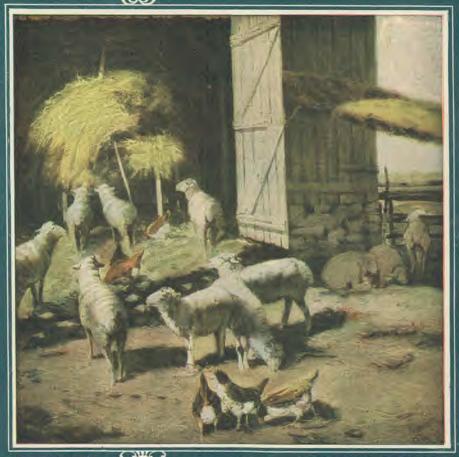
Life Whealth

THE NATIONAL HEALTH MAGAZINE.



MARCH



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Write at Once, While the Supply Lasts

Review & Herald, Washington, D. C.

This Issue

K

F we do not have the privilege of living in the sun-kissed land described in the article by Mr. James, we may at least learn, every one of us, to understand better and to love more the out-of-doors. After all, the country right around us has just as much enchanting beauty as that de-

scribed, awaiting the interpretation of some appreciative bard.

With this issue we begin a series of articles by Dr. H. J. Achard, already known to old readers of Life and Health. The series on "The Home Care of Consumptives," which will be continued during several numbers, while in some ways heretical,—and what thinking man is not a heretic?—is full of practical instruction on a most important theme.

Mrs. R. S. Cummings, by means of a storyette, "Joy and Peace Restored," gives some valuable hints to mothers, which may be the means of effecting a great

economy of time and a saving of nervous energy.

Barnum used to say that the American people love to be fooled. They do not. They are chagrined when they find they have been duped; but a vein of credulity in a large proportion of people leads them to open themselves to some new fraud as soon as the true nature of an old one is demonstrated. The articles by Dr. Cramp, on "Gas-Pipe Therapy," begun in this number, throw light on one phase of the great American game of fisherman and sucker. The statement, "A sucker is born every minute," is, perhaps, no exaggeration, in view of the large sums of money that pass into the hands of unscrupulous scoundrels.

One of the marks of civilization is the improved attitude toward the insane. Specialists have long ago come to recognize the mentally deranged as a class requiring hospital treatment rather than prison treatment. Dr. Wagner's article brings this changed attitude home to the laity, and makes some suggestions which

may be the means of preventing or alleviating mental trouble.

Mr. Ballou has written a series of articles, "The Law of Rest in the Healing of Disease," said by some readers to be the best exposure of the weakness of Christian Science, New Thought, and the like. The third article of the series appears in this issue. The final article will appear in the next issue. In connection with Mr. Ballou's article, "Unnecessary Loads," by Mrs. Helena H. Thomas, may be read with profit.

"The Prevention of Colds" contains excellent spring-weather advice.

The Next Issue

For April we again have so much matter in hand we hardly know how to crowd it all in. Among the important articles are:—

By Dr. Cramp, the conclusion of "Gas-Pipe Therapy."

By Mr. James, "Surprises of the Out-of-Doors."

By Dr. Achard, "Fads in the Treatment of Tuberculosis," the second of his series on "The Home Care of Consumptives."

By G. D. Ballou, conclusion of the series "The Law of Rest in the Healing of Disease."

By H. W. Francis, "Behind the Immoralities," which seeks to lay the blame for crime where it rightfully belongs.

By W. J. Cromie, instructor of gymnastics, University of Pennsylvania, "Com-

mon Sense Eating and Drinking."

By Anne Guilbert Mahon, "Special Exercises for Business Women."

By Geo. E. Cornforth, another article on the "Cooking of Vegetables."

By J. R. Leadsworth, B. S., M. D., "Bilious Headaches."

If you enjoy the March issue, you will surely want the April number.

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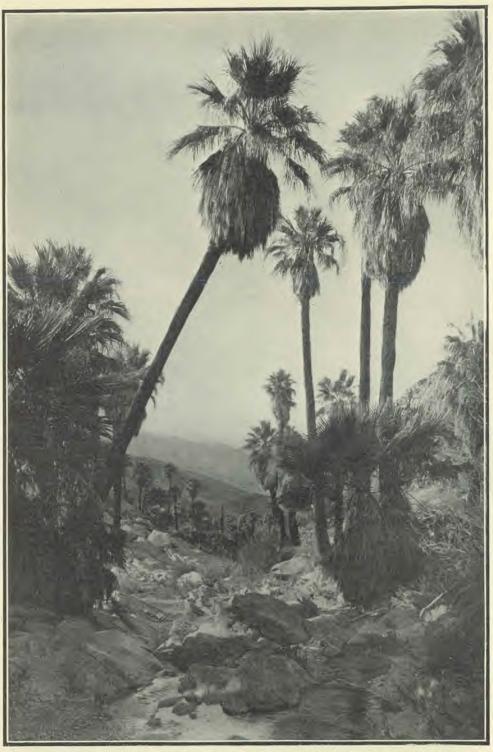
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In one of these canyons there were hundreds, possibly thousands, of palms native to California. It was a place bathed in a wonderful restfulness, leading the mind almost irresistibly to a contemplation of God

VOL. XXVI No. 3

LIFE&HEALTH

THE NATIONAL HEALTH MAGAZINE

MARCH 1911

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

Published Monthly

GEORGE HENRY HEALD, M. D., EDITOR

Washington, D. C.

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A FEW HEALTH BRIEFS

One of Gelett Burgess's clever sayings is this: "There is work that is work; there is play that is play; there is work that is play, and there is play that is work; and in only one of these lies happiness." It is only in furnishing work that is play that we can fully accomplish our object.—Occupation as a Therapeutic Agent in Insanity, Dr. Mary Lawson Neff, in Medical Record.

930

"Interesting work is, psychologically speaking, play."

36

Uninteresting play is, by the same token, work.

200

Play, because of interest, is a much more powerful mental and physical developer than work.

処

The most useful work, done in a perfunctory manner, only makes the doer a drudge.

600

The most useless play, entered into with spirit and enthusiasm, tends to perpetuate the youthfulness and the mental and physical health of the player.

嬔

The greatest good is accomplished when one engages in purposive useful work with such enthusiasm that the work becomes play to him.

遊

The value of play as a developer is recognized in the fact that no university worthy of the name attempts to eliminate play as an essential feature of the curriculum.

In the treatment of the insane, also, play and interesting occupations are proving to be more potent than any other factor in restoring the mental condition to the normal.

继

Children counted as "backward" and "defective," who have been a source of despair to teachers after the old methods, are, through play and interesting occupation, developed into useful citizens.

346

The playground properly supervised and the children's garden in which the occupations, because of the intense interest they afford, partake of the nature of play, do more than any other factor in reducing juvenile delinquency.

總

"All work and no play makes Jack a dull boy."

始

A potato carried in the pocket is an efficient preventive of an attack of rheumatism—which would never have occurred without the potato.

路

The potato at least affords mental comfort to the simple-minded. It costs less than the gas-pipe and other trinkets sold to the gullible as cure-alls, and for this reason it is not so highly esteemed. We do not value that for which we do not have to pay.

Md

Sea water is a most effectual remedy for certain conditions. But sea water does not lend itself to exploitation. There is no mystery about it, and there is an abundant supply; so it may never be popular, though it has more virtue than ninety-nine one hundredths of the proprietary advertised remedies.



S we grow older, we long for peace and rest. Life has many struggles, conflicts, heartaches, worries, distresses, burdens, and sorrows, as well as joys, happiness, pleasures, and loves. We desire surcease from the struggles and burdens. That we need not have had woes with our burdens; that we need not have had worries with our sorrows: that we need not have had defeats and heartaches with or after our conflicts, does not alter the facts. We have had them, or think we have, forgetful of the promise of the Master, "Seek ye first the kingdom of God, and his righteousness; and all these things shall be added unto you." So we long for rest after the strife, even though convinced that the pain of the strife was unnecessary.

How full the Bible is of suggestions of the comforting power of God: he is our shepherd; he leadeth us through green pastures and beside the still waters; he comforteth as a mother comforteth; "as a hen gathereth her chickens," so would he gather us; "he knoweth our frame; he remembereth that we are dust;" "like as a father pitieth his

children, so the Lord pitieth them that fear him."

It is well for one when he comes to this period in his life if he has learned what I might term the spirituality of God's great out-of-doors. For then he discovers that these mountains, valleys, canyons, oceans, islands, plains, deserts, forests, clouds, sky, and other things, which he has come to regard as mere nature, in reality possess within themselves many characteristics which lead the mind to the contemplation of their divine Author.

Sorrow is often the only teacher from whom men will learn this lesson. Sorrow and the burdens of life drove Moses forth into the wilderness, but it was there he saw the "burning bush." Elijah was bowed down with the weight of griefs and woes when he went forth into the wilds, but it was there that God passed by and he heard his voice. Driven into the wilderness by heartbreaking sorrows and the burdens of the sin of the world, Christ gained strength to come back and drink the last final cup in triumph.

When the heart has been weaned away from the deceiving pleasures of the world



FIG. I

There is a quiet serenity in such a mountain snow scene that, "like the sound of a great Amen, comes to one's fevered spirit with a touch of infinite calm"

by sorrow and pain, one dimly begins to discern the spiritual in nature and fly to it. How like a child flying to its mother's bosom when injured or made afraid! Happy the man who, like dear old Gilbert White, of Selborne, England, or Thoreau, or John Burroughs, or John Muir, learns this lesson early. Such men learn the lessons of the out-of-doors in a closer sense than the majority of mankind, and the result is they escape most of the petty trials and worries, the burdens and distresses that generally harass and disturb their fellows.

I have learned to love nature in all her moods,—in the stormy, tempestuous, torrential, cyclonic moods, as well as in the more peaceful ones. I have been in storms when for days and nights at a time my companions and I did not wear a dry thread of clothing, or sleep one moment save in blankets thoroughly sat-

urated with rain. I have sat out and watched the most stupendous display of forked lightning that eye of man ever gazed upon. At first sight my companions and I were almost paralyzed with fear of it; then the thought arose that even these manifestations were an expression of some thought in the mind of God, and that if we could but realize it. we might learn an important lesson from So, although afraid, I came out to see this wonderful display of God's fireworks. I have been in cloudbursts and seen the Colorado River in the heart of the Grand Canyon rise sixty feet in one hour. My companions and I have battled to push our boat through miles of dangerous quicksand, where even the Indians contended that we could never pass. In all these apparently adverse manifestations of nature, there has been hidden something of joy, something of

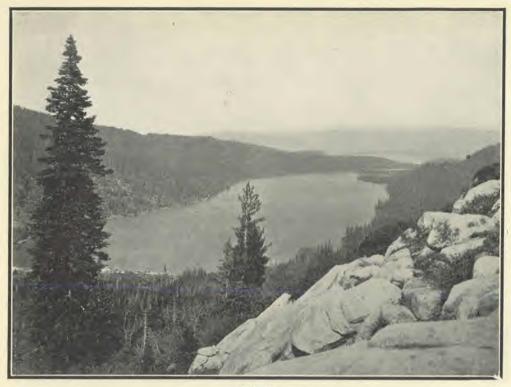


FIG. 2

A glacial lake arrests and holds the strenuous racer through life, and he sits down perforce, and soon relaxes physically and mentally

beauty, something of strength, that without those experiences I should never have known.

It was not until I had learned much of the sterner moods of life that I began to understand, appreciate, and seek the sweet peace and restfulness that nature so abundantly knows how to impart. There once came an epoch in my life when it seemed that an avalanche dashed over me, the earthquake shook down everything that I had erected, and the cloudburst swept it all away. There seemed to be nothing left. Then it was I learned to appreciate to the full the peacefulness and restfulness of nature. I hastened to the desert, and there in perfect solitude regained what I had lost of spiritual equilibrium. In those immense, wide stretches of nature I learned to take a larger outlook upon life, and to realize that barrenness and

desolation — the emptiness of life apparently swept bare of everything — have allurements, attractions, richness of color, ecstacies of feeling, that no other place in the world affords.

Then I found leading down into these vast desert areas, numerous canyons, each one of them with a charm and a beauty peculiarly its own. In one (frontispiece) there were hundreds, possibly thousands, of palms native to California, palms found nowhere else in the world. Under the shelter of these majestic giants, which can live only with their feet in the water and their heads in the burning sun, I found a peace and rest that I had never before known. It was a place bathed in a wonderful restfulness, leading the mind almost irresistibly to a contemplation of God.

At another time I fled to the Sierras in wintertime (Fig. 1), and there learned



FIG. 3

I have seen Mt. Shasta wreathed in a filmy veil of cloud, as soft and delicate, as refined and ethereal, as the daintiest bridal veil ever devised by man

the marvelous peace and rest found in the snow-clad mountain landscape where all the slopes are covered with towering trees, each of which bears its heavy and beautifully perfect load of snow. There is a quiet serenity about such a scene as this from which one can never escape. Like "the sound of a great Amen," it comes "to one's fevered spirit with a touch of infinite calm. It quiets pain and sorrow, like love overcoming strife, and seems the harmonious echo from our discordant life." Feverishness, the heat of passion, man's anger, hatred, and all the burning and inflaming passions of life, simply cease to exist in the presence of such calm, peaceful restfulness as this.

It is in the mountains, too, that you learn the peacefulness and restfulness of lakes. (Fig. 2.) There are no more soothing and quiet spots than the glacial lakes of the high Sierras. One sits and looks at them with a fascination that

never tires. They arrest and hold one; and the strenuous racer through life, sits down perforce, and soon relaxes physically and mentally in the presence of their calm, quiet, peaceful serenity.

Who has not felt the sense of peace and restfulness in sight of one of the stupendous mountains of the world? How calm, majestic, noble, grand, these immovable mountains are! They have stood the storms of thousands of years, and yet they present the most placid, serene, and beautiful faces, their summits outlined against a perfect blue sky, inviting man to lose his sense of hurry, bustle, restlessness, in the deep folds of their tree-clad slopes. I have seen Mt. Shasta (Fig. 3) wreathed in a filmy veil of cloud as soft and delicate, as refined and ethereal, as the daintiest bridal veil ever devised by man. Nay, refine the finest veil a thousandfold, and it still would not be as delicate as this filmy



FIG. 4
What a wonderful thing is night, when all nature itself seems hushed to rest!

veil of peacefulness floating over the face of this giant monarch of the ages.

And, thank God, while stupendous mountains are to be found only here and there on the earth's surface, there is scarcely a habitable country on the globe without its pastoral scenes, where quiet rivers (see title illustration) sleepily flow through tree-clad fields, where the gentle lowing of kine, the calls of the lambs to the sheep, the whole scene made musical with the songs of the birds, make one think of the "green pastures" and "still waters" which restore the soul.

Then, too, everywhere we have the peace and quiet and restfulness of the night. (Fig. 4.) What a wonderful

thing is night, when all nature itself seems hushed to rest! In the large cities, life would be impossible to one of my temperament were it not for the soothing, restful night of peace, which quiets all the feverish pulses of the day, stills the noises and the confusion, and renders undisturbed sleep possible.

Words are feeble things to describe what nature gives to man of restfulness and peace. There is but one way of really knowing it, and that is unreservedly to trust yourself to nature at every possible opportunity until the peacefulness and restfulness, which are among the most important elements of her spirit, flow naturally and abundantly into your own soul.



is a pleasing innovation that physicians find encouragement in giving to the laity information on problems of sanitation and hygiene and even on questions concerning many diseases, and it is a subject for congratulation that the public are interested in so many questions of this nature. In years gone by the physician used to be considered as a sort of magician who, in some inscrutable manner, influenced the diseased body so that more or less suddenly the disease which his patients were suffering from would disappear. People are beginning to understand that there is absolutely no sorcery, nothing mysterious about it; that we physicians can not cure disease, - if you wish to be absolutely exact, - but that we can only guide nature and support the diseased organism in such a manner that it shall be able to fight against the offending substances in its economy which have produced the disease; and just because this is being more fully understood, the work of physicians, in a great many ways, is becoming easier; for if we can work with our patients, or, reversely, if our patients will work with us instead of simply passively adhering to directions, our endeavor will be so much more successful.

There are a great many things in regard to tuberculosis and consumption that have puzzled investigators for many centuries. Ever since five hundred years

This lecture, delivered at the Chicago public library, Saturday evening, Nov. 5, 1910, was the first of a series delivered under the auspices of the Chicago Medical Society.

before Christ, when a very careful and detailed description of the disease and a description of its treatment were given by one of the most noted physicians of all times, down to the present day, physicians have studied consumption, have experimented in regard to it, have attempted special methods of treating it and curing it; and just about one hundred years ago it was very much to the fore, through the investigations of some French pathologists, who helped materially in bringing about the happy results we have witnessed in the last thirty years.

Paradoxical as it may seem, tuberculosis is perhaps the most curable disease that man is subject to; and, on the other hand, consumption is the most difficult disease that physicians are called upon to treat. Let us see what we understand by these terms. Tuberculosis is a disease which may affect any organ of the body, but most frequently attacks the lungs. It is due to the action of the tubercle bacillus, a microscopical fungus discovered by Robert Koch in 1882. When tuberculous disease is well established, a destruction or wasting of tissue occurs, and we have consumption, which thus forms the later and terminal stage of tuberculosis.

The tubercle bacilli may be introduced into the body years before consumption occurs, and one noted German scientist has even asserted that the infection occurs, through the agency of milk, in infancy, and that, therefore, consumption is but the end of the song which was sung at the cradle. This opinion is un-

doubtedly not only extreme but incorrect, because only a relatively small number of cases of tuberculosis are due to milk infection; and if milk infection were of such immense importance, the frequency of infantile tuberculosis would be far greater than it is. In countries where cow's milk is not used at all, where, therefore, the possibility of milk infection is eliminated, tuberculosis is just as frequent as where milk forms a staple article of diet.

The fact that small infants are not at all resistant to tuberculosis further opposes this theory; and, while for later periods of age tuberculosis is one of the most curable diseases, in the first six months of life the mortality from tuberculosis is one hundred per cent. The essential curability, however, of tuberculosis in adult life is easily proved if we consider the fact that out of one hundred so-called healthy, or presumably healthy, persons, at least eighty have had at one time or another tuberculosis in a more or less mild degree. Their individual normal resistance was sufficient to overcome this infection and to prevent progressive disease.

It was shown six years ago by a pathologist in Zurich that out of one hundred patients dying of other diseases, ninety-four showed traces of tuberculosis. Nor was he the first one to say it. In 1837, a French pathologist found that out of fifty inmates of an old ladies' home, forty-seven showed traces of tuberculosis; and these women had lived in most unfavorable conditions before being admitted to the asylum. All these women had at one time or another had tuberculosis, and the disease had been arrested, had ceased to be progressive, and had clinically been cured.

While thus let us say eighty per cent of all the people have at one time or another had tuberculosis, only about eleven per cent of all deaths in the course of a

year are due to progressive pulmonary tuberculosis; so that a great many more people become tuberculous than die of tuberculosis; which establishes the fact that tuberculosis is an essentially curable disease. On the other hand, once a patient has arrived at the destructive stage of tuberculosis, at consumption, the disease is extremely difficult to treat. This is largely on account of the chronic nature of the affection, which takes a very long course. It runs anywhere from three to five or seven and sometimes more years before it terminates, almost invariably fatally, if the disease has progressed at all before it is taken in hand.

Then, again, the disease has many peculiarities, one of which is that it often causes exacerbations. There may be an acute aggravation, followed by a remission and a period of health, during which the patient feels completely well. The fever disappears; night-sweats cease; the patient feels like new, and says, "I am cured, I am all right." Then he goes to work, and possibly gets careless, and the first unfavorable accident, such as taking cold, such as an undue amount of work, such as excesses, may cause the tubercle bacilli in his body to be reactivated. The disease takes a new start, and proceeds to a further degree. A little more of the lung is destroyed, and then perhaps the process is arrested again. And so it goes on, sometimes for months, sometimes for years, until perhaps, for some reason or another, for instance, through an acute intercurrent disease like influenza, the tuberculosis becomes acute, rapidly progressive, and fatal.

The Care of Consumptives

The care of consumptives includes two important phases, which may be subdivided in various ways. The two principal considerations are, first, the care of the consumptive as a patient, and, second, the care of the consumptive as a possible source of infection for others, or the prevention of the spread of infection. While the second does not, perhaps, strictly belong under the subject heading of my lecture to-night, it is of immense importance, and I should hardly feel justified in not considering it. I shall therefore try to discuss it as fairly as may be.

To begin with the care of the consumptive himself. There is one point which I feel obliged to impress upon you most, and that is this fact, that a person suffering from pulmonary tuberculosis which is progressive, or active, should, under no condition, depend upon himself for the needed efforts to fight his disease, but should always be under the care of a physician and of a nurse, even if such a patient is not able to pay for a physician's services and assistance. It is, as I have already intimated, for a great many reasons extremely difficult to treat the disease, and there are many things which might be injurious to the patient; he might very easily hurt himself unwittingly by some exposure or exertion which he hardly realizes to be such; he might act very foolishly in a great many ways, and harm himself, preventing his recovery, and, on the other hand, encouraging his disease to progress the more rapidly. But not only for this guarding against of accidents, but more especially for the proper guidance in the search for health, in the struggle against this invidious and treacherous disease, the services of a physician are necessary.

On the other hand, the services of a



nurse are necessary to act as a corollary to the advice of the physician; and in that respect the patients who are members, if I may use the expression, of tuberculosis dispensaries, are very well off, because they receive the gratuitous services of physicians and nurses. After the doctor has examined the patients and has decided upon their treatment and care, the nurses visit the homes, and see that the directions of the physician are properly carried out. They see that the house and homes are arranged as well as possible for the benefit of the tuberculous patient, as well as for the benefit of the family; see that proper medicines are taken; that a proper amount of food is ingested; that proper exercise is indulged in; that proper rest is administered. The nurse, in short, gives instructions, and sees that the directions of the physician are carried out.

Again, it is extremely difficult to overcome all phases of consumption without some assistance in the way of medicine, by which I mean any kind of remedial agent, whether drug or mechanical treatment; and for this, of course, the advice of a physician is needed. Except by the advice of a physician, consumptives should never take any medicine whatever, and especially should they never buy any "consumption cures," so called, because there are a great many medicines recommended for the use of consumptives, principally quack medicines, advertised in the daily press and highly lauded as specifics for consumption, or, better, against consumption, that are extremely harmful. them simply dull the symptoms, and do not in any way assist in overcoming the disease or in arresting it, and for this reason it is most important that a physician should have the supervision.



SAY, Mabel, I'm getting tired of this thing of coming home to dinner and waiting until there's no time left to eat; can't you have dinner ready at twelve sharp?" These were the words of the ambitious Mr. Cleveland as he walked into the kitchen, where his wife was struggling to get dinner ready to serve, with a boy of three poking his finger into the butter on the table, and a wee baby girl of ten months, tied in a high-chair, crying vigorously in her vain efforts for freedom.

"Please don't scold, dear," said Mabel, as she turned her warm, tired face to greet her husband. "If you knew all I have had to endure this morning, you wouldn't wonder that dinner is late."

"Perhaps that is so, but if it only happened once in a while I wouldn't mind, but it is nearly every day. Perhaps I would better take dinner downtown," said Mr. Cleveland, as he turned to the empty table in the dining-room.

"No, please don't do that. I see so little of you as it is."

Mr. Cleveland got a paper, and

stretched out on the couch in the bay window, but before reading he said: -

"Mabel, you seem to have unusually hard work in managing the children. I don't believe you understand how to accomplish your work and care for the babies, too. How would you like to attend the mothers' meeting held once a week at the club-house? I don't know much about it, but perhaps you could get some ideas that would make it easier to manage your home duties. Get Alice Newman to come to-morrow afternoon and stay with the children, and then you can go down to the club-house. Here is ten dollars with which to pay Alice and do what you like down-town."

"You are a good boy, Jack, and I do want to have things more pleasant for you; but somehow I don't seem to manage the babies very well. I hope they will have some real practical ideas at the mothers' meeting to-morrow. Come, I guess everything is ready now."

The dinner was soon eaten. Mr. Cleveland rushed off to his office, and Mabel was left to finish her day's work.

The next day things went about the same, but Mabel got off in time for the meeting. As she entered the door, Mrs. Barton met her with a cordial greeting, and introduced her to a number of the ladies. Soon the chairman called the meeting to order. After the formal opening, a paper was read by Mrs. Martin, who had such a charming matronly appearance and winning ways that every one was ready to give attention, especially Mrs. Cleveland. All knew Mrs. Martin would be practical, for she was the mother of five dear children, three girls and two boys, and she always knew what she was talking about. The subject

of her paper was, "Some Little Comforts for His Majesty the Baby, Also the Young Mother." Following this was a demonstration on the proper cooking of grains and vegetables, and then the close of the meeting.

All the way home Mrs. Cleveland was planning on carrying out at least two of Mrs. Martin's suggestions. That evening after the babies were asleep, Mabel and Jack sat in the library, and had a discussion on the paper heard at the clubhouse.

As a result, early the next morning Mr. Cleveland was whistling gaily in the tool-house, where he was starting to make an enclosure for baby Dorothy, 4 x 6 feet, and four rails high, called in the paper, a "pen," or "baby yard." In a few days, by using his odd minutes, it was finished, and at Mrs. Martin's suggestion placed on the grass first, so as to make a good impression on Dorothy, as already several months of her existence had accustomed her to other plans. In

spite of the new arrangement, she was delighted. After a few trials, the pen was unhooked at the corners and put to gether in a sunny part of the diningroom, where, when Mrs. Cleveland was busy with cooking so baby couldn't be watched, Dorothy could still play with her blocks and rag doll, and even help herself to walk by going around the inside, holding to the top rail. When she was tired, she sat down on the pillows put on the floor for her comfort.

It was just a week after the meeting at the club-house that things were running well. What a different picture when Mr. Cleveland came home to din-

ner! The table was spread, and mother had even put a bowl of sweet peas in the center. As he entered the diningroom, baby looked up from her corner and smiled, and Harry hurriedly put the last block in the toy-

box and ran to climb up on papa's shoulder. They trotted off into the kitchen, and there was Mabel, calm and self-possessed, just turning the soup into the tureen. Even the potatoes looked cleaner as they lay in the open oven.

"Well, Mabel, how does the pen work?"

"Can't you see, Jack? I don't see why we couldn't have thought of that long ago. It is the greatest comfort to both baby and me. She doesn't have to sit in the high-chair and get so tired, but can play about in perfect safety; and more than that, I can get a good dinner and have it on time, too, so now you won't need to think of going anywhere else for dinner. Come, let us eat while things are hot. Come, Harry, let mama



put on your bib while papa puts sister in her chair."

How pleasant this picture in contrast with the other!

One other suggestion from Mrs. Martin's paper was carried out later when baby Russell made his appearance, and that was the use of the sleeping-bag.

Mrs. Cleveland had always had a time trying to keep her babies covered at night. She had pinned them in and

rolled them in and so on; but nothing was very satisfactory. So for Russell, besides his four outing-flannel nightgowns, she made an equal number of sleeping-bags. These were made by simply folding two yards of twenty-

seven-inch material together and sewing up both sides, leaving the corners square so as to give him plenty of room to stretch his arms as he grew older. They were buttoned in front, and had a soft neck-band, to avoid danger of choking by use of a string. At the bottom they were hemmed and a tape put in, so as to close the bag at the feet. In this arrangement the new baby was always as warm as toast.

Baby Dorothy had outgrown the pen by the time Russell was four months old, so papa gave it a fresh coat of paint, and mama made a bed in one corner on the pillows, where the baby was placed for his nap when it was convenient. Later, as he grew older, he would waken all alone sometimes, and if mama happened to be in another room, he would creep off the pillows, and be playing with a string of spools or some other simple yet marvelous thing.

Little by little the baby began to exercise himself by taking hold of and sha-

king the sides of the pen, and his life was a happy one. When mama was too busy to let him be out in the room, Harry would take him with Dorothy to ride in his new wagon, or he would entertain himself in the pen.

which sometimes was in the house and sometimes outdoors where he could watch the older children make mud pies, and O, how he wanted to get his wriggling fingers into that pan of mud!

After about fourteen to sixteen months, each baby was graduated from the pen, with already some training in self-reliance and obedience. Papa Cleveland never had half the chance to scold, and Mama Cleveland grew to be a queen in her happy domain, and often wrote helpful things to be read at the clubhouse.





GAS-PIPE THERAPY By Arthur J. Cramp, M.D.

The Modern Substitute for the Rabbit's Foot and Other Amulets and Charms — No. 1

HEORETICALLY, most intelligent people accept the truism, "Physicians treat; nature cures;" practically, they reject it. The healing power of nature - vis medicatrix nature - is to most of us a theory rather than a condition; an abstraction rather than a fact. A not inconsiderable proportion of those who are sick, and a still larger percentage of those who think they are sick, would get well either without treatment or possibly in spite of treatment; but human nature is so constituted that it desires to credit to human agency all favorable changes in physical conditions. On this weakness the nostrum exploiter fattens, and the founder of healing cults thrives.

John Smith is ill, and, after a period, gets well again. If during the interim John has taken a widely advertised patent medicine, the credit for his recovery is given to the nostrum; if he has embraced the latest healing cult, the ism adds one more cure to its list of victories: if John has turned for help to electric belts or magnetic rings, these theatrical, but innocuous devices get the praise; if he has called in the family physician, to the doctor belongs the glory. That John Smith would in all probability have recovered without any artificial assistance, real or imaginary, he is not willing to admit. Whatever he may have done during the period of his physical abnormality, he believes that is what cured him, - whether it be Peruna, Christian Science, electric belts, or the doctor's calomel. It is necessary to realize this very human weakness, this tendency to mistake sequence for effect, to reason post hoc, ergo propter hoc,— "following this, therefore because of this,"—to be able fully to appreciate what follows.

The Birth of the Gas-Pipe Therapy

At first sight it might seem that to attempt to capitalize, as a panacea for all earthly ills, a piece of nickel-plated brass pipe with a flexible cord attached, would tax the ingenuity of even a getrich-quick Wallingford. Yet it has been done, and has evidently proved a most profitable piece of promoting. The master mind that conceived the idea of what may be called the gas-pipe cure, was one Hercules Sanche, whose "professional" history as recorded in the medical directories for the past twenty-five years is enlightening:—

1886: Port Gibson, Miss.

1890: Detroit; inventor of electropoise.

1893: Detroit; discoverer of the laws of spontaneous cure of disease; founder of spontaneous cure school and hospital.

1896: Detroit and New York City; inventor of oxydonor and viomotor.

1900: Detroit and New York City; licensed in medicine 1854; practised medicine exclusively until 1869; practised medicine and diaduction together for comparison from 1885; discoverer of diaduction; originator of diaductive practise.

1902: Chicago, Detroit, and New York City.

1910: Detroit and New York City.

Sanche's claim to have discovered "the law of the spontaneous cure of disease" is, of course, an absurd untruth. Natural laws — and this is a natural law

- are not discovered, but formulated, and this particular law was formulated centuries before Sanche's time. Had he dubbed himself "discoverer of the undeveloped commercial possibilities in the "spon-

taneous cure of disease," his claim might have gone unchallenged.

The Electropoise

The electropoise,—the original gaspipe cure, - was a hollow, empty, nickelplated metal cylinder, not quite four inches long, and weighing somewhat less than five ounces (Fig. 1). Attached to the cylinder by a small removable cap was a single cloth-covered wire cord. At the free end of this cord there was a small metal disk that could be attached to the wrist or ankle of the user by means of an elastic band that was fastened to it. This silly piece of charlatanry sold for ten dollars.

To sell the thing it was necessary, of course, to give a more or less plausible explanation of its alleged powers. It was given: -

"The electropoise supplies the needed amount of electric force to the system. and

by its thermal action places the body in condition to absorb oxygen through the lungs and pores."

"It introduces this potent, curative agent, oxygen, into the remotest and most recondite parts."

Meaningless, to be sure! but the unintelligible always appeals to the unintelligent.

The Oxydonor

The success which attended the exploitation of the electropoise and the verification of Barnum's classic aphorism



FIG. I

Photographic reproduction (reduced) of one of Sanche's early advertisements - the electropoise, the original gas-pipe cure

of the name seems to have been dropped.

The oxydonor differed slightly from the electropoise. It, too, was a nickelplated metal cylinder, but it was a little shorter than its prototype, and, instead of being empty, it contained a stick of carbon held in place by means of sealingwax or resin. The most important point of difference, however, was the price; it sold for thirty-five dollars instead of ten dollars, although the amount asked seems to have fluctuated during the past fifteen or twenty years. Possibly waves of credulity sweep over the land at intervals, and the greater demand for humbugs of all sorts at such times permits greater prices to be asked and obtained.

ment was chris-

nor victory (Fig.

2), though of late

vears the last part

The price is not the only thing about the oxydonor that has changed with time; the claims made for the instrument have undergone modification. More than ten years ago we read: -

> "The oxydonor victory generates or absorbs oxygen from the water, and forces it by the law of induction through the system."

> More recently, however, it is said: -

"Oxydonor causes the body to absorb large quantities of oxygen - the vitalizer of the blood - through the myriad pores of the skin."

The Force of Diaduction

In applying the oxydonor it is essential, so the "inventor" says,- and if he



FIG. 2

The oxydonor was advertised to cure pracevery disease from toothache to lockjaw. This fake has sold at different times for from \$10 to \$35.

doesn't know, who does? - that the cylinder be placed in a glass jar containing cold water, or, preferably, ice-water. Then, with the disk at the free end of the cord buckled to the bare ankle of the individual using it, the "diaductive" force begins to work. This hypothetical force,-" diaduction,"-was apparently invented by Mr. Sanche about the same time that he brought the oxydonor into existence. In his attempt to prevent imitators from infringing on the patent which he had taken out on the oxydonor, Sanche gave the courts an opportunity to express a judicial opinion on his newly invented "force." Here is what Mr. Justice Shiras (who later became a member of the United States Supreme Court) said regarding "diaduction:"-

"I am entirely certain that I do not understand the working of this so-called force, if any such exists, and I greatly doubt whether Dr. Sanche has any clear conception of the force or principle which he seeks to describe under the name 'diaduction.'"

And more recently a New York judge said: —

"From the record evidence we have tried to get some intelligent idea of 'diaduction.' We have failed utterly."

There seems little doubt that the theories enunciated by Sanche were in-

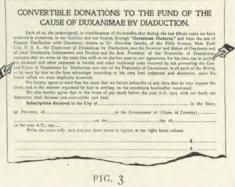
vented for the express purpose of giving "an air of verisimilitude to a bald and otherwise unconvincing narrative." In fact, the courts have stated as much; they have expressed the opinion that the theory "is a mere pretense, that is to say, a theory not entertained by the inventor in good faith, but put forward as an

imaginary hypothesis merely for the purpose of obtaining a patent on a very simple contrivance, which was not patentable unless the claim was reinforced by some such pretended discovery." In any case, whether the "force" was brought into being to further the sale of the oxydonor, or the oxydonor was invented for the purpose of capitalizing the imaginary force, no one but Sanche knows. That the combination makes as picturesque a humbug as can be found in the history of charlatanry, all who have given the matter any study must admit.

The Fraternity of Duxanimæ

Nor was Sanche content with this double-barreled, interacting fake. Still further to augment the sale of the oxydonor, he attempted to found a fraternal organization whose aims and objects were the exploitation of his "pocket diaductive instrument"— the oxydonor. The name given to this organization was "Fraternitas Duxanima," or "the Fraternity of Duxanima," and its "first president" was, of course, Hercules Sanche. The aims, purposes, and raison d'être of this concern were set forth in a book of seventy-six pages—a book with an opening sentence four hundred sixty-

eight words long! It would be hard to find within the same space as much unintelligible nonsense combined with opera bouffe philosophy and blatant egotism as goes to make up this "literary" production. To attempt to analyze the volume would be as impossible as it would be unprofitable, but the crux of the whole



Photographic reproduction (reduced) of part of the form to be filled out by those dupes who wish to further "the cause of duxanimæ;" that is, help the sale of oxydonors, and furnish Sanche with money for "personal and other expenses in travel"

matter may be summed up in the words: Buy the oxydonor!

Nor was this all. Elaborate and abstrusely worded forms were sent out to be filled and returned by those who were willing to make "donations to the cause of duxanimæ by diaduction" (Fig. 3). What these donations were for is hinted at in the opening paragraph of the printed forms:—

"... the undersigned ... donate to Dr. Hercules Sanche, of 261 Fifth Avenue, New York City, U. S. A., ... amounts that we write on the same line with, or on the line next to our signatures, for his own use in paying his personal and other expenses in travel and other incidental costs incurred by his promoting the general cause of duxanima by diaduction ... to be used by him to the best advantage, according to his own best judgment and discretion, upon his honor which we trust implicitly herewith." [Italics mine.—A. J. C.]

The money thus donated was to be "convertible into loans," which would be paid to the donors or their beneficiaries, "to the proportion of fifty per cent, or the full amount when current expenses are well provided for." Not in cash were these loans to be paid, if we read the contract aright, but "on dues for the diaductive treatment of any case of disease . . . or on the regular retail prices of any diaductive instruments [oxydonors!] or devices that, as the head of the firm, I manufacture, or of any books that as such I publish." Could even that visionary but lovable old promoter, Colonel Sellers, have conceived a more elaborate way of painlessly and speedily separating the fool and his money?

Chicago, Ill.

This article was not written for the purpose of casting odium upon one man or one set of men, but to caution readers against some of the schemes for gently relieving them of their money. Millions of dollars are being constantly poured into the pockets of smooth talkers, who promise something for nothing or health to the incurable. It would seem that the more brazen and impossible the assertions, the more readily the people are deceived. The government has saved millions of dollars sent to these rascals by people with more credulity than judgment; but they can not prevent all fraudulent work. They must first have definite proof of fraud before they can proceed.

We urge our readers to learn the lesson, not only regarding the gaspipe "cures," but regarding all schemes promising or guaranteeing marvelous cures. After all, there is nothing so cheap and so plentiful as pure air and pure water. And that, perhaps, is the reason why these remedies are so generally disregarded.

The next issue will contain another paper giving some more astounding facts regarding the gas-pipe therapy.— Ed.





The Imanoidation Lofthe Insane

Charles G. Wagner, M. D., Superintendent Binghamton State Hospital for the Insane, Binghamton, N. Y.

HE subject of insanity has always been of absorbing interest. Its history runs back through the ages to the earliest times, and its strange phenomena have played a conspicuous part in human affairs since the advent of man on earth. Other affections or diseases cause the loss of one or more of the bodily organs, but insanity involves the unfortunate sufferer's whole being, and changes his relations with the entire external world. It robs him of self-control; it takes away his responsibility before the law, and frequently renders him a pitiable, helpless wreck, wholly dependent upon others for all his wants. It is an ailment that comes alike to the rich and to the poor, and often brings the shadow of appalling disaster into the home where before were happiness and contentment.

The earliest figure in history presenting symptoms of mental derangement is found in the Old Testament, wherein Saul is spoken of as possessed of an evil spirit, and is said to have been solaced by the music of David's harp, and made well again. This was a thousand

years before Christ (1063 B. C.). The same record tells us that five hundred years later Nebuchadnezzar, king of Babylon, "was driven from men, and did eat grass as oxen, and his body was wet with the dew of heaven, till his hairs were grown like eagles' feathers, and his nails like birds' claws"—and that after six years his reason returned unto him, and he was re-established in his kingdom. Dan. 4:33.

In those early times the symptoms of insanity were almost universally regarded as manifestations of spirits, sometimes benevolent, sometimes evil or avenging; and the treatment was religious in character. The "possessed" were sent to the temples, where the priests sought, by exorcism, purification, ablution, and, sometimes, by the blood of sacrificial victims, to effect cures. Occasionally the patient survived the treatment, and then the cure was ascribed to the appeasement of an offended deity or demon, and the zeal of the priest was rewarded by many and costly gifts.

Insanity had no recognized status as a disease until the coming of Hippocrates, the "father of medicine." With his advent, 400 B. C., we behold the first physician who recognized the brain as the organ of the mind, and mental de-

rangement as the result of brain disease. After Hippocrates came the Græco-Roman school, with Celsus, Aurelianus, and the great Galen, who wrote five hundred memoirs and whose ideas had great influence in his own time and for centuries after. Under the wise teachings of these great physicians, the true nature of insanity gradually became more and more appreciated, and a system of treatment was devised which, although crude in its details, was highly creditable.

Unfortunately, the bright prospects with which the Christian era dawned were destined soon to fade away. With the fall of the Roman empire and the subsequent decline of civilization, the whole world lapsed into darkness and superstition, and the study of insanity was lost in the chaos of the Middle Ages. Demoniacal possession again became the accepted belief and filled all imagina-Superstition prevailed everywhere. It was the reign of sorcery and witchcraft, and the noble acquisitions of science and religion, the accumulations of centuries of loving labor, were totally destroyed. Barbarism reasserted itself, and the most cruel tortures that human ingenuity could invent were practised on the insane, with the idea of expelling demons from their bodies; and thousands were burned at the stake for the loss of their reason.

Toward the middle of the eighteenth century, the idea of diabolical agency in mental disease again began to give way. The study of mental pathology was revived, and the treatment of the insane began to improve; but even then progress was slow, and little was done for them beyond providing places of detention, where the dark cell, foul air, poor food, and chains were their unhappy lot. Few patients were housed in hospitals or asylums, and those who were fared badly enough, as the so-called hospitals were in reality little less than prisons.

All over Europe the conditions were practically the same. In Paris as late as 1793 the asylums were in a shocking condition. Misfortune, infirmity, vice, crime, and diseases of the most loath-some character were to be found, in the midst of the most disgusting surroundings. Men and women were to be seen covered with filth, cowering in stone cells, narrow, cold, and damp, and furnished solely with straw beds, that were rarely renewed until extremely foul.

Into these frightful dens, in which we would now refuse to house cattle, the unfortunate insane were rudely thrust, and their only attendants were convicts from the prisons. If it happened that they were noisy or violent, the camisole, the straight-jacket, or manacles were used to keep them quiet. Is it to be wondered at that such unhappy wretches, in their despair and rage, made their dismal quarters resound with their outcries and the clanking of their chains?

The belief was well-nigh universal that the insane could be controlled only by harsh measures; so the poor maniac continued to wear his chains, and to drag out a miserable existence, until welcome death came to his relief. Such was the fate of the unfortunate lunatic on the European continent prior to the appearance of Pinel, whose advent may well be counted the beginning of the modern period in the history of insanity.

It was in 1792 that Dr. Philippe Pinel became physician in chief at the asylum in Paris called the Bicêtre, where two hundred male patients were quartered, and where the most shocking cruelties were habitually practised upon the inmates by their keepers. Pinel had attained some distinction as a physician. He was a diligent student of mental diseases, and his first step as the head of the asylum was to discard utterly the whole doctrine of spiritual influence as a cause of insanity. He held to the

theory that mental derangement was the result of physical disease, and undertook to prove that kindness, good food, and proper hygienic surroundings would go far toward curing disordered minds, while brutality and chains only tended to confirm the malady.

He went to the dismal quarters in the wards of the asylum, where fifty-three men were in chains, some of them having been thus confined for many years, and brought them forth from their dungeons and cells. He gave them light, air, and the food they needed. In place of chains he clothed them, and instead of harsh commands he spoke to them in mild and kindly language. The treatment was simple, but the effect was magical. To the surprise of the attendants, who expected to see the maniacs ferociously attack their liberator, those who had been the most fierce when chained left off their rayings with their manacles, and showed no disposition to make violent use of their new-found freedom. Strange as it may seem, it is recorded on excellent authority that the lunatic who had been regarded as the most dangerous madman, and who had survived forty years of inhuman treatment, was afterward known as the faithful and devoted servant of Pinel. Thus, in Paris, more than one hundred years ago began the movement which we may justly regard as having resulted in the universal emancipation of the insane.

Appreciation of the true nature of insanity as a mental disorder due to disease of the brain, has been steadily growing during the past century, and to-day the insane man is everywhere looked upon as a sick man in need of care and treatment. The human mind may be roughly defined as the functional activity of the brain cells, and the maintenance of these brain cells—this wonderful mind tissue—in a healthy state is essential to the sound mind. To accom-

plish this end, nature does her part by surrounding each cell with a network of little vessels, which help to hold it in its proper place, and through which the heart sends the blood stream, loaded with nourishment, rushing with endless current while we sleep as well as during our waking hours.

For protection from injury she envelops the brain in a strong, tough membrane, called the dura mater; and over this she places the skull, with its thick, bony walls in the form of an arch, well calculated to guard the delicate structures underneath from external violence. Notwithstanding the great care nature takes to protect the brain from external injury, this vital organ is extremely vulnerable to attacks from within. ever-flowing blood stream not only bears the food supply for the brain cells, but it also carries to them the deadly poison of alcoholic stimulants, and the equally dangerous drug intoxications, especially opium and cocain, when these substances are used to excess. Such poisons inevitably impair the mental powers of the individual, and are frequently important factors of what may be called the preventable causes of insanity. There are also many other causes which may be classed as preventable; among them are bad hygienic surroundings, insufficient food, syphilitic infection, and the intense struggle for existence which modern social conditions impose upon many inhabitants of large cities, especially in the crowded tenement districts.

To recognize the early symptoms of insanity is not always easy, even for the trained physician, and it is still more difficult for the layman. No general rules governing diagnosis can be laid down; but when a marked change in an individual's habit of thought, feeling, and conduct is observed, and especially when such change is accompanied by the expression of delusions, mental unsound-

ness is to be apprehended. For example, if a careful, prudent business man, of strong religious convictions and high moral principles, suddenly neglects his business, becomes profane, immoral, and careless of public opinion, suspicion as to his sanity is warranted. An eminent divine forsakes his ordinary walk of life, and frequents the race-track and the gambling-den. Here again is such a marked departure from normal conduct that suspicion of insanity is at once aroused. In determining the mental state, comparison is always to be made between the individual's symptoms at the time of observation and his previous habit of thought, feeling, and action, when he was known to be in a state of mental health.

The treatment of insanity requires knowledge and skill not ordinarily possessed by physicians in general practise; nor is the home of the patient usually a suitable place for the care of such cases. For these reasons and others of importance, nearly every State in the Union has provided hospitals for the insane, with special equipment for their care and treatment. Skilled physicians and trained nurses are employed, and the best sanitary appliances of every kind that may contribute to recovery are provided. Such institutions maintain schools for the training of nurses; and the doctrine that kindness will tend to restore a disordered mind to health. while harshness only confirms the malady, is everywhere a fundamental principle of instruction.

In these hospitals the old-time mechanical restraints, such as manacles, chains, straight-jackets, camisoles, mittens, etc., which were once the main reliance of every asylum, have been completely abandoned, together with the cell solitary confinement, and harsh measures of every kind. The idea of prison walls is removed as far as possible from

the patient's mind, and his entire environment is made comfortable and homelike. The greatest amount of individual liberty consistent with safety is allowed, and each patient is encouraged to spend much of his time in the open air.

Many light occupations are devised, such as rug, broom, and brush making, basket weaving, sewing, shoemaking, gardening, etc.; for it is a well-known fact that when an insane patient can be induced to employ his hands in some useful occupation, his mind is less given to introspection, and his chances of recovery are proportionally increased.

The treatment of the insane to-day may be summed up as the provision of proper medical attendance, good nursing, suitable diet, baths, entertainment, congenial occupation, and pleasant surroundings, all of which are to be found in the most effective form in our hospitals especially designed for the care of such cases. Some cases of insanity are practically hopeless from the beginning of the disease, but in a large percentage of the cases a cure may be effected if treatment is begun before chronicity is established. It is, therefore, of the utmost importance that the early symptoms of mental unsoundness be recognized, and that remedial measures of appropriate character be instituted at the earliest possible moment.

To bring the facilities of State hospitals for the insane more easily within the reach of incipient cases in need of care and treatment, some of the States, notably New York, have made provision for the admission of patients on their own application without legal procedure of any kind. Such patients simply make application in writing to the superintendent, and agree to give five days' notice before leaving the hospital. This arrangement has been found to work well in many instances.



Mental Causes and Remedies

F to the adverse mental causes already mentioned we add pride and lust, we have sufficient to account for perhaps nine tenths of all disease.

Pride shapes the choice of clothing as regards style and material, hampers the human body of civilized women at the most vital point, the waist line, exposes, half-clad, the extremities, and deforms the feet by small, ill-fitting shoes. We send missionaries to China to reform the pride which leads to foot-binding, while, through pride, a crusade against life is progressing in America. Many prolapsed organs are traced by surgeons directly to the use of the corset. Lungs enfeebled by the use of stays have permitted the lodgment of tubercle bacilli.

Commercialism conspires with pride to continue the awful tragedy; for "capital" has learned that it can make gain no more surely than by catering to and directing the changes in fashion.

Lust fastens upon the very life-blood of thousands of victims. There is no town or hamlet or country neighborhood that does not bear testimony on this point, and the facts are too patent to require further amplification in this ar-

To lust and pride, surgeons say, are due nearly all disorders requiring abdominal surgery. Are we overstating the matter when we affirm with others higher in authority that nine tenths of all cases of human disease and suffering are due directly or indirectly to mental causes?

The Remedy

The most important preventive of suffering is mental and spiritual training. If adverse mental conditions were prevented, or even circumscribed, dire consequences might be greatly mitigated. If peace, quietness, and repose reign in the human mind, there will be no chance for the onset of diseases due to mental causes. The principles of self-denial and self-control, trained into the life, would raise a barrier against the flood of evil emotions which now afflict humanity.

A Perfect Remedy

Right relationship to the Creator is essential in order that life may prevail in all its fulness. "Thou wilt keep him in perfect peace, whose mind is stayed on thee: because he trusteth in thee." Isa. 26:3.

Restful, loving confidence in the Creator brings perfect peace and prosperity, and where peace and prosperity

prevail there must be health, except as some damage may arise from physical causes.

The Master said. "Come unto me, all ye that labor and are heavy laden, and I will give you rest." It is the mission of the religion of the Bible to work out of human minds and hearts all adverse mental causes by working in favorable mental conditions. Thus religion and true hygiene work hand in hand, redeeming this life from evil consequences and turning it into channels of rest, peace, and repose. Perfect

rest and peace leave no room for doubt or fear or wrath or envy, nor for worry, care, or anxiety. Pride and lust and all evil mental states will flee apace before that fellowship with the personal Creator which comes to those who seek it. This fellowship is just as real and just as easily attained as that which springs up between a true parent and a true child that has never been deceived. It is not a far-away dream nor a phantasm of the mind nor

an ecstatic frame of mind evolved from one's own inner consciousness. It is just trusting and believing and loving him who is the author of all life and being. It is feeling at home in the presence of his Spirit, which is sent to reprove and to comfort all his children.

Sunlight, air, water, food, clothing, exercise, rest,—these seven. Take care of them, and a kind nature will take care of you.

For years physical causes of disease have received attention. Latterly, the pendulum has swung the other way, and many are looking to the mind as the one cause of disease, and the one means of cure.

A rational view considers both body and mind as acting together in the causation of both health and disease.— Synopsis of first article, October, 1910.

Seeds of conditions adverse to life were sown in our natures at an early period; and now we find everywhere doubt, unbelief, fear, hatred, envy, jealousy, evil surmisings, care, anxiety, worry, remorse, agony, despair. These conditions breed death. As all the possibilities of the oak are pent up in the acorn, so the misery and wretchedness of the entire race were pent up in the first doubt.

Care, anxiety, and worry sap the life forces, and leave their victim weak and spiritless. Remorse and despair prepare for the suicide's end. We do not have to reflect long to bring to mind scores of cases of chronic conditions which prove that unhappy mental moods tend to sickness and death. — Characteristic quotations from second article, December, 1910.

Partial Mental Remedies

mill flume brings a full supply of water to keep every machine running to its full capacity. One night an enemy bores a hundred auger holes in the flume. The next morning the mill runs slower, and some of the machines are not running fast enough to do good work.

This represents the human body when under the influence of adverse mental conditions. What shall we do? We may go at once and stuff the holes full of sod, grass,

leaves, or mud, and secure a fair supply of water once more; but we know these repairs will soon decay, and the flume will leak as badly as before. The only permanent remedy is to rebuild the flume with new material of the original kind. Anything that will diminish the leakages of body energy and bring in a measure of mental peace and quietness, will also bring a measure of physical health and comfort to the body. The assurances of the doctor, the

cheerful, happy moods of some loved friend, a journey among new scenes, mental diversion by music, mirthfulness, expectation, or curiosity,—anything, in fact, to draw the mind from its old moods, such as promises of cure and false suggestions,—will produce a measure of confidence, trust, and rest. Even a pleasing falsehood may be made to minister healing and comfort to the afflicted one.

Trust in a heathen joss may bring temporary rest and cure. Occultism and mysticism have in them curative power because they excite curiosity and expectation, and satisfy the love of the marvelous, thus diverting the mind away from its distressing states.

It is so easy for man to interpose his personality, his influence,- they call it magnetism in these times,—that this is the course usually pursued by the socalled mental and divine healers. Like Simon of old, they give out that "themselves are some great ones." Then the enchantment begins, and sufferers forget their troubles; and the organs that, through worry, care, anxiety, or perhaps through fear of hell or remorse of conscience, have been robbed of vitality, once more rally and return to comparative health. It is such results that have given reputation to several flourishing systems of healing.

Sudden Relief

Sometimes sudden, or reasonably sudden, relief follows the restoration of partial confidence and rest of mind, and this is heralded as a miracle of divine power. Now if sudden fear or the agony of disappointment can rapidly prostrate one with a sensitive nervous system, and in some cases cause death, may not a sudden restoration of confidence and hope as quickly give relief, and allow the physical powers to rally? If the body is not too much worn out by the nagging of a

perverted mind, it may, like a spring from which the load is suddenly removed, come back quickly to its normal condition.

These results are no more marvelous than that water will quench thirst or fire warm the body; but the devout disciple of these systems of healing interprets the operations of this natural law of rest as marvelous instances of divine healing. This is made possible because of the vague, undefined sentiment that prevails everywhere, that whatever is accomplished for the human body by other than physical means must be by divine interposition.

Here, then, are results due entirely to mental causes of which the people know comparatively nothing. If the healer professes to use some occult method, the occultism gets the credit. If Christian Science is managing the sleight-of-mind performance, Christian Science gets the credit, and of course to the patient this proves the doctrine true. Now all these instances of physical restoration by modern healers might be fully accomplished by any one through any other means which would restore the mind to a state of rest or attract it away from its destructive moods.

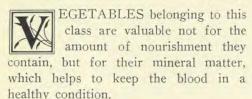
Hypnotism is doing the same thing, but in a more arbitrary and unnatural manner. One human mind is induced to submit fully to another, when a condition follows in which the subject loses all self-control and all responsibility, and through the suggestions of the operator the mind is at least temporarily changed so that the tobacco or liquor or other physical or mental habits become repugnant to the patient, and a remarkable cure is reported. But we do not hear of the relapses which occur in any of the cases cured by these various systems. An old mental science healer of twentyfive years' experience told me after she

(Concluded on page 184)



SHOOTS, STEMS, LEAVES, AND INFLORESCENCE

George E. Cornforth



Asparagus

FOOD	VALUE IN	CALORIES PER	OUNCE
PRO.	FAT	CAR.	TOTAL
2.1	-5	3.8	6.4

Asparagus With Cream Sauce

Wash the asparagus, and break it as far as it is tender into inch-length pieces. Put it to cook in barely enough boiling water to cover it, and cook it till just tender, which will be twenty minutes if it is young (if it is old, it may require forty-five minutes), adding salt a few minutes before it is done. Drain, saving the water for soup stock, and pour over it a cream sauce.

The tough lower portion of the asparagus stalk may be used in making soup.

Asparagus Tips on Toast

Wash the asparagus, breaking off the tough portions. Tie it in bunches of eight or ten stalks with the heads even. With a sharp knife cut off the lower ends so that the bunches

will stand upright; then stand them in a kettle containing boiling water, allowing the heads to be well out of the water. Cover the kettle tightly. In this way the tips will be cooked by the steam by the time the less tender portion is cooked, and will not be cooked to pieces. Add salt a few minutes before the asparagus

water onto a hot dish, and untie the bunches. Dip nicely prepared thin slices of zwieback into the water in which the asparagus was boiled. Place each slice on a hot individual platter. Put a few stalks of the asparagus on each slice of toast, the tips all the same way, and pour a little cream sauce over the tips.

Stewed Asparagus

Cook the asparagus as in the first recipe.

is done. When it is tender, lift it out of the

Cook the asparagus as in the first recipe. When tender, make a gravy of the water in which the asparagus was cooked, by adding a little cream or vegetable oil, and thickening it

little cream or vegetable oil, and thickening it to the consistency of gravy with flour stirred smooth with cold water. This also may be served over slices of zwieback.

Asparagus and Peas

Prepare asparagus as in the first recipe, using with it an equal quantity of green peas.

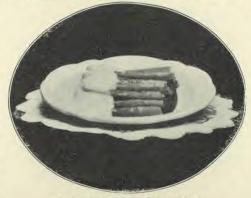
Celery

FOOD VALUE IN CALORIES PER OUNCE

PRO.	FAT	CAR.	TOTAL
1.3	-3	3.8	5.4

Celery is one of the most valued of salad herbs, and one of the nicest flavorings. Celery is best when eaten raw, if fresh, crisp, and tender, but it should be thoroughly masticated. To prepare it for the table break the stalks apart, wash

and clean them thoroughly with a vegetable brush, rejecting any green portions and tough stalks. Then put them in ice-cold water for an hour before serving. The green portions and tough stalks may be used in making soups.



ASPARAGUS TIPS ON TOAST

To keep celery fresh when it is not to be used as soon as purchased, wrap the bunches in brown paper, sprinkle them with cold water, wrap in a cloth wrung out of cold water, and put them in a cool, dark place. While it seems to me cooking spoils the flavor of celery, the following are good recipes:—

Stewed Celery

Cut tender stalks of celery into inch-length pieces. Put it into a stew-pan, and add enough boiling water to half cover the celery. Put a cover on the stew-pan, and cook the celery slowly till it is tender. Add salt and a little cream, and when boiling thicken with a little flour.

Celery on Toast

Cut tender stalks of celery into pieces about two and one-half inches long. Put them into a stew-kettle with sufficient boiling water to half cover them. Stew till tender, adding salt just before it is done, and serve on toast in the manner in which asparagus tips on toast are served.

Celery With Tomato Sauce

Prepare the celery as directed for stewed celery, and serve it with -

Tomato Sauce

- t cap of the water in which the celery was
- I cup stewed strained tomatoes
- 2 tablespoonfuls oil
- 2 tablespoonfuls flour
- 1/2 teaspoonful salt

Heat the tomato and water to boiling, and thicken with the flour rubbed smooth with a little cold water. Add the salt and oil.

Cream Celery Toast

Cut tender stalks of celery into one-fourthinch pieces, and add them to a nice cream sauce. This should be served on thin slices of zwieback, which have been slightly moistened in hot water.

Braised Celery on Toast

- I pt. water
- 2 tomatoes or an equal quantity of canned tomatoes
- r tablespoonful chopped carrot
- I tablespoonful chopped turnip
- 1 tablespoonful chopped cabbage
- I tablespoonful chopped onion
- I bay leaf
- I teaspoonful nut butter
- 1/2 teaspoonful sage
- I tablespoonful browned flour

Mix the ingredients, and stew slowly for one and one-half to two hours, adding boiling water as it may be necessary to keep the original quantity of liquid. Strain through a fine strainer and press the vegetables to extract all the juice. Add salt to this stock, and in it cook for one hour celery which has been cleaned, cut into three-inch pieces, and tied in bundles. When tender, remove the bunches and thicken the stock with one tablespoonful of flour stirred smooth with a little cold water. Serve a few pieces of the celery on slices of moistened zwieback with some of the gravy poured over them.

Spinach

FOOD VALUE IN CALORIES PER OUNCE

PRO. FAT CAR. TOTAL 2.4 .8 3.7 6.9

"It is a singular fact that the water drained from spinach after being boiled, is capable of making as good match



CELERY, CRISP AND REFRESHING

paper as that made by a solution of niter." Spinach is valuable as a source of iron in the diet.

What was said in the previous lesson about the cooking of greens, applies equally to spinach. Spinach should be carefully looked over, rejecting tough stalks and imperfect leaves, and should be washed in several waters, lifting the spinach from one pan to another each time it is washed, thus allowing the sand to settle to the bottom, to be sure that it is entirely free from grit. Steaming is the best method of cooking spinach, because it extracts less of the mineral matter. One should be sure to have enough spinach, as it shrinks to one tenth or one eighth of its original bulk.

Boiled Spinach

One peck of spinach should be cooked in three-fourths cup of water, great care being taken that it does not scorch. When tender, drain and press it to extract all the water. Chop it, and season with salt, and a little cooking oil. Use sliced hard-boiled eggs to garnish it, and serve lemon quarters with it, or lemon juice may be mixed with the spinach.

A small amount of the water drained from the spinach may be used in vegetable soup or broth; a little of it added to gravy will give a meaty taste.

Cabbage

FOOD '	VALUE IN	CALORIES PER	OUNCE
PRO.	FAT	CAR.	TOTAL
1.8	.8	6.5	9.1
di .			

The cabbage has been a favorite vege-

table from very early times. The ancients thought it was easily digested and very wholesome. It is, however, when cooked, one of the least easily digested of vegetables. That it is a valuable antiscorbutic has long been recognized. Cabbage contains such a large quantity of water that, when dried, the solid substance from a great quantity of cabbage makes only a small bulk. For this reason cabbage is dried for the use of travelers, or where it is necessary that the food be light and occupy little space.

Boiled Cabbage

Remove all dried outside leaves, and cut the cabbage into eighths or smaller, removing the core. Look it over, wash carefully, and put it to cook in a small amount of boiling water. Be careful that it does not scorch at first. As it cooks, water is extracted from the cabbage, in which it will cook without scorching. Boil till tender, which will require from three fourths of an hour to two hours, according to the age of the cabbage. Do not cook it too long, as this will turn it dark-colored and impair its flavor. Add salt and a little vegetable cooking oil, when it is about three fourths done. Serve with lemon quarters or spour lemon juice over it.

Creamed Cabbage

After cleaning and washing the cabbage, cut it into shreds with a large, sharp knife. Steam it or boil it in a small quantity of water till tender. Drain off the water, which may be used for soup stock, and pour cream sauce over the cabbage.

Cabbage in Tomato Sauce

Cook as in the above recipe, using tomato sauce instead of cream sauce.



SPINACH WITH EGGS AND LEMON

Chopped Cabbage

After cleaning and washing the cabbage, chop it fine and mix with it lemon juice, clear or diluted, a very little salt, and a little sugar.

Cabbage Salad

Prepare the cabbage as in the preceding recipe, or shred it, and for one pint of the cabbage use —

½ cup thick cream I tablespoonful sugar

2 tablespoonfuls lemon juice

Mix the lemon juice and sugar. Whip the cream, not too stiff, carefully mix with it the mixed lemon juice and sugar, and then add it to the chopped cabbage. Slightly sour cream may be used instead of sweet cream.

Baked Cabbage

Prepare and cook the cabbage as for creamed cabbage. Then put it into a baking-pan in layers with a sauce made by mixing together the following ingredients, and bake till set:—

t cup milk t beaten egg

1 teaspoonful salt

Hot Slaw

Shred one-half head of cabbage. Put into a stew-kettle the following: —

1 tablespoonful cooking oil

3½ cups water

½ cup lemon juice

Put in the cabbage and cook till tender.

Cabbage and Cream

Chop fine one-half head of cabbage. Put it into a sauce-pan with —

I tablespoonful cooking oil

1/3 teaspoonful salt

1 tablespoonful flour

Stir these well together; then add -

½ cup cream

Cook for about forty-five minutes.

Lettuce

FOOD VALUE IN CALORIES PER OUNCE

PRO. FAT CAR. TOTAL 1.4 .8 3.4 5.6

Lettuce is another vegetable which has been used from very early times. Herodotus says it was served on the tables of the Persian kings four hundred years before the Christian era. Lettuce has been supposed to contain a narcotic and sedative principle; but this occurs only to an infinitesimal extent in the young, tender leaves which are commonly used as a salad. When the flowering stem develops, the sap becomes milky and bit-

ter, and then its narcotic property is more fully developed.

Lettuce is used principally as a garnish for salads and meats. Those who do not serve meat may use it to garnish the dishes which replace the meat.

Preparation for the Table

Pull the head apart, breaking the leaves from the stalk. Wash it well, and put in ice-cold water for an hour or more before serving. When ready to use it, shake the leaves dry. Serve lemon quarters with the lettuce, or make a dressing for it of equal parts of lemon juice, sugar, and water, or a smaller proportion of sugar may be used. Sweet cream, to which a little sugar and a pinch of salt have been added, may be liked as a dressing. A cream dressing, such as was described for cabbage salad, may be used with it. It may be served with mayonnaise salad dressing; with lemon juice, salt, and olive oil; or with the following:—

French Dressing

3 tablespoonfuls lemon juice

1 tablespoonful salad oil

1/2 teaspoonful salt

Or -

11/2 tablespoonful lemon juice

11/2 tablespoonful salad oil

1/2 teaspoonful salt

Or -

t tablespoonful lemon juice

3 tablespoonfuls salad oil

½ teaspoonful salt

The proportions may be varied to suite the taste. Mix the salt and oil together; then whip it vigorously with a batter-whip while the lemon juice is slowly added, and the mixture will become creamy. Pour it over the lettuce and serve at once. The dressing must not be prepared till just before serving.

A sour cream dressing for lettuce may be

made as follows: -

Sour Cream Salad Dressing

2 tablespoonfuls water

d cup lemon juice

I egg

teaspoonful salt

I level tablespoonful sugar

I teaspoonful oil

Beat the egg, add the other ingredients, and cook in a double boiler, stirring it till creamy. Cool, and add one-half cup sour cream.

Some may like a -

Sweet Egg Sauce

I egg

½ tablespoonful salad oil

t tablespoonful sugar

Beat the egg very light, then beat into it the remaining ingredients, and pour it over the lettuce.

Cauliflower

FOOD	VALUE IN	CALORIES PER	OUNCE
PRO.	FAT	CAR.	TOTAL
2.1	1.3	5.5	8.9

Cauliflower is botanically allied to cabbage. It is more easily digested than most other vegetables.

Preparation and Cooking

Break off the outside leaves, cut the flowerets from the stalks about two inches below the top of the floweret. If the flowerets are large, divide them. Wash and place it in salted water to drive out any insects that may be hidden in it. Much the better way to cook it is steaming. It should be cooked till it is just tender, which will require from twenty to forty minutes. Longer cooking will turn it dark-colored.

Boiled Cauliflower

Use a kettle of such size that when the cauliflower is stood in it stem downward it will hold the cauliflower upright. Have in the kettle barely enough boiling water to cover the top of the cauliflower. Add salt when it is about three fourths cooked. Treated in this manner the delicate top will not cook to pieces before the stalk is tender.

The cauliflower may be served with lemon juice, cream sauce, parsley sauce (cream sauce with chopped parsley added), egg sauce, or tomato sauce.

Baked Cauliflower

Place boiled cauliflower in an oiled bakingpan, and pour over it one pint of cream sauce into which one-half cup of cottage-cheese has been mixed. Sprinkle the top with zwiebackcrumbs, and bake.

Cauliflower au Gratin

Boiled cauliflower

I pt. slightly sour cream

1 egg yolk

1/2 teaspoonful salt

Place the cauliflower in an oiled baking-pan, pour over it the cream, egg yolk, and salt, which have been beaten together. Sprinkle the top with zwieback-crumbs. Bake till set.

Cauliflower Salad

Prepare and cook the cauliflower as directed for steamed or boiled cauliflower. When cooked, pour lemon juice over it, and allow it to stand in the refrigerator for one hour or longer. Prepare the following dressing:—

Salad Dressing

Yolks 3 eggs

1 cup sugar

a teaspoonful salt

i tablespoonful flour

3 tablespoonfuls oil

Beat the yolks, and add to them the sugar and flour. Mix the lemon juice and oil and heat to boiling; then pour them over the egg mixture, beating it well as in making frosting. Cook in a double boiler till thick, and cool. Whip one-half cup of thick cream, adding to it sufficient of the dressing to make the desired consistency, and flavor. Take the cauliflower from the lemon juice, and place it on a salad plate. Pile the dressing on top of the cauliflower, then arrange on the dressing thin strips of cooked beet which have been soaked in lemon juice. Plain cream may be used it place of the whipped cream.



CAULIFLOWER SALAD

The picture does not show the beautiful contrast between the green of the parsley, the white of the cauliflower, the gold of the dressing, and the red of the beet



DISEASE A BAD HABIT OF CELLS



ACH cell has its specific func-Muscle-cells can not secrete mucus; salivary cells can not make hydrochloric acid; nerve-cells

can not secrete urea.

Whatever stimulus is applied to the muscle-cell, whether it be heat, cold, electricity, percussion, or nervous impulse, the response is a contraction. Whatever stimulus is applied to the mucous cell, the response is the elaboration and discharge of mucus. The work of the cell may be increased or diminished, but, so far as we know, can not be changed in its nature. A cell may cease to react to normal stimuli. In muscular atrophy, for instance, the muscle-cell will no longer contract in response to the appropriate stimulus; or the cell may react inadequately; or its reaction may be excessive, as in the hypersecretion of gastric juice, a habitual condition in certain nerve states.

When a cell has established a wrong habit of response, there seems to be a tendency for that habit to continue. As new cells are formed to take the place of the older ones, these new cells may inherit the same abnormal characteristics. This may explain many of the abnormalities of the body which we term disease. The fat person is not necessarily so because he eats too much. Many persons who eat more than they should are not fat, and often the heavy person eats lightly, sometimes even to the extent of producing weakness, and yet all the food material seems to go to the production of fat.

It would seem in such cases that the

cells which have to do with the metabolism of the body - that is, the tissue changes - have formed some bad habit, and, like an army of undisciplined laborers, are working at a disadvantage, turning food material into fat, which normally should be disposed of in some other way.

The gouty person is not necessarily a heavy meat eater. He probably has learned that he must abstain strictly from meat, tea, coffee, alcohol, and the like, and that the least infraction brings on a gouty attack; but his neighbor eats a porter-house, drinks whisky several times a day and several cups of coffee, and has no gouty symptoms. Perhaps the gouty person has in some of his tissue cells a bad habit that favors an excessive production or a deficient elimination of uric acid.

It may be, and seems quite probable, that cancer is but the changed habit of cells; that is, certain of the cells which in adult life ordinarily learn to behave themselves decently, as is the case with adults generally, have forgotten that they are adults and have again become children; in technical language, there is a "reversion to the embryonic type," that is, to unrestricted and unlimited growth.

This theory of change of cell habit does not run counter to the germ theory. It dovetails with it at every point. Normally the intestinal walls secrete substances inimical to the growth of the putrefactive germs. A change of habit in these cells, brought about perhaps by continued indiscretions, causes a change in the substances secreted by the intestinal walls, and thus produces conditions favorable to the growth of putrefactive germs. These germs, gaining a foothold, multiply and produce poisonous substances, which may be absorbed into the system.

Normally the intestinal walls prevent the entrance of germs from the intestinal tube into the body. A change of the habit of the cells forming this wall may so lower the line of defense that germs find opportunity to enter into the blood-vessels and into the system generally. There is probably, also normally, a mechanism which prevents the entrance of certain poisonous products from the intestines. A change of cell habit might be the means of permitting these to enter readily into the blood.

Again, the defensive liver- and kidneycells whose work is to dispose of the poisons entering the body, or produced in the body, may be so altered in habit that they fail partly or wholly to do their work.

Thus, while we recognize the influence of disease germs in the production of morbid conditions in the body, we must also remember that there are certain changes taking place in the body itself which permit disease germs to gain a foothold, and that these changes in the body are, to a certain degree, changes in the cell habit. What causes this changed cell habit? — Disobedience to what are ordinarily known as the laws of hygiene; in other words, the indulgence in dietary errors, carelessness as to body cleanliness, neglect of exercise, and the like.

We may also understand that what is known as artificial immunity is probably due, partly at least, to changes in the cell habits. If a small quantity of poison is introduced into the body, a quantity not enough to overcome the body, the cells of the body immediately assume the defensive and set up a resistance. This

effort on the part of these cells becomes, to a certain extent, habitual. Perhaps it is for this reason, partly at least, that when a person is inoculated with the vaccine of cowpox, which is simply a modified form of smallpox, the person is afterward immune or nearly so from smallpox. The cells in overcoming the milder disease have formed a habit which makes them better able to overcome the more serious disease.

It is for this same reason that there are many diseases which themselves produce immunity from a second attack. That is, the one attack produces a habit of resistance in the cells which afterward enables them to overcome subsequent attacks.

This is an attempt to explain briefly a very complicated process, which is not thoroughly understood, and which would require volumes adequately to explain.

100

Is It Possible to Be Humane and Yet Inhuman?

Is it possible that some may acquire such an overweening regard for the lower animals as to lose perspective, and fail to realize the value of human life?

There is something psychologically potent in a name. In a past age in certain countries it was only necessary to brand a man as a heretic - it mattered not how exemplary his life - he paid the penalty. With the masses now a word may be more weighty than the most logical arguments. Witness the word "scab." In it is pent up all the hatred against an idea; and it matters not that the idea may be ill-defined. Its force comes not from long logical reasoning, but from the cumulative influence of crowds. serve any assembled multitude that resorts to violence and you will learn that the "straw that broke the camel's back" was some catch phrase, passed like wildfire, which turned the pent-up feelings into seething billows of ungovernable fury and the crowd into a mob. A reservoir is converted by a ruptured dam into a destructive, raging torrent, and the rupture is caused by the catch phrase passed from mouth to mouth.

Where such catch phrases are used, there is no need of argument. Argument is powerless with a madman or a mob. Argument means reason. The catch phrase means unreason.

Such is the thought that comes to mind when one reads the choice catch phrases invented by those who oppose animal experiment. Such phrases as "a vile pursuit," "a devilish science," "an organized system of barbarity," and the equally choice terms employed to the workers in this line,—"fiends," "demons," "human monsters," and the like, being fair examples.

But surely where there is so much smoke there must be fire. Can we be sure that there is no cause for the outcry against animal experiment? Most certainly these humane people who have undertaken to protect the dumb brutes are conscientious and careful in their statements? Alas! that is just the thing that stands most in need of proof.

The writer himself, as a medical student, had ample opportunity to know what kind of work is done in the laboratories, and to know the kind of men who do such work; and he has not been able to adjust his knowledge of these things to the descriptions of animal experiment published broadcast by the people who oppose laboratory methods. According to their own testimonies, most, if not all, of these people are entirely ignorant of what takes place in laboratories. have never witnessed the work. know nothing of the precautions taken to obviate unnecessary pain. They ignore the fact that reputable laboratories in this country have strict rules regarding the humane treatment of animals.

One of the persistent complaints raised by these people is the unnecessary loss of life, especially of cats and dogs. Do they know that in New York City alone there are put to death, in order to be rid of the excess, more than ten times the number of cats and dogs used in all the laboratories in the country? And this only in one city. Why do they not raise the outcry against this "waste" by the poundman?

But these people claim that all they want is reasonable inspection of laboratories. Is it? In England they have such inspection, and in no country is there such an active, persistent attempt to do away with laboratory experiment altogether as in England, though the public hearings have repeatedly failed to show cases of inhumane treatment of animals. After all, is not this the cry of the cults who say in effect that all animal life is as sacred as human life, and that rather than sacrifice a few monkeys or rabbits for experiment, it would be better to let cerebrospinal meningitis and other fatal diseases continue to mow down our babies?

But another cry is raised: "Animal experiment has never taught us any truths that really result in the saving of human life." This statement absolutely ignores some of the most patent and important facts of medical history, facts which must be known to any one who has read the history of our conquest of the mosquito diseases and any of the germ diseases. To be consistent with themselves, these people necessarily deny that germs have anything to do with disease except as a result.

As a matter of fact, this campaign is conducted by people who refuse to acquaint themselves with the results of the work that has been done by laboratories. They are wilfully ignorant of the fact that our knowledge of tuberculosis as a disease affecting cattle as well as man, and communicable from cattle to man through milk, has been established by animal experiment. By this means we are enabled to discover tuberculosis in animals; and our modern treatment and prevention of dysentery, lockjaw, cerebrospinal meningitis, bubonic plague, malaria, and other diseases are directly or indirectly due to animal experiment. Cut out the results of animal experiment and our modern knowledge of diseases would amount to nothing.

Why not admit it? Why not give the men engaged in this work of disease study the credit for average humanity? Why not realize that the increase in our knowledge of disease conditions and saving of human life is worth infinitely more than all the animal life that has been sacrificed to obtain it?

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The Cause of Infantile Spinal Paralysis

THIS elusive disease, which has spread as a pandemic over a large part of the civilized world, is beginning to yield its secrets to the laboratory workers. The infectiousness of the disease has been suspected for more than a quarter of a century, but has not been definitely proved until recently.

Though there are reports of animal paralysis in connection with the epidemics of human paralysis, laboratory workers have not succeeded until recently in inoculating animals with the disease. Dr. Simon Flexner, of the Rockefeller Institute, has succeeded in inoculating monkeys with the infection, and is transmitting the disease from monkey to monkey; and similar work is being done in other laboratories.

It is now known that the organism of this disease is smaller than any of the known bacteria, being capable of filtration through the finest filters. It is too small to be seen with the ordinary microscope, and has not been certainly seen even with the ultramicroscope. It appears to be highly resistant to agencies that destroy ordinary micro-organisms.

By animal experiment we know the incubation period of infantile paralysis ranges from three to thirty-three days, averaging eight or nine days. The symptoms and post-mortem appearances in animals are strikingly similar to those in the human subject, but the mortality in monkeys is greater than in humans, being fifty per cent in monkeys and ten per cent in man (infants, largely).

Animal experiment shows that the nasopharynx is the favorite point of introduction for the disease. There is evidence favoring the view that the nasal mucous membrane may be, not only the means by which the disease is received, but also the means by which it is given off. An attempt is being made to establish artificial immunity against the disease.

Dr. N. S. Bryant reported in a recent New York Medical Journal the result of eighteen months' experience with the disease, and, according to him, it is transmitted by means of the nasopharynx. In case of epidemics of infantile paralysis he says there is a large amount of nasopharyngitis present.

Infantile paralysis, according to Dr. Bryant, is a contagious and infectious disease. The infection seems to enter the system by way of the nasopharynx. The disease proper, uncomplicated by sequelæ, yields to local treatment of the pharynx. The most important preventive measure, according to the doctor, is nasopharyngeal hygiene. In times of epidemic, all cases of nasopharyngitis ("colds") should be regarded with suspicion, and should be treated thoroughly.



ANY years ago I won a prize offered by one of the big magazines for the best paper submitted on the subject of "The Child's Proper Development." It was easy money to me; for I was fortunate in having a friend who had a whole brood of healthy, attractive, and well-handled children, and I merely quoted his theories of child-training, jotting down my observations as to the working out of those theories in practise. The paper not only won the prize,- there were several hundred competitors,- but it stirred up a good deal of interest and the usual number of letter-writers. There were a flattering lot of approvals, but also a sufficient number of croakers and prophets of evil, who foretold dire happenings to those children as a result of that kind of training, to make me, a novice in the child business, a bit skeptical as to its ultimate outcome. Well, the years have galloped by, and still I have the privilege of intimacy in that interesting family, and have continued to observe its evolutions and progress with solicitous interest. Its mode of life has continued unchanged. Several of the eight children have become men and women, and now there are four grandchildren. All the members of that large family are well and happy, and apparently there is not even one black sheep in the fold. They all seem to be round pegs that have been properly fitted by their training and environment into round holes. Ample time has elapsed and all of that family are settled enough for me to state most positively that the theories and practises of the parents that I then described have been proved correct, sound, praiseworthy, and deserving of emulation.

Now, that family is not only happy and wise, but also, being thrifty, is honest, hard-working, and moderately "successful," as the term is applied in a worldly sense, living comfortably and entertaining largely, - not in the accepted sense, but in having friends, particularly needy ones, make them long visits. There is much to do in house and stable work and all about the place, and many servants are employed. I have kept my eyes open to see how that detail was managed. I have had many talks with master and mistress and servants on the subject, and my conclusion is that there is no "servant problem" in that household.

Everywhere else it is such a bugbear. Other friends are taking to living in hotels and flats to escape the servant problem, and it is so much discussed and rehashed the country over, the main topic of conversation generally, that I am impelled to believe that my friend—let us call him X—is as sound on that subject as he was on the child subject. Therefore, I feel it almost a duty to describe his handling of that generally moot question for the benefit of long-suffering and servantless households. It may help

them. I thoroughly believe it will if they "go and do likewise." It will not be a long dissertation, nor overtedious and replete with detail, for the simple reason there is not much to tell. X's theories and solutions of troublesome problems are beautifully simple, direct, and effective.

Before going farther let me say that X means Mr. and Mrs. X. There is no headship nor "lord of the manor" there.

It is a full-fledged partnership. There is no clash, for they both intuitively wish to do the right thing and the same thing. At times there are discussions, but these are not to establish which of the two shall have his or her ideas carried out, but merely to thrash out all the possibilities of the case. Indeed, it is more than a partnership, it is an ideally communal and socialistic organization. The children have a voice in the arrangement of family affairs; they express their opinions, and the parents consider them, often de-

ferring to them. It has not spoiled the children, but has imbued them with a delightful sense of responsibility with the parents, a keen interest in the common welfare, and cultivated a logical, dispassionate, and unselfish desire to be right and do things right.

It is so with the servants. One reason why there is no servant problem there is because X avers that there are no "servants" to create a problem, and no "mas-

ter" to have to wrestle with it. People are employed to do certain work in that household; they are as essential in it as the so-called "master." It is communal and at the same time patriarchal. those helpers do their work well and are decent, in other words, if they fit into their places, they are shown every consideration, and soon find themselves as deeply interested in the common good as are the members of the family. If they

do not fit, they are eliminated, but even that is done nicely.

X has not any "old

family servants of his father's" to draw upon; his supply is from the same common stock you and I draw upon, but somehow or other the right kind drift in his direction. Perhaps it is luck, but I think rather it is good management. That house has a reputation; if a servant is sick or marries and goes off, there is a cousin or a sister waiting and anxious to help out. And they seem to arrange all that by

themselves. At any rate, in an intimate acquaintance with the X's of over thirty years I have seldom known or heard of their having to go on servant-hunting expeditions.

There is not the usual abyss of class dividing master and servant in that house. Each is interested in the other: it is in the atmosphere. If the helpers are in trouble or need help, physical, mental, or financial, there is a frank avowal to X, and he does what is best,



X TALKED OVER THE HORSES WITH THE STABLEMAN

not merely expedient, in every case.

There are no "orders" given; Mrs. X discusses the marketing and supplies with the cook; X talks over the horses with the stableman; the butler is an important personage, and his opinions are listened to. After a particularly good dinner cook and butler may get a word of approval from Mrs. X, and the presence of several guests makes no difference; if anything goes wrong, the "helpers" as frankly state, then and there, the cause, and express heartfelt sorrow. It is all done spontaneously, naturally. There is no false-front nor "company manners" to be put on and off.

Those helpers have good rooms; their food is the same as the family's, not the left-overs and cold victuals, and Mrs. X insists upon good hot meals for them and at regular hours. Their amusements and time off are matters of real interest to the family, not to be curtailed and dodged, but a necessary part of the economic system.

Some will say that house must be chaos itself, cheeky servants who run things, a thoroughly scared, weak master, etc. Well, I've been around a good deal and kept my eyes open, and never, in palace or cottage or army post or college, have I seen so much harmony, so smooth-running domestic machinery, so wholesome discipline, and so much real comfort and all-round happiness as at the X's.

I say they discuss things with the servants. It is hardly that. It is a bit hard to explain properly. It must all be in the right kind of feeling on the part of the X's that gets into the atmosphere, and makes the others feel the same way, for there is absolute devotion, no wrangling nor bother. Never is there any question about this one's not doing certain things he was not hired to do, or that one's complaining that the other was shirking his share. They fit, inter-

lace, do everything willingly, voluntarily. I know this sounds like exaggeration, but it is not; they often do more than the X's expect. The driver will suggest that it is so fine a day Mrs. X may care to go out, and he can just as well take his afternoon some other day; the cook hears that the folks are going out for the evening, and stays up to fix a little supper for them when they come home. Of course, they are pleased with the attention, and say so. It is not a politic cajolery to encourage future efforts, but a genuine expression of pleasant surprise and gratitude. It is real, and comes from right thinking, and is catching. Let the helper be white, black, yellow, or purple, he or she will get into the same spirit in short order.

I have known X to try dangerous experiments. One was to take a fellow fresh from jail into his employ. He worked faithfully for a while, then the old disease broke out again; he "lifted" one of X's suits of clothes and some money and decamped; but, years afterward, he wrote X a letter, enclosing some of the money and expressing gratitude for the kindness shown him. Last year X picked up a half-frozen and thoroughly saturated "bum," cleaned him up, fixed him comfortably in an outhouse, and set him to sawing wood. became more respectable, he obtained a footing among the other helpers,there's no caste there, but each one's standing is just what he or she makes it. He braced up, and ultimately X helped him start out as a pedler of clocks, rugs, and what-not in the rural districts. Today he has a little store and is doing well; he is a respectable citizen, and looks upon X as his savior. True, poor X has had some off-color and amusing experiences with his experiments; but however unworthy and perhaps debased the experimentee may have been and thankless at the time, the influence of X's kindness has had its effect; it has not been lost. The very fact that some one has shown real interest in him will help tone up the most hardened criminal, and oft-times save him from criminality.

X's helpers work for him by preference, and do more, even at lower wages than they could get elsewhere. The work is not looked upon as menial. Every one in that house works. If there is a party or extra crowd, the daughters think nothing of helping wash the dishes. What is usually regarded as menial work is looked upon differently there, it is a part of the whole, as respectable as anything else if done in the proper spirit, and the proper spirit reigns there.

Try it. Forget the servant part of it. Under old conditions your forebears may have been serfs, vassals, or tenants. They rebelled; to-day you are an employee, clerk, or assistant. Do unto the servants as you would be, and have insisted upon being, done by. Give them kind treatment, not doled out as charity from a superior being, but as their due, -real consideration in the true spirit of an ideal democracy,- and you will soon have as little trouble and as great pleasure and contentment as has X; and it will not be long before you realize that most of your troubles were imaginary, self-imposed, or self-created, and that there really is no servant question.

THE LAW OF REST IN THE HEALING OF DISEASE

(Concluded from page 171)

had been converted from the delusion, that she had frequently to "cure" the same persons over and over again of the same difficulty.

Evidently it is not so easy to bring into the human soul the true spiritual rest in Jehovah as it is to induce one mind to yield to another and repose in its supposed power.

But when one is induced to yield this to the Creator, self-control, instead of being lost as in hypnotism, is suddenly strengthened, and responsibility is greatly increased; and as long as the condition of trust is maintained, that man's mind will be free from all adverse mental causes,

and his body, being unhampered by a false mind, will retain its vigor until age only shall dim the vital powers.

Denial

It is useless to deny the existence of physical causes or of adverse conditions to get rid of them. Try as hard as we can, we may not successfully continue to fool ourselves. We may deny lust and pride, not their existence and reality, but their control of us, and successfully escape the consequences due to the folly of yielding. We may deny the power of appetite and of evil mental states in general, and escape the multitude of human ills due to adverse mental conditions.





COLD in the head is second in abomination to one in the heart, yet, withal, is such a grievous menace to the house in which we live that he who successfully antidotes it will perhaps be more gratefully received than he who essays to antidote

Such is humanity, and herein I find justification for giving some of that prevention which is better than cure.

the cold in the heart.

Every one may catch cold, but certain people have what may be called an inherent - which may be an inherited tendency to colds. These people have hypersensitive mucous membranes, with diminished resisting power to invading germs. If such persons could have an equable temperature to live in, they would probably get along with a far less number of colds, while the ones they did have would be less of a menace.

The immediate cause of colds is to-day understood to be an infection from impure air, dust, etc. Owing to their contagious character, colds are found going from one to another of the same family or association, as in schools, stores, offices, and wherever people are massed, this massing of people always being a menace requiring extra care to avoid various deleterious outcomes. Whenever a city neglects to sprinkle its streets, it has been noticed that nasal and throat irritations, leading up to catarrh, acute and chronic, are much more prevalent.

To keep up a good resisting power by keeping up the health standard goes a long way toward immunity. The circulation of the skin should be kept as good as possible, by baths and frequent massage. It is a good plan to place some salt in the bath water. Avoid indigestion and overwork, loss of sleep, or anything that has a tendency to depreciate the reserve power; and, not least, have the best air possible indoors and out. The sleeping-rooms should have a large volume of air circulating through them all night, avoiding only strong drafts. Places of public assembly should be well ventilated, very much better than is apt to be the case, since the matter is too often entrusted to the care of some one who knows little of ventilation principles, and probably cares less, aiming only to conserve the heat by closing up air entrances, at the expense of the health of the audience.

To those already having a cold I would say, You owe it to others to take every precaution as to the spreading of your To this end you should avoid spraying the atmosphere, by always placing before your nose and mouth a handkerchief when you sneeze or cough; and these handkerchiefs should be washed separately from other clothing.

By the frequent use of antiseptic sprays and gargles you will be doing considerably more in this direction, and still more by having your own individual towel and drinking-cup, and by sleeping alone.

Rooms occupied by those having colds need to be flooded with pure air frequently. According to some of the best authorities, it is not advisable to take large quantities of water except when sweating is to be promoted.



HROUGH a vista of years and years I seem to see the man of whom the very thought affrighted my childish self, because of a distorted imagination, owing to the name by which he was usually called —" Crazy Jonathan." Consequently, he was a terror to the children for miles around, though I can not recall one unkind act on the part of the man of whom we stood in such awe.

No one seemed to know whence he came or why he led such a wandering life. Had he lived in this generation, he would have doubtless been called a "tramp" instead, but he lived at a time when a man who would not work was generally supposed to have a diseased brain. Anyhow, "crazy" he was always called, though he was allowed to wander at will from place to place.

He usually put in an appearance in my home town about twice a year, and when his coming was noised about among the schoolchildren, they did not venture alone on the street, for "Crazy Jonathan" not only muttered as he walked the streets, but he always carried a large pack upon his back, which doubtless contained his few belongings, but, to the childish mind, hideous indeed were the contents of that mysterious pack.

One day a curious group of little folks stood at a safe distance from the weary man, who had seated himself on a bench, and as he took off his hat to wipe the perspiration from his face, one boy exclaimed:—

"He is a fool if he isn't 'crazy'! Just see him trying to rest with that heavy load on his back!"

Then one, more bold than the rest, drew a few steps nearer, and ventured:—

"Say, mister, why don't you take off your pack, so's you can rest better? We won't touch it!"

But with a decided shake of the head, the wanderer dolefully made answer:—

"I'd have to load up again!"

"Crazy Jonathan" had, I supposed, faded entirely from my memory, but the picture he made that spring day, sitting under a wild cherry tree abloom, as he said, with a weary sigh, "I'd have to load up again!" was vividly brought to mind recently by the remark of a woman who, though considered sane, gave evidence of the same lack of wisdom as did "Crazy Jonathan" long years ago. However, the pack which she carries is not on her shoulders, as was his, yet it is more burdensome to the wearer, methinks, and taxes others as well; for her pack-worries not only rob her of rest, but they depress all about her.

She had been as usual airing her dread of being helpless in her old age, and kindred worries, when a light-hearted person ventured to say: —

"O grandma, make a resolve to live just one day without worrying; it would be such a wonderful rest for you!"

But the old lady shook her head as she said plaintively:—

"The worries would all be there just the same, and I'd load up again, come night, so what's the use!"

Her argument did not show any more wisdom than did that of the one called crazy Jonathan, and yet, as the one recalled the other, the writer fell to wondering if both were not a type of many persons who foolishly "load up" with unnecessary burdens and worries.

Even the beast of burden is wiser than such, for, as the poet has beautifully expressed it,—

"The camel, at the close of day,
Kneels down upon the sandy plain
To have his guide remove his load,
And rest to gain.

"The camel kneels at break of day
To have his guide replace his load,
Then riseth up anew to take
The desert road."

Life's "desert road" is hard enough at best, but O, how it would lighten the load for some of us if we would give closer attention to the divine Guide who left the injunction:—

"Sufficient unto the day is the evil thereof."



EHRLICH'S NEW REMEDY "606"

ALVARSAN, as it is called commercially (the chemical name is too long for common use), is proving a sore disappointment to those who supposed that one of the cruelest diseases that inflict humanity was about to be eradicated, and possibly a happy disappointment to the other class, who look upon the attempt to extirpate syphilis medically as an encouragement to vice. The fact is that while "606" is useful in the specific disease, causing usually a disappearance of the characteristic reaction and symptoms, and of germs in the specific sores, its apparent benefits seem to be in many cases at least only temporary. We are informed positively by some investigators that salvarsan does not cure the disease. Moreover, it is asserted that, like other arsenic preparations, it is not without its dangers, and we may yet learn of blindness and even death as the result of medicinal doses of the new remedy.

In the experience with "606" we are having a repetition of old history, showing the tendency of man to build a high structure on a very imperfect foundation. Some physicians have had brilliant and lasting results with this remedy; others have had no better results than with mercury. As the mode of administration is definitely prescribed, and as the drug is only made by one house, such a variation of results between men equally intelligent leads to the natural conclusion that these men, in spite of scientific attainments, are apt to find what they are looking for. The history of every new remedy presents a similar phase.



AMONG THE AYMARA INDIANS OF BOLIVIA AND PERU

F. A. Stahl



HERE are about one hundred fifty thousand of these people; Peru claims fifty thousand, and

Bolivia the greater part. The Aymara Indians are naturally a strong, sturdy race, the severe climate and their rough way of living allowing only those to live who are strong. But the use of alcohol and coca is making terrible inroads among them. Diseases which were unknown to them a few years ago, are now cutting them down in great numbers.

From our first meeting with them in La Paz, we have been interested in this people. The more we have seen their need, the greater our interest has grown. A few weeks ago, I received a letter from A. N. Allen, of Peru, asking me to work with him among the Aymara Indians at Puno, Peru, a town on the shores of Lake Titicaca, the border line between Bolivia and Peru. When they received word that we were coming, hundreds came out to meet us, some carrying flags, giving us a most hearty welcome. After each one had embraced us, - a custom the people have, which takes some time where there are several hundred to deal with,- they called for a meeting. The first meeting lasted from 9 A. M. to 4 P. M., with one hour intermission for lunch. The speaking was done through two interpreters. The interest these people manifested was intense. At times they could not contain themselves. and would repeat the words spoken, over and over again. Every day the interest increased, and we received invitations from other villages to speak and instruct

them. They compelled us to stay longer than we had planned, the people coming for miles around.

At one place we were invited to speak in their church. This we dedicated to the worship of the true God. The church belongs to the Indians, and has been used for years in connection with the worship of images; but the people have now cleaned these out.

They brought many sick for us to treat, and we visited at their homes others that they could not bring. God blessed this work, and many were healed, not so much on account of what we did as in answer to earnest prayer. At one place, where a father called for us, we found his daughter ill with typhoid-pneumonia, struggling for life. We told them to take the fire out at once, as the place was full of smoke. We instructed the mother how to care for her daughter, how to use the chest compress, and to give cool sponges; we explained the necessity of giving the patient plenty of cold, pure water to drink (as this had been withheld), and advised as to her diet. Then Brother Allen and I invited the father and mother, with others who were there, into this rude hut, and prayed for the life of this daughter. God heard and answered, and has restored her to her happy parents.

We were led to another hut not far from this place. As our eyes became adapted to the dim light, we were almost overcome by the sight that met our eyes. On the floor on one side of the hut lay a woman dying. At her feet lay two very sick children. On the other side lay a man groaning in agony; and at his feet lay another child very sick. A whole family ill with typhoid. The floor of the hut was covered with filth. In one corner was a pile of decaying food. Near the sick children were placed bowls of chopped pork. We could not stay in the place longer than two or three minutes at a time. The father and three children were removed to a clean hut, and placed upon a milk diet, and given pure water to drink. When last heard from, they were improving. But the mother succumbed a few hours after our first visit.

All this sickness is because of ignorance. The people are calling for instruction, and are willing to follow it when given. Can we withhold it from them? We treated fifty sick people, and promised to do all we could for them in the future.

We asked if they wanted schools for their children. Almost with one voice was heard, "Waliki," "Waliki" (Good, Good). "Will you help to build these schools?" was asked. "Hisa," "Hisa" (Yes, Yes), they responded.

The people brought offerings of eggs, potatoes, cheese, etc., and nothing would satisfy them until we had taken these offerings from their hands. During a meeting those who came in late would go right up to the speaker and embrace him, this not interrupting the meeting. Elder Allen baptized fifteen faithful people. There was no irreverence; children, as well as adults, were in a spirit of prayer. It was a most impressive scene. The

weather was cold, and a light snow falling, but they did not mind this. They were happy in the thought that God loved them, and that they could also follow in the footsteps of the dear Saviour. It was a new thing for these poor Indians to hear that God really loves them. They had never realized this before, having been taught differently by the priests.

A few days after this, we bade them farewell. About a hundred accompanied us for several miles, many being in tears. A short time after this, the priests influenced the authorities to arrest fifteen of these young men because they met us with flags. What the outcome of this will be, we do not know, but we have the faith to believe that this will only strengthen the cause of truth. Brethren and sisters, remember these Aymara Indians in your prayers, that God will send them faithful teachers.

The following is a song in the Aymara language: —

Mojgsa Jesus Auki, Hamki monamti; Wawaman almapa, Mankgan chhactanapa.

Unttastua Diosay; Huchan cancatajga; Khuyapayasikima Aca huchctaratiga.

Sweet Jesus mine, Look on me a sinner; My soul is lost, For sin is mortal.

My God, thou knowest me; I am frail; I also acknowledge Thy great kindness.





EXPOSED FOODS

HE vending of fruit, confectionery, and the various forms of pastry, from street stands, push-carts, and pedler's baskets, is abominably unsanitary, and should be abolished. In the better sections of the city, little of this practise may be encountered, but among the more crowded districts and poorer neighborhoods, the street pedler thrives. small dealer starts out in the morning, with a basket or box of the most inferior grade of assorted confectionery, and takes his place along the curb, where he awaits the passing purchaser, who fingers over the wares, until a selection is made, and then greedily devours the candy. The vender carefully rearranges his stock in trade, with his not too clean fingers. It is bad enough that the sweetmeat(?) is impure, but when we recall that the basket remains in the open all day, and in most cases without any covering, along the curb, where the dust and pulverized refuse from the street and gutters is blown upon the contents, we can easily appreciate how contaminated it must be.

The soft candy, and such as the chocolate-coated variety, exposed to the changes of the weather, readily absorb the impurities from the dust and air. Notice, upon a warm day, such a basket or box, with its grimy proprietor, at the corner, and see the street-sweeper a few feet distant diligently brushing the pavement, so that a cloud of dust and particles of decayed matter fill the air, only to settle upon the moist confectionery.

The idea of merely inhaling the dust

is revolting, yet it is eaten — only in a disguised and more palatable form. We fully realize that in the manufacture of these products only the most inferior grade of material is necessarily used, and that before it reaches the selling receptacle, the candy passes through many hands and unhygienic processes which are decidedly unclean; but it becomes worse if we take the time to notice the pains one of these pedlers will take to maintain the attractiveness of his display.

Toward the end of the day, the merchandise begins to lose its fresh appearance; the surface of the coated varieties becomes dulled from exposure and frequent handling; and then it is a common practise for the man in charge to select such pieces, and, holding them to his mouth, blow his breath upon them, and rub them to a polish. using his fingers or his coat sleeve, or, even worse, his pocket-handkerchief. Of course we might speculate as to the variety, number, and virulence of the pathological organisms in that man's exhaled breath, upon his clothing, or within that handkerchief, but it is too disgusting. Nevertheless, the fact remains, and is easily proved by a little observation.

The same process applies to fruit. Every one has seen the dirty foreigner blow his breath upon an apple, and then rub it to a polish upon his coat. That seems customary, the apple looks cleaner and more shiny; and, unfortunately, it is one of the failings of human nature to prefer to buy shiny articles.

Perhaps the worst result of this form of selling falls upon the children. The youngsters, with their ready pennies, are the best customers and, sad to say, the chief sufferers. Their resistance to the impure produce is naturally much lower than that of the adult purchaser. They are obviously more susceptible to infection and contagion, which in many unrecognized instances are induced and spread in this manner.

Some stands and baskets have glass covers, which are commendable, but which still offer slight protection against the handling and cleaning process. Why is it necessary to sell these delicacies (?) upon the street at all, especially when the innocent children are the shoppers? It is bad enough to have the cheap and impure stuff in stores, the poorer class of which vie with one another in producing more for the money, in order to catch and hold trade; and this necessarily results in impure products of confection, ice-cream impurely flavored and made of inferior ingredients, and the almost deadly soda-water, which may be seen advertised in certain sections as selling at "one, two, and three cents a glass."-American Medicine, November, 1910.

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Can We Eat Too Much?

It is commonly believed that the proteid foods are the ones concerned in the formation of putrefactive toxins. That is in the main true, but it is quite clear to me that all forms of food, when taken in greater quantities than the digestive fluids can digest, are capable of forming putrefactive poisons which are deleterious to the human organism.

I have therefore insisted that all my patients should take small meals, in which proteid should form a very small proportion. To my mind, it is not so much what the patient eats as how he eats. I have found the best results follow when general food was given, but the quantity of food of any kind was limited to a very small amount.

Most people habitually eat,—at least once a day, and frequently at all meals,—not only much more than they need, but much more than they can digest. In the latter case, putrefactive decomposition naturally results. This may be obviated by giving only such food as can be digested; and it is even better to give, for a time at least, even less than this amount.

When this plan was followed every day for a number of days, the putrefactive products in the urine were invariably decreased, and in some cases entirely disappeared.— Greene H. Hammond, quoted by J. A. Stucky, M. D., in the Journal of the American Medical Association, Oct. 9, 1909.

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Alcohol and Cell Life

DR. L. DUNCAN BULKLEY believes that alcohol is prejudicial to all kinds of cell life. Degenerative changes follow in its wake, when used to excess. It lowers the opsonic index, facilitates infection, interferes with metabolism, and depletes energy. Regarding its effects on the skin, Bulkley believes that its use directly favors the occurrence of acne, eczema, psoriasis, erythema, and syphilitic lesion of the skin. He bases his belief on the known physiologic effects of alcohol; viz., dilatation of the cutaneous capillaries, relaxation of the cutaneous muscles, and modification of the perspiratory secretion .-Editorial Therapeutic Medicine, March. 1910.



In this department, articles written for the profession, which contain matter of interest to Life and Health readers, are given in abbreviated form. Sometimes the words of the author are given, but more often the passage is abbreviated, or else paraphrased in popular language. Technical matters and portions of articles having no popular interest are omitted. Give the authors credit for whatever is good, and blame "us" for the rest.

A BRIEF VIEW OF MEDICAL HISTORY

of medicine had its origin in the perfecting of an elaborate superstructure designated as symptomatology. Diseases were studied and classified entirely according to their external manifestations. Disease classification was handed down from Hippocrates, like the Talmud, its original expression intact and unimproved, but its external form made more and more complex through the accumulation of successive commentaries.

The earliest therapy, consisting of water, heat, cold, dietetics, and hygiene, gradually acquired spurious additions and variations, many being weird and useless, while others were harmful. At the time of the burning of the Alexandrian library, chemistry or alchemy had reached quite a high degree of development. This knowledge, transmitted to southern Spain and Italy, was imparted from father to son. It became intermingled with necromancy, astrology, and horoscopy, and was regarded by the masses as something superhuman. Its possessors became a cult by themselves, and at the dawn of the Renaissance, they appeared as a sinister group, hardly allied with medicine, but rather with its antithesis — the gentle art of poisoning.

It was from this amiable group of assassins that the physicians of the seventeenth and eighteenth centuries derived that medication from which, during a long period, too few patients survived. With the passing of the Renaissance, the poisoner began to acquire medical lore from the physician, and the physician acquired a knowledge of dangerous chemical substances from him. The physician of the eighteenth century had mislaid the simple therapy and clearly defined classifications of Hippocrates, and had become hopelessly swamped in a sea of commentaries. But he was zealous; he bled and purged, he nauseated and salivated. His mortality was as high as his zeal.

At this juncture appeared a Luther in medicine. His name was Hahnemann. and he had a great idea. Hahnemann reasoned that if he were to intoxicate himself with different drugs, he might be able to produce symptom-complexes, then recognized as definite diseases. He tried it, and certainly got symptoms; and these he tabulated; then he reasoned that by giving infinitesimal doses he might immunize against those symptomcomplexes. So he tried minimum doses on various persons in disease, and more of his cases survived than any one else's. Whereupon, in 1810, he wrote a book called "A System of Rational Therapy;" and so it was, relatively. And thus there entered into the art of medicine a schism which clave it from crown to chin, which was of great value at the time, and which has done little harm since.

With the Reformation came a general revolt against all forms of dogma. Little by little physicians adduced to the aid of medicine a vast deal of knowledge drawn from the natural sciences. These fragments of absolute information, gathered from biologist, physiologist, chemist, and botanist, began to fit together, forming a rational whole. This was not the art of medicine; it was the science of life.

As I have said, the art of medicine began with a superstructure; it could hardly have been otherwise in the absence of the natural sciences and their technical devices. With the advancement in general scientific knowledge, however, the study of the nature and cause of disease was rapidly becoming a highly specialized science. But what of therapy and treatment? This was at a standstill. Dogma, tradition, and empiricism had fostered the inevitable sectarianism which always associates itself with belief as contrasted with knowledge. And until late years, therapeutic medicine, with its various hostile camps, has continued to bear the hall-marks of medieval scholasticism, while the real problem of medicine - the amelioration and prevention of disease - has been all but lost in schism. As a matter of truth, aside from a few relatively specific protoplasmic poisons, drug therapy has been in a sorry state.

The future of our efficiency in combating diseases of obscure origin and inception lies, I believe, in the study of beginning conditions. We are entering upon the development of a new study, the pathology of the living. It is more important for us to know the pathological conditions which cause a patient's present sufferings—a pathological change which is perhaps remediable—than it is to know the fullest particulars of that unhindered morbid change which has at last caused death. Our

chief purpose now is to heal the living.

In the same degree that schism and dogma have failed to add anything to our knowledge of the cause of disease or of efficient treatment, so have they been conspicuously absent in the advancement of that crowning glory of modern medicine, the science of preven-The entomologist, the naturalist, the botanist, biologist, and bacteriologist have each contributed his quota in the study of the intermediate host; and the passing of the flea, louse, mosquito, lower rodents, tsetse fly, etc., will mean the passing of certain groups of diseases which have decimated the earth. - A. S. Chittenden, M. D., Binghamton, N. Y., in New York State Journal of Medicine, November, 1910.

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Overeating: the Great American Crime

IN reading periodical literature, as well as the more special publications devoted to medicine and surgery, it is a noticeable fact that the advertising columns and pages teem with the more or less blatant claims made for remedies to be employed in dyspepsia and constipation. These interesting advertisements are to us important as indicative of two very prevalent conditions. Dyspepsia, and difficulty and pain in digesting alimentary products, as well as constipation of a more or less chronic character. if studied up to the very fountainhead, will be found to depend upon one condition, principally, and several others, secondarily.

Let us first consider the individual who is in fairly comfortable circumstances, and we will note that for him there is nothing more attractive or more satisfying than the pleasures of the table. He may have been reared in this manner, and from his childhood up he was petted and indulged, and his fond parents never felt happier than when he ate to satiety.

Such a habit, engendered in childhood, will persist through adolescence, adult life, and old age. We like to see an individual who has a good appetite; we abhor one who is a gormandizer, a glutton. He does not eat with reason, he merely indulges an animal instinct which can hardly be denominated a craving. treats his stomach as if it were an empty receptacle, a sort of sack which he carries about with him for the only purpose of filling it. And with what does he fill it? - A heterogeneous mass of nondescript matter, called food, and which a strict analysis would pronounce alimentary junk.

Is it to be supposed that a well-behaved stomach would or could digest anything like that? Is it any wonder that dyspepsia becomes the fruit of such conduct? But this is not all. Such a meal, as it is called, is drenched with copious libations of ice-water, cold beer, and Manhattan cocktails; and we have the victim of his own gorging curled up, waiting for the doctor to give him an emetic and an injection of morphin. Let us not forget that the patient has dined well, and this would not be possible did he not indulge in a large cut of pie, some doughnuts, and a few other equally tempting, indigestible articles. He has also swallowed during the entire meal hot biscuits inlaid with butter. All of his bread must be hot, and his batter cakes bathed in butter and sirup. When he is forty, he is a chronic dyspeptic and constantly a subject of all sorts of gastric tortures.

Another result of overeating is constipation, a constipation so marked that it really becomes obstipation. Such a person does not feel comfortable in the morning unless he has swallowed a

tumbler of some much advertised and lauded aperient water. Can it reasonably be expected that such meals will be properly digested, or that they will form a mass for the promotion of regular alvine evacuations? It is the overeating that is the cause of all this. Those who are served with dishes that they fancy, will eat of them until they can eat no more; and then comes the natural result, the punishment of the crime, comes the diet of soda-crackers and sodawater, the visits at spas and wateringplaces, and, if there still be hope, the restriction to a proper diet of limited scope, easy of digestion, of assimilation, and of metabolism.

It is time that a proper dietetic regimen be enforced by physicians in order to place their patients in a proper physical condition, so that they may bear all the physical and mental stress laid upon them without being particularly aware of the fact. Let us see that our patients are given more wholesome, more nutritious, and more digestible and assimilable food, and we will note a rapid decline of cases of nervous prostration, debilitating dyspepsia, and weakening constipation. There will be some red blood formed and less bile, and the coming American, instead of being a crawling polyclinic, will be a model of a sane and healthy man. As physicians it is our duty to bring about such a desired change, and as medical advisers we can easily accomplish such a desirable end by a course of reasonable advice and a striking demonstration of the truth of what we have said and urged. We must abolish dyspepsia, and the only means of doing it is by striking at the root of the great American crime, overeating. The St. Louis Medical Review.



THREE NEW BOOKS ON HYGIENE

Personal Hygiene and Physical Training for Women, by Anna M. Galbraith, M. D., Fellow of the New York Academy of Medicine; 371 pages, with original illustrations. Cloth, \$2 net. W. B. Saunders Company, Philadelphia and London.

The author has aimed to present in a clear and concise manner the fundamental physiological laws, together with directions for the proper development of the body and the training of the physical powers by means of fresh air, tonic baths, proper food and clothing, gymnastic and outdoor exercise, so that the tissues will be placed in the best possible condition to resist disease.

We must protest against the teaching that "fresh meat must be eaten by a woman in health at least once a day, and young girls need it twice a day." We have been puzzling our brain to know what the author meant by, "The liver makes all the sugar that is needed in the system when none is taken in the food. In addition to this, all the starch that is taken as food is converted into sugar in the body."

There is a tendency to recommend drugs to lay readers, and she recommends hot tea for a woman who is chilled; for headache she recommends tea and sodium bromid.

But in general the instruction regarding diet, clothing, and the treatment of simple disorders, is excellent. The section on physical culture, illustrating the various movements by photographs of a graceful young college woman, is worthy of special mention.

The Working People: Their Health and How to Protect It, by M. G. Overlock, M. D. The Blanchard Press, Worcester, Mass.

Dr. Overlock is one of the extremely active physicians who is helping to bring about an improvement in social conditions which will make for the better health of the masses. In the Introduction he says: "This is a plain book, written in a plain way, by a plain man, for plain people." Granted; but it is none the

less a work that may well be studied by social workers, and others interested in the hygienic education of the masses. After all, the "plain man" must have line upon line, precept upon precept, and too often he is only willing to close the stable door after the horse has escaped. As the doctor says in his chapter on the working people as spendthrifts, people will pay a doctor, take his medicine given for temporary relief, and neglect his earnest advice given to reach the source of the difficulty.

The directions are plain, the arguments and statistics (not too many of them) are convincing, and the book ought to be a means of uplift among the industrial classes, if they can be induced to heed its teachings.

Rural Hygiene, by Henry N. Ogden, C. E.; \$1.50 net. The MacMillan Company, publishers, New York.

The author, who is professor of sanitary engineering in the College of Civil Engineering, Cornell University, and assistant engineer New York State department of health, is particularly well qualified to prepare a volume on this subject, the need of which he has seen in his connection with the State sanitary corps.

He enters into the details of sanitary construction, so that the book might be used with profit by many architects and builders. His chapters on drainage, heating, ventilation, water-supply, and sewage disposal are written from the standpoint of a man uniting the latest scientific information with a knowledge of practical details. If his book contained no more, it would be a valuable book for every farmer; but it contains excellent chapters on personal hygiene adapted particularly to people living in the country, and the book is full of valuable information for the city dweller as well. The chapters on disinfection, contagious disease, mosquitoes, the control of tuberculosis, hookworm disease, pellagra, and the like, are particularly valuable for those living in the country.



Discussion of Articles on Hygiene and Kindred Topics Which Appear in the March Issue of the Magazines

Pearson's

NEARLY every one at some time needs to consult an expert regarding his eyes. Thousands, because of the seeming economy, consult one of the "eyes tested free" establishments—often to their undoing. "The Fake Eye-Glass Dealer," * by James R. Noland, in Pearson's Magazine (New York), tells in a candid way the tricks of the fake optician and the ways of the optical diploma mills. A perusal of the article may save many readers from a closer acquaintance and disastrous experience with these eye quacks.

There are approximately six million women wage-earners in the United States, who, with few exceptions, are paid considerable less than men. Richard Barry considers the question "Why Women Are Paid Less Than Men." Mr. Barry deals with the facts and the laws as he has observed them in various States, and considers the question whether woman-suffrage will help women to obtain better salaries. Mr. Barry's observation convinces him that woman-suffrage has not thus far helped women in a financial way. He arrives at certain conclusions which should be of interest to

Good Housekeeping

every woman worker.

We have become a race of candy eaters, and, incidentally, nearly a toothless race. "The Candy Revel," by Barton Currie, in Good Housekeeping (Springfield, Mass.), gives a review of the national candy habit, and its tremendous growth, and gives the views of physicians regarding the outcome of the national indulgence.

Prof. John R. Murlin, of Cornell University Medical College, gives an article on "Food Requirement for Brain Work."

The Delineator

"The People to Whom We Confide Our Children," by Marie Van Vorst.

"Running the House by Rule," * by Elizabeth Hale Gilman. This is the third of a series, the caption of the present article being "Kitchen Utensils and How to Care for Them." It might with propriety have been called "Cooking as a Fine Art." The direc-

tions are practical, and are intended to add, dignity and charm to that part of household work which tends to degenerate into drudgery.

The Mother's Magazine

MUCH more than parents may realize, the character of their food influences the future health and efficiency of children. "The Worth of Feeding Children Properly," by John Whitman, in the Mother's Magazine (Elgin, Ill.), shows how proper food influences the physical health and efficiency of the child, and how improper feeding leads to physical as well as moral bankruptcy.

Mischief and crime among children may be reduced by curing their physical defects. Laura Crozer tells the story in "Curing Children to Make Them Good"

dren to Make Them Good."

Many girls know nothing whatever about caring for their health. Dr. F. J. Stewart considers this important subject in the article "The Ignorance of Girls as to Themselves."

The "Defective Physical Condition of Schoolchildren," by H. F. Cable, discloses some frightful conditions very prevalent in our schools. A simple discussion of "Croup, Mumps, and Infantile Paralysis," with symptoms and treatment, adds much to the value of this issue.

The Designer

"BUYING BEAUTY AT THE GREENGROCER'S,"* is the picturesque title of a very practical article by Winifred Fales, which appears in the Designer (New York). The woman who seeks to increase or preserve her beauty is coming to realize that she can not attain her object by means of creams and powders, but must develop beauty from the inside out; the entire system must be freed from impurities. The wise woman awaking to this fact seeks the greengrocer's instead of the drug-store. The article outlines the effect of meat, tea, coffee, etc., on the complexion, and offers suggestions for a simple dietary and simple treatments which act as beautifiers.

^{*}The articles designated by the asterisk have been read by the editor of Life and Health.

The Chautauquan

Sociological conditions have an intimate relation to the health of the masses. It is not altogether within the power of the wage-earner to regulate his life and that of his family according to the dictates of modern hygiene. He is a victim of the social conditions under which he lives. What is municipal ownership doing in the Old World? and what can it do in the United States to prevent the exploitation of the masses? Two articles in the March Chautauquan by Percy Alden, M. P., and Charles Zeublin.

Physiologic Therapeutics

High blood pressure is an important factor in the premature death of elderly men, especially men of affairs, "good livers." The March issue of *Physiologic Therapeutics* (Chicago), the Hypertension number gives several articles on high blood pressure, among them "Muscular Fatigue as an Antidote to High Blood Pressure in Certain Cases, and Walking as a Factor in Reducing High Blood Pressure."

Garden Magazine - Farming

Outdoor occupations, especially for the man whose work is largely indoors, is a means of health and recreation. A clerk shut in during office hours has a rented home with a back yard, which, because of the uncertain duration of his tenancy, he hesitates to improve. "A Renter's Garden," by C. L. Meller, in Gar-

den Magazine — Farming (Garden City, L. I.), tells how he may, by means of annuals, convert his back yard into a garden of delight.

Children's gardens are now generally recognized as a means of physical, mental, and moral education for the little ones, and as a most potent factor for health. "Children's Gardens Everywhere," conducted by Ellen Eddy Shaw, gives practical directions to the child how to plan and make seed estimates for his garden. The problem of starting and maintaining children's gardens is discussed.

Country Life in America

We can not all bear the rigor of outdoor sleeping. "Pretty Nearly Sleeping Outdoors," by H. S. Adams, in *Country Life in America* (New York), describes a glass bedroom built greenhouse fashion, which insures plenty of fresh air and germ-killing sunshine, as well as protection in bad weather. The March 1st issue is devoted to gardening; March 15th will be a "Back to the Land" number.

The National Food Magazine

- "Food and Health Conditions in Germany," by Rutledge Rutherford.
 - "Tropical Fruits and How to Use Them."
 "Violations of the National Food Laws."
 - "Domestic Science in the Home."

Ladies' Home Journal

"How Can I Keep Young?" by Dr. Lillian L. Bentley.

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Opium Importations.— The annual import of opium into the United States is seventy-five thousand pounds, of which three fourths is used by habitués.

Plague Stamped Out in the Philippines.

— The epidemic in the Philippines seems to be entirely eradicated, as no case has been reported there for a long time.

Antityphoid Inoculations.— In the Massachusetts training-schools for nurses there have been some sixteen hundred antityphoid inoculations practised on four hundred five individuals with no bad results, and apparently with increased resistance against typhoid infection. From the frequency of typhoid infection among nurses it has been concluded that the hospital nurse in Massachusetts is eight

times as liable to typhoid infection as the ordinary citizen. Present results seem to indicate that the inoculations will greatly dimin ish the typhoid incidence among nurses

Destroying Rats in England.— Because of a rat plague in Suffolk, England, in which four human cases occurred, a warfare against the rat is being carried on. Barium carbonate is recommended as the most practicable poison. It causes the rat to hunt for water in the open, and thus avoids the nuisance of dead rats in the house. One part of this poison to four of meal, mixed in a dough, or the powder spread on fish or moist toasted bread, is eaten readily by the rats. As rats refuse to eat food that has poisoned other rats, it is necessary occasionally to change the form of food in which the poison is administered.



A Costly Kiss.—A woman of New Castle, Pa., kissing her brother, who was dying of diphtheria, became ill with the disease and herself died.

Cocain Importations.—In 1909 one hundred eighty-five thousand ounces of cocain were imported into the United States. Of this amount only five thousand ounces were used legitimately by physicians, the remainder being used by victims of the cocain habit.

Plague a Serious Menace in Manchuria.

The cables tell us that the plague situation in Manchuria is so serious as to threaten international calamity. The Chinese government has invited experts from other countries to give their time to the study of the situation, and has offered to bear the expenses.

Meals for Schoolchildren.— In Stockholm the common council has voted a sum of money yearly for the purpose of providing substantial midday meals for the children in the primary schools, and in some of these schools they are also given breakfast consisting of bread and milk, when this seems necessary. School baths are fitted up in all of their primary schools, and are greatly appreciated by the children.

City Versus Country. — Notwithstanding the unfavorable housing and tenement conditions of congested New York, the health of the millions of that city seems to be better than that of the rural population of the State, the death-rate in New York City being 14 per thousand, other cities 14.7, and rural New York 15.8. The cry, "Back to the country," is all right, but first let us do a little back-yard clearing in the country. Let us do away with fly breeders, insanitary wells, and the like.

A First-Aid Pullman Car.— A hospital on wheels, a specially arranged Pullman car, designed to be used as a lecture-car to teach the methods of first aid in districts where accidents are common, has been prepared for use of the American Red Cross Society. Besides dining and sleeping quarters for the staff, this car has a room twenty-six feet long, which can be used either as an emergency hospital or a lecture-room. It is provided with the most recent apparatus for aid in case of disaster, and also a moving-picture outfit to show the various methods of procedure in giving aid to the injured.

A Chair of Preventive Medicine.— The Washington University of St. Louis has just created a chair of preventive medicine. Undoubtedly all progressive schools will in a short time take this advanced step.

Meeting of School Hygienists.— The fifth congress of the American Hygiene Association met in New York City, February 2-4. Such topics were considered as "The Teaching of Sex Hygiene," "Communicable Diseases," and "Open-Air Schools."

An International Opium Conference.— There will be held at The Hague, Holland, May 30, an International Conference on Opium, at which meeting there will be representatives of the United States, Great Britain, France, Germany, Italy, Japan, Netherlands, Persia, Portugal, Russia, and Siam. The meeting will consider not only the use of opium, but also the use of cocain and morphin.

Moving Pictures and Crime.— Three New Jersey boys, inspired by witnessing in a motion-picture show the scene of a hold-up, went out and waylaid a man, robbing him of his wallet containing two twenty-dollar bills and a watch. The boys wore masks, but the man recognized one of them, and they were later arrested in a saloon. When they were brought up before the judge, they said they had attended a motion-picture show, and thought they could accomplish a hold-up as successfully as shown in the pictures.

Consulting Housekeepers. A suggestion is made by a writer in the Survey that every training-school teaching household administration should develop a corps of consulting housekeepers, prepared to go into any home, study the situation thoroughly, and make a recommendation as to how the household should be administered in order to obtain the maximum efficiency on the income available. The time necessary for such a study and the nature of the report would vary according to the size or complexity of the household. Fees would vary in proportion. The work would include the installation of proper bookkeeping, the indication of what proportion of the income should be devoted to the various elements of the budget, and instruction in sanitation. Such a plan would be of most use in households with an income of from one thousand to ten thousand dollars.

For the Safety of the Public,—St. Louis is preparing to enforce the sterilization of cups, glasses, forks, and spoons in hotels, restaurants, bars, and soda-fountains.

The World's Congress on Alcoholism.— The Thirteenth International Congress on Alcoholism will be held at The Hague, Holland, Sept. 11-16, 1911. The discussion will be arranged in two general topics: The Community Against Alcoholism, and The State Against Alcoholism.

The Soy-Bean as a Diabetic Food .- The December issue of the American Journal of the Medical Sciences gives a paper in which the soy-bean is recommended for diabetics, because of the fact that this bean contains practically no starch. A French pharmacist has succeeded in making bread from the bean, which is said to resemble gingerbread, and a number of diabetics in Algiers have been fed with this bread, with excellent results. The beans may also be used as a vegetable by soaking from twelve to sixteen hours, until the skins come off, and stirring until the skins rise to the surface, after which the beans are boiled with salted water, seasoned, and served hot. A gruel flour is made from the bean, which is very serviceable in the preparation of gruel, broth, or biscuit.

Decrease in Death-Rate of Infants.— The percentage of deaths of infants under one year of age in Berlin from 1870 to 1889 was 30, from 1880 to 1890, 27.1; from 1890 to 1900, 23.2; from 1900 to 1910, 19. This is the period during which the practise of furnishing pure milk to infants, which was begun in 1880, has been made more universal. This is more than a coincidence.

The Omaha Typhoid Epidemic. The city of Omaha, Neb., was visited by an epidemic of typhoid November, 1909, which lasted till March, 1910, in which there were reported 582 cases with 59 deaths. The record is six times as high as the normal typhoid rate of the city. By invitation of the governor at the request of the local medical society, an investigation was undertaken by the United States Public Health and Marine Hospital Service, the results being reported in Bulletin No. 72 of the Hygienic Laboratory. As the result of careful investigation of all causes which might have to do with this epidemic, it was concluded that the source of the outbreak is the Missouri River water, which is very much polluted with sewage above the intake of the Omaha water-works. Careful recommendations were made, which the city will undoubtedly heed.

LISTERINE

To promote and maintain personal hygiene

In all matters of personal hygiene Listerine is not only the best and safest, but the most agreeable antiseptic solution that is available for the purpose.

The sterilization of the teeth may be most nearly accomplished by using Listerine as a mouth wash. The success of Listerine is based upon merit: the best advertisement of Listerine is—Listerine.

Listerine Tooth Powder.—An innovation, in that it contains neither fermentative nor harshly abrasive ingredients. It is not intended to supplant Listerine in the daily toilet of the teeth, but is offered as a frictionary dentifrice to be used in conjunction with this well-known and time-tried antiseptic.

Listerine Dermatic Soap.—A bland, unirritating and remarkably efficient soap designed to meet the most exacting requirements of a saponaceous detergent. It is of especial value in preventing cutaneous affections.

Listerine Talcum Powder.—An excellent absorbent and deodorant, particularly adapted for use after shaving, and indispensable in the nursery to prevent soreness and chafing.

Interesting pamphlets on dental and general hygiene may be had upon request

Lambert Pharmacal Company, St. Louis, Mo.

Hookworm in Porto Rico.— Major Ashford, of the United States Army Medical Corps, reports that there have been three hundred thousand cases of hookworm disease in Porto Rico since 1904. By his energetic administration, which was carried on without the flourish of trumpets, so that we in the United States knew practically nothing about it, he has awakened the islanders to a realization of the fact that this disease is preventable. He is confident that the island can be rid of the disease.

Public Health Service to Have New Powers .- A bill has been introduced into both houses of Congress, providing that the Public Health and Marine Hospital Service be hereafter known as the Public Health Service, and that this service be empowered to investigate the diseases of man and the conditions influencing the propagation and spread thereof, including sanitation, sewage, and the pollution of navigable streams and lakes; and to issue from time to time bulletins for the use of the public. This greatly increases the powers and consequently the usefulness of this service, which heretofore has been confined principally to the investigation of certain infectious diseases.

A Lamentable Exhibition of Race Prejudice.- The Boston Medical and Surgical Journal, commenting on the fact that more than one hundred Georgetown and George Washington medical students refused to attend the lectures of one of the instructors because, at a recent exercise of the class, several Negro students from Howard University were present, says: "Such instances of race prejudice are unfortunate and unworthy in individuals of the supposed enlightenment of medical students." It might have added that it is a lasting disgrace to the medical profession that these men, soon to become members of the profession, have yielded to such childish prejudice against fellow students in the same high calling.

Bad Teeth and Scholarship .- Dr. Gulick, president of the School Hygiene Association, has estimated that two decayed teeth in the mouth of a child are sufficient to retard the child six months in his study. School inspectors in New York City report that ninety per cent of schoolchildren are in need of professional dental services. By the appointment of dental consultants and special lecturers in oral hygiene, Commissioner Porter, of the New York State Department of Health, who believes that, as a germ disease, tooth decay should receive the attention of the State and local boards of health, is the first State commissioner of health who has taken an active part in the crusade for clean mouths by enlisting the co-operation of the dental profession.

The Business World Going Dry.— It is not sentiment nor theory, but fact, that it is becoming more and more difficult for any but abstainers to obtain positions of responsibility in the business world. Of seven thousand employers to whom queries were sent, nearly four thousand replied that they do not employ men who use alcohol in any form.

Where Doctors Disagree.—Some time ago in the "District" a man was kept a prisoner for more than a year, and was not even allowed close communication with his own family. Word now comes that a Chinese leper in Passaic, N. J., has been released, and allowed to return to his laundry work, on the opinion of the city sanitarian that leprosy is not communicable in this climate. Possibly the difference between the climates of the District of Columbia and Passaic, N. J., accounts for this difference in policy.

Plague in Shanghai.— Plague is still progressing in Shanghai, and is the cause of alarm to the foreign population. The disease is mostly confined to the native section of the city, but the difficulty of dealing with the situation on account of the opposition of the Chinese to the application of modern sanitary measures, makes the matter one of special danger. However, by means of fumigation, rat destruction, and rebuilding of houses so that they are rat proof, and the isolation of infected persons, the work is progressing.

Enlarged Glands in Schoolchildren.—From the examination of five hundred children of the higher schools of Saxony, Dr. F. Gumprecht finds changes in the lymphatic glands in the neck to be extremely common, about one half showing enlarged glands. The enlarged glands were more frequent in the lower than in the higher classes. He found that the majority of children with changes in the glands already showed a slight falling off in the general state of their health; that is, they showed such signs as paleness, thinness, and bad carriage.

Cities Legally Liable for Water Pollution. The Supreme Court of Minnesota has recently rendered a decision which may well cause careless city officers some concern. There was an epidemic of typhoid fever in Mankato, Minn., determined by the State board of health to be due to pollution of the city water by sewage. The widows of two men who died of typhoid in this epidemic sued the city on the ground that death was due to negligence of the city officials. The case finally went to the Supreme Court, and was decided against the city. The decision is just. It lays on the municipality the legal responsibility of keeping its conditions healthful. It lessens the temptation to economize by the use of a makeshift of unsanitary water-supply.

THE FALLACY OF FIGHTING IT OUT IN NERVOUS DISEASES

T is interesting to notice how science often establishes facts which were first observed by the unscientific. For centuries men were convinced that a good appetite is necessary to good digestion. Lately Powlow has proved that they were right. Many have believed that in some way red light is beneficial to smallpox. have learned within recent years that this supposition is right. So in many instances the practical man is doing things before the scientific man has learned the reason for his action.

In the spiritual life many have realized that spiritual conflicts are fraught with most disagreeable and often disabling consequences. Abnormal psychology now shows us something of the mechanism of these conflicts, and in some instances enables us to prevent or remove their bad effects. We have learned, for instance, that our advice to patients that they "fight it out" in case of functional nervous disorders is wrong.

If we should ask the patient troubled with nervous exhaustion, or hypochondria, or obsessions, or some form of depression, what he is doing about his many fears, anxieties, and perplexities, he will inform us that he is doing the best he can to "fight it out." That is certainly a brave thing to do; but if we inquire how he is succeeding in his fight, he will almost certainly tell us that he is not doing well. Despite his most determined efforts, the contest seems interminable. There is no more pathetic spectacle than that of a man who has engaged for years in this fruitless struggle, and has reaped nothing but discouragement. Yet I believe such a man may travel the road that leads, in some measure, at least, to success.

A Cornish farmer returning home one

dark night struck across the moorland. In one place there was a number of disused mine shafts, some few filled up, but others hundreds of feet deep. The farmer, missing his way, found himself among the shafts. Knowing his extreme danger, he sat down, resolved to wait till morning. Becoming so cold that he could wait no longer, he tried with extreme caution to make his way out of the difficult situation, following the downward slope of the ground. In spite of his care, he found suddenly, on putting his foot down, that he was on the edge of a shaft, and his foot dangling in vacancy. He threw himself backward, but too late; he slid several feet, grasping the grass and heather. Finally his foot struck a large stone, which arrested his fall, and he hung there for several hours in mental anguish, not daring to move, clinging to a tuft of heather, and shouting at intervals, in the hope that a searching party might be sent out to look for him. At last there was a sound of voices, and the glare of lanterns. Rescuers had been sent out. They found that he was lying in a shaft that had been filled up, and that there was firm ground a foot below him. If the stone had given way, he would have been spared that long period of horror.

This is a striking example of the attitude of nervous people who attempt to overcome their abnormal mental states. The healthy man lives physically and morally without watching how he lives any more than is necessary. If we begin to study ourselves, we do not know where it will lead us. The inevitable outcome is mental disaggregation. The majority of people escape this tendency. Among those who suffer most intensely are nervous people given to morbid looking inward. Every neurotic is so interested in the manner of his living that he has little interest in life itself. He does not read without considering whether he is going to fatigue his brain. He eats nothing without watching the process of digestion. If he walks, he fears he will overtax himself. Bathing may give him a cold. In bed he is listening for his heart-beat, and frequently he is feeling his pulse. So contracted has become his mental horizon that he has ceased to be a useful member of society, and has become a burden to himself and his friends.

To suggest to this man to fight this condition is like asking the moth to get into the flame; for the only place to fight is in his mind, a fight between will and emotions, with an intellect wavering between one and the other. It is a fight to the finish; and this poor patient finds there is no finish for him. It is like the squirrel going round and round in his cage, while his strength and especially his courage are suffering in consequence.

I knew a young man with moderate nervous exhaustion go to the woods of Maine to "fight it out;" but he returned a slave to his magnified fears and abnormal sensations. To fight is to cling in desperation, as the Cornish farmer did, to mental grass and heather, with the solid earth only a foot beneath.

The morbid fears are not physical things. It is impossible directly to strangle them out of existence. So elusive are they that when apparently banished for good they have a disagreeable habit of turning up at most inopportune times. And though the patient on numerous occasions has fought and won the contest, the fight has to be continued as often as a rebel thought gives challenge.

Through a number of researches we have come in possession of a vast amount of knowledge of the factors which have to do with the different states of psychological instability. There are certain associations of ideas which mark emotional

waves, and others which produce little or none. By a process of analysis it is found what associations set up emotional conditions in an individual, and by appropriate treatment these associations are set in the right light with the patient, and his troubles disappear.

More interesting than the associations themselves are changes in the electrical resistance of the body during the formation of an association of an emotional nature. It has been learned that we can actually detect emotions by running an electrical current through the body, and measuring this current by means of a delicate galvanometer. Even one spoken word setting up an emotional reflex may cause a change in the reading of the galvanometer. This shows the profound influence of ideas upon our emotional stability. If a disagreeable emotional complex can produce nervous instability, the formation of such complexes in "fighting it out" is a blunder.

Further, it has been proved that an effort to crowd out disagreeable experiences, or to "forget it," is often the source of troublesome nervous disorders. The young girl attempts to smother the memory of a disagreeable experience, and finds herself later the victim of hysteria; and not till this smothering experience is brought to light and assimilated, is such a girl returned to her former health of mind and body. We pay by nervous instability for trying to smother disagreeable experiences.

There are scarcely any of us but have endeavored to crowd out some disagreeable experience of the past, and in doing so, have been conscious, first, of the futility of the effort, and, second, of its disturbing effect upon the tranquillity of the mind. We have made a bad matter worse. If this is true in regard to normal individuals, how much more true of the nervously unstable. To maintain a mental conflict within one's own mind is

to prevent the unself-consciousness so essential to mental health.

It is not so much drugs that many nervous people need; it is the practical philosophy of life — one that will enable them to enter more courageously the dusty arena with men and women, or fight the perplexing problems of life. A certain amount of worry is inseparable from any active life; to accept such worry philosophically is worth more than all the efforts to try to "fight it out."

But the nervous person says, "I can not let go," or, rather, "I do not let go because I have never been taught how to do it." The Cornish farmer clung because he could not see, therefore did not know that the ground was just below him. This is the predicament of the poor nervous person who is in ignorance of the meaning of his morbid ideas, sensations, and emotions. Like the farmer, he assumes a catastrophe, and in trying to "fight it down" he sets up within himself a constant turmoil of anxiety and depression. Left to himself he can do nothing to solve the recurring riddle.

It is here that the trained and sympathetic physician finds his field of greatest usefulness. He should be a man who brings the light; and as the farmer put his foot on the ground when the lanterns of the rescuers revealed it, so may the nervous sufferer relax his hold upon his fears when his physician reveals to him the emancipating truth.

The problem, then, is to educate him out of the habit of fighting, to one of surrender, based upon knowledge. The metamorphosis is no easy task. The Cornish farmer doubtless felt pain and stiffening for days as the result of clinging to the grass, and it is too much to expect that nervous people will have no trace of the fight after they have surrendered.—John E. Donley, M. D., Boston Medical and Surgical Journal, Nov. 3, 1010.

Hygiene of the Mouth and Teeth

A PROMINENT cause of decay is the lodgment of particles of food, especially starches and sugars, between the teeth and in the depressions. In order to prevent decay of food, which begins very quickly in the mouth, it is important to brush the teeth thoroughly after each meal. The best instrument for this purpose is the old-fashioned tooth-brush made of hog's bristles, which should not be so stiff as to injure the gums, but should be stiff enough to remove all foreign matter from between the teeth.

With the greatest care, it is difficult to keep the teeth entirely clean; and the majority of people are careless with their teeth. Hence it is of great importance to arrange the food so as to diminish the tendency of the starches and sugars to lodge between the teeth. Food should, therefore, be eaten dry, coarse, and fibrous in order to require mastication; incidentally, this prolongs mastication in children, and tends to strengthen the teeth and develop the jaws. As a result of this, the jaws become larger and broader, affording more room, and as a consequence there is less crowding of the teeth.

Having in mind only the prevention of decay, the foods to be eaten not too frequently are the soft, mushy foods, especially if loaded with sugar, and candy. Raw foods and salads, dry toast, stale bread and butter, and vegetables, cooke l so that they are dry and require chewing, are better for the health. Even young children after they have commenced to cut their teeth should be given crusts of bread or dry toast, and later other forms of hot food which require chewing, to take the place of milk and gruels and various mushy foods .-Journal of the American Medical Association, Nov. 26, 1010.



Osler's Challenge Antivaccinationists have been speaking of

"Dr. Osler's silence," and now he comes out in the American Magazine with the statement: "I would like to go into the next severe epidemic with ten selected vaccinated persons and ten selected unvaccinated persons. I prefer to choose the latter,- three members of Parliament, three antivaccination doctors (if they can be found), and four antivaccination propagandists,- and I will make this promise: never to jeer nor to jibe that they caught the disease; to look after them as brothers; and for the four or five who are sure to die, I will try to arrange the funerals with all the pomp and ceremony of an antivaccination demonstration."

We have not yet heard of the antivaccinationists taking up this challenge. If they do (which is not very likely), it will be interesting to observe the outcome.

她

To Spit or THE Boston Police Not to Spit? Board, determined to enforce the antispitting ordinance, recently arrested in about three weeks four hundred fifty-nine persons for spitting on streets and in public places. At first a two-dollar fine was imposed, but as this did not seem to be sufficiently deterrent, the fine was raised to five dollars. One person, for a second offense, was fined ten dollars; and one who refused to pay his fine, though able to do so, was sentenced to eight days in the house of correction. This seems to be a severe method of dealing; but nothing less rigid appears adequate to break up the filthy and dangerous custom which is becoming so firmly established.

In Washington, D. C., a different condition prevails. Notices in the street-cars inform the public that "spitting is unlawful," but they are not seen or not heeded by a certain class of passengers, who need more than the gentle admonition of a warning sign to deter them from the filthy practise of spitting on the car floor. At one time a person who seemed to be a consumptive ejected his filthy and dangerous expectoration on the floor, and a policeman sitting two or three seats from him seemed to pay no attention to it.

We are convinced that nothing less than a drastic enforcement of the law will have a salutary effect on the class which claims the right as American citizens to befoul sidewalks and floors of assembly-rooms and public conveyances.

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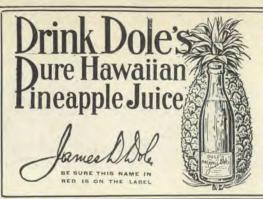
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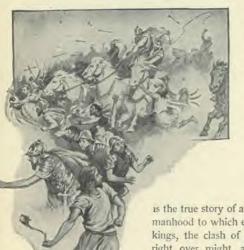


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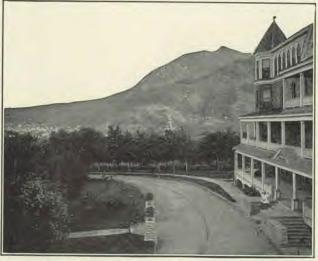
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