[1] Unless there is some stomach trouble that forbids, it is well to use liberally of coarse vegetables and fruits, with whole-grain preparations.[2] Graham and whole-wheat bread should replace white bread. Bread, gems, or rolls made from a dough containing as large a percentage of bran as will "rise," are excellent.

Salads made of lettuce and other raw vegetables furnish an abundance of fibrous matter, which tends to stimulate bowel activity.

In constipation it is important to drink freely of water. Six or eight glasses a day at intervals is not too much. It is well to drink a glass or two before breakfast. If to this morning drink there is added, say, a tablespoonful of bran, it is very effective. Water taken at mealtime may increase the tendency to constipation.

An apple or two, an orange or two, or a few dates, before breakfast, may be sufficient in many cases to establish regularity. Figs and dates, from their fibrous nature, are efficient laxatives. Prune sauce is a good daily dish for one of constipated habit. A tablespoonful of olive oil, taken at mealtime, with salad or otherwise, will act as a gentle laxative.

Honey and other sweets are laxative. Probably the sugar in fruits is the important laxative factor, though the acids, as in oranges, have a similar effect.

Tea, because of the contained tannin, is especially bad in constipation. Other foods, though good in themselves, which fail to furnish sufficient residue to stimulate the bowels to action, are meat, eggs, milk, white bread, and polished rice — the kind usually sold in stores. Some persons find blackberries, on account of an astringent principle which they contain, to be rather constipating.

Exercise

Exercise is an important factor in the correction of constipation. But as with any other good thing, it is possible to take too much of it. One who has not been used to exercise may, by beginning suddenly a course of strenuous work, do himself more harm than good.

In taking any of the following exercises, do not continue them to the point where they produce an unpleasant effect. These directions are merely suggestive. It is not necessary to take the exercises as prescribed; the patient may vary them from day to day.

Any exercise which brings into play the abdominal muscles, such as horseback riding, rowing, walking, gardening, or outdoor games like tennis, is of value in constipation. Sweeping, scrubbing, and other forms of household work are good for the abdominal muscles. The disadvantage is the dust and the monotony.

For special exercises the following are suggested, though there are others just as good: —

Forward Bending

1. Stand with hands at side.
2. On toes rise, hands upward stretch, palms forward. Reach as high as possible.

[1] Spastic constipation is made worse by a coarse diet, but most persons suffer from the atonic form, which is benefited by coarse food.

[2] If fruits or other foods cause flatulence, or gas, they must be avoided.

3. Slowly bend, carrying the arms downward till fingers touch floor, if possible bending only at the hips. Many persons will find that they cannot touch the floor in this way.
4. To position.

Repeat six to ten times.

Body Side Bending

1. Body erect, heels together, hands at side.
2. Hands on hips, fingers forward, thumbs back.
3. Bend to right and then to left, as far as possible.

Six to ten times.

Body Twisting

1. Body erect, heels together, hands at side.
2. Arms sidewise stretch, level with shoulders, palms down.
3. Twist body to right as far as possible, then to left.

Alternate six to ten or more times.

Forward and Backward Bending

1. Hands on hips, fingers forward, thumbs back.
2. Bend slowly forward as far as possible, then backward as far as possible.

Alternate six to ten or more times.

Thigh Flexion

1. Lie on back on the floor or on a couch.
2. Draw the right thigh toward the body as close as possible, allowing the knee to bend, then lower it to position.
3. The same with left leg.

Alternate six to ten or more times. Then both at the same time six to ten times.

Leg Raising

Similar to the above, but do not bend the knees. Lying on back, carry the leg as high as possible, first the right, then the left, alternate, then together.

Trunk Raising

1. Lie on back, with toes under a sofa or other furniture, and hands on hips as in side bending.
2. Rise to a sitting position and sink back slowly.

Alternate six to ten or more times.

This may be varied by clasping the fingers at the back of the head for position 1.

These exercises may be made considerably longer if desired, or they may be varied. If they become monotonous, a series of imitative exercises may be devised. Here is one entitled —

Turning the Crank

Imagine a crank with a swing that on the down stroke reaches nearly to the floor, and on the up stroke reaches above the level of your head. Stand with right foot advanced in a somewhat rigid attitude, take hold of the imaginary crank with both hands, push forward, then downward, then pull toward you, then upward, describing a circle, and exerting all your strength. At one time you will be bent well forward, at another time erect. At one time your arms will be outstretched, at another drawn in or flexed. If your muscles are energized during this exercise, you will probably be breathing quite rapidly after two or three turns, unless you are an athlete, and you will find it vigorous work. In

fact, by antagonizing one set of muscles with another you can make the exercise as vigorous as you like. And you will note that the abdominal muscles come in for their full share of the exercise.

You may vary the exercise by putting the left foot forward instead of the right, and "unwind" the crank. Another imitative exercise is —

Pulling the Rope

Stand with one foot forward,— the right for a while, then the left,— and imagine yourself pulling in on a heavy rope, say two or three feet at a time. Reach far forward, grasp the rope, and as you lean back pull hard on the rope; then reach forward and take another pull, and so on until you are tired. Another resistant exercise, in which arms, trunk, and limbs are all exercised, is —

Piling the Stones

Imagining yourself about to transfer a pile of stones, one at a time, from one pile to another, stand with outstretched legs, lean far out to the right, bending the right knee, and grasp a stone as far from you as possible. Assume the erect position, then bend to the left, flexing the left knee, and place the stone as far to the left as possible. Place ten, fifteen, twenty-five, fifty, or one hundred stones in this way.

These exercises are perhaps best taken in connection with the morning air bath on arising; that is, in the nude.

Deep Breathing

Deep breathing is an excellent exercise for the relief of constipation. Not only does the oxygenation of the blood improve the abdominal functions, but the use of the diaphragm and the abdominal muscles in deep abdominal breathing gives to the abdominal contents the best kind of churning, or massage.

Deep breathing is best practiced in the open air. The clothing should be loose, so as to give full play to the lungs. One may begin breathing in slowly until the lungs seem to be full, then hold the breath for a moment and take in another breath. In exhaling, the breath should pass out quietly until the lungs seem to be empty; then another breath if possible. One would in this way take three or four breaths in a minute. The exercise calls into play some of the lung cells that are seldom used. Another method is to breathe with little inspirations, say four, then hold the breath a moment, then four more little inspirations, then hold the breath again for a moment, and continue this way until not another inspiration can be taken; then after holding the full inspiration for a few moments,

breathe out in little puffs, four at a time, followed by a pause, until the last possible breath is driven from the lungs. A few breaths like this will send the blood tingling through the veins, and incidentally the abdominal organs will receive a very efficient massage, or manipulation.

The rapid alternate compression of diaphragm and abdominal muscles without breathing, so as to move the abdominal wall rapidly forward and back, is a most effective measure, and can be taken almost anywhere several times a day.

Panting

Another excellent exercise is "panting;" that is, with mouth open, take short, rapid, forcible breaths, say about two hundred a minute. This is a fine exercise for the diaphragm, and a good massage movement for the abdominal organs, encouraging the flow of bile, which is an intestinal lubricant.

The accompanying illustrations of wand exercises are self-explanatory. The movements illustrated are all excellent for the development of the abdominal muscles, as is also the exercise pictured on this page, which consists in alternately raising and lowering the body by means of the arm muscles.

The final article of this series will discuss the use of massage, electricity, mental therapeutics, and laxatives in the relief of constipation. As there has been a desire expressed by readers of the series to have the whole in a convenient booklet, arrangements are being made to publish such a booklet on Constipation, to be used as a premium to "Life and Health."

HOW NOT TO TRAIN A CHILD

HELEN DODS, R. N.

This is the latter portion of an article, "The Blessed Lesson of Obedience," by Miss Dods, which appeared in *The Nurse* (Jamestown, N. Y.), June, 1916. The first portion appeared in the October issue of LIFE AND HEALTH.

IT is a great pity that many mothers can do less with their children than can some one outside the family. The mother, more than any other person, ought to have such an understanding as will impel her child to "love, honor, and obey" her. In the home, the influence is continuous, and if it is lacking there, no outside influence can ever quite make up for it.

Two sisters lived with another sister and her children. The children were inclined to be disobedient, except when with one of the aunts, who had an excellent influence over them. One day this aunt went to the door and asked one of the nephews, who was playing in the yard, to come into the house. To her surprise he paid no attention whatever. When she spoke again, he looked up quickly and ran to her at once, saying, "Oh, I beg your pardon, Aunt Minnie; but honestly, I thought it was mother or Aunt Emma calling me!"

What Dr. Montessori calls "disciplined liberty" is a point to emphasize. The more obedient your child is, the more you can trust him, and the more you should do so. Also, every child is entitled to childhood — much disobedience comes through restraint. Therefore, to use an expressive slang term, it is "up to you" to see that your obedient child has all the fun he is entitled to. The more you sympathize with him in his fun, and the more you join with him, the better comrades you will be.

As a matter of fact, there is no harm whatever in allowing a child to know that his very habit of obedience brings privileges.

There is something very fine in those two words, "disciplined liberty." It follows one all through life. If we are disciplined in good habits of eating, sleeping, and right living, good health is the liberty we enjoy. If we are disciplined to control temper and worries, our liberty is health, serenity, and poise.

There is one bad habit of which I want particularly to speak, and that is the habit of whining and teasing, for it does make a child so unattractive to other people and so unhappy himself. If children were never to have anything for which they whine or tease, the habit would soon be broken.

May I tell you of a personal experience with one of my children? This case is extreme, but in one form or another is still the sort of thing we see every day.

A number of years ago I started a little girl in life, and left her at the age of two months with well-formed habits of eating, sleeping, and temper. Her parents were most anxious to do well with her, and were intelligent and zealous in their efforts.

Everything went beautifully through the routine period of the baby's life, but when the child developed into an active member of the household, the parents failed utterly. Somewhere along the way, the child got the upper hand, and almost before they knew it they found themselves unable to control her.

One Sunday, when she was about eighteen months old, I dined with the family. On Sundays, Molly was allowed to sit in her high chair by her father's side at dinner, just because it was the only day in the week he saw much of her.

Here is the monologue of the father at that Sunday dinner. He is a hard-headed business man, not a namby-pamby, but this shows the sort of thing they had unconsciously drifted into.

We had started dinner when some one asked the father a question about the morning sermon. This was the result: —

"Oh, yes, it was a fine sermon. His text was — (Yes, Molly, what is it you want? Oh, I see; you want the napkin ring! Well, here it is, only you mustn't drop it on the floor, because father won't pick it off the floor.) Yes, a very good sermon. I liked particularly what he said about — (No, no. You mustn't drop it on the floor. There! you mustn't drop it again, because father won't pick it up again. Won't Molly take just a taste of father's soup? Such *good* soup! Well, never mind, you needn't take it. There, let father dry her tears. Now, Molly, you must *not* throw that napkin ring on the floor again. This is the last time I shall pick it up today. If you drop it again, you will just have to cry. There, now you may just cry, for that is *very* naughty. Oh, here, here, never mind! Here's a spoon — here's a pretty spoon for Molly. Oh, doesn't Molly want the spoon? Well, here's the napkin ring. Molly! Father says you must not drop that napkin ring, not another once, *not another once!* Here's a little sugar. Oh, yes, mother, a little sugar won't hurt her. There, that's what she wanted — didn't I tell you?) Speaking of that sermon, it seems to me Dr. Blank overreached himself just a little when he claimed — (Now, Molly, this is the last time I shall pick up that napkin ring. Oh, here comes the big turkey! What does the big turkey gobbler say? Can't Molly tell father what the big turkey gobbler says? No? Well, don't cry about it. Father will give Molly a nice piece of the turkey gobbler. Now, here, Molly, just eat this for father. See, father eats it. It's goody good. Oh, yes, eat it, dear; it's good for Molly! Some more sugar? Now, mother, all the doctors say children should have some sweets. Here's a piece of sugar for Molly, but mother says, 'No more.' Now, here's the napkin ring. Molly, you must *not* hit father with the napkin ring. There, there, hit father if you want to! A little baby girl like that isn't old enough to know any better. [This last in an explanatory way to the rest of us.] Oh, but the table isn't the place for Molly's feet. Now, that's the place for Molly's feet,— right — down — there. No, I said not on the table, not — on — the — table, NOT — ON — THE — TABLE! Oh, well, it won't hurt the tablecloth any! Here's a little piece of sugar.)" And thus he went on from soup to dessert. It is needless to say that we never heard his opinion on Dr. Blank's orthodoxy.

When Molly was two and a half, her brother was expected, and I was with the mother for several weeks before his arrival. Things had gone from bad to worse. I found the household an absolute monarchy, ruled over by the smallest but most resolute despot in the world. I give you my word, if that family had been in the power of the Black Hand, they couldn't have been more afraid than they were of that little morsel of humanity. If they attempted to cross her in any way, she shrieked and yelled, and she always shrieked and yelled at every necessary performance — bathing, dressing, undressing, feeding. She refused all food, except white bread and now

and then a baked apple and small quantities of milk. She hung about her mother's skirts and whined and teased incessantly.

Her feeding times were evidenced by roars which issued from the nursery, where her mother, her nurse, the cook, and the waitress took turns in getting her to eat. They begged; they bribed; they ate half of her food themselves in trying to show her how good it was.

I was like Brer Rabbit, I "lay low" and watched proceedings. The entire household was so unanimous in believing her unamenable to discipline and in every way "impossible" that I almost grew to believe I had come up against the uncontrollable child.

She acted so very badly about eating that her mother actually had her examined by a specialist to see if there was anything wrong with her throat. Her constant fretting and lack of sufficient food told on her, and she looked what she was — an unhappy little girl. She was pale and thin and highly excitable.

Just one good habit of her babyhood had been retained. She would go to bed nicely; that is, she would roar lustily until she was put into bed, but once there, she would curl down and seem perfectly content to be left alone.

One day, after I had been in the house about three weeks, Molly struck consternation in her slaves by refusing to take her morning nap. Her mother begged and reasoned; she bribed; she even went so far as to spank, in a half-hearted way; but Molly refused to subside.

My own part in this was incidental, or shall I say accidental? I happened to be there at the psychological moment, of which we hear so much nowadays, and to me was given the opportunity of entering the arena with Molly.

What I did the father or mother might have done, but they were so far afield that they were thoroughly afraid of themselves and of Molly. They seldom dared give even the slightest command, and when they did, there was that in their tones which indicated that they did not expect to be obeyed. Molly knew this, and they knew that Molly knew it. During the weeks I had been there, I had been impressed with the utter slavery of the family, but still more with the pity of it for Molly, who, through her own unbridled wilfulness, was losing the happiness which should have filled every day of her life. My sympathy was with Molly.

It took less than two minutes. No, I did not spank her, and she did not cry any more; she simply turned over and went to sleep. To this day, I cannot remember what I did. I do know that I spoke to her in so low a tone that her mother, who was listening at the door, could not hear me. I took both Molly's hands in mine, and told her she must mind her mother always, and must be quiet and go to sleep. It really was not anything I said; it was that Molly knew!

One of the trials of her life at that time was to have her leggings and mittens put on for out of doors. That afternoon, when it was time for her to go out, she came trudging to me with her arms full of these things, and dumping them in my lap, asked me to put them on. I could have wept for joy. Never before had I even attempted to put them on. When she stood there before me, looking at me expectantly, I knew she was won. She was simply saluting her superior officer.

From that time on, Molly and I were friends. By the end of two weeks you would not have known her. She took to good behavior as a duck takes to water. She acted as though she had come into her own. She obeyed, not only me, but her parents and nurse as well.

Obedience and good habits of living will prevent half the illness of children. Through obedience comes not only better health and greater happiness, but the poise which self-control and self-reliance can give. Obedience also promotes every child's chance for recovery from

illness. Teach your children to like your physician; never hold him up to them as a bogy, as is sometimes done. Teach your children to take medicine without protesting. An obedient child will not fuss over taking medicine or showing the tongue or having the nose or throat sprayed or the temperature taken. And to do all these things readily and quietly may some day mean the saving of a life. . . .

As far as the behavior of the child is concerned, however, more and more we hear discussed the self-evident fact that many American children — there are extremists who say *all* American children — are pert, forward, and disobedient. All the causes for this may be hard to determine, but through insight into many homes, the successes and failures seen at first hand, I am strongly of the opinion that the children lack reference and respect for the parents, and the parents lack ability to inspire these qualities. These are the causes of failures, just as the successes are due to the parents who hold the respect and love of their children through every age and stage of life. Do not be afraid your child will not love you so well; the result will be quite the contrary.

You will say, "I know that children differ." Ah, yes, they do; but not so greatly as one might believe. The normal, healthy child is never an impossible child; and while mothers will never be free from the problems regarding them, so long as children are children, there is a goodly list they may scratch off if their children are well grounded in obedience. Children have an indisputable right to an early training that will fit them, mentally, morally, and physically, to face life unflinchingly.

EFFECT OF IMPROPER SHOES

DEXTER D. ASHLEY, M. D.

Dr. Ashley's article appeared originally in the *New York Medical Journal*, under the title "The New Species in the Human Family." It was considered of sufficient value to appear in the annual bulletin on the health of school children, issued by the United States Bureau of Education. Though the article uses some medical terms, it will probably be understood by most readers.

THE learned biologist classifies man as a plantigrade — a sole walker. Fashion and the shoemaker have made him (especially the female) a digitigrade — a toe walker. . . .

Most transitions in nature are accomplished at a sacrifice in efficiency and for a time a proneness to deformity and disease of the part in question. We have an animal that should carry an upright body in standing and walking, as a plantigrade with a broad sole with three points of pressure, a tripod,— the heel, outer side of the foot, and ball of the foot,— when all too suddenly this tripod is superseded by placing the weight upon the anterior leg of the tripod — the anterior foot — and the assumption of the progression of the digitigrade. Can you wonder that nature takes her toll in discomfort, subjecting the individual to a list of infirmities never experienced by primitive man? The mere mention of some of these infirmities should deter the transgressor and warn him to lead the simple life if he would avoid pain, deformity, and impaired locomotion.

Digitigrade progression persisted in means weight bearing on the distal extremities of the metatarsal bones, with the phalanges projected upward at a sharp angle instead of extending forward. By continued stretching of the capsular ligaments the sensitive synovial ends of the bones are uncovered and exposed to pressure. In many cases the joint becomes permanently, partially, or totally luxated or dislocated, resulting in hammer toes or flexed toes of mild or severe degree, with corns on the toes and callosities in the anterior metatarsal arch (metatarsalgia, Morton's disease, or Morton's neuraglia), due to the crushing and thinning of the tissues and the giving way of the anterior arch, resulting in a broadening and thickening of the anterior part of the foot, with mild or severe hallux valgus, bunions, overriding toes, clubbed toes, hallux rigidus or still great toe. The X ray shows a thinned bone cortex, increased cancellous tissue, a dumb-bell atrophy of the proximal phalanx, distorted joint surfaces, and bent bones. The great mass of muscles on the plantar surface — five layers of plantar flexors built into the arch — are almost functionless. Withered by disuse, crushed by braces and high, unyielding arches built in the shoes, we have seemingly lost track of these muscles in our mad scramble to brace, prop, and support the foot while walking on our toes. There is always a loss of the muscular control which is necessary to an elastic progression, ability to maintain an upright position and a good carriage, and strength to succeed in this strenuous life.

The entire anatomy of the part is affected. Weak ankles, loss of balance, fallen longitudinal arch, weak foot,

strained foot, sprained foot, sensitive, painful foot, flat foot, rigid foot, elongated foot, pronated foot, abducted foot, and valgus foot are some of the terms designating the ills we bear and the price we pay for unphysiological walking and standing. These conditions are accompanied by swollen, puffy ankles, with referred pains in calf, knee, thigh, and back. Frequently there are severe intermittent cramps, preceded by numbness of the toes and a burning sensation referred to the anterior foot. There may be severe pain, so persistent as to break the spirit and constitution, make life a burden, and render the sufferer nervous and irritable to a degree.

The digitigrade progression is conducive to sprained ankles and broken bones. The tendo Achillis becomes permanently shortened, preventing the normal range of ankle motion and necessitating a pronated position of the foot, valgus great toe, and bunion, due to the unphysiological body thrust imparted to the foot. When standing in low heels or bare feet, these people often complain of a sensation of falling backward.

While bearing the discomfort of these diseases, what wonder that this digitigrade of the genus homo is sometimes cross or has nervous prostration? This individual is suffering with weakened, inefficient feet, deformed from long wearing of viciously planned shoes. If this toe walker stands little and walks less and is given a very high heel and pointed toe, wedging the toes forward and the arch ends nearer together, the strain upon the arch muscles and ligaments is relieved and the pain alleviated at the expense of the anterior foot. The result can only mean more deformity, more weakness, dependence upon the energy and endeavor of others. If a turn of the wheel of fortune should at any time call upon such a dependent to be a worker, to sustain herself or others, she would be found to be a miserable cripple because of her abused feet.

That walking with an elastic step is the most invigorating exercise that can be indulged in by old and young is almost an adage — a recreation that is impossible of indulgence after wearing improper shoes, as practiced by a large proportion of our civilized population. The old European custom of making long tramps afield, along paths through woods and over hills, with friends and family, is hardly known in this country, the dusty or muddy roads offering to the pedestrian the only and uninviting avenue to the country. When we are there, we find no paths leading to the woods. We are a riding nation. Walking for exercise cannot find favor with our stilted digitigrade, or be performed with the joy of living by one whose toes have lost all power.

TEN MEDICAL MAXIMS

A. B. OLSEN, M. D., D. P. H.

Dr. Olsen writes from England, where nation and individual have accepted the task of sacrificing self for what they believe to be a righteous cause. This sacrifice on the part of the individual involves the most rigid economy of material means, of time, and of health. Britons who have never known what it is to economize are learning now. The lesson is one we Americans need to learn, and may we learn it without being forced to it by the necessities of a devastating war!

EFFICIENCY is the watchword of the hour, but to get fit and to keep fit requires special effort and training. The fresh recruit receives a course of physical training to harden his muscles, fortify his powers of resistance, and inure him to the hardships of the soldier's life. Those who remain behind are the working soldiers, and they, too, require training for the active life that they are now called upon to lead.

Health is very largely a matter of cultivation, and a man or woman grows strength by using the muscles. Workers who are obliged to lead a sedentary life are especially in need of physical culture, and to keep fit they should spend at least five minutes morning and evening doing deep breathing and arm exercises, and also walk three miles each day.

The maintenance of sound health depends very much upon the care given to the human furnace. From the food we obtain both energy for labor and building material for the repair of the ordinary wear and tear of life. The blood is a liquid fuel prepared directly from the food we eat. In selecting a diet, the requirements of the body should be studied, rather than the demands of a fickle and too often perverted appetite, and the food should be eaten with the view to better health and greater efficiency. For energy and strength there is no diet superior to the natural food of man as found in fruits, nuts, cereals, pulses, vegetables, and the products of the dairy.

One important objection to the use of animal flesh is the presence of decom position, which sets in as soon as the animal is killed, and produces certain organic extractives, products of putrefaction, all of which are more or less harmful. Meat eating is a habit and a fashion, and there is ample evidence that the active laborer as well as the sedentary brain worker can live at least equally well, and we believe better, on a nonflesh diet.

Sufficient time should be taken to chew the food well before turning it into the stomach. Mastication not only assists digestion, but also gives necessary exercise to the teeth and helps to maintain them in a sound condition. Horace Fletcher has demonstrated that efficient mastication of food is an important factor in developing strength and endurance.

The meals, which should not number more than three, should be taken at regular intervals, and no one should allow himself to indulge in titbits or any kind of food between meals. Sweets, pastries, cakes, most savories, and all fancy foods are equally expensive to the purse and to health. The more time that is spent in mixing and compounding a dish in the kitchen, the more trouble it will give to the digestive organs.

A well-balanced diet includes all the food elements. Those having to do with the preparation of food should become familiar with food values and learn the difference between the nourishing properties of various articles of diet. For example, the potato is the most valuable of vegetables, and is rich in heat and energy-producing food, while the egg is rich in protein matter, useful for the building and repair of the tissues. The average adult requires from fourteen to sixteen ounces of starchy foods, includ-

ing sugar; one and one-half to two ounces of fat or oil; and two to three ounces of protein each day. Fresh salads, which should be eaten daily, are valuable chiefly for their important salts.

Plain fare makes for health and long life. Many courses make many complaints. A small variety of food at the same meal gives less temptation to overeating. With most people the mixing of fresh fruit with cooked vegetables causes indigestion. Neither does milk go well with either vegetables or fruit, but rather with porridges, breads, and other cereal preparations.

The old proverb that cleanliness is next to godliness sums up the vital importance of sanitation and personal hygiene. Sanitation means cleanliness. Fresh air is clean air. Therefore keep the windows open. Adam's ale — pure water — and the freshly prepared juice of fruits are clean drinks, but alcohol is a poison. Strict cleanliness debars animal flesh because it contains a varying amount of filth in the form of waste matter. Keep the mouth, teeth, and tongue clean, and never handle food without first washing the hands. Flies are not tolerated in a clean home.

Finally, cultivate a spirit of faith, hopefulness, and courage, and endeavor to radiate sunshine and good cheer. Keep smiling, and act as if you were the living exponent of the joyous life.

HOME COOKING SCHOOL

YEAST BREAD, OR FERMENTED BREAD (CONTINUED)

GEORGE E. CORNFORTH

THE article last month gave instruction in the fundamentals of bread making, and also directions for making a loaf of white bread. A knowledge of these principles will be a great help to any one who wishes to make use of any of the following recipes.

One Loaf of Whole-Wheat Bread

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

Follow the directions for making white bread, given in the October LIFE AND HEALTH.

One Loaf of Graham Bread

This recipe is to be used with a Graham flour or wheat meal that is made by simply grinding whole wheat, nothing being removed from or added to the meal after grinding. This recipe will not make good bread with ordinary Graham flour.

1 pound Graham flour that is a real wheat meal.
1 cup lukewarm water
1 cake compressed yeast
1½ teaspoons salt
3 tablespoons molasses
3 tablespoons oil

Sift the flour to make it light and break up the lumps. Do not throw away the bran. This bread is to contain *all* the wheat, including the bran and germ of the wheat. Look over the bran that remains in the sifter, to be sure that there is nothing in it that should not go into the bread. Then mix the bran with the flour that has been sifted. Crumble the yeast cake into the lukewarm water, and stir it till it is completely dissolved. Then stir in the salt, molasses, and oil. Turn this mixture into the flour, and stir it to a dough with a spoon. It should be too soft to knead. Cover it tightly with a tin cover or several thicknesses of cloth. Set it in a warm place to rise till a hole will sink in the dough when it is struck with the backs of the fingers. Then take the dough out on a floured board, and mold it into a hard roll according to the instructions given in the directions for making white bread. Place the roll in an oiled bread tin and set it in a warm place to rise, covered with cloth. When the top of the loaf is a little below the top of the pan, it is ready to put into the oven. The oven should not be quite so hot for baking this bread as for baking white bread, because this bread is more apt to scorch on account of the molasses it contains.

To make this bread without molasses use the following recipe: —

1 pound Graham flour that is real wheat meal
1 cup and 2 tablespoons lukewarm water
1 cake compressed yeast
1½ teaspoons salt
3 tablespoons oil
3 teaspoons sugar

If ordinary Graham flour must be used in making Graham bread, follow the recipe for making white bread, using one-half pound white flour and one-half pound Graham flour, or a smaller proportion of Graham is sometimes used. Sift the Graham flour, but do not throw away the bran; use the bran in the bread.

The preceding recipes have been given for beginners to practice on. I will now give recipes for quantities of bread that might usually be made at home.

White Bread (4 loaves)

4 pounds bread flour
4¼ cups (or 1 quart and ¼ cup) lukewarm water (when more than one cup of liquid is to be measured, it is more convenient to use a quart measure)
2 cakes compressed yeast
2 tablespoons salt
¼ cup sugar
¾ cup oil

Proceed according to the recipe for making one loaf of white bread. This recipe contains a smaller proportion of yeast, and it will take longer to make the bread than is required when using the recipe for one loaf. A still smaller quantity of yeast may be used, one cake, for instance; but the less yeast used, the longer it will take to make the bread. When a small quantity of yeast is used, the bread is sometimes set in the evening. But this makes the process more uncertain on account of the difficulty of arranging the amount of yeast, the temperature of the water used, and the temperature of the place in which it is set to rise, so that the dough will be risen enough, but not too much, by morning. As a general rule, the best bread is produced by using more yeast and a shorter time.

If it is desired to use less yeast and set the bread at night, what is called a "sponge" may be made at night, consisting of the water, yeast dissolved in the water, and two thirds of the flour. This is thoroughly beaten together and set to rise in a place that is not quite so warm as would be suitable when using a quicker process. In the morning the remaining ingredients are mixed into the sponge to make a dough, and from this time on the process is the same as when a dough is mixed at first.

These recipes call for a larger proportion of oil than is generally used in making bread, the quantity being that which is used in making buns. This is at the suggestion of Dr. Lauretta Kress, and it makes a bread that is very tender, especially the crust, and unlike baker's bread. This would be a good bread for people who do not care to use butter.

If it is desired that the bread should be lighter, and in this respect more like baker's bread, when the dough has risen the first time punch it down in the middle and fold in the sides so as to make a hard ball. Turn the dough over, and allow it to rise a second time. When it has risen the second time, mold it into loaves.

Whole-Wheat Bread (4 Loaves)

4 pounds whole-wheat flour
1¼ quarts lukewarm water
2 cakes yeast
2 tablespoons salt
¼ cup sugar
¾ cup oil

Proceed according to the directions for making white bread.

Walnut Bread

Use the recipe for whole-wheat bread, putting into the dough when it is first mixed (that is, mixing them with the flour before the liquid is added to it) two or three cups walnut meats, not chopped.

Fruit Bread

Use the recipe for whole-wheat bread, mixing into the dough when it is first mixed two cups seedless raisins that have been washed and dried.

Graham Bread (4 loaves)

4 pounds Graham flour that is a real wheat meal
1 quart lukewarm water
2 cakes yeast
2 tablespoons salt
½ cup molasses
¾ cup oil

Proceed according to the recipe for making one loaf of Graham bread. With the same proportion of yeast it requires a shorter time to make Graham bread than white because the dough is softer, and even when the dough is equally stiff, Graham or whole-wheat bread rises more rapidly than white bread.

Date Graham Bread

When the Graham bread dough is ready to mold into loaves, divide it into four pieces; flatten each piece into a sheet about three-fourths inch thick. Lay stoned dates over the sheet, roll up, put into tins, let rise, and bake.

Rye Bread

2½ pounds rye flour
¾ pound white bread flour
3½ cups lukewarm water
1 cake compressed yeast
1 tablespoon salt
½ cup oil

Mix the rye flour and white flour. Dissolve the yeast in the water. Add the salt and oil to the water. Turn this liquid mixture into the flour. Mix to a dough. Knead till smooth. Put the dough into an oiled bowl and set it in a warm place to rise. When risen, punch it

down, and work in the sides to form a hard ball. Turn it over and let it rise again. Then take it out on a bread board, divide it into three pieces, and with the hands roll each piece into a roll about one and one-fourth inches in diameter. Lay a towel on a baking pan, and sprinkle flour over it. Lay the rolls about one-half inch apart on this floured towel, drawing the towel up between the rolls so they will not stick together. When about double in size, carefully roll the loaves off from the towel onto an oiled baking pan. With a sharp knife cut three diagonal slits in each roll, brush them with water, and put them into the oven to bake. One-half tablespoon caraway seed may be added to this dough, if desired.

Rye Meal Bread (2 Loaves)

½ pound rye *meal* (not rye *flour*)
1½ pounds white bread flour
2 cups and 2 tablespoons lukewarm water
1 cake compressed yeast
1 tablespoon salt
2 tablespoons sugar
⅓ cup cooking oil

Sift the rye meal. Do not throw away the bran, but after looking it over, put it with that which is sifted. Sift the white flour. Mix the meal and bran and flour together. Dissolve the yeast in the water, add the salt, sugar, and oil, and mix this liquid with the flour. Knead till the dough is smooth. Then proceed as in making white bread.

Pumpernickel, or German Black Bread (Rye. 1 Loaf)

Pumpernickel is a bread that is much enjoyed by the German people. I enjoy it myself when it is made by the accompanying recipe, and that is the reason I am giving it, having never seen a recipe for this bread in a cookbook or magazine. As made by the Germans, the bread is sour in taste. This sour taste is due to the fact that instead of using yeast in making the bread, a little dough left over each time is used in starting the next batch of bread. Of course this dough becomes sour, the fermentation proceeding so far in the left-over dough as to produce acetic acid,[1] the acid of vinegar. This sour flavor is enjoyed by those who like this bread; but as we do not recommend the use of vinegar, the recipe I am giving calls for yeast instead of the left-over dough to start the bread, and the bread is free from acetic acid.

First make a setting as follows: —

½ cup boiling water
1 ounce white bread flour (¼ cup well shaken down)
½ yeast cake dissolved in
¼ cup warm water

Put the flour into a one-quart sauce pan or double boiler. Pour the boiling water over it, and stir briskly with a batter whip till the mixture is free from lumps. Boil one minute over the fire, then cool till lukewarm. Dissolve the yeast cake in the one-quarter cup of water, and mix it thoroughly with the flour-and-water mixture. Allow this to stand in a warm place for four or five hours, then add to it the following ingredients to make a dough: —

¾ cup lukewarm water
1 teaspoon salt
3 tablespoons oil
12 ounces rye flour
5 ounces rye meal (use all the meal, including the bran)

Knead till the dough is smooth. Set it in a warm place to rise. When light, take the dough out onto a bread board, and form it into a roll that will fit into a bread pan. Set it in a warm place to rise till it responds weakly to the touch. Then bake it.

This bread will not rise nearly so much as the white bread. It will scarcely double its bulk. It makes such a small loaf that it is better to bake it in a pan about three fourths the size of

(*Concluded on page 525*)

[1] The editor is of the opinion that lactic acid is formed. At any rate some who have difficulty with yeast breads are able to use pumpernickel without difficulty.

RYE BREAD RISING RYE BREAD BAKED

The rolls are longer than they seem in the picture.

RECIPES

GEORGE E. CORNFORTH

FOR those who would like to try something else besides the bread recipes, we are giving a few of a general nature.

Barley and Vegetable Soup

½ cup Lima beans
3 tablespoons rice
1½ tablespoons pearl barley
⅓ cup chopped carrots
¼ cup chopped onion
1 small potato, chopped
2 quarts water
2 tablespoons flour
1 tablespoon oil
1 tablespoon salt

Wash the beans, rice, and barley, and put them to cook in the cold water. After they have cooked slowly for three and one-half hours, add the chopped vegetables, and continue the cooking for one and one-half hours longer. Cook the flour in the oil till it turns brown, then stir about two cups of the soup broth into it, then stir it into the soup. Add hot water to the soup to replace that which has boiled away, and the salt.

Macedoine of Fruit in Jelly

½ ounce vegetable gelatin, dissolved in
¾ cup boiling water
1-6 cup lemon juice (1 large lemon)
⅔ cup sugar
1 cup cold water
1-6 teaspoon salt
1-6 cup diced banana
1-6 cup diced apple
1-6 cup diced peaches
1-6 cup stoned canned cherries
2 tablespoons cherry juice
1-6 cup diced orange
(That is, one cup of a mixture of these fruits cut into dice)
1-6 cup walnut meats (not chopped)
Pineapple flavor
Wintergreen flavor
Red coloring
A few grains salt

Put the gelatin to soak in one quart of hot (not boiling) water. After it has soaked three fourths of an hour, turn it into a fine strainer to drain off the water, and put it to soak in a second quart of hot water. After twenty minutes' soaking, drain off this water and put the gelatin to soak in a third quart of hot water. Turn it into a strainer to drain off this third water; then put it to cook in the two-thirds cup of boiling water. As soon as it dissolves, turn it through a strainer into the remaining ingredients, which have been mixed together. Stir it enough to be sure to get the gelatin distributed throughout the mixture, then turn it into cups wet with cold water. Use enough pineapple and wintergreen flavoring to give a delicate flavor, and enough red coloring to give a pretty pink color. When cold, turn from the cups, and serve with —

Lemon Custard

1 pint milk
½ cup sugar
2 teaspoons cornstarch
1 egg
Grated yellow part of the rind of one lemon
1-6 teaspoon salt

Heat the milk in a double boiler. Mix the sugar and cornstarch; beat the egg, and stir it into the mixed sugar and cornstarch; stir some of the hot milk into this mixture, then stir this mixture into the hot milk. Cook, stirring constantly, till the mixture becomes creamy or coats a silver spoon when dipped into it. Remove the inner part of the double boiler and set it into cold water. Add the lemon rind and salt.

Walnut Loaf

2 cups milk
2 eggs
1½ cups nicely browned zwieback crumbs
¾ cup chopped walnuts
1 teaspoon salt

Stir the crumbs into the milk, and allow it to stand till the crumbs soak up the milk. Beat the eggs and add them, then stir in the nuts and salt. Pour into an oiled bread tin. Bake till set. Serve with —

Walnut Gravy

1 cup milk
1 cup water
¾ teaspoon salt
¼ cup flour
½ cup chopped walnuts

Heat the milk and water to boiling in a double boiler. Stir the flour smooth with a little cold water, and stir it into the hot liquid. Allow it to cook five minutes. Stir in the nuts and salt.

YEAST BREAD, OR FERMENTED BREAD (CONTINUED)

(*Concluded from page 524*)

the pan used for the other recipes. This bread is hard, and should be sliced very thin to serve. It gives one "something to chew," and therefore is wholesome, and many people find it very palatable. Rye being more laxative than other cereals, this bread can be recommended for its laxative effect.

EDITORIAL

THE CONTROL OF INFANTILE PARALYSIS

NOT since the time when the news of the presence of yellow fever in New Orleans or Mobile or Memphis sent a shudder through the country have the people been so thoroughly aroused regarding an epidemic disease as they have been regarding the present epidemic of infantile paralysis. The excitement in some places has amounted to a veritable hysteria in which physicians and health officers have been as much involved as the laity. Some of the measures adopted to control the epidemic will doubtless appear as ludicrously fantastic, when we know how the disease is actually transmitted, as do some of the attempts made a generation ago to control yellow fever.

In view of the fact that infantile paralysis does not appear to be so communicable, and does not, on the whole, take such a toll of life, as some of the better-known diseases of childhood, such as scarlatina, diphtheria, and measles, it is not immediately apparent why this epidemic should be accompanied by such a furor of excitement. The reasons may be in part: (1) The publicity given to the epidemic through the activity of the United States Public Health Service, and the sensational manner in which the subject was treated by some of the daily newspapers; (2) the fact that we know so little regarding the mode of communication, and less regarding efficient methods of prevention and cure of the disease; and (3) the apparent tendency of the disease to jump great distances.

That the unfamiliar is more terrifying than the familiar is evidenced in our attitude toward leprosy, a disease which, in this country at least, is very feebly communicable. Tuberculosis is, to say the least, a hundred times as communicable as leprosy, and yet we may have tuberculosis patients all around us without much alarm; but let it be known that there is a leper in the town, and there is a panic immediately. Even health officials go to ridiculous extremes in their efforts to prevent the spread of this comparatively rare disease.[1] Because it is rare, we fear it. In India, where thousands have the disease, and where evidently it is more communicable than here, lepers mingle almost freely with those who are healthy. So we think little of the epidemics of scarlet fever, measles, diphtheria, and other diseases, each of which takes a much larger toll of life than infantile paralysis, from the mere fact that they have been so long with us that they have lost their terror.

This article is not written with the intent to belittle the danger from the present epidemic. It is serious enough; but losing perspective and becoming hysterical does nothing toward the control of the disease.

A disease that takes one of a household, and skips several blocks or to the next town for the next victim, is not to be controlled by any of the means now

[1] An intelligent and very efficient health officer located not a thousand miles from the national capital, once staged a quarantine against an unfortunate leper which lacked nothing in dramatic interest, but which to the poor leper amounted to persecution. And yet this health officer can scarcely be blamed. Had he done less, his official head would doubtless have paid the penalty in response to the demands of an infuriated populace.

being used. The quarantines and the certificates of health may satisfy the health officers, but the epidemic goes merrily on.

Some may wonder why the doctors and other learned men are not making earnest efforts to ferret out the secret of this dread disease. They are. Probably there never has been so much concentrated effort applied to the control of an epidemic as is being devoted to the present epidemic. Nothing that national, State, and municipal health boards, backed by government appropriations and assisted by private institutions such as the Rockefeller Foundation, can do toward the eradication of the disease is being omitted. Scientists are working overtime on the problem; and sooner or later we may have the secret which will rob infantile paralysis of its terror.

The decades are few since the very name "yellow fever" was a terror. Now that it is so well known that the disease can be absolutely controlled, the presence of a case in a city is the signal, not for a reign of terror, but for a campaign of mosquito extermination.

The control of infantile paralysis may depend on some measure just as simple.

H. Heald.

TURKISH SOLDIERS

View taken on board a Bosporus steamer.

Infantile Paralysis Transmission an Obscure Problem

One thing in the transmission of infantile paralysis which makes it extremely difficult to control is the quite evident fact that the disease is transmitted by healthy "carriers." Inasmuch as the germ has not been isolated, it is impossible to tell who may be carriers except by long and expensive animal inoculations. But it is probable that any one coming in contact with a patient may carry the disease in his nasal secretions, to be passed on from one carrier to another until they reach some susceptible person, usually a child. It would appear that the number of persons susceptible to the disease in a severe form must be comparatively small, else the epidemics would be far more serious than they are.

In some ways the disease resembles the country-borne diseases, like typhoid and malaria; for it often has much greater comparative prevalence in sparsely settled communities than in large cities, indicating that there may be some important transmitting agent peculiar to the country. At one time it was believed that the disease might be transmitted by the stable fly, and there were some reasons for so thinking, but this supposition has been given up.

Among the problems for the sanitarian to solve is this one: "Why are there proportionately more cases of infantile paralysis in thinly settled regions, where the chances for exposure are few, than in cities, where the chances for exposure are many?" Notwithstanding this rural prevalence of the disease, it is said that the best results are obtained by quarantine and isolation. Is it a fact that the disease in the cities is transmitted by means of contacts with carriers and in the country by means of some insect? May it be transmitted by some of the domestic animals? In some epidemics it has been noted that there was a coincident epidemic of limberneck (paralysis of the neck) among the fowls. The theory of animal transmission, however, is not accepted, for the reason that it has been impossible to transmit the disease to any of the domestic animals except the rabbit, and then only to a limited degree.

* * *

Clinical Description of Infantile Paralysis

It should be stated in the first place that the name "infantile paralysis," by which the disease is most generally known to the public, is somewhat misleading, as many of the cases are not perceptibly paralyzed. The name "poliomyelitis," although somewhat unfamiliar and terrifying, is more descriptive of the disease, indicating that it is a degeneration of the spinal cord.

The abortive attack of poliomyelitis was thus described by Dr. Henry Koplik in a discussion before the New York Academy of Medicine: —

"A child of five years is attacked with a headache; slight malaise; an attack of vomiting lasting five days; intense pain in both lower extremities, radiating to the soles of the feet, worse at night; slight pain in the nape of the neck; lassitude; cerebellar gait on walking [something like a drunken person]; increased reflexes in the lower extremities; and a rectal temperature above 100.5° F. In ten days the pains have disappeared, and the child is well and wants to go out to play. The abortive cases present prodromes such as headache, weakness, diminished reflexes, and pain in the nape of the neck, with or without vomiting and fever, and

do not present paralysis, and the patient recovers."

Of the more severe type of the disease Koplik says: —

"The patient has an attack of vomiting and slight fever, and within twenty-four hours the mother observes that the child cannot move one or the other extremity. In these forms there may be no fever, but it is possible that in giving the history the mother may have overlooked the symptoms of fever, malaise, and such indisposition as peevishness, which may have preceded by a few days the paralysis. In other cases the paralysis appears gradually. Pain may continue to be quite severe, especially when the extremities are moved. The paralysis may spread, and involve not only the lower extremities but also the upper extremities, the muscles of the back, respiratory muscles of the thorax, and possibly the muscles of the abdomen. . . .

"The meningitic form of paralysis runs its course with cerebral symptoms. The child of three is taken with vomiting for forty-eight hours, followed by rigidity of the neck, with pain on flexion of the head," etc.

The symptoms from here on may vary, the permanent effects being a paralysis of the facial muscles, cross-eye, inflammation of the optic nerve, etc.

Dr. George Draper describing the disease, says: —

"As our knowledge has grown, it has become increasingly evident that we are dealing with a general infection that presents a great variety of manifestations. The cases that escape paralysis are just as important from the standpoint of the spread of infection as the paralyzed cases, and infinitely more dangerous. . . . It has been said that it is extremely rare to see more than one case of paralysis in a family; but a very careful investigation where there has been one case in a family frequently shows that another child has had symptoms, as fever, malaise, and vomiting."

Draper divides poliomyelitis into five classes: (1) Gastrointestinal; (2) respiratory, with cough, lung signs, pains in the joints and bones; (3) febrile; (4) simulating a brain or meningitis attack; (5) paralytic cases. In the first three classes of cases there may be transient slight paralysis.

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An Important Conference on Infantile Paralysis

A CONFERENCE of the health officers and representatives of the United States Public Health Service which met in Washington, August 17 and 18, adopted rules intended to control the spread of infantile paralysis.

This conference proposed that the epidemic situation be placed in the hands of the Public Health Service, which will undertake an investigation of infected areas, and control the movement of persons under sixteen years of age from infected areas to other States, issuing certificates for travelers based on certificates from private physicians. The report disapproved of quarantine by one State against another or by one community in a State against another community.

The report also recommends that all cases of infantile paralysis be reported immediately to local and State health officers, and by the latter to the Public Health Service; that persons of sixteen or under moving from an infected area be kept under observation for two weeks or more; that persons ill with the disease be isolated for six weeks from date of onset; that persons suffering from the disease, and their attendants, be rigidly isolated in properly screened rooms, all body excretions to be disinfected at the bedside. Preference was expressed for removal of patients to a hospital rather than isolation in the home.

It was further recommended that in case of death from infantile paralysis the funeral be strictly private; that where the disease is unusually prevalent, the assemblage of children in public places be prohibited; and that schools be not opened without thorough medical supervision. In view of the fact that there are unknown carriers of the disease, warning was given against contamination by human excretions, against the fly nuisance, and against the common drinking cup.

It was also advised that a general educational campaign for cleanliness and sanitation be conducted, particularly as regards personal hygiene, and especially hygiene of the mouth and nose.

The report predicts that there will likely be epidemics of infantile paralysis next year in States that escaped this

epidemic, and advises that the measures recommended be continued in operation until the disease has subsided to or below its usual level.

The Value of Diet in the Treatment of Pellagra

PASSED ASSISTANT SURGEON RIDLON reports[1] observations on fifty-eight pellagrins who came under treatment in the United States marine hospital at Savannah, Ga., from February, 1914, to September, 1915.

Following the idea embodied in Goldberger's report,[2] the observers placed the patients on " a diet relatively rich in the animal and leguminous protein component and relatively poor in the nonleguminous vegetable component."

Eighteen of the patients were given drugs, including arsenic, iron, quinine, strychnine, potassium iodide, etc., which have been highly lauded as useful in pellagra, and nine were given placebos, that is make-believe, or inert medicine. Ridlon records his conclusion in the following language: —

" There is no evidence that any of these drugs exerted any appreciable effect upon the duration of the disease, and their use did not lead to any very marked improvement in individual symptoms."

For the rash they found " normal salt solution [approximately a teaspoonful of salt to a pint of water] suitable as a moist dressing, and an ointment containing bismuth subnitrate and vaseline useful to soften a roughened skin area."

In his conclusion the author says: —

"A study of these cases allows us to conclude that in pellagra the dietetic treatment is of paramount importance, and that in this series success has followed the use of a diet in which the animal and leguminous protein component has been relatively increased and the nonleguminous vegetable component relatively decreased."

[1] " Pellagra. The Value of the Dietary Treatment of the Disease," by J. R. Ridlon, Passed Assistant Surgeon, United States Public Health Service, in " Public Health Reports," July 28, 1916.

[2] That pellagra " is dependent on some yet undetermined fault in a diet in which the animal or leguminous protein component is disproportionately small and the nonleguminous vegetable component disproportionately large."

A Statistical Study of Appendicitis

IN his paper read at the Rochester meeting of the American Public Health Association,[1] Stoumann gives the results of a statistical analysis of mortality from appendicitis, from which he draws the following conclusions: —

" There is no evidence that the apparent increase of appendicitis mortality is caused by a greater frequency or virulence of the disease, whereas many facts indicate that this increase is simply caused by the shifting of deaths from other groups.

"Appendicitis is met with in all ages, from birth to extreme old age. It has its highest mortality in the age period of ten to fourteen years, but attains another high point in later life, for males in the sixties, for females in the seventies.

" No race or nationality is exempt from appendicitis; the mortality is about the same among Negroes as among white people. It is frequent also among the Japanese and Chinese.

"Appendicitis is much more frequent, especially in the younger ages, during the years of diarrhea epidemics. The annual fluctuations of appendicitis are closely connected with the prevalence of this disease.

" Appendicitis shows also a close connection with rheumatic fever.

" The mortality from appendicitis is, other things being equal, highest where mountains or long distances make transportation to hospitals difficult. This is most pronounced in middle life.

"Appendicitis is of about equal frequency in urban and rural communities. In cities it is more common in childhood and youth because of the higher frequency of diarrhea in cities; but on the other hand, the mortality is higher in rural districts during middle life because of the longer distances to hospitals.

" Appendicitis is most frequent in occupations with much sedentary work, probably because this favors constipation."

Unfortunately there is in all this no suggestion of why one person has an attack of appendicitis while another under apparently similar conditions escapes. Is appendicitis a sequel of pyorrhea or of infected tonsils? or is it favored by the presence of endamebas? or is a heavy meat diet a predisposing factor? Both constipation and diarrhea are mentioned as contributing factors, but in what way? The report, though enlightening, fails to tell us how to avoid appendicitis.

[1] "An Analysis of Appendicitis Statistics," by Knud Stoumann, of the Prudential Insurance Company of America, "American Journal of Public Health," July, 1916.

Foods, Drugs, and Longevity;
Some Thoughts on Their Relations

UNDER the above title Leroy D. Swingle, Ph. D., Department of Pharmacology, University of Utah, has an article in the *New York Medical Journal* of July 22, 1916, from which some excellent thoughts may be gleaned. For instance: —

"It is to be regretted that many doctors 'practice medicine,' in the primary sense of the term, when they should practice prophylaxis and therapeutics [that is, prevention and treatment]. The practice of medicine suggests the use of medicines (drugs) only, yet the physician must use not only drugs for the cure of disease, but among other things dietetics both for the cure and prevention of disease. We cannot believe that drugs are a panacea for human ills and the prevention of death, though many of the patent medicine advertisers often assert as much. It is hard to believe that the physician would be influenced by such advertisements; but nevertheless, from the frequent prescription of such drugs, we are led to conclude that an impression is made by the constant appearance of such assertions before their eyes. However, the modern doctor who has been trained in experimental pharmacology surely ought to escape any such influence."

Swingle is not a "drug nihilist." He believes in the proper use of drugs, but evidently he knows that drugs have their limitations and dangers, as the following will testify: —

"Although the drug may not produce a lesion or an apparent histological change in the tissues, which may completely destroy their function, and although it cannot introduce a new function in an organ, and thus upset the balance of the functions in the body, yet it may have harmful, remote effects as the result of increasing or diminishing certain functions. Many clear examples of such action may be cited, while other unknown slight effects may exist. Normally all the organs should balance each other in their functions. It would appear that the prolonged use of drugs, which, while bringing nearer to the normal the functions of a deranged organ, may render abnormal the functions of other organs and so upset the balance of the functions, may allow the barriers against death to be thrown down earlier than otherwise. Many of the active drugs — and those are the only ones that could possibly have any value — used so extensively in this age of experimental medicine are known to have such untoward effects. Do we appreciate or fully know the ultimate end of these effects? Yet if the function of the organ to be treated is of more vital importance than the function of the organ which is affected unfavorably, the treatment with the drug may result in a net benefit.

"But the treatment with drugs generally would not remove the cause of the derangement of the organ, and how much better it is to use a treatment that would strike at the cause of the abnormality without affecting the normal functions of the other organs! In some cases it is certain that dietetics is that other treatment. As investigation proceeds, it will doubtless reveal a direct or indirect relation between other pathological conditions and diet, so that the treatment of these conditions will become a natural one — dietetic. All will agree that drug therapeutics is not a natural treatment."

Then Swingle shows how atropin used in asthma, by paralyzing part of the nerves of the mechanism, is anything but a natural treatment, yet it relieves the paroxysms. He says: —

"In the absence of knowledge of anything better, it might be considered a rational treatment, but it is not a natural treatment. Such a treatment is one that would attack the cause, and not only remove the attack, but act as a prophylactic [preventive] against recurrence. . . . Fasting is held to be beneficial, and hence there may be causal relation between this disease and food conditions. If so, the natural treatment and prophylaxis would be proper regulation of the diet."

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We Swat Flies;
Why Not Headaches?

WHY is it not a good practice to "swat" a headache as soon as it manifests itself? There are multitudes of headache remedies that will give prompt relief. Is it not better to take a little medicine than to endure the nerve-racking experience of a throbbing head?

Certainly the most natural procedure and the one most commonly resorted to is to "take" something that will give prompt relief, and there are scores of such carried by the drug stores. But is it the wisest procedure? Let Dr. Tom A. Williams, well known in this country and in Europe as a specialist in nervous disorders, give the answer. He says:[1] —

"Headache, although always a sign of disordered health, is merely a symptom. It is very unwise to treat it by a mere suppression of the pain. This is just as irrational as it would be to paint over the crack in the girder of a bridge instead of repairing the part. It should be treated by removing the cause. Fortunately, the natural body processes often do this in a few hours, or after a night's sleep; but

[1] "The Aim and Purpose of Modern Clinical Neurology," by Tom A. Williams, M. B., C. M., Edin., of Washington, D. C., read before the Medical Society of Virginia at its annual meeting, Oct. 26-29, 1916.

the causes recur, and so does the headache. If only headache were the result, it would be less serious; but there is always gradual deterioration of the general health, not only on account of the strain resulting from the constancy of the pain, but by the operation of the causes themselves. These are generally complex, and difficult to unravel even with all the knowledge of an experienced physician. But the results are well worth the trouble, as will be demonstrated. . . .

"It is common to attribute headache to disordered digestion, especially as it may be dissipated after an aperient; but this is only a superficial view of a cause which lies deeper than the digestion itself.

"Women often regard headaches as a concomitant of the periodicity of their functions; and they conclude that gynecological attention should remove the headache. This, too, is a superficial view.

"Imperfect refraction of the eyes is often the first thing thought of where headaches are frequent. While it is true that the strain of overcoming a refractive error does not conduce to headache, and that glasses will prevent this in many instances, yet such strain does not cause headache in all cases, and even when it does, there is frequently a constitutional disturbance as well, which increases a person's susceptibility to the effects of the straining; so that even in these patients a general survey should be undertaken, as well as the examination of the eyes."

Dr. Williams in his illustrative cases relates one of a physician subject to a periodic headache, supposed to be due to eyestrain, and improved slightly by the use of glasses, which was finally cured by placing the patient on a standard diet containing a minimum of protein.

Such a method is not a hiding of symptoms, but a removal of the cause. All masking of symptoms by drugs is self-deception on the part of the patient.

The Bacillus Carrier and the Restaurant

RESTAURANTS, even those nickel-plated ones with plate-glass mirrors, inlaid mosaic floors, and marble walls, are potential spreaders of disease. Kendall[1] relates an instance where seventeen cases of typhoid fever in a department store were traced to a certain lunchroom, where these persons lunched. "An investigation of this lunchroom revealed the very significant fact that several cases of typhoid fever had developed among the employees; a waitress recently convalescent from typhoid was the probable source of infection."

Commenting on this incident, Kendall says: —

"The portal of entry of the typhoid bacillus is the mouth, to which it may be carried directly by infected fingers, and less directly in infected food, milk, or water. This explains the relation of the restaurant to the spread of typhoid.

"The typhoid bacillus leaves the body of the typhoid patient and the typhoid bacillus carrier in the feces, and less commonly in the urine. The hands of a typhoid carrier are exposed to direct infection from the feces or urine one or several times daily, and it requires little imagination to follow the organisms from the infected and imperfectly cleansed fingers of a cook or waitress to the mouth of the prospective victim. It would appear, therefore, that bacterially clean hands would be an extremely important factor to insist upon among the employees of a restaurant."

Germs are not afraid of plate glass and nickel trimmings and marble walls. Food which is not cooked after it is handled, as bread, pastries, fruit, lettuce, etc., is a potential carrier of infection.

Nutritive Value of Whole-Grain Bread

IN the *New York Medical Journal* of August 26 is an excerpt from an article by F. Röhmann, which appeared in *Berliner Klinische Wochenschrift*, Jan. 31, 1916. In that article it is stated that much of the protein of grain is contained in the layer immediately beneath the pericarp, and as grain is usually ground for whole-wheat flour, this protein, being inclosed in the aleurone cells, impermeable by the digestive juice, is lost and may be found undigested in the discharges.

"When, however, the grain is very finely ground so as to pulverize this hard outer layer, a much larger proportion of its protein contents is made available. Bread made of such finely milled whole grain has a much higher nutritive value than ordinary bread, and provides so much additional protein that it very largely spares the more expensive protein foods, such as meat."

The outer layer, he continues, has been found to contain substances nec-

[1] "The Bacillus Carrier and the Restaurant," by Arthur I. Kendall, Department of Bacteriology, Northwestern University Medical School, in "American Journal of Public Health," July, 1916.

essary for growth. Röhmann does not accept the "vitamine" theory, but believes that the virtue of the proteins in the outer layers consists in the fact that they are complete proteins, whereas the protein of the endosperm, from which fine flour is made, is wanting in certain essential protein constituents. "The use of such bread is therefore not only decidedly economical, but also provides a much more complete diet on the protein side." The *New York Medical Journal,* commenting editorially on this excerpt, says: —

"In view of the fact that ordinarily it is impossible to obtain freshly ground whole-wheat flour, it may be valuable to know that it is quite possible to obtain at small expense a practical household mill for grinding wheat.

"A small grinder in the kitchen may be used not only for supplying whole-wheat flour for the family, but also for cracking wheat, corn, barley, oats, rye, and other grains for use as breakfast cereals. These should be obtained from a seedsman rather than from a grocery or feed store, because in this way a high quality of clean grain is insured at small cost.

"Flour may be also ground from any of these grains. In this way persons who need to have the benefit of unadulterated natural cereal foods can supply themselves at minimum expense."

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Teaching the Natives the Way "Back to Nature"

THIS is what Dr. J. Madison Taylor in the April *Medical World* is attempting to do for the rugged old scouts, hunters, lumberjacks, and other dwellers outdoors, who, because of disregard of their health, have been worn out. Most of these men he finds have pyorrhea or Riggs's disease, in a bad form, rheumatism, frequent colds, and other affections showing that in some ways they are not leading an ideal life.

He would have them wear dry clothing, changing as often as necessary, and be sure to change at night, rubbing the body thoroughly whatever the weather. For treatment he would first have the teeth put into the best condition possible, improve the condition of the skin by cold bathing and massage, relieve the joints or other painful spots by careful, deep massage; but what seems most important is his treatment of high blood pressure by dissolving out the uric acid crystal in the kidneys. His directions follow: —

"Get a fountain syringe, and flush the bowel every third day with one quart of warm water containing one tablespoonful of salt and one half as much *washing* soda, sodium carbonate (*not* bicarbonate). Hold it in for fifteen or twenty minutes, so as to absorb some and wash out the acid plugs in the kidneys as well as old feces from the bowels. I know of nothing which beats this to clean out bad kidneys and to lower high blood pressure. Run the water in slowly and stop every time colic occurs, then let it run some more."

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Is Civilization Advancing or is It Retrograding?

PERHAPS no one has ever accused the *Scientific American* of being a moralizer. It is not a sociological nor an "uplift" or reform periodical, but one devoted to the advancement and popularizing of science, particularly the physical and mechanical sciences, as distinguished from the sociological sciences. Anything pertaining to scientific advancement in the conquest of matter is in the sphere of this journal.

For these reasons a statement in the February 19 issue of the periodical is especially significant.

Following an editorial on "Modern Firearms," which shows the marvelous improvement in firearms made in the last sixty years, is another editorial entitled, "Have We Advanced?" The writer of the article scouts the sentiment couched in the words "Civilization, Its Cause and Cure," and argues for the worth of certain features of our present civilization, which he says must be acknowledged to be progressive. But —

"it is apparent that the unquestionable intellectual advance which has taken place is altogether too localized. A certain small section of mankind has carried science and speculation in general to a point never before reached, and has opened to the world mightier and more magnificent vistas than ever dawned upon the most gifted men of the ancient world; but on the other hand, our newspapers, our picture shows, the current amusements of the people, almost indicate a greater intellectual degeneration than has previously existed in written history."

Say, now, is not that a startling statement from such a source, and is it not

a true statement? There are a few other things that might have been added, such as the frothy, evanescent fiction (especially that dealing with the sex problem), the increase of narcotism, and the impoverishment and serfdom of the masses and the accumulation of fabulous wealth by the few. The writer continues: —

"Which of these is the real tendency of the modern world? Suppose on the one hand we consider, say, the 'History of the Science of Physics,' and on the other 'The Rise of the Modern Politician,' and then try to decide which way things in general are going. Are things in general going anywhere?"

The *Scientific American* writer believes that it was modern "progress" that led to the present war, and hopes that the "modern chaos in bringing forth war has died of the monstrous birth," and continues: —

"Putting the matter without undue optimism, we can say that if the war does not show us the right road to travel, it will at least show that the old road led to regions we have no desire to revisit."

Let us hope so. But the passions of man are stronger than the intellect of man. Man taken in the aggregate is little better than a bulldog, which would rather be all chewed up than not to fight.

Recent Insurance Testimony Regarding the Value of Alcohol

AT the ninth annual meeting of the Southern Medical Association, John L. Davis, M. D., medical director of the Amicable Life Insurance Company, read a paper on "Health Conservation Through Life Insurance Companies," [1] from which the following is taken: —

"The European war has done at least one good thing in demonstrating that alcohol is bad for the human economy. War is not altogether bad when it drives vodka from Russia, absinth from France; when it compels the beer-drinking kaiser to say that victory will come to the nation drinking the least; and when Lord Kitchener bids his men fight drink as they would fight an enemy. Life insurance companies have always known that whisky shortens life.[2] For years and years our tabulated experience reiterated its disastrous effects. In every case of sickness or accident and in every surgical operation the element of alcohol adds a grave factor to the outcome. The greatest temperance sermons are written from the dry data of insurance offices, and they always show that alcohol is an enemy and never a friend to man or beast. Thirty-seven of the leading insurance companies have lately given the public their combined experience, and it shows that there is no such thing as safe or moderate drinking. With a standard mortality of 100 degrees, moderate drinkers show a mortality of 118, free drinkers 186, reformed drinkers (Keeleyites) 132, and occasionally drinking to excess 139-170."

[1] "Southern Medical Journal," July, 1916.

[2] Not always. Back in the forties of the last century teetotalers were required to pay an extra premium for insurance, as they were supposed to be extra hazardous risks.— Ed.

OUR WORK AND WORKERS

PRAYER AND RUBBING

Told by a Nurse

WHETHER we prayed him back to life or rubbed him back, or both, I hardly knew. That he was dying seemed certain. That he rallied and lived a few days longer I knew for sure.

It had been a long, hard siege of nursing for me. The doctor had attended the man quite constantly. It came to the point where it looked as if our efforts would fail after all.

The patient was a business man, the head of a good-sized family. The wife, three or four grown sons and daughters, and three smaller children, were all present. As the man apparently was in his last gasps for breath, the horror of the thing seemed to take possession of them, and all, young and old, gave up to the most heart-rending agony.

The family had at one time been a representative Christian household. The growth of business interests had drawn from the spiritual life of the family. The grown children had gone their own ways, and not all had gone straight. The younger children were showing neglect. The mother had drifted with the rest.

The lack of spiritual life left the family comfortless, and each gave way to uncontrolled grief. Harvey, the oldest, himself a man of family, was out in the back yard. Jackson, the next oldest, a man-about-town, not married but ought to be, was in the kitchen crying as if his heart would break. The younger children would look into the room, see the father in his death struggle, and then run shrieking away. The mother was alone in a room, almost prostrated.

A married daughter and her husband stayed by. These two had been the most faithful of any to maintain the home religion. They seemed now to be the only ones of the group with self-possession enough to bear the presence of death.

The terrible sounds of mourning and the awful scene of distress seemed unbearable. That the man should die under such conditions seemed impossible. Something said to me it ought not to be. My faith was a simple one, just simple enough to believe that if we prayed God to spare the man, he would do so.

The man's extremities were cold to the knees and elbows. Apparently there was little use to pray or do anything else. But my faith told me that nothing was impossible to God. Speaking to the two with me, I said, "Let us pray the Lord to spare him, and while we pray let us rub his arms and legs."

Now if any one thinks it does not look good to engage in something else while praying, let him bear in mind the urgency of such a time as this, and the fact that there was need of both prayer and rubbing. One was not to supplement the other; they went together.

And anyway this is the proper order in prayer for the sick. We are to do all we can with means of restoration. It is not our efforts that do the healing; neither is it in the means alone that healing lies. God is the Healer always, and at all times, whatever means are used and whether or no we look to him for healing.

Well, God did mercifully give a lease of life to our patient. Some one telephoned the doctor that the man was better, but he could not believe it. As he came into the near-death chamber, he said, "Why, this is a miracle!" He asked what had happened, and the daughter told him what we had done in

prayer and rubbing. Whatever the doctor thought of our method, he witnessed to the unusual results.

The experience was an impressive one to the various members of the family. They were more than glad to spend the most of the night in earnest consideration of religious questions. The confession of personal shortcomings must have been good for their souls. All received a real blessing, and when two days later the patient had a relapse and passed away, the situation was far different from the one I have presented. The man died a peaceful death, with his family about him, all fully resigned to their loss.

Some time later Harvey, the oldest son, lay in a hospital with only a few hours left him. An operation had failed to save his life. His last thought was for me to come and pray with him. I responded to the call, and was glad to feel that he died with a spiritual comfort.

The next oldest, the man-about-town son, seemed also to carry with him the impressions of his father's deathbed experience. He showed in various ways his respect for religion. And when an hour of serious trial came to him, his one thought was to send for me.

Likewise the two grown daughters; their minds seemed to turn instinctively to us when one of them fell into serious trouble, and nothing would do but to make our home the place of help.

With all the attending circumstances and the sequences, I could not help believing that the kind Lord did work a miracle in staying death, and that he did it in answer to our prayer, joined with such human efforts as we could make.

THE SUBLIME PORTE

This is the main entrance to the government building of the Ottoman Empire. This building is said to have been the scene of more stupidities and mistakes than all the government buildings of the other nations put together.

EFFECTS OF ALCOHOL[1]

H. W. WILEY, M. D.

Dr. H. W. Wiley presented before the American Society for the Study of Alcohol and Other Narcotics an important paper on "The Pharmacology of Alcohol,"[1] from which the following is a quotation: —

AUTHORS agree generally in the belief that the liver is especially the organ most seriously injured by alcoholic intoxication. Cirrhosis of the liver is not the only disease which may be induced by alcoholic intoxication. Various disorders are produced, according to the resistance of the individual and the extent and persistence of his habits in the consumption of alcohol. Beer and wine seem to be less destructive of liver tissues than the more concentrated distilled beverages. Fatty degeneration is one of the forms in which these bad effects are manifested. An excess of fat in the liver — that is, the condition known as fatty degeneration — is constantly noticed among persons who have used large quantities of alcohol, especially of the distilled beverages, for a long time. The liver is generally enlarged among all users of alcohol. As the fat becomes infiltrated in the tissues of the liver, the quantity of blood therein is proportionately diminished, and thus the fundamental activity of the liver injuriously disturbed. In fact, a fatty liver is much more common in drunkards than cirrhosis.

The heart of the user of alcohol does not escape its pernicious influence. Whether directly or indirectly is not so important as the fact that enlarged hearts are very common among those who are habitual users of alcohol. This enlargement of the heart is probably incidental, arising from the fact of the increased burden upon the arteries and the disturbing effects of the alcohol thereon, promoting the hardening of the coats of the arteries. As soon as the coats of the arteries become hard and inflexible, the back pressure upon the heart is increased, with the natural result of heart pressure with the sequence of disorders which promote organic lesions of other descriptions, leading sooner or later to fatal results.

The question naturally arises why it is that men of intelligence who must have knowledge of these serious lesions caused by the use of alcohol deliberately continue a habit which they are perfectly certain will shorten their days and make their active life less effective. The ignorant man who knows nothing of these matters may possibly be excused. There are conditions of life so hard that it is readily understood why some method of forgetting these hardships may be followed, but the case is different with those who know and understand. The man who is addicted to the use of alcoholic beverages is diminishing his opportunities for usefulness in life, closing avenues of employment, deadening the acuteness of his intellectual faculties, numbing the accuracy and value of his physical exertions, laying the foundations for diseased liver, heart, brain, and arteries, and courting an early grave.

It seems to me that in this propaganda for reform and for the betterment of human conditions we should not fail to emphasize the ravages produced in an organism by the use of alcohol. The method in which it manifests its workings, the symptoms which attend its use, and the certain although gradual degradation of the vital organs, should be featured in a campaign to restrict the

[1] Published in full in "Medical Times" (New York), June, 1916.

use of alcohol and to enlighten the people in regard to its dangers.

There is another effect of alcohol of very grave character which must not be forgotten. I have spoken of the hardening effect of alcohol on albuminous substances. If a solution be made of the white of an egg, and alcohol added, with stirring, the mass will soon become milky, opaque, and finally flocculent, showing the precipitation of the albuminous matter. The primordial cell, in other words the protoplasm, is largely composed of soluble protein; that is, albuminous material. The continued effect of alcohol, even in very dilute solution as it is in the blood in the case of moderate drinking, cannot fail in time to have its effect upon this cellular, limpid globule. Professor Minot has shown, in his epoch-making researches on old age, that the opaque and hardening cell is a concomitant, if not the cause, of senility. If we could always keep the protoplasmic cells limpid, always keep the coats of our arteries flexible, youth might be prolonged to an almost interminable degree.

The effect of alcohol upon the germ cell and upon the embryo is quite as marked as it is upon the protoplasmic cell. A large amount of data has been collected on this point, and all pharmacological and experimental observations lead to the one result — that alcohol is a deadly poison to the germ cell and tends to change the embryo from a normal to an abnormal growth. The use of alcohol cannot fail to have a most disastrous effect upon progeny, and the data which are available indicate this to a most convincing degree. While the alcohol habit itself may not be inherited, especially if we admit that heredity is not influenced by acquired qualities, the degeneracy coming from the injured germ cell and the injured embryo does predispose to the acquirement of the alcohol habit.

While people in good circumstances and in happy situations often acquire the alcoholic habit, it is found most conspicuous in those who by disappointment, failure, hardship, poverty, or other disagreeable condition are prone to mental suffering, and seek in the alcoholic stimulus a relief from their misery. Thus all imperfect beings, naturally being less happily adapted to the environment than those of normal character, tend to relieve this discrimination which has been made against them, by some method of forgetting it. Alcohol provides the quickest and most effective method of this temporary relief from suffering. Thus the children of parents who are addicted to alcoholism are prone to be abnormal, predisposed to tuberculosis and cancer, and often are victims of epilepsy and mental derangement and inefficiency. . . .

At the present time I am fully convinced that local prohibition by counties or by States will never prove effective as long as the traffic in alcoholic liquors is permitted in inter-State commerce under the high protection of the laws of the United States of America. In order to render local prohibition prohibitive, nation-wide prohibition must be enacted.

The effect of alcoholic beverages upon efficiency, which is really a pharmacological effect, has never been so well illustrated as at the present time. In the warring nations of Europe the necessity for national efficiency is supreme. To this end many of the nations engaged in this terrible conflict have abolished or restricted commerce in alcoholic beverages as a means of increasing the efficiency of the citizen at home or the soldier in the trenches. It is a pertinent question to inquire whether, if the maximum efficiency in the nation is desirable in time of war, it is not also equally desirable in time of peace. That nation has its maximum of efficiency in time of peace which restricts as completely as possible commerce in habit-forming drugs of all descriptions. Inasmuch as alcohol works the greatest havoc of all habit-forming drugs, its restriction would do most toward increasing national efficiency.

ITEMS OF INTEREST

Near-Beer Intoxicant

Montgomery County, Maryland, has prohibited the sale of near-beer, said to contain less than two per cent of alcohol, on the ground that it is an intoxicant.

Alcohol Causes Heat Stroke

According to Dr. Karl Meyer, Medical Warden, Cook County Hospital, Chicago, and Dr. Harry Gauss, who have made a careful study of 155 cases of heat prostration, 98 per cent of the cases of heat stroke are traceable to alcoholism.

Union Opposed to Saloon

A building on the San Francisco water front, owned by the National Seaman's Union, which could have been rented for saloon purposes at a high rental, has stood idle for two years, the officers of the union declaring that they will not assist the saloon business in any way. Other influential labor unions of national scope are opposed to the saloon on economic grounds — that the saloon harms the workingman.

Will This Get Them?

In Missouri there is a statute providing a fifty-dollar fine for each sale of liquor to a minor or to one to whom liquor has been forbidden. In Kansas City a Mrs. Ollie Brown has filed suit against the proprietors of a certain saloon for $9,500 damages for furnishing liquor to her husband after she had sent them written notice not to do so. Should she be able to win even a part of this, it will cause the saloon men to be more cautious in the future.

Smoking and Fire Loss of Life and Property

This is a forceful presentation of the cigarette question from the viewpoint of property destruction. Prepared by T. H. Williams, assistant manager of the American Insurance Company, and for sale by Manfred P. Welcher (field secretary, Eastern Division, Anti-Cigarette League of America), Hotel Coronado, Coronado, Cal. Ten copies for 5 cents; 100 copies, 50 cents; 1,000 copies, $5.

There are many reasons why the cigarette is harmful. This one is worth consideration.

A Drastic Anticigarette Law

Every person, firm, or corporation which sells or gives or in any way furnishes to another person who is in fact under the age of eighteen years, any tobacco, cigarette, or cigarette papers, or any preparation of tobacco, is guilty of a misdemeanor, and upon conviction thereof shall be punished for the first offense by a fine of not less than $25 nor more than $100, or by imprisonment for not more than sixty days; and for the second offense by a fine of not less than $50 nor more than $200, or by imprisonment for not more than ninety days; and for each subsequent offense by a fine of not less than $100 and not more than $300, or by imprisonment for not less than ninety days nor more than six months, or by both such fine and imprisonment.— *California Penal Code.*

Backslid Through Drink

Of twenty-eight Sing Sing convicts taken into the Ford automobile shops, only seven backslid, and these through drink.

Prohibition in Canada's Middle West

According to the *Pioneer* there is not a licensed place in which drinks are sold in all the territory between the Rocky Mountains and the western limits of Ontario.

Seattle Satisfied

Seattle grocers and dealers in home necessities and comforts testify that during the first six months of prohibition there were more sales and fewer bad debts. Money that formerly went for whisky now goes for home supplies.

Slump in Beer Consumption

According to preliminary report from the Commission of Internal Revenue there is a remarkable decrease in the revenue receipts on beer for the fiscal year 1916 as compared with the fiscal year 1915, showing a decreased consumption in 1916 of 1,182,193 barrels of beer as compared with 1915.

Industry Fights Alcohol

According to *Harper's Magazine*, August, 1916, the law making employers liable for all accidents to employees is having a strong tendency to eliminate drinkers from all industrial operations, for alcohol plays an important part in causing accidents. If an employer tolerates alcohol users on his premises, he must pay the cost of their mistakes. As a result of the law, employers have installed safety devices and have inaugurated safety campaigns, an important one being the rule against drink.

Druggists Favor Liquor Restriction

President Keith of the South Dakota State Druggists' Association was cheered when, in his annual address before the assembled druggists, he stated his belief that the State would go dry this fall, and his conviction that the druggists should coöperate with the temperance people in securing just laws. The association passed a resolution warmly commending the State board of pharmacy for its action in revoking the certificates of druggists convicted of selling liquor illegally.

Arizona's Dry Mining Town

Arizona has a mining town which is enjoying a boom similar to the old mining days. Incidentally the town is as dry as a bone. Miners neither drink nor gamble. As a result, they have some spare change. Some of the miners have subscribed and opened up mines of their own, and are becoming wealthy. In the good old days their wages would have gone over the bar or been wasted at the gambling table. The *Independent* of August 21 has a forceful comment on the advantage that temperance has been to this town, which in a short time has grown one thousand per cent in population, and much more than that in wealth.

Lower Insurance to Abstainers

The Chicago and Northwestern Life Insurance Company has recently been organized to give a "cash reduction on ordinary life rates to abstainers, because of their better mortality experience." It is said that directors and officers are prominent temperance men, the intention being to form an "organization of abstainers, by abstainers, and for abstainers."

A Remarkable Experiment

For two years the Philadelphia Quartz Company has been conducting an experiment to demonstrate to its employees that abstinence pays. The company agreed to make a ten-per-cent increase in the wages of those employees who would sign a pledge. All the three hundred employees, except a very few of the older ones, took the pledge. Now employers and employees speak enthusiastically of the system. For the men it has meant better pay, better homes, and less loss of time. For the employers, it has meant fewer accidents and a greater output of work. Now every one desiring employment with this company must sign the pledge.

The Red Flag

An engineer, giving his little girl a small red flag, explained that on the road the red flag signifies danger. "Would you stop your train if you saw a red flag on the track?" she asked. "Yes," he said, "or there might be an accident." After her papa had left, the little girl, going to the sideboard, fastened the flag to the decanter, and then went to bed satisfied. The father, on coming home, went to the sideboard for his usual nightcap; but seeing the flag, he understood and heeded the warning.

NOT A DRY RESORT

Here the brewers have commercialized the beauties of nature

Get Off the Scrap Heap

"If you are forty and thinking of crawling on the scrap heap, or if you are letting the old-age idea possess you, causing you to feel that the best of your life has flown by, you are doing yourself and the whole world an injustice," truthfully says the North Carolina State Board of Health. It is strange that the idea has gained such a foothold in America that the real work of the world must be done by men under forty years of age. Perhaps this has come as a result of the methods pursued by certain industrial enterprises to fill their organization with youthful blood in order to facilitate the "speeding-up" process that has been considered essential to successful competition with business rivals.

One great truth stands out as a result of the European war, and that is that mature judgment and level-headed experience count more for efficiency than youthful fire and enthusiasm. Unless you have been overfed and underworked and have acquired one of those fat, flabby, bulgy waist lines,— in other words, unless you have lived the life of the swine, a slave to abnormal appetites,— the very best of life is before you at forty.

Even the fat man at forty is not irreparable if he is still free from the onset of degenerative diseases, such as hardening of the arteries, heart disease, Bright's disease, and similar afflictions. He may never be able to outbox Jess Willard or make his mark in athletics, for the simple reason that he has lived short on bodily care and long on banquet appetites, but by adopting a rational plan of living — proper diet, exercise, rest, and freedom from alcoholism and other harmful indulgences — he may yet live many years and continue in useful service. The man of forty who has made moderation in all things the rule of his life has only reached the threshold of real accomplishments. He may never be a billionaire, but fame, honors, achievement, and independence await him, if he will hitch his wagon to one of those stars and strive toward some laudable end, remembering that upon the measure of care that he gives to his body depends the fulness of joy that fills his soul as the result of achievement.

E. H. Harriman was hardly heard of before he was forty, and he began his great work, the reorganization of the Union Pacific, at fifty-two; Cromwell never saw an army till he was forty-three; Grant was a clerk in a store at forty; Woodrow Wilson became president of Princeton at forty-six; Sir William Osler himself never would have been heard of had he died at forty; while Gladstone did not introduce the first home rule bill until he had reached the mature year of seventy-seven. Every one of the military geniuses that have made a mark of especial achievement in this great war is long past sixty, and there probably never was a crisis in the world's history that called for more exacting and soul-racking expenditure of physical energy than these men have been subject to for these many months.

Then why quit the joyful and exhilarating occupations of life at forty? At that age you have but attained the full mental and physical stature of manhood. The world needs you then more than ever before. There is plenty of material for the "rust germs" to work on without the man of forty placing himself at their mercy. Devote the next few years to correct living and thinking, and see if the elixir of youth does not enter your veins and fit you for something worth while in life.— *Public Health, Michigan.*

The Causes of Arteriosclerosis

The causes of arteriosclerosis fall under the headings of heredity, age, sex, alcohol, syphilis, acute rheumatism, certain acute infections, high living, and hard work. As Osler has tersely said, the onset may be said to depend in the first place upon the quality of arterial tissue (vital rubber) which the individual has inherited, and secondly upon the wear and tear to which he has subjected it. Our parents determine to a great extent the kind of tissue with which we start life; we ourselves may continue the factors which tend to injure this tissue.

Age is also a factor beyond our control, but according to comparative anatomy man is entitled to live one hundred years if he conserves his energy by self-denial, protects himself as best he can against disease, and is able to secure the comforts of life. Age is a very indefinite expression; one may be old at thirty, another may be young at sixty. Lives of self-denial may enjoy a corresponding reward of longevity; lives of self-indulgence receive the punishment of premature senility. . . .

Alcohol acts in many ways to cause arterial degeneration. It overexcites the heart so that the vessels are subject to greater strain; it disturbs digestion, causes liver cirrhosis and kidney insufficiency, which load the blood with poisons; lastly, alcohol is itself a poison to the blood.

Syphilis causes so much thickening of the inner walls of the vessels as to lead to great diminution or even obliteration of their caliber. . . .

The story of arteriosclerosis is not the story of the last few weeks, but must comprise the life history of the patient from his cradle, and often include that of his forefathers also. . . .

It is not the work but the worry that leads to arterial degeneration. Hard work in these competitive times is a thing but few can avoid, but fortunately it need not be shunned through fear of harmful effects, for if taken up with a cheerful, contented mind it will strengthen and develop rather than weaken the bodily forces. But the secret of successful hard work is hap-

piness; not pleasure, for pleasure is only the gratification of our animal nature. . . . Real happiness is the fulfilment of our spiritual desires, and depends upon the possession of character. . . . He who in the prime of life has learned this secret of happiness, can bid defiance to the enemies of advancing years.— *Charles Edward Nammack, M. D., LL. D., in Medical Record, April 15, 1916.*

The Movie Craze

WE do see a health problem in the present movie craze. We see our children and our young people, and also our elders, running to the movies night after night; we see them less content to spend the evening at home; we see them less frequently reading one of the classics, or even the better current works of fiction, to say nothing of serious literature.

We are seeing less of settled home life and its interests, less of that introspection and meditation so necessary if we are to approach each day's tasks with proper forecast and prearrangement.

We are seeing our young people more and more dependent on extraneous influences and outside excitement for entertainment, less self-contained, and less capable of the enjoyment of life for what is stored within themselves.

We believe that the movie craze is doing more to destroy the home life of the American people than all other influences combined; and we believe that it is as harmful an influence, and in the same way, as cocaine or morphine or whisky.

We believe the educational value of the movie is infinitesimal in comparison with its power for harm.— *Modern Hospital.*

Alcoholism in England After the War

IT will be very interesting to see whether England, after the war, will be able to control drunkenness as she is now controlling it through the Central Liquor Control Board. This board is concerned mainly with the efficiency and productiveness of workers in munition areas; it took over control early in 1915. Drunkenness has been reduced about fifty per cent as compared with conditions before the war. This has been brought about by penalizing all treating and by restriction of the hours of sale. Liquor may now be sold between noon and 2: 30 P. M. and [between] 6: 30 and 9: 30 P. M. on week days, and on Sundays between 1 and 3 P. M. and 6 and 9 P. M. The buying of liquor on credit is not permitted. Limited hours are also prescribed for the sale of bottled liquors for consumption off the premises where such sales are made. The board has confined the consumption of alcohol to those hours which conflict least with the working day, and which coincide with meal hours. There has been far less disorderly conduct than ever before.

It seems hardly likely that England will be able to keep up such a pace in time of peace. The exigencies of the war have made the present situation possible.

A few good words may be said for war. Nowadays it greatly reduces alcoholism — anything at all that will do that is entitled to a good word; it prompts the individual to sacrifice personal convenience to national efficiency in great crises, and it eliminates the unfit among noncombatants.— *The Medical Times, August, 1916.*

Toeing Out and Toeing In

WHOEVER heard of corns, bunions, and painful flat feet among the aboriginal Indians or Negroes? They grow their own shoe leather, they toe in, their feet give them no trouble beyond an occasional stone bruise or abrasion. It is common sense to plant one's feet in the easiest position. The runner instinctively turns his toes either straight forward or a little inward to obtain the best purchase. The foot is like a three-legged stool, with the three points of support at the heel and at the balls of the great and little toe. Common sense teaches one that the center of that tripod is the most stable point. If you stand on the edge of the stool, it will tip. If one throws his toes outward, the weight of the body comes on the inner side of the foot; it everts and tends to flatten. Try it, barefoot, and see for yourself.

Because Louis the Fourteenth was short and had deformed feet, he toed out, put on two-inch heels, and set an example of a mincing gait that all Europe began to ape at once. It was found that the soldier balanced better during the manual of arms if he toed out. For these two inadequate reasons polite society painfully trains its children to imitate a dead and gone monarch who does not deserve such a memorial —NOR any memorial, for that matter.— *Editorial, Long Island Medical Journal, July, 1916.*

Asparagus

"I have observed repeatedly that after eating asparagus tips, cooked in any ordinary way, my urine has a peculiar and somewhat offensive odor. Other members of the family are affected the same way. We have experienced no other effects whatever. Is this the result of a kidney condition in our family, or does asparagus contain properties that act quickly on the kidneys?"

The phenomenon you have observed is due to the nature of the asparagus, and not to any abnormal condition in your family.

Bed Wetting

"What should you advise as a cure for bed wetting in children from three to ten years of age? Would fomentations, sitz baths, heating compresses over the bladder, and the wet girdle effect a cure?"

I do not know that any hydrotherapy is particularly effective in this condition. A phimosis operation is sometimes beneficial. Any local irritation should be corrected. The use of fluid in the afternoon and evening should be restricted. The child should be taken up once or twice during the night as a matter of routine. The condition usually tends to cure itself in time, but I am not certain that any method of treatment is positively curative.

Diet in Case of Stomach Dilatation

"Kindly send suggestions for diet in case of dilatation of the stomach."

A dilated stomach will require more than dietetic treatment. If there is stenosis, or stoppage, of the pylorus, owing to some growth or thickening, an operation will be necessary. If the dilatation is secondary to gastric catarrh or other stomach disease, you should have local massage and other treatment to stimulate the muscular work of the organ. An abdominal supporter might be of advantage to you; but such matters cannot be satisfactorily arranged by correspondence. You should be under the care of a physician who knows how to treat stomach disorders.

Regarding diet in such cases, there is quite a divergence, some using a liquid diet, others believing that liquids should be avoided as far as possible. In any case, it is usually advised first to remove all fermenting matter from the stomach by means of a stomach tube.

In administering a liquid diet, it is necessary to give a comparatively large quantity; and in order not to overburden the weakened stomach, it is given in about seven small meals, rather than three large ones. The program should begin with milk, gruels, soft-boiled eggs, giving not to exceed a half pint at a feeding. After a few days add semisolids, such as porridges, boiled rice, spaghetti, and mashed potato. Be careful not to cut yourself too short on protein.

As I said at first, you should be under the care of a physician, who can determine the cause of your dilatation, and prescribe such treatment as may be necessary, and keep track of your diet so as to have it properly balanced.

Bleeding Piles and Nervous Headache

"Kindly give treatment for relieving bleeding piles and nervous headache of twenty-five years' duration."

For the bleeding piles the best treatment is an operation.

In order to treat the nervous headache, it would be necessary to determine the cause, which may be eye trouble, or some condition in the nasal passages, or faulty diet, or some other condition which could be determined only by personal examination.

Chiropractic Treatments

"Is it advisable to use chiropractic treatments?"

I have never been favorably impressed with chiropractic as a system. The treatments may accomplish good in some cases, otherwise I do not see how chiropractors could continue business. But I feel quite certain that many of the claims made in favor of this system are absolutely baseless, and that a good many persons are led to postpone adequate treatment by taking chiropractic.

Bad Water

"I am a traveling man, and I cover quite a good deal of territory, and cannot always get good water to drink. In fact, most of my work carries me to the rural routes, and the changes of water (at least I think this is the reason) give me bowel and kidney complaint. Now I am not using stimulants, and do not eat meat, so it must be the water that causes these troubles. What should you advise?"

The safest thing for you to do is to use nothing but boiled water when you do not know its source. You probably now have conditions which, if not relieved, will shorten your life, and these may be due to the use of contaminated water.

Diet in Rheumatism

"Kindly outline a safe diet for a person suffering from a light form of rheumatic trouble. I understand that red meats, coffee, etc., are objectionable. Are all fruits permissible?"

There are at least four classes of diseases masquerading under the name of rheumatism. These differ quite materially as to their causation. It would be necessary in the first place to learn exactly what your trouble is.

I think from the form of your query that you understand that diet alone is not sufficient to cure the conditions called rheumatism, as you ask for a "safe diet."

Without more knowledge of your trouble, I should suggest that you use freely of fruits and vegetables, though not at the same meal, and whole-grain cereals as far as possible. Many of the preparations on the market, especially the carton foods, are denuded of some of their most valuable constituents, the newly discovered vitamines. Whole-wheat bread in this respect is superior to white bread, and the old-fashioned whole wheat or cracked wheat to the higher priced and more pretentious wheat preparations. It is almost impossible to get rice in this country that has not been robbed of its vitamine; but a liberal supply of milk, preferably uncooked, will make up this lack. Take your protein largely in the form of milk, and thus reduce the acidity of the blood.

Fruits, vegetables, and milk form alkaline residues in the blood, and are all valuable in cases tending to excessive acidity. Caffein may be objectionable from its close association with the uric acid group. All meats form an acid residue in the blood.

Sweating Feet with Bad Odor

"Please give directions for relief of excessive sweating with bad odor."

Of prime importance are the following: (1) A cooler climate; (2) less exercise when it is warm; (3) frequent bathing and change of clothing.

The following lotion is recommended for local application: lead acetate, 3 drams; dilute acetic acid, 1 dram; water, 1 pint.

For sweating feet with troublesome odor, the stockings may be soaked in the evening in a three-per-cent solution of boric acid, dried, and used the next morning.

A solution of 30 grains of chloral to the ounce of water is sometimes used with advantage.

A weak solution of permanganate of potash may be used in the same way, but its color is objectionable.

Gum Chewing — Stiff Neck — Headache

"Is continual gum chewing apt to do harm, or is it healthful? What makes the cords in the back of the neck hurt and be a little stiff? What is good for continual headaches?"

I know of no authoritative statement regarding any injurious effects from the practice of chewing gum. There have been many assertions that it is harmful, but possibly these have been inspired by an antipathy aroused by the unesthetic nature of the practice. It is certainly inelegant, to say the least.

The fact that the habit is so easily formed and so persistent, would indicate that possibly it fills some want in those who are nervously unbalanced, as tobacco does in those who are highly strung. That a drug or a habit fills such a want does not, however, argue that it is harmless.

An osteopath would doubtless tell you that there is a displacement of one of the vertebræ in the neck, causing the soreness, and possibly his manipulation would relieve it. It may also be due to a draft striking the neck, or to some unusual movement, involving one of the neck muscles or muscular groups in an unusual way. Massage and neck movements may help.

Continued headaches may be due to a number of causes, and the cure would involve the elimination of the cause, whatever it may be. It may be due to eyestrain, or nasal trouble, or digestive trouble, or to some growth within the skull, or to other causes. The first indication is to determine the cause.

In any case the use of "headache remedies" is unwise, for such remedies are themselves injurious; moreover, they cover up the danger signal which should warn you that some part of your living machinery is not in working order.

Nervous Symptoms

"I have been a little nervous for years. Since I lost my wife eighteen months ago, my nerves have bothered me quite a little, more especially when I am at home; and I occasionally have a little headache. Sometimes I become dizzy and faint, and I have a tendency to get discouraged. My appetite is poor. I have lost about eight pounds the past year."

In order to give adequate advice it would be necessary to make a personal examination, because while apparently this trouble is largely caused by a feeling of depression that has come over you, there may be some physical condition that would need treatment. Symptoms such as you mention might be present in various conditions, and the first requisite is to have a thorough examination in order to determine the conditions that need remedying.

Aerated Bread

"Kindly inform me as to the hygienic qualities of aerated bread, and how it is made."

Aerated bread is made without yeast, in the belief that the yeast in bread is more or less injurious, as the yeast is not all destroyed by baking. There are probably cases of digestive disturbance in which yeast is harmful.

Aerated bread is made by incorporating air into the dough by mechanical means, usually by means of a mechanical mixer or kneader. Aerated bread may be made in the home in the form of gems, rolls, and beaten biscuit; but without a mixer it is not practical to make large loaves.

Aerated bread, if not very carefully made, is liable to be more tough than yeast bread, and this toughness may more than counterbalance any virtue it possesses.

Result of "Safety First" Crusade

As a result of the "safety first" crusade begun in 1913, there has been a 50-per-cent lowering of the accident rate in industrial institutions in the United States.

Surgeons Wanted for Military Service

Sir William Osler has cabled the information that the London military hospitals are needing first-class physicians and surgeons to serve for a period of six months. Liberal terms are offered.

Less Bromide in Epilepsy

In the *Medical Review of Reviews*, July, 1916, Shanahan states that there has been a marked decrease in the use of bromides at the Craig Colony for Epileptics, and that with this decrease there has not been an increase of seizures, but rather a decrease. Shanahan believes that the bromides have a much more restricted sphere in the treatment of epilepsy than is generally supposed.

Some Lucky Town

The Metropolitan Life Insurance Company has presented the National Association for the Study and Prevention of Tuberculosis $100,000 to be used in demonstrating, for a period of three years, in some community in New York or Massachusetts, that tuberculosis can be controlled if right means and adequate resources are available. In some fortunate town in New York or Massachusetts, the $100,000 will be spent in giving the people all that the latest knowledge, backed up by ample funds, can give in the way of sanitation, education, etc. Will the consumptives from elsewhere gravitate into the town?

Cure of Exophthalmic Goiter

In the *Medical World*, August, 1916, Dr. Charles F. Anderson, of Lexington, Ky., showing "before and after" photographs which are convincing, so far as the face and eyes are concerned, reports a cure of a case of exophthalmic goiter. Treatment lasted three weeks, resulting in cure of one who had been taking treatment for more than two years under other physicians without benefit. Dr. Anderson's treatment follows: "For rapid heart action I gave interrupted concussion at the seventh cervical vertebra for five minutes. Then using the sinusoidal rapid current, I applied one electrode at the seventh cervical and the pad at the sacrum, and gave this interruptedly for ten minutes." "The pulse dropped from 120 to 84, the goiter disappeared, and at the end of the second week the most careful observer could not notice any difference in the eyes."

Antituberculosis Fight in China

In western China a campaign of publicity has been organized to inform the people regarding the danger of tuberculosis. For this purpose large numbers of calendars and circulars are distributed.

Too Much Meat

One of the most prevalent maladies, and that productive of misery, is meat poisoning — from overindulgence in good, wholesome meats. . . . The three principal symptoms of meat poisoning are grouch, pessimism, and stupidity.— *Medical World.*

New Hygiene School

The School of Hygiene and Public Health of Johns Hopkins University will open in October, 1917. A year will be required for building, equipment, and arranging for a teaching staff. This school will have aid from the Rockefeller Foundation, and will doubtless be one of the most efficient schools of the kind in existence.

Pharmacists Fight Nostrums

Organized pharmacists are preparing to carry on a campaign in opposition to the sale of drug nostrums by traveling peddlers. The movement is a good one, as the man who travels from town to town, not having to face the damage his drugs may do, is not so responsible as the established druggist; but nostrums from any source are evil.

Federal Quarantine Against Infantile Paralysis

The United States Public Health Service established a quarantine prohibiting children under sixteen years of age from leaving New York City in interstate travel without a health certificate from both the city department of health and the federal authorities. Numerous cities have established quarantines against children coming from New York City.

First Hay-Fever Ordinances

The city of New Orleans recently adopted an ordinance providing that the tenant or owner of any premises must not permit weeds or grass to grow more than two feet high on his premises, or more than one foot high on the walk in front of premises. Similar legislation was passed about a year ago in New York, providing that owners or occupants of any premises in the city of New York must not permit ragweed or poison ivy or other poisonous weeds to grow on such premises in such a way that the plants shall extend upon or overhang any public place, or allow the seed or pollen or poisonous emanations therefrom to be carried through the air to any public place.

Brooklyn Physicians Admonished

A number of Brooklyn physicians who have been negligent in reporting baby births within ten days according to the law, have been warned, and some have been reported to the corporation council for prosecution.

Stray Cats Suffer from Infantile Paralysis

As part of the "clean-up" program brought about by the epidemic of infantile paralysis, a campaign of extermination of stray cats was inaugurated, and fifty thousand of these animals had been caught and killed in Brooklyn, N. Y., by the first of August.

Acceleration of Growth after Retardation

In the *American Journal of Physiology*, Osborne, Mendel, and others, as a result of nutrition observations on white rats stunted in growth by an inadequate diet, report that "after periods of suppression of growth, even without loss of body weight, growth may [on an adequate diet] proceed at an exaggerated rate for a considerable period. . . . Despite failure to grow for some time, the average normal size may thus be regained before the usual period of growth is ended."

Studies in Water Drinking

P. P. Hawk, having made a study of the result of experimental work on water drinking, concludes that for the normal individual "the drinking of a reasonable volume of water with meals will promote the secretion and activity of the digestive juices, the digestion and absorption of the ingested food, and will retard the growth of intestinal bacteria, and lessen the extent of the putrefaction processes in the intestine." Unquestionably there are those with disturbed digestion whose troubles are increased by the use of water at meals.

Remedy for Baldness

The following remedy has been recommended for baldness: Resorcin, 10 grains; castor oil, 30 minims; tincture of soapbark (*Quillaja saponaria*), 15 minims; rose water, 1 fluid ounce. Rub the whole scalp daily. This is a very pleasant preparation. The soapbark makes a fine lather without damaging the scalp; and if it does no good, it will at least do no harm. The resorcin is of some advantage in destroying bacterial life in the scalp, and thus preventing dandruff. And if the rubbing is faithfully done, the stimulation will tend to increase the nutrition at the roots of the hair.

Diet and Nerve Degeneration

Koch and Voegtlin (Bulletin 103, Hygienic Laboratory of the United States Public Health Service) report a series of observations on changes in the brain and spinal cord of animals fed on an exclusive vegetable diet. Microscopic examination of the tissues of these animals, according to these writers, revealed extensive degeneration of many of the nerve tracts in the spinal cord, very similar to those found in pellagra. In some of the animals the chemical changes were practically identical with the changes occurring in pellagra. These men believe that these observations furnish additional evidence that pellagra is a dietetic disease.

Treatment of Burns

According to Slack, in the *Journal of the Georgia State Medical Association*, immediate application of tincture of ferric chloride is the best treatment for burns. Paint the entire surface with the tincture several times by means of a cotton applicator or a camel's-hair brush, being careful not to rupture blisters or remove charred surface, then apply gauze dressing. There is an increase of pain at first, which soon ceases. The author has used this treatment for twenty years with satisfaction.

Electromagnetic Treatment of Digestive Disorders

A new process of diagnosing and treating digestive disturbance is based on the fact that ferrosoferric oxide (ferrum reductum), or as we might say in common parlance, a form of iron rust, has the property of being attracted by a magnet. It is also opaque to the X ray. A patient is given a massive dose of the iron salt to fill the stomach and intestine. Then a powerful electromagnet manipulated above the abdomen of the reclining patient attracts the iron compound to one point. By means of the electromagnet a passive massage may be administered to various portions of the intestinal tract, and at the same time X-ray pictures may be made of the parts.

Modern Wars are Less Deadly

According to Lieut. C. A. L. Totten, U. S. A., modern wars are far less deadly than those of earlier date. In the seven battles from 1631 to 1634, the period between the introduction of firearms and the use of the bayonet, the percentage of loss in battle was 25.5. In the period from 1745 to 1813, which included "brown Bess" and the bayonet, the percentage was 20.7. In the third period of eleven battles, from Alma to Chicamauga, 1854 to 1863, the percentage of loss was 15.5. In the period from 1866 to 1870, that of the breech-loading gun, including six battles, Koniggratz to Sedan, the losses were 11 per cent. In the fifth period, from San Juan to Mukden, including seven battles, 1898 to 1905, the percentage fell to 10 per cent.— *Scientific American, July 29, 1916.*

An Infant Mortality Rate Zero

For ten years, from 1894-1903, there was in Villiers-le-Duc, southern France, no death of a child under one year of age or of a mother in childbirth. For the preceding ninety years the annual infant mortality had been twenty to thirty per hundred, except in 1854-63 when it was fifteen per cent. During this decade there was a mayor who, though not a medical man, believed in public health measures. The son of this man was mayor in 1894-1903, and among the measures he adopted was the provision of help, medical or otherwise, as needed, at the expense of the village for every mother or expectant mother; the mother was to receive a special grant if she remained in bed six days, and another grant if at the end of the year the child was healthy. Provision was also made for the sterilization of the milk. This information is given on the authority of S. G. Moore, medical health officer of Huddersfield, England, in the London *Lancet*, May 6, 1916.

Cankered Mouth

In case of cankered mouth the mouth should be kept clean, according to the *Medical Summary*, the sore spots being touched with a solution of silver nitrate or zinc chlorid; or in case these are not at hand, with iodine or alcohol. The sore throat should be gargled frequently with sodium bicarbonate or sodium salicylate.

Orange Peel for Constipation

In the French army exhausted orange peel is being used in the treatment of chronic constipation. The peeling is boiled for an hour, the liquid being used for a flavoring mixture or a mouth wash. The boiled peel is then dried and given freely. It stimulates not only the action of the intestinal canal, but also the flow of bile, it is thought.

Quinine in Infantile Paralysis

Dr. N. McL. Whittaker, of Brooklyn, N. Y., has recommended as a preventive of infantile paralysis quinine in two to five grain doses every night. For treatment he injects intramuscularly ten to twenty grains of quinine and urea hydrochloride, followed by three or four grains of quinine by mouth every hour or so until the patient has received forty grains, or until evidences of quinine poisoning appear.

Rheumatic Fever

According to Dr. H. C. Wood, Jr., in the *New York Medical Journal*, June 13, the most important local measure is to keep the inflamed joint quiet and to protect it. For diet he advises chiefly milk supplemented by starchy foods and eggs. He does not advise the alkaline bicarbonates, as they are neutralized by the gastric juice, preferring the acetates and citrates, which act as antacids when absorbed. The potassium salts are the best preparations (that is, potassium acetate and potassium citrate), and should be given in lemon juice or citric acid in twenty to thirty grain doses every two or three hours, or until the urine becomes alkaline.

Autotherapy Successful

Passed Assistant Surgeon John C. Parham, U. S. N., reports in the *Southern Medical Journal* that he has had good success in treating infected wounds by means of autotherapy, which is the use of a filtrate from a localized infection (say a boil or an abscess) as an antidote. This filtrate is injected hypodermically, or else some of the product of the wound is taken inwardly by the mouth. In either case the results are "magical," as described by Dr. Parham. Probably this explains why all animals, when wounded, lick their wounds. If the wounds are infected, the infectious matter is thus taken into the alimentary canal, and enters the blood current in such a way that it stimulates to the formation of "antibodies." In other words, this method of treatment is a vaccination against the infection. Autotherapy was first recommended by Dr. Duncan, who has for a number of years urged his fellow physicians to make use of this means of treating local infections.

Improved Hot Water Bottle

The ordinary hot water bottle usually has the stopper fastened by a chain in order to prevent its loss. To manipulate the stopper with this chain is a nuisance, to avoid which some one has invented an inside stopper, with handle protruding outside. To open the bottle it is simply necessary to unscrew the stopper and push it down far enough to allow the water to pass freely. To close it, the handle is pulled and twisted.

Cause of Diabetes

Meltzer and Kleiner, of the Rockefeller Institute, stated in the *Medical Council*, May, 1916, their belief that dextrose (grape sugar) is the cause of diabetes. Dextrose is natural in the human metabolism, but an excess causes diabetes. It is not the dextrose of fruits and honey, however, but the artificial product known as corn sirup which the authors believe to be responsible for the production of diabetes, especially when it is used constantly.

Treatment of Ivy Poisoning

In view of the fact that the poison of poison oak and poison ivy is a volatile acid resin, the rational treatment is an alkali. The local application of ice is also extremely beneficial. The use of a saturated solution of baking soda in ice water applied freely and continuously, according to the *New York Medical Journal*, brings prompt relief and a complete cure within twelve hours. This is in marked contrast with the older methods of treatment, where there is always the suspicion that the disease ceases when it wears itself (and the patient) out.

What Shall We Believe?

Now comes a report to the State Department at Washington from Dr. Taylor, of the American Embassy at Berlin, stating that he has made a special investigation throughout Germany at the request of our government, and is finding that there has been, instead of a diminution, an actual increase in the supplies of milk for babies. He further states that the infant death rate is lower now than before the war. And here we have been thinking that the German babies were dying off by the scores because they could not get our condensed milk!

Acidosis in Children

Howland and Marriott, in *Johns Hopkins Hospital Bulletin*, March, 1916, says that acidosis is not uncommon in children, and frequently proves fatal in infants. They advise in the beginning of severe diarrhea in infants the administration of bicarbonate of soda in sufficient quantity to keep the urine alkaline. Panting or labored breathing especially indicates the need of alkaline treatment in infants and children. The bicarbonate may be given by mouth or rectum. It is best given under the advice of a physician, who, on account of the vomiting in diarrhea, may have to give the remedy subcutaneously (two-per-cent solution), or preferably intravenously (four-per-cent solution). Infants under one year may be given one hundred and fifty grains of sodium bicarbonate in twenty-four hours.

Sold Diseased Pork for Food

The New York Supreme Court has affirmed a judgment against a dealer for $1,000 damages for illness caused by eating pork infected with trichinæ. The pork had been inspected, and it bore the United States government stamp.

Twilight Sleep Abandoned

The obstetricians of the Johns Hopkins Hospital, after a trial of more than a year, have abandoned twilight sleep, as being too dangerous for both mother and child. Their experience was that it could be used safely only in exceptional cases and under the most skilled supervision.

Inspected Pork May Contain Trichinæ

In order to correct a false impression that inspected pork is safe, the Public Health Service has issued a warning that government-inspected meat may contain trichinæ. There is no known method of inspection that can guarantee the absence of trichinæ from uncooked pork. If you must eat pork, be sure it is well cooked!

Bulletin on Headache

The University of Missouri has issued No. 11 of its Medical series, a bulletin entitled "Headache — A Symptom: Its Causes, Prevention, and Cure." The author is Walden E. Muns, instructor in pathology. The announcement is made that copies of this bulletin will be furnished free until the edition is exhausted. The address is University of Missouri, Columbia, Mo.

To Dissolve Boric Acid

Those who have tried to make a solution of boric acid powder have been annoyed by the scum forming on the top and the milky condition of the mixture. The *Midland Druggist* states that this can be avoided by putting the boric acid in a mortar, adding a little water and triturating to form a paste, and then gradually adding more water and triturating until the solution is complete. Another method is to put boric acid into a bottle, add a few drops of water, shake vigorously, then add a little more water, shaking and adding water until the solution is complete. It is said that a little practice is necessary in order to do this well.

The Last Fourth the Sanest

According to the statistics gathered by the *Journal A. M. A.*, the recent Fourth of July celebration was the sanest in our history; this, owing to the campaign of education that has resulted in the last few years in substituting historical pageants for nonsense and noise making. In 1903, the first year of the statistics, 466 deaths were reported as due to fireworks. In 1916 there were reports of only 30 deaths from this cause. The injuries in 1903 from fireworks were 4,449; in 1908, 5,623; and in 1916, 850. Deaths from lockjaw were 406 in 1903, none in 1916, and there was no case of accidental blinding — a rather frequent accident in the past.

Trolley Car Ambulance

It is reported that a Brazilian city uses a trolley car ambulance to carry patients to and from the hospital, located in a suburb.

Abolishes Soda Water Glasses

The Maryland State Board of Health has issued an order to all druggists and dispensers of soft drinks forbidding the serving of drinks to customers in glasses, unless they are willing to destroy the glass after it has been used once. This order went into effect September 1.

Nature Discards the Gluttons

In a bulletin issued by the United States Public Health Service is the statement that "when a man becomes greedy and takes more ease and food and drink than is his share, nature discards him." Think of it! In this brief sentence is the explanation for the rapid increase in the degenerative diseases which are taking men off in the prime of life.

Adrenin in Infantile Paralysis

A New York physician writing to the *Medical Record* gives the history of three cases in which he treated infantile paralysis with adrenin, obtaining good results. He comments: "It would appear that the ideal treatment in the light of present knowledge and experience consists of: (1) Early puncture and withdrawal of cerebrospinal fluid; (2) administration of adrenin intraspinally; (3) followed immediately with the introduction of immune serum, or, in its absence, normal serum."

Kaolin in Infantile Paralysis

About a year ago the recommendation was made to dust kaolin into the throat and nose in case of infection, in order to remove the bacteria from these regions. For a year Whittemore, of Cambridge, Mass., has been treating nose and throat infections by blowing powdered kaolin over the affected surfaces. He finds the method harmless and productive of prompt curative results, and suggests that the method be applied in the case of every child and adult who has come in contact with any possible source of infection from infantile paralysis.

Garlic for Whooping Cough

A writer in the *British Medical Journal* gives a remedy for whooping cough which seems to be quite common in the country, but which is not generally known to medical men. The method consists of wearing under the soles of the feet, between two pairs of socks, slices of garlic. It is said that if the garlic is worn under the feet in this way, the odor may be detected in the breath within a half hour. The garlic treatment should be continued for a week or ten days or more, according to the severity of the case. Garlic may also be taken internally, by chopping, boiling in milk, and mixing with bread crumbs. Perhaps some of the natives of southern Europe could give us several recipes for the use of garlic internally. If garlic is a sure-enough cure for whooping cough, there must be some places in sunny Italy where this disease is unknown.

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

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