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**LIFE & HEALTH**

THE NATIONAL HEALTH MAGAZINE



*Beginning this Issue:*

*"With God in his Out of Doors"*

*By George Wharton James.*

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# The June "Life and Health"

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Senator Robert L. Owen, of Oklahoma, framer of the bill now pending before Congress for the establishment of a National Department of Health, gives a forcible expression of his convictions in the June number, under the title, "The Conservation of Life and Health." The senator from Oklahoma recently delivered a stirring speech on the floor of the Senate in support of this bill, and this will be commented upon in the forthcoming issue. This feature alone will make the June issue a noteworthy one.

The issue for June will be, in every respect, the most attractive, and, we believe, the most thoroughly helpful number of LIFE AND HEALTH ever published. It is one for which we predict an enthusiastic reception from all of its old readers and from thousands of new ones.



Bellamy's "Looking Backward" is recalled by the quaint but striking way in which Henry Waldorf Francis deals with the subject "Early Twentieth Century Civilization" in the June LIFE AND HEALTH. The writer treats particularly the conditions obtaining in this day as viewed from the imaginary standpoint of one living at the end of the twentieth century. His article is both amusing and instructive.



Dr. George Wharton James writes in the June number on "Physical Health." The introduction of the series in this number speaks promise of what is to follow. We can simply assure the readers of LIFE AND HEALTH that there will be no disappointment.

Professor Cromie, of the University of Pennsylvania, whose first article for LIFE AND HEALTH appears in this number, will write in the June LIFE AND HEALTH an equally helpful treatise on the subject "The Results of Physical Training."



"Open Air Schools" is an appropriate subject for discussion in the June number. It is treated by one who is well qualified to write upon this subject, namely, Dr. James P. Warbasse, author of "Medical Sociology" and former editor of the *New York State Journal of Medicine*.



"Prevention of Typhoid Fever" is a straightforward discussion of a plain but very important subject by a writer of extensive experience, Alfred B. Olsen, M. D., D. P. H., superintendent of the Caterham Sanitarium, Surrey, England.



Dr. Henry R. Harrower, editor of the *Medical Standard*, Chicago, writes in the June number on "The Elimination of Disease."

# CONTENTS FOR MAY

GENERAL ARTICLES	PAGE
With God in His Out-of-Doors, <i>George Wharton James</i> .....	261
That Boy of Yours, No. 4—The Sins of the Boy and the Sins Against the Boy, <i>H. T. Musselman</i> .....	265
Growing Old Gracefully, <i>William J. Cromie</i> .....	270
About the Danger of Tuberculosis Infection From Consumptives, <i>H. J. Achard, M. D.</i>	273
Fresh Air an Efficient Cure, <i>E. C. Jaeger</i> .....	277
Establishment of the Home, <i>W. H. McKee</i> .....	278
<b>HEALTHFUL COOKERY</b>	
Vegetables, <i>George E. Cornforth</i> .....	281
<b>CURRENT COMMENT</b> .....	
Importance of Teaching Hygiene in the Schools—The Other Side—The Dope Evil —Disheartening Suggestions—The Significance of the Splashing Sound—Edison on Meat Eating—Again the Vivisectionists—Present Status of the Tuberculin Therapy.	283
<b>ABSTRACTS</b> .....	
The Nervous Child—Hives in Infancy.	288
<b>MEDICAL FORUM</b> .....	
Work Cure—Do We Teach Our Children the Most Important Knowledge?	292
<b>THE MEDICAL MISSIONARY AT WORK</b>	
The Sufferings of India's Children, <i>H. C. Menkel, M. D.</i> .....	294
Beginning of Medical Work in Uruguay, <i>John V. Maas</i> .....	296
A Splendid Opening for Medical Missionaries .....	297
<b>EDITORIAL</b> .....	
We Plead Guilty.	298
<b>AS WE SEE IT</b> .....	
A National Campaign Against the House-Fly—Bonuses for Babies—Transmission of Disease by Money—Negative Evidence—Enforce Reasonable Laws—Establish Your Own Trust—A Practical Examination in Hygiene and Physical Culture—A Fallacy Regarding Medical Inspection—Advertising Ethics.	300
<b>SOME BOOKS</b> .....	
<b>HEALTH ARTICLES IN THE MAY MAGAZINES</b> .....	
<b>NEWS NOTES</b> .....	

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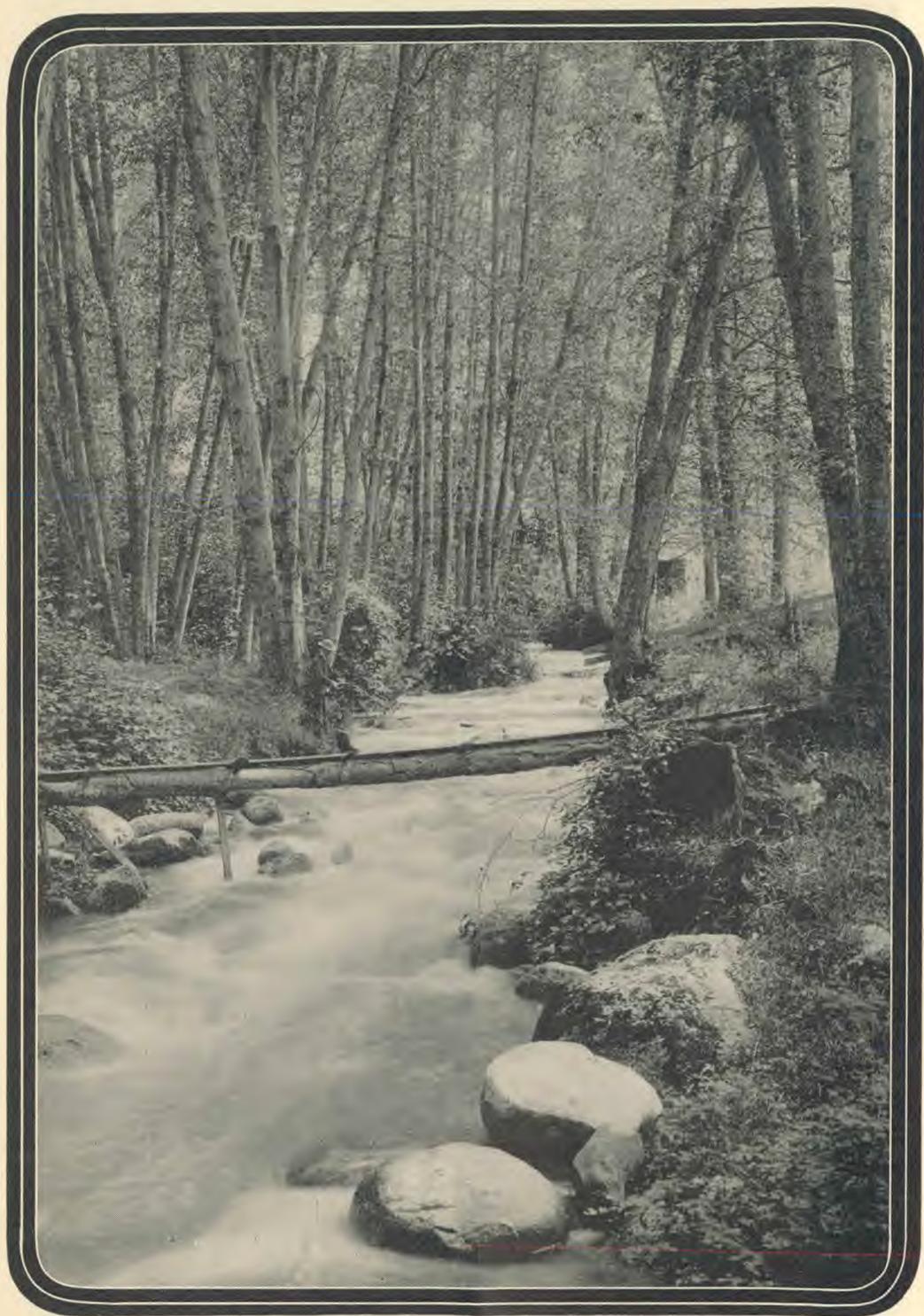
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## With God in His Out-of-doors

*George Wharton James*

IT is in the sense that the out-of-doors exists independently of man, and that indoors is the result of man's actions, that I give this series of articles the above

represents a corresponding idea in the thought of him who is all powerful, all present, all truth, all love, all wisdom. Hence to know God as fully as I may know him, I can begin in his own school ground, in his own kindergarten, and from what I can see, find out something of what he is. And what an infinitude is there! what a variety! what wonderful perfection of everything in its kind!

title. Whether the out-of-doors is objective or subjective to man makes no real difference to the question at issue. It is to the mental and spiritual effects upon man's life, and through these upon his physical life, that I wish to direct the attention of the readers of LIFE AND HEALTH.

To me the out-of-doors is a direct expression of the thought of God. Everything I see

The out-of-doors is a direct expression of God—his own school ground, his own kindergarten.

Well might the psalmist cry out, "The heavens declare the glory of God; and the firmament showeth his handiwork," and the philosopher declare, "The undevout astronomer is mad," and equally well can the simplest mind say, "When I see this rose, I know there is a God."

Nature's charms and glories are totally independent of man, for they are solely dependent on God; they are reflections of his mind.

Man should study the great out-of-doors to find God, to know his thoughts; and the more he studies and reflects and knows, the more wondrous it all becomes.

what astonishing beauty! what gorgeousness of color! what satisfaction to all the senses—sight, feeling, taste, smell, hearing—in that which we find out-of-doors!

Take the infinitude and the variety. Just sit down and calmly contemplate for one single hour all that you can recall of the objects of nature with which



THE AUTHOR IN A PRACTICAL OUT-OF-DOOR OCCUPATION

you are personally familiar. Begin with the high things — the sky, the stars, the planets, the milky way, the comets, the sun and the satellites of the planets, then the various clouds and the colors of the sunrises and sunsets. Take next the large and expansive things, like the oceans, continents, islands, mountains, great lakes, canyons, deserts, plains, then the growths of the vegetable world, from the giant sequoias to the tiniest spike of moss, including all the plants and flowers, wild and garden; and the same with the animal kingdom, including all insects, and the fish creation, and the flying creatures. And when you have done that, you have only just begun: you have only looked at things in a broad and general way; you have not gone into details, you have not used the telescope and the microscope. You saw the stars as a whole, not one star in all its particular glory; you saw the snow in the mass, not its individually

exquisite crystals; the rock as a great structure, not the beauty of the tiny grains that in their coherence made the block what you saw it to be.

Well might the psalmist cry out: "The heavens declare the glory of God; and the firmament showeth his handiwork," and the philosopher declare, "The undevout astronomer is mad;" and equally well can the simplest mind say, "When I see this rose, I know there is a God, because it is so perfect in beauty of form and color and perfume."

Yet there is more to external nature even than this. Not only does a cursory survey exhibit the beauty and glory of the objects around us, and a close and intimate study reveal exquisite and dainty wonders we had never dreamed of, but an added glory and charm is found when we see these objects in harmonious conjunction one with another. I have a picture before me. It shows a rugged mountain; on its slopes are stalwart trees, shrubs, and flowers; at its base is a large *mesa*, or table-land, covered with gorgeous, flaming golden California poppies, with groups of happy children and men and women gathering them by the armful, while over all is the perfect blue of a cloudless and flawless sky.

I close my eyes, and in a moment another picture is before me. It is of the Grand Canyon. There is a wide, deep



THE GRAND CANYON OF ARIZONA

"It is a deep, wide abyss, carved by God centuries ago"

abyss, carved centuries ago out of the solid rock which it has shaped into every kind of huge, vast, fantastic, wonderful, grand, and majestic form, with here and there a grotesque figure to make you laugh. Color is as rife and varied as among the flowers of a sun-kissed garden, and perspective heightens the effect. On its brink and stretching back from it for miles are thousands of giant trees, and at its bottom runs a wild, mad, roaring, impetuous river, while above float fleecy clouds as white as down, dream ships on a heavenly ocean of cerulean blue.

Close your eyes again, with me, and I'll give you another picture. We stand on the seashore, looking across a stretch of limpid blue water to the tree-clad shore on the opposite side. Seagulls are flying to and fro, lighting on the sand at our feet, and playing with the surf that the great, crested waves dash in roaring and seething masses before us. Beautiful brown seaweeds are afloat on the surface; and in the rocks to the right, exquisite mosses of the ocean and ferns unknown on land catch the colors of the rainbow from the sun as it glints through the waves.

Let us look at another picture, such a one as you may find east, west, north, and south. It is of a pure, sweet mountain stream, flowing rapidly along over the boulders, many of which are covered with mosses and lichens of many years'

growth. On each side are beautiful trees, their long, straight, slender trunks bathed in golden light, and their leaves glinting and glistening like diamonds in the gentle breeze that plays with them. Eye and ear are alike charmed here, for the music of the brook and of the trees and of the birds in the trees is "enchanting."

And I could take you into the glorious scenery of the Yosemite Valley, with its

El Capitan, and Bridal Veil, Yosemite, Nevada, Vernal, and Illouette falls; into the big-tree groves, where majestic sequoias tell you of the majesty of God; or to the Painted Desert, where the solitudes tell you of the calmness and serenity of God.

Nay! the memory brings back pictures so fast that you can not even stop to name them,—pictures of quiet-faced sheep in the green mead-

ows of England, of the waving palmettoes in Florida, the sugar-cane plantations of Louisiana, the cotton fields of Georgia, the home gardens of La Belle, France, the valley of the Connecticut River in Vermont, or that of the Nile or the Rhine.

Have you ever really thought before of the vastness and wonder and marvel of it all—of what God's out-of-doors really means, that it was and is totally independent of man or his will? It is here regardless of man, can not be affected by man, and would remain here,



AT WORK IN THE ORCHARD

doubtless, if not a soul were left in the whole earth to witness it.

Browning is said to have regarded the world of nature as a mere stage for the showing off of man, the background that sets him forth. As a rule, I find all of Browning's thoughts very helpful to me, but this one I can only partially accept. Nature's charms and glories are totally independent of man, for they are dependent

solely upon God; they are reflections of his mind, even as man is a reflection of the divine mind. And man can not afford to look down, or look carelessly or indifferently, upon anything that reveals God to him.

Still one more picture arrests our attention. It is early morning, and we see a group of cattle on a tree-clad hillside. The cattle are happily grazing, and the trees are witnesses of their contentment, just awakening to the joy of day, the sun searching out and driving a way all darkness, except the refreshing shadows cast by

each leafy monarch on the sward beneath.

Is there nothing here but a group of cattle, the trees, the hillside, and the sunshine? One is instinctively led to quote those wonderful lines of Robert Browning:—

"The year's at the spring,  
And day's at the morn;  
Morning's at seven;  
The hillside's dew-pearled;  
The lark's on the wing;  
The snail's on the thorn;  
God's in his heaven—  
All's right with the world!"



AN OUTDOOR STUDY AND SLEEPING PLACE

"At the Grand Canyon, where I have written two (and part of a third) of my books"

So man should study the world,—the great out-of-doors of God,—study it to find God, to know his thoughts, to seek to understand what he means by them, and to find the good there is in them for himself. And the more he studies and reflects and knows, the more marvelous and wonderful it all becomes. He finds that it is a beautiful world, a good

world, a true world, a blessed world; hence it is God's world, for it can not be the devil's world! No! No! It is God's; and though our eyes of the flesh may not see it in all the  
(Continued on page 280)



"WHEN I SEE ROSES, I KNOW THERE IS A GOD"



No. 4—THE SINS OF THE BOY AND THE SINS AGAINST THE BOY



**T**HAT boy of yours is no saint, but the chances are that he is more sinned against than sinning. In fact, many of his sins may be due

to your sinning against him. Not that you or any of us mean to sin against the boy, but that we commit these sins through ignorance and our misunderstanding of his nature and needs. By these words we do not mean to excuse the sins of the boy. Sowing wild oats is not a necessity in moral development; nor do we need to let the boy run wild with moral depravity in order to teach him to appreciate the beauty of goodness. What we do need is to see his sins and sympathize with him and aid him in his fight for character.

What now are some of the sins of the boy? Youth is the stage in which occur the greatest number of lapses into crime. It is said that seventy-five per cent of the first lapses into crime occur during boyhood. As said in a previous article, the forces of evil contend with all their power in the days of youth for the possession of the boy's soul. And yet, the boy can hardly be charged with deliberate wickedness. Most of his sins are due to hereditary impulses, bodily changes, ignorance, and environment.

Conduct is, first of all, the product of one's feeling life, and not of reason. Coming into the possession of new powers of body and mind, the thrill of sensations sweeps through the whole region of boy life, and often leads him to do things which, from adult standards, seem to be terrible. Ignorant of their significance, in most cases, there is no inhibitory ideas to restrain him from the free expression of these impulses and powers. Many of his sins are simply the extravagant expressions of the spirit of adventure and conquest. Especially is this true with the city boy, where artificial standards of life more or less prevail. Many of the so-called predatory acts of city boys are simply the expression of natural instincts and impulses for adventure which have long been suppressed by municipal regulations. Jane Addams describes numbers of these taken from the records of the juvenile court in Chicago. In most of these cases, it is the city that is the sinner, and not the boy. In the recent strikes in Philadelphia much of the rioting was due to boys, and some of the judges in dealing with these cases showed little knowledge of the nature and needs of a boy. Most of these riotous acts on the part of the boys were due to the spirit of adventure and the desire for conquest. Standing at a railroad gateway, the writer overheard two schoolboys of fourteen discussing

these outbreaks with some enthusiasm. Both of them expressed the wish that they could have been in one of these riots. These two boys were, from all appearances, from one of our best homes. There was nothing mean in their faces, bearing, or expressions. Their desire to take part in the riot was simply due to the abounding spirit of adventure which characterizes all normal youth. Much of the stealing on the part of boys of the street is not due to the sin of theft so much as to a desire to accomplish other things with the goods which are taken. In understanding the sins of the boy, therefore, one must take into large consideration the spirit of adventure and conquest and the desire for achievement, so prominent at this stage of life.

Many of the sins of the boy are due to ignorance. Feeling, as he does now, that childhood restraints no longer have a place in his life, and feeling, as he does, that he must construct his own life, the average boy starts out on this perilous voyage without the simplest moral chart to guide him. Many of the most important elements of true living are unknown to him. Some of the deeds which mar life forever have no appearance of evil in them to his untrained eyes. All this is due to the lack of proper instruction on the part of parents and teachers. The average boy has been preached to much

about the smaller virtues of life, but on the great elemental and constructive virtues which lie at the basis of genuine manhood, little or nothing has ever been explained to him. Lacking understanding, he shows the want of moral strength in thoughtlessly indulging his appetite, not having due respect for age and authority, in want of reverence and devotion, and in other destructive deeds. Often he is abused for his sins when he



DISCUSSING THE STRIKES WITH  
ENTHUSIASM

should be sympathized with and instructed. Another chief cause of the sins of boyhood is the environment in which he is called upon to live. Associating, as he often does, with men whose ideals of life are not high, and whose moral habits are not without question, the boy is led to do many things which he would otherwise escape. Likewise, the gang of which he usually forms a part is not often made up of the kind of boys with whom he should associate.

Not that the gang is necessarily evil, but that members of the gang are often evil in their habits of living. Then, the civilization in which he lives tolerates and sanctions the saloon, the gambling house, the brothel, and other dens of iniquity. All these are open gateways into evil actions, and evil actions lead to depraved spirits and degenerate manhood. Here again the boy is infinitely above the civilization in which he is

called upon to live, and, once more, is more sinned against than sinning.

To be specific and enumerate some of the sins of boy life, we may say that perhaps the most aggravating sin of American boy life is his irreverence for authority and his self-assertion. The self-assertion of the boy is perfectly natural and proper in certain ways. The carrying of this self-assertion into rebellion against all authority is where the danger comes in. Sin is

always the abuse of something good in itself. In some way we must teach the boy reverence for law and order and respect for authority. This is not easy in that home or that city where the boy's inherent sense of justice leads him to see constant injustice in the actions of the members of the home and the citizens of the city. In many cases, the boy's irreverence is justified, and his rebellion natural. One thing is sure, we can not teach

the boy reverence and respect for authority by way of suppression only. We must place before him ideals and personal examples which call forth self-expression of the best that is within him. Thus we provide for the self-assertion, and work in line with his unfolding manhood.

Another sin of boyhood is that of fighting or bullying. Reference was made to this in a previous article. This sin is a very natural one, and if prop-

erly dealt with, never leads to disastrous results. Perhaps it is due chiefly to the instincts of the tribal stage of human development. Often this finds cruel expressions, such as torturing members of an opposite gang or inflicting pain upon an enemy just to see him suffer. On this point, Dickinson, one of the best boy writers, says: "If a boy were reared under such conditions that he never saw a fight, never was in one,

and he never suffered from his own foolishness, what sort of man would he make? The very best way to sharpen a boy's wits and to cure him of wanting to ride every fractious horse that his father owns is to let him ride. Life is in living, it is an indefinite struggle and fight, and the boy who never did a foolish thing never did a wise one." Lying and stealing have no large place in the sins of the boy. If he lies or steals, it is, as a rule, sim-



ASSOCIATION WITH MEN OF LOW IDEALS

ply a means toward accomplishing some other end. The boy is not a natural liar nor a natural thief. With his gang, he often feels that all things are to be had in common, and this explains his taking, publicly or privately, the property of some other member.

Perhaps the most dangerous of all sins of the boy are his sexual sins. Most parents and many workers with boys fail to appreciate how great a sinner the average boy is in this re-

spect in the later stages of boyhood. At fourteen or fifteen, a large percentage of boys have fallen into the habit of masturbation, and one of the saddest things that every student of boy life discovers is that about eight-five per cent of our boys experience the sexual fall before seventeen years of age. This is due in a large measure to ignorance. Ninety per cent of the boys of the land have no instruction whatever on the sacredness of these aspects of life. Most of the boys who sin in this respect have no sting of conscience, showing plainly that the instinct has had free expression without any knowledge of its moral and religious significance. In a later article on "Purity and the Boy's Preservation," we shall present some ways and means of saving our boys from this awful sin and its consequences.

Some one will say that we have discussed the sins of the boy in a very sympathetic manner. We answer: No one should ever discuss them in any other manner. Every boy makes a fight for the achievement of character; and in the temptations which come to him, and the sins which he commits, he needs all the sympathy and fellowship possible. This leads us to say that one of the principal sins against the boy is the lack of sympathy and fellowship which he receives at the hands of his

parents and teachers. Failing to understand his nature and needs, we fail to appreciate the peculiar temptations which come to him, and the struggle which he passes through in battling with them. This closes the door of his heart to our best influences over him, and leads him, so far as he gives any expression to the struggles through which he is passing, to unburden himself within the sacred circle of his gang. The other members

of the gang, lacking experience like himself, can render little help; and, in this way, as a result of our refusing to provide sympathy and fellowship for the boy, he is deprived of the help which he should receive from his big brother. Growing out of this lack of sympathy for the boy is the sin of abuse which is often heaped upon him for his supposed deviltry. This abuse sometimes degenerates into beating the boy's body as if that would be the



BEATING HIS BODY TO DRIVE THE  
DEVIL OUT OF HIS SOUL

means of driving the devil out of his soul. We do not mean to say that it is sinning against the boy for him to receive punishment for his own sins. That punishment should be natural, and, as a rule, visited upon him in nature's own ways. It is a better part for parents and workers with boys to point out the meaning of this punishment rather than to take the place of nature in visiting the same upon him.

One of the worst sins which is committed against any boy is the failure of those who are in touch with his life to teach him the truth about the great fundamental moral and religious activities and virtues of life. Feeling, as he does in this stage, the duty of constructing his own life, and desirous, as he is, of making that life genuine, he is ever in need of the intelligent guidance of those who know the pitfalls which are in his path, and the dangers which beset his feet. To withhold wise instruction now is a crime which is almost unpardonable, and yet there is perhaps no more common sin than this sin against the life of the boy.

Still another sin which is committed against the boy is our failure to provide for him the heroic and the ways and means of adventure and conquest. The city streets afford the boy no chance to develop into a man of character and of usefulness. The

country boy has the natural means of finding adventure. In the city, it is the duty of all who have to do with boy life to arrange certain activities which will form a substitute for what the boy in the country gets naturally. Supplying the boy with books which present the heroic in its moral and religious aspects often aids him in these matters, filling, as it does, his imagination with ideals of proper kinds of conduct, and thus

saving him from the grosser expressions to which the city streets tempt him. Providing books, however, is not sufficient. There must be athletic and other activities for the muscles. Field days in which trials of strength are offered can be used, and used effectively. Cross-country tramps with a good leader of boys provide excellent ways in which the boys can gratify their spirit for outdoor adventure. If we would

save our boys to righteousness and truth, we must make ample provision for the expression of their hunger for adventure and achievement. Not to provide these things is to sin against them, and to sin grievously.

Still another sin against the boy is our failure to guide him in the selection of his amusements. Any one who has investigated these places of amusement will turn away from them with a sad heart at sight of the multitude of



PROVIDE PROPER AVENUES FOR THE EXHIBITION OF ENERGY

youth flocking to them. It is no use to cry down amusement, for the boy must have amusement. Our duty is to provide proper amusement for him in the home, the school, the playground, and the church; and if we fail here, we simply add another number to the long list of our sins against the boy.

We close this article with the sentiment with which we began, namely, that

*(Continued on page 297)*



## Growing Old Gracefully

*William J. Cromie, Instructor in Gymnastics, University of Pennsylvania*



WHITE HOUSE, EAST ENTRANCE

**M**ANY men and women think almost constantly of their increasing years, and this picturing of a tottering, decrepit old age hastens the process. We may sing, "Oh, that we were young again!" but we are growing older as we sing. We may sigh for the elixir of youth, but sighing does not bring it. Looking backward and yearning for the rosy scenes of early days is like gazing from the deck of a vessel embarked for a foreign shore; for while we look, we are being carried farther away, with each revolution of the ship's wheel,

from home and loved ones. Longing for the past and dreading the future does not give us youth, nor prevent old age.

Youth is a condition, and "we are as old as we feel." While age is inexorable, and its wheels know no retrograde movement, still, these same wheels, if kept well lubricated by the oil of optimistic thinking and healthful exercise, will perform their work better and run longer and more smoothly than if allowed to become clogged with the rust of indolence, regret, fear, and pessimism. This is true, because some are old at twenty, others at

thirty, forty, or fifty, while some are young at seventy.

### Age as Seen From a Distance

When youth looks forward to old age, it appears a very dreary season of life. Youth regards age as we in autumn anticipate the approach of winter with its chilly blasts, its naked trees and cloudy skies. But winter, although it terrifies us at a distance, is just as pleasant, when here with its variety of enjoyments, as

other seasons of the year. So grand old men remind us of a bright winter's day, as the sun shines on the pure-white snow. These men who are living in the winter of life have their compensations. The world bows down to the knowledge that is contained in those snowy heads. See the glorious look

Youth is not restored by longing for the past, neither is old age prevented by dreading the future.

As winter, whose approach we would fain escape, brings with it unexpected pleasures; so the winter of life, feared by youth, has its many compensations.

To grow old gracefully

First, banish discordant thoughts, foreboding, regret, discontent, anger, jealousy.

Second, care for the physical health (diet, exercise, bathing), and avoid all harmful indulgences.

that lights up their faces as they are tendered a seat in a crowded car or assisted across a dangerous highway. It is with a pleased reluctance that they accept the proffered courtesy. We should not look at age with sorrowing eyes, because it is beautiful and eloquent. That crown of white is but a type of the eternal crown of purity that awaits them when the winter of life is ended.

### Do Not Think You Are Old

When one becomes a certain age, he imagines that he looks like others of the same age; that he will soon be useless, unfit for work, and unable to perform

his wonted duties. As surely as he thinks this, it will come true, owing to the fact that thought is creative. "As he thinketh in his heart, so is he." The London *Lancet*, England's foremost medical journal, reports the case of an English lady, who, when quite young, was disappointed in love, and became insane. She lost consciousness of the passage of time, and consequently believed that she was living in the very hour that her lover deserted her. She stood by the window day after day, and month after month, for years, awaiting his return. Persons who saw her at seventy-five years of age declared her to be not over twenty. The continuous conviction that she was still young kept her from growing old in looks. If, as Seneca said, it is part of the cure to wish to be cured, so, also, it is part of youthfulness to wish to be young, and to strive in every possible way to perpetuate this condition.

The body is built up of beliefs, and our convictions are stamped upon every fiber of our being: What we believe, what we think, that we are; so those who remain young in spirit never grow old. We can not retain youth by contemplating old age any more than we can maintain health by constantly thinking of disease. It is impossible for the self-dissector to retain youth very long, when he is always thinking of and studying himself, and is forever on the alert to discover the least symptom which indicates age. Medical students imagine that they have many of the diseases they study, and persons afflicted with heart-disease aggravate this organ's condition by reading about it and by studying its symptoms. We die a thousand deaths

in thinking of the final one; we picture it in all its hideous and gruesome forms. We read about revolting cases of murder and suicide in our "yellow" papers. We seek news of scandal, divorce, and fast living. We read books and novels of a questionable nature, and yet expect to have healthy minds, and to live a slow, calm, graceful life to old age.

It is this kind of diseased thinking and reading that produces a diseased mind, so that, when one meets reverses or is disappointed, he resorts to the cowardly alternative of taking his life. That one in this condition has a diseased mind is proved by the fact that most persons who have attempted self-destruction by drowning and failed, have been sorry afterward. The sensation of being immersed in cold water very often restores one's reason, and he then tries to save himself when it may be too



WILLIAM J. CROMIE

late. Thoughts of age and discordant moods are the natural atmosphere of decay and disease, while crime and suicide are engendered and thrive in the miasma of the mind. As in eating, the food is masticated, digested, and assimilated, and then becomes part of one's being, so in thinking or reading of evil things: reading is eating, studying is digesting, believing is assimilating. After one believes a thing, it becomes a part of him as much as does food that has been assimilated. The first essential, then, in growing old gracefully, is to have control over the train of one's thoughts, and, when discordant ones present themselves, to banish them quickly and direct the thinking along other channels. Shakespeare evidently had this thought in mind when he said, "'Tis the mind that makes the body rich."

### Aids to Perpetuate Youth

Another way to arrest old age, or prolong youth, is to avoid those things which lower the tone of health. Besides giving way to hurry and worry, discontent, envy, anger, jealousy, hatred, and other emotions, we also break almost every law of health and hygiene. We take too little muscular exercise, and consequently deteriorate in bodily stamina. We frequent theaters and other public places, and sit for hours in the poisonous bath of carbon dioxide. We eat almost twice as much as is necessary for the proper sustenance of the body; we crowd down meats, vegetables, pastry, candy, nuts, wines, fruits, spices, condiments, ice-cream, coffee, etc., into a stomach which is probably tired and overworked, and expect it to take care of this incongruous burden without a protest. In an hour or so a glass of ice water is tumbled on top of this trying load, and then another, until the poor horse (the stomach) is "stalled," and labors under extreme difficulty. We do not keep the million or more drain-pipes of the body (the pores of the skin) open by frequent bathings,

while our lungs do not properly perform their function, due to shallow breathing. We burn the "midnight oil" while these poor tired bodies should be resting and recuperating. We do not live slowly enough; we are too zealous after wealth, position, and power, to the exclusion of recreation and vacation, and are therefore becoming neurasthenic and are shortening life. We should realize that too much food and drink, especially if impure, together with vitiated air, make impoverished blood; that poor blood creates diseased tissue, and unhealthy flesh begets evil morals, and that evil morals and emotions have their offspring. One who banishes evil thoughts and emotions, who exercises the mind and body daily with health-giving thought and rational exercise and proper diversion, who indulges in a daily bath, who secures sufficient rest, who breathes the pure air deeply and basks in the sunshine occasionally, who strives to live an industrious, careful, cheerful Christian life will grow old gracefully, and be an inspiration and help to those with whom he comes in daily contact.



GYMNASIUM, UNIVERSITY OF PENNSYLVANIA



# About the Danger of Tuberculosis Infection From Consumptives

*H. J. Achard, M. D., Chicago, Ill.*



IT is a strange fact that a certain periodicity prevails not only in natural phenomena but also in the convictions by which nations are swayed and in the opinions which move man. In such a cyclic manner the communicability of tuberculosis, or of its destruction stage, phthisis, has been at different times accepted and again rejected. Already in antiquity Aristotle claimed that consumption could be transmitted from person to person, and the Roman physicians, as well as Galen, were fully convinced of the fact that the breath of consumptives is injurious. The same opinion was voiced time and again by the most prominent medical writers of the Middle Ages, although it appeared to be an established fact that as a rule consumption was transmitted by heredity.

In the southern European countries the popular conviction regarding the contagious nature of phthisis was so strong and so firmly established that the clothing which had been used by one dead of consumption was refused even by the lowest beggar. As long ago as 1784 a royal edict in Spain, and in 1788 one

passed by the sanitary commission of Naples, enforced most stringent measures to prevent the use of anything which had been worn by persons dead of consumption. The houses in which they had died were fumigated, their clothing, bed linen, and even their beds were burned.

In the northern countries this fear of contagion was not so marked. While the communicability of the disease was as-

serted by some German and French writers, others denied it, and the English physicians either answered the question negatively or doubtfully, or then declared that in the

Is consumption "catching"?  
Is it dangerous in the sense that scarlet fever is dangerous?  
How may we avoid "catching" consumption from our friends, and yet not subject them to annoyance?  
What may the consumptive do in order to avoid danger to others?

British Isles the disease was not contagious, although it might be so in southern parts. Prof. Benjamin Rush, of Philadelphia, one of the most noted American physicians, and one of the signers of the Declaration of Independence, retracted in the second edition of his "Medical Inquiries and Observations" (Phila., 1805), the admission made in the first edition, that consumption might be communicated from person to person.

With the improvement of instruments for medical research, and with the development of more exact methods of investigation and experiment during the nineteenth century, the question was agitated again and again, until a French

physician (Villemin), in 1864, afforded the experimental proof that tuberculosis is infectious, and Robert Koch, in 1882, demonstrated the tubercle bacillus as the ultimate cause of the disease. With these demonstrations the transmission of tuberculosis by heredity was disproved, and its communicability from person to person established.

It is a matter of contemporaneous history that with a clearer understanding of the nature of communicable diseases the science of medicine has become occupied with the prevention of disease fully as much as with its treatment. Given the fact that a certain disease can be transmitted from person to person, the obvious thing to do was to prevent such a transmission. With acute infectious diseases, like diphtheria, scarlet fever, smallpox, measles, etc., this is accomplished fairly easily by isolating the persons afflicted with the disease, and by preventing their coming in contact with healthy persons. In an essentially chronic disease, like tuberculosis, the problem was very much more difficult, the more so as tuberculosis was found to be far more prevalent than was formerly suspected to be the case. If we consider that at least one half of all healthy adults are actually tuberculous, although in not nearly all of them the tuberculosis ever progresses to the destructive stage or to consumption, if we further consider that one out of every seven deaths is due to consumption, the strict isolation of tuberculous persons is manifestly impossible. Nor is it necessary, as we shall see.

Tuberculosis, while one of the greatest scourges of civilization, is at the same time one of the most curable diseases. This may appear a strong statement, and unfortunately I have not here the space to afford the proof. I refer those interested to Dr. Knopf's latest contribution to the tuberculosis literature, a book which is written for the laity and in

which this point is discussed at greater length.<sup>1</sup>

The readers of this journal are more or less familiar with the movement of the last twenty years for the eradication of tuberculosis. It is a movement in which the entire educated world has taken part, and in which physicians occupy an advisory position, while philanthropists, jurists, clergymen, teachers, social workers, business men, etc., all do their share. In the course of this crusade the public were told and retold that consumption is a communicable disease, and that a consumptive who, by spitting promiscuously, scatters tubercle bacilli broadcast, is a menace to the health of his associates and of those who handle his clothing and other articles contaminated by him, that he endangers even the health of those occupying his rooms after him.

All these assertions are only too true and have been substantiated by frequent experience. The strong insistence upon the facts was necessary to bring them fully into the consciousness of people, and was unavoidable for the successful institution of measures for limiting and diminishing the prevalence of tuberculosis. It was an unfortunate consequence of this teaching that persons, not afflicted (as far as they knew) with tuberculosis, should become afraid even to associate with consumptives, and these poor unfortunates were in many instances not only shunned, but actually persecuted as a public danger. The only fact realized appeared to be: Tuberculosis is a communicable disease; therefore let us have nothing to do with tuberculous persons. It was not taken into consideration that the disease is not acquired by a single exposure to infection, as are diphtheria, smallpox, and other communicable diseases, but that prolonged and intimate

<sup>1</sup> "Tuberculosis a Preventable and Curable Disease," by S. Adolphus Knopf, New York, 1909.

contact is, as a rule, necessary in order to transmit it. The sensible avoidance of possible infection which was taught, gave birth to an unreasoning and foolishly hysterical fear which saw danger even when none existed. The earlier careless neglect of all precaution changed into a craze, a morbid fancy fearful of the very hand-shake of a tuberculous patient.

The next step in the popular education will be to lead the fear of infection into the normal limits of precaution, and to show that, while indeed communicable as taught, tuberculosis is not virulently so. Fortunately the pendulum of the public thought already is swinging to less extreme variations, and the true facts are becoming better realized.

The experiments of the many investigators who devote their lives to the elucidation of tuberculosis have established the following facts, which I will state as plainly as is possible in a short paper of this nature. It is, however, impossible to cover the ground fully, and I must refer my readers to their family physician for a discussion of doubtful points.

Since the tubercle bacillus is responsible for the occurrence of tuberculosis, its presence is necessary for infection. Without tubercle bacilli there can be no tuberculosis.

As I have shown in my paper, "On the Paths of Tuberculous Infection," in the March number of this journal, the tubercle bacilli must be brought into the body in order to act, and this occurs generally by inhalation. It follows that where the air is pure, not contaminated by tubercle bacilli derived from the expectoration of consumptives, tuberculosis is not prevalent unless imported from elsewhere. The tubercle bacillus does not occur in nature, that is, it can only live and propagate in the animal organism, hence it can only be acquired from persons (and, perhaps, from ani-

mals) who are tuberculous and who discharge tubercle bacilli.

Aside from the relatively few cases of tuberculous pus and alvine discharges, which are generally taken care of and destroyed, the only source of tubercle bacilli in the air we breathe is derived from consumptives who cough out the bacilli. Many investigators have shown in their writings that tubercle bacilli are not only discharged with the sputum, but that they may be sprayed into the atmosphere during talking and coughing even without expectoration. Consequently there is a danger zone for about three feet from consumptives in the direction of their expired air. Persons speaking with such patients, if coughed at or if inhaling their expired air, may take tubercle bacilli into their air-passages and become infected, and if they are predisposed, they will probably thus acquire tuberculosis.

It follows that there is slight danger of tuberculous infection unless you are coughed at or breathed upon by consumptives, or unless the air which you breathe contains contaminated dust. This occurs, as a rule, indoors, especially in crowded, ill-ventilated rooms, and tuberculosis, for that reason, has justly been called a disease of tenements. That the inhalation of dust which is uncontaminated by tubercle bacilli does not produce infection of itself is shown by the fact that street-sweepers, teamsters, drivers, and others who inhale much dust, but who live an outdoor life, are comparatively free from tuberculosis.

In dispensaries, in sanatoria, and by physicians generally, consumptives are taught how to breathe, how to cough and expectorate, so as to minimize and eliminate the danger of transmitting the infection to others. They are shown the danger, and are told that when coughing they must hold their hand or a cloth before their mouth, that the expectoration

must never be deposited on floor or walls or in any way indiscriminately, but always into a receptacle provided for it, best in a cuspidor half filled with water; for wet tubercle bacilli can not float in the air except in droplets of sputum. Consumptives are taught not to talk or breathe directly into other people's faces, and to take every precaution to destroy the infectious discharges from their tuberculous lungs.

This is simply a matter of common sense. Nobody who dresses a running sore would dream of throwing the discharges on the floor, or if by accident they get there, of leaving them; they are washed up. Consumptives are told that their expectorations are actually discharges from running sores in their lungs, and that therefore they must be disposed of according to the dictates of common sense and of cleanliness.

It follows that consumptives who are being treated and instructed are in no manner a source of danger to their surroundings provided they put their teachings into practise, and provided they are clean. If they refrain from loud or violent talking or "sputtering," if they take care of their expectorations, if they are careful to wash their hands after these have been coughed upon, and are careful never to touch anything with sputum-soiled fingers, they can not infect persons or objects near them.

It is therefore not only foolish but unjust to mark tuberculous patients who have been undergoing a course of treatment in a sanatorium as dangerous. Untold harm has been done in this cruel manner, and very often the unfortunate patients have foregone timely treatment rather than to be subjected to the opprobrium which attaches so unjustly, in the

minds of many persons, to consumptives. There are no words strong enough sufficiently to condemn this absurd excessive fear of tuberculous infection, which is so prevalent that it has led to the name of Phthisiophobia to be coined for it. Nor should the establishment of sanatoria be prevented and antagonized by people living near the proposed localities. It is not the inmates of sanatoria who are a source of danger to the community. In places where tuberculosis sanatoria have been in active operation, the general frequency of phthisis has rather diminished. On the other hand, we must confess that in open climatic resorts where consumptives congregate unrestrained the frequency of consumption has increased; because the patients had not been taught how to avoid spreading the infection, and because the healthy had not been shown how to avoid acquiring it. The latter is easily accomplished, not by shunning your consumptive friends or acquaintances, but simply by avoiding too close a contact with them, by insisting on their taking proper treatment and learning how to exercise proper precautions.

I hope to have shown that the careful consumptive who practises the teachings of his physician is in no wise dangerous and need not be shunned. It is the untreated, untaught, and the careless consumptive against whom we must guard ourselves. For him the prohibitions of spitting in public places are necessary, him we must watch, and if he is unteachable or persistently careless, then we must avoid and isolate him to prevent his becoming a source of danger to his fellow men.

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# Fresh Air an Efficient Cure

E. C. Jaeger



**D**ID you ever think of it, that oxygen is the most abundant element on the earth? Yet many people are starving for want of it. It is true that oxygen forms only one fifth of the air, but that one fifth is practically limitless. If all processes whereby oxygen is added to the air were to cease, it is probable that all the oxygen man and the animals would consume in a century would scarcely change the composition of the air.

Our most immediate and urgent want, without which we could not exist for even a few minutes, is supplied in limitless quantities and in such a form that no trust can obtain a corner on it. Perhaps for that very reason we do not appreciate it as we should. Possibly an attempt to corner the air would cause us to realize to a greater extent the fact that one's health depends on the air one breathes.

Oxygen accomplishes wonders in our bodies. It may almost be said that *oxidation is life*; for every living process, so far as we know, is accompanied by oxidation. It is significant that we have the record in Genesis (2:7): "God formed man of the dust of the ground, and *breathed into his nostrils the breath of life*; and man became a *living soul*."

Through oxidation we obtain heat, and all energy and activity. Through oxidation poisons are destroyed. Wood is necessary for the stove, but without *air* it would be worthless. So food, though it is necessary to the body, would be worthless without oxygen.

Some years ago there came to my notice an illustration of what fresh air

will do. An infant was born in fairly good health, but developed very slowly, and when six months old was underweight, thin, and undeveloped. The child cried almost incessantly, and there was inability to retain food. The mother, fearing that her child might take cold, kept the house tightly closed. Gradually the infant lost in weight until it seemed a mere skeleton. The best physicians available could do nothing for the child. Even predigested foods could not be retained.

The father's brother, a physician, was called from a distance. The moment he entered the house, he detected the cause of the child's illness, and in a short time he arose from his chair, saying, "Give me that baby, some good warm bedding, and the baby carriage." He took up the baby, wrapped it snugly in the clothing, and placing it in the cab, wheeled it into the front room.

Though it was zero weather, and a brisk wind was blowing, he opened the windows and doors. And there he kept that child not only that night, but every day for a while, with no fire in the room. That first night the child slept a little, the cries were less frequent, and the next morning the little one took some nourishment. Slowly but surely the normal conditions came back. On sunny days the parents wheeled the child round the yard. All that winter the infant was never near a fire except when bathed. Nature's fires kept it warm.

Of the three children in that family, that child is to-day the strongest. Only a lack of fresh air had kept it from being that from birth. More fresh air and less artificial heat is what we need. All the medicine and all the good food and baths could never have cured the infant, but fresh air did. Why not have more of it?



## Establishment of the "Home"<sup>1</sup>

*W. H. McKee, Superintendent Michigan Home for Girls*



SEARCH was immediately made for a location for the Home in the city. It was a failure. No satisfactory property was for sale for any such purpose. It became evident thus early that there was a marked prejudice in the minds of some against the establishment of such an enterprise. Nevertheless we persevered. At prayer-meeting that week the matter was referred to and the lack of success mentioned. This brought out the offer of a farm of forty acres, with buildings, ten miles in the country. Instantly it dawned upon us that the refusal of city property for the establishment of a Home was a providential intervention in order that it might be located, where it ought to be, in the country. Here, where there

is sunlight, pure air, good water, healthful surroundings, seclusion from the suggestions and temptations of the city, complete removal from former associates and companionships without confinement, and an opportunity for healthful occupation which would aid in the self-support of the Home; here, where are wholesome surroundings with a pleasant and attractive situation, shade trees and flowering shrubs, orchard, garden, grain fields, and meadow lands, where the girls can find opportunity for profitable occupation in domestic duties, and also in the flower garden, the vegetable garden, and the berry patch; here, where self-supporting industries can be established, and the Home family fed out of the soil.

These considerations were decisive regarding a country location. The farm was seen, and although the buildings were insufficient, and the soil light and almost completely worn out, yet its acquirement seemed so providentially di-

<sup>1</sup> Continued from the March issue.

rected that it was purchased in faith that the blessing of God would cause it to blossom as the rose, and bring fertility to its bare and sand-blown acres.

The Michigan Home for Girls was organized, a board of trustees elected, the proper papers filed, and all legal requirements met. The property was purchased, and the title vested in the association. This consisted of forty

acres of land, a house of five rooms, and an ancient wind-shaken barn. The house has been enlarged to twenty-three rooms; an acetylene gas-plant and steam-heating apparatus installed, and the building piped for hot and cold water in toilet, bath, and treatment-rooms. It is hoped, eventually, to carry on a model sanitarium work here on a small scale. Indeed, there is an equipment even now which would give very acceptable service for

simple water treatments, were it not for the need of a windmill or gasoline engine to pump the requisite water. To do this with a force-pump, by hand, requires more labor than can readily be supplied, although this is done at present.

Another forty acres, across the road from the first, has been added to the original Home farm. On this is a good farmhouse and a barn which has been enlarged and remodeled this last summer. An ice-house, corn-crib, and workshop have also been added to the original buildings. These must be increased

also, as soon as possible, by a school-house, and an industrial building. In these and on the farm, in garden and berry patch, it will be possible to furnish sufficient occupation for the members of the Home family that there need be no idle hands or minds. School, domestic, and industrial work will provide branches of industry not found in the devil's workshop. In this way not only

will some practical returns be brought to the Home, but the young women who pass through the training will become useful members of society, competent to fill places where trained and efficient assistance is needed in household affairs.

In the school, which is a regular graded work, a "Christian education" is sought to be given, in both practise and theory. The desire is to make special efforts in elementary science work; house-

hold chemistry will be taught for use in the cooking school, which is to prepare intelligent and competent cooks for service in homes where skilled and healthful cookery will be recognized as an accomplishment to be appreciated, and given the honorable recognition which such ability deserves. It has been well and properly said that healthful "cooking has become one of the fine arts," and not only is that true, but to cook healthfully is a science. To teach pupils this science and train them in this art, is a branch of desirable education



W. H. MCKEE

to which sufficient attention has never yet been given. It is true there are cooking schools and cooking schools, but modern cookery, as it is taught, largely appeals to the palate, and in so doing produces many strange combinations of unhealthful articles, which often prove an injury to health.

Disease is increasing. New diseases are appearing. This is true in both man and beast. These react one upon the other. It is acknowledged that flesh foods are becoming more and more unwholesome. This fact, perhaps even more than the expensiveness of a meat diet, will cause a demand for girls as "kitchen queens" who know something of proper food combinations and preparations, and understand vegetarian cooking. It is the hope of the Home

to be able to train some of these, and to provide the very best methods for such education. While the scope of Christian education is unlimited,—circumscribed only by the boundaries of God's universe and the possible achievements of eternity,—it never unfits any for the humblest service, but renders them more capable and more willing for the ministry to which they are called, whatever that may be.

They who have been forgiven much, love much, and the evidence of love is obedience and service. The repentance, love, and obedience of Mary Magdalene have preached the gospel with power through the centuries. Who can tell how many more Marys there may be upon whom we may come unawares?

*Byron Center, Mich.*

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## With God in His Out-of-Doors

*(Continued from page 264)*

rich and perfect beauty that God sees it in, and that he intends we shall see it in, we see and feel and know enough of the goodness and beauty and glory of it to know that he means good, and good only, to us through and in it. Hence we call it God's out-of-doors. It is the work of his hands, the product of his thought; and the more we become like him, the better we shall see and understand its glory and beauty; and the more we understand these, the more spiritual and heavenly wise we shall become.

O that I had the power of the one who came crying in the wilderness! How I would call upon the weary, tired, money-mad, artificial, city-loving, diseased, unrestful sons and daughters of men to forsake much of the indoor life

they lead and get out into the great, wide, wonderful, beautiful out-of-doors of God. I would plead with them tenderly; I would call to them as with authority; I would use all proper methods to lead them to come into the open, be friendly with it, get into its spirit, learn its moods, study its rich lessons, drink in its wonders, enjoy its perfect beauties, partake of its frankness and simplicity, and step by step learn to see it with the spiritual eye; for, as we now see it, it is but the symbol, the figure of a greater, grander, sweeter, purer, more beautiful reality, the things that are seen being but temporal and vanishing, while the real and permanent things are the things of God, the things of the Spirit, and these only abide forever.

*(To be continued)*



# HEALTHFUL COOKERY

## Vegetables

George E. Cornforth

Hast thou named all the birds without a  
gun?  
Loved the woodrose and left it on its stalk?  
At rich men's tables eaten bread and pulse?

O, be my friend, and teach me to be thine!  
—Ralph Waldo Emerson.



VIEW IN SENATE CHAMBER

WHILE the word vegetable, in its broadest sense, includes everything that grows from the earth, yet from a culinary standpoint the term has been narrowed down to apply only to roots and tubers, as potatoes, carrots, beets, etc.; shoots, stems, leaves, and inflorescence, as asparagus and celery, spinach and cauliflower; immature seeds, grains, and seed receptacles, as green peas, corn, and string beans; and some articles which are really fruits, as the tomato and squash. And from this narrow use of the word, "vegetarians" have sometimes been looked upon as persons who live upon such articles of diet, and amusing items are sometimes seen in the papers ridiculing the people who must derive such exquisite pleasure and benefit from a diet of turnips, carrots, and cabbage. In this lesson we intend to discuss the food products which are included in the narrow meaning of the word vegetable.

The fact is commonly known that these vegetables are low in nutritive value, and by reason of this fact the mistaken idea has prevailed that those

who adopt a vegetarian diet must eat great quantities of food in order to get sufficient nourishment, and that the digestive organs may be overtaxed in disposing of so great a bulk of food. This, however, is a mistaken idea, because vegetarians depend for their nourishment upon cereals, legumes, and nuts, the nutritive value of which is high, and they do add fruits, which they esteem highly as an article of diet, not for their high nutritive value, but for their cleansing properties and as a delicacy.

We will give a table of the nutritive value of common vegetables, so that their nutritive value may be compared with that of other foods by referring to tables given in previous lessons.

FOOD VALUE OF VEGETABLES IN CALORIES

	PRO.	FAT	CAL.	TOTAL
Potatoes	2.6	.3	21.3 <sup>1</sup>	24.2
Green peas	8.1	1.3	19.6 <sup>2</sup>	29.0
String beans	2.6	.8	8.6 <sup>3</sup>	12.0
Carrots	1.3	1.0	10.8 <sup>4</sup>	13.1
Turnips	1.5	.5	9.4 <sup>5</sup>	11.4
Beets	1.9	.3	1.2 <sup>6</sup>	13.4
Spinach	2.4	.8	3.7	6.9
Sweet potatoes	2.1	1.8	31.8 <sup>7</sup>	35.7
Cabbage	1.8	.8	6.5	9.1
Cauliflower	2.1	1.3	5.5	8.9
Green corn	3.6	2.9	22.9 <sup>8</sup>	29.4
Milk	3.8	10.6	5.8	20.2

<sup>1</sup> Starch. <sup>2</sup> Mostly sugar. <sup>3</sup> Starch. <sup>4</sup> Sugar. <sup>5</sup> Pectose. <sup>6</sup> Sugar. <sup>7</sup> Starch and sugar. <sup>8</sup> Sugar.

From this table it will be seen that all these vegetables, except Irish and sweet potatoes, green peas, and green corn, have a lower nutritive value than milk, that is, there is more water in them than there is in milk. The bulk of this class of vegetables is made up of water and cellulose or woody fiber. Their dietetic value is due largely to the mineral matter which they contain. They require cooking to break up and soften the cellulose, and in some of them to burst the starch grains, thus rendering the starch soluble.

Green vegetables are best cooked the day they are gathered. If this is impossible, one should endeavor to keep them in as fresh a condition as possible by putting them in a cool dark place. Roots and tubers are only fit to use when they are plump and solid, not shriveled, when they are free from decay, and before they have begun to sprout. Winter vegetables keep in the best condition in a temperature as near the freezing-point as possible without being cold enough actually to freeze them. The place where they are stored should also be dry and dark, these conditions being unfavorable to decay and germination. They should be near nothing having a strong odor, because, as they readily absorb odors, their flavor will be impaired. They should be sorted before storing, and frequently afterward, and any decaying ones removed to prevent the decay from spreading.

Contrary to a very prevalent idea, it requires skill and knowledge of the principles involved to cook vegetables in such a manner as to have them palatable and nutritious, not losing much that is valuable in the process. Vegetables are valuable largely for their mineral content and their flavors. They should be cooked in such a manner as not to lose the former nor impair the latter. We are inclined to believe that when vegetables are properly cooked so as to retain

their delicious natural flavors, there is less temptation to use condiments to cover up insipid taste. But we fear it is too true that "many cooks throw away the true richness, while they serve the 'husks' only." To cook vegetables properly by boiling, so as to retain the natural properties, they should be put to cook in *boiling* water, using as little water as possible without burning, because water, especially if it is not boiling when the vegetables are put in, dissolves the salts and some of the other nutritive material, and the less water there remains to be poured off after the cooking, the less of these will be lost. If salt is to be added as seasoning, the best time to add it, generally, is just before the vegetables are done. And, while the water should be kept boiling, the boiling should not be violent. Gentle boiling is best. As long as water is boiling, its temperature can not be increased. If water must be added during the process of cooking, it should be boiling. We might say here that the water in which almost any vegetable has been cooked makes good soup stock or foundation for gravy. Another important point to be observed in order that vegetables may not only be as nutritious as possible, but that they may look attractive, is that they should be cooked till they are just done, but no longer. They should not be put to cook, and then left without further thought till needed. It requires thought and care to cook vegetables properly, as much as in any other line of cooking. Baking and steaming, however, are preferable to boiling for all vegetables that can be cooked in these ways, because their flavors and nutritive constituents are thus more easily retained. Still another important point is that vegetables should be served *hot* and as soon as done.

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[An article will follow giving specific directions for preparing and cooking vegetables.—Ed.]



## Importance of Teaching Hygiene in the Schools

**S**OME health authorities confess that with the millions expended to fight consumption . . . there is not a corresponding decrease in the number of cases. The people who attend tuberculosis lectures and exhibits are chiefly those who are interested in questions of personal and public health, and are the parents who in most cases try to teach the children some health rules; but the major part of the population, and the part we need to reach, are the uninterested ones who never attend lectures or exhibits. The population can often be reached only through the children, and the children can be reached only at school. . . . Uncleanliness may be discouraged by sending home the child with the dirty head; care of the teeth may be instilled by having his teeth treated for him. But the true work is supposed to come from teaching hygiene, sanitation, and physiology. That is the means adopted by boards of education. This is undoubtedly the best and most effective means at our command. Has this branch been taught in a manner to give the best results?

Ask any teacher; ask any pupil of the public school if he likes the study of physiology and hygiene; most of them will answer No. And if a child does not like a subject, it can not be made to learn it, much less carry out its teachings, and talk about it at home. The cause of failure to arouse the interest of the child must be the manner of teaching this important subject. The principal and teacher are not at fault, for they teach according to rules and

course of instruction furnished by the bureaus. The teaching is done through text-books published to meet the requirements of these boards.

Study a dozen of the most popular of these text-books on physiology and hygiene, and you will readily understand why the teacher can not teach, and children can not learn, this important subject. The anatomy and physiology, which occupies half of the volume, is as dry as the bones that make up the subject. . . . One fourth of the book is by law (in some States) required to consist of the evil effects of alcohol, tobacco, and other narcotics. I do not mean to belittle the importance of this subject, but such rules require the adding of a section on the subject to almost every paragraph. Alcohol and tobacco are blamed for every defect and disease mentioned. The subject is overdrawn, and the phrases are repeated so often that the child tires of seeing and reading them, and the object-lessons are lost. There remains one fourth of the book for diseases and hygiene. . . .

Educators apparently believe that personal and public hygiene can not be taught without a knowledge of anatomy and physiology. This is a wrong impression. Hygiene can be made an effective and interesting study with little reference to the other branches. Anatomy can not be made palatable.

The mission of this article is not to criticize, but to encourage the establishing in our schools of a course in hygiene so arranged as to give a practical and interesting training in proper living at

home and at school. If sane courses are established, we shall see an advent of useful text-books; then the child will be a willing pupil, will learn, retain the knowledge, and carry it home to the benefit of the parents and the public.—*S. W. Newmayer, M. D., in New York Medical Journal, Feb. 5, 1910.*

### The Other Side

WE have to confess that we have often endured thirst rather than employ the chained utensil furnished, but we have also to confess that we have experienced thirst so compelling that we would gladly have used anything as a vehicle to get the water to the mouth.

We do not know just who is responsible for the drinking-cup phobia, but we have been doing some inquiring during the past week relative to it. We have asked several physicians, some of them specialists and some of them general practitioners, if they had ever met or heard of an authentic case of disease communicated by the drinking cup. Each response added one to our own experience. We never have.

We may have esthetic reasons for preferring to use our own particular dish, but the wave of prohibition which is sweeping over the country would lead one to think that each of the ninety millions of Americans carries in his mouth a deadly poison which will be fatal if it reaches his fellow, and that the drinking cup is the favored vehicle of transfer.

The laws which are being enacted on this subject remind us forcibly of those which stand on the matter of spitting in public conveyances and on sidewalks, and which are spasmodically enforced two or three days in two or three years. It is a fine ordinance, and should be enforced at all times; decency demands it. But we have never been able to discover that tubercular sputum is one bit safer

when deposited in the street, and there dried and scattered to the four winds, than it would have been had it been deposited on the sidewalk or elsewhere. Yet the law lets the people spit in the gutter and street.

There is a lot of foolishness in a lot of these sanitary measures. These are times that call loudly for common sense.—*Editorial, Medical Fortnightly, Feb. 25, 1910.*

### The Dope Evil

THE term "dope" as employed so generally by the laity has reference to habit-forming drugs, of which there are not a few. The more common are opium and its alkaloids, chloral and its congeners, bromid of potassium, Indian hemp, cocain; and perhaps cigarettes might properly come in the same category. Another vice that has gained a measure of popular use in European countries, and which is said to be getting a foothold in this country, is that of ether drinking.

The use of ether as a routine dope by the laity is attended by the greatest danger. The habit for it is readily formed, and even before the establishment of the condition which our foreign friends call "etheromania," there is always danger of a fatal issue for the reason that the "dose enough" is not easily regulated. It is so easy for the person using ether or chloroform by inhalation to cross just over the line and use a little too much. This necessitates the calling of the coroner. The "ethero-maniac" not only inhales the drug, but takes it by the stomach route as well. The comparative cheapness of ether makes it much sought after by a certain class of denizens of the underworld, for cocain, morphin, and other drugs which produce mental exhilaration, or oblivion, are often beyond the user's financial reach.

The use of ether or chloroform is often begun by well-meaning and respectable people for the purpose of relieving neuralgia, or as a sleep-coaxer, when somnolency is delayed, or worldly vexations encompass them. The habit is acquired before it is scarcely realized, as is indeed true of all narcotic drugs. Many persons who are troubled with melancholia, disappointments, and other ills which cause intolerable insomnia begin the use of hypnotic drugs in the minimum dosage only to find in a little while that the dose must be run up. Many persons graduate as it were from one nerve deadener, and must sooner or later resort to something of greater potency.

Persons given to dissipation and excesses of one kind and another resort to chloral, morphin, or ether to "drown sorrow," to taper off a debauch, or even in lieu of alcoholics. Cigarette smoking is perhaps an important factor in the causation of these vicious habits in people occupying the lower social strata of life. The poverty and distress that constitutes so much of the part and parcel of life in large cities is always an etiological factor.

Cocain is the most vicious dope drug, for it soon dethrones all semblance of reason and manhood. This habit was a few years ago most thoroughly disseminated among blacks and a low order of white people through the use of catarrh snuffs. The drug is not now so easily procured, although the laws are not so rigidly prohibitive as to place it beyond the reach of those who have become fiends to it. Patent medicines with their ever-present alcohol or narcotics and their ubiquitous use are swelling the ranks of the drug habitues because of the depraved appetites which they bring about. Physicians too often, sometimes innocently, foster drug habits in patients by overprescribing narcotic drugs. The

hypodermic syringe, godsend though it is, has been instrumental in fastening pernicious habits upon thousands.—*The Medical Summary, February, 1910.*

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### Disheartening Suggestions

ONE of the worst things that can ever happen to a person is to get it into his head that he was born unlucky. In every town where people are complaining that their environment is against them, and that there are no opportunities, others under similar conditions manage to succeed and make themselves felt in their community.

Never allow yourself even to think of the possibility of being a failure. Stoutly assert that there is a place for you in the world, and that you are going to fill it like a man. Train yourself to expect great things of yourself. Never allow yourself to admit even by your manner that you are destined to do little things all your life.

You will be surprised to see what mere persistence in holding your thought stoutly toward success and happiness will bring you. Constantly expect something large of yourself, and refuse to allow your doubts and fears to cripple your efficiency.

Many persons of real efficiency do little things all their lives because they are the victims of discouraging suggestions. Whenever they attempt to do anything, they allow their minds to dwell on the possibility of failure, and they picture the consequent humiliation of it until they cripple their powers of initiative. Many of those who are doing little, mediocre things to-day are capable and might be doing great things, if they would only learn to control their thoughts and focus their minds in the right direction.

If you are ambitious to do anything great, anything distinctive, the greatest

thing of which you are capable, spare no pains in keeping yourself in superb physical condition, keeping your life in tune with your great life-purpose. Keep it free from everything which would cut down its creative, productive power. You can not afford, for the sake of indulging a hot temper, to harbor fear, doubt, and discouragement, for they will halve your efforts, and perhaps absolutely neutralize them. Keep your mind clear and free, and always in tune with your highest aspiration, and you will produce the maximum of your possibility.—*Success Magazine, March, 1910.*



### The Significance of the Splashing Sound

THE stomach . . . is ideally adapted for the production of the splashing sound, and we can, therefore, elicit a splashing sound in most stomachs, irrespective of age or sex. The writer makes this statement after having tested the splashing on every patient that came under his observation for the last few years. Children are no exception to the rule.

The presence of the splashing sound in any stomach means merely the presence of a fluid or semifluid contents, plus air or gas, in the stomach. I have heard some physicians designating any stomach where splashing can be produced as one of atony. I consider it erroneous, and I have noticed the splashing sound in perfectly healthy children time and again. . . . We have no right to diagnose it as such [atony] unless we . . . have established the existence of a mild degree of motor insufficiency in the stomach. It is then that the diagnosis of atony of the stomach is fixed. . . .

Whenever a stomach can not empty itself after a full-sized meal in seven hours, it is a case where the motor pow-

ers of the stomach are impaired, or of motor insufficiency. . . .

The value of the splashing sound of the stomach, if produced at a time when the stomach ought to be empty, becomes apparent.—*J. W. Weinstein, M. D., Medical Record, March 5, 1910.*



### Edison on Meat Eating

THE wizard is a firm believer in the crusade against the eating of meat. He believes that a large death-rate is a natural concomitant of meat eating, and he says that if the people stop eating meat, the death-rate of the country will decrease fifteen per cent.

"This boycott on meat," he said today, "is the best thing that ever struck the country. We all eat too much meat. Much of the disease the human family suffers at present comes from an over-indulgence in meat. If this boycott on meat is genuine, and the people keep their promise to abstain, in one year the death-rate of the country will be reduced fifteen per cent."—*Philadelphia Evening Times, Jan. 23, 1910.*



### Again the Vivisectionists

AGAIN the antivivisectionists are making the welkin ring with their false claims and accusations. So loudly and viciously have they made their attack on certain scientific institutions, notably the Rockefeller Institute of Medical Research, that Dr. Simon Flexner has actually been driven to make a public reply. It is a shameful state of affairs when men of Dr. Flexner's attainments and standing have to defend their work for humanity against the faddistic outcry of comparative non-entities of achievement—or anything else. It makes one's blood fairly boil to read the ravings of the mental myopes who consider the discomfort and suffering of a ridicu-

lously few animals of far greater importance than the welfare of countless human beings. When one thinks of the great discoveries of medicine that would have been impossible but for animal experiment, and of the wonderful progress of surgery made possible through the same agency, these objections seem as nothing else than the products of unbalanced, if not perverted minds.

The writer yields to no one the possession of a greater love than his for dogs and other animals. He has known the genuine affection of more than one noble beast and treasures, as not the least of the things that make life worth while, frequent companionship with several intelligent dogs and horses. A person who, from circumstances or non-inclination, has never enjoyed such associations has been denied much. But in spite of this inborn love for animals and the anguish that has ever been felt at their slightest suffering, the writer would willingly sacrifice every dog or other animal that could become the slightest possible factor in aiding to solve any problem of medicine or surgery; the needs of the human family transcend those of every animal ever created. As a matter of fact those whose work legitimately calls for animal experimentation, never abuse their opportunities, and those who practise vivisection illegitimately, can be punished by existing laws.

The antivivisectionists may be only terrible examples of how far astray good intentions, wrongfully directed, will carry the simple and thoughtless. But if the people who are carrying on this ridiculous movement do accomplish their avowed purpose, it will be a sorry day for scientific research. It appears to be time medical men generally made themselves heard on this vital matter.—*American Medicine, February, 1910.*

### Present Status of the Tuberculin Therapy

IS it a specific?—I must reply in the negative. In the final analysis, we can only regard tuberculin as a valuable adjunct to the hygienic and dietetic therapy of the disease. J. H. Pryor, of Buffalo, most tersely states that the tuberculous patient must have eighteen square meals of oxygen a minute, accompanied by three square meals of food a day. Trudeau, who has used tuberculin over a longer period of time, in more cases, and more conservatively than any other man in the United States, shows that eighteen per cent more of treated incipient cases are living than of untreated, while twenty-five per cent more of advanced cases who received tuberculin are living than of those who did not. He also says: "Many years ago, in spite of general denunciation of tuberculin, and long before I knew anything about the statistical evidence, I formed the opinion that tuberculin, when administered, had, within certain limits, a favorable influence on the course of the disease, and that the results of sanitary treatment could be improved and made more perfect in many cases by its application. As years have passed, I have seen no reason to change this opinion." Thus speaks one of our greatest authorities on this subject. We, with small experience, can only follow his lead. Tuberculin unquestionably is a valuable remedy in its present form, and with the present improved method of administration, is it not reasonable to hope that as the discarded tuberculin of 1890 was changed through the years into the valuable remedy of to-day, so may this remedial adjunct of to-day become a true specific of the future?—*Voor-sanger, in the American Journal of the Medical Sciences, Jan. 19, 1900.*

# Abstracts



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.

## The Nervous Child

**T**HE nervous child is more common now than formerly, more common in large cities and cultured families than in the country and in the families of the poor. The nervous child becomes the neurasthenic adult, or may become neurasthenic while yet a child. Many of these nervous children are not brought to us for treatment. When they are brought to the family physician, they are often dismissed as having imaginative ills or nervousness, and they are allowed to worry on to adult life without assistance, sympathy, or encouragement.

The nervous child may be so by inheritance, or as the result of environment or of some accident or illness. The "black sheep" of an otherwise healthy family is one who has usually been the nervous child subject to the same training as his brothers and sisters. Perhaps if he could have been removed from the rest of the family and been properly managed, he might have been very different.

Nervous children are particularly susceptible to their surroundings. Their irritable nervous systems are easily disturbed, and easily exhausted, leading to neurasthenia. The early recognition of these cases may do much to better their condition and save them from a life of misery, their parents from much trouble, and the community from some criminals;

for undoubtedly nervous children are sometimes liable to develop criminal instincts or tendencies.

### Symptoms

First, the nervous child has an abnormal capacity for feeling emotions and sensations, these being aroused by stimuli which would have no appreciable effect in the normal child. There is usually a marked tendency to fright at things which would not disturb other children. Continuous crying without evident cause is another symptom. Sometimes muscular twitchings can be produced by tapping any portion of the body. Defects of speech are not uncommon. Bed wetting or clothes wetting is another symptom. Sometimes a disagreeable emotion, as when the child is compelled to do something he does not want to do, will set up spasmodic attacks of coughing and vomiting. Palpitation of the heart, dizziness, and fainting may be seen in older children. After the age of five or six, headaches are frequent, brought on, possibly, by anxiety over lessons, eye strain, sitting in ill-ventilated rooms, etc. Such headaches usually disappear after school hours, unless the condition has become chronic.

The neurasthenic child has very little endurance, mental or physical. He easily tires of anything which requires sustained effort and attention. His interest

is easily exhausted, and he falls back in his studies because of lack of endurance. This failure, to one of his sensitive nature, is a great discouragement, and adds to his difficulties. He soon dislikes school and teacher, and goes from bad to worse.

Want of appetite or capricious appetite is common. It is unusual to see a neurasthenic child with normal appetite, digestion, and nutrition. It is difficult to keep up nutrition because the child can not be induced to eat anything he does not fancy. Such children are usually thin and anemic.

Disorders of sleep are common, such as wakefulness, grinding the teeth, crying, laughing, talking, or walking in the sleep, night terrors, etc. While these conditions are likely to be associated with digestive disturbances or adenoids, they occur much more commonly in nervous children.

Among the emotions of nervous children are, unconquerable fear, fits of uncontrollable rage, craving for sympathy, selfishness, envy, discontent with everything, morbid sensitiveness, and a tendency to melancholia.

#### Causes

Most nervous children are born of neurotic parents. Training will modify, but will not entirely overcome the difficulty. Some cases are developed, as after an attack of scarlet fever or acute dyspepsia, in a family where the others are healthy. In all subacute and chronic digestive disturbances, there is more or less change of the character, and if the disturbance is prolonged, there is permanent injury to the nervous system. This digestive cause of nervousness in children has been too long neglected.

Among other causes of nervousness in children may be mentioned, noise, broken sleep, late hours, school pressure, theaters, parties, etc., etc., and we must not omit adenoid growths, eye strain,

nasal growths, phimosis, and vaginitis.

Another factor in the development of nervous children is the mother. When parents are fitful and inconsistent in government, little stability can be expected in the children, and this is especially so when the parents disagree as to policy. Nervous children are especially resentful of what seems to them injustice or partiality. Suggestions of bugaboos and other frightening measures by unwise parents or nurses make children miserable and add to their nervousness.

#### What Becomes of the Neurasthenic?

This depends on how well we can improve the environment. Some cases go on permanently as neurasthenics. Others, under favorable circumstances, may recover sufficient mental balance to be regarded as normal.

#### Treatment

We must first search for any cause of irritation, such as adenoids, eye strain, middle-ear affection, chronic skin eruption, or digestive disturbance. Having attended to any of these, we must give careful attention to the diet, and to other habits of the little patient.

Remember these children are sensitive to faults, demand sympathy, and impose on parents. Avoid overtreatment, for they soon learn to be tyrannical in their demands of parents. Make the treatment largely educational. In this the most difficult matter is to get the co-operation of the parents. It is difficult, for instance, to break up the habit of late retiring and sleeping late in the morning, or of allowing the child to attend the theater once a week.

Recreation should be planned with care, and should not be too severe. When the weather is good, there should be open-air walking, short of fatigue. Do not encourage memorizing of verses. Keep the child out of school till six or seven [better eight or ten].

On account of the fickle appetite the mother is apt to feed the child anything that will be accepted, regardless of its fitness. Sometimes a child eats better at a strange table, or where parents are absent, the constant anxiety of the parents acting as a counter-suggestion. Do not try to force the appetite, but allow wholesome foods only, giving, as far as possible, a choice among these.

Long hours of sleep, twelve to sixteen hours' rest in bed up to four or five years of age, will result in better appetite and better nutrition. Diet and hygienic measures, judicious outdoor exercise, fresh air night and day, and enforced rest, constitute the chief means of treatment. Strive to improve nutrition by increasing the appetite and the digestion. To do this, we must diminish fermentation, and especially putrefaction, in the digestive canal.

One may begin with milk alone, giving one ounce and a half of milk to each pound of the child's weight. A thirty-pound child would receive forty-five ounces of milk a day. Meats are especially liable to putrefaction. Egg-white is also liable to putrefaction, but less so. A change to a milk diet will do much to remove the intestinal putrefaction, which is the cause of much of the nervousness of children. Butter and cream are less liable to putrefaction than meat or eggs, but an excess of fat is not well borne. Milk and cereals, rice, sago, tapioca, form the chief antiputrefactive foods. Avoid an excess of sugar. Avoid milk in acute enteritis. If the milk is pure, the raw milk is much preferable, otherwise, it is best Pasteurized. Farinaceous foods can be used freely after nine months of age, and should be so used when there is intestinal putrefaction. The grains should be thoroughly cooked. [The directions regarding antiseptic treatment, being a matter that should be wholly under the care of a

physician, has been omitted from the abstract.]—*Dr. E. H. Bartley, Professor of Pediatrics, Long Island Hospital College, Brooklyn, read before annual meeting of the Association of Teachers of Diseases of Children; abstract from Pediatrics, February, 1910.*



### Hives in Infancy

**I**N infants, urticaria, or hives, is essentially a chronic disease, occurring not only in the bottle-fed and the ill-nourished, but also in the breast-fed and the apparently well-nourished. It may begin anywhere from the fifth week to the fifth year of age, but usually during the first two years, and it affects the sexes about equally. The disease is most common in summer, but exposure to either cold or heat may cause a fresh outbreak in one who has the disease. Even the exposure of the child's body for the purpose of examination may cause new wheals to form. Vaccination is sometimes followed by hives in a previously apparently healthy infant.

Infantile hives is characterized by intense itching, as shown by the constant tendency to scratch; second, by loss of sleep and crying at night; third, by the eruption consisting of wheals, pimples, blisters, and even pustules. The limbs are more frequently affected than the body, and the head and face seldom. The wheals are usually surmounted by pimples or blisters; and when the wheals subside, the pimples remain for weeks or months. During the early stage of the disease, the child may appear healthy and well nourished, but later, sleepless nights and constant itching cause peevishness and fretfulness, and the child becomes manifestly ill-nourished, perhaps somewhat emaciated, and has a pasty face.

In nearly all cases it will be found that the mother has allowed the infant almost

anything to eat. Not infrequently is a child of two years given meat, soup, pickles, coffee, tea, raw fruit, candy, and other unsuitable foods. In the breast-fed, in no single instance have I found the child fed at regular intervals, and what is of more import, the diet of the mother is usually unsuited to the nursing function. From my observation, I believe I can say that hives in infants is due to poisons generated in the intestinal canal. Having this condition within, an external irritation, such as insect bites, or itch, or vaccination, may cause an explosion for which the child has already been prepared by the internal condition.

Another cause of hives is the habit of swaddling the infant in a superabundance of clothing, particularly those made of coarse wool. The child's body is thus, during the warm months, in a constant sweat, and the maintenance of an even body temperature, which is so necessary to a balanced circulation, is impossible.

Ordinarily the child comes to the physician with reddened patches, wheals with central pimples or blisters resembling somewhat a fleabite, and deep-seated and scratched pimples, and the trouble is easily recognized; but sometimes, on account of the scratching, it

is difficult to determine the nature of the eruption — whether it is hives, or itch, or insect bite.

In treatment, the first thing to attend to is the diet. In the case of the nursing infant, the diet of the mother, and the regularity and number of the infant's meals must be attended to. Too often the infants have been overfed. Another important matter is the care of the child's finger nails, which should be trimmed close, and kept scrupulously clean, so as not to infect the skin from scratching. Third, too much clothing must be avoided.

Drugs are of minor importance. The bowels, however, must be kept open. Locally for the itching, alkaline baths are good, the simplest being the addition of common washing-soda to the bath. The child should be kept in it for at least fifteen minutes. To allay intense itching, in addition to the baths, cooling salves and lotions, such as of menthol, may be used, but it should be remembered that they do not help or cure the disease, nor does any local application.

It is necessary to persevere in the treatment of this obstinate infant affection, giving attention in every way to the general hygiene of the child.—*Udo J. Wile, M. D., in American Medicine, January, 1910.*



# THE MEDICAL FORUM



## Work Cure



It will be remembered that Patterson in England, not long ago demonstrated that manual work, properly directed, has an excellent effect in the treatment of tuberculous patients. For five years Dr. Herbert J. Hall, of Marblehead, Mass., has been demonstrating in a practical manner that the benefits of manual work are not confined to the treatment of pulmonary diseases. He gives his experience in the *Journal of the American Medical Association*, Jan. 1, 1910, page 12, in an article entitled "Work Cure." He begins his article with the statement:—

"It may be stated without fear of contradiction that suitable occupation of hand and mind is a very potent factor in the maintenance of physical, mental, and moral health in the individual and the community. Conversely it has also been recognized, though not too well emphasized, that the right kind of work, properly carried on, may be a valuable remedy in certain functional nervous diseases when unsuitable occupation has been the rule, when suitable occupation has been misused, or when idleness, either from choice or from necessity, has been the habit.

"The normalizing effect of suitable manual work, or even of well-chosen intellectual work, on the neurasthenic or psychasthenic who has been idle or overworked, and who has been for years the prey of mental and nervous complications, has only to be seen to be profoundly appreciated. In these cases in which the tired mind tortures itself with doubts and fears, and spends the long days in useless self-analysis and in appreciation of mental and physical suffering, it is probable that progress toward health is often indefinitely delayed because no occupation is found, or even attempted."

Among the difficulties which he meets in prosecuting this work, he recounts:—

"But the difficulties in the way, first, of finding a suitable employment for the neurasthenic, and then of inducing the patient to exert himself in his own behalf, are very great, and have made progress along such lines very slowly. Unfortunately it is also true that ill-advised work can be productive of positive harm, and may result not only in deepening discouragement, but in intensifying all symptoms."

This will indicate that while a neurasthenic might help himself by plunging into some absorbing occupation, he might, on the other hand, make his condition even worse.

Being convinced that proper work for the purpose of cure could be performed only in an institution, Dr. Hall began, some five years ago, with a small workshop for making hand-woven fabrics in cotton, woolen, and linen. With the manual work, he used as necessary other therapeutic measures, such as the ordinary practising physician might use, but he had no equipment for hydrotherapy, massage, electric treatments, etc., as given in the ordinary sanitariums. In many cases, the work proved to be the only thing needed to effect a cure.

From the first, the patient is taught to economize strength. He is shown, for instance, that he can saw through a piece of wood without grasping the saw with a crushing grip. Dr. Hall often selects the simplest manual acts for the patient, as involving a minimum of physical expenditure. These acts are repeated with intervals of rest, until they can be performed without fatigue. Gradually the difficulties and requirements of the work are increased, the aim always being the

economy of nervous energy, and the maintenance of a simple and direct mental attitude. When there is no interest in the work, on the part of the patient, he is encouraged to expect definite results later, but there is no urging. As a rule, the patients enjoy the novelty of the treatment, and forget for the time their worry and suffering.

The plant at Marblehead is in no wise a sanatorium for the administration of treatments, but an industrial plant in which the patients are apprentices and pupils. Opportunity is provided, of course, for rest. The twenty-four hours are divided into variable periods of work, rest, and recreation. There is abundance of air, and patients have a sufficiency of wholesome food, careful oversight, and medical treatment when indicated. Patients in need of constant care and nursing are excluded. Various artistic crafts were added to the workshops,—crafts in which proficiency might be valued by any one. The crafts employed, in the order of their usefulness as curative agents, are hand weaving, wood carving, metal work, and pottery.

During the five years, one hundred cases have been treated. The following table gives the result. A few cases of insanity were accepted at the first, but such cases are no longer received. As far as cases have been followed up, relapses have been rare.

Name of Disease	Number Treated	Im- proved	Much Improved	No Relief
Hysteria .....	18	15	1	2
Insanity .....	5	2	2	1
Neurasthenia, severe ...	12	7	4	1
Neurasthenia, mild .....	20	12	8	0
Neuroses .....	17	8	5	4
Psychoses, or fixed idea	8	1	3	4
Unclassified .....	20	14	4	2
Totals .....	100	59	27	14

It has long been our belief that the greatest drawback to the sanitarium methods is the opportunity they afford the patient for self-study, introspection, and the discussion among themselves of

their respective symptoms. Undoubtedly with this handicap, they have accomplished much good, but would they not accomplish much more were they organized on an industrial basis, at least for that class of patients who are given to the study of their own symptoms and those of their neighbors?

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### Do We Teach Our Children the Most Important Knowledge?

THAT the common school education omits or skims over one of the most essential branches of knowledge, that of human nutrition, is asserted by Dr. Charles Douglass in *Pediatrics*, February, 1910. He finds these subjects "largely omitted in school or college curriculum, or taught in such a distant or inferential or imperfect way that the pupils have not received enough knowledge to make them independent thinkers on these subjects," and comments:—

"There is no school or educational source between our present school systems and the future duties of life. We compel our children to study other subjects which have no bearing upon present or future health. . . . True it is that the construction of the body and of the different organs therein is a part of the present educational course, but . . . subjects which concern the present as well as the future health are omitted entirely, or are so imperfectly taught as to leave the pupils, after school is ended, the victims of inherent health ideas, which too often are founded on error and confusion of thought. The result is that physicians are continually called in even by the presumably best-educated people to correct errors in nutrition which could only arise from the densest ignorance."

The teaching of domestic science in the school, and the elimination of other matters not necessary to the education of the girl, will do much; but he pleads for the boys also, and hopes that the time may come when no child may leave school without some sound knowledge regarding nutrition and general hygiene.

# The Medical Missionary At Work



## Sufferings of India's Children

*H. C. Menkel, M. D.*



HERE is no experience which pulls upon the heart-strings of missionaries more than the suffering, neglect, and misery to which the children of India are subjected.

Children are brought to our dispensary whose eyes, or other parts of the body, are rotted away by loathsome disease, some with great discharging ulcers. Perhaps the child has suffered a long time from fever or bowel trouble, and is then brought in a dying condition.

When the parents are asked why they did not bring the child before, the reply often is that they had no time, or that the native medicine-man has been trying to cure the disease by making poultices of cow dung and putting on the sores, or other useless methods have been employed until the child is beyond help. By this I do not mean to say that there is no parental love among these people; for many parents are as proud of their children as we are of ours, but it is due to ignorance.

I give herewith some experiences of Miss Annie Lackey, who has spent many years in India, and has seen much of Indian child life:—

“For several years my work was among the children of an orphanage in Deoghur, Bengal. Since the founding of this orphanage about ten years ago, there have been received into it more

than two hundred children. By far the greater number of these were famine orphans whose bodies had been weakened by starvation, and disease had already laid hold on many of them ere they came under our care. At that time most of them were suffering from sore eyes, sore mouths, liver trouble, dysentery, or other diseases, while many of them were covered with dreadful sores. In some cases disease had gone so far that little could be done; but with proper food and careful nursing, the majority grew from mere skeletons into plump, happy children. But their constitutions, having been weakened by famine conditions, were easily attacked by disease, and after a few years some died who had seemingly grown strong.

“One of the saddest things has been to see innocent children suffer for weary months or even years, then die of that inherited disease of sin. Here is a chubby, sweet little girl. She looks well, and is happy and playful; but after about a year signs of this loathsome disease appear. Every effort is made to relieve her, but after months of misery, the little life passes away. This is only one of several similar cases. As I have seen these innocent sufferers, I have been brought to realize more than ever before the meaning of God's ‘visiting the iniquity of the fathers upon the children, and upon the children's children, unto the third and to the fourth generation.’

"Tuberculosis also has carried off some of our girls. The last case was that of a beautiful girl of seventeen. She came to the orphanage when but a little girl. She had never been strong, but in November last she became ill, and five months later she died. I have heard expressed the belief that one cause of lung trouble among the Indian people is the custom of sleeping with their heads covered with their blankets. This is a cus-

always wore a sad expression, and could never be induced to join the other little ones in play. Her condition was thought to be due to opium, which for years the mother must have fed her. She lived only about one year.

"Among so many children there are many kinds of diseases to be dealt with, but God was good, and during the ten years since the establishment of the orphanage there has been but one case of



A GROUP OF ORPHANAGE LITTLE ONES

The most of the orphans grow from mere skeletons into chubby, happy children

tom against which I had to be constantly fighting in the orphanage.

"Two little girls had to be removed from the institution because they developed what was feared to be leprosy. One of these was the daughter of leper parents, but at the time she was admitted, she was pronounced untainted.

"Another pitiful case was that of a dear little girl who was brought to us by her mother, a poor ignorant village woman. Little Naomi, as we called the child, had the appearance of being much older than she really was, and she used to go about in such a lifeless manner that it made one's heart ache to see her. She

cholera, and not a single case of smallpox, although every year brought its scourges of both cholera and smallpox to the inhabitants of the town. Last year during an epidemic of smallpox it was stated that five hundred children, besides adults, died of this disease. But to us was verified God's sure promise, 'There shall no evil befall thee, neither shall any plague come nigh thy dwelling.'

"The heathen believe smallpox to be the visitation of a goddess, and they speak of it as 'great mother.' In many instances they refuse all medical aid, and for both this and *haija* (cholera) they resort to the beating of drums and the

sacrifice of goats in order to appease the anger of the god or goddess. They take no precaution to prevent infection. In the house of a cholera patient it is not uncommon to see the other members of the family drink from the same *lota* from which the patient has been drinking.

"In Rath, United Province, where I am now doing zenana work, I find that every mother feeds her babies opium. Every day as I go in and out among the people, I see little children who are kept stupefied by this drug. In one house, the other day, I saw a woman in whose arms was a chubby, beautiful baby boy, but I noticed a dulness not natural for babies, so I asked, 'How much opium do you feed it?' Her answer was, 'Three pills

daily.' At another house I saw a rickety little child of one year. Its body was so thin that the skin hung in folds, and the mother was telling me that it would not eat. When I inquired as to the amount of opium she fed it, she said, 'I give it two pills daily.'

"When I try to make the women understand the evil of giving opium to the babies, they explain, 'But, men-sahib, they cry when we do not give it to them!'

"The ignorance and suffering of India's people are terrible. One's heart is made to ache day after day at the sights of suffering on every hand, but especially for the innocent and helpless little children."

## Beginning of Medical Work in Uruguay

John V. Maas



ALMOST from the beginning of our association with the work in South America, we have contended that the medical missionary branch would be most effective among these people, since they are very suspicious of any doctrine except the Catholic confession. So it is unnecessary to say we were made glad by the news that five trained nurses were coming, of whom two were allotted to Uruguay.

The writer at once went to Montevideo, the capital, to arrange for their services in that city, in which live one fifth of the inhabitants of the republic, with no representative of this message. For needed information I called at a hospital, where the first person I met was a physician, and was told our nurses would not be allowed to practise. But this we have found to be untrue.

At a general convention held January 28 to February 4 we were happily sur-

prised by the arrival of Misses Brockman and Kerr, who said they would join us in Uruguay. It was, however, deemed best for them to attend our training-school in Argentina for three months, to study the language. After a time, they accompanied Mr. Hammerly, a trained nurse from Gland, Switzerland, and his family, to the city of Montevideo. Despite opposition from the source mentioned, the way has opened for them, and they have been recommended from one house to another to relieve the sick.

One day a rich *estanciero* (a man who owns a large tract of land) came to the city, from a distance of nearly two hundred miles, to find a good nurse to care for a case of smallpox. Miss Kerr accepted the call, having been recommended by friends of the man. While there, two more came down with this disease. But the good Lord gave strength for the service, and blessed

with healing. Thus in every case the people have interested themselves more or less in the truths we believe.

Just yesterday a brother came to my house who had passed a night at the neighbors of this *estanciero*, who told him that a young lady in the *estancia* was greatly interested in the truth. The people, however, have been very reserved, owing to the prejudice that exists. But the Christian example has been most effective. Already we have been urged by persons from other cities to

open this work, they promising their help and influence. Women are more sought as nurses than men. It might be said that Misses Kerr and Brockman have been more than self-supporting since they began labors here, in spite of a strange language in a strange country, with a strong opposing element. We hope others, for the love of humanity, will deem it a privilege to leave home land and friends to seek and save that which is lost. This field is white for the harvest.

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## A Splendid Opening for Medical Missionaries

THE province of Shansi, China, with a population of over twelve million, offers an inviting field to the Christian physician. Dr. W. A. Hemingway, a medical missionary of the American Board, has a small hospital at Tai-ku, where he treated 2,177 cases last year, besides a large number of dispensary patients. He is not troubled with rivals, the nearest hospital on the north being thirty-five miles distant, on the east and south one hundred fifty miles, while on the west there is none nearer than Persia! With only two Chinese assistants and two native men nurses, Dr.

Hemingway has accomplished wonders since he went out in 1903. Shansi men are famous all over China for their business ability, especially as bankers. But the entire province, once wealthy, is cursed with the opium habit, and many of its victims come to this hospital for treatment. The price of the drug has doubled lately, thus forcing the poor to abandon its use, and the law is rigidly enforced that the poppy shall not be planted, nor opium brought into the province from outside. Dr. Hemingway is a graduate of the University of Chicago medical school.—*Selected.*

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## That Boy of Yours

(Continued from page 269)

the boy is more sinned against than sinning, and that it is our part to see and understand the sins of the boy in order that we may cease our sinning against him, and save him from as many of the sins of his youth as possible. To the understanding and sympathetic worker with boys, the possibilities for right-

eousness are untold. Down in the depths of his best nature, there is an abiding thirst for righteousness, which we may rely upon to work with us in our efforts to help him in the achievement of character and genuine manhood.

1701 Chestnut St., Philadelphia.



## We Plead Guilty

**W**E are in the minority. We have, however, one consolation; we are not alone. In every human advance, it has been a minority that stood for progress, and by the mass they were considered cranks. The multitude and those with educational, social, political, and financial prestige have stood for conservatism, until perhaps for a generation or more a few determined ones gathered force to stem the current.

At the time of the inception of Christianity, it was such a foregone conclusion that the new religion, accepted by only a few of the lowest classes, was an excrescence unworthy of serious attention that scarcely any Roman of importance thought it worth his while to argue the matter seriously.

A few generations ago, witchcraft had such a hold on the European mind that no man felt seriously called upon to argue in favor of it. Learned judges accepted the dictum as a matter of course, and if any doubted the truth of the witchcraft idea, they hardly dared to think aloud, and any arguments they might have made against the prevailing practise of burning witches would have been futile.

Not so very long ago, it was supposed to be necessary and healthful to drink freely of intoxicating liquors; and it was not then a disgrace to get intoxicated. Those who first protested against drunkenness and made a plea for temperance (which to them meant moderation) were considered radical; and the *teetotalers* were simply ridicu-

lous; to the crowd, total abstinence was practically synonymous with lunacy.

Within the easy memory of the present generation liquor was still freely prescribed as a stimulant for diseases of all kinds; and to withhold liquor from one seriously ill was likely to be considered malpractise. In these various points of issue fierce battles have been fought between those who stood for progress and those who stood "pat." First the battle was waged by a few progressives against the many. Later, as converts were made, it became a movement of the crowd, and a few conservatives were left behind.

Even now there may be some who still believe Christianity to be an excrescence, some who consider witchcraft to be a reality, some who look upon the temperance propaganda as a farce, some who still adhere to alcohol as a sheet-anchor in the treatment of disease; but they are stragglers, the army has marched on out of sight and left them standing.

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In the matter of so-called vegetarianism, that is, the question whether or not flesh shall form a part of the diet, we confess that we are in the minority.

Dr. Woods Hutchinson, author of the remarkable theory that every person taller than five feet six is abnormal, says we are cranks, and that ought to settle it, for he certainly knows. Major Charles E. Woodruff, of the United States Army, who has demonstrated to his own satisfaction that we in the United States are

suffering from too much sunlight, has shown (to his own satisfaction also) that if we do not eat meat, we suffer from nitrogen starvation, and he is becoming very much worried that such eminent physiologists as Professor Chittenden and his coworkers should promulgate the dangerous doctrine that most Americans eat more nitrogen than they need. Dr. Harvey S. Wiley, who has won for himself immortal fame in his fight against impure foods, and who believes thoroughly in whisky, provided it is not misbranded, says in a recent number of *Collier's*, in effect, that the vegetarians are a poor deluded people; and as a government authority on foods, ought he not to know?

\* \* \*

After all, what are the arguments for a meat diet? Simmered down, they are:—

1. Practically all mankind eats meat when obtainable.
2. Mankind from the earliest historical times ate meat.
3. Prehistoric man, as far as the evidence goes, was a meat eater.
4. The most enlightened nations are now heavy meat eaters.
5. A sufficiency of nitrogen can not be obtained from non-flesh foods.

The first four premises, we admit, but deny that the conclusion follows. Mankind the world over from time immemorial have used alcohol and caffeine. Man now pretty generally uses nicotin; and perhaps these are nowhere more freely used than in our most enlightened countries. See the parallel? Yet who uses these facts to prove that the human system needs these poisons?

Concerning the sufficiency of nitrogen on a well-selected non-flesh diet, no informed physiological chemist could seriously question that it is possible. Nitrogen can be as fully fitted into a meatless menu as in one containing meat, even

granting the correctness of the high nitrogen requirement of the older school, which has been denied by Professor Chittenden and others. How do you suppose the horse can extract the nitrogen required for his work from the grains? Does the human body need a larger proportion of nitrogen than the horse?

\* \* \*

Some of Dr. Wiley's arguments for the use of meat are amusing. For instance, "The meat-fed hound can soon run a rabbit off its legs, but a fox will give him a run worth the money." Does the learned doctor know that in a fox-chase two animals are used, dogs and horses? I have heard of restricting the meat of hunting-dogs to make them better hunters, though the dog is unquestionably carnivorous by nature. I have never heard of the reverse process with the horse. Have you, doctor?

One of the doctor's arguments I will admit. For the gladiator, the prize-fighter, the man who must act with fierceness and cruelty, meat is a necessity.

Like others arguing against a non-meat diet, the doctor sets up a straw man and proceeds to demolish it. In part of the arguments, a non-meat diet is made equivalent to a strict vegetarian diet. That is the only way that an argument can be made on the basis of the amount of nitrogen. But even with a strict vegetarian diet, I am not willing to concede that one can not maintain health and efficiency, provided that the diet be carefully selected. The difficulty with most vegetarians is that through poverty, or as a result of insufficient knowledge of food values, they have an unbalanced dietary, consisting of an excess of carbohydrates, and a deficiency of fats and proteids. Unquestionably the savage or the person of little education in dietetic lines will be more likely

to maintain proper nutrition when animal food is eaten than when it is not. For this reason, to point to the starved millions of India and other Oriental countries as examples of the effect of vegetarianism is hardly fair.

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The most progressive nations are heavy meat eaters. But is the civilization ideal? Granted that it is better than the civilization of India. What of the economic struggle just before us? One can scarcely think of the inevitable fight for supremacy between labor and capital without shuddering. What has caused these conditions? A few decades ago we were one people. Now we are two peoples, a rich aristocracy, and a muttering, seething labor class, that is fast learning the power of combination. What has caused the gigantic accumulation of capital, unparalleled in the world's history? What has given men such insatiable ambitions that to become a millionaire now only whets a

man's appetite to become a multimillionaire? In a country producing enough wealth to enable every person in it to live comfortably and even luxuriantly — what has caused the impoverishment of the masses? — Ambition run mad; the result of overstimulation.

Give me a nation of intelligent vegetarians, and I will give you a nation free from the social atrocities of this nation. I am no prophet; but feed one generation with a non-stimulating, nutritious diet, and there will be less intensity, less unholy scramble for dollars, less squalor and drunkenness, and your wives and daughters will be safer on the streets unaccompanied. I will admit that for what America now recognizes as success, a heavy meat diet is necessary, but I deny that such success is the ideal.




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## As We See It

**A National Campaign Against the House-Fly** WE wonder why the natives of India, losing thousands of lives annually by snake bite, do not banish the snake; yet the serpents of India commit insignificant depredations, and cause few deaths, as compared with the house-fly. I know you do not believe that this little creature, which has no sting, and which buzzes around so lovingly during the summer-time, can be very harmful. With complacency we tolerate the fly, though we might get rid of him with far less difficulty than would be involved in the destruction of the snakes of the Indian jungles.

The fly has no sting, he merely causes us a little annoyance, and we become

used to that. He has a more persuasive way of working, and we have become so accustomed to his presence that, with some of us at least, home would not seem home without his presence.

But those who have studied the habits of the fly have come to recognize him as one of man's most dangerous enemies. For some time the Merchants' Association of New York has been conducting an educational campaign which is already producing definite results; as intelligent people are learning of the danger of the fly, its filthy habits, its method of propagation, they are learning to limit its reproduction. They are learning that its proper appellation is not "house-fly," but "typhoid fly." The name sounds

ominous, but it is no more ominous than the little insect we have been accustomed to harbor in our houses.

The American Civic Association, recently located in the national capital, is an organization which aims to make all country life beautiful. It accepts, as part of its work, the elimination of the house-fly, for the reason that this insect destroys happiness by spreading disease and death.

The association recently received from London a moving-picture outfit showing the fly in all stages of growth,—the egg, the maggot, the mature fly at work on offensive material, such as the top of a spittoon, then on a baby's nipple. Next the baby is seen with the nipple in his mouth. No lecturer is needed to explain the nastiness of the life history of the little creature, which is pictured in so graphic a manner. It is the intention of this association to have films duplicated for use in moving-picture establishments all over the country, so that the educational campaign can be carried direct to the youth of the nation.

It is not probable that any one who has seen the series of pictures in all their disgusting reality will soon forget the lesson; and more than any lecture or description, are these pictures destined to arouse the young to a sense of the nastiness and the danger of the fly, and to the importance of thorough cleanliness in the matter of garbage, stable filth, and the like, upon which flies develop.

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**Bonuses for  
Babies**

Is the subject of an article in the *London Lancet* of Feb. 28, 1910. The author deplores the fact that the mothers in certain manufacturing districts of England have so far lost their natural instinct, which ordinarily prompts the parent to look out for the welfare of her offspring, as to need the goad of a bribe

to cause them to do their God-given duty.

England is not the only country where such a goad is used; for the same condition obtains in Vienna. It is sad but true also that in practically all civilized lands at the present time there is need of something extraordinary to cause mothers to play their proper part in caring for their helpless ones.

Of all God's creatures the human offspring is the most helpless and dependent. The Creator evidently saw the tendency of our selfish hearts, and ordained that if we would be even as attentive as the dumb animals are to their young, we would have an experience which would develop an otherwise neglected side of our lives.

It is quite as unfortunate for the well-to-do mother to turn over the care and feeding of her child to other hands, which in many cases do not provide natural but artificial foods, as it is for the poor working woman to leave the care, and possibly the feeding, of her child to an older brother or sister, or to an institution which will care for it while she is at work. Of the two the former is less justifiable, and both produce an inferior grade of humanity.

Except for absolute inability on the part of the mother, the child should be nursed by her till nine months of age. The failure in this respect not only produces weaklings, but also develops in the case of the girls, women less able to act the part of mothers. Many a young mother is incapacitated to nurse her own child, and is caused many a heartache, simply because her proud mother, and possibly grandmother, refused to maintain a natural relation to her child.

Substitute for this the continued watchfulness of a true mother, which means proper attention to all the needs of the child in early life, and we shall

have a change in the picture in the world to-day. There would be a stronger race physically, mentally, and morally.

Without any question, "the end justifies the means."

R. S. I.

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**Transmission of Disease by Money** IN former issues we called attention to the campaign against dirty money conducted by A. Cressy Morrison, of Chicago. Mr. Morrison in a somewhat sensational article called attention to the fact that paper money is extremely filthy, and may be the means of transmitting disease; and later Warren W. Hilditch, of the Sheffield Laboratory of Bacteriology and Hygiene of Yale University, made an experiment with twenty-four bills, the dirtiest he could find, and found them free from dangerous germs, and he published his opinion that the campaign by Mr. Morrison was unwarranted.

It appears, however, that the campaign has had the effect of greatly increasing the number of old bills redeemed, and it would seem from this that bankers and others appreciate more than formerly the desirability of having clean money. Mr. Morrison in a personal letter suggests that while some of this increased redemption may be attributed to the increased use of currency, the percentage of redemption largely exceeds the percentage of increased currency, so evidently the movement for clean money is bearing fruit. While there may not be quite the danger in dirty money that Mr. Morrison seems to think there is, it certainly is unpleasant, to say the least, to have to accept old bills that are unquestionably dirty, and are possibly capable of conveying infection.

In the region of the national capital the old bills are not so much in evidence, as all the banks make a practise of pass-

ing out new currency as far as possible, but in the more distant States, old filthy bills are the rule rather than the exception, and it is desirable that the more distant banks will, if only for the sake of cleanliness, make a practise of sending in a larger number of old bills for redemption.

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**Negative Evidence**

REFERRING to the quotation, "The

other side," in this month's Current Comment, we would call attention to it as a striking example of loose thinking. Suppose a child just coming down with scarlet fever were to drink from a drinking cup on the cars or in the street, and twenty other children should drink out of the same cup the same day. What is the probability that the true source would be traced, in case several of the children afterward contracted scarlet fever? Just think how unlikely it would be that we could obtain evidence that would certainly implicate the drinking cup.

Yet we know that scarlet fever and other children's diseases are transmissible. We know that often a child gets the disease when we are unable to determine the source. We know that drinking cups contain parts of the lining of the mouths of the drinkers, swarming with the bacteria contained in these mouths. Is there any reason to believe that if there are disease germs in the mouth, they will not be left in the cup, as well as the harmless germs? Knowing, as we do, that children's diseases are transmitted largely at school, and that in some of these diseases the germs are largely in the mouth, are we guiltless when we allow all the children to drink from one cup, merely because we have not happened to trace definitely infection through the cup?

**Enforce Reasonable Laws** ANOTHER point on which we would disagree with the writer of the editorial: We believe most sincerely that it makes a great difference whether sputum is deposited in the street or gutter, or whether it is deposited on the sidewalk to get onto the shoes and dresses and be carried into the house. The street germs are comparatively harmless, for the sunlight takes care of them. It is the germs that get into the houses, cars, and other enclosed places that we should be more afraid of. The attempt to forbid spitting altogether is quite certain to be disregarded; but it should not be so difficult to educate the public not to spit in buildings, or cars, or on sidewalks.

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**Establish Your Own Trust** THE hatter's union boycotted a company against which they had a grievance, and were assessed by the court a heavy fine as a punishment. "The ultimate consumer" boycotted the beef trusts, and afterward had to pay a fine in the shape of increased prices for meat; that is, all those who had to have meat. But have you ever thought of the hen as a "trust buster"? The *Press Democrat* (California) suggests:—

"The hen can help us to beat the beef trust. Not many of us are to raise our own beef, but most of us can raise our own hens, and most of us can find the eggs the hens have laid. Armour and his associates have hundreds of millions of dollars invested. Anybody with ten dollars and a back yard can engage in competition with Armour, and win a part of Armour's trade by supplying his table with something better than beef."

In Australia, we are told, the government is the egg trust, receiving, grading, and selling all eggs marketed on that island. The grading is very strict, as to both age and size. The government charges a cent a dozen for its services, and eliminates the profits of the middleman, thus working for the interest of

both producer and consumer; for, after all, they are the important elements in the economic problem, and the middleman is too often the parasite living off the industry of others. But with your own back yard in operation, you become both producer and consumer, and eliminate all middlemen's profits so far as your animal food goes.

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**A Practical Examination in Hygiene and Physical Culture** HEREAFTER all public-school pupils in New York City, in order to be promoted to the next class, must, in addition to their other tests, pass a practical examination in hygiene and physical training. This examination will include an inspection of the hair, face, teeth, nails, and clothing, in order to determine whether the child is making intelligent use of his knowledge of hygiene. In physical training, the examination will include observation of the position of the child when standing, sitting, walking, etc. Pupils failing to pass the test will be referred to the school physician for special attention.

It would seem that this is a much better way to examine children than to test merely the memory of text-books. Such an examination as this will bring to the mind of the pupil, more than anything else, the fact that what the text-book gives, is not merely words to be learned, but truths to be wrought into the daily habits. Naturally the teachers will by this means be spurred to greater diligence in encouraging a practise of cleanliness and personal hygiene on the part of the pupils, and can make the matter of inspection a stimulus for greater faithfulness.

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**A Fallacy Regarding Medical Inspection** THE Merchant Company having recently undertaken to secure regular medical inspection for its pupils,

who come from families in good circumstances, a general complaint against the procedure was raised by parents, who said that however necessary such an examination might be in the slums, it was unnecessary for their children. The editor of the *Edinburgh Medical Journal*, referring to this incident makes the following comment:—

“This complaint voices a fallacy which it might be worth while to dispel. The fallacy is that unsuspected disease is only likely to be found in the children of the careless or very unobservant parent. Those who entertain such an idea naturally resent the suggestion that their children, concerning whose health they are quite satisfied, should be subjected to periodical inspection.”

The *Journal* then calls attention to the fact that medical inspection in Great Britain began, not with the elementary schools, but “in the great boarding-schools which are attended by the sons of the wealthy.” In some of these schools careful medical examinations have been made of every boy at entrance for years, and the results of these examinations furnish—

“ample, indeed startling, evidence of the necessity for the systematic examination of all boys, no matter how great their home advantages, and no matter how healthy they appear.”

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#### Advertising Ethics

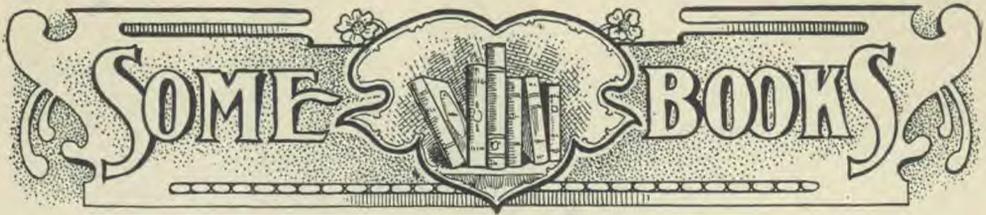
EVEN the New York *World*, the last of the large dailies to continue the advertisement of quack concerns, has given up the practise, not because it objected to sharing the profits of these harpies, but because it learned that it was “poor business.” Honest, respectable advertisers refused to take space in the *World* alongside of the disreputable fellows who had been using the *World* pages to

aid them in fleecing the sick and suffering.

The *World* is working for “success,” which in common parlance means the attainment of an end without too close scrutiny as to the ethics of the means adopted. To the man working for success, the means is secondary; for once the end is accomplished, the crowd worships at the success shrine, and asks few questions as to means or methods.

But there are men, and I believe there are an increasing number of them among periodical and advertising men, who believe success should be measured by the integrity of the means used to win it,—men who believe that giving publicity and space to a rascally enterprise is entering into partnership in the rascality. If a newspaper advertises an abortionist, it is in the abortionist business, and is as guilty as the criminal who buys the space for that purpose. If a religious journal advertises *Pruna*, it is in the business of making *Pruna* jags, as much as the notorious Ohio house. If a health journal advertises a nostrum, or questionable appliance, or “get-well-quick” or “get-rich-quick” scheme, it is in that questionable business.

The time is fast passing when the proprietor of a periodical can say, “I am not responsible for what advertisers insert. I merely rent space.” Those who say this, are on a par with the man who rents a house for immoral purposes, and makes the excuse that it is none of his business what his renters do with the property. It will soon come to be recognized by the managers of all respectable periodicals that to advertise any questionable product or enterprise is “poor business.”



## The Search for Immortality

**Scientific Living**, for Prolonging the Term of Human Life: by Laura Nettleton Brown. The Health Culture Company, Passaic, N. J.

**Natural Salvation** (Salvation by Science): Immortal Life on the Earth From the Growth of Knowledge and the Development of the Human Brain: by Charles Asbury Stephens, M. D. The Laboratory, Norway Lake, Maine. Cloth, 297 pages.

**Some Wonders of Biology**, by William Hanna Thomson, M. D., LL. D., Author of *Brain and Personality*. Cloth, 222 pages. Dodd, Mead & Co., New York.

Ever since the first pair were given the message, "Ye shall not surely die," mankind has been making a search for evidence upon which to base a belief in a future life. Often it resolves itself down to the simple proposition given by Shakespeare in Cato's soliloquy; viz., that there must be such a thing as eternal life or immortality because all mankind hanker after it; and yet it is a notorious fact that a very large proportion of mankind has very little concern about a future life.

The three books here considered take up the matter of a future life from very different standpoints. In the first, the indefinite extension of physical life is principally a matter of eating and thinking. If you do not live forever, it is because you do not eat right and think right. In the second, it is a matter of evolution. The human race is gradually becoming more scientific, and through science will eventually eliminate everything that makes for death. In the third, the mind itself is inherently immortal, and is, as it were, only accidentally related with the brain, and, after all, this physical life is only a passing incident, and not at all necessary to the full realization of the real personality, which is the mind.

The author of "Scientific Living," is confident that by proper living, life might be indefinitely prolonged, even for centuries; a proposition we are not very likely to prove or disprove in this generation. Some of the sentences are about as clear as Mrs. Eddy's. For instance, speaking of tumors: "Even the 'false concept' that names, individualizes, fears, watches, and grows the abnormal cells

may be 'crossed out,' leaving the life principles free to eliminate the growth in natural channels." Not exactly Christian Science, but a first cousin to it.

The third chapter, "The Great Central Truth," emphasizes the thought frequently advocated in *LIFE AND HEALTH*, that the various so-called healing methods, so diverse in what appear to be essentials, depend on one great law of cure. It is not "some specific remedy," but "the attitude of mind or partial fulfillment of a general law that affords relief." "The enthusiasm and will power required to execute any prescribed rule draws an increase of vital force."

A fundamental teaching of the book is embodied in the sentence, "To retain living proteid cell for tissue building should be the first great aim in every meal." Evidently the author was not aware that not one particle of proteid enters the body until it is broken down into much simpler forms, so that it is no longer "living."

There are undoubted advantages in the use of a certain amount of uncooked food, but this explanation of the fact, out of harmony as it is with the findings of physiological chemists, can hardly be called "scientific."

In general, the teaching, inculcating hopefulness, simplicity, cleanliness, avoidance of flesh, is excellent, and as a rule, the recipes are very good; based, however, on the assumption that proteid cells must be eaten "living."

In conclusion, the book is a philosophy rather than a science, a theory rather than a demonstration, a claim rather than a proof. Whether these "natural methods" will enable the users to prolong life indefinitely is a problem as yet unsolved.

Dr. Stephens disclaims all connection with the Oriental mystic cults on the one hand, and with the theory of Metchnikoff on the other; namely, "that human life may be prolonged from forty to sixty years, but that old age and organic death are ultimately inevitable." According to the author, "natural salvation holds the opposite of this as regards cell old age and death; namely, that each is scientifically remediable, and that immortal life, that fond dream of all human ages, now

bids fair to be won by man himself; and that this grand development of science is what the evolution of life on the earth looks forward to." He believes that the prolongation of life "is coming as a result of increase of scientific knowledge in every field, and the practical application of that knowledge."

But "to confer the gift of deathless life on this present beast-man would be an endowment without meaning, a calamity." "The beast-life can not, in the natural order of things, be thus endowed, since it is a lower order of life." "The beast-life will die out; it is a higher kind of life that becomes immortal. Into that higher mode of life we must enter or die."

He says, very properly, we think: "Life, indeed, as thousands of our fellow men live it, is not really worth living, they live so badly, so foolishly, so futilely, so without aim or ennobling purposes; the kind of life that very naturally ends in disgust with life, and that brings death itself."

Dr. Thomson's book is a book with a purpose. The author of brain and personality

obtained his medical education in the fifties, and the stamp of that far-off time is still discernible through his later researches and studies. The doctor stands for certain propositions, which, I take it, he stood for before he began his medical education; for, after all, scientific study does not always materially alter childhood views. Among other things he believes: (1) The mind (that is, the individual mind) may exist independently of the brain, and (if I understand him rightly) is eternal; (2) deterioration of mentality is a chemical and not a structural process on the physical side; (3) the earth is the only place in the universe capable of supporting physical life.

There are eminent scientists who would differ with the doctor on these propositions; to a layman it would seem that science must necessarily be silent on these subjects. They are propositions, at least the first and the third, not capable of scientific proof or disproof. As a philosophical speculation, the book affords decidedly interesting reading. There are a few inaccuracies in the giving of bacteriological facts, but these are of a minor nature.

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## The Quest for Health

**Preventable Diseases**, by Woods Hutchinson, A. M., M. D., Author of "Instinct and Health," etc. Cloth, 442 pages; \$1.50 net. Houghton, Mifflin Company, Boston, Mass.

**Those Nerves**, by George Lincoln Walton, M. D., Author of "Why Worry?" Cloth, 200 pages. J. B. Lippincott Company, Philadelphia.

Physicians are sensing the responsibility that rests upon them of educating the masses regarding the nature and the prevention of disease. Being human, they are subject to human imperfection. Being finite, a doctor can not see all sides of a subject. "Doctors disagree," and what they say is not necessarily final. However, they are seeking for the truth, and their efforts are being rewarded.

Some physicians conceive of man as an animal which has gradually evolved a brain and finally a mind, the mind being analogous to any secretion, a product of the brain. Others conceive of man as being a mind temporarily inhabiting a body. Between these two opinions there are many shades of belief.

Dr. Hutchinson stands strongly for the material view, and considers disease to be largely if not wholly a matter of aberrant chemistry and physics. Others, perhaps fewer in number, believe that disease is wholly a matter of the mind, "the subconsciousness," and subject entirely to suggestion.

In his treatment of communicable diseases,

typhoid fever, tuberculosis, scarlet fever, measles, diphtheria, pneumonia, colds, malaria, etc., Dr. Hutchinson has written chapters well worth the attention of every layman, and many physicians might not find the time lost to read them; but in the last two chapters, "Nerves and Nervousness" and "Mental Influence Upon Disease," he seems to lose his bearings; for it is impossible to reduce all disease down to the terms of bacillus and bile.

Dr. Walton does not take the view that everything can be cured by an appeal to the mind, but he shows that there are certain conditions, miseries, disappointments, due to wrong mental habit, which can be overcome, by careful education, and which must be overcome in order that the individual may live an efficient life.

Both books are written in a pleasant, easy style, and both contain a large amount of information along medical lines of great value to the layman who desires to avoid unnecessary illness and to increase his efficiency.

It should be remembered, however (Dr. Hutchinson to the contrary notwithstanding), that there is no disease, even the self-limited germ diseases, in which a courageous, hopeful attitude does not have a beneficial influence, and in which a tendency to give up in despair does not have an unfavorable effect upon the course of the disease.

Every successful physician is unconsciously a mental healer. His very presence, his hopefulness, and his cheery voice somehow stir

up the body cells to increase their reaction against the disease. On the other hand, there is probably no mental disease that does not have connected with it some physical cause. The hypochondriac sometimes needs only a good purge. The ancients were not so far off in naming one of the mental diseases "black bile." Neurasthenia may be largely a matter of intoxication. The person who is mourning over having committed the "unpardonable sin" may have merely eaten some food that has gone wrong. The "blues" may sometimes be cured by use of an abdominal supporter. A book that does not recognize this duality of causes for disease has to that extent missed its mission.

**The Standard Domestic Science Cook Book**, compiled and arranged by William H. Lee and Jennie A. Hansey. Cloth, 500 pages. Laird & Lee Publishers, Chicago.

This collection of 1,400 recipes, adapted for homes, restaurants, boarding-houses, picnics, and entertainments, with 135 drawings and 15 full-page lithograph plates, has evidently been prepared with care.

Among the novel features are, the special index on inside of front cover, by which, with aid of the thumb index, any subject can be referred to instantly; Kitchen and Table Suggestions; Food Analysis; Average Cooking Time; Time for Digestion of Various Foods; Kitchen Measures; Marketing; Dictionary of French Cooking Terms. The recipes are divided into some thirty departments, which can be turned to immediately by means of the index.

The book is prepared on the usual plan of making meats a prominent part of the meal, and for one using a non-meat dietary, it would not be so useful as some others; but as an exponent of the ordinary style of cooking, it is very commendable.

**The Landscape Beautiful**, a study of the utility of the natural landscape, its relation to human life and happiness, with the application of these principles in landscape gardening, and in art in general, by Frank A. Waugh,

Professor of Horticulture and Landscape Gardening, Massachusetts Agricultural College, Amherst, Mass. 49 full-page engravings, large type, wide margins, cloth and boards, gilt top, deckle edge, 336 pages; net, \$2.

A book out of the ordinary. Many books have appeared on nature study and allied subjects, but nothing like this one. They are not constructive; this work sets forth a new system of nature study and nature appreciation.

The author contends for the beauty and utility of natural landscape, and insists that the love of the beautiful is a large part of all men's lives, and that the landscape is the source of beauty available for the majority of the common people.

Professor Waugh is an experienced teacher, and he makes it apparent in the masterly way he deals with the subject, giving in detail practical methods by which the landscape can be taught by teachers, studied by pupils, and enjoyed by all.

He gives careful attention to landscape gardening, teaching that the work of landscape gardeners should show the landscape at its best. Aside from its value as an expounder of a great truth, the book has unusual merit as a work of art, and in literary style it is far above the average.

**Temperance Torchlights**, by Matilda Erickson; Stories, Studies, Songs, Poems, and Useful Information on Temperance Topics. Cloth, 256 pages, post-paid. Price, 50 cents.

This little book, replete with facts, anecdotes, incidents, statistics for the temperance worker, gathered from various sources, treats various phases of the liquor traffic and other allied evils in a masterly manner. It should find a useful place in families, schools, and libraries, as a work of reference; and young people's societies and temperance organizations might make excellent use of its pages in preparing programs.

This collection of choice nuggets from the masters should inspire temperance advocates to work with renewed zeal for the cause of health and temperance.





## In the Magazines

### Important Articles on Health Will Be Found in the May Issues of the Magazines

#### **American Motherhood, Cooperstown, N. Y.**

"Dr. Mary," the first of a serial treating of a sick baby handicapped by illy prepared parents.

"Table Manners," by the editor.

"Baby's Rights," by M. F. Langton.

"Parental Selfishness," editorial.

#### **Cosmopolitan Magazine, New York.**

An article by Upton Sinclair, in which he describes how he regained his health by fasting, after years of physical misery.

#### **Good Housekeeping Magazine, Springfield, Mass.**

"Practical Roof Gardening," illustrated.

"Perils of Cincinnati School Buildings."

"What Any Woman's Club Can Do in Reforming the Milk Supply."

"San Francisco's Demonstration."

"The Housewife and the Fly," a poem.

#### **The Mother's Magazine, Elgin, Ill.**

"A New Method of Exterminating Mos-

quitoes and Flies and Suppressing Disease," by H. F. Cable.

"Small Farms, Their Relation to Development of a Boy's Character," by D. D. Healy, former purchasing agent, Cook County, Illinois.

"The Home Medicine Garden," by Caroline A. Watt, M. D.

"Every-Day Cooking," by Martha J. Nichols.

"Destroying Mosquitoes to Save Children," by A. Celli, Professor of Hygiene.

#### **Woman's Home Companion, New York.**

"The Doctor's Page," conducted by Jean Williams, M. D.

"The Sweet Course," a group of simple desserts, by W. M. Farmer.

"Camps I Have Built," by W. A. Keyes.

"Ideal Housekeeping," by Margaret E. Sangster.

"How I Blundered as a Mother," by Ruth Harding.

**Public Drinking Cups Abolished.**—The Wisconsin State board of health has issued an order forbidding the use of public drinking cups on railway trains, in railway stations, and in all public-school buildings.

**Hookworm in Alabama.**—A recent report states that in one county one third of the members of one thousand families examined had the disease, and in another county, more than one half of those examined were infected with hookworm.

**The House-fly Indicted.**—J. J. Jackson, of New York, who has been conducting in his own city a campaign against the house-fly, recently gave a lecture in Washington, in which he characterized the house-fly as the "most dangerous animal on the earth." Mr. Jackson is working under the auspices of the American Civic Association, which association is planning an extensive national campaign against the fly this season.

**Health Squad Active.**—Members of this squad travel on the New York trains and trolleys, etc., warning passengers that they must use cuspidors and not spit on the floors. Refractory spitters are arrested and fined.

**A Journal of Physiological Therapeutics.**—Dr. Harry R. Harrower, editor of the *Medical Standard*, is launching a new medical journal with the above title, to be devoted to hygiene, hydrotherapy, electricity, massage, etc. The price is to be \$1 a year, and the address is 72 Madison St., Chicago.

**Antituberculosis Work in New York.**—The slogan of the new State-wide campaign is, "No uncared-for tuberculosis in 1915"—a worthy aim. A movement is on foot for a county hospital in every county, one or more visiting nurses for every city and village, more free dispensaries, and provision for the treatment of every case of tuberculosis either at home or in an institution.



**To Study Pellagra.**—The U. S. Public Health and Marine Hospital Service has sent Dr. Long to South Carolina to spend six months in the study of pellagra.

**Sanatoriums of Monasteries.**—In Bulgaria an attempt is being made to abolish the convents and monasteries of the Greek Church, and to make use of the buildings and of the revenues for the establishment of tuberculosis sanatoria.

**Decreased Consumption of Beer in Berlin.**—The consumption of beer is diminishing in the kaiser's capital from year to year, especially the "genuine beer" of Bohemia and Bavaria. The native beer is much weaker in alcohol than these imported beers.

**The National Committee for the Control of Tuberculosis in Animals.**—This committee recently held a session in Detroit. The governments of the United States and Canada, and the large stock-raisers and packers of both countries, were represented on the committee.

**Dirty Bills.**—According to the statement of Representative Wiley, of New Jersey, a dollar bill was examined microscopically and was found to contain ninety-two million germs. He is using this statement in support of a bill he has introduced to provide clean currency by burning all paper money returned to the Treasury.

**Georgia Laundresses Examined.**—The aldermen of Atlanta propose to pass an ordinance requiring all laundresses to submit to medical examination, in order to weed out such as may be capable of transmitting tuberculosis, smallpox, and other communicable diseases. Evasion or violation of the ordinance will be subject to fine or imprisonment.

**First Russian Antialcohol Congress.**—At the very beginning of this congress, which was held in January, the prefect of police forbade discussion of the government monopoly of alcohol. This was resented by some of the prominent delegates, and a strong protest was addressed to the minister of finance. The prefect of police replied by forbidding the publication of reports, and began proceedings against several of the members of the congress.

**Indians Vote for Prohibition.**—Nez Perce County, Idaho, went prohibition by nearly one thousand majority at its election, March 9. It is said that the Nez Perce Indians, who took part in the election, voted almost to a man for prohibition.

**Layman's Medical Journal.**—Wisconsin is to have a periodical with the above name, having for its object the education of the public in regard to hygiene and the prevention of disease. It will be conducted by the medical women of Wisconsin.

**Campaign Against Water Pollution.**—The Monthly Bulletin of the New York State Department of Health for January contains a number of very important articles regarding the pollution of streams, disease from impure water, sewage disposal in cities, country homes and camps, the inspection of watersheds and the like.

**Inoculation Against Typhoid.**—This procedure, which has been eminently successful in the British army, is now being tried tentatively in the United States army. The men stationed at Fort Wadsworth, New York harbor, have been inoculated with antityphoid vaccine prepared at the army laboratory, Washington.

**Public Health Degree.**—The Oakland (Cal.) College of Medicine and Surgery has established a course in hygiene and public health under the professorship of Passed Assistant Surgeon W. Colby Rucker, U. S. P. H. & M. H. Service. They will give a degree, Doctor of Public Health, at the completion of a one-year course to graduates in medicine.

**Cause of Beriberi.**—Drs. Fraser and Stanton have reported results of their investigation of beriberi, giving as their conclusion that the disease is due to the use of white or polished rice, and that the outer covering of the rice which is removed in the hulling process contains nutritive materials, the lack of which causes the nervous symptoms making up the disease known as beriberi. They assert that the trouble may be obviated, either by using whole rice or by adding to the diet of white rice some of the "polishings" or some other substance containing the same nutritive materials.

**Danish Government Helps Consumptives.**

—The Danish government pays three fourths of the expenses of poor people taking treatment in sanatoria. In Denmark there is one bed for each 1,200 inhabitants, as against one bed for 4,500 inhabitants in the United States.

**Third International Congress on School Hygiene.**—This Congress will be held in Paris, August 2-7, this year. Practically all civilized countries will be represented. For particulars, write to the Secretary-General L. Dupestal, 10 Boul. Magenta, Paris.

**Alcohol From Sawdust.**—An establishment in southern France has perfected a process of treating sawdust with sulphurous acid. It is said that by this process wood-alcohol can be made as "harmless" as grain alcohol, because of the elimination of the sulphuric acid of the old process.

**Cholera in Russia.**—Just as the epidemic of cholera was reported to be ended, a fresh outbreak occurred in St. Petersburg. There is prospect that if they do not handle it more energetically than they are reported to have handled the epidemic of last year, they are likely to have quite a run of it.

**Examination of Cold Storage Plants.**

—As a result of the high prices of meat, the health committee of New York has ordered an immediate inspection of all cold storage plants, for it has been shown that in some instances food was unfit to eat for forty-eight hours after it was taken from storage, an evidence that the foods deteriorate while in storage.

**Coffee, Tea, and Asylums.**—In a recent health report issued by the board of health of Kansas City, Dr. Wheeler, health commissioner, made some strong statements against the practise of feeding schoolchildren with tea, coffee, sweets, which he declared to be a crime. He believes that the caffeine-containing drinks among children fill insane asylums, and that carelessness as to diet increases nervous disorders, and may cause or hasten death.

**Rochester Tuberculosis Open-Air School.**

—The *Rochester Herald* of March 20, describing this school, says that it is in no sense a hospital. The school is for the purpose of helping children who are physically weak to become strong and to make them keep thus by plenty of judicious exercise. While tuberculous children are accepted, the school is not especially for this class. Any child who is physically debilitated may be admitted for a period of health building. This school is the outcome of the activities of the Rochester Public Health Association. The sessions were held at the day camp until Christmas, after which it was moved to its present quarters in King Street.

**One Smallpox Case Causes Excitement.**

—In Vienna, Austria, a single smallpox case caused considerable excitement recently, an evidence of the rarity of the disease in this city. Before 1860, when more rigid vaccination began to be enforced, smallpox cases were constantly present in the Vienna hospitals. Two or three years ago there was an epidemic of one hundred fifty cases of smallpox, in which there were nineteen fatal cases. It is found that every one of the fatal cases was unvaccinated.

**Commendable Educational Work.**

—The Hampton Institute, Virginia (for colored), trains its students in hygiene and sanitation. It gives special instruction on tuberculosis, typhoid, and venereal diseases. Unquestionably the dissemination of this instruction among the future educators of the colored race must eventually be of untold benefit. Doubtless instruction will be added regarding hookworm disease, one of the greatest menaces of the South, affecting probably a much larger proportion of the colored than of the white people, but in them producing perhaps not so serious results.

**Smallpox in the United States and Germany.**

—A Cincinnati physician says the continuance of smallpox in this country is due to the fact that in rural districts vaccination laws are not enforced, and as a result there are non-immunes who act as reservoirs of smallpox infection. He calls attention to the fact that in the three years 1900-03 there were one hundred sixty-three thousand recorded cases of smallpox in the United States, but in Germany, where vaccination laws are rigidly enforced in country as well as city, there were only 1,051 cases during the same period. But these figures will mean nothing to the man who has been converted to the antivaccination propaganda.

**World Opium Conference.**

—Eight nations have already accepted an invitation extended by President Taft to join in a call for an international conference at The Hague this year to consider the world-wide prohibition of the sale of opium. The nations accepting this invitation are: the United States, the Netherlands, Germany, Russia, China, Siam, Italy, and Portugal. It is feared that the British government, though friendly to antiopium movements, on account of internal troubles may wish to delay the conference. It will be remembered that one year ago the British delegates refused to join officially in the declaration that opium should be considered dangerous, and suitable only for medical use by physicians. France is another important country which is delaying acceptance of the President's call.

**Sleeping - Sickness Commission.**— The work of this commission, which had its headquarters near the north end of Victoria Nyanza, has been completed. It has been found that the tsetse-fly, after having bitten an infected patient may retain the power of infection for several months, and for this reason it was determined that the only way to eradicate the disease was to remove all inhabitants from the fly areas. Thousands of natives—only a fraction of the former population, owing to the terrible ravages of the disease—have been removed to regions having no flies. Other precautions have been taken, such as the establishment of a segregation camp for those who are infected. As no new cases have developed for some time, it is supposed that the disease is under control.

**A National Tuberculosis Sunday.**—The National Association for the Study and Prevention of Tuberculosis has suggested a national tuberculosis Sunday, April 24, to be observed in all the churches of the United States. During the past year sermons on tuberculosis have been preached before thousands of congregations, and from this a movement has been started to establish one Sunday in the year as a Tuberculosis Sunday, in which it is hoped that every one of the thirty-three million churchgoers in the United States will hear the gospel of health. The large inter-

denominational bodies, such as the Y. M. C. A., Y. W. C. A., and the various young people's societies are also in line with the movement. On April 24 tuberculosis sermons will be preached in all the churches in the country, literature will be distributed to the members of the congregations, and in every way an effort will be made to teach that tuberculosis is a dangerous disease, and can be prevented and cured.

**The Fragrant Cigar.**—Dr. Stiles recently made some observations regarding the sanitation of certain cigar factories in Florida in which the laborers were largely Cuban, Spanish, and Italian. Among these he found a number having hookworm disease. It is the custom in these factories to have one person read while others work. This excellent custom was brought over from Spain. Dr. Stiles suggests that if the readers were supplied with reading-matter regarding hygiene, and especially with regard to hookworm disease, it would do a vast amount of good. Dr. Stiles condemns the practise which he noticed of sticking the cigar bands on with saliva, and the habit of biting and mouthing the end of the cigar. It must be consoling to the smoker to know that he is holding a cigar in his mouth that has been in the mouth of one of these foreigners.

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**NOTICE I Have Just Completed a HIGH PRESSURE STEAM CANNER**

that cans everything so it keeps, without preservatives. Requires about one-fourth the time for cooking required by Hot Water Canners, or on a stove. The smallest size can be used on a stove, and will cook a meal in a few minutes. This supplies a long-looked-for article. Every family should have one. Price within the reach of all. Plant large gardens for canning.

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## Startling But True! FREE SAMPLE

### No More Wash-Day! Agents \$6 to \$18 a Day

New Method of Cleaning Clothes. Cleans Family Wash in 30 to 50 Minutes. Woman's Hardest Work Made Easy. No Rubbing. No Motors. No Chemicals.

## Not a Washing-Machine

DOES IN ONE OPERATION THE WORK OF WASH-BOARD, WASHING-MACHINE, AND WASH-BOILER

See How Simple—DIFFERENT, EASY—Put on any stove, add water, then soap, then clothes—move knob occasionally. In 5 to 8 minutes first batch clean—next batch same way, same water—in 30 to 50 minutes family wash clean. No labor, no injury to clothes. Cleans woolsens, flannels, blankets, or colored clothes, as well as white goods, finest laces, curtains, bed clothes. Saves time, fuel, labor. Saves money.

EASY WAY—in 30 to 50 minutes cleans washing which before took entire day.

All metal, strong, durable, sanitary, light in weight. Easily used, cleaned, handled—always ready. Child or weakly woman can use it. Saves wash-day drudgery.

### USERS PRAISE THE "EASY WAY"

J. McGee, Tenn., writes: "One young lady cleaned day's washing in 1 hour with Easy Way—another in 45 minutes." Mrs. T. Bullen, Canada, writes: "I washed bedding, heavy quilts, curtains, etc., without rubbing." Lauretta Mitchell, Ohio, writes: "Done a big washing in 45 minutes—sold 3 already." A. D. Poppleton, N. Y.—"Gives perfect satisfaction. Washed bed quilts, greasy overalls, and fine clothes. Greatest thing on earth." F. E. Post, Pa., writes:—

## TWO-WEEKS' WASHING IN 45 MINUTES

Clothes cleaned without rubbing." J. H. Barrett, Ark., after ordering 38 Easy Ways, says: "You have the grandest invention I ever heard of." J. W. Myers, Ga., says: "Find check for 12 Easy Ways. Greatest invention to womanhood, forever abolishing miserable wash-day. Sells itself."

## Agents Getting Rich

—R. O. COWAN, N. Y., placed 13 in six hours—(profit, \$39). Mrs. J. Brown sold 10 in 3 days—(profit, \$30). K. J. Blevins, Ohio, writes: "Made 7 calls, sold 5 one day"—(profit, \$15). R. H. Latimore, Pa., writes: "Sold 4 this morning. Never yet turned down." A. G. Witt, Pa.: "Received Easy Way yesterday; sold 4 to-day—not out for orders." Mrs. Gerrish, Mont., ordered sample, then 1 dozen, then 100—(profit, over \$300). Just made one shipment 1,000 Easy Ways to Russian agent. N. Boucher, Mass., orders 75 more, says: "Everybody wants one, best business ever had." A. S. Verrett, La., sold 8 in one day—(profit, \$24).

## FREE SAMPLE TO AGENTS

We want managers, agents, men or women—home or traveling, all or part time, to show, take orders and appoint agents. Easy Way new article, not worked to death. Best seller out. Every family wants one. People glad to see it demonstrated; buy without being asked, and throw away costly wash-machines to use it. Only 2 sales a day means \$36 a week profit. Price only \$6 ready for use. Sent anywhere. Not sold in stores. Order one for your own use. YOUR MONEY REFUNDED IF NOT SATISFACTORY. Send for Free Sample offer, special agents' proposition, etc. COSTS NOTHING TO INVESTIGATE. Send name and address, any way, for full description. Write to-day.

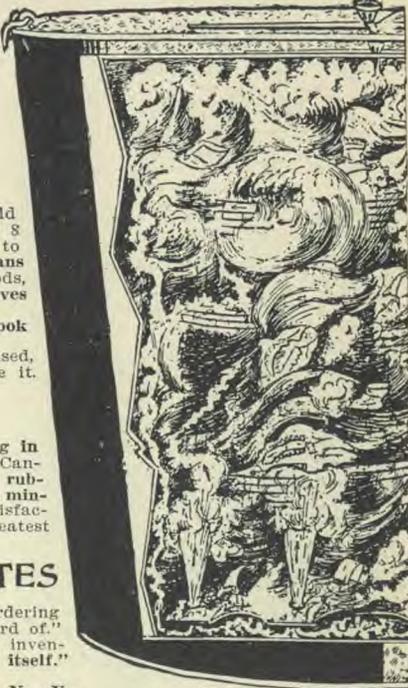
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# BURNS AIR

Fuel Drawn Principally From Atmosphere  
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Air now burned in this wonderful stove is free to rich and poor alike. No trust in control.

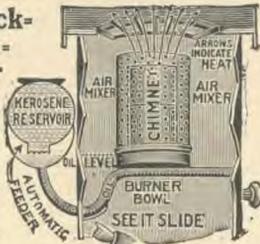
### This Valveless, Wickless, Automatic Oil-Gas and Air-Burner Stove

automatically generates gas from kerosene oil, mixing it with air.

Scientific test proves it uses 395 barrels of air to one gallon common kerosene oil.

**CHEAPEST FUEL — SUMMER COMFORT.** Intense heat but concentrated under cooking vessels and absorbed by articles being cooked—not thrown out to overheat your kitchen.

To operate—turn knob—oil runs into burner—touch a match; it generates gas, which passes through air mixer, drawing in about a barrel of air to every large spoonful of oil consumed. **That's all.** It is self-regulating, no more attention. Same heat all day or all night. For more or less heat, simply turn knob. There it remains until you come again. To put fire out, turn knob, raising burner—oil runs back into can, fire's out. As near perfection as anything in this world. **Ideal for summer use.** Not dangerous like gasoline. No dirt, soot, or ashes. No leaks—nothing to clog or close up. No wick—not even a valve, yet heat is under perfect control—kitchen always cool. **D. CARN, IND.,** writes: "It costs me only 4½ cents a day for fuel." **L. NORRIS, VT.,** writes: "The Harrison Oil-Gas Generator are wonderful savers of fuel, at least 50 to 75 per cent over wood and coal." **E. ARNOLD, NEB.,** writes: "Saved \$4.25 a month for fuel by using the Harrison Oil-Gas Stove. My range costs me \$5.50 per month, the Harrison, \$1.25 per month." **THOS. VINCENT, WIS.,** "My wife never had anything she enjoyed so much as her stove. It is very quick, no heated room or dirt. Surpasses



Sectional Cut of Generator



All Sizes

anything we ever saw."

**NOT LIKE THOSE SOLD IN STORES.** Ideal for roasting, cooking, baking, ironing, canning fruit, picnics, cottages, camping. In Winter use Radiator for heating houses, stores, rooms, etc. No more carrying coal, kindling, ashes, soot, and dirt. No hot fiery kitchens. Absolutely safe from explosion. Not dangerous like gasoline. Simple, durable—last for years. Saves expense, drudgery, and fuel bills.

**ALL SIZES, PRICES LOW—\$3.25 AND UP.** Sent to any address. Give this stove a trial. Send no money—only send your name and address. Write to-day for full description, thousands of testimonials. Our 1910 Proposition. Circulars FREE.

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# Ladies, Stop Wishing! Have Money! It's Easy! Don't Envy the Rich! Make \$5 to \$10 Daily Yourself!



Any woman can share in world's greatest money-making opportunity. Only take warning—let nothing interfere—hurry address on postal—that starts you—simple, but mighty important. Listen! Previous experience, capital, unnecessary. Age, location, duties no hindrance. Give all or just your spare time—suit yourself—money yours anyhow. You're right; **WOMAN'S TURN HAS FINALLY COME**, and what a splendid turn it is! Surpasses wildest dreams, but it's really happened. You, if quick to act, will make the easiest, quickest money of your life. This invention, opportunity, money; all for women, not men. **Woman invented it**—women use it—women buy it—women sell it. Hear the unexpected, glorious, wonderful news from those already started! One lady writes: "Sold 15 one afternoon. Enclose order for \$100." Another: "Everything looks so good. Have orders for nearly \$200 worth." Another: "Sold \$14 worth in two hours." (\$7 an hour! Think how you could live on that income!) Another: "Enclosed order for \$80. Sold four right away. Greatest convenience and comfort ever invented." Another: "Enclose order for \$60. Have orders on the phone." Another: "\$53 in one day. No trouble to sell. Come to me without solicitation." Another: "Delighted! A blessing to humanity. Worked 4½ hours—sold \$44 worth." Hundreds tell of just such wonderful success supplying enormous demand for that long-sought blessing—**A SELF-HEATING FAMILY SYRINGE**. Undoubtedly best thing ever invented for humanity. Just what women world over have longed, wished, and prayed for. What a glorious prospect for lady solicitors! **How easy: Just show—money yours—\$5 to \$10 daily easily earned.** How attractive, fascinating, irresistible—an all-metal family syringe and heater combined in one—put contents in cold—touch a match—presto! contents hot, ready to use; day or night, any hour, any place, at home or traveling. **No rubber bags to leak, rot, crack, smell, go to pieces after short usage.** Always clean, germ proof, absolutely sanitary. Means but one syringe, one cost for a lifetime. Means farewell to druggery, inconvenience, expense, annoyance. Prevents and cures diseases—saves many times its cost in doctor bills—indispensable for health and personal cleanliness. Every family needs it—every family buys. **Price low; really insignificant; only \$2 complete, ready for any one to use. Not sold in stores.** Shipped to any address. **Guaranteed satisfactory or money refunded.** Never such a seller—never such an opportunity for women to make their entire or spare time profitable.

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Make haste: Send a postal this very minute for catalogue, testimonials, agency plan, or—better still—send order. You won't be disappointed. We give exclusive territory and **FREE SAMPLE** to active agents. Get one for your own use anyhow. Costs nothing to investigate.

**SANITARIUM SUPPLY CO., Box 28, Station F = TOLEDO, OHIO**

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All readers of LIFE AND HEALTH are vitally interested in the matter of pure, wholesome hygienic food supplies. The following is a partial list of the products of old, established and thoroughly reliable firms whose specialty is supplying sanitariums, vegetarian restaurants, and individuals

	PACKAGE		PACKAGE
Graham Crackers, sweetened	.....\$ .10	Sanitarium Gluten Meal, about 20%	..\$ .20
White Crackers	..... .10	Sanitarium Gluten Meal, about 40%	.. .40
Ideal Soup Crackers	..... .10	Sanitarium Gluten Sticks, about 40%	.. .20
Oatmeal Crackers, 15 cents; 2 for	... .25	Charcoal Tablets	..... .25
Fruit Crackers	..... .20		CAN
Zwieback or Toast	..... .15	Baked Beans, 15 cents; 2 for	..... .25
Caramel Cereal or Cereal Blend	.... .15	Peanut Butter	..... .25
Wheat Flakes (Toasted)	..... .10	Malted Nuts	..... .60
Wheat Flakes Biscuit (Toasted)	.... .10	Nut Cero, ½ lb. 15 cents; 1 lb.	..... .25
Fruit Nuts (Malted)	..... .10	Nut Loaf, ½ lb. 15; 1 lb.	..... .25

Price list, including Sanitarium Olive Oil, Sanitarium Grape Juice, and a full line of special products, and order blank mailed to any address upon request.

### Special Offer

To introduce our goods an initial order amounting to \$5 of the above will be shipped to any address for \$4.50, cash with order.

### Special Rates to the Trade and Institutions

Order from the factory nearest you, addressing—

### SANITARIUM FOOD COMPANY

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Living the lives we now do, it is impossible to get rid of all waste in the system, no matter how regular we are.

This waste adheres to the lower intestine, and is extremely poisonous, as we all know.

The blood, constantly circulating, absorbs these poisons, distributing them throughout the system, weakening our resistance against infection and bringing on directly countless other ills which gradually become chronic—Indigestion, Headaches, Biliousness, Palpitation, Rheumatism, Dizziness, etc.

It is frequently the direct cause of Appendicitis. These are the reasons when a physician is called, no matter what your ailment, the first thing he does is to clean out the intestines with strong drugs. You know this is so, don't you?

## The Internal Bath By Means of the J. B. L. Cascade

is a perfectly natural way of eliminating this poisonous waste from the system. It uses Nature's great cleanser—Warm Water—and does not force Nature, but assists her.

Fully half a million people are using it to-day, and are singing its praises, not only because it has relieved them of countless ills, but because it is keeping them in such perfect health and fine spirits.

### Thought He Would Be an Invalid

Crede, Amethyst P. O., Colo.  
January 18, 1910.

Tyrrell's Hygienic Institute,

Gentlemen: It is nearly two years ago when it

was hard work for me to go to my office. I was feeling more than sick, in fact, there were times when my arm and practically my left side were paralyzed, and for some time I thought I should be an invalid for the balance of my days. I had doctors and specialists and went to a number of hot springs and am sorry to say, without getting any benefit.

One day last March, a Mr. H. B. Randt came into my office and told me about your J. B. L. Cascade, and upon his advice, I sent for it. Its use has been attended with the very best results, and I would not do without it for any price. I honestly believe it will cure anything that can be cured. You may let my fellow sufferers know what your J. B. L. Cascade has done for me, as I now feel like another man and am attending to my business right along.

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(Wholesale Flour & Grain Dealer.)

Just write me a line, and I shall be glad to consult with you without any obligation whatsoever. Internal Bathing is being recognized universally now as Health-Insurance, and you may be assured that you will learn things regarding yourself you never knew before.

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NEAR PENNSYLVANIA R. R. TERMINAL  
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☞ A house made famous through its splendid service and personal attention to patrons. The Grand counts its friends by the thousands. Army and Navy people stop here, as do all experienced travelers. For, more excellent living facilities, quiet elegance, and *sensible prices* are hardly obtainable elsewhere.

☞ As for transportation facilities, New York's subways, elevated, and surface cars are all practically at the door. Theaters and shopping districts also immediately at hand.

☞ Splendid Moorish dining-rooms are but one of the many famous features of the *New Annex*.

**ABSOLUTELY FIREPROOF**  
Rates: \$1.50 Per Day, Upward

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Guide to New York (with maps), and Special Rate Card sent upon request

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Farmers wear it successfully while working in the harvest-field; trapeze performers while giving exhibitions. Surely YOU also could wear it with comfort and satisfaction. You will do yourself an injustice unless you give a fair trial to our

### Huston Automatic Truss



FRONT VIEW

Patented  
Sept. 7, 1897

Of course we can not convince you of the truthfulness of our claims unless you are willing to test them. Are you willing to give us a chance? Will you write to us to-day?

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Send size around body in line with rupture. Once adjusted, this truss can not be displaced by any motion of the body. Correspondence solicited.

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Experience not necessary. Honesty and willingness to work all we ask. We will give you an appointment worth \$50 to \$75 every week. You can be independent. Always have money in abundance and pleasant position selling greatest labor saving household invention brought forth in fifty years. LISTEN:—One man's orders \$2,650.00 one month, profit \$1,650.00. Sylvester Baker, of Pa., a boy of 14 made \$9.00 in 2½ hours. C. C. Tanner Ia., 80 years old, averages five sales to seven calls. See what a wonderful opportunity! Room for YOU, no matter what your age or experience, or where you are located—if you are square and will act quick. But don't delay—territory is going fast. Read what others are doing and be influenced by their success. **WORK FOR US AND GET RICH.**

"I do not see how a better seller could be manufactured," writes Parker J. Townsend, Minn. "Called at twenty homes, made nineteen sales,"—E. A. Martin, Mich. "Most simple, practical, necessary household article I have ever seen" says E. W. Melvin, San Francisco. "Took six dozen orders in four days,"—W. R. Hill, Ill. "Went out first morning, took sixteen orders,"—N. H. Torrence, New York "Started out 10 a. m., sold thirty-five by 4 o'clock,"—J. R. Thomas, Colo. "Sold 131 in two days,"—G. W. Handy, New York. "I have sold goods for years, but frankly, I have never had a seller like this,"—W. P. Spangenberg, N. J. "Canvassed eleven families, took eleven orders,"—E. Randall, Minn. "SOLD EIGHTEEN FIRST ¼ HOURS. Will start one man working for me today, another Saturday,"—Elmer Menn, Wis.

These words are real—they are honest. Every order was delivered, accepted and the money paid in cash. Every letter is right here in our office, and we will give the full postoffice address of any man or woman we have named if you doubt. This is a big, reliable, manufacturing company, incorporated under the laws of the State of Ohio, and every statement we make is absolutely sincere and true. **YOU CAN MAKE THIS MONEY:** You can make

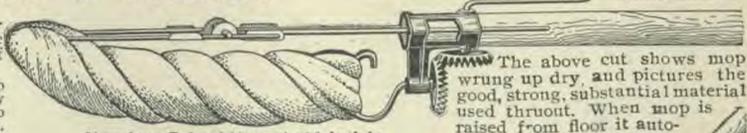
## \$3000.00 in 3 Months

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THE NEW EASY WRINGER MOP

Selling this great invention—**The Easy-Wringer Mop**—the biggest money maker of the age. Think of it! A Self-Wringing Mop. No putting hands into the dirty water. No aching backs. No slopping against woodwork. No soiled clothes. No contracting deadly disease from touching hands to filth and germs that come from floor. Can use scalding water containing strong lye. Two turns of crank wrings out every drop of water. Makes house-keeping a pleasure—Makes the day happy. Simple, practical, reliable, it lasts for years. Every woman is interested—and buys. No talking necessary—it sells itself. Simply show it and take the order. Could you imagine an easier, quicker, better way to make money than supplying this demand all day created.



New Low Priced Household Article.

The above cut shows mop wrung up dry and pictures the good, strong, substantial material used thruout. When mop is raised from floor it automatically straightens out ready for wringing

We want more agents, salesmen, managers, to fill orders, appoint, supply control sub-agents, 150 per cent profit. No investment required. We own patents and give you exclusive territory, protection, co-operation, assistance. You can't fail, because you risk nothing. **HUNDREDS ARE GETTING RICH.** Act quick. Write for your county today. **WE WANT A THOUSAND MEN AND WOMEN.**

**Send no Money:** Only your name and address on a postal card for information, offer and valuable booklet **FREE** Tomorrow belongs to the one behind—the opportunity is open **TODAY.** Write your name and address clearly, giving name of county.



This smaller picture shows mop on floor. It spreads out and is held down to floor at all points.

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One who has a thorough speaking acquaintanceship with the English language, who can converse on current topics correctly, who can speak with proper emphasis and enunciation, with no peculiarities of speech which attract attention to him rather than to what he is saying.

Men possessed of the above qualifications are wanted every day, everywhere, to fill positions of importance, to wield an influence in public affairs and **TO DO BIG THINGS.** Men who can speak English clearly and forcibly are wanted to take positions as teachers, lecturers, ministers, and leaders in important enterprises. If YOU are such a man, positions like these are open to you. Study your speech carefully and closely and see whether you possess these necessary qualifications for large undertakings.

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