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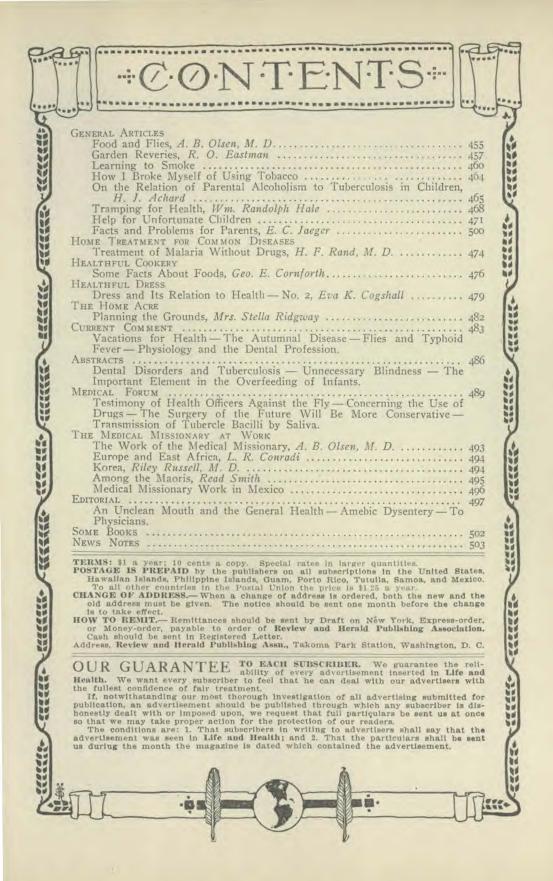
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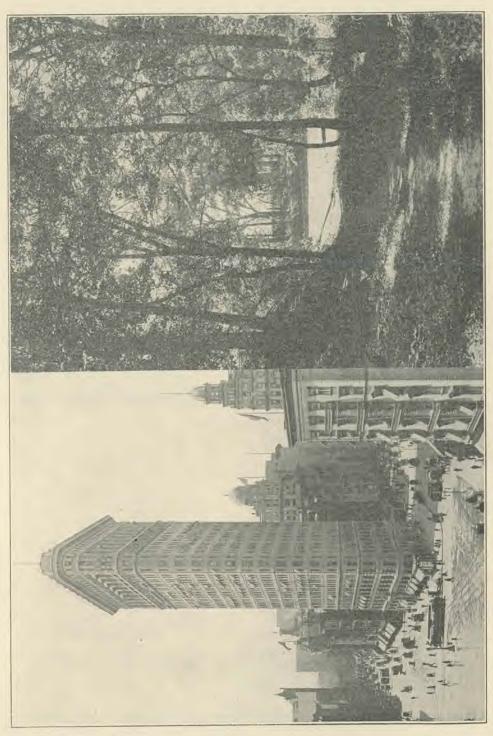
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"Something better is the law of all true living"

Takoma Park Station, Washington, D. C., August, 1909 Vol. XXIV

No. 8

Food and Flies

A. B. Olsen, M. D., Superintendent Caterham Sanitarium, Caterham, England

IGHT among us is an insect guilty of distributing a score or more of diseases, all of them more or less fatal. We have looked upon the fly as a sort of innocent nuisance, and have not realized the great harm that this pest is doing.

The fly's foot - and you will remember that the fly has several feet - ends in a pad covered with innumerable hairs. and at the end of each hair is a little hollow sucker for the purpose of drawing up matter. It would not be farfetched to compare the foot to a toothbrush; and moist matter has the very best possible chance to stick to this haircovered pad. It has been demonstrated that a single fly can carry one hundred thousand living germs in one trip from the manure heap or the privy to the kitchen or the dining-table.

The filthiest pig finds it difficult to compete with the fly in filthiness, and is infinitely less dangerous as far as health is concerned, because we do not admit the pig into our larder; but, unfortunately, we have been admitting the fly, thinking it a harmless creature.

Flies thrive in filth; they can not exist

1 From an address delivered at the General

without filth. When a fly seeks an appropriate place for depositing its eggs, it looks for some kind of organic filth so that its eggs will afterward hatch and produce other flies.

Flies breed in refuse heaps of all kinds, manure heaps, stables, slaughter-houses, butcher shops, pail closets, privies, bone works, ash pits, garbage deposits, sewage pools, etc., also in restaurant kitchens, private kitchens which are not kept clean, milk shops, dairies, and confectioners' shops, as well as numerous other places.

They hasten the spoiling of milk and of all other foods. They carry the germs from their breeding-places to the larder, where the food is kept, and walking over the food, contaminate it.

Is it strange that flies carry disease? Diarrhea of infants, typhoid fever, diphtheria, scarlet fever, smallpox, measles, whooping-cough, cholera, anthrax, tuberculosis, dysentery, glanders, erysipelas, ophthalmia, and other diseases are spread by flies. In New York City diarrhea carries away about seven thousand infants annually, and there is every evidence to show that this terrible scourge is due largely to the agency of flies.

Extermination is a very difficult thing, because the fly is most prolific. Keller estimates that one fly produces in a

455

Conference of Seventh-day Adventists, Ta-

koma Park, D. C., May 20, 1909.

single summer season two million flies; and that is a very modest estimate. We ought to attempt not only to destroy them, but also to prevent, as far as possible, their development. It is possible that with our best efforts we can not

absolutely exterminate flies, but we can go a long way toward that, if we give heed to some very simple measures, which we can put into effect into our homes everywhere. Summing it up in a word, the secret is in keeping the premises clean and sweet all the time. Just as long as there is suitable material for the development and multiplication of flies, just so long they will multiply by the But they millions. must have organic filth for their multiplication. A proof of this is the presence of the fly wherever there is filth.

The only permissible convenience in towns ought to be the water closet. And in country and town the greatest

heed must be paid to refuse of any kind. Whether from kitchen or stable, even though it be merely the sweepings from the floor, the refuse must be kept in receptacles, tightly covered, and must be emptied frequently, and the receptacles should then be cleaned out and disinfected. If we would follow that one suggestion, it would go very far toward the extermination of the fly.

Secondly, stables, barns, and outhouses should be built just as far as possible away from dwelling-houses, and

should be kept clean, for your own sake as well as for the sake of your cattle, the milk of which you use. The manure should be spread on the land as fast as possible, or kept in watertight tanks with closed covers. The manure heap is a very prolific developing place for flies.

All offensive matter, garbage, and kitchen and house refuse ought to be kept in closed tanks or receptacles, and taken away from the premises at frequent intervals, daily if possible. To destroy all breeding-places make free use of disinfectants.

To protect our houses we should use screens, and look upon it as a disgrace to have a fly in the house. I do not hesitate to

say that a single fly is able to carry the infection of disease, and lay some one on a bed of illness, from which he may never rise. I would recommend, then, every possible device by which we can keep flies out of our houses.

Let us have fly-proof houses.



MAKING HER MARK



HEN the first of June arrives, and thereafter until "the frost is on the pun'kin, an' the fodder's in the shock," it is one continuous fight with the bugs. There is a bug for every particular kind of plant, and sometimes two or three of them. For instance, I dosed my gooseberry bushes right in the nick of time with a good, liberal allowance of Paris-green soup, and the little black and green worms tumbled off helter-skelter in no time. When I thought, good, easy man, full surely my gooseberries were a-ripening, I went out to look, and lo and behold, there was the cutest little red bug you ever saw in your life, sitting on the topmost branch, just as nice as you please, with an air of complete contentment and prosperity. I paused to observe, and a dozen of his little brothers and sisters scuttled away out of sight underneath the leaves. Then I betook me to my den, where I pulled down from its accustomed place upon the shelf a paper bearing upon its front cover in large type the words, " Annual Spraying Number." I found Mr. Bug duly classified, noted his characteristics and main propensities, likewise the kind and quantity of medicine prescribed, and prepared to make the rest of his career short and miserable.

I have made a special study this year of poisons. I laid in a stock sufficient to make my wood-shed as formidable a place, almost, as a government arsenal. There is poison enough there to poison all the dogs in the neighborhood, and that's saying a good deal. For I have

learned this much in my course of amateur gardening — that if you want to save your fruit and vegetables, you must keep the poison pot a-boiling. For practical and thorough information along this line, get Farmers' Bulletin No. 127 from the Department of Agriculture at Washington. It's free, and every gardener ought to have it, as well as other good authorities on spraying and the use of insecticides.

Still, bugs or no bugs, there is nothing quite like gardening for a summer occupation. When the real mellow days of summer come, with their warm fragrance of fruits and flowers, and with deep, cool shadows all about; and when the summer activities, the abundance of fresh air, and the vitalizing sunshine stir up the summer appetite, where can you find more complete satisfaction than in your own home-made garden? Come out with me in the early summer and pull a bunch of nice fresh onions,- you eat them, don't you? Of course you do, - or a basket of crisp lettuce,- not the kind that the grocer's artificial fountain has been striving to keep alive for the past twentyfour hours, or a bunch of juicy, crisp, cool radishes, the very appearance of which on the table is an appetizer.

Or a little later in the season, take a stroll in the berry patch and help yourself to a handful of rich, red, luscious strawberries, picked ripe, not half-ripe, or a mess of peas, the kind that melt in your mouth. I have something over a mile of early peas this year, counting the rows placed end to end. Then there's

string beans, sweet corn served on the cob, summer squash; but why enumerate further? It makes us hungry to think about it, and it's not anywhere near dinner time.

We gormands ought to be honest with one another. We all like to eat better than almost anything else. The bank president will take a paper handed him by a subordinate officer, run his eye over

a list of names and items, and in a moment dispose of the question of whether or not to make thousands of dollars' worth of loans. Watch him when he sits down to the table for luncheon, and - if he hasn't dyspepsia, as so many poor bank presidents have - see the care and critical judgment which he invariably exercises when the day's menu is placed before him.

Watch that boy of yours when you put

him to the table after a morning spent out-of-doors. See his eyes sparkle as they take in everything that is placed before him. And you yourself — why is it that your mouth waters when you think of a dinner of green peas and new potatoes fresh from the garden? Why, simply because it is perfectly natural. The greatest physical delight is the satisfying of a healthy appetite with whole some foods.

When God led the children of Israel out of the wilderness into Canaan, he promised them a land flowing with milk and honey — good things to eat. When Caleb and Joshua went up to spy out the land, they brought back a mammoth bunch of grapes — more good things to eat. When the American hostess today wants to be assured of a good attendance at her social function, she lets

it become known that there will be refreshments—still more good things to eat. Do you wonder that the farmer, who is the producer of these good things to eat, has the world by the nape of the neck?

Horace Fletcher, the apostle of thorough mastication, as some call him, or the "chewing reform man," as he is even better known, has written a book under the title, "The New Glut-



"I HAVE BEEN FREQUENTLY APPROACHED BY VARIOUS INDIVIDUALS FOR INFORMATION"

ton or Epicure." It always struck me as a very comprehensive title — so much so, in fact, that I didn't feel called upon to read the book. The story was right there in the title, and knowing something of Fletcher's message, I simply put two and two together and did not read any further. For "the new glutton," I concluded, is the one who has been led to adopt the natural dietary, not by restriction, but by indulgence of his true ap-

petite. In other words, give me my garden, and the fulness of provision which it makes for my table; give me the time and the incentive to eat slowly with a due realization of the enjoyment it affords, and you can have your pate de foie gras, your calves' brains, your frogs' legs, and your tripe, and who cares? The natural dietary asserts itself and becomes established without the aid of weighing or measuring devices or tables of contents.

So then, admitting, by weight of authority, that the shortest way to the hearts of most of us — women too, this time — is through our stomachs, see how necessary an adjunct to the American home the garden becomes. As an actual creator of peace and prosperity, who can find its equal?

Since I began to put some of my garden experiences and ideas onto paper, I have been frequently approached by various individuals for information, in which cases I have always cheerfully told all that I knew, considering myself discreet if I stopped there. The natural consequence of being resorted to as an authority once or twice is that the recipient becomes puffed up in his own esteem, and I believe I was actually about ready to write a gardeners' dictionary, when I made a short voyage of discovery.

It was not a long voyage - just a trip to the other side of the neighborhood, that was all. But over the other side of the neighborhood there lives a gardener whose name is Smith, and what he does with growing things is a caution. I had just set out tomato plants a few days previous to my voyage of discovery, and prided myself upon having some unusually nice plants. Also I was quite well pleased with my beans, my peas, and my potatoes. But when I saw "that man Smith's" garden, my pride vanished in a thin green streak of envy, and my complacency was lost in a maze of discontent. There were tomatoes blossomed and big enough to bear fruit. Rhubarb, asparagus, onions - simply great! Cabbages - well, you ought to have seen them. And as for the long, clean, even, straight rows of beets, carrots, spinach, lettuce, etc., I can only say that I had seen pictures of them before, but Smith actually grew things that way.

I looked for a few brief moments; then I turned to my companion, and said, "Let's go home."

Berries have come — and some have gone. Still more will be ripening just at the time you read this. We are all busy on my "farm" — glad that we are busy, and that our appetites do justice to the foods the ample garden provides.



LEARNING to SMI

HAD long counted it a very necessary part of my education to learn to smoke. I had mastered the three R's decently enough;

I could figure algebraic equations, I knew all there was said about the nimbus and

quimbus and flimbus clouds in the physical geography, and I had once spelled the whole school down: but I could not smoke. I realized my deficiency painfully as I observed Billy Wiggs puffing his twofor-a-cent cigarette, and spitting at cracks in the sidewalk with wonderful precision and well-defined masculinity. I was told once that I spit like a girl; and my, how it hurt!

So there I was approaching the

age of manhood, wearing a stand-up collar and long pants - together with the other necessary conjunctive articles of apparel - but lacking the main accomplishment which goes to make up a manly address, the ability to smoke. A real man who didn't smoke,- I couldn't bring myself to imagine such a thing! So, naturally, I started in to learn.

I had already taken the first steps, in the due course of events, but I had never before faced the ambition with the grim determination to do or die that now possessed me. I had sucked at the butt end of an old rattan whip, cut into lengths the right size for smoking and distributed among ambitious smokers. I had enjoyed the fragrant aroma of smoke-

wood - usually consisting of roots and fagots of a straight - grained, porous construction. Later in the day I had invented the form of ciga-Gordon and I had smoked them with extreme satisfaction and with no further noticeable effect than a parched tongue or ent taste like a

a "blend" of my own, made from the carefully dried tops of dandelions. rolled up in sheets of newspaper in rettes, and Jimmy two and a persistsmudge in mos-

quito time. Thus, by moderate degrees, I had passed through the stages of preparation, and was ready to learn to smoke real tobacco.

I have looked carefully through the advertisements of correspondence schools in several of the large magazines. There are something like two hundred of them, I believe, and they teach everything,from rear-admiralship to boot blacking, -but I fail to find a correspondence school of smoking. Think what a snap



"I REALIZED MY DEFICIENCY PAINFULLY AS I OBSERVED BILLY WIGGS"

somebody is missing! How many thousands of the youth of America would jump at the chance to learn smoking by easy stages and by painless process. In my day, at least, there was no such opportunity.

First I regaled myself in the usual



"AN OCCASIONAL DRAG AT THE OTHER FELLOW'S CIGARETTE"

fashion with an occasional "drag" at the other fellow's cigarette on the way to and from school, but as there were usually three or four insistent beggars to every accomplished youth who smoked this process soon proved to be too slow, and at last I determined to go off by myself and learn smoking at one fell swoop. Once the determination came upon me, the rest was easy enough.

I noted carefully the place where my father kept his pipe. A fine pipe it had been in its day. It was incrusted with the nicotin of many generations. Probably the smoke of bushels of the worst tobacco that ever slid across the counter had been sucked through that pipe-stem to wend its way through the various passages of the throat and nose of my respected progenitors and finally dissolve in the atmosphere. The poetic language of the pipe spoke to my heart. All that afternoon I fidgeted in my seat, impatient for the clock to strike four. Then, without a word to anybody, I was off for



"WHEN THE BLUE CLOUDS ISSUED FROM MY MOUTH . . . I WAS IN AN ECSTASY"

the house and the pipe. I seized the adored object of my ambition with eager hands. I put it in one pocket, and the remnants of a package of that "worst

tobacco in the world" in another, and hied me to the hen-house.

Luckily — for the hens — it was a deserted hen-house. There were only a few bedraggled flies frisking about on

the grimy window. There was no other outlet than the door; and when I closed the door, I was safe from detection, and could enjoy to the full every morsel of the tobacco that I smoked. I did not reckon on the future. I cared not what the consequences would be. I was going to smoke.

I filled the pipe and pressed the to-bacco down into the bowl as I had seen my father do so oft before. Why couldn't I smoke as well as he? I wondered. Then I lighted the match, and drawing in on the stem, watched

the tobacco glow as it came in contact with the flame. And when the blue clouds of smoke issued from the pipe and from my mouth, I was in an ecstasy of joy as I realized that I was actually smoking real tobacco in a real pipe.

How long I continued doing so, I can not tell. Time soon ceased to be a standard by which to reckon. There were hours of sensuous satisfaction — then years of misery. I remember observing the flies topple over one by one when the smoke got so thick in that two-by-four place that it could almost be cut off

in slices. The fact impressed me as a curious one, and I reasoned wisely that it was about time to quit — but, O, there was a *little* tobacco in the pipe not quite burned up, so I took one or two

"WITH A RAG-BAG FOR A COUCH, I RE-LAPSED INTO A SEMICOMATOSE CONDITION"

puffs more; and such a dizzy feeling! My head what - 0! 0! Then nature asserted itself, and like any other sick dog, I looked for a dark, quiet hole into which to crawl, where I could conveniently die. My refuge was a gloomy corner of my neighbor's wood-shed, where, with a ragbag for a couch, I relapsed into a semicomatose condition until nature had cleaned house on the inside of Then I me. crawled home, pale and trembling, deposited the pipe and tobacco where it belonged, and said

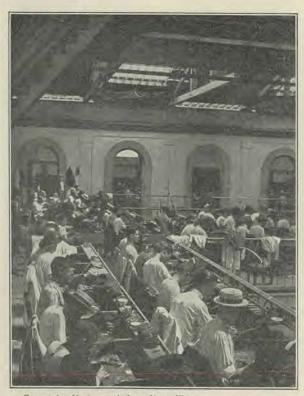
I didn't want any supper. My mother, looking at me with sympathetic eyes, said, "Why, William, how sick you look!" I answered, "Yes'm," and crawled off to bed to dream that a huge pipe had suddenly taken on life, and had me down on my back pounding me in the stomach.

Did I quit?—No, I didn't. About a week after that, I tried it again, and came out of it in about the same plight—worse, if anything. Then I discovered that the true way to glory is patience; and I went at it easily, with milder tobacco, and more moderate at-

tempts, until I had finally mastered the entire smoking curriculum. Then, and not until then, I began to make desperate struggles to rid myself of an obnoxious habit, which not only was an offense to all decent people, but which was slowly but surely making inroads upon my

health. I quit; but there is scarcely a day when I do not meet some other one who learned just as I did, and who says to me, "I don't see how you did it; I'd give anything if I could stop smoking right now."

Moral: Don't begin.



Copyright, Underwood, New York City

THE MANUFACTURE OF CIGARS IN THE LARGEST FACTORY IN HAVANA, CUBA



How I Broke Myself of Using Tobacco

T about the age of seventeen years, I was suddenly taken ill.

I had been doing a man's work, and now I could scarcely work at all.

I had no appetite, and could sleep only when sitting upright or nearly so. My heart troubled me so that it seemed at times I would smother.

Without saving anything to my parents, I consulted a physician. He was very frank with me, and told me plainly that there was no medicine that would help me, but that I must give up the use of tobacco or die. I began to wonder how I could give up this coveted habit. When I was at home, the

day would drag and seem so long and wearisome, and when I associated with the boys on the street, the temptations for using tobacco were so overpowering, that I soon realized I could not overcome the tobacco habit in either of these ways. Finally a bright thought came to me, to go into the woods and spend a day.

It was a pleasant summer day, and I persuaded my mother to put up a little lunch for me. With a new determination in my heart, I started for the woods,

to spend the forenoon in viewing some of nature's beauties; and after eating my lunch, I hunted for some ripe berries. I was so weak that it seemed rather difficult to fill the little pail mother had put my lunch in, but finally this task was accomplished. After resting a while, I returned home about dusk with a good appetite. That night I slept better than I had for a long



time. But what about the tobacco? I scarcely thought of it all day because my attention was taken up with the things of nature, so pure and unlike that filthy habit.

Day after day I went to those woods until I could carry home two large pailfuls of berries, and the tobacco habit was gone.

On the Relation of Parental Alcoholism to Tuberculosis in Children

Dr. H. J. Achard

N a paper on "The Influence of Alcohol on Pulmonary Tuberculosis," read before the American Medical Society for the Study of Alcohol, etc., last March, in Washington, D. C., I gave as the results of a study of the available literature upon the subject, the conclusion that alcohol exerts a debilitating effect on the system, if used to excess; that alcoholics are more prone to acquire infectious diseases than are non-alcoholics, and that they offer less resistance to tuberculous infection: that, finally, a progressive tuberculous disease, once established, will run a more rapid course than it would, other things being equal, in persons not alcoholized. There is evidence, however, to the effect that in a way alcohol may, in single and small doses, produce an increased resistance to infection; vet, as we shall see presently, this increased resistance is not of sufficient practical value to encourage the use of alcohol even as a drug.

Possibly, the greatest harm which can be attributed to the agency of alcoholism is not in its direct but in its remote action, and does not affect the alcoholics themselves so much as their children and children's children. The influence of an alcoholic heredity in weakening the organic resistance to any harmful influences in the posterity has been shown chemically and experimentally on frequent occasions. Professor Lancereaux

is very emphatic in his denunciation of alcoholism for this reason. Thiron, Arrivé in his graduating thesis offered to the medical faculty of the University of Paris, Professor Mays of Philadelphia, and many others have afforded clinical evidence; Laitinen, among others, also Achard and Gaillard, the experimental proof. Imbault (Thèse de Paris. 1901), from a study of French writers on the subject, concludes that a hereditary predisposition for tuberculosis in the descendants of alcoholics is an established fact, certainly for tuberculous meningitis, and at least probably for pulmonary tuberculosis.

My former teacher, Prof. G. von Bunge, in Basel, Switzerland, has for vears investigated the deleterious effects of alcohol upon the animal organism. In the last edition of his Text-book of Physiology (Leipzic, 1905. Vol. I, page 388), he says that it can not be denied that a disposition to disease is inherited, and that this disposition may be acquired on the part of the parents by an abnormal mode of living, especially through alcoholic and other forms of poisoning. In a pamphlet on the increasing inability of women to nurse their children, published first in 1899, and recently in its sixth edition with greatly augmented statistical material, he offers statistics in support of his contention. According to these, the fathers were -

Occasional drinkers in 149 cases; and 8.7% of their children had tuberculosis " 160 Moderate 10.7 66 .. 66 a Excessive 67 16.4 16 Topers 27.7 21.7

While the frequency of tuberculosis in the children, in itself, is not excessive, as compared with the general frequency of the disease, the very manifest increase of the disease in the children, according to the moderate or excessive use of alcohol by the father, is significant, and seems to demonstrate, as far as figures can do so at all, a predisposing influence of an alcoholic heredity for the acquirement of tuberculosis.

Pégurier, reporting to the International Congress on Tuberculosis in Paris, 1905, considered parental alcoholism to be one of the most strongly predisposing factors for tuberculosis in children. From the results of an exhaustive inquiry into the heredity of three hundred fifty consumptive patients in the Antituberculosis Dispensary in Nice, he feels justified in asserting that parental alcoholism is, of all family taints, without exception the most pernicious in its effects on the children, preparing, as it does, even more than parental phthisis, the soil for bacillary infection in the latter. In fact, he says the children of alcoholics appear to be more likely to become tuberculous than the children of consumptives.

According to the Washington Times of June 6, 1906, Dr. S. Alex. MacNicholl declared that ten thousand out of sixty-three thousand children in New York, examined, were found suffering from defects and maladies due to inherited alcoholic taint. Of the ten thousand children twenty-seven per cent were

tuberculous; twenty per cent had spinal defects; a total of forty-seven per cent for tuberculous infections.

Kaeser relates an interesting case in the eleventh Annual Report of the Tuberculosis Sanatorium in Heiligenschwendi, of a man who had been a teetotaler for eleven years. The children born before that time, that is, while he was a heavy drinker, are all scrofulous or tuberculous; the later-born children are all healthy.

Dr. Crothers relates the history of a family of seven children, born of alcoholic parents. Of these, four died of tuberculosis, two of alcoholism, one of pneumonia. There were nine descendants of these seven children in the third generation. Two of them were inebriates, four died of tuberculosis, and three were temperate. Crothers quotes Dr. Kerr to the effect that at least one third of the descendants of inebriates suffer from tuberculosis, and that all are more prone to develop the disease from slight exciting causes.

The influence of alcoholism, both personal and parental, in the patients treated in the Henry Phipps Institute, Philadelphia, is very manifest in the response to treatment, as shown in the last (Fourth) Annual Report of the institution (1908, page 32, seq).

There were 153 cases treated, with a personal history of alcoholism, and 434 who denied the abuse of alcohol. The results are shown in the accompanying table.

ALCOH	ALCOHOLICS		NON-ALCOHOLICS	
RESULTS CASES	PER CENT	CASES	PER CENT	
Discharged with disease arrested 2	1.30	5	1.15	
Discharged with disease improved40	26.14	217	50.00	
Discharged with disease unimproved76	49.67	178	41.01	
Had died35	22.87	34	7.83	

In 162 patients who gave a history of in 411 who denied such a heredity, the alcoholism in preceding generations, and results were as follows:—

ALCO	ALCOHOLICS		NON-ALCOHOLICS	
RESULTS CASES	PER CENT	CASES	PER CENT	
Discharged with disease arrested 3	1.85	4	0.97	
Discharged with disease improved60	37.03	194	47.20	
Discharged with disease unimproved77	47.53	174	42.33	
Had died22	13.57	39	9.48	

There is nothing astonishing in the fact that in alcoholics the percentage of improved cases should fall below that in non-alcoholics, nor that the tuberculosis mortality in alcoholics should be higher. Strangely enough, the percentage in improved cases with alcoholic heredity is rather higher than in those with a personal alcoholic history, while of course it is lower than in those with a negative alcoholic history, both personal and pa-The mortality is noticeably rental. higher in both classes of alcoholics than in those with a negative alcoholic history. Dr. Flick concludes, from the results obtained, that alcohol, being a poison to the human organism, may stimulate resistance to other poisons as well as to itself, and thus, within limits, set up a certain amount of immunity against tuberculosis infection.

However that may be, and I am far from denying the theoretical possibility of such an immunity produced by alcohol, under certain conditions,- it would be bought at too dear a price in many other respects to make us desirous of advocating alcohol as a means to produce it. Moreover, a specific immunity against tuberculosis can be produced much more efficiently, and in a degree which can be regulated according to the needs of the individual case, by specific remedies, which have in the last years formed the subject of investigation of tuberculosis-physicians to a considerable extent, and which have been proved to supply a means by which the great "white plague" can be attacked more effectively than has been possible in the past.

Asheville, N. C.





Tramping for Health

William Randolph Hale

RESTLESSNESS, or a longing to break away for a while from conventional life, is apt to characterize indoor dwellers, such as men of sed-

ize indoor dwellers, such as men of sedentary callings, and housekeepers of the

Martha type. For the city man, a week or so of camp life in the woods seems the most attractive and most natural thing, and he usually returns tired, but content.

Some fifteen years ago the writer was an enthusiastic bicyclist, and would enjoy riding even now but for some injurious effects, more readily observed in the course of a long ride of twenty miles or more, which make bicycle riding an apparently undesirable form of exercise. The longcontinued and severe jarring of the spinal region, and undue ex-

citation of the nerves at its base, can not promote either health or longevity.

But no such objection applies to walking; so as an antidote for the periodic restlessness, and a means of health and recreation, spiced with adventure, I arranged a tramp trip to the seashore, starting from where I live near the mountains.

I very much desired a compagnon de voyage, but could find no one with both

leisure and inclination for this kind of experience, so I went entirely alone. My family and friends were somewhat concerned for my safety, and I was cautioned especially to beware of tramps, and to

keep a good revolver handy. But I saw no tramps - not one. was the only tramp; and if anybody was afraid, it was the other man, not I. The roads generally were lonely, passing through a sparsely settled country, with few travelers, and many deserted farmhouses, whose occupants had probably gone to obtain work in the cotton mills.

Though my tramp appearance was against me, I never experienced the least incivility, but was treated everywhere with kindness, and in the more remote rural settle-

ments, with the most free and generous hospitality. The expenses along the way amounted to less than ten dollars.

My outfit consisted of one black oil-skin poncho, sixty-six by ninety inches, weighing five pounds, for use both as blanket and rain coat; one suit of underwear; several pairs of thick cheap socks; a map of my route; a book to read; something to eat; and last (and least) a pistol; all contained in a capacious satchel of blue



READY TO START

denim, which could be carried in the hand, or shifted to easy positions on the shoulders or back. The total outfit, including a heavy bludgeon, or walkingstick, weighed about fifteen pounds.

Leaving Greenville, S. C., on the morning of April 14, my route lay through the counties of Greenville, Laurens, Greenwood, Saluda, and Lexington, to Columbia, thence by the towns of Sumter,

Florence, Marion, Conway, in Horry County, and so to Myrtle Beach, S. C.,—something over two hundred fifty miles. The first of May, after seventeen days on the tramp, including three or four spent on the beach, I arrived home by rail.

There was never any attempt to make time, my pedometer showing only an average rate of two or two and one-half miles an hour. I stopped to play and wade, barefooted, in every brook; bathing in the creeks; turning aside, whenever tired or heated, to sprawl in the shady forest, sleep-

ing, reading, dreaming day-dreams, listening to the cooing of the doves or to the song-sparrow's melody.

Rain fell only upon two afternoons, and this was the most agreeable weather of all in which to travel. Taking off shoes and socks, turning up my trousers to the knee, and sticking my head through the slit in the center of the poncho, I kept perfectly dry and comfortable, and made an enthusiastic ten-mile walk, notwith-standing my feet became rather sore.

The last half of the journey was mainly along the railroads, through a flat and generally swampy country, where one might hesitate to sleep in the open at night; but wherever possible, I slept in the woods, sleeping thus eight nights out of the seventeen — a most enjoyable and novel experience. I usually penetrated a little way to some secluded spot in a pine forest, and divesting myself of hat and shoes, rolled up in the poncho, with my satchel for a pillow. The first night

in camp was a "white night." The situation was strange, and I did not succeed in getting to sleep. The second night I slept about four hours, and after that I usually slept about seven hours. Some of the nights were cool, but I was never uncomfortable, owing to the excellent circulation in my tired feet and legs, which kept them always warm.

Only once was I ever in any danger. One morning about daybreak I was rudely a wakened by two crows, which doubtless had a nest in the tall pine under which I was

sleeping. The crows, seeing a strange-looking black object, without arms or legs, at the foot of their tree, came down to investigate, and alighted on a heavy dead limb lower down, which broke off and fell with a dreadful crash just at my head, giving me a narrow escape, and a bad fright. As I jumped up suddenly, and the crows saw it was a concealed man, they flew away, uttering the most discordant squawks.

I saw no snakes, outside the swamps, nor any venomous insects; but I considered it of prime importance, upon lying



PREPARED TO WADE

down in the woods at night, to stuff my ears loosely with cotton, to prevent any accidental intrusion from earwigs or other prying insects.

After leaving the hill country, mos-



A SOUTH CAROLINA CYPRESS SWAMP

But if I slept at a house, I always ate supper with the family. Not being addicted to the breakfast habit, I was never obliged to lose time in the morning waiting around for that inconvenient

and unnecessary meal. Among the dietetic sins which I remarked on my travels, imperfect and hasty mastication seemed the most common, and the one which was least necessary.

During the first week no benefit appeared to result from my walk. I tired easily, and though feeling as well as usual, I became constipated, had a capricious appetite, and began to fear that a man nearly fifty years of age, and un-

quitoes were numerous after dusk, but as I went prepared to exclude them, I escaped with two bites. In that flat country the streams flow sluggishly, and the water is apt to lie in still pools and eddies, where this pest can breed. Very few who live in the mosquito districts escape periodic attacks of "the fever," as it is called.

I started out hoping to do my own cooking in camp, but found that the supplies and equipment were too burdensome to carry, so I ate a regular

dinner at the best-looking farmhouse I could find on the road, and carried for supper, when I camped, a supply of fruits, nuts, raisins, and the like, which were nutritious, and required no cooking.



GATHERING CRUDE TURPENTINE IN A SOUTHERN PINE FOREST

accustomed to long-distance walking, should not have undertaken so much. But by the end of the second week, I was easily averaging twenty miles a day,

(Continued on page 501)



AFFLICTED, YET PATIENT

This little fellow was strapped to this board for more than a year

Help for Unfortunate Children

HE cry of the poor—have you heard it? Have you experienced the bitter wail going up from hundreds, yes, thousands, in our great cities who find their meager earnings insufficient to meet rent and groceries and

clothing, and who must go hungry or be turned out for non - payment of rent? Denying themselves nourishing food, living huddled up in illventilated, unlighted, insanitary quarters, is it a wonder that sickness comes to lay low some on whom falls the burden of providing for the family, and with a diminished income greatly increases the expense?

In our hurrying industrial age, when the very atmosphere seems to breed a grasping instinct, when the strong and rich grow rapidly richer without much regard for the submerged; when the laws, taxation, and the like seem to say, "For he that hath, to him shall be given: and he that hath not, from him shall be taken even that which he hath," it were a sad time for the wretchedly poor of our cities if it were not for such organizations as the New York Association for Improving the Condition of the Poor.

This organization has been in existence

for two thirds of a century, and it would be difficult to place any adequate estimate on the vastness of the work it has accomplished for the alleviation of suffering among the downtrodden.

Taking up the matter of hygiene, which is only one of the association's activities, the record shows that it has provided for more adequate in-

spection and supervision of New York's tenements, has secured legislation looking to a purer milk supply, has sent to the country thousands of sick who could not have been helped otherwise, has erected public baths, started vacation schools and school gardens, and has looked after the physical welfare of schoolchildren.



"SMILING JOE" ON THE BEACH
He was strapped on his back for months. He
is now "graduated," cured

But in this paper we desire to consider only one feature of the work, that of the open-air treatment, at Sea Breeze, of the poor children having surgical tuberculosis,—that is, tuberculosis of the joints, bones, and glands.

The work for non-pulmonary tubercu-



THE BABIES STAY OUT IN THE OPEN AIR SUMMER AND WINTER

losis as carried on at Sea Breeze was not an experiment, for it had been in operation for nearly half a century in France, and at present there are at least seventy-five such seaside institutions for tuberculosis children. It has been proved beyond question, by the experience of the various institutes, that the sea air affords exceptional advantages for the cure of surgical tuberculosis in children, and that many get well, when afforded the advantage, who

would grow progressively worse under older methods. But the demonstration had to be made in this country in order to bring home to us the value of this treatment.

In 1904 the association decided to establish at Sea Breeze, Coney Island, a temporary tuberculosis sanitarium for

children. The first camp consisted of tents with a capacity for about forty-five patients. That season sixty-three children were treated for tuberculosis of the spine, joints, and glands.

Throughout the summer the children spent the entire time — twenty-four

hours a day—in the open air; at night in tents widely open at the ends; in the day-time on the beach, unless it was raining, when they occupied a large covered platform open on all sides. Each patient had a daily sea bath.

Improvement was manifested at once in the general health. The little fellows, pale, languid, with picky appetites, fretful, and disinclined to play when they arrived, soon manifested a revival of spirits, slept soundly, ate well, played with a will, became



JOHN, "THE COP"

Playing "ring around the rosy " with the Sea Breeze children

ruddy and rugged, and gained in weight.

The local tubercular trouble in bone or joint was slower in yielding; but the immediate gain in general health, in connection with the indicated surgical work, served to arrest the disease process in most cases, and to cure it permanently in many cases.

When the weather became too cold for tent life, old buildings were arranged for dormitories, with practically outdoor ventilation and with wide-open porches. This expense was undertaken with some



ON THE VERANDA

misgivings, but with the conviction that the open-air treatment must be kept up if the gain of the summer was to be maintained for the little patients. For twenty-four hours a day during the entire winter the children, well bundled up, were kept practically outdoors, the temperature in the wards ranging from 10° to 40° above zero.

Not all the children are cured at Sea Breeze. Nearly half are permanently cured, and another one fourth are greatly improved. About one fourth receive no permanent benefit.

The work, begun at Sea Breeze as an experiment, has fully demonstrated that surgical tuberculosis should not be treated in the wards of a city hospital, but in the open air, and has shown that the sea air affords special advantage for this purpose.

Subscriptions amounting to more than a quarter of a million dollars have been



TYPE OF JACKET WORN BY MANY OF THE BABIES

received for the erection of a permanent seaside tuberculosis hospital for children, and the association will appreciate further contributions for this purpose.









Treatment of Malaria Without Drugs

H. F. Rand, M. D.,

Superintendent St. Helena Sanitarium, Sanitarium, Cal.

ALARIA is considered by all who put any reliance in drugs as a disease that can not be handled by anything except quinin in some form. But we have many striking illustrations which clearly show the advantages of hydrotherapy when properly applied in this disease.

In a Western State, as teacher of physiological therapeutics in connection with the State university medical school, we had an opportunity to demonstrate the effects of hydrotherapy.

There were a number of malarial patients from the Southern States, especially Texas and Louisiana, which they had treated with their remedies, but after about two weeks the chills returned. Being requested to try hydrotherapy, we took the cases, and followed them through, with excellent success.

Nearly every one who attempts hydrotherapy in this disease uses hot water. This reduces the number of white blood-

¹ From a paper read before the Medical Council, Seventh-day Adventist General Conference, Takoma Park, D. C., June, 1909.



cells, and lessens their activity, and also reduces the alkalinity of the blood. Thus the leucocytes in the blood are prevented or hindered in their work of destroying the parasites. Instead of doing this, the right thing to do is to increase the num-

ber and activity of the cells, and keep up the alkalinity of the blood.

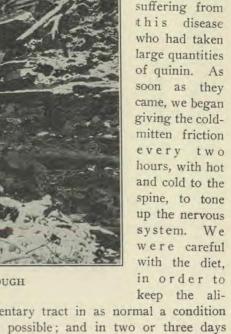
We gave these patients a cool halfbath about ten hours before the chill was due, following this with other cold treatments at intervals. The men from the medical school were there to watch the results. They watched for the chill to come, but it did not come. We used other cool treatments, and kept them up. Together w e treated these cases for a week. All that was required in the treat-

ment was hydrotherapy, and it was a success from the beginning.

There was another case that they had been treating in their way for nearly two weeks. The man had been taking quinin and other medicines. The doctors told him it would probably be three or four months before he would be well. They knew that the malarial parasites could resist their medicines, and live in spite of them. This case was more reduced than the others had been. We used coldmitten friction, beginning about the same

> number of hours before the chill was expected each time, and the chills kept coming further and further apart, until finally they ceased in about a week.

Just recently in California, we have had two gentlemen who had taken mitten friction every two hours, with hot and cold to the spine, to tone up the nervous system. We were careful with the diet. in order to keep the ali-





COOL ENOUGH

mentary tract in as normal a condition as possible; and in two or three days the chills were completely obliterated, and the patients improved very fast. We used no quinin at all. The examination of the blood in one week showed no trace of the plasmodia.



Some Facts About Foods

George E. Cornforth

T is a busy world we live in. People seem to have no time to care for their health, though, as has been well said, "The man who would be a success in any line of work must first be a success in his own body."

Athletes, for the sake of winning a contest, subject themselves to rigid rules as to temperance in eating and drinking and the general care of the body. If temperate living is necessary to win an athletic contest, why is it not just as important in the race of life?

Horse trainers, though they may not know how to care for themselves, know how to take care of valuable horses. But which is more important, the horse or the man, a horse-race or the race of life? The man who would not think of allowing his valuable horse to get at the oat-box and eat all the oats he wants, would probably complain bitterly if his physician did not allow him to eat all he wanted of some favorite article of food.

Stockmen know what, how much, and when to feed, and they feed to get results. Why not feed ourselves and our children to get results? Are our children of less importance than our stock? Would that mothers might realize what a help it would be to them in bringing up their children properly if they would apply the laws of health in the care of their children; for often when boys and

girls are naughty, the trouble is with their food. Many a mother is feeding her children into drunkards' graves.

A food is a substance which, when taken into the body, supplies heat and energy, builds tissue, and repairs waste. To be a true food, a substance, when taken into the body, must become a part of the body, and must not be injurious. Alcohol, which some would have us believe is a food, does not become a part of the body; it does not enter into the cells, but is oxidized, or burned up, around the cells.

The diagram names the different classes of food, and tells what food substances supply them. The two main classes of food elements are carbonaceous and nitrogenous. The carbonaceous foods are made up of carbon, hydrogen, and oxygen. The nitrogenous foods contain these, and also nitrogen and sulphur.

The carbonaceous foods are of two classes — the carbohydrates (starches and sugars) and the fats. Starch is found most abundantly in the grains. It is also found in the legumes and in some vegetables. Sugar is of two classes — the sucroses and the glucoses. The sucroses are cane-sugar (beet-sugar and maple-sugar are chemically the same as cane-sugar), milk-sugar, and malt-sugar.

The glucoses are dextrose or grapesugar, and levulose or fruit-sugar. Grapesugar and fruit-sugar are found in fruits. A mixture of these two sugars is called invert sugar. An example of this is honey, which is a mixture of about equal parts of dextrose and levulose, with a small proportion of cane-sugar, and is a naturally predigested food. One must not entertain the idea, however, that because it is a predigested food, it may be partaken of freely. It is a very concentrated food, and it is very easy to eat too much of it. It is fortunate, therefore, that it is high in price.¹

People are accustomed to think that fats are largely of animal origin, but there is an abundant supply of fat of vegetable origin, to which there is not the same objection that there is to the fat of the bodies of animals. Nuts and olives furnish us with an abundant supply of vegetable fat, and there are other vegetable oils, such as olive oil, cottonseed oil, corn oil, peanut oil, and oil of sesame.

The carbonaceous foods are the fuel foods which supply heat and energy to the body. Another name for nitrogenous food is proteid. The proteid foods are albumen, casein, gluten, legumin (vegetable casein), and fibrin. The best example of albumen is white of egg, which is almost pure albumen. Casein is the curd of milk, from which cheese is made. Gluten is found in wheat. Legumin, sometimes, called vegetable casein, from the fact that it resembles the casein of milk, is found in the legumes,—peas, beans, and lentils.

The two minor classes of food ele-

ments, though not minor in importance, are cellulose and mineral substances. Cellulose is woody fiber. It makes up the structure, or framework, of foods — the skins and sections of fruits and vegetables, and the cell-walls of foods. It is practically indigestible, but furnishes the bulk which is necessary for proper digestion.²

The mineral substances go to build bone, brain, and nerves, and are important constituents of all the tissues of the body. Iron is an important constituent of the blood; phosphorus is needed by the bones and nerves; potassium is required by the red blood-cells and the muscles, sodium for the proper constitution of the fluids of the body; chlorin goes into the composition of the dydrochloric acid secreted by the stomach; sulphur is one of the constituents of proteids; calcium goes to build the bones; and fluorin and silica are found in the teeth and bones. Thus we see that to supply the great variety of elements which the body requires, a variety of food is necessary; but a large variety should not be eaten at one meal.

There is another class of substances sometimes called foods; namely, condiments, such as pepper, mustard, ginger, salt in large quantities, cloves, Worcestershire sauce, spices, and similar substances. These are added to food to "season" it, or give it "a relish," or to stimulate appetite. They are not foods. All the heat they produce is the hot taste in the mouth; the only energy they create is that which manifests itself in a bad temper; and the only tissue they build is a gin-liver; for gin-livers have been found in men who never were users of liquor, but who consumed large quantities of spices, especially pepper. The person whose taste has never been benumbed by

¹ This, in the mind of the editor, is the crux of the whole matter. Sugar is easily burned in the body, and burns at the expense of other foods. It is also easily fermentable. Its taste is almost universally relished. Its cheapness throws open the temptation to use it excessively. Perhaps the sugar trust is right, after all, in attempting to secure a high tariff on sugar. The principal advantage of other sugars over cane-sugar is that they are so expensive they are not likely to be eaten in large quantities.— Ep.

² That is, it was thought to be necessary until Horace Fletcher taught us otherwise. — Ep.

the use of such things wants none. The natural flavors of well-cooked food, in their great variety, are sufficient appetizers. Anything else only obscures those delicate shades of flavor, and makes all foods taste alike, besides disguising unwholesome food in such a manner that it is unsuspectingly eaten.

Food is usually measured in calories, or heat units. The amount of heat which a food will produce when burned outside the body is a measure of the amount of energy and heat it will produce when burned in the body. A calorie is the amount of heat required to raise one kilogram of water one degree, centigrade, or practically two quarts of water one degree Fahrenheit. One ounce of carbohydrate or of proteid yields 116 calories, one ounce of fat 264. According to some recent researches, the average person doing light work requires 2,100 calories of food a day. Of this about 10%, or 210 calories, should be proteid; 25% to 30%, or 525 to 630 calories, should be fat, and the remainder carbohydrate.

To give a little more definite idea of how much a calorie is, we might say that two eggs yield about 125 calories. Each of the following yield about 100 calories: I ordinary slice of bread (I I/3 oz.), I medium-sized potato, I round tablespoonful of sugar, 3/4 lb. of watermelon, I large apple, 2/3 glass of milk, I/5 glass of cream, 1/2 oz. of butter. When we study the different foods, we will give their food value.

From the facts thus far stated, it becomes apparent that cooks should be well trained for their work, and nurses should understand the properties of foods, and how to prepare them so that they will be easily digested and assimilated, because it takes a variety of good food well prepared to build a healthy body; and it is food, not drugs, that nourishes a sick person back to health.

Table Showing the Different Classes of Foods

Carbonaceous
Carbonydrates
Starches
Grains, Vegetables, and Legumes
Sugars
Sucroses
Cane-, Beet-, and Maple-Sugar
Malt-sugar
Milk-sugar
Glucoses (in fruit and honey)
Dextrose (or grape-sugar)
Levulose (or fruit-sugar)

Fats
Butter, Cream, Nuts, Olives
Vegetable Oils
Olive, Cottonseed, Corn, Peanut

Nitrogenous — Proteids
Albumin — White of Egg
Casein — Milk, Cheese
Glutin — Wheat, other Grains
Legumin — Legumes
Fibrin — Meat, Grains

Cellulose — Indigestible, Bulk

Mineral Substances

Iron — Spinach, Yolk of Egg
Phosphorus — Grains, Legums
Potassium — Potatoes, Fruits
Sodium and Chlorin — Salt, Vegetables
Sulphur — Vegetables, Yolk of Egg
Calcium — Milk, Eggs, Grains
Fluorin and Silica — Vegetables, Grains
Magnesium — Grains, Milk





Dress and Its Relation to Health—No. 2

Mrs. Eba K. Cogshali



HALL we now look within the body at those delicate organs of soft tissue upon which life and health so directly depend?

The stomach should lie above the intestines, between the floating ribs. But, alas, it is seldom that corsets allow the

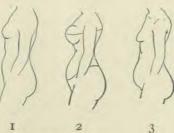
"floating ribs" to float. Through the pressure of corsets, and the weight of skirts, the stomach becomes prolapsed, and falls upon the intestines, pressing them downward upon the contents of the pelvic cavity. From this an inactive condition of the bowels results, a difficulty common to most women.

The ascending, transverse, and descending colon, or large intestine, becomes crooked, and often doubles on itself, causing serious obstruction.

God put the stomach between the ribs. Women have crowded it down among the lower abdominal viscera. It is rare to find a woman without a prolapsed stomach; oftentimes it is four inches below its proper position. Of course the stomach can not change places with the organs below it, so, if it is crowded down into the lower abdominal region, the other organs are crowded down too. When the colon is so twisted as to produce stricture and constipation, the owner of this deformed body takes laxatives to remedy a trouble that exists only because of the conventional dress.

> However, the chief trouble is with the pelvic organs. The ligaments that hold them in place gradually give way from strain, and, like spent india-rubber, lose their elasticity, become weak, and stretch until they spring back no more. As a result, these organs fall low on the pelvic floor, and lie there,

often tipped back against the spine, causing backache; and as the nerves of these organs connect with the brain, they telegraph the miseries to headquarters, and then we have headache. Or, the pelvic organs having tipped forward, bladder troubles ensue. Tumors are an abnormal development of a natural thing. Some grow inside the uterus, others outside. Disturbed circulation in this organ causes congestion, inflammation, ulceration, and perhaps morbid growths.



I. NORMAL FIGURE

- 2. CORSETED FIGURE
- 3. DEFORMITY PRODUCED BY

By these conditions, too, the general disposition is changed, and a bright, happy girl becomes morose, fretful, sad, and uncompanionable; indeed, many homes are made miserable because of the wretchedness of wives and mothers who are slaves to fashion. Can the de-



A "MODERN" COR-SET, AS TAKEN FROM AN ADVERTISEMENT

mands of home and society be met with such a state of things? - Impossible! Various nostrums, patent medicines, are taken, serving only to aggravate the trouble; when, if the blow were only struck directly at the cause of suffering, health and happiness would surely return.

But to consider further the troubles that dress produces internally.

The stomach, dragged out of place, loses its natural tone, its walls become relaxed, dilatation occurs, and distressing symptoms of gastric neurasthenia result. The constant dragging upon the liver and the right kidney, causes the displacement of these organs. In post-mortem examinations of sudden deaths, the ribs have been found completely to overlap one another, and to have produced such deep indentations that medical students have learned to call the livers of female subjects of the dissecting room, the "corset liver." These indentations are often so deep that the wrist may be easily laid in the groove; and there have been cases of livers cut nearly in two. This organ is a mass of blood-vessels, through which every particle of blood ought to circulate freely, on its way to the heart. Of course it can not get through the

squeezed portions; and the half-done work of a crippled liver results inevitably in an unclean, impure condition of the blood, which utters its cry by means of aching nerves.

That Bright's disease is more common in man than in woman is accounted for by the fact that woman's liver is larger than man's, and therefore capable of removing more poison. What a shame to interfere with the work of our best internal friend! But, on the other hand, women suffer more from gall-stones and jaundice than do men; because the compression of the waist involves direct pressure upon the liver, and restrains the action of the diaphragm, and in consequence the liver and gall-bladder are not well emptied of bile, and the secretion hardens into masses called gallstones. The portal circulation of the blood, that which passes through the stomach, spleen, pancreas, and intestines.

and thence to the liver on its way to the heart, is seriously disturbed by prolapse of the abdominal organs and compression of these vital parts.

A woman has naturally a larger waist than a man, in proportion to her height; and the liver and other viscera are larger, and hence require



the liver and other "FORM," FROM AN viscera are larger, ADVERTISEMENT

more room. But when so terrible a disregard of proportion and comfort is exercised, the organs become atonic, or devitalized, and physical deterioration begins.

There are other organs that suffer severely besides those mentioned. The relation of tight bands and corsets to respiration is most important. Generally this subject has been considered by reformers with reference to the lungs and respiratory tract alone. The fact that the diaphragm, the important muscle of respiration, is attached to the ribs near the waist line, and should be allowed to swell the ribs laterally in breathing, is generally overlooked; abdominal and intercostal (or rib) breathing is impossible with tight clothing.

The air we breathe is composed of oxygen and nitrogen; for convenience we say the air consists of one part of oxygen and four parts of nitrogen. The latter dilutes the former, and regulates its supply to the body. Oxygen contains the life element that purifies the blood as it passes through the lungs in the pulmonary circulation. This is what the Bible means when it says, "The life is the blood," and, "The life is in the blood." It is the oxygen, the life element, that we breathe. Thus we have the "breath of life" of the seventh verse of the second chapter of Genesis. The more air one can take in,- the greater lung capacity one has,- the more vitality one possesses. Oxygen is needed to cleanse the tissues; and beauty of complexion depends upon a full and free breathing capacity. The lungs should so swell in breathing that the one billion seven hundred million air-cells shall all be filled with pure air, to be distributed by the little red blood-corpuscles to every nerve and tissue in the body. This is so imperfectly done by the corset-wearing woman, that it is no wonder she has a muddy complexion, and that her whole physique is below the normal in health and vitality.

Again: with every breath the entire contents of the pelvic and abdominal cavities should move up and down rhythmically. The action of the diaphragm stimulates the internal organs with increasing vitality, when allowed to act naturally. Just a few facts relative to

breathing may show the importance of permitting the proper natural expansion of the lungs and chest cavity. As before stated, our vitality depends on the amount of oxygen we can take in; and besides purifying the blood, breathing (proper breathing) hastens digestion, so that fermentation of food is not so likely to occur; the nutritive qualities of the food are all utilized; and the liquid food, the nutrition for which the system is waiting, is hastened more rapidly into the circulation.

Full and deep breathing also gently compresses the liver, and alternately frees it, emptying it of stagnant blood, and hurrying the bile along its course. It hastens portal circulation, and increases the capacity of the chest, both vertically and laterally. It is an exhilarating tonic. It equalizes the entire circulation, and cures pulmonary troubles, also headache (when not caused by displacement of organs or chronic disease), renders one less liable to take cold, restores nervous poise, and develops lung capacity, by which to gain still greater strength and health.

Dear reader, did you notice the hourglass shape of the habitually corseted figure in our last article? It is suggestive indeed. The sands of life soon run through a figure shaped to such a garment. The corset grasps the expanding lungs like an iron vise, and compresses the ribs and prevents their spreading with the incoming breath, as one might tie the handles of a pair of bellows together. The natural shape of the waist is not a circle, but an ellipse-oval. large waist - one that is proportionate to the figure - is a sign of large lungs and vital organs, of which any woman should be proud. A small waist indicates precisely the opposite.

We have now surely seen that health depends largely upon intelligent dressing of the body.



Planning the Grounds

Mrs. Stella Ridgway

MISTAKE commonly made by those who are planning to build a home, is to expend the whole amount set aside for that purpose on the building itself, seemingly forgetting the interior furnishings and the exterior setting of garden and lawn. One architect has suggested that the sum one contemplates using upon a home should be divided into fifths - three fifths for the building proper, one fifth for the furnishings, and the remaining one fifth for the gardens. This may be a bit rigid, and yet in the main the architect is right. If the inelastic pocketbook must be considered, it is better to do so in the beginning, before a debt is incurred. Debt is a burden, and one should be careful how he invites its presence, especially in a home, which should be a place of rest and freedom from care. Still, with forethought and good planning, one can come through on the right side of the balance sheet; but let it be remembered that the saving comes not in lumps, but a dollar here and a dollar there.

The first glimpse a visitor or a passer-by gains of a home makes a lasting impression, and if the house is ever so grand from an architectural point of view, and yet out of harmony with its surroundings, the misfit is apparent at once, and gives anything but a flattering opinion of the builder's taste. There are homes that attract one and leave a pleasant impression on the mind, while others

repel, and one feels like shunning them. Bacon said, in his essay on building, "Houses are built to live in, and not to look on," and there is a vein of truth in the saying. Superfluous ornamentation of the exterior of a house should be avoided. It is poor taste architecturally.

The house interior should be so arranged that every inch of space will be utilized, and the housework made as easy as possible, so that the ever-present problem of domestic help may be ignored by the housewife if she deems it advisable.

Let the rooms be large enough for comfort and freedom, the division of wall spaces well planned, and the color scheme restful and harmonious, and there will be a beautiful home without costly furnishings. Whether we plan to build humble or grand, let us see if we can not build a little smaller or less elaborately, and so have something to expend on the surroundings. A garden need not be very expensive, especially if a part of the work is done by one's self. The style of house and the surroundings should influence the design of the grounds, but usually simplicity and the harmonious grouping of shrubbery and flowers should be studied. While no set rules can be given for gardening, and landscape gardeners are born, not made, yet there are things to be avoided, such as a chaotic mass of color in beds and borders. A bed of the scarlet geranium

(Continued on page 501)



Vacations and Health

ACATIONS are taken mainly with the idea of improving health, vet it often happens that people return to their homes suffering from some form of ill health due to carelessness, and frequently they need additional rest after their return. Vacations during hot weather are especially likely to be followed by unfortunate consequences; for often they have to be taken in unusual surroundings; the sleeping-quarters may be more cramped than at home; the food may be unusual, and may be eaten irregularly; and the exposure to the sun, with unaccustomed exercise, may create a condition of lowered vitality, which heightens the danger from toxic substances from food, so much more likely to spoil in hot weather, and from infectious bacteria, which grow so much more luxuriantly at high temperatures. In a word, there are so many dangers that the weeks of intermission from a busy occupation may prove anything but the re-creation they are supposed to be.

The old Romans succeeded in conquering the world as much by the ability to maintain the health of their troops in their campaigns as by the courage and organization of their soldiery. Some of the maxims of their army regulations would be worth keeping before the mind of the vacation tourist who wanders far from home and into unusual conditions during the summer. One of the principal of these was: "In the land of the enemy beware of the water and certain

times of the day that the inhabitants of the country deem dangerous." Another was: "Avoid countries with swamps, which are sources of diseases, and deserts and mountains without trees." A third, which is especially applicable at this time of the year, was: "The soldier must not be without protective shelter. A man must guard against the rays of the sun, and begin the day's work very early." These wise old Romans realized just what were the special dangers of people traveling far from home. These were the water, certain times of the day, the heat of the sun, and swampy ground. We are likely to think that the ideas behind these maxims are much more modern. If tourists would take them to heart, there would be much less aftermath of disease following vacations.

It was especially exposure to the heat and the sunlight that the Romans insisted on as most enervating. There is probably nothing that lowers resistive vitality and lays one open to the influence of disease like exhausting exposure to the sun. In recent years so much has been said of the benefit of sunlight that we sometimes forget that, like every other good thing in excess, it may be intensely harmful. Exposure to the sun is likely to be especially baneful if its effects are not neutralized by longer hours than usual of restful sleep. It is this especially that travelers are likely to miss. Most persons do not sleep so well away from home as at home. Often the feeling that one is losing the precious hours

of vacation is allowed to shorten the time spent in bed. For the very young this policy may not prove harmful, though it must not be forgotten that it is among them that we most frequently see the sad results of vacations supposed to be taken for health improvement. Among the middle aged, however, there is no doubt that unless taken with some of the Roman maxims in mind, vacations may well prove more harmful than beneficial.

— Jour. of the Amer. Med. Assn.

The Autumnal Disease

WE speak of typhoid fever as an autumnal disease, its death-rate being highest in that season. And urbanites have, as a corollary to this, considered that "city typhoid is bred on the farm;" that the disease has been contracted by urban sufferers during their vacations. Such is no doubt often so, especially since the bacillus is enormously diluted in the water-supply of cities; whereas, on the other hand, the infection drained from a privy will easily saturate a near-by well. However, our comparatively recent literature concerning the fly as an intermediary explains many cases of urban typhoid, for which rural districts would be in no wise responsible.

One need but count back two months from the fall typhoid mortality to the time when flies became rife, and to reflect that this period corresponds with the inception and course of "autumnal" typhoid. Of course the higher temperature must also be considered; but only as a contributory, not as an essential factor. It is most congenial to fly breeding, and its enervating influence is a predisposition to infection, typhoid or otherwise.

Other means than water (and ice) by which typhoid may be contracted are vegetables, fruits, meats, and other foods (especially milk), upon which flies may have deposited the bacilli. . . . Other means of typhoid infection are by contaminated oysters and clams; and possibly also by lobsters and crabs, those scavengers of the sea.

We have from time to time made known to our readers the possibility of dissemination by "typhoid carriers," who, it would seem, for months or years after they have recovered from the disease retain typhoid bacilli in the gall-bladder as a reservoir, so that their dejections are a constant danger.— The Boston Medical and Surgical Journal.

Flies and Typhoid Fever

THE importance of the part taken by the fly in the spread of typhoid fever has recently been emphasized by the writings of Dr. L. O. Howard, the entomologist of the United States Department of Agriculture. He has shown that the fly will breed by laying eggs in surface deposits of manure, either around

the stables or in the box closets where human excrement is deposited. . . . The adult flies may also feed from such material, and they can also transport typhoid bacilli from these places to kitchens and dining-rooms, and infect the food in two ways. . . .

Fecal matter containing the germ of

typhoid fever may adhere to the body and legs of the fly. . . . The second method of infection of the food is the deposit of the feces from the fly upon the food, as it has been shown that the typhoid bacillus will remain alive twenty-three days in the intestine of the fly. . . . Sometimes when lime had been used in the latrines, flies with whitened feet were seen walking over the food. . . .

It is difficult to state just how much typhoid fever comes from the fly as a carrier, but the danger from this source is obvious, and the route of infection which is now open from our cesspools to our kitchens can be closed in two ways—the privy itself can be carefully screened against the entrance of the fly, and as an additional safeguard, the contents can be disinfected by chlorinated lime or freshly slaked lime. The doors and windows of the kitchen should also be screened against flies.—Maryland Medical Journal.

Physiology and the Dental Profession

ODERN dentistry largely owes its rise and existence to the dissemination of physiological principles. Before the public had learned by physiological teachings that the teeth serve more than an ornamental purpose, it was rare for any one to consult a dentist unless excessive pain were present. In that case relief was usually afforded by extracting the offending tooth. This act required only a mechanical workman, and for this reason dental work was formerly attended to by the barber. In his estimation the extracting of a tooth and the shaving of a head required an equal amount of intellectual ability. . . .

Twenty years ago a certain town in Iowa boasted of three dentists. To-day it contains at least two hundred, each one busier than the former three. The three worked at a time when any dental operation aside from the killing of a tooth itself was regarded as an ornamental luxury. The two hundred dentists draw their patronage from a community enlightened by physiological principles. Among them the desire to

preserve their teeth is no longer prompted by a sense of vanity, but by the knowledge that good teeth are necessary to the maintenance of perfect health.

Stimulated by physiological teachings, the young man or woman to-day makes regular visits to the dentist to have teeth attended to before a large cavity has resulted. The young mother, recalling her school-day teaching, now consults her dentist for her infant's first set of teeth, knowing that they ought not to be neglected, even though another set will take their place. The aged sire or matron undergoes the pain of having a new set of teeth installed, knowing that good digestion may prolong or make enjoyable the last remaining years of life.

So it has come about that the education of the masses in regard to physiological truths has gradually created the profession of modern dentistry, and by changing the motive for consulting the dentist, has produced a demand for more and better dentists.— Carl J. Wiggers, M. D., lecture to dental students, Ann Arbor, Mich., in Dental Cosmos.

Abstracts

In this department, articles written for the profession, which contain matter of interest to Life and Health readers, are given in abbreviated form. Where practicable, the words of the author are given, but often the passage is abbreviated, or else paraphrased in popular language. Technical matters and portions of articles having no popular interest are omitted.

Dental Disorders and Tuberculosis

E have given too little attention to proper mastication. Our hasty meals bring about conditions that may be the initial cause of tuberculosis. If the saliva is impaired, there can be no normal assimilation. The prepared foods do not favor jaw action, hence do not receive the proper amount of saliva. This may be a favoring cause of dyspepsia, and may contribute to increase consumption. Tuberculosis makes great headway in a system that is exhausted.

An astonishing feature in connection with the causation of tuberculosis is the abnormal condition of many mouths. Large cavities, filled with indescribable débris, tend to disarrange the digestive system. These cavities, on microscopic examination, show the most prolific bacterial life. Nowhere else in the body could one find a more congenial habitation for the germs of tuberculosis than in the deep-seated cavities of the teeth.

There is a correspondence between the greatest incidence of tuberculosis and that of tooth decay, for both of these infections are most frequent between the ages of fifteen and thirty-five. As age comes on, the danger from these infections lessens. The important time for prevention is in the prime of life.

Another tuberculosis danger in a deranged mouth is the ulcerated tooth, belching forth its pus, which, seeping from the gum, finds its way into the stomach to do incalculable damage. The so-called pyorrhea alveolaris, or wasting away of the ridge of bone which holds the teeth, is associated with germs as dangerous to health as those of decayed and ulcerated teeth.

The tubercular bacillus does mischievous work in many mouths which have had so-called dental attention. The average cement filling is a porous material, with cavities large enough for the lodgment of a conglomerated mass of putrid vegetable and animal débris, and is not a safeguard against bacterial growth, because of its sponge-like nature. amalgam filling shrinks after hardening, leaving a gap between the walls and the cavity. My own experience with other fillings leads me to believe that the goldleaf filling and the porcelain and gold inlay are the only fillings which give promise of germ exclusion.

Prodding the teeth with cheap wood toothpicks favors inflammation of the gums, and wounds the gum tissue.

Disease may be transmitted by reckless dentists who are unmindful of the cleanliness of their fingers or instruments. Sometimes the simple procedure of cleaning the tooth is productive of injurious results. The thoughtless operator, dipping an instrument into an unhealthy pus pocket, proceeds with the same instrument to adjoining healthy teeth, and transmits the infection.— Dr.

B. J. Cigrand, Read at the Chicago Public Library, Nov. 14, 1908. Abstracted from the American Dental Journal.

Unnecessary Blindness

NOT more than five out of fifty thousand persons have any idea what "ophthalmia neonatorium" means. If, when turning over the pages of an annual report of a State school for the blind, one comes across the expression, in a list of long Latin names giving the causes of blindness, "ophthalmia neonatorium, 30," it conveys no meaning to his mind other than that it is one of the many diseases affecting the sight. It never occurs to him that this most easily preventable of all diseases is one of the principal causes of blindness.

Or, if one visits the school on one of its public anniversaries, to see the little blind children go through their exercises; to admire and be thankful for all that has been done and is being done to make their lot more endurable; and the thought comes that those little children have a lifetime of long, darkened days before them, it never occurs to him that, of the seventy-five children there assembled, twenty-five never would have been blind had their eyes been properly washed and cared for when they were born - had a few drops of a simple solution been put into their eyes, taking two minutes to apply, costing two cents to obtain!

The startling newness of this discovery, the horror of it when first realized, is bewildering. Why have we not known it before? Knowing now, what can we do to end this appalling state of things?

The public, acting under the guidance of, and in co-operation with, the medical profession, can do everything. For no

movement in this country, if undertaken in the interest of humanity, and based on sound principles, has ever failed of accomplishment, through the irresistible force of an enlightened public opinion, when that public opinion has been properly directed and controlled.

It is difficult to overestimate the efforts, extending over many years, which have been made by humane and progressive physicians to control this frightful disease.

In all countries the disease is found, perhaps less prevalent in our own than in other countries, but everywhere a scourge; and wherever it prevails, in Great Britain, Germany, France, and Italy, in Canada, and in our own country, there devoted members of the medical profession are to be found, earnestly striving to cope with it.

To their efforts it is due that, in all of our best-conducted lying-in hospitals and in the maternity wards of general hospitals, the ophthalmia of infancy has greatly decreased. As instancing one only of many similar well-managed institutions, it is satisfactory to know that, out of four thousand births, during a period of six years, at the Sloan Maternity Hospital of New York City, where preventive methods are employed, not one case of infant ophthalmia had developed.

Much has been done by the medical profession. No others know so well as the doctors how great is the need of further effort, and they are making it. Within two years there has been in this country a distinct revival, the beginning

of a crusade in behalf of the extermination of infant ophthalmia, which is destined sooner or later to stamp out the disease and to save the sight of thousands of children yet unborn.— Medical Examiner.

The Important Element in the Overfeeding of Infants

THAT the proteid of cow's milk is difficult to digest by infants has no longer any positive evidence to support it, and is discredited by nearly all Continental writers. It can be demonstrated that nearly any baby can digest a high percentage of pure casein [curd] in suspension, or skimmed milk, provided it can stand that much sugar, and that curds never appear in the stools, no matter how much the percentage of proteid, provided the food is fat free, and lastly, that curds regularly appear in the stools of babies to whose food whole milk is added even in small quantities after they have been on a fat-free milk. The very curds that have been assumed to be casein, we are now told, on the highest authority, are chiefly fat derivatives.

In two cases of summer diarrhea with profound intoxication, the patients seemingly moribund, each, after one day of water diet, was given, during the next twenty-four hours, the pure washed casein in suspension of sixteen ounces of milk. This was followed by an uninter-

rupted convalescence and curdless bowel movements. Formerly I would not have dared to give them even one ounce of milk for a number of days, for fear of "proteid indigestion," and I feel positive that both babies would have died if they had been put on barley-water and sugar, or on whey, or on milk containing fat.

That fat is relatively easy to digest seems equally doubtful. It is certainly one cause of milk overfeeding, and plays the leading rôle in the intoxications, and these two conditions are much the most frequent and serious nutritional disturbances in infancy. We all know from every-day experience that cream is not well borne by sick babies, especially those that have digestive disturbance, nor is whole milk so well taken as skim milk; and if this is true, then there is every reason to believe that the fat is comparatively difficult to digest in health as well .-"Remarks on the Feeding of the Healthy Infant," by Joseph Brennemann, M. D., in Jour. of the Amer. Med. Assn.



THE MEDICAL FORVM



Testimony of Health Officers Against the Fly

HE merchants' Association of New York has a committee on water pollution, which has shown that typhoid fever and dysentery are most prevalent in New York during fly time, and especially in those districts adjacent to the water front, easily reached by flies which have fed on the fecal matter floating near the sewer mouths.

They have shown that this floating filth contains disease germs, and that the disease germs can actually be found in large numbers on the legs of the flies, or in their digestive passages.

Recently the chairman of this committee addressed a letter of inquiry to various health officers and physicians with especial reference to disease transmission by flies. Many of the answers state a positive belief that flies constitute an important means of typhoid transmission. Some give proof to this effect; some express the belief that while the fly may be an important means of transmission, it is less important than the milk- and water-supplies.

J. N. Hurty, secretary of the Indiana State Board of Health, says:—

"We have records of several instances where typhoid fever was unquestionably transmitted by flies. The last instance was at the Wehrnely Orphans' Home, near Richmond, Ind. Sewage disposal at this home is by the use of a dilapidated outhouse, or vault. The house is not fly-proof, and it was undoubtedly through flies that the typhoid epidemic was started. A man who had recently lost his wife went to the

home, taking his child with him to be cared for there. He was sick at the time, and returned to die with typhoid fever two weeks afterward. Within eighteen days after his visit, typhoid fever broke out in the home, fourteen cases and one death resulting. He used the outhouse, and there was no possibility of drainage getting into the well. Flies must have carried the infection."

Here is a clear case where flies caused fourteen cases of typhoid and one death. But don't blame the flies. Blame the people who permitted an open privy and an unscreened kitchen to furnish the opportunity for the flies to transmit the disease.

The secretary of the Kansas Health Board tells of some typhoid epidemics occurring in small towns. Investigation of a number of these showed that the disease started from a single case, usually imported from some other place. In these towns there were open privy vaults and unscreened windows. The disease ceased when cold weather cut the flies off.

Here is one from the Green Mountains, sent in by Dr. Henry D. Holton, secretary of the Vermont State Board of Health:—

"For several years one or more persons living on a large farm, which received its water-supply from mountain springs, had typhoid fever in the autumn, new farm-hands generally being the sufferers. No pollution of the water-supply was discovered, but investigation showed that the farm privy was unscreened and swarming with flies, which had free access to the house and its food supplies. After the old

closet had been abandoned for more modern arrangements, and the house supplied with screens, no cases of typhoid occurred in the neighbhorhood. The daughter of another farmer in a section in which there had been no typhoid fever for many years went home, when she developed a mild case of the disease. Two other children were stricken, and one died. Water conditions were found to be unobjectionable, but it was learned that the discharges from the patients had been thrown into a meadow opposite the house, which had no screens. Flies swarmed upon the table at meal-time.

Dr. Holton expresses himself as certain that flies in these cases transmitted the typhoid fever, all other sources of infection being excluded.

Dr. Claude M. Smith, director of Laboratory of Hygiene, Atlanta, Ga., says:—

"We have been convinced for some time that the greater part of our typhoid fever comes more from the activity of the common house-fly than from any other source. Our records in the health office show that typhoid fever comes and goes with the house-fly, while other conditions appear to be the same."

The secretary of the Colorado State Board of Health gives details of a typhoid epidemic with fifty-five cases and six deaths traced to one dairy. The dairyman was suffering from a mild case of typhoid fever, but was still up and delivering milk.

"The water-supply of this dairy was fairly good. However, we found that the stools of both the wife and husband had been deposited in an open privy vault located thirty-five feet from the milk-house, which was unscreened and open to flies. The gelatine culture exposed for thirty minutes in the rear of the privy vault and in the milk-house among the milk-cans gave numerous colonies of typhoid bacilli, as well as colon bacilli and the ordinary germ life."

The milkman supplied milk to one hundred forty-three customers, so that more than one third of his customers contracted typhoid fever, probably through the agency of flies. In the opinion of this health officer, "the fly is one of the most common disseminators of typhoid infection."

To Dr. Burr, of Binghampton, N. Y., we are indebted for this significant testimony:

"In this locality we have had rather more than our usual number of fall typhoid cases, in persons who have had their summer outings in tents and in attendance at camp-meetings."

Camping expeditions and camp-meetings where privies and foods are not screened may be very fruitful sources of typhoid.

The assistant State health commissioner of Virginia writes: —

"I believe that very few of our typhoid epidemics in Virginia are caused by polluted water or milk. Flies certainly play a very large part in the epidemiology of the disease."

It is no more than just to state that a number of health officers consider contaminated water and milk to be more important sources of typhoid transmission than flies. This is very probably true in large cities where there are few open privies, and where the water-supply is some contaminated river; but the fly, when fully investigated, will probably clear up many obscure cases of typhoid infection.

Remember the name - typhoid fly.

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Concerning the Use of Drugs

THE Journal of the American Medical Association has an article entitled "Optimism and Pessimism," in which the writer (probably one of the editorial staff) expresses the opinion that both of these attitudes hinder the advance of scientific medicine.

"On the one hand stand numbers of practitioners who hasten into print, lauding the satisfactory results of first one treatment and then another, generally medicinal, of first one and then another disease. These same optimistic physicians will many times be found the following year lauding an entirely different treatment from that they advised and found so successful the preceding year."

On the other hand, he finds a large class of physicians "whose names are significant of the best in medical research, and whose teaching is listened to with respect from one end of this country to another," who he believes are "so pessimistic as to the treatment or the management of disease as to prevent the scientific investigations necessary to develop common sense and rational therapy."

He finds that these physicians advise any antitoxic or specific treatment, physical remedies, climatic changes, etc., but that it is exceedingly rare for one of this class to describe or advise the best method of overcoming the many symptoms that occur in the course of most diseases. Although they themselves actually tide their own patients over serious conditions and save their lives,—

"they are unwilling, for some unknown reason, to attribute such successful outcome in these cases to the advantages of any drug or set of drugs. They even seem at times to think that it is an acknowledgment of failure, or something derogatory to their prestige, to admit that the proper use of a drug has really caused their general treatment to be a success."

He believes that this failure on the part of these persons who are in a position where they should be teachers causes many physicians to listen to enthusiastic representatives of manufacturers of proprietary remedies.

The query naturally arises in one's mind, If these so-called pessimists who are really the flower of the profession, are afraid or ashamed to say that in their treatment of a certain case they used such and such drugs, is it not a question whether they themselves really believe in the efficacy of these drugs?

Unquestionably drugs do relieve symptoms, but these men have too much scientific knowledge of the nature of disease to believe that relieving symptoms is curing disease. They are the pioneers in an effort to arrive at the real nature

of disease processes, and they strive constantly to get at the roots; and if, in order to keep the patient comfortable, they find it necessary to lop off some branches, they regard it as an unscientific procedure, and perhaps say little about it.

Recognizing that drugs relieve symptoms, and using them as a necessary evil, they say as little as possible about it. They are the "therapeutic pessimists," but they cure their patients.

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The Surgery of the Future Will Be More Conservative

CLARA DERCUM, M. D., read, before the Alumnæ Association of the Woman's Medical College of Pennsylvania, a paper entitled "Nervous Disorders in Women Simulating Pelvic Disease," in which she takes issue with the long-held and prevalent belief that many or most of the nervous symptoms are the result of pelvic disorders.

"The hold of the doctrine of 'reflex nervous disorders' on the profession for so many years is little short of marvelous, but its fallacy has been demonstrated beyond dispute by our increasing knowledge of nervous diseases."

She shows by an analysis of five hundred eighteen cases that "there is obviously no relation between hysterical stigmata [neurasthenic symptoms] and pelvic disease," and that —

"operations on the pelvic and other viscera for the relief of nervous symptoms have no justification. It is perfectly clear that no operation should be performed which has no positive surgical indication. When this subject is fully understood, the fastening up of so-called loose kidneys, the removal of normal ovaries and tubes, of normal uteri, of normal appendices, of pieces of normal coccygeal bone, will cease, as will also repair of trivial cervical lacerations."

She believes that the gynecologist [specialist in woman's diseases] of the future will understand better the fact that many nervous conditions simulate pelvic diseases, and then —

"his greatest endeavor will be to have the fewest operations to his credit, instead of the greatest number. The conservation of normal pelvic organs and the restoration to health of diseased ones by medical means whenever possible will be his highest aim."

Dr. Dercum deplores the fact that at the present time there is such a tendency to mutilate women, removing organs that are perfectly healthy, because the idea has taken such a firm hold of the profession that nearly all hysterical and all neurasthenic troubles are in some way connected with pelvic disorders.

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Transmission of Tubercle Bacilli by Saliva

DOCTORS Newman Neild and E. V. Dunkley, of London, desiring to learn whether the saliva of consumptives contains tubercle bacilli, examined fifty cases, finding the tubercle bacilli present in the saliva in twenty-nine.

They relate instances where patients whose saliva was found to contain tubercle bacilli, essayed to moisten a finger in order to turn the page of a book, etc., and comment as follows:—

"These three cases were of the laboring or mechanic class, so that one is not surprised at their use of saliva in operations requiring some delicacy of touch. . . . But this use of the saliva for turning over the leaves of a book is not absolutely confined to the more uneducated classes. The danger of this practise is no imaginary possibility."

"The commonest use of saliva among the educated is to close envelopes and stick stamps [dangerous both to sender and receiver of letter], so common, indeed, that it would seem almost hopeless to attack this method."

These men actually found tubercle bacilli on envelopes which had been sealed by consumptives. While this may not be one of the more important methods of infection, it is one that should not be disregarded. Perhaps, as suggested above, it is too much to expect older people who have formed their life habits to change their practises in this regard. But it might be far more profitable with the children, to teach, if necessary, a few less Greek roots and French verbs, and to teach more about the danger of mouth infection - moistening lead-pencils, licking stamps, swapping gum(!), using the spoon or dish of another, drinking from a public cup. Our children should be taught to have a tender hygienic conscience. While they should not be taught to live in constant fear of germs, they should be encouraged and trained to form right habits so early that it will always be natural for them, without any thought regarding the matter, to avoid mouth infection.

In England, lupus, or tuberculosis of the skin, is comparatively common. In a number of cases the authors learned from the patients that there was a slight skin wound to which they had applied saliva as a healing agency. The saliva, containing tubercle bacilli, had undoubtedly infected the skin.

"It is a practise very common among nursing women to apply saliva to the nipples to encourage the infant to take the breast."

Here are two dangers,— first, of possible infection of the breast, second, of almost certain infection of the child.

While the authors do not desire to attach undue importance to transmission of tuberculosis through the saliva, they consider it a real danger. They urge bookkeepers, for their own sakes and for the sake of others, to avoid moistening the finger in order to turn leaves.

"Surely it is not too much to ask that wherever there is an inkpot, there should be a gum or finger dampener, and that it should be taught in the schools that moistening the fingers with saliva is a dirty habit, and a habit that is fraught with danger both to the possessor and to others."

The Medical Missionary At Works



The Work of the Medical Missionary

R. A. B. OLSEN, of Caterham Sanitarium, England, in a five-minute talk at a recent world's convention held in Washington, said:—

"From different speakers we have already listened to descriptive and statistical reports of our European health institutions. I will outline some of the principles on which we are attempting to found and carry out medical missionary work in the European field.

"As medical missionaries, we must always look to Christ, the Great Physician, the Healer of the nations. Of our Master Medical Missionary it is written, 'He went about doing good.' That sums up, in our opinion, the work of the medical missionary. He has a large mission. That mission does not pertain to the body alone. In truth, it pertains more to the soul than to the body; for the body is only the temple of the soul.

"In our medical missionary work, we recognize three classes of health evangelists: (1) Doctors; (2) nurses (matrons, cooks, etc., as far as possible, should be nurses); (3) other workers—health magazine and book canvassers and others engaging in any branch of health work.

"Consider all of these medical missionaries or health evangelists working for health, the healing of body, mind, and soul. God has given us an all-round, full, complete, missionary work. We have to show the people that sin is the real cause of sickness, whether of body or soul. Let us not forget, then, that, as medical missionaries, we have to treat a sin-sick body as well as a sin-sick soul.

"As medical missionaries, we require not only thorough and efficient training and experience in matters pertaining to health and disease, all of which is necessary, but still more we need the power of God working in and through our lives. We need more prayers, more intercession with God for divine love, for wisdom and skill in dealing with our afflicted brethren and sisters.

"We believe in true divine healing. We look to Christ, the Great Physician, as the only healer. To obtain true success our lives must be linked with his.

"We have a large number of nurses in the European field engaged in medical missionary work. This is especially true in Germany. We have there eighty or more nurses engaged in field work. We have a few graduates in mission fields from the Caterham Sanitarium.

"I am opposed to professionalism. I want to be known as a medical missionary rather than as a professional man. I am in full accord with the idea that the genuine medical missionary physician or nurse is a medical missionary evangelist."

Europe and East Africa

L. R. Conradi



REGARD the medical missionary work as the right hand of gospel work. We have experi-

enced this. Our sanitarium work in Germany started with a small beginning; but at the present time we have about two hundred educated nurses, and about one hundred in the field. Our sanitarium would not be able to employ more than from twenty to twenty-five nurses; but we find that, as our nurses become indeed missionaries, not simply skilled in their profession, but also in the work for souls, they find abundant work everywhere. Our nurses at the present time are found not only throughout the German empire, but in Austria-Hungary, in Russia, in Palestine, in German East Africa, in British East Africa, and in Abyssinia. We are thankful to see, wherever they go, the blessing of God attending their work.

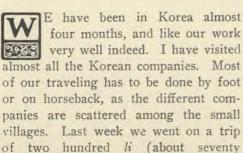
Last October, when I was in East Africa, I found three hundred persons in one neighborhood without any medical help, save our two nurses there. Indeed, this appeals to us to-day. We are thank-

ful for the great interest our people take in our sanitarium work. We printed a ten-thousand edition of "Ministry of Healing," which is all sold; we have also printed another edition of ten thousand, which the people are now selling. This helps us in every way. It carries the great health truths of this message to the people, and brings financial returns to us. It is a cause of rejoicing to us that one of the queens of Europe has the book, and has studied these principles. She was willing to write a preface to the book, in order to increase its sale, and she said, "If you do not like it, I will write another. I want your people to come to this country, and establish sanitarium work."

I am thankful to say that we have at least six young men at the present time in German universities ready to finish their medical course. Better than all this, a number of them are indeed missionaries even while they are pursuing their studies. They are getting other young people interested in the truths of the Bible.

Korea

Riley Russell, M. D.



miles), and remained three days with an isolated company. We left Sunan about noon, and, after passing over several low mountains and through fertile valleys, we stopped for the night at Morokdongkoda, staying in a Korean hotel. There was one room, and fourteen persons slept in it. It was about ten by fifteen feet in size. And as the Koreans have no system of ventilation, and all of them smoke, the atmosphere gets rather dense.

Among the company were traveling merchants from all parts of Korea; so we did not miss the opportunity to scatter a good supply of tracts, and see that every man had a copy of "The True God and His Sabbath." Two of the men were much interested, and Brother Smith gave a Bible study to one of them. We have this man's name and address, and shall correspond with him.

The natives have no furniture, no stove, no glass. They build a fire under the floor, and then spread down a blanket and lie down. A company of boys and young men kept up a continual howl until about midnight, and on inquiry we found it was to frighten away the robbers; for the town had been plundered by robbers about one month before.

The next morning we had a bowl of rice, and started on our way. While we were riding through a small village, a man ran out and called, "We won! We won!" or, "O doctor." When we stopped, he said his wife was very sick, and he wanted us to see her. we turned aside, all the rice-thrashing ceased, and the natives gathered round. We were able to help the patient, and did not fail to distribute our tracts, while Brother Smith asked them if they were Christians. We quickly bade them goodby, and rode on, while they followed to the edge of the village, and bowed, and said, politely, "We thank you so much."

We hastened on, passing through snow-covered rice-fields, and over mountain trails. At one place we saw about ten men with a falcon, hunting We were told that there were many tigers in the mountains, but we did not see any, although I have seen many beautiful skins for sale.

Our destination was reached apout ten o'clock in the forenoon, and soon we had the company collected. We studied and preached for three days, and between times visited at their homes, or saw their sick .- of whom there were many,- for they are more than one hundred li from any physician. The people said we did just like the Saviour, - preached the gospel and healed the sick. This caused us to lift our hearts to God that he would help us to be true ambassadors for him.

I never enjoyed a trip more in my life, and never was more busy. We in Korea ask an interest in your prayers.

Among the Maoris

Read Smith



URING our stay of one month here at Tolago Bay, we have been kept very busy treating the

sick. We have given many treatments, and have enjoyed helping the people. They are very appreciative. We secure one of the children, when we can, to act as interpreter.

Our worst case has been one of asthma and lung trouble. We were sent

for by friends of the sufferer, and found her gasping for breath and raising blood. Her temperature was 104°, and her pulse 120, but by constant attention and treatment, she became convalescent in a little over a week, and then she knelt with us in thanksgiving for her recovery. We praise our God. He is bless-

We made a visit to Tokomaru Bay

last week, as the daughter of the chief was sick, and sent for us. After a few days' treatment the patient was relieved from pain, and is now getting on well. For this we give thanks to our Source of help and strength.

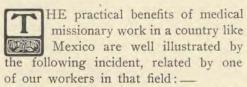
The chief has a nice house to entertain the white man. He and others sleep on the floor, as is their custom, in a large one-room Maori house. He showed us to our room where we were to sleep, and then to the sitting-room and kitchen. Everything was new and clean, and fitted up as a European house. In the bedroom were a hand-some bedstead, bedding, duchess chest, wash-stand, floor cloth, curtains and blinds, etc., while the other rooms were just as fittingly furnished.

It will be interesting to you to know

that while we are treating a patient, the near friends, numbering six or eight perhaps, are onlookers, wonderfully interested in the methods of treatment. In addition to this audience it is not unusual for a pet sheep or lamb or one or two pet pigs to find their way into the sick-room. The people are all the while talking in their native tongue—no doubt respecting the treatments. We sing to them when the patient is well enough, and they show their appreciation.

Hitherto Mrs. Smith and I have visited and worked together, as there are so few facilities for giving treatment. Wood sometimes has to be found, water carried, the fire made, etc., which of course means much work; but we get over more ground in this way.

Medical Missionary Work in Mexico



"One of the most prominent physicians of Guadalajara, Mexico, was stricken with paralysis some time ago, and as a result was brought to a condition of complete helplessness. One of our brethren who had received some training as a nurse was called to give massage to this invalid. He found him unable to move hand or foot.

"In harmony with the principles of rational therapeutics, he began to give hot and cold to the spine, in connection with massage, and a great improvement has resulted. The patient is now able to move himself, and with a little help to sit up in bed. The improvement in this case is a marvel to all who have heard of it; and because of the professional and social position of the patient, who is a professor in the state medical college, there are many openings for our health principles among the best families at this place."



Unsigned articles are by the editor

An Unclean Mouth and Tooth Decay as Related to General Health

E keep our clothing and our bodies clean, but frequently the mouth does not receive the attention it should. It is not uncommon to see a germ-coated tongue, and to detect a foul odor in the breath which is due to the condition of the mouth. If there is one portion of the body above another that needs to be kept clean, it is the mouth. Stomach and intestinal putrefaction is frequently caused by the bacteria which are cultivated in the mouth, and mixed with the food in the process of mastication.

The saliva, when normal in quality and quantity, is capable of inhibiting to a certain extent the growth of disease germs in the mouth. An injured animal that can have access to the injury with the tongue, by frequent application of saliva soon recovers.

The saliva, because of its antiseptic properties, should be well mingled with the food, but the mingling of the saliva with the food necessitates thorough mastication, a process too often ignored.

Because of imperfect mastication, the salivary glands are not called upon to secrete the normal quantity of saliva, and as a result the glands degenerate. The limited quantity of saliva that is then formed is also inferior in quality, and the mouth, which normally is kept com-

paratively free from germs, becomes a convenient place for their growth. When foods which readily undergo decay are lodged between the teeth, or their juices are smeared on the tongue and gums, the mouth becomes filthy, and tooth decay is encouraged.

The gums and the mucous membrane of the mouth are very vascular, and are supplied with a rich network of lymphatic capillaries, which readily absorb the poisons formed by the growth of bacteria. Any laceration of the gums forms an entry, or gateway, for germs of disease into the lymphatic circulation, It is probable that this is one of the ways by which tubercular germs gain an entrance into the body, and may account for the prevalence of tubercular glands of the neck. Tuberculous meat and tuberculous milk may thus be directly responsible for tuberculous glands of the neck, for they afford both the germs and the soil favorable for their growth within the mouth. Those who subsist on such food should see that the mouth is frequently cleansed if they would protect the system from infection.

Stiff, hard-bristle tooth-brushes should, however, not be used to cleanse the teeth and mouth; for by vigorous brushing with hard bristles the gums and mucous membrane may be lacerated, and through the punctured areas the germs of disease may enter the lymphatics.

The tooth-brush should be soft, and should be kept in alcohol or some other antiseptic, or it may be exposed to the sunlight daily. If this is not done, the food particles gathered by the brush afford an excellent medium for the cultivation of bacteria. A soft tooth-brush, kept scrupulously clean, may be employed with safety to cleanse the teeth. The best time to employ the brush and paste or powder is at night before retiring. After meals, the mouth should be rinsed with water.

In the use of sharp toothpicks or wooden toothpicks the gums may be punctured, and inoculated with bacteria. The simplest and best toothpick is, in my experience, a partially burned match. It is free from germs, is soft and pointed; it contains no sharp pieces; and the burned portion, when brought between the teeth, tends to prevent fermentation.

The best aid in keeping the mouth in good condition is thorough mastication of well-baked breads, as zwiebach, crackers, etc., at each meal. This keeps the mouth clean, stimulates the circulation of blood through the salivary glands, and improves the quality of the saliva secreted, so that germs can not flourish within the cavity. The better the food is

masticated, the less we need tooth-Monkeys usually have fine teeth. They use no tooth-paste. They eat food that requires mastication, and refuse pastry foods, which cultivate bacteria. Those who follow the monkey's example will not find it difficult to keep the mouth clean and to prevent tooth decay. In fact, it is seldom that a person who chews his food properly has decayed teeth; for thorough mastication, by increasing the circulation of blood to the gums and teeth, helps to make them hard and sound, and by diverting more blood to the salivary glands, favors the production of a healthy secretion of saliva, and retards the growth of bacteria in the mouth. Soft-boiled foods lodge between the teeth, and favor the cultivation of germs. Frequently the decay in teeth is arrested and further tooth decay prevented by ceasing to live upon unchewable boiled foods, and replacing them with hard-baked breads and raw foods requiring thorough mastication. Old tooth cavities should, of course, be cleansed and filled, so as to have no lurking places for bacteria.

An absolutely clean mouth is necessary to prevent tooth decay, but a clean mouth is possible only to the one who eats the most natural food in the most natural way.

D. H. K.

Amebic Dysentery

CERTAIN diseases generally known as "tropical" are so only in the sense that in the tropics the conditions exist which are most favorable for their propagation. Not the least among these conditions is uncleanliness. When these diseases are transferred to temperate climates, they will, under favoring circumstances, gain a foothold there.

Heretofore, we have been practically free from amebic dysentery; but now it is gaining a firm foothold here, especially upon the Pacific Coast. Like many other diseases, it may be classed as a filth disease.

Dr. D. J. Long, of the United States Public Health and Marine Hospital Service, read a paper before the California State Medical Society, in April, in which he gave evidence that the disease is not infrequently contracted by persons who have never been away from this country.

The disease is caused by a parasite which inhabits the intestine, and which is transmitted from one person to another by means of the intestinal discharges coming in contact with foods which are eaten raw, or polluting the water-supply.

Amebic dysentery is a common disease among the Asiatics; and as there are many Asiatic gardeners in the West, it can be readily understood that raw vegetables and strawberries may be a means of transmitting the disease. Dr. Long says:—

"The Chinese and Japanese at least are aware of the fact that human excrement makes an excellent fertilizer, by mixing it with water and sprinkling it from an ordinary sprinkling can over the tops of the growing vegetables. In the Philippines we used to find in the huts of the Chinese gardeners a jar in which was carefully col-lected the urine and fecal matter of the gardener and such assistants as he might have. Inasmuch as a large percentage of Chinese, Japanese, Filipinos, etc., have dysentery, it may readily be seen how the disease could be distributed. Musgrave produced typical amebic dysentery, with abscess of the liver, in a monkey which had been fed on a culture made from the fifth water that had been used to wash a bunch of lettuce. There are not many cooks who wash lettuce, watercress, or celery five times in as many changes of water."

The lesson we should learn is that vegetables and strawberries, unless home grown, should not be eaten until they are thoroughly cleansed or cooked. In fact, from a contaminated source, it is questionable whether the most thorough washing is sufficient.

To Physicians

A NY one desirous to know more definitely the methods pursued in the Sea Breeze Hospital in the treatment of Pott's disease, should secure a copy of the *Medical Record* of June 26 (Wm. Wood & Co., New York, 15 cents), and read the paper by Dr. Ely, attending surgeon at Sea Breeze Hospital.

Dr. Ely explains the methods which have been so successful in the Sea Breeze institution in the cure of surgical tuberculosis, especially Pott's disease, and describes the Bradford frame and the Calot jacket, pictured in this number of LIFE AND HEALTH in the article "A Work for Unfortunate Children," page 471. The article by Dr. Ely will well repay a perusal by any physician interested in the treatment of surgical tuberculosis in children.







Facts and Problems for Parents



E. C. Jaeger

HE question is a much mooted one among parents, and is worthy of careful thought. Thousands of children die and many are diseased because of the lack of parental knowledge. Many do not realize the results

of placing the child in the schoolroom at an immature age.

A noted educator not long ago made this statement: "Parents should be the only teachers of their children until they have reached eight or ten years of age;" and again: "The only schoolroom for children from eight to ten years of age should be in the open air, amid the opening flowers and nature's beautiful scenery."

This advice, which has longer been believed as theory than obeyed as a truth, has the testimony of science and experience in its favor.

In order not to disturb and destroy the development of the delicate organism of the child, it is best that his activities be largely physical; if we neglect to strengthen the physical power, we thereby place the child at a great disadvantage by lessening his ability to resist disease.

During the first ten years children are more susceptible to contagious diseases and digestive disturbances than at any other period of life. Eye-strain is very common among children who are placed in school at an early age, while it is almost unknown among those who do not attend school until their eleventh year.

It certainly seems that every parent

who has the wellbeing of his child at heart should not wink at these facts, but now, while it is his opportunity, he should seek to give his children that inestimable blessing, a sound mind in a sound body.

If Shakespeare's philosophy of judging values by final results, be sound, it certainly does not pay from the standpoint of either mental acquirement or economy to

place the little child at his books too soon. Statistics show that there is in almost every case a diminution in school work in about the fourth or fifth grade, corresponding to about the tenth year of children who entered school in the sixth year. This is the reaction of an overworked brain. Nothing has been gained. Their play fellows who were kept at home until now soon outstrip them in school work.

During the first seven or ten years of a child's life the most lasting impressions for good or evil are made. Where

A child begins to learn the minute it takes its first breath, and in the first three years it probably learns more than in any subsequent three in its existence, but it understands little of the phenomena it perceives. Until it is nine or ten years old, its whole purpose in life is learning its environment, and sometimes it is ten years more before it really understands the simplest things it has learned. It is, therefore, not at all strange that if a child is kept out of school until its brain is fairly well grown, say until nine or ten, its subsequent progress is greater than that of children who must often unlearn many of the absurd conceptions they formed in the first years of school life. - American Medicine.

and under what instructor will these lessons be learned? amid the questionable associations of chance playmates or among the pleasant and attractive scenes of nature? Who ever learned evil by beholding a spotless lily or a verdant field? and who, as well as the mother, can cultivate in the children a love for the beautiful?

Nature study and calisthenics in the schoolroom can never answer the Creator's demand for nature study and wholesome play in his own outdoors. The place to rear a family is in the country. City life is unnatural, and affords no place for the children to play as they ought. Give the boys and girls a chance

to romp and run, and the wholesome pleasure the rural life affords, and see what health, what happiness and mental keenness, they will possess.

The foregoing does not presume that the children should not see a book nor read a line until their eighth year. Its only plea is that an opportunity be given for natural development. If properly trained and taught, children will have gained at the age of eight a wonderful power of expression, and an ability to love and know the things of the created universe. Reading and numbers come in also, but only as fast as an inquisitive mind demands.

Fernando, Cal.

Planning the Grounds

(Concluded from page 482) with a border of the "dusty miller," set in the right place on a well-kept lawn, is better than a conglomerate mass of color and plants. A smooth, velvety lawn and a neatly trimmed hedge are always in good taste; but whatever one plans to do, let it be remembered that "eternal vigilance" is the price of success, as well as of liberty.

It is the everlastingly keeping after the weeds, the rolling, the clipping, the trimming that bring the results. As Kipling says to the little boy in the "Just So" song,—

"The cure for this ill
Is not to sit still
And frown with a book by the fire,
But to get a large hoe,
And a shovel also,
And dig till you gently perspire."

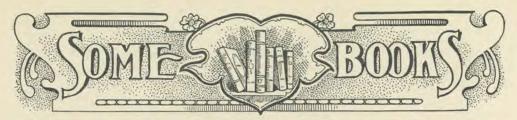
Tramping for Health

(Concluded from page 470) and my appetite was something of which to be ashamed.

Upon starting, my weight was one hundred thirty-seven pounds, and at the finish, only one hundred thirty-seven and one half; but now, exactly three weeks since the termination of the walk, it is one hundred forty-five, a gain of eight pounds, and this despite the fact that my weight is a constant quantity, ranging

only from one hundred thirty-seven to one hundred forty pounds. My eyes are brighter; skin is clearer, though tanned; and every bodily function is renewed and stimulated to a higher level of efficiency. A long-standing tendency to insomnia has entirely disappeared, and my appetite and assimilation of food are unprecedented.

Exercise for the sake of health becomes drudgery. But exercise enlivened by a purpose has a tonic effect.



A Manual of Personal Hygiene, by American authors, edited by Walter L. Pyle, A. M., M. D. Third edition, revised and enlarged; cloth, 450 pages; well illustrated; \$1.50. W. B. Saunders Company,

Philadelphia.

This excellent little work, prepared by eight specialists, is written in simple language, easily understood by the unprofessional person. The last edition has been made more useful by the addition of a glossary of the purely medical words unavoidably used in the text.

While we might not indorse all the book teaches on diet, we regard it, on the whole, as a most excellent compendium of hygiene

for the lay reader.

Mrs. Rorer Produces a Vegetarian Cook-Book

It is a noteworthy fact when a writer with a world-wide reputation as the author and compiler of popular cook-books intended to meet the actual demands and inclinations of the public, produces a vegetarian cook-book. This has actually been done, and the author who has done it is no less a person than Mrs. S. T. Rorer, whose name is a household word as the

result of the general usage which her popular cook-books have received for many

The fact will be at once recognized that Mrs. Rorer does not write her new book, which is entitled "Vegetable Cookery and Meat Substitutes," for the purpose of creating an interest, so much as to meet the interest which already exists. This is good evidence that the no-meat idea is being rapidly received by intelligent people.

Mrs, Rorer's book is in no wise a textbook of vegetarianism, but the author plainly states that "overeating of meat has had its day, and has left us as a reminder much sickness and sorrow." She has been very successful in her effort in this work to present recipes for healthful vegetable dishes in good variety, together with suitable meat substitutes which can be made without recourse to special foods that can be obtained only with difficulty.

A vegetable cook-book by Mrs. Rorer is certain to be well received, and it may be expected that many will be led to the use of a smaller quantity of meat as the result of its useful suggestions. The book contains 328 pages. In cloth, by mail, \$1.62. It may be obtained from the Michigan Book Concern, Battle Creek, Mich.



BOATING Washington Sanitarium, Takoma Park, D. C



Public Drinking Cups Abolished.—The Kansas State Board of Health has issued an order forbidding the use of public drinking cups in trains, depots, and schools after September 1.

Twelfth International Congress and Alcoholism.—This congress will be held in London July 18-24, at the Imperial Institute. A number of British and foreign members will present papers.

A Floating Hospital for Babies.— Philadelphia is falling into line with Boston and other cities in the establishment of a floating hospital, having a capacity of one hundred, for the care of sick babies of the poor.

Cause of Tuberculosis Decrease in Great Britain.— We are informed by Dr. Arthur Newsholme that the decrease in tuberculosis in England is due to the fact that advanced cases known to be centers of infection are segregated and treated in separate institutions.

Immense Quantities of Quinin.— During 1908 more than one and one fourth tons of quinin was used in the Canal Zone for the prevention and treatment of malaria. Quinin is dispensed freely to all who ask for it, whether employed by the commission or not.

Antituberculosis Crusade in Brazil.— The sanitary authorities of Brazil are spending a million and a quarter of dollars in the effort to check tuberculosis in the principal cities, and are establishing hospitals, agricultural colonies, and sanatoriums, and are requiring that every case of tuberculosis be reported to the authorities.

Playgrounds Save Child Life.— According to the records of the coroner only three children were drowned in the canal and other waters about the city of Rochester during the past year, while heretofore there have been from fifteen to twenty each year. This much smaller number of accidental deaths of children is the result of the playgrounds and the swimming-pools in the parks.

Playgrounds Prevent Tuberculosis.—In the great war of civilization against the white plague, the playgrounds will play a most important part, giving the children the privilege of gleefully playing out in the fresh air and sunlight.

Miniature Truck-Farm for Children,— Through the efforts of the International School Farm League, a truck-farm fifty feet square has been established on the grounds of Bellevue Hospital, in order to give outdoor employment to tuberculous children.

Changes in Nomenclature.— The committee on scientific nomenclature recommend the following changes, among others: change "epidemic diseases" to infective diseases; discontinue the word "croup" [diphtheria, instead]; use "tuberculous" instead of "tubercular" when referring to tuberculosis.

Flexner's Serum and the Governor's Son.

— If an antivivisection bill comes up before Governor Hughes, he will likely veto it; for he has had in his own family a demonstration of the value of animal experiment. His own son was attacked with cerebrospinal meningitis in a very severe form, which would undoubtedly have proved fatal had it not been for the prompt use of Flexner's serum, a remedy developed by means of animal experimentation.

A Gigantic Play Festival.- Following the Playground Congress, the citizens of Pittsburg were presented the spectacle of a playground nearly a mile square in one of the parks, in which eighteen thousand children played organized games, the games being witnessed by fifty thousand other children and adults. The ground was divided into ninety-nine glaygrounds, each assigned to a school or to one of the groups from a down-town playground. Each group, as soon as it arrived, began playing its favorite games. The most significant fact was the excellent order observed throughout the day. There was no need of police control even in this vast throng, made up of various nations, quite a large sprinkling of whom were unacquainted with English.

Poisoning From Bismuth.—Bismuth is generally regarded a harmless remedy, and is taken into the stomach like so much chalk. But its harmlessness is due to the fact that it is ordinarily insoluble in the digestive juices. When used as a paste, with vaseline, for injection in tuberculous joints, it has produced several cases of poisoning, at least one being fatal.

Five Hundred Dollars for Spitting.—That is what the New York Department of Health charges for the privilege. The subways and surface cars have the warning notice, "Spitting on the floor of this car is a misdemeanor; \$500 fine, or imprisonment for one year, or both, may be the punishment therefor." In order to teach the people to respect this ordinance, nearly two hundred arrests were recently made.

Leprosy Curable.— Ten persons in the Hawaiian Islands, ranging in age from six to seventy-nine years, are declared to have been cured of leprosy. Some of them had been inmates of the leper colony as long as twenty years. Some of the older patients, not being able to find employment on the outside, have petitioned to be sent back to the leper colony. Under the circumstances, having to meet the natural dread of the disease, the segregation with the lepers seemed preferable to freedom.

Physical Causes of Dulness.— A Los Angeles physician examined fifty of the bright and fifty of the dull pupils in the public schools, finding that sixteen per cent of the bright pupils and eighty-six per cent of the dull pupils were suffering from some abnormal condition of the nose, throat, eye, or ear. Unquestionably these conditions have much to do with the production of dulness in children. In many cases where children have had such difficulties remedied, the increase in intelligence has been remarkable.

A Plant to Destroy Mosquitoes.—The German government has for some time been experimenting in its African possessions with the plant arsolla, which it is said is an efficient preventive of the mosquito. They gave it a trial in a malarial district; and though the swamps were somewhat near the sea, and in a cooler climate than was normal for the plant, so that it did not make its best growth, yet it covered the swamps to such an extent that the mosquitoes were not able to breed. It is probable that in marshy districts in the tropics this plant will prove a valuable aid in eliminating the mosquito and mosquito diseases.

Relaxation for Neurasthenia.— The German word auspanning signifies "to take off the harness and step out of the shafts for a brief interval." A German physician, Boas, recommends auspanning for his neurasthenic patients. At intervals of six or eight weeks, he sends them on a five or ten-day trip, and in many instances has had remarkable results, especially in cases where the neurasthenia resulted from excessive mental work or emotional stress. A health resort is not necessary. The main point is a period of diversion every six or eight weeks.

The English Children's Act.— The British Parliament has recently enacted a law which takes the place of and repeals a number of former acts for the children. Among other provisions, this act forbids the presence of any child under fourteen in a drinking establishment. Fortunately, in our country custom prohibits such a practise; but in England it is very common for women to drink at the bars the same as the men do in this country, and to take their children with them, giving even the infant in arms strong drink. Another important provision of the law is the forbidding of the sale of tobacco to the young.

Playground Association Congress.— The third annual congress of the Playground Association of America was held in Pittsburg, Pa., May 10-14, 1909, the deliberations being conducted in Carnegie Music Hall. Eighty-five playground cities, from Portland, Maine, to Seattle, Wash., and from Winnipeg and Toronto, Canada, to New Orleans, La., were represented by delegates. Among other important topics considered was "A Safer, Saner Fourth of July." The movement, which received a strong impetus at the Congress, will doubtless end in the abolition of our present property-and-life-destroying method of celebrating the national holiday.

American Medical Association Opposes Benzoate of Soda .- The American Medical Association has passed a resolution asking Congress to so amend the National Food and Drug law as to prohibit absolutely the use of benzoate of soda and such preservatives in the preparation of foods designed for interstate commerce. Dr. Welsh objected to the resolution on the ground that it is still an open question whether benzoate of soda is injurious in small quantities; but Dr. Reed called attention to the fact that benzoate of soda is the means by which waste products and filth absolutely unfit for food are preserved,-that without this preservative this refuse could not be utilized.

Progress in Cuba.— With the beginning of the present fiscal year, the republic of Cuba established a bureau of information, President Gomez appointing Leon J. Canova, an American newspaper man, who has resided in Cuba eleven years, and has a wide acquaintance with the island, as its director. Those wishing information of any nature concerning Cuba can obtain the same, free of charge, by writing to Leon J. Canova, U. and I. Bureau (Utility and Information Bureau), Department of Agriculture, Commerce, and Labor, Havana, Cuba.

The Milk Show an Object-Lesson. — The Cincinnati Milk Commission recently conducted in that city, with the co-operation of the Department of Agriculture, an exhibit, which Dr. Evans, health officer of Chicago, characterizes as "the most comprehensive educational attempt of its kind ever made by any American city on the crusade for the betterment of its milk supply." Probably, as Dr. Evans says, "no city had greater need for such a campaign;" for the health department had been conducted by the old spoils system, and past boards of health and milk inspectors had opposed any progress in the line of better milk. This milk show is only part of a movement for purer and better

milk which is destined to sweep the entire country.

Abortionists Guilty of Murder.—The Iowa Supreme Court has decided that when death results from an induced criminal abortion, the operation constitutes murder in the second degree in the State of Iowa.

Public Health Protection.—A movement is on foot to incorporate a National Association for the Protection of Public Health, for the purpose of promoting among the people of the United States a better understanding of the laws of health and sanitation. The principal activity of the association will be educational.

Value of the School Nurse.—In Chicago certain nurses under pay of the city have the care of the health of schoolchildren. They visit the various schools, detect many cases of contagious disease early enough to prevent contagion, visit parents, and inculcate principles of cleanliness and hygiene, instruct mothers in the care and feeding of infants, and aid the medical inspectors by reporting home conditions, as privation and disease, which might otherwise escape notice. Undoubtedly they will have a telling influence on the health of the rising generation.

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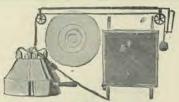
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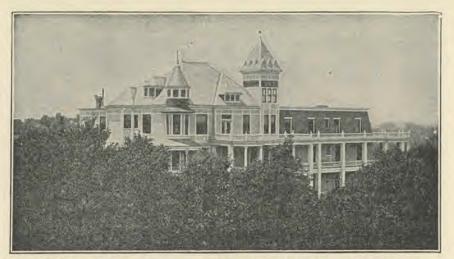
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