

# PHYSICAL CULTURE

DEVOTED TO HEALTH, STRENGTH, VITALITY, MUSCULAR DEVELOPMENT, AND THE CARE OF THE BODY

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## THE EDITOR'S VIEWPOINT

**S**HALL we have a National Board of Health? Is humanity of sufficient importance to deserve as much attention as is now being given by the Federal Government to hogs, cattle, sheep, and other domestic animals? The reader's answers to these queries will unquestionably be in the affirmative. There is grave need for a Department of Health; for a Government Bureau that has for its purpose the unbiased investigation of every influence that affects human life for good or evil.

### THE MEDICAL PROFESSION AND THE NATIONAL HEALTH DE- PARTMENT

Both of the great political parties, during the last presidential election, apparently favored a Department of Health. There is no problem before the citizens of this country at the present time more important than health. Unless some attention is given to the decline of the birth-rate and other indications of a lessening of national vitality, as a nation we will soon be on a decline at the speed of a lightning express.

The Hon. Robert L. Owen opened the fight for this Department in the United States Senate some time ago. The Senator in his remarks quoted extensively from the work of the Committee of One Hundred on National Health, and we therefore take it for granted that he has secured the statistics for his most weighty arguments from this particular source. This committee was named during President Roosevelt's term, for the purpose of making an investigation with the view of remedying various evils that were known to exist. As will be noted in a contribution to be published in the next issue of PHYSICAL CULTURE, many very prominent men were named on this committee. In fact, many of them were so prominent, and their activities were already so occupied, that it was impossible for them to really give any time to the work of investigating so important a subject, and they no doubt delegated their authority principally to those who did have the time. As a result the Committee of One Hundred on National Health easily and naturally drifted into a committee of medical men, who were considering the health of the nation on one hand and the advancement of their own particular interests on the other hand.

The science of medicine from an allopathic standpoint simply represents one school, and in nearly every state in the Union we have witnessed the extraordinary efforts made by those financially interested in this particular school to legislate the healing art into their hands exclusively. The natural inclination of nearly all forms of business at this particular time is a gradual growth towards monopoly. Though there may have been a time when the practice of medicine was a profession, it has gradually assumed the aspect of a business, and to-day only too many physicians are business men, who plan and scheme for the dollar as ruthlessly and as pitilessly as the worst medical quack in the land. I do not deny that they may "need the money." Their



families have to be supported; they are compelled to "keep up appearances" in order to impress their patrons.

But what has all of this to do with the National Board of Health? Simply that the present state of affairs indicates that this vastly important department may fall into the hands of some particular school of healing, and that the entire machinery of the Government will be used for the one purpose of advancing the propaganda favored by this school. In other words, that the National Department of Health may become a mighty weapon that will be used as a means of forcing the people into the ranks of the believers in "dope" as the only means of curing disease and building vitality.

There has been a great hue and cry in this country for a long period against trusts and monopolies. The financial extortion which the public has had to endure because of these evils has brought these particular commercial methods into disrepute. Now, an ordinary monopoly does nothing worse than to rob you financially. The amount of money that one particular trust may take from an individual is usually trifling, but a **MEDICAL TRUST, A MONOPOLY OF THE HEALING ART**, in which it is often difficult to find any two doctors absolutely agree as to diagnosis or treatment, represents a **DANGER TO HEALTH AND LIFE THAT IS TERRIBLE IN CHARACTER.**

The science of medicine has nothing to do with health. Its avowed purpose is the treatment of disease. Its members have studied disease. Diagnosis with them assumes extraordinary importance, and if the proposed National Board of Health is to be in charge of medical men who look at health from a medical viewpoint, who do not understand and have not sympathy with the science of physical upbuilding as taught and practiced by the adherents of physical culture and other drugless methods of building vitality, then indeed will the nation suffer severely at the hands of a department of this nature.

Those who believe in vaccination, in the anti-toxin theory, in the elimination of poisons by adding more poison, in the idea that germs are the sole cause of disease, are trifling with individual and national vitality. They are on the wrong road—and on one that does not lead towards health and physical wholesomeness. They have never learned, and apparently do not care to investigate, the reason for immunity from all disease that many people seem to have somehow secured. If they were really and truly anxious to understand the science of disease and health, then immunity from disease would be looked upon by them as a marvelous power that should be investigated in its most minute details. The physical culture theory maintains that this immunity from disease is easily attained—not through the aid of vaccination or other poisons that are considered so essential by the medical fraternity, but simply through the extraordinary vital resistance that one can easily develop within his own organism.

If we are to have a National Board of Health let it be such a department in fact as well as in name, but if it is to be headed and operated by men in sympathy only with the theories of medicine, we will then drift into chaotic darkness that will be as profound as any experienced within recent generations, for the particular theories of one branch of the healing profession are to be advanced at the expense of human health and vitality, there can be but one result, and that will tend towards individual and national disaster.

Let us hope that the dangers which our investigator promises to reveal in his forthcoming contribution are not as serious as he anticipates. A Department of Health that would work for the nation's interest would make changes in another generation that would add to the strength, vitality and longevity of the race to an amazing degree. But remember that many of the changes necessary will be radically and emphatically against the interest of those who represent the medical idea. Can you therefore depend upon medical men to discount and eliminate their own propaganda? Can the National Department of Health possibly become an unprejudiced power if it should be conducted exclusively by the members of the medical profession?

If we are to have a National Department of Health let us first of all insist upon an unprejudiced and unbiased management. Broad-minded men, who are not wedded to any one particular theory, but who will maintain an open-minded attitude, seeking at all times for the truth, are absolutely essential to manage the warring factions, with



their emphatic advocates, who are contending for the acceptance of their respective theories. In order to settle these disputes, in order to definitely and clearly learn the truth, the judges, who will be represented by the management of the proposed Health Department, must be able to view all the conclusions of the various schools of healing without prejudice.

Therefore let us have a National Health Department that is composed of men who are not now, and who have not been previously, interested in the healing art. They should be able to approach the question with open and unprejudiced minds. A body of hard-headed business men, capable of forming conclusions from plain facts that are easily ascertained, would constitute a National Department of Health that would be to the best interests of the citizens of this country.

WHEN President Taft opened the baseball season in Washington, by throwing the ball from his box in the grandstand into the diamond, it gave us an evidence of the recent marvelous growth of public interest in athletics. The athletic inclinations of former President Roosevelt no doubt set an example for our high officials of which they will take advantage at frequent intervals. Until Colonel Roosevelt assumed the duties of this high office anything in the nature of athletics was supposed to be too undignified to attract the attention or to interest the highest official in the land.

#### THE FUTURE POWER OF ATHLETICS

We owe a great deal to our former President. He is one of the few men who are unafraid. He had his own ideas of the dignity of his office, and he followed them. Every man, no matter what may be his ambitions or his profession, has a desire to be strong. He may not be ambitious to lift great weights, or to be able to successfully compete in a hundred-yard or one-mile race, but nevertheless he envies those men who possess the muscular power essential to perform those feats of strength and endurance. He recognizes that the strength essential to win contests of that kind clearly proves the possession of energies that are nothing more than a part of superior manhood, and the attributes of manhood of a high degree are needed at all times. They prove the possession of energies that are essential in mental or physical work. They prove that one possesses the instincts that are associated with the virility and the power of strong manhood.

Our future Presidents will be strong advocates of athletics. In fact, I will venture the prophecy that they will themselves have to be athletic to a certain extent. They must necessarily be strong advocates of health and strength in the nation, and in consequence they must necessarily become believers in the great value of all sorts of exercise that develop an athletic physique.

Baseball is a great game. In the development of great vigor and vitality it would be hard to equal. Most baseball players are great, strong, hardy fellows, who possess an extraordinary degree of vitality. Though I am an emphatic advocate of what some people choose to term bedroom athletics for remedying defects or for maintaining vitality, I would say to those who can take advantage of the "great outdoors" that they are "twice blessed" and that they can hardly spend their time more profitably than by an active interest in our great national game. Here you have running, and throwing, and sliding, and various other gymnastic turns and twists that require extraordinary activity of the body as well as mental quickness and alertness. Baseball will prepare one for the strenuous game of life in which all are struggling for success and happiness.

The successful men of the future will be athletic not only in body, but in mind. Our great men will have to realize the necessity for catering to the athletic element, for through the interest in athletics we can solve the extraordinary problem that is now before us, of stemming the destructive tide of physical degeneracy that is in evidence in every settled community. Let us all commend President Taft for his interest in baseball. If he would become a real physical culturist, and reduce himself to an athletic build that would enable him to personally indulge in a game of baseball at fre-



quent intervals, I am firmly convinced that he would be a better President, and though he might lose some of what some people term dignity, he would gain in energy and enthusiasm, and would be able thereby to add many years to his splendidly useful life.

THE newspapers throughout the entire country have given a vast deal of attention to the life and career of Albert Wolter, a youth who was recently convicted of the murder of a young girl. The story for which I was arrested and sentenced for publishing, several years ago, does not contain even a minute part of the immorality which is clearly depicted by this deplorable case, which has been flaunted in its most minute details in newspapers throughout the entire country. Here was a young man who led a grossly immoral life. The one object of his existence seems to have been to satisfy his perverted instincts, and this notorious youth, together with his intrigues, furnished copy that was greedily absorbed by millions of readers.

#### A TRAGIC OBJECT LESSON

It is strange that no one has complained of this tale being obscene. The newspapers in which it appeared mostly sold at one cent a copy, and were thrown around the home and read by members of the family of all ages, and not even a faint protest has been heard. Has there been a change in the interpretation of so-called obscene literature? I am inclined to think there has been a material change. Let literature of this kind go on its way. Let those who so desire read the appalling details of the life of this youth. You can not thwart them from their course—which must lead to perversion and degeneracy. If their tastes run in that particular direction they will find food for thought, if not in newspapers then within their own experiences. They are going towards ruin and oblivion fast enough, and where their minds are sufficiently steeped in immoral filth they are beyond help, and they may just as well be allowed to quickly and painlessly go on to their ultimate fate.

Albert Wolter is simply a victim of his environments. He is a product of miserable and degraded prudery. He is the result of so-called innocence and ignorance. Olga Nethersole, the famous actress, states in a recent article over her signature in the "New York Evening Journal," that Wolter's father is to blame for his ruin. She says that Albert never had a fair chance—that the furies of fate pursued him even before he reached his cradle, and that they have been pursuing him ever since, and that they will pursue him to the bitter end. She briefly tells the life story of this youth. He was born out of wedlock. In his earlier years he did not have the opportunities that are given to ordinary boys. She states that he never received a word of counsel or advice in regard to the most sacred things of life, the use or misuse of the functions of life-giving. Albert's mother told Miss Nethersole that she was too modest to talk of such things to him, and ashamed to do so, as she puts it, but that his father had mentioned to him the temptations that must be met and conquered when going out into the world among men and women, but that Albert was then past the impressionable age.

Here is a youth who is facing death because of Governmental or paternal neglect. It is the duty of parents to properly inform their offspring of all the important phases of life. Where the parents neglect this duty, then it is the duty of the Government, for it is the Government that must assume the responsibility for irresponsible citizens after they have grown to the age of an adult. If the parents fail in their duty, and the Government fails to step in and assert its authority, then it frequently becomes necessary for the Government to furnish penalties for sins that have been committed because of ignorance.

The Government owes to every one of its citizens the strength and health and mental ability which are essential to give him or her at least a fair start in life, and where children are stunted and perverted by parental indifference they have failed to secure a fair start. They are simply the result of their environments. To be sure, they frequently have to suffer severe penalties, but in many instances they are not fully deserved, for their sins may have been unknowingly committed, and they may be pursued by an inheritance—the sins of their fathers—that, if properly regarded would land them in an asylum for the insane.



Albert Wolter, as Miss Nethersole states, must suffer for a crime for which his parents might justly be blamed. They neglected their duty. They failed to properly prepare him for life. They committed the same crime against him from which millions of other young men are suffering throughout this entire country. He no doubt knew that murder was a crime, but, as Miss Nethersole states, the furies of fate pursued him, and when within the fury of uncontrollable and abnormal desires one is not in possession of his sanity. Such abnormal beings, at certain times, one might say, belong to the underworld of beastliness, and are not directly responsible for the crimes they commit.

From the very first issue of this publication we have pleaded for a reform that will absolutely eliminate evils of the Wolter kind. Boys and girls should grow up fully informed. They should understand the nature of the instincts and emotions that stir them so terribly under certain influences, and with this full understanding they would be able to more thoroughly control themselves.

As long as parents evade this responsibility, and as long as those who suffer from this neglect are allowed to grow up within the grasp of ignorance greater than that of savage tribes, just so long will we have boys of the Wolter type.

One could probably find thousands of young men in New York, and in other cities, who are leading lives very similar to that which was outlined in detail in describing Wolter's immoral career. They are all victims of circumstances—living in a fool's paradise. They are wasting their vitality and their manhood, and their chances in life, simply and solely because of ignorance. They are nothing more than the victims of parental and Governmental neglect—each a poor struggling ignoramus, going swiftly and pitilessly toward his ultimate fate.

This publication has been striking sledge-hammer blows at this ruination of young men. We have been fighting for the truth, and have been contending with might and main that these young men and their innocent, and not infrequently willing victims should be saved. They should be made to see the light, and that, too, long before they have fallen into the muck and mire of immoral habits, to discontinue which often requires a terrible struggle.

Continuing at our present rate, the time is not so far away when we will be a homeless and a childless nation. So-called homes will be nothing but a temporary habitation in which to live and eat and sleep. The divine characteristics which were formerly associated with home life will have been forgotten unless the physical culture spirit can be inculcated into the present and the rising generation. The "sowing of wild oats" is considered a necessary experience for every young man, and not infrequently by the average young woman. Let us not go into details when we talk about the sowing of wild oats—they will not bear description—but any miserable ignoramus who has gone through this sowing process in the past will testify to the terrible results that often accrue.

Take a hand with us. Join in the fight to save the young men, and also the young women, from prurient prudery. They are suffering the tortures of the damned because of mistakes they have made, resulting from this devilish policy. Vast numbers succeed in making their lives here literally hell on earth. Thousands of letters have come to me describing their terrible experiences. Life to them has been hard, cruel and pitiless. No consideration for the ignorant, no sympathy for the innocent. They are simply turned loose without warning, to learn from actual experience that is often devitalizing and even death-dealing in character, the results of their own mistakes. They should be warned in no uncertain terms. They should know definitely and clearly the actual character of all the evil into which they are almost sure to fall, and then if they deviate from the path of rectitude they have no one to blame but themselves.

Lend your aid, all you who believe in the truths expressed in this editorial. Go out among your friends, and help spread this invaluable knowledge. Write the newspapers and magazines and convince the editors of these various publications of the terrible necessity for this reform, and in the end we will have a better and a stronger race, and much of the weakness and sickness and sorrow which are everywhere in evidence at the present time will soon fade into the dark and distant past.



It is somewhat paradoxical to call an athlete "old," for, as I have so often stated, one is as old as the minute cells of which the tissues of the body are constructed.

In other words, if most of the cells are new, or fully alive, then one is young in feelings, and possessed of the energy and enthusiasm of youth, regardless of one's age. As will be noted in an article appearing in this issue, Weston, the grand old man of the athletic world, has finished his long tramp from San Francisco to New York.

#### THE GRAND OLD ATHLETE

On many occasions in the past we have referred to the very great value of walking as an exercise. We have stated that it increases the endurance, adds to the vitality, and prolongs life. That, furthermore, it will keep one young, full of the live cells that are a part of youth. The truth of this statement was never more remarkably illustrated than in the life and records of Weston. Think of it, a man seventy-two years of age accomplishing feats of endurance that he could not perform forty years ago! Seventy-two years of age, and still in the prime of manly vigor and vitality. This seems unbelievable, and yet the records of Weston indisputably prove the truth of this statement as far as he is concerned.

The spring and early summer is the most inviting period of the year, and no one should remain indoors who can possibly avoid it. Get out into the sunshine. Enjoy Nature's beauties. Fill your lungs with the life-giving oxygen, and thus help to cleanse the body of the poisons and impurities that at this particular time of the year seem to be so much in evidence.

The spring is the time for bodily housecleaning—it seems to be the period at which blood purifiers are specially needed, and if you would follow some of the suggestions I have made, if you will take a little of Weston's exercise, and use with it some common sense in your dietetic and other habits of life, you will not need a spring tonic. In fact, you will probably find yourself bubbling over with surplus energy, and life will be buoyant and exhilarating, and you may be filled at times with the joy of living and breathing. Such pleasures, mind you, cannot come to the inactive and the inanimate—one must be fully alive in every part to enjoy them. The brain, as well as the tissues of the body, must be awake and alert to secure all the energies and activities that are justly due to them.

Weston is an old man in age, but he is still a young athlete. He is apparently just in the prime of life. In his case, instead of the prime of life being from thirty-five to forty-five, it may be from sixty-five to seventy-five. Perhaps we could all extend our prime of life thirty or forty years, as he has in his case, if we would follow his advice and walk. If you are a business or professional man, not only your physical, but your mental efficiency will be vastly increased if you will walk not a mile or two, but on an average make your walks run from ten to twenty miles each day. To be sure, there may be days when you have no time to walk, but on other days, when you do have time, go on a long "tramp," and if your walk should average the distance named you will soon find yourself becoming a new man, and you will literally be born again, and your every power will be vastly enhanced because of this change.

*Bernarr Macfadden*

#### REMOVAL OF EDITORIAL DEPARTMENT.

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# Strengthening a Weak Back

EXERCISES FOR ADDING VIGOR TO THE LIGAMENTS AND MUSCLES OF THE CENTRAL PORTIONS OF THE BACK

By Bernarr Macfadden

THE vitality and strength of the human body depends to a large extent on the back. I have on a great number of occasions strongly emphasized the importance of spinal strength. Several illustrated lessons appearing in this publication last year had this one particular object in view. If one has a strong spine he is capable of holding the back in an erect position. There is always a tendency on the part of the spinal column to divert from the normal position which it should assume. The exercises appearing in the lesson in this issue are devoted almost entirely to strengthening the muscles in the central portions of the back.

In this part of the body are found some of the most powerful of all the various muscles with which we are supplied. Great feats of weight-lifting are often performed by strong men in which these muscles alone are compelled to stand most of the strain. Some strong men can lift weights ranging from two to four thousand pounds, largely with the strength of these muscles. This gives a fairly clear idea of the enormous power that can be developed in the tissues of this particular part of the body.

The muscles chiefly used by these exercises overlie what is termed the small of the back, while the muscles of the upper back and a few of the muscles of the legs and hips are brought into a certain amount of active use.

Exercises of a general nature will add greatly to the benefits which may be attained by the movements here prescribed for strengthening a weak back. As an all round exercise and remedial agent too much stress cannot be laid upon the value of walking. In order to obtain the best possible results from walking. However, it is necessary that it be performed in a proper manner. Another very important factor is the use of a proper form of footwear. The shoes

should be made to fit the feet, instead of the foot being forced to fit the shoe, as is so often the case. Even if unable to procure suitable shoes in one's immediate vicinity, recourse may be had to one of the reputable firms of shoe manufacturers selling shoes by mail, some of whom pay particular attention to the physiological aspects of making shoes fit the feet.

As stated in preceding lessons, it is advisable that each of the movements of each series be performed until the muscles involved in its execution are thoroughly fatigued. This is preferable to devoting a short length of time to performing all of the exercises in turn. The advantage accrued from the performance of each of the exercises until the muscles involved are tired, lies chiefly in the fact by calling certain muscles into sustained and vigorous play one is assured that the blood supply of these muscles will be markedly increased, and that the broken-down muscular tissues will immediately be replaced by the virile elements provided by the life stream. This by no means indicates, however, that the movements illustrated are not of a nature to be used in connection with each other. On the contrary, it will be found that they are each of a nature splendidly adapted to be performed in succession, in the order illustrated. Taken in this manner, each exercise will serve as a counter movement to the exercise which preceded it, and the entire series will provide an excellent system of movements for the muscles of the entire body.

EXERCISE A is illustrated in figures Number One and Number Two. The exercise is really very plainly illustrated by the two photographs. This movement brings into very active use the muscles of the "small" of the back, and also uses to a fairly vigorous extent the muscles of the hips, or buttocks. Recline in a



sitting position, the hands placed a little ways behind you, as shown in the illustration; now, with elbows rigid raise the central portion of the body as high as possible, and bring the head back as far as you can. Repeat the exercise until there is a distinct feeling of fatigue in the muscles in the "small" of the back and the posterior portion of the hips.

EXERCISE B is illustrated in figures Number Three and Number Four. This might be termed a lifting exercise. You reach downward and interlace the fingers behind and a little above the right knee, as shown in figure Number three, resisting the movement slightly with the leg. Now raise upwards to a erect, standing position, as is shown in figure Number four. Repeat the exercise until there is a distinct feeling of fatigue, after which rest and breathe abdominally for a few moments, then take the same exercise with the hands interlaced behind and a little above the left knee, and continue until you are tired.

EXERCISE C is indicated in figure Number Five. Place the back of the hand and wrist in the "small" of the back, as shown in illustration. Now bring the shoulders and upper part of the body as far back as possible, "bowing" the back as much as you can. Resume a natural position, and repeat this same exercise, flexing as strongly as possible the muscles of the small of the back. These are the muscles that are used in bringing the back to this particular position, and if they are tensed very vigorously the results of the exercise will

appear much more promptly and satisfactorily.

EXERCISE D is illustrated in figures Number Six and Number Seven. This is an ordinary movement that is shown quite frequently for bringing into active use the muscles we are desirous of affecting in this particular lesson. It is not quite so vigorous as the previous exercises, but it is good to combine with the others, as it is inclined to develop suppleness and activity as well as strength. Reach downward and touch the toes, the knees stiff and elbows rigid, as shown in figure Number six. Now swing the arms outward and upward, with the elbows rigid, reaching upward and backward as far as you can, as shown in figure Number seven. Repeat the exercise until there is a distinct feeling of fatigue. Draw in a deep inhalation as the arms go upward, and exhale as the arms go downward.

EXERCISE E commences from the position illustrated in figure Number Eight. Bring hands outward slightly, as shown, bend downward, touching the toes with knees straight, then raise upward, swinging the hands outward (as shown in illustration), and upward, until the same position as shown in figure Number seven is assumed. Continue until there is a feeling of fatigue. Variations of this exercise can be taken by bringing the arms forward to the right as you go upward and backward, and then when repeating the movement swing far over to the left, alternating to the right and left during each movement.

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## A Unique Summer Camp

The portrait of the sturdy young lady appearing in our cover design this month, together with other photographs used to illustrate the articles on "Camping," which begins on the following page, are copyrighted by Underwood & Underwood, and were taken at the summer camp which is yearly maintained at Pelham Bay Park, near New York City.

This camp is an unusual and most commendable object lesson for the Park officials of our large cities to investigate, with the view of establishing similar

camping-sites within their own jurisdiction. It is located on public property, and any one desiring to camp there may do so on receipt of a permit from one of the park commissioners of New York City, to whom application may be made at any time. The city maintains a free water supply for those who dwell in this unique colony, and also enforces sanitary regulations in the camp. Last summer nearly four hundred tents—owned by the campers themselves—were erected at this unique settlement.





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A family party and their well equipped summer home under canvas. This group of fresh air enthusiasts afford substantial evidence of the benefits of outdoor life.

## When, Where and How To Camp Out

By Arlington Ide

### SOME USEFUL HINTS FOR THOSE PLANNING AN OPEN AIR VACATION—HOW TO SECURE THE BEST POSSIBLE RESULTS THROUGH A RESORT TO NATURE

It is unfortunately true that many of those who look forward with pleasure to an outing in the open air during the summer months, and to spending a vacation within walls of canvas, only too frequently fail to secure all of the pleasure and benefit they anticipate from their trips. As a rule this is chiefly due to a failure to observe sanitary and other precautionary measures to secure proper surroundings when camping. The following discussion of what is most important and needful for the prospective camper provides information as instructive as it is interesting.—Bernarr Macfadden.

**T**HIS is the time of the year that we feel stirring within us, the desire to get in touch with the sights and sounds and scents of Nature—the time when the city streets become a burden, and the roar and tumult of the communities of men, a weariness to the spirit, when we yearn for woods and meadows; for the gurgle and sparkle of streams, the cooling stretch of lakes, the rustle of leaves, the odor of grasses, the crash of breakers on silver beaches—the

time, in short, in which the out-of-door instinct inherited from our primeval ancestors, asserts itself and, if we be wise, we will listen to and obey it.

Happy is he who so obeying, can manage to go a-camping. For in no other way can we so faithfully observe the mandates of the instinct. Yet because we have lived many generations of artificial existence, we have lost much of the sense of living naturally, such as a camp demands.



The writer will endeavor to point out some of the mistakes into which the unaccustomed are apt to make when they determine to break away from the usual summer resort and tent it for the hot months. Many people seem to imagine that a season spent in a summer camp, while relieving them of a large proportion of the physical ills and mental troubles of city life, frees them also from the dictates of hygienic laws. The result is, that the end of the vacation not

into the wilderness, or engage the services of a man who is capable of showing them how to properly revert to the life primeval. But the economy and apparent simplicity of camp life—especially under canvas—appeals to them mightily. And so, they read up on the subject; perhaps appeal for advice to those who stand ready to give it, purchase supplies, and set forth to get close to Mother Earth and her summer charms with the assurance of the inexperienced.



A trio of campers making way with the good things provided by their volunteer chef.

only finds them minus the benefits that should rightly have been theirs, but not infrequently, their ignorance or carelessness have sown seeds of disease that are apt to bear a harvest of doctors' bills in the months that follow.

It need hardly be said that these remarks do not apply to the experienced camper, or to those whose return to Nature is done with the assistance of a professional guide. Nor are they intended for the persons who sojourn in the permanent camps attached to certain summer hotels, or who abide in the modern portable houses. In these latter instances, the term "camp" seems to the writer to be somewhat of a misnomer.

But the chief sinners against sanitation in the way cited, are people of moderate means, dwellers in big communities, who cannot afford to go far

The return to town is not infrequently made in a premature manner and under the conditions already intimated. And yet, an exercise of moderate degree of hygienic sense would have made the camp a success where it has proven to be a failure.

Now, this discussion will not attempt to touch on the needs of the camper at length. All that it will try to do is to call attention to the simple physical culture measures that are essential to the comfort and welfare of the campers. It may be added that the writer speaks with some amount of authority on these matters, as he has been a member of many modestly-equipped camping parties in various parts of this country.

Let it be supposed then, that the party has been formed, outfitted and that the approximate location of the



camp has been determined upon. The next thing to do is to select a sanitary site for the tents. In spite of all advice to the contrary, the writer thinks that a camp should be pitched under a tree or trees. Shade is one of the things desirable in the summer time, and ideal shade is furnished by tree leaves because, while they keep off the sun, they do not interfere with the free circulation of the air. Pay no attention to the yarns about a camp so situated inviting lightning strokes, or that you are running chances of being crushed by a falling tree. Trees that fall and trees that act as lightning conductors are alike so rare, that they may be classed as negligible factors in the matter.

Remember that it is better to pitch high rather than low. This statement too, will not meet with general endorsement perhaps. But the camper of experience will tell you that the advice is



A halt for refreshment by the waterside—no need for artificial appetizers here.

correct, nevertheless. By pitching high on a hill-side or on a plateau, you get a natural drainage; you obtain your share of any of the winds of Heaven that may be stirring and yet are not in evidence lower down, and you are freed from many of the insects pest that infest bottoms and river sides. Besides all this, the ground around brooks and near the foot of hills is not infrequently damp and miasmatic. Again, if you are on a hill-bench or a woody ridge, you avoid a good deal of the morning and evening mists that arise in the valley below. Whenever possible, let the site be on slightly sloping ground. This will cause the ground beneath the tent platform to get rid of rain-water in short order, and will keep it dry under ordinary conditions. A porous, sandy soil is to be preferred to all others for camping purposes.

The amateur camper is apt to make his tent unduly "snug" at night by



A smudge or smoky fire may often be used to advantage when insects cause annoyance.



tightly lacing the flaps. A groundless fear of night air and the desire to "lock the door" when darkness falls—both legacies of the life civilized—are responsible for his so doing. Or the presence of women and children may additionally prompt him to these unnecessary proceedings.

Now a tightly closed tent stands for poor ventilation. In the case of an ordinary room, some amount of fresh air finds its way inside between the window

put additional coverings on your cot. But for the sake of your lungs and your body in general, don't violate that law of sanitation that declares: "Thou shalt not inhale polluted air."

The water supply of a camp is another matter that should be carefully considered. In the heart of the Rockies, or amid the mountain fastnesses of British Columbia, it is perhaps safe to drink from any spring or lake that you come across. It is otherwise if your tents are



An ideal spot for camping—wood, water and shade in abundance.

sashes, even when the latter are closely closed. But a tent has no windows. And if the platform is flush with the canvas, comparatively little air can enter from below. If there are from four to six persons sleeping in, say, an eight by twelve tent, hermetically sealed in the fashion described, it is a foregone conclusion that their slumbers will be uneasy and that the morning will find them peevish, feverish and headachy. They have been breathing poisoned air for eight hours or so, and suffer in consequence.

Fresh air and plenty of it by night and day is, or should be, a prime factor of the régime of the camp. Such air, whether it be still or in motion, never harmed anybody. It is the want of it that breeds mischief. Sleep with your tent flaps open. If you feel chilly during the night,

pitched in a farming or grazing district. In the latter instances, it is advised that if the water comes from a stream or creek, it be boiled before use. The precaution may *not* be necessary, but its safety is obvious. Also, a small filter such as are especially made for camp use, will rid the fluid of a lot of foreign matter that, while harmless, isn't nice to look on or to swallow.

An ideal water supply is that that is furnished by a spring-head. Should you be camping in rolling or hilly country, you should have but little difficulty in finding such a source of supply. As a matter of precaution, it is better to have your tents a trifle below instead of above the water, whether you drink from a stream or the pool that is to be found adjoining the head. By so doing, you avoid the possibility of polluting the supply by





A group of veteran campers whose knowledge of woodcraft and outdoor life is attested by the excellent location they have chosen.

scepage, refuse, etc. Note also what is said elsewhere about the location of latrines.

If you are not lucky enough to have a spring-head handy, watch out for wet weather. When rain seems inevitable, get a supply of water in the camp while the source of your water supply is still clear. A creek or river disturbed by a rain or freshet is always discolored and sometimes positively unhealthy. In summer it usually clears quickly, but still the reserve fluid is a good thing to have. See to it that the camp is kept clear of refuse. Burn or bury debris or remnants of meals as soon as possible. The stuff, if allowed to gather, attracts flies, and these pests are numerous enough around camps normally, without the setting of baits for them.

Speaking of flies reminds one that fly-netting is an

essential to the camper out. In addition to the comfort that the material brings by day and night, it is well to prevent insects from making free with food. The country as well as the city dweller is not immune from the disease-infection that these pests may bring with them. Apart from that, it is neither pretty or pleasant to see one's provender made a promenade for all sorts of creepy, crawley things.

The question of latrines or closets is an important one to the camper. As far as location is concerned, they should always be *below* the camp and so situated that there can be no possibility of their harming the water supply. A three-foot hole dug in the ground, having two uprights so fixed that they extend about a foot above the ground, these



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A part of camp life that it's best to take smilingly.



supporting a horizontal board eight inches in breadth with a opening of a proper size cut in its centre, will be found to be convenient. Of course, the uprights must be firmly planted. A bucket containing *dry* earth and a small shovel is also useful. From a sanitary point of view, the earth-closet leads in efficiency and the arrangement just described is of this sort. A latrine of this type will never prove offensive.

It need not be added that the latrines for each sex should be located at separate locations. A small tent, sufficient to surround the accommodation is advised. Such a tent can be made at home. Also do not fail to provide for sudden sickness or such weather as may render impracticable the use of the latrine by the women of the party.

If the ground is fairly porous, such as you will find in, say, Maine, the Adirondacks, New England or Western Pennsylvania, there is not the slightest necessity for a trench being dug around the tents to allegedly carry off rain-water or dew. The average greenhorn thinks that such a trench is an essential, but this is not so, however. The ground in the localities mentioned will dispose of the results of a heavy shower in a half-hour or so. The trench is, however, needful if you are pitched on a heavy, clay-like soil. But whenever possible, such localities should be avoided, as they are more or less unsuitable for a camp.

Do not forget that the adage that "Cleanliness is next to godliness" stands good in camp as well as out of it. Neatness is one of the cardinal virtues of life under canvas, as far as the camp itself is concerned. After you have decided on your water supply, see what facilities it affords for bathing. In nine cases out of ten you will find a pool or stretch fitted for your ablutions. An improvised screen of boughs or of a tent flap will afford privacy if necessary. If you can arrange to take along a small sitz bath, you will not regret so doing. The ladies in particular will appreciate it. It is intended for use inside the tent when the weather or other matters make out-door baths uncomfortable or impossible.

In regard to clothes, the camp is an excellent place in which to get rid of all

the garments that are too ancient in fashion or too shabby in appearance to wear in the city. Also, old clothes, like old friends, are the most easy and comfortable. The outer garb may be pretty nearly what you like; but next the skin wear cotton. You will probably be advised to have underwear of woolen, but pay no attention to such counsel. Cotton is cool, clean and enduring. Silk underwear—though expensive—is also to be commended.

The ordinary tennis shirt, with pockets right and left, is a capital garment for camp wear. Choose the sort that has a rather broad collar. If it turns cold, the collar can be turned up and, if you have a scarf handy, tie it around the collar and you will be as snug as the proverbial "bug in a rug." Three, or even a couple of such shirts, will be amply sufficient for a month's stay in camp. While you are wearing one, the other can be at the laundry—in the nearest brook or lake.

Do not take an overcoat with you in camp, fearing a cool snap—a sweater is far better. But even this will not be necessary if you have an additional shirt to slip over its fellow. The layer of air between the two garments will keep you very warm indeed.

Of course, you will wear no collar in camp. Instead, use a silk handkerchief. This will protect the neck from chafing and is always cool and perspiration-checking, even on the hottest day.

Never forget that a camp is a place of recreation, first, last and all the time. Let the children run wild if they want too. Don't permit the women folks to work and worry about the tents and their belongings as if they were the rooms and furniture of the ordinary house. Impress on yourself and the others that you have cut loose from the irksome duties of civilization and that you are going to give your hands and mind a thorough rest. Do all you can to make fun in the camp. See to it however, that such fun and the life in general shall be of a wholesome and interesting sort.

So shall mind and body be refreshed by reason of their return to Nature and you shall call the summer-camp blessed, by reason of its beneficial influences.





Signor Zerola, the great tenor, as "Riccardo," in Verdi's "Masked Ball."

## Physical Culture and the Vocal Art

By Frank Prina

Signor Zerola, the golden-voiced Italian tenor, who is the subject of the sketch which follows, is a living example of the remarkably beneficial effects of wholesome exercise and right living upon the human voice. Even the most unobservant must have noted that ill-health of one sort or another exerts plainly apparent ill-effects upon the human voice, and it is unquestionable that robust health has a correspondingly beneficial effect upon the vocal organs. A study of the regimen followed by Signor Zerola should prove particularly instructive to those who are interested in the cultivation of the voice.—Bernarr Macfadden.

WE have read, from time to time, in the pages of PHYSICAL CULTURE, of the achievements, lives and habits of clergymen, scientists, inventors, commercial kings and diplomats, as well as actors, but believe this is the first time anything has been written about a real operatic "star."

The name of this great "star" is Nicola Zerola, the dramatic tenor, who

came here unheralded, and at the opening of the Academy of Music, New York, simply carried the metropolis, as well as its press, by storm, with his great singing and masterly interpretation of Verdi's wonderful—though extremely difficult—"Aida." Those readers who are fortunate enough to have heard him since, will bear me out when I say that such a real "robusto" tenor voice has



not been heard here since the days of our never-to-be-forgotten idol Tamagno, for whom Verdi wrote "Otello."

It is in few instances that the press in general has given such unanimous praise to an artist. All the criticisms were gratifying and pronounced him an artist above the ordinary.

Why? Because he came here without any previous advertising and "delivered the goods" by displaying a magnificent, evenly-placed "robusto" tenor voice of such beauty and potent qualities, that one critic of a prominent daily remarked "the power of his voice made the seats tremble without affecting, in any way, its beautiful ringing quality."

The word *power* means a great deal. To be powerful in anything, one must have something to uphold it, or, better still, "back it up." Signor Zerola "backs" his power and endurance with a wonderful physique, and as one newspaper stated, "he is built on such heroic lines that he offers a striking contrast to the many diminutive tenors we are in the habit of hearing." He stands close to six feet in height, weighs one hundred and ninety-five pounds and has a chest measuring forty-eight inches. To see him stripped, he im-

presses you as a weight lifter, in fact is a prototype of Eugene Sandow, for whom he has often been taken, there being a marked resemblance in their features.

When asked how he had reached such a fine degree of physical development, he responded by saying that he owed his physique and great lung power to a great deal of outdoor life and careful living. As a youth he romped and played as a

real son of sunny Italy. Born at Naples, he spent much of his time in the Bay of Naples, swimming and rowing, as well as in other aquatic sports, and shows with real modesty, two medals he won as a swimmer, one in an endurance contest and the other for, as we call it, "fetching," that is, swimming under water. This early athletic training was the means of building up a strong constitution and vital power, which has stood him in good stead in the fifteen or more years that he has been singing.

Tosing as he does, and as often, requires confidence, endurance and vital power, which are the results of enjoying perfect health, and it is only with this health that he is able to keep "on edge" as well as "on pitch."

Signor Zerola does not smoke or drink, and emphasizes the fact



Signor Zerola, as "Radames," in Verdi's "Aida."



that to retain the quality and flexibility of the voice, one must refrain from indulging in either of these two harmful practices. It is a well known fact in medical science that the use of stimulants will, in time, cause the vocal chords to lose their elasticity as well as their power.

He pays a great deal of attention to regularity in sleep, in fact, anything he does. He sleeps on an average of eight hours in every twenty-four; arising early every morning, even after having sung an opera the night before, he dresses and starts out for a good brisk walk of about thirty minutes duration, breathing deeply and expanding his lungs to their fullest extent all the while; returning he goes through a systematic course of exercises with three pound grip dumbbells, which lasts about fifteen minutes. In this work he pays particular attention to exercising the abdominal muscles, as well as those surrounding the vital organs. The strength and condition of the abdominal muscles play an important part in the make-up of a singer. If they are not under perfect control and are not responsive, he may come to grief when singing an exceptionally long phrase or when attacking and sustaining his "top" note.

To get back to Signor Zerola's work, by the time he is through with his exercises, he has worked up a good perspiration, and with a plunge that cools him off and a good rubdown with a heavy Turkish towel, he is through with his morning work. After looking over his morning mail, he partakes of a light breakfast, which consists of eggs, milk, cereals and fruit. At eleven he goes to rehearsal, which lasts sometimes four or five hours. On days that he has no rehearsals, he devotes the time to studying new rôles, calling on friends and attending to his correspondence.

Late in the afternoon one is sure to find him out strolling leisurely, accompanied by his wife. At about six o'clock he has his dinner, which is the only heavy meal he eats during the day. In the selection of his diet he is extremely careful, eschewing rich gravies, pastry, heavy meats and anything of a greasy nature. His dinner consists of soup,

vegetables, salads and a little poultry and fish now and then, and at every meal one is sure to find either rice or spaghetti in some style or another, the Signor being very fond of the latter two dishes, as most Italians are. It takes him almost two hours to eat his dinner, eating slowly and masticating thoroughly he believing in the axiom: "Chew your food, the stomach has no teeth." He usually ends his meal with a little fruit, light pudding or ice cream. As for drinks, he never touches tea or coffee, but drinks with his dinner a glass or two of a sweet red Italian wine, which is similar to our grape juice.

On days that he sings, he has his heavy meal at about 2 P.M., so that by the time the opera commences, which is usually about 8 P.M., his food has had ample time to digest and thus free the stomach of any foreign matter. He adheres strictly to this rule, saying; "that to sing well and without effort, one's digestive organs must be at rest and the circulation of the blood normal." The only nourishment he takes between this meal and his breakfast the morning after is a quart of milk, in which three eggs have been beaten, this he sips slowly after having finished singing. After getting home from the opera he goes through a few calisthenics and with a vigorous rubdown he is off to bed.

What I have written is the simple, yet very effective and self-satisfying way in which this great artist enjoys perfect health and happiness. Just a few words in regard to the man himself. He is thirty-six years old, of a fine old Italian family, very intelligent and holds a diploma as a civil engineer. It is about seventeen years since he took up the study of music in earnest, and it was after five years of good hard work that he made his debut as an operatic singer, and then it was a baritone, assuming the rôle of Tonio in Leonecavallo's "Pagliacci." His teacher had been very conscientious and willing, but it seems that he could not distinguish a baritone from a natural tenor; it may be possible that the power of his voice may have deceived the teacher into thinking him a baritone. He sang four years in this capacity, meeting with indifferent success. During



all this time he felt inwardly that he was a tenor, but he seemed willing to let well-enough alone, until one day he finally made up his mind that he would have his voice tried and get the opinion of a very prominent maestro.

Assured that his voice was a very promising dramatic tenor, he set hard at work bringing his voice up and avoiding the use of his lower register, which register seems to be the backbone of a baritone, and inside of a year he made his re-entry in "Pagliacci," but this time as "Canio," which is the leading tenor rôle of the opera. He created such a furore that after the opera his admirers dragged him in a carriage through the streets of the city. From then on he met with one success after another, singing in all the great opera houses of Italy, France, Spain and other parts of Europe. He also scored great triumphs in Egypt, Mexico and Cuba. He now has a repertoire of over thirty operas, and is ready to sing anyone of them after twenty-four hours notice. His repertoire is made up of rôles that call for a tenor with a powerfully high-pitched voice and who possesses real histrionic ability. Of the "old school" he sings such operas as "Il Trovatore," "Aida," "Masked Ball," "Otello," "Ernani," "L' Lombardi," "Don Carlos," "Norma," "Samson and Delilah," "L' Poliuti," "Le Prophete," "Le Juive," "Carmen," "Les Huguenots," "William Tell," "La Forza del Destino," and others that are not familiar to American opera lovers, as well as "Cavalleria Rusticana," "Andrea Chenier," "Siberia," "Fedora," "Ger-

mania," "Manon Lescaut," (Puccini's), and "Tosca," of the more modern school. He is the greatest living interpreter (there being only two other tenors who attempt to sing it), of Rossini's "William Tell," which opera has been shelved for the want of a real "robusto" tenor who is a great actor as well. It was in this opera that our friend Tamagno was "at home," and to be proclaimed the successor of Tamagno, as Zerola is called in Italy, is saying a great deal, for, as you know, Tamagno was the greatest tenor the Italian operatic stage ever produced, not barring the great Rubini, or the much-beloved Mario of decades ago.

Signor Zerola has been preparing for two years, Verdi's "Sicilian Vespers," and he has been promised a revival of same at the Manhattan Opera House. In this opera Zerola as the singer, actor and finished artist will make us forget the great tenors of the past as well as those of the present.

This article has not been written simply to exalt Zerola and belittle other equally conscientious artists, but to show what talent, confidence and persistence, backed by perfect health and a fine physical development, which is only the result of hard work, will do for anyone who is striving honestly to reach the top rung in the ladder of success in any profession.

It may interest English readers to know that Covent Garden Theatre, London, has engaged Signor Zerola for the next three years, to sing leading tenor rôles, commencing with the coming season.

### Again the Canned Diet



They work while you sleep.

Help! Help! The can is alive.



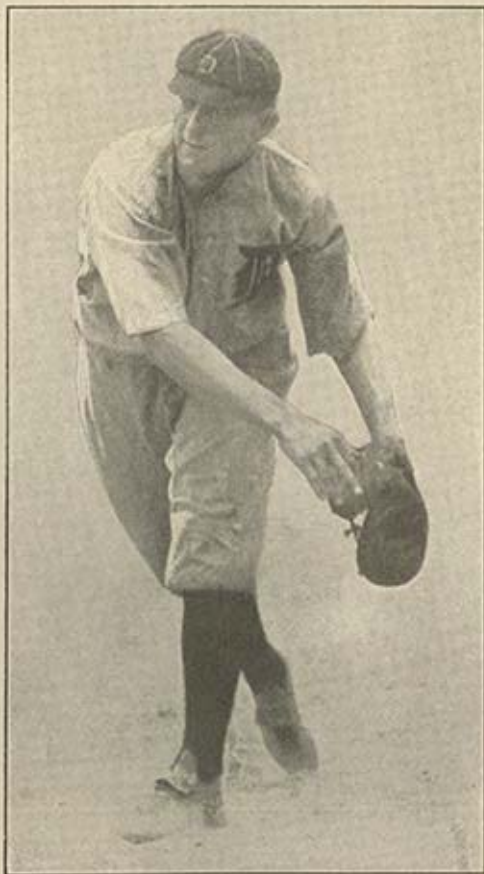
# Tuning Up the Ball Players of the Big Leagues

HOW MEMBERS OF MAJOR LEAGUE TEAMS ARE ROUNDED INTO SHAPE, THE PROBLEMS OF CLUB-MANAGERS, AND HOW THEY SOLVE THEM

By Sam Miller

Baseball well deserves the appellation most commonly applied to it—the great American game. As an exercise it has few peers—one might reasonably say that it builds brain as well as brawn. The expert ball player is forced to use lightning-like quickness of thought by many of the emergencies which confront him. The game is such as to call every muscle into play, and one must be thoroughly alive in every part of the body to become an expert player. The following description of the methods of training followed by the stars of the game lends point to the contention so often put forth in these pages—that the body and mind are both at their best and that man rises to his fullest capability, in work or play, through well-chosen exercise and under a proper system of training.—Bernarr Macfadden.

**D**URING the early spring, there is much speculation among baseball enthusiasts as to just which players their favorite clubs will take south for training, and as to just who will survive the trial of the preliminary season and earn regular places in their team's line-up. Few of even the dyed-in-the-wool followers of our most popular outdoor pastime realize what this trip means to both owners and players. Long before the training season begins, the managers of the clubs of the major leagues devote much thought and consideration as to just who shall accompany the teams under their direction on the spring training trip, and as to just



Ty Cobb. This Detroit player has been the sensation of the American League, ever since his entry into the ranks of that organization several years ago.

what system shall be used to train each player up to his best form.

The spring training of ball players does not merely consist of selecting a training grounds, choosing sides and playing the game in an aimless manner for a few weeks. The plan of a preliminary period of training was formulated by the magnates to have their men in tip-top physical shape by the time the playing season opens. They realize that no one likes to pay to see a team of ill-conditioned individuals play a game, so each year they dig down deep into their pockets, and spend sums averaging from ten to fifteen thousand dollars before even seeing a chance to get back any of



the money thus expended.

To the players this training season means a whole lot. Many of them are sent south for a tryout, and it is up to them to fight desperately for positions on the team. If they are found wanting, back to the "bush leagues" they go. No player is sure of his job, and it is a continual strife between the veterans and the youngsters for regular berths. And in the parlance of baseball, "veteran" is not used in the sense in which the word is usually understood. A veteran in business life, is usually a gray haired man, of many years. But not so the ball player. At the age of from thirty-five up, when a man should be in the prime of life, he is in most cases considered unfit for fast company. Of course there are a few notable exceptions, of which I shall speak later, but this is the general rule.

The spring training squads usually number from twenty-five to forty men—in some cases more. Accompanying each team is usually a trainer and perhaps a doctor to look after the athletes, and these certainly are busy men. They are very important assets of each team, and the success of a club depends a good deal on the calibre of the trainer that is procured. A good man will keep more players in the game during the season, and cause less changes in the line-up. Changes in the makeup of a nine break up teamwork, and a good team is one that is intact all of the time.

From the minute the ball player arrives at the training camp until he leaves he is on the go. The manager looks over the men, and recommends a method of procedure for each. This pitcher has too much surplus flesh on him, and he is told to jog around the park at a fair clip bundled up in sweaters, before and after



Howard Camnitz, of Pittsburg, a young pitcher who led the National League last year.

practice, to bring him down to the required weight. That infielder is too slow, and he is instructed to practice sprints, and take a little flesh off his legs, and so it works on down the line.

The one great asset of every ball player is headwork, and it is not the college man who is the sole possessor of this quality. Many a collegian has broken into the game, and been forced to retire, or is playing in the minor or "bush leagues" as the profession denotes the smaller circuits on account of poor baseball sense. A player is born, and not made, is the contention of the greatest authorities, and many an apparently ignorant lad risen from the lots can display a higher degree of quick-wittedness in a baseball sense than the college player.

While we are on the subject we will take as an illustration Merkle's famous failure to touch second in the Chicago-New York game, on the Polo Grounds, in 1908. Who would ever accuse Mike Kelly of an oversight like the one spoken of? Merkle is a schooled man, but never thought of the consequences of his hasty action. Kelly had no schooling, but was the brainiest ball player who ever lived.

The necessity for quick headwork is the chief point impressed upon each of the youngsters. The infielders are drilled by the manager in the most effective methods of outwitting baserunners, and how to play different batters, and the best methods of throwing the ball to the bases. The outfielders also receive instruction on the same lines, by the managers—all of this being preliminary work, however. A new player breaking into fast company will never know where he is going to play, as he gets a tryout at every position, and frequently an outfielder may become a catcher or infielder, while a pitcher may in the same manner be de-



veloped to play some other position.

The first important point that the manager observes about the recruit is his position at bat. Some men hug the plate, some stand off a bit too far, while others swing poorly. Some men bat right-handed, but the manager noting that these are good runners, tries to teach them to bat left-handed. The reason for this is apparent. A man who bats right-handed, loses time in dropping his bat to run to first base. On the other hand a left-handed batter hits and runs with the same motion. A left-handed batter is usually a good bunter, because he can get a good start on the fielder.

During the batting practice, the men are placed in squads, and sent to different parts of the field. A few pitchers are detailed to each squad, and the men simply stand up, and take a swing at the ball, being careful not to make too much of a swing for fear of their arms. They have to go slow at first, to get these members tuned up to the right pitch, or they will be put out of commission for a month or so, or even forever, as has happened in many cases.

The manager goes from squad to squad, and corrects the faults noted in each player, while the latter strives to follow the example set by the manager, and the success with which he follows the system, determines whether he shall be a member of the team, or be sent back to the "minors." Many players are wonders in the spring trips, but make very poor hitters in actual competition. These invariably

go back to the smaller leagues after a short stay, where they may make good again, and be given another trial. Sometimes they stick on their second attempt, but in many cases they are sent back each time. That is why we find so many men batting .300 in the minors, while others batting less are given a trial, and make good. The league managers are tired of taking these habitual failures along with them, which explains why they are not drafted.

After a few days of this sort of practice the real practice game-work commences, and the calibre of the players is further tested. In these games the pitchers are the men that are watched closely. The young twirler is cautioned not to use curves for the first few days, but simply pitches straight balls. Pitching a curve is a great strain on the muscles of the arms and if performed without proper preparation, may ruin the career of a promising twirler. The arm is not in

condition to be twisted in any way, and a sudden snap of that member, such as is employed in throwing a curve, may displace the sinews, and cause great pain. This will disappear after awhile, but the player may never again be able to pitch as well as before. His arm will be practically dead, and he will have what is known as a glass arm. The pitcher may be a great player, but five or six innings will be his limit. Unless the real injury is discovered he will have to retire from baseball.

This bit of information may be of great value to those readers who



Dode Criss, St. Louis. The best batting pitcher who ever played in the major league circuits.



play the game. Many a young ball-player has often wondered why his arms pain him, and the above is the explanation. A pitcher should always have his arm protected from the cold also, as I have known men to be out of the game for a year on account of a cold in the arm. A most notable instance of this sort was that of the late Bill Hogg, formerly of the New York Americans, and later with Louisville. Spring training put him out of commission in the big leagues. Clarke Griffith, who was then manager of the New York American League team, forced Hogg to pitch against Newark in an exhibition contest, on a cold drizzly day, in spite of the pitcher's protest. This killed his arm, and sent Hogg back to the minors. Such an occurrence as that stated above is not uncommon, and many a sad-hearted youngster is turned back for this reason.

On the other hand, by following the instructions of the managers a player can generally improve wonderfully. Wholesome food is provided by the club, and all that is required of him is steady work. If the pitcher is not heavy enough every means is tried to make him heavier. If he is too heavy, and shows promise, he is sent to Hot Springs, Arkansas—of recent years a famous resort for ball players—and reduces his avoirdupois by a course of baths.

His daily runs around the park strengthen his endurance, and clear his head. His constant exercise pitching the ball develops his arms to a great degree. The pitcher should be a big, husky man of great endurance, and a great capacity for work. Pitchers of small stature who have made good in the big leagues, can

be counted on the fingers of both hands. A slightly-built man can never have the speed of a six-footer, and usually depends upon his ability to outguess the batter. A splendid lot of pitchers, from the standpoint of general muscular development, is employed by the Brooklyn Club, of the National League, who, with one exception, measure six feet or over. A new recruit on the team who is bound

to make good is Schneeborg, a youngster who stands six feet, three inches in his stockings, and is built proportionately. Among this club's pitchers are some of the finest specimens of muscular development ever sent to the big leagues. Nap Rucker and George Bell are also well-built men, and the only pitcher on the team under six feet is George Hunter. A man must be big, and must have ability to make a good pitcher in the big leagues. A fairly good man will always get a fair try-out, but it is up to him to make good.

The infielders should be fast, heady men, and this is what the managers are always on the lookout for. They should not be too light, but size

does not cut much figure, although it is bound to work against the player at some stage of the game. The men trying for the infield positions are practiced on gathering up hard hit ground balls, and liners, and in throwing to the bases. There are different methods employed by each manager, but the general maxim is to throw to the base, and the fielder guarding the sack should be on the job all of the time. The laggards are disposed of right away, and it takes some tall hustling to keep up with every play.



"Cy" (Denton) Young. The grand old man of baseball.



The outfielders are trained in getting after all sorts of drives to the outer works and compared to the infielder's work, they have nothing to do. The main thing that determines a manager in the selection of his outfield is the hitting ability of the various candidates. The best hitters get the jobs, because good hitters are scarce, but fielders can be found anywhere. A combination of a

good hitter, and fielder in one man, makes the latter invaluable as a member of the team, and he can command a great salary. A good example of this sort of a player is Willie Keeler, the former New York American Leaguer. As an outfielder he was without a peer, and he was always in the front rank as a batter.

The great danger to the outfielders is the gradual weakening of their ocular powers, which is the result of playing the sun fields. The right field in American League Park, in New York, and the left field at the Polo grounds, have ruined the eyesight of a score of players, many of whom would have made good on other teams. Keeler, with all his skill, was forced to get out of the New York American League Club for this reason. Practically every ball park on the big league circuit has a sunfield, and the



Tom Bliss, a promising young catcher who made good at St. Louis last year, going after a high one.

men who play these positions are invariably found wanting in batting after a few seasons on account of weakened eyesight, and are sent back to the leagues where the pace is slower.

Another source of great bother to infielders and outfielders is the malady known as "charley horse." A player suffering from a charley horse is absolutely useless until cured, and here is where

the trainer plays his most important part. The afflicted player cannot run, as he is sore all over, and his knee joints and leg muscles are stiffened and cramped. It takes a lot of rubbing and massaging by the trainer to cure this ailment. It is caused by sliding to bases, and general exposure, and almost every player suffers from this malady on the spring trip at some time or other.

The work of the catchers on the southern trip is watched by the managers with the same attention that is paid to the pitchers. The backstop practically runs the team, and must be a man of judgment with a clear head, and know what to do in critical moments. He must also be a good thrower and have a strong arm so that he can get the ball down to the bases in time to head off the runners.

A light man rarely if ever makes good at this posi-



"Kitty" Bransfield, the veteran first baseman of the Philadelphia Nationals, who is still full of ginger.



tion. He needs all of the weight and strength to keep him on his feet all of the time. He plays in more games than a pitcher, and must show something in order to be kept on the squad. A good catcher is the most difficult ball player to locate, and out of the raft of men tried out every year, only two or three show enough ability to stick in fast company.

The catcher is tried out in all of the exhibition games, and the manager observes his manner of gauging his opponents. He tries to show the new man his faults, and shows him how they can be corrected. The new man follows instructions as far as he can, and if he shows promise, he is kept a season, even two or three. If not he is sent right back to the minors. Out of a total of more than thirty catchers tried out in the American and the National leagues last season, only three made good. Archer of the Chicago Cubs proved to be a wonder, while Bliss, of the St. Louis Nationals, and Livingston, of the Philadelphia Athletics, show signs of greatness.

This season there are but two men in fast company, that show signs of developing into first class backstops; Mitchell, of the New York Americans, a former pitcher, is the better of the two. Erwin of the Brooklyn team is the other man.

A team that is shy in the catching department is like a wheel with a weak hub. A few years experience in the big leagues ought to show the man behind the bat the noticeable weakness of every player, and he must be up on all of these points, or he will be found wanting.

Frequently a manager makes the mistake in trying to correct the throwing position of the new recruit, and spoils his effectiveness. This happened in the

case of Archer, of Chicago. When this player was a member of the Detroit team, Hughey Jennings, who was manager, tried to make Archer throw from a position on his toes. Archer is what is called a flat-footed catcher, one that stands well back, letting the weight fall on his heels. He could not learn Jennings' style, and was sent to Buffalo. Frank Chance of the Chicago National team then took him up, and he was the sensation of the league last year. Jennings' poor judgment in this case cost

him the world's championship, as he had no good man to stop the pilferings of the Pittsburg nine.

After a month's work in the training camp the squad is usually divided into two sections, and they make their way north by easy stages, playing exhibition games in the big cities on the way. This is the hardest part of the campaign.



Willie Keeler, another veteran who is still good. He is shown here making a perfect bunt. Jack Kleinow, of the New York Americans is behind the bat.



The fare at most of the places is poor, and the ball player welcomes the sight of the home town with relief. We poor scribes also suffer untold tortures on these barnstorming jaunts.

The life of the ball player is not all roses. This was brought home forcibly to the writer at Atlantic City last year, when he was paired off with Tommy McMillan the diminutive shortstop of the Brooklyn Club, at the hotel. After the game with the local team I went back to the hotel with McMillan, and when the latter stripped I noticed three livid welts on each leg. McMillan, who is the lightest—and also the smallest—man in the major leagues, weighing but one hundred and twenty pounds, informed me that these were souvenirs of the local diamond, that he procured while sliding to bases. Both of his legs were terribly scarred, as the rough contact with the sod even wears through the padding that the players wear.

The catchers also are scarred, but in another way: Take a good look at the hands of any professional catcher, and you will probably find that many fingers are knotty, and broken, while the palms are one mass of blisters, and bruises. Lou Criger, of the New York Americans, and Jim McGuire, of the Cleveland team, have fair samples of battered hands. These men are real veterans and are two of the few old timers who are still playing the game. "Cy" Young, of Cleveland, is the oldest man playing the game in the major leagues in point of activity. He is the real marvel of the diamond, and has been in the game twenty years, but his pitching is just as good as ever. He lives a healthy outdoor life, and is something of a vegetarian. His forty-third birthday was celebrated last year, when he pitched a no hit, no run game. He will be a factor in the race this year also. Other veterans who are still actively engaged in the game are Fred Tenney of the Giants, Kitty Bransfield of the Phillies, Fred Clarke, of Pittsburg, and last and not least the great, and only Hans Wagner, of the same team. No baseball story would be complete without mentioning this wonderful player, the greatest batter in the world. These

men are exceptions to the general rule, and have not outlived their usefulness in their long term of service.

Of the youngsters who have broken into the limelight in the last few years, the names of Ty Cobb, champion batter of the American League, Jack Miller, of Pittsburg, Wilson, of Pittsburg, Herzog, of the Boston Nationals, Summers, of Detroit, Arrelanes, of the Red Sox, and Rucker, of Brooklyn might be mentioned as shining examples of what spring training does in the way of developing dormant ability. Some of these might have come right into the big leagues and made good, but it is the general preparatory work in the south that helps these young men, and too much stress cannot be laid on the importance of the trip.

Baseball is the national game of America, and is played in every town, city, and hamlet in the country. It is a clean sport, and is beneficial to its followers in every sense of the word. It is one of the few sports in which professionalism does not mean crookedness, and is exemplified as the only sport that is not tainted. The office worker and factory hand delight in the various situations in evidence at every stage of the game with the same gusto as the millionaire, and while at the game every man is the equal of the other. The public appreciates the expense to which the magnates are put to whip the teams in shape in the spring, so that the home town can have a good club, and supports them loyally. The owners of the clubs, who at first are simply financially interested soon become enthusiastic fans themselves and spend hundreds of thousands of dollars during their baseball careers to produce winning teams.

What would the fans do without the yarns from the training camps in the spring, if that system was abolished? How many championships were won in the spring in the minds of the fans, only to dwindle to mere nothingness as the season progressed? The preliminary season is a great institution, and we look forward to it eagerly every year. But, now that the season is on, and the clubs have entered the first lap of the big race—may the best teams win.





Boston girl swimmers, winners in the Life Saving Corps prizes. Front row: Florence Gassa, Rose Pitnoff, Elsie Akroyd, Esther Donohoe, Mazie Brophy. At right, (upper figure), Elsie Akroyd.

## Boston's Star Girl Swimmers

By Livingston Wright

**A**S fine specimens of physical womanhood, it would be difficult to find two more superbly formed girls than Elsie Akroyd, who recently accomplished the astonishing feat of swimming across Boston Harbor, and Rose Pitnoff, who lately succeeded in not only swimming across Hull Gut (the swift waters which intersect portions of Deer Island, on which is the Boston prison for petty criminals, and which are so turbulent that they form what is regarded as an impassable barrier to the possible escape of prisoners), but turned about and swam back again!

More than 7,500 people recently gathered on the South Shore of Dor-

chester Bay, opposite the Headhouse at City Point to watch these two and several other expert maiden swimmers contest for prizes offered by the City Point station of the United States Volunteer Life Saving Corps.

Misses Pitnoff and Akroyd easily captured the principal prizes, Miss Pitnoff taking the first prize for diving and Miss Akroyd capturing the first prize for 100-yard dash.

The L-street Bath at City Point, and the magnificent opportunities it affords for learning the aquatic art have developed some wonderful swimmers among the hundreds of girls who visit the recreation place.



# Why Muscular Exercise is a Prime Factor in Health Building

HOW PHYSCULTOPATHY CURES DISEASE BY UPBUILDING CONSTITUTIONAL STRENGTH THROUGH ACTIVE USE OF THE MUSCULAR SYSTEM

By Bernarr Macfadden

In this series of lectures upon the science of Physcultopathy, I am presenting a thorough exposition of the fundamental principles upon which this new science of healing is founded. If you become thoroughly familiar with the information found herein, you need never thereafter have the slightest fear of disease. You will know what it is and how to treat it whenever it may appear. This series of lectures has been given in an institution with which I am connected, and I want each reader to feel that I am standing before him and emphasizing each statement that is found herein. These lectures will be weighted with practical and valuable truths. As nearly as possible they are given here just as they were taken down by the stenographer at the time they were delivered.—Bernarr Macfadden.

THE direct connection between strength building and the cure of disease is rarely understood. One might say that nearly all diseases, especially when chronic in character, are largely brought about through vital depletion which results from the lowering of the general strength of the body. Therefore, in nearly all cases, with the building-up of increased strength, disease, so-called, readily disappears.

Now, muscular exercise is one of the most important remedial methods in the cure of all sorts of complaints. Osteopathy, mechano-therapy, chiropractic—all of these, one might say, are nothing more than forms of muscular exercise for the spinal column. To be sure, they are combined with many measures for adjustment, and with some manipulation, but in reality they depend upon the exercise the patient secures while being treated for results.

Let me emphasize that chronic disease is really lessened vital resistance. If we could only have that important truth impressed upon us, many of the puzzling problems that one comes in contact with when dealing with disease would quickly disappear. To be sure, disease, to the average individual, presents an unsolvable mystery. It is difficult to understand, and a great many so-called experts who claim that its varied manifestations, in every detail, are perfectly plain to them, are nothing more than pretenders, or scientific guessers. Any

influence, mind you, that lessens your strength, weakens your power to digest and assimilate food, and decreases your ability to eliminate poisons from the body, will naturally be a cause of disease. I believe that the lack of exercise of the muscular system is unquestionably one of the most prevalent causes of disease. With the weakness that results from this lack of exercise there comes lessened vital resistance, and disease naturally follows.

The forefathers of the present generations of American stock were a race of hardy pioneers. These pioneer Americans did not need physical culture exercises. They lived in the open air. Their living rooms were well ventilated—they did not know how to make them otherwise. They were compelled to take all sorts of strenuous outdoor exercise. This vigorous muscular activity was essential to their health. They knew little or nothing about developing strength. They had to make active use of their muscles to get food and clothing, and build the houses that were essential to their comfort.

In all animal life we observe great activity, except during the hours of sleep. Activity is essential to life. Activity is life. Where you find inactivity, there you find death. Activity and life go together; inactivity and death are companions. Study any of the lower animals, and as a rule their instincts and their requirements result in



their manifesting very great activity. Take bird life, for instance. You will find these little creatures flitting about here and there, almost perpetually active, throughout the entire day. Their instincts seem to compel this eternal activity. One might say they express the joy of life in this motion. The domestic animals, those that are under the domination of mankind—if left to themselves, and not penned up, will be found usually moving about, even those poor animals that are condemned to a life in a circus cage, are nearly always found walking back and forth, and swaying their bodies from side to side, in accord with the instinct of activity which impels them to move about. Their natural desire to actively use their muscles asserts itself in spite of their narrow environment.

This instinct for activity should be just as strong in humankind as it is in animals. It is just as strong in hardy, healthy children. One often hears a mother say "There is Charlie; I just can't keep him still; he is always on the move." Mothers frequently refer to this characteristic as though it were a fault; it is really a sign of health; it is a sign that that boy possesses the natural instincts of boyhood. It is through following out the desire for activity that he builds the strength and the health for the manhood that is to come to him at some time in the future. It should be identically the same with girls. When you find a girl that is full of life, and often referred to as a "tomboy," you will in practically every instance see her develop into strong ruddy womanhood and a fine specimen of her kind, all due, mind you, to the active "tomboy" life that she indulged in as a growing girl. Select most anywhere a fine specimen of womanhood, and you will find that her life as a girl was active in every sense.

I am firmly convinced that one of the most prominent causes of the disease that is so frequently in evidence in the men and women of to-day is the tendency among parents and teachers to restrict the desire for activity among growing boys and girls. It is really their duty to encourage rather than restrict activity of this kind. I know many parents have

the idea that all this is mere play, that the education that children secure at school is of far more importance, but of what value is an education that is secured at the expense of manhood and womanhood? What is an education worth if one does not possess health? That is practically what knowledge costs when the instincts and desires for muscular activity are stifled, benumbed and ignored. A great many parents strongly emphasize the necessity for "studying lessons." They will warn the children not to play so much; not to waste so much time in useless games. Many men will say, when the idea is suggested to them of sending their son to college, "Why, what's the use? They do not do anything in college but play football and baseball. They waste all their time playing these foolish games." I am of the opinion that in the building of manhood these so-called foolish games is of greater importance (especially if a boy is inclined to be muscularly weak), than the entire curriculum of the greatest college in the world.

I make this statement because I am firmly convinced that manhood is worth more than the mental twaddle that can be acquired from the eternal memorizing process that is considered so extraordinarily important in the average school or college. Mind you, I am not belittling the value of education. Knowledge is invaluable if it is not secured at a terrible sacrifice, but one who acquires an education at the cost of manly powers or womanly vigor is the victim of an ignorance so pitiful and inexcusable that no words in the English language can do it justice.

If one has the powers of manhood or womanhood within the body one can easily secure all the education one may need—and one need not spend a large part of life acquiring it, either, but if one has spent the nervous energies of youth plodding over monotonous lessons, and has grown to the age of an adult a mere miserable weakling, a cipher as far as manhood or womanhood is concerned, a mere sexless being, there is but little hope for him or her, intellectually or otherwise, in this world. One can educate such specimens of life until dooms-



day, and they will never amount to anything.

I believe in emphasizing the importance of superior manhood and womanhood; and it is our inability to understand the value of these marvelous gifts that must be blamed for the physical and mental human nonentities that we find everywhere in this so-called civilized age. The terrific struggle that growing boys and girls often have to make to acquire what is called an education has laid many a young man and young woman in an early grave, the victims of consumption and various other diseases. Not long ago I heard that at the graduating exercises of a well known educational institution one of the graduates was brought in on a cot. She was determined to receive her graduation certificate, but she was so weakened, her vitality so depleted (one might say miserably wrecked through what we term education), that three months after this important event she passed away into the other world. She was a victim of the pitiful ignorance to which I have already referred. She was literally murdered, through the inability of her teachers and parents to understand the real necessities of life.

There are thousands of similar instances. Young men and young women are being educated to death, hurried into their graves, one might say, before they have a chance to really know anything of life. I am not much of a believer in this stereotyped education that is secured solely from books. When they follow their own unperverted instincts boys or girls will naturally develop a high degree of physical strength, but we crush and crowd out these instincts, when one becomes a stereotype, a copy, a parrot, there is but little chance for one in this strenuous age. By all means avoid the mistaken policy of diverting the instincts of boys and girls when they demand exercise. This policy might be denounced as one of the greatest curses of the age. The active use of the muscular system of these growing boys and girls is essential to the development of the superior manhood and womanhood that is by no means so common a possession as it should be in this so-called enlightened age.

Not only do I believe that boys and girls should be encouraged in all sorts of games, but I believe that grown-up boys and girls should indulge in play of a similar character. There ought to be playgrounds for one and all, no matter what their age may be. One should remember that when we annihilate the desire for active use of the muscles, when we become too dignified for play, or to secure the activity of the muscles that comes with it, then one will begin to grow old very rapidly. Rheumatism, dyspepsia, gout are in nearly all cases associated with inactivity, and when we decide that we must

dignify, and in that sense we do not benefit your mature years. In your youth, if it is then about to join the ranks of the aged. If you are determined to grow old, you will find the stiffness, and the twinges that often come with old age, will appear very quickly, but if you determine to fight off the signs of old age, if you will cultivate the mental attitude that throws aside every thought of growing old, then you can rest assured that you will retain your health and youth, the elasticity and suppleness that come with youthful instincts, on and on, sometimes almost to the very edge of the grave.

Avoid dignity as you would poison. It stands for the unbending, unyielding stiffness that you find in a lamp post or a ramrod. Under a dignified exterior you will nearly always find the pangs of dyspepsia, the twinges of gout, and various other unpleasant disorders that are the natural concomitant of inactive bodies and overfed stomachs.

By all means hold on to your desire to be boyish and girlish. No matter what your age may be, at least in feeling and instincts, you always want to feel like a boy, full of the health and life and enthusiasm that come with boyhood. No matter how old you may be, you should have the youthful elasticity of body and mind that is ordinarily associated with youth, for if you are to keep free of disease, if your body is to be full of life in every part at all times, supple and alert, you must adhere to these suggestions. You will have to learn the necessity for the active use of every part of your mus-



cular organism. When you cease using your muscles, they gradually begin to grow weaker; slowly but surely they become infiltrated with fat, and dead cells begin to accumulate. These minute harbingers of death begin to clog up the functional processes of inactive muscles, and with the tissues saturated with this foreign dead matter it is easily possible to acquire almost any disease.

Youth and old age are not invariably indicated by the number of years one may have lived. The decision as to which class others will place you depends on how many of these dead cells you are carrying around with you. I have seen men at seventy who were really younger than other men at twenty-five or thirty. These older men were younger because the man who was younger in age carried within his tissues more of the dead cells I have referred to. They followed an inactive life, while the older men followed an active life. The muscles of the elder man were supple and strong, and the blood was coursing through every part of their tissues, and naturally the dead cells were promptly eliminated. In even the healthiest body there is present a certain amount of poison, of impurities, and the activity of the depurating organs which comes with muscular activity is absolutely essential in order to keep the body clean, and strong, and young.

We have a very striking example of the value of exercise in the laboring classes. Men who are occupied with hard labor are naturally of rugged strength and health. They have to be, in order to perform their work. The exercise that they find in their occupation builds a high degree of strength. Farmers, for instance, are in nearly all cases strong men. Their exercise keeps them in a vigorous condition, and the farmer of to-day and of the past have furnished the vitality that is feeding our great cities. The great cities of the world are consuming the lives of thousands upon thousands, millions upon millions, of men and women who have secured their vitality from the country. I say they are destroying these men and women, because their environments have made it impossible for them to reproduce themselves.

The average young man goes to the

city with the vigor and vitality that he has secured in the country: he marries, and founds a family. Sometimes there are three or four, and in a few cases five generations, but as a rule two or three generations constitute the limit of his vital endurance, and then his family tree, the vitality that was secured from country life and country air, is snuffed out definitely and permanently. Each generation shows lessened vitality, and finally the vital spark of life is not even capable of reproducing itself, and, mind you, one of the most important causes of this degeneracy is muscular inactivity.

Take the laboring men whom you find swarming in the various large cities; most of them are foreigners. In New York, for instance, I have seen Italians workmen sit down at meal time and make a meal of a loaf of bread, eating it dry. In many instances they are satisfied with white bread—they possess such remarkable digestive and assimilative powers that they are capable of finding nourishment even in this un-nutritious food but as a rule even they go the same way. They disappear in from two to five generations, and it is the continuous influx of this new vitality and vigor, new health from foreign countries that is increasing our population. We have been feeding on the vitality from foreign shores for so long a period that the time is soon coming when the degeneracy that is to-day found in France will be upon us, unless the reforms that we have been advocating are quickly and thoroughly instituted at an early date.

The influences of sedentary occupations towards weakness and decay are fearful to contemplate. Everywhere you will find men looking for an easier job. They want to make their livelihood with their brains. Manual labor is regarded as menial. It is beneath the average man to do a laborer's work. It is an undesirable occupation, though as a rule you will find the manual worker more contented, and far more satisfied with life, than the average brain-worker. Farming, it always seems to me, ought to be a very satisfactory occupation, and I am convinced that very soon there will be a reversal of the present desire for city life and city influences. There will be a



drifting back to the farm, and to the manual work that is looked down upon so much at the present time.

Everywhere in large cities we have conveniences for quick transportation; street cars, elevated and underground railroads. One would almost think that walking was a dangerous exercise. Many women will take a car even if their destination is but a short distance away. They are too lazy to walk, and furthermore, they do not understand the value of walking; do not know of its health and vitality-building possibilities. I believe that walking is absolutely essential to the enjoyment of health and strength. The strongest athlete, when he is training for a contest, when he desires to possess the highest degree of health, will usually walk from five to fifteen miles a day. There is that remarkable man, Weston, over seventy years of age, and still capable of breaking walking records that he made forty years ago.

Now, walking is one of the best of all exercises. If I were asked to choose one exercise, and were not able to practice more than one, I would take walking. Walking is a vitality builder; it is a most remarkable cure for various chronic diseases. There are very many serious ailments that can be absolutely cured simply through the aid of long walks. Walking increases the digestive and assimilative powers. It spurs on the activity of all the body-cleansing organs. It increases the lung capacity, strengthens the heart. It seems to accelerate the functional activity of every organ of the body. If you are not making a business of walking a certain distance at fairly regular intervals, you are inviting disease. Those who are in the habit of walking are keeping disease at a distance. As a part of the process of remaining young, you will have to walk. I know of a young man eighty-five years old who has kept his youth by his habit of walking five to ten miles every day. He looks hale, hearty and active, and apparently enjoys as good health as he did in his younger days, and when he was asked why he did not grow old like the ordinary man of his age, why he was not stiff, he said that he did not allow the stiffness to come upon him; that he walked every

day, rain or shine, and that even if a little pain appeared he would continue his walk. He did not intend to allow his body to become stiff and old. It takes a certain amount of determination, of mental stability and will power, in order to keep young, and free from disease.

Running is another splendid exercise. I am fully aware that it is very undignified to run, but it is a good plan to forget your dignity so frequently that you will finally leave it far behind. I make a practice of running at frequent intervals. I run because I enjoy it, and because I know it benefits me greatly. It adds to my general vital vigor. It adds to my ability to fight disease.

You might say that disease is eternally after you. It is watching for a chance to attack you, and whenever you divert from that which is normal you lower your vital resistance or lessen your strength, and are liable to be attacked by disease, and you make this possible simply because of your depleted vitality that results from causes within your own control. Consumption, the terrible scourge, is really caused by inactivity, by the accumulation of dead cells. It is nothing more than a vast quantity of catarrhal poisons in the blood seeking an outlet. This fearful disease can be cured in practically every instance, in its first stages, with but little more than muscular exercise. If the complaint has advanced to any great extent, then more stringent measures are necessary, more careful dieting, and various other aids, must be used, but at the outset of this complaint, if you will follow what is termed an ordinary wholesome diet, remain out of doors as much as possible, breathe pure air, walk, run, and exercise all the various muscles of the body, it will disappear in a remarkably short time.

Rheumatism is another disease caused by inactivity. Uric acid, the poison that is associated with this disease accumulates in such quantities that it cannot be carried away. This foreign material then causes the rheumatic twinges. One might say that the depurating and purifying organs are not doing their duty, and the proper activity of the muscular system will arouse these functional processes, and these poisons will be carried



away. Remember, also, that activity not only strengthens the muscles, but the muscular power is also increased.

If you want a strong brain (the brain is simply a part of your nervous system), if you want more stability, stronger character, increased will power, then I would say, add to your muscular development. You can depend upon it that this increased muscular vigor will add to your brain power, because it will give you more nervous energy, and brain power, as I have previously stated, is really a species of nervous energy. You cannot possess too much nervous energy. No matter what may be your occupation, nerve power is a valuable asset. The nerves control every part and function of the body. They control a part of the mind as well. If you want to be free from disease, be of strong physique, develop a powerful muscular system.

Many have asked me the question, if the development of the muscular system can be retained, after it has once been secured, without continuing the exercise. I would answer that question with an emphatic "No." If you have attained a certain development by persistent work it may not be necessary for you to continue the same amount of exercise, but the use of these muscles you have developed is absolutely essential in order to retain them. If they were developed by use, they can only be retained by use, and if you have a strong body, made so by exercise, if you want to retain your strength you will have to continue with at least a certain amount of regularity the use of these muscles throughout your life. You need not necessarily take your exercise every day, you may even skip a week or a month now and then, but you must come back to the necessity of using your muscles if you expect to retain the great and wonderful gifts that you have originally obtained from their regular use.

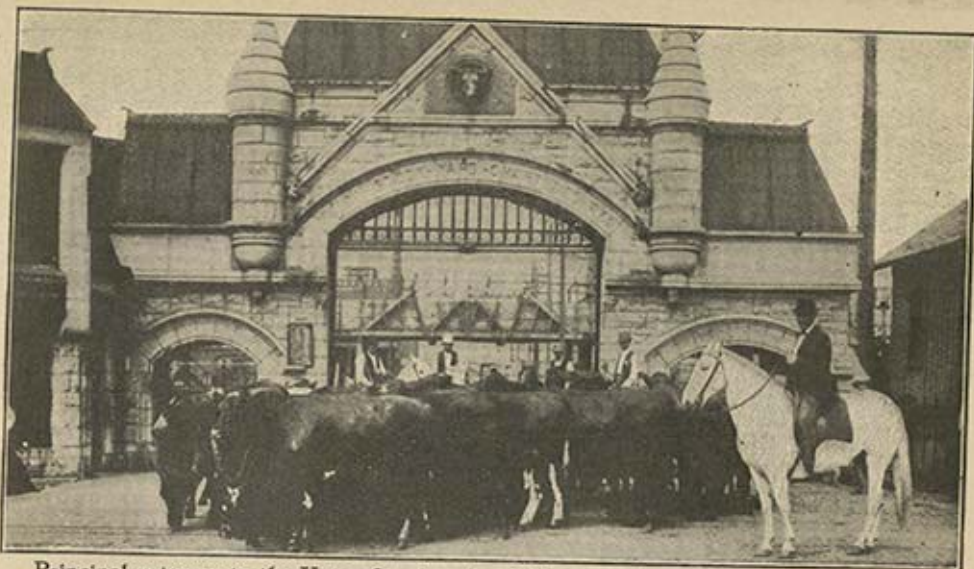
Although the want of use of the muscles in adult life feeds disease, and causes weakness and decay, the need of muscular exercise for the growing child is far more important. The boy who has been given the chances which come from the thorough development of his body will grow into a strong and in most cases fine-

looking specimen of manhood. If he does not secure this chance he will usually be weak in body, vacillating in mind, and in many cases a miserable specimen of manhood. In one case you have a strong physical foundation; you have a capital that is worth more than a million dollars stored in some bank; a physical capital that is absolutely essential to the success of a human career. In the other case you have a frail, delicate physique, without the strength of body, or stability of mind and character, that assume so much importance in this age.

It is in your power absolutely to so evolve your boys and girls. You can mold them to a wonderful extent, you can build them into beautiful specimens of human life, if you will only give their physical development the proper attention in their growing years. And what is the value of the rewards for which you may be working? What is manhood and womanhood worth? There is one thing in life justly due every boy and every girl, a strong, healthy body. If you had the power of selecting as a capital for your boy or girl a million dollars and a weak, frail body, or no financial capital and a very strong physique, which would you choose? I think the average parent would say, "Keep your money! Give me the fine, strong body." And he would choose wisely, for with a strong body money can easily be made, and to a weak, frail body money cannot bring health or happiness, or in fact anything that will make life satisfying in every way.

The average individual dies many years before his time. The usual death is from some disease. There are but few who die of old age, who literally wear out, and when you die from any other reason than old age you die before your time. It is only when you die of old age that you live out the limit of your vital capacity, and it is to the neglect to properly and actively use the bodily powers that much of this disease, and a large majority of early deaths, is due. If you want to live out your allotted number of years, and if you want to be fully alive and alert while you do live, then muscular exercise must be an important part of your daily regimen.





Principal gateway to the Union Stockyards of Chicago. Into this vast enclosure are daily driven a vast army of animals—never to re-appear except in the form of one or another of the food products (potted chicken for instance!), into which they are ingeniously transformed.

## The Jungle's Aftermath

With Introduction By UPTON SINCLAIR

STARTLING REVELATIONS OF THE ACTUAL CONDITIONS WHICH AFFECT  
THE PRODUCTION OF AMERICA'S MEAT SUPPLY—A STRONG CONFIRMATION  
OF UPTON SINCLAIR'S DESCRIPTION OF CONDITIONS IN PACKINGTOWN

By Mrs. Ella Reeve Bloor

In my contribution to this series published in the last issue of *PHYSICAL CULTURE*, I told how an investigation into conditions in the Chicago stockyards had been made under my direction for a prominent New York newspaper, and of how the results of the investigation had been suppressed and kept from the public. I was only able to give a general account of what had been brought forth by that investigation, but this month I am able to introduce Mrs. Bloor, who conducted it, and who tells a most interesting story of her experiences. Mrs. Bloor accompanied me during a careful investigation which I made into conditions in the South Jersey "glass-district," the results of which were published in a monthly magazine; and I am very glad to testify to her ability and to her honesty and sincerity as a student of social conditions.—Upton Sinclair.

WHEN the whole country was stirred by the revelations contained in "The Jungle"—and President Roosevelt sent his investigating commission to verify or discredit that book—the facts obtained by that Commission were so overwhelming that Congress was forced to enact some semblance of restrictive legislation governing meat inspection, and the canned-goods industry.

The Act of Congress of June 30th, 1906, was supposed by the credulous public to be adequate and powerful enough to reform all the evils existing in Packingtown. The people settled down to an undisturbed meat diet, and silence and security again reigned over that vast charnel-house of America. As I had helped the Commission to obtain a greater part of their facts, and had later given the public the facts by publishing



a detailed report of the results of the investigation in the *New York World* and the *New York Times*—aiding no doubt in bringing the delayed report before Congress. I naturally felt a deep interest as to the real effect upon the Chicago stockyards of that exposure. So, to find out definitely whether the new law was being fully enforced, after considerable time had elapsed, I again visited Packingtown, this time determined to make a really private investigation by actually working in the various houses. This story will relate my own experiences of this investigation, but the newspaper man who accompanied me (and who worked in many departments, to which a woman worker would not have access), had just as many striking opportunities getting information, and his conclusions agreed entirely with my own. I spent the first few days after my arrival in getting general impressions of the district called collectively "The Union Stockyards." Here there is a large city of many thousand souls,—there being 50,000 at least of them employed in Packingtown. The entire district is mainly owned and controlled and politically manipulated by the Beef Trust. The Government post office bears the name "Union Stockyards," the largest hotel, "The Transit House," is owned by the Beef Trust; and over all hangs

the deadly miasma of the stockyards smell; a mixture of odors from soap factories, phosphates, and fertilizers, slaughter-houses and barn-yards, all together so vile, that it literally "smells to heaven." One of the streets, called "Whiskey Row," has a saloon in every house—in some of them, women were buying potato whiskey for five cents per pint.

In walking over the great viaducts spanning the cattle pens, we noticed a large number of "downer carts" carrying sick, heavy, and in some cases apparently dead hogs. These carts were drawn by horses and were like large

crates or boxes on wheels—they were marked "I. P. Co." an "independent packing concern"—*how* independent can be imagined, when after tracing the progress of these carts for days we found that when these hogs, some of them "condemned" were taken to the "independent" slaughter-houses outside, to be killed, they were afterward dressed and sent out with the regular stock-yards products.

The streets "back of the yards" we found in the same deplorable condition, as on our previous visit—they were still dumping grounds for old tin cans and all sorts of refuse. The environment of the workers, still so hopeless and forlorn, the vile smell in the air, the neglected houses and



Mrs. Ella Reeve Bloor as she appeared when employed as a member of Packingtown's working force.



streets impressed us, even more than before, with its degradation. After the investigation was completed, I asked my co-worker, the seasoned newspaper man, what had made the deepest impression upon him, he answered without a moment's hesitation—"Oh! the dreadful way in which the people live."

Just at the edge of the stockyards district, "Bubbly Creek," where the sewers of the packing-houses and stockyards empty, was being "operated" in the usual manner—"catch basins" were floating near the mouth of the sewer to catch all the grease that might come to the surface, and men were standing on these floating wire-sieves, dipping up the great masses of grease into barrels, to be put through refining and rendering processes—until even this vile sewer-grease could be manufactured into some valuable by-product of the Beef Trust.

When we applied at the visitor's entrance of one huge plant the Saturday after our arrival, we were told that on account of an accident in the "cooler,"—the large cold storage department—no visitors would be allowed. Strong ammonia fumes still pervaded the atmosphere, and we found that the accident, the second since January, had killed six men outright, and disabled many more. Worn out ammonia pipes had exploded and when the explosion occurred, men were shut in like rats in a trap, the only door being useless on account of the pouring in of ammonia fumes—killing those inside instantly.

The next day we were glad to meet one of our co-workers in the previous investigation, a young man whose testimony I had secured for Roosevelt's commission, and of whom a prominent lawyer of Chicago (who had been present while he was being examined by the Commission), afterward wrote me: "The testimony of that man alone was bad enough to make me hang the packers if I were on a jury

with them before me." I asked him if he saw many changes since the law of 1906 had been passed—he seemed to think general surface conditions were better, such as a greater number of wash basins—more running water, towels, and more cleanliness enforced in dress of men and women—but that *no change* had taken place, in his estimation, in the *condition of products*. He gave me a number of labels showing that labels of various sorts could be put on the same product, "Inspected" labels, he said, could be used by any one, as they could easily be

found lying around loose. Inspectors do not examine *contents* of cans and tubs, only the *outside*. This young man was then working in the lard department.

We went through Swift's house with the visitors, on the following day, also Libby-McNeil's Canning House and some of Armour's killing floors and canning departments. We were "personally conducted" *over* many roofs to escape seeing what was going on *under* the roofs. In this "visitors parade" no sausage-making was shown, no lard rendering, oleomargarine and butterine manufacturing, not a single process of disposing of by-products, except *after* placing in cans, and in the dried beef room where girls were filling cans with dried beef and with bacon. In this room a manicure department was operated by one woman, who gracefully manipulated the hand of one of the girls while visitors were passing; but when it is considered that over 3,000 are employed in Libby-McNeil's, and perhaps more in each of the other large houses, the fact that one woman couldn't accomplish much with so many hands, would be quite obvious. The girls told me that eight cents was taken from each "pay" for this manicuring, so it was quite a *profitable experiment*, after all, for the Beef Trust.

On Tuesday morning, clothed in old



Brass time check issued to Mrs. Bloor as an employee of one of the mammoth branches of the stockyards.





A corner in one of the cattle-pens, with a recently arrived consignment of western steers.

black garments, and giving the name of "Ellen Lewis"—a widow from Missouri—I applied for work at one of Packingtown's largest establishments. As I passed through the broad gates of the Union Stockyards that morning with the tramping army of workers, my feelings were very different from those of the "visitor." A sense of deep responsibility, a desire to find out the *truth*, as to this vital food question possessed me. I felt that I had become a component part of this tramping, sweating, suffering mass of men and women, and it was not "acting" for one moment; it was *always* very real to me. I found over a hundred men gathered in front of an old building previously used as a stable. Inside the stable, benches were placed around one side of the room and here many women and girls were sitting patiently, biding the time of the man inside the little office, who was leisurely eating his breakfast and reading the morning paper. Finally, at eight o'clock, he announced "no work this morning, girls." Most of the women hastily shuffled out, but I pushed my way inside the office, and said "Can't I please get work in some of the canning rooms or kitchens, I can

cook." Mr. W., superintendent of this department, looked me over and said, "If you can cook, why don't you get work in a restaurant—or I can get you a job at house-work." I answered hastily, "Oh, no, I have a little boy at home, and must go home at nights, and I must get work right off." "Well, go along up to Mr. P.'s room, you may get a job up there," he answered.

I started to find the canning room, but got lost in the by-ways and alleys. At last I found a line of men waiting for work at the slaughter house of another firm. I asked a big yard-policeman, wearing the uniform of the Chicago city police—who was standing there, where the women could get work. "Go in there," he said, pointing to a dark entrance—"ask the policeman in there."

In the alley way I found another man in uniform. To him, I said, "The man out there said you could show me where to get a job."

He leered at me as he replied—"O yes, I'll get you a job to-morrow morning—you can come here all right. I'll see about it to-day, and you meet me to-night at ten minutes after six—outside the yards at Forty-third and Halsted



street gate, and I'll tell you all about it."

"If you're sure I can get work, why can't I just come here to-morrow morning?" I asked.

"Oh! you meet me to-night," he said, "and I'll have a talk with you." Then touching my shoulder, he went on confidentially, "You do right by me and I'll do right by you."

"Oh! I'll work hard and do my best," I answered.

"Ah!" said he, "I don't care about the working hard part, that's not it."

On my way out the yard-policeman hailed me—"Did he give you a job?" he asked. I told him I thought I'd get work in the morning.

"Of course," he cried, "a neat looking woman like you will get a job all right—you come on in and me and you will have a good time together—we'll take a walk some evening, have a bite to eat,"—and more in the same strain.

That night at ten minutes after six o'clock, I waited at Halsted and Forty-third street gate, and sure enough the man appeared with only the cap of his uniform changed for a hat. I asked him

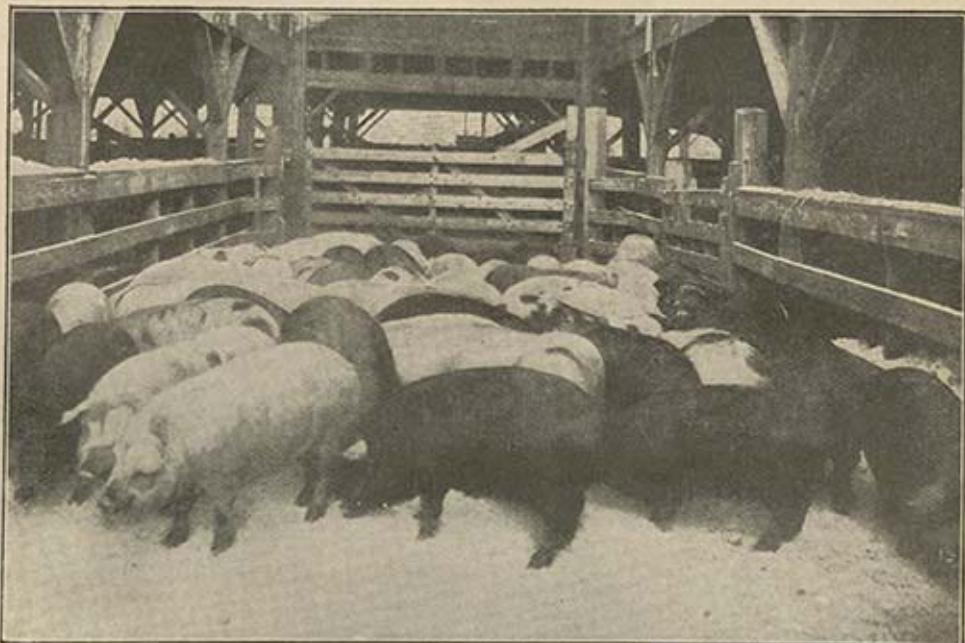
if the job was all right and if I could go to work at seven in the morning.

"Oh! that will be all right," he said, "but never mind about that, come get on a car, let's go down town."

I had to keep up my character of a green country woman, so I looked at him with my mouth open, and said "Why, mister, I can't go down town with you, I don't know you, and my aunt (an aunt manufactured for the occasion, of course) won't like it."

"Oh! I'm a good fellow, I am, come on, I'll go to your aunt's with you," and for ten minutes he begged and solicited me, standing on that corner, and only by promising him that I would meet him the next night at the same time could I get away from him—even then he walked alongside of me to the corner of my street.

This experience proved conclusively that girls working in the "yards," the Jungle of America, are subject to just such insults from men clothed in a little authority. If a woman of my age, a mother of young men and young women, could be so treated, made to feel that my



Some sturdy specimens of that noble animal, the hog, who has borne so many of our latter-day aristocracy to wealth and power—but who has probably left more destruction in his wake than did ever the steeds of the predatory men-at-arms of feudal times.



job depended on yielding to his solicitations, how must it be with young, ignorant girls absolutely dependent for their living on holding their jobs in the "houses" of the Beef Trust. I afterwards secured the names and addresses of these yard policemen or watchmen—they were both married men, of middle age. It is perhaps needless to add that I did not go to work the next morning at that packing-house, and for many days I shunned that particular passageway.

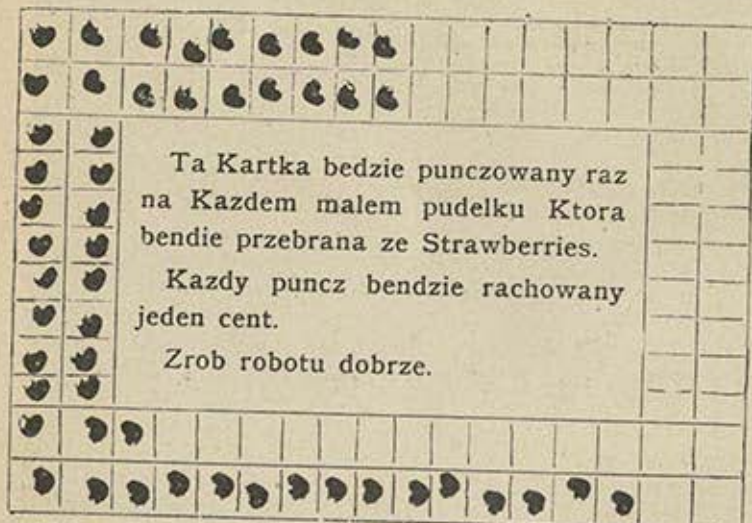
On Wednesday morning, again applying at the office in the canning department, of another firm, they told me to go up stairs and ask the forewoman there for a job. She was a sharp-eyed, vigorous young woman whom the girls called by her first name. I afterward learned that she had worked in the canning factory a long time and when the memorable strike occurred she had staid in the house, and her position as forewoman came, no doubt, as a reward. After looking me over, she decided to put me to work, but frankly told me I could never stand on my feet ten hours a day—and she really seemed to pity me. She called a boy to take me down to the office, where I was given an employment ticket, which I exchanged with the time clerk for a tag with my number on—14713. I was placed in the label department, and

told I would receive \$5.00 per week at first, and might be given piece work later. From the first I entered into the spirit of the place, and wanted so much to stand well with the forewoman that I found myself continually "speeding" up. The girls working near me frequently said: "Don't hustle so, they won't think any more of you, and don't be in a hurry to get on piecework, then you'll only get two and a half cents per hundred for wiping grease off cans, and three cents per hundred for putting keys on."

By a strange chance, I wiped cans all the first day of my job next to a table where a girl was busy *tearing old labels* from large cans of the "Very Best" dried beef. I asked her why she tore those labels off. "O," said she, "I guess the forelady wants different ones"—and she did, for presently another girl came along with a tray full of bright new labels containing the magic words "Inspected and passed under the Act of Congress of June 30th, 1906, establishment 2. A." and these new labels were put on the same old stuff. The cans I wiped were full, and the forewoman tried to teach me how to distinguish between those that were good and the *unsound* ones by tapping them a certain way—they all seemed alike to me, and I passed

them along for their "Inspected" labels. So much for the effect of the law on the stuff *inside* the cans.

At noon time, that first day, one of the girls said—"You're such a stranger, come and have your lunch with our bunch, the dressing-room lady makes the coffee for us." About eight of the girls clubbed together in groups and the dressing-room lady "cooked" the coffee in an old lard



A fac-simile reproduction of the ticket supplied Mrs. Bloor while employed in the canning department of one of the huge plants in Packingtown. It is printed in the Polish language.



pail. We sat around on boxes in the large room where they canned roast beef and veal-loaf, and in this dark, dingy room, which they call the "spotted roast-beef" room, we ate our lunches every day. The room (which had an odor like a morgue, as it was near one of the kitchens where meat was being cooked and "prepared"), gets its name from the fact that the filled cans brought there, are so spotted with rust that they have to be painted white to cover the spots, and then labelled. This dark room, by the way, is not on the "visitor's route."

At 12:30 all the various groups who had been loudly chattering and calling out to each other, emptied the dregs of their coffee pails right out on the floor in all directions and returned to their rooms above. The continual standing by the tables for ten hours each day was a real hardship to me, and I found that many of the girls never got "used to it." I had to take my shoes off toward night at first and went home always utterly weary and dispirited, without a desire for food or recreation; the only craving I had was for rest.

One day I washed glass jars in the "sliced bacon" department. The little girl who wiped them for me came from one of the darker rooms down stairs, and she was greatly pleased to work by me where it was lighter. She talked much of her grievances. In one room (kept open to visitors) she had been compelled to wear a white coat and she said that her mother had to wash the coat twice a week and if she got a spot on it or it wasn't ironed right, she had to go home. Toward the end of the long day's work, she said wearily, "I'm so tired of this work—my brother is learning to be a 'chiffonier' and when he is through, I can leave this old place and learn a trade."

Two older girls who labelled the jars after we had washed and wiped them, told me they had never been away from Chicago, and begged me to tell them what the "country" was like. We could catch glimpses of the visitor's parade occasionally passing outside our door. "Little they know what goes on in this building" they said to me, and then described some of the sausage kitchens and other rooms which we passed through at noon time.

"O! but they are just as dirty as they smell," said the girls;—and they were.

Feeling that I had secured certain evidence in this plant of the evasion of the law of inspection, and of the doctoring up of very old canned goods, I told the forewoman one day that I had secured a job at housework; and after paying up my share for the coffee to my "bunch," I bade those warmhearted girls good-bye, feeling as if I was leaving them "in prison for life."

While waiting in the superintendent's room for my pay, after leaving this job, he suddenly appeared where I was waiting and asked me what I was doing there. "Waiting for my time," I meekly said.

"How did you get work here anyway, who recommended you?" he shouted.

I told him I just walked in and got the job by asking for it and that I was leaving for a better job at housework. He finally gave me my "time," but I felt as if I was under suspicion *that* time.

In the visitor's parade at one establishment the lecturer shows off the fine new buildings, but almost nothing is seen by the public of the old building, which is fit only for a huge bonfire.

In this fire-trap, I got a job in the preserving kitchen at hulling strawberries. I received one cent per box—my cards, which had to be punched for every box, were inscribed in the Polish language, showing that nearly every woman who worked in that room was a Pole or a Slav. The strawberries were cooked in the same room, and also put in the jars. In the corner of the room a man was preparing a white liquid in a large bowl, he then put a tumbler full of the white liquid in each kettle of strawberries just before pouring into jars.

I learned afterward from a person closely connected with the foreman of that room that the white liquid was citric acid and the formula was four ounces to each kettlefull of berries. This authority also stated that no other preservatives were being used at that time, in that department under the new food law, but that there was absolutely nothing to prevent them from labelling old stock with the *new* Inspection labels. In passing through different rooms and corridors of this canning house I saw tierces







# Strengthening and Beautifying the Eyes

THE NEED OF PROPERLY SAFEGUARDING THE SIGHT.  
MEASURES FOR KEEPING THE EYES BRIGHT AND STRONG

By Madame Teru

Of all the wonderful faculties that the human economy possesses, none is more marvelous in its power nor more important in its effect than the sense of sight. Madame Teru's injunctions that the eyes be given proper care are well worthy of heed, and her instructions for maintaining the beauty of the eyes are rendered in her usual succinct and thorough manner.—Bernarr Macfadden.

**M**Y subject this month is on one of great importance. The saying goes that he who runs may read—and thereby learn much that is both useful and entertaining. But he who cannot see can neither run nor read. To one without the power of vision, the whole world of art and literature and science—all that is beautiful, all that makes life enjoyable and interesting in this modern age—is practically a sealed book. It may be pointed out that many beautiful things have been produced by the hand and brain of the blind, but has it not always been under the direction, or with the assistance, of those who could see?

To the loss of a limb one can become accustomed, and in time one may even get along as well as another perfect in this respect; artificial teeth can through man's skill replace the natural ones, and even render good service; but all man's skill can never duplicate that most wonderful of all organs—the eye. And despite this there is an appalling negligence in the observance of hygienic rules in relation to the eyes, even among those who can not plead ignorance as an excuse. Of the eyes much appears

both in poetry and prose. Milton's musings on his loss of sight enables one to appreciate the sorrow of the blind. To write of the beauties of Nature and not to see them, is not this the irony of Fate?

I shall but briefly describe the structure of the eye, and then pass on to a consideration of the hygienic rules already mentioned. The eyeball rests on a soft fatty cushion which lies in a socket formed by the bones of the skull. It is made up of three coats and three fluid bodies known as humors. The outer coat, the white of the eye, as its name, sclerotic, indicates, is hard and unyielding. In its fore part and center is the cornea, which is transparent and through

which the light passes into the eye. The second coat, the choroid, lines the inner surface of the sclerotic, and is made up principally of blood vessels and nerves. Behind the cornea is the iris, the curtain of the eye which regulates the amount of light entering, and at the center of which is a round opening, the pupil. The iris gives the color to the eye, and performs its work by means of a little muscle and small fibres about the pupil. Between the iris and cornea is



Using the hand as a cup to hold water for bathing the eye. This should be repeated, while the temperature of the water is gradually decreased, until cold water is used.





Bathing the eye with the glass eye-cup in general use for this purpose.

the aqueous humor. Back of the iris is another humor of the eye, the crystalline lens, whose function is to focus the light that enters. By means of a small muscle developed from the choroid coat, the lens can accommodate itself to changing distances. At the inner surface of the eye is the retina, the third coat; it is a thin layer of nervous substance upon which the images of external objects are received, and the impression then carried by the optic nerve to the brain. Between the crystalline lens and retina is the main cavity of the eye, which is occupied by the vitreous humor. The rays of light entering the eye are refracted through the medium of the cornea and the three humors. Proper refraction of light is necessary in order that a perfectly clear impression of an object be made upon the retina; and it is to correct errors of refraction that glasses are worn. Besides the muscles of the iris and lens there are six muscles which serve to move the eye in almost every possible direction.

This description serves to show how intricate and delicate an organ is the eye, and it goes without saying that the most careful attention should be given it. Necessary as is the daily washing of the face, it is equally important that a like attention should be bestowed upon the eyes. This eye bath may be given either by means of an eye cup or with the hand.

When an eye cup is used, the head should be tilted slightly backward, the eye upturned, and the cup carefully brought to the open eye. If the hand is used, form a hollow of the palm, fill with the wash, and bend the head forward, bringing the eye directly over the hollow. Opening and shutting the eye will insure a thorough cleansing. For the average individual, tepid water is about the right temperature.

The invigorating effects of cold water are well known, and an old lady of my acquaintance, who can read six hours at a stretch without any discomfort, attributes this to her daily eye-bath. She begins the treatment with warm water, the temperature of successive waters being gradually lowered until the water last used is cold, the whole operation requiring but five or six minutes.

To keep the eyes in good condition, certain rules as regards light and position should be strictly followed. The diffuse daylight is considered the best illumination for work requiring exertion to any extent of the eyes, but if the day is dark or cloudy, a good artificial light is preferable. The work, or reading matter, should be so arranged that the light will fall on it from the left side. Light from the front falls directly upon the eyes, which obviously is undesirable; while if from the back, the work is shadowed by the body of the person, and if from the right side, the right arm, which is most generally used, likewise darkens the work. The upper body should be held erect when seated and the work held about fifteen or eighteen inches from the eyes. The stooping position, assumed by nearly all people, and formed in early school life, is disastrous for the vision, and is in part responsible for the defect known as myopia, or near-sightedness. One should never read while lying down, those who have ever tried it can testify to the great strain to which the eye is subjected in such a position.

An injurious practice, too commonly indulged in, is reading on cars or trains. The effort to focus the eye upon the printed page during the movement and jolting of the train strains the eye



severely, often causing headache and ultimately weakening the vision. The eyes are sufficiently taxed in the ordinary pursuits of life, and though the lack of time makes this practice a necessary evil with most of us, those who are concerned with the beauty of the eye must avoid it. Constantly viewing the scenery through the window of a moving train is also tiring to the eyes. When this is the case, they should be rested by closing them for ten or fifteen minutes, and if the attention is directed to other objects (the passengers in the car, for instance), they will be considerably relieved. "Variety is the spice of life" for the eyes as well as for the mind. The eye strain resulting from long journeys by train or motor car will be greatly allayed by an eye bath made of equal parts of witch hazel and distilled water.

The approaching summer season makes necessary some protection from the glare of the sun while on long walks or on the water. The little caps with green-shaded peaks will do admirably on such occasions, and will be found restful and soothing to the eye. We are all familiar with the deafening effect of a great noise; too great a light has a blinding effect upon the eyes, and has been known to cause blindness. This is a fact that should be borne in mind by mothers who carelessly leave helpless little babies (whose eyes are especially susceptible), lay blinking in the sun.

While riding or walking dust frequently enters the eye, and from the rubbing to which people often resort to remove the foreign matter, the eye becomes red and inflamed. By bathing the eye in a boracic acid solution this unlovely appearance will disappear. It may be remarked here that after returning from a long walk we consider that ordinary attention to one's person requires one to take a foot bath and to wash the face and hands to remove all traces of dust and fatigue; yet the eye, the most important organ of sense, is entirely overlooked. Has it not also suffered from too glaring a light, blustering winds,

or from the dusty road? At such times many people use cold tea leaves, but just as much benefit is derived from cold water, as the object is to cool and soothe, and cloths dipped in cold water will do this effectively.

The conditions which are most unfavorable to the beauty of the eye are fatigue and dust. Dust irritates and inflames the eyelids, while fatigue causes the eyes to become dull and heavy. If the eyes are used when fatigued, the consequent extra effort necessary on their part, causes one to squint and frown, resulting in the ugly aging wrinkles about the eye. When the eyes are in such a state one should retire as soon as possible to a quiet room and, after making one's self comfortable, lie down and apply a compress over the eyes, made by dipping a soft cloth into hot rose water. As a stimulant for tired eyes, salt water will also prove beneficial. A soft old cloth should be dipped into the salt water and applied as above. For cases of extreme fatigue, however, I have always found the hot rose water compress the best.

I can not too strongly impress upon the reader the necessity of resting the eyes. While resting the body, a fund of energy is accumulated. In the same way, by affording relaxation to the eyes,



Massaging the eye with the finger tips. This should be done gently, but firmly and persistently.





Kneading the eyebrow to promote its growth. In performing this operation the eyebrow should be gently pinched between the thumb and finger, beginning close to its inner corner and working gradually toward its outer extremity.

it recuperates from the effects of previous exertion and is rendered fit to cope with the next day's work. Rest is as important as exercise. Without exercise, an organism will deteriorate from disuse without rest it will become worn out. The "happy median" will bring with it the greatest health, and the problem for each of us is to discover what that median is for himself.

In the earlier times, when books were not so common and of newspapers there were but few, defective eyesight was not so usual as it is to-day. The principal occupations were of an outdoor nature, and consequently there was no need of the close application of the eyes so necessary to-day. But print and cheap paper, the unceasing work required of the eyes in most of the industries, have played havoc with them, and the use of eyeglasses has increased correspondingly.

Nearly all authorities claim that the only way of remedying weak eyes, or eyes possessing one or another of the defects known as myopia, astigmatism, etc., is by means of glasses. But if the proper observance of hygiene serves to keep the body in good health, despite the fact that it is subject to much wear and tear, why may not the eye by proper care also maintain its integrity?

In addition to the advice I have given regarding rest and the eye bath, it is claimed by some, that the gentle massaging of the eye will assist in preserving the sight. The stroke frequently recommended is to rub with the utmost gentleness, so as to avoid pressing on the eyeball, from the inner corner of the eye outward with the second and third finger. I am, however, averse to recommending massage for the eyes indiscriminately, as the eyes are too important an organ to be trusted in the hands of a novice.

It may be interesting to consider the effects of the use of alcohol and tobacco upon the eyes. We have all observed the watery and bloodshot condition of the eyes of those who use alcoholic stimulants, and when the quantity used is above that regarded as "moderate" the eyes are red and bleary. The acuteness and quickness of vision is also greatly impaired by the use of stimulants. It is universally admitted by authorities that tobacco has a deleterious effect on the sight. Inflammation of the lids is caused by the smoke; and the eyes of the young suffer particularly from this narcotic. Tobacco-blindness is a term not uncommon among oculists.

Too much can not be said of the benefit derived from fresh air. Living in poorly ventilated rooms is a factor in marring the beauty of clear, bright eyes, and close sleeping apartments are responsible for the listless and dull appearance of many people's eyes on arising. In connection, it may be stated that proper functioning of the entire system is an important factor in the appearance of the eyes. When the whites of the eyes are yellow, biliousness is often the cause, the stomach may not be in good working order, or the liver may be sluggish in its action. More water should be introduced into the system, and if constitutional treatment is resorted to the symptoms will disappear.

Many ladies are in the habit of using belladonna, or drops sold for the purpose, to brighten the eyes. This is a practice which is to be condemned, as in nearly all cases these eventually impair the sight.



It need only be explained that physicians when examining eyes use belladonna, the effect of which is to paralyze the muscular fibres which contract the pupil, dilating it, so that the trouble may be more easily determined. Thus the danger involved in the continued use of drops of a like nature is apparent. Conscientious beauty specialists condemn the practice. The one condition necessary for brightness and clearness is general good health, and then if the eyes are properly cared for, and not abused, artificial brightness will not be necessary—and should be avoided in any case.

The veil is an article the use of which eye specialists disapprove. It can be readily understood that the threads of the veil act as obstructions to the vision, and consequently when viewing objects through it the eye is constantly strained. The eye is kept dodging the thread, so to speak, in order to best sight whatever may be under observation. Veiled women, in large cities, read while riding to and from work thus entailing great hardship upon the eye. Fashion is indeed a fickle mistress! For a short period plain, finely woven meshes were favored, but now the chanticleer craze has invaded the field and weird designs of all sorts of animals are being woven into the material, thus making worse an already bad condition.

Beautifully arched eyebrows and long lashes enhance the plainest eye and impart much beauty and character to the face. Besides being ornamental they serve to protect the eye. The eyebrows help to shade the eyes from excessive light and protect them from the discomfort which would be caused by the perspiration trickling into them; the eyelashes partially exclude the dust and other foreign bodies and also help to shade the eyes. Scant eyebrows, or those that grow unevenly, can be improved by a little careful attention. They should be daily massaged with white vaseline. A little is applied to the eyebrows and they are then gently but firmly pinched or kneaded, paying special attention to the scant parts. Lanolin is also

much used for this purpose. The eyebrows should be brushed daily; this keeps them free from dust and at the same time stimulates the hair roots. Tiny brushes are sold for this purpose, but a small tooth brush will suffice.

A good growth of hair is only possible on a healthy surface, similarly the eyelashes depend upon the condition of the eyelids for their luxuriance. When the eyelids are inflamed or diseased in any way, the growth of the lashes is much affected—often to such an extent as to cause them to fall out. Thus if the lids are kept in good condition, avoiding inflammation, the growth of the lashes is assured. It will be of advantage to brush them with the little implement mentioned to remove any dust from them. Brushing them upward inclines them to curl.

The practice of massaging the eyes regularly and persistently—with great care, of course—has a most beneficial effect upon the appearance of the eyes, and will also aid to improve the eyesight. No one will question the beneficial effects attainable in the various organs and regions of the body through massage of a proper sort, and the eye constitutes no exception to this rule. Massage accelerates the circulation of the blood to the portion of the body manipu-



Smoothing the eyebrow with the finger tips to improve its appearance and symmetry. In performing this movement, the finger-tips should be moved from the inner end of the eyebrow to its outer extremity.



lated and also has a strong tonic effect upon the nerves. It is difficult to massage the eye in the same manner as the large muscles of the body, but nevertheless the cardinal principles of massage can be applied to massaging the organs of sight.

There are many devices on the market for applying massage treatment to the eyes, and some of them are doubtless efficient and capable of producing beneficial results. However, the practice of massaging with the finger tips will effect practically the same results, forcing the blood along by the gradual change of the seat to which pressure is applied, accelerating the circulation to the tiny capillaries and blood vessels in and around the eyeball, and gaining for them a renewed and increased supply of the life-giving elements supplied them by the blood stream.

In massaging the eye the finger tips should be lightly pressed upon the lid over the eyeball, and moved about with a gentle yet firm pressure, and with a circular motion. This process should be continued until every portion of the eyeball has been covered. In most cases it will be found best to perform the massage before retiring for the night. If the

influence of the massage is disagreeable, to even the slightest degree, it should be performed with very light movements, and for a brief interval at first. If the practice seems to be attended with benefit, the duration of the treatments may be gradually increased.

In conclusion, a few simple rules might be given which will be of advantage to the reader.

In the imagination, man with his book in the great wide outdoors is a charming

picture, but in practice reading out of doors is trying to the eyes because of the intense light. Neither should one read by a flickering light.

Do not read when mentally or physically fatigued or while lying down.

Be careful to avoid having the light shine directly upon the eyes.

During or after an illness, very little reading should be done, as at such times the eyes are weak.

Children should be cautioned not

to rub their eyes as their hands are usually soiled from playing.

To remove foreign objects from the eye, the eyeball should first be inspected, and if the object is not found, a clean thin pencil should be laid flat on the eyelid, and by grasping the lashes the lid can be turned back for inspection.



The final step in treatment of the eyes—the firm but gentle application of a suitable brush to the eyebrows.

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# Teaching the Youth of Chicago to Play

By Harry G. Hedden

## HOW THE MAGNIFICENT PLAYGROUND SYSTEM OF THE METROPOLIS OF THE WEST PROVIDES OUTDOOR AND INDOOR SPORTS FOR MULTITUDES OF PEOPLE

The trend of public sentiment among thinking people everywhere is to award proper recognition to the absolute necessity for proper exercise and recreation to maintain physical and mental efficiency, and the splendid system of playgrounds and outdoor recreation-centers maintained by the city of Chicago are most gratifying evidence of the progress of the physical culture movement. When such extensive measures for the protection of the public health can be inaugurated in the face of the apathy of many of our public officials, who can doubt that with a general understanding of the value of the reforms we advocate, playgrounds of this sort will be regarded as essential features on the equipment of our great cities.—Bernarr Macfadden.

WHAT is the greatest thing in Chicago? The answer, of course would depend entirely upon the viewpoint. The viewpoint, in turn, would necessarily be biased by the interests and ideals of the individual deciding the question. Many people, no doubt, would unhesitatingly assert that the biggest, greatest, grandest possession of the city ranking second in the nation is her commercial power. Others would as enthusiastically affirm their unqualified preference for her baseball prestige. Then a few ambitious boosters would bring forward Chicago's opportunity to surpass New York in size. Probably some would call attention to the cost of rent. Still others, perhaps, would suggest the prevalence of vice. The Board of Trade, the city's educational equipment, the religious fervor, and the Alderman from the First Ward, all these, and numerous other features of fame, would very likely be entered and zealously supported as candidates for the prize. It is even conceivable that some cynic would call for a unanimous vote in favor of the extreme ease with which political pirates and other professional plunderers rob the slumbering public.

Having no desire to adopt the sensational advertiser's rabble-catching policy of slinging superlatives, I shall not presume to be endowed with either the ability or the responsibility of pronouncing any infallible edict as a finality to all difference of opinion. My purpose in writing this discussion is to present in

a fair, simple and practical way one decidedly worthy, serviceable, and progressive enterprise recently established in this noisy, smoky, wicked metropolis on the shore of Lake Michigan. An institution such as every city sorely needs is the magnificent playground system of Chicago.

In sixteen of the city's beautiful parks, there are maintained regularly, throughout the year, well equipped playgrounds, or recreation centers. Two of these are in the North Division, three in the West Division, and eleven in the South Division. All are under the direct supervision of the Park Commissioners, who make up three organizations caring for the parks and boulevards in their three respective sections of the city, and receiving funds provided by the State of Illinois.

The original cost of these recreation centers controlled and supported by the Park Commissioners forming these three municipalities working within the city but independently of the city and county authorities, was about nine millions of dollars. This amount was expended for the land, the buildings, and all the articles of material equipment. The annual expense of operation is from twenty to thirty thousand dollars for each playground. This covers the cost of improvements and the salaries of the employees.

In addition to the sixteen centers receiving state support, there are conducted every summer by the city itself a



number of smaller playgrounds in available places. Last year, there were fourteen of these, provided by the Special Park Commission appointed by the City Council, and maintained financially by a budget of sixty thousand dollars. The cost of equipping and conducting these small playgrounds was really less than that amount; for a considerable portion of the fund allowed was used for the purchase of small tracts here and there suitable for special parks which were not fitted up with any apparatus for playing. These places were converted into little resting spots, where eyes tired of seeing brick, stone, and cement might look upon grass and shrubs and flowers, and ears wearied by the ceaseless uproar of the rushing metropolis might enjoy the privilege of listening to the water bubbling from a drinking font. These fourteen playgrounds, though small, provide wholesome exercise and amusement for hundreds of boys and girls not well able to take advantage of the facilities afforded by the larger parks. Thus, during the summer months, the definitely specified and well-cared for places of play are thirty instead of sixteen.

As the activities in these larger centers open throughout the year are far more extensive than those in the smaller playgrounds operated only in the summer, a study of the work done in the former will give a clear conception of what is accomplished by both kinds. Further, both in equipment and in methods of operation, all these recreation points in the different sections of the city are very similar; so a description of any one of them would serve as a description of every other one. Of course, there are a few variations in respect to the forms of sport permitted by the natural and modified conditions existing in the several parks. In general, however, the advantages are very nearly equal. Each place is made as attractive and as practically useful as possible, and is well taken care of by from twenty to twenty-five capable and earnest employees.

The limitation of space will not permit an elaborate discussion of the equipment and activities of these interesting centers of recreation. It will not allow even a

presentation of sufficient photographs either to show attractive scenes in all of the several parks or to suggest all the excellent features of any one of them. Perhaps, however, a brief outline and a few illustrations of the different ways in which these places are ministering to the multitudes who visit them will help greatly toward producing a clear, practical, and appreciable impression of what is going on in these places of play. The accompanying photographs, for which we are indebted to Mr. Edward B. DeGroot, Director of Playgrounds and Gymnasiums of the South Park System, are illustrative of several features of physical training provided for both children and grown people, and also of the encouraging interest being taken in the playground movement. The large one showing the crowd at one of the play festivals is Mr. DeGroot's favorite picture of its kind.

Each play center has two indoor gymnasiums, equipped with modern apparatus, steel lockers, and ample baths. One of these is for men and boys, and the other for women and girls. There are also outdoor gymnasiums, athletic fields, and swimming pools. Some of these are regularly reserved on certain days for the exclusive use of women and girls. All the gymnasiums and playgrounds are under the direction of trained instructors, who conduct classes in gymnastics, dancing, and indoor games in winter, teach and superintend various forms of outdoor sports in summer, and endeavor to benefit as many people as possible in as many ways as possible.

Of course, in addition to the many special games and the various forms of athletic training carried on in the definitely specified and regularly equipped playgrounds, there are still other kinds of sport furnished in a more general way by the different parks. In all these places of recreation combined, almost every form of both outdoor and indoor sports is provided. As many kinds as possible are furnished at each individual center. There are baseball, football, basketball, track and field events, golf, tennis, boating, swimming, croquet, archery, range, bowling, skating, hockey, curling, tobogganing, gymnastics, and just plain play.



There are also speeding courses, equestrian paths, and wading pools. Thus it will be easily seen that these recreation centers afford wholesome play for young and old, strong and weak. They are open every day in the year, to boys and girls, men and women.

The gymnasium equipment is not extravagant, but it is very excellent and substantial in quality and most practical in arrangement. The indoor gymnasiums are equipped with steel lockers, dressing booths, shower baths, plunge pools, and with all the essential apparatus for general gymnastics and the various indoor games. The outdoor gymnasiums, for

that of the smallest and yet spacious pool of forty-five by eighty-six feet, in Russell Square, to the lovely Lake Michigan Beach, in Calumet Park. In the swimming places in the eleven South Park Playgrounds alone, about fifty thousand bathing suits and nearly seventy-five thousands towels are available for the free use of the public. In order to insure the utmost safety, pleasure, and usefulness, the Park Commissioners employ constantly two or three life savers for each place, according to the size of the pool.

Very frequently a single one of these pools accommodates a thousand boys in



Gymnastic dancing on the porch of one of Chicago's recreation buildings. A delightful, wholesome form of exercise.

summer use, have much of the indoor equipment and also several extra kinds of apparatus. Horizontal bars, chest bars, slanting poles, traveling rings, flying rings, climbing ropes, ladders, etc., are attached to iron pipe frames. Jumping and vaulting standards, hurdles, shot-put rings, and miscellaneous apparatus for games are arranged apart from these frames, in the most serviceable manner possible. There are lawn swings, rope swings, teeter ladders, seesaws, and other similar apparatus arranged especially for the use of children.

The outdoor swimming pools at the regular play centers range in size from

one day. On some of the hottest days, the different pools altogether handle from fifteen to twenty thousand people.

Nor do the people confine their enthusiastic patronage to the swimming pools. That the facilities not only for bathing but also for indoor gymnasium work and outdoor sport and recreation, both formal and informal, are highly appreciated and extensively used by the public, an accurate registration record and careful, interested observation stand ready to attest. For instance, out in Jackson Park there are maintained two golf courses, one of nine holes and the other of eighteen. At the first tee of the





One of the features of the training offered at the playgrounds. A feat performed at a public exhibition.



Scene at one of the track meets. Outdoor gymnasium and recreation building in the background.



eighteen-hole course there is a large shelter, fitted with a commodious lunch counter, seven hundred and fifty lockers, and shower baths for both men and women. All of these are furnished free of charge. Notwithstanding the fact that four persons are assigned to each locker, so great is the demand that not nearly all those who apply for locker privileges can be accommodated. The use of these golf links is very great, having reached as high a record in respect to number of players as fourteen hundred people play-

photographs affords a good suggestion of the interest taken in the regular track meets, both by the contestants and by the spectators. Again, some of the figures of the registration in the indoor gymnasiums are well worthy of study. In a recent winter season, during the three months of December, January and February, the eleven South Park gymnasiums received a total registration of 11,810. Of these, 7,289 were boys and men and 4,530 were girls and women—7,094 were under sixteen years of age,



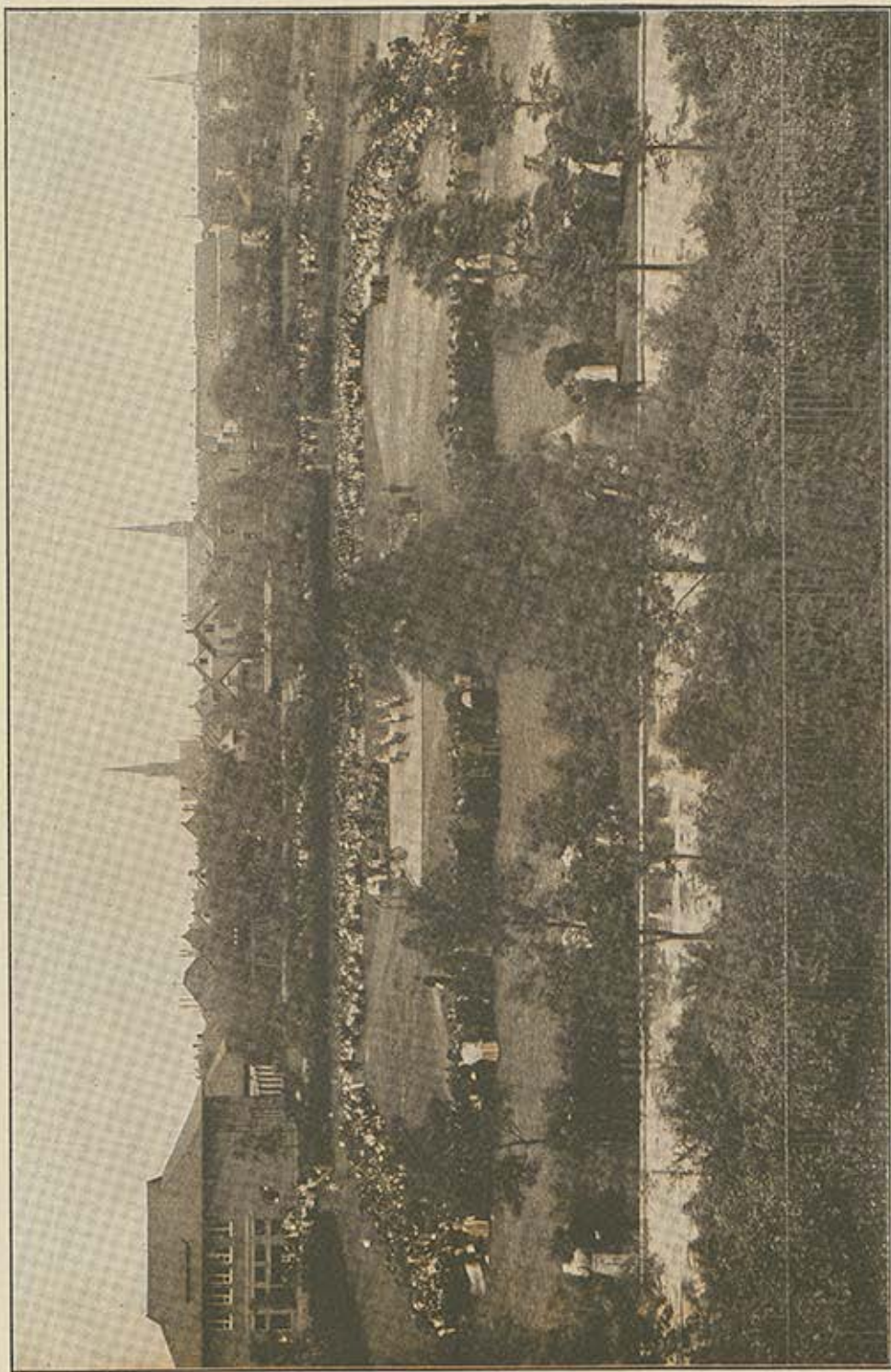
Outdoor swimming pool on boys' day. Sometimes, in one day, a single pool is used by a thousand boys.

ing over the eighteen-hole course in one day. People often go to the grounds early in the morning in order to obtain playing tickets giving them the right of early turns for using the course. Equal or even greater advantage is taken of the admirable facilities for baseball, football, and tennis. In addition to general, informal playing, there are definitely scheduled games and tournaments in these branches of sport, and also in track athletics, basketball, and indoor baseball. One of the accompanying

and 4,725 were older. A few more than five thousand were working people, and the remainder (a little more than one-half the total number), were students. In favorable weather, too, there were immense crowds at the nineteen skating ponds and seventeen toboggan slides.

Each recreation center has a reading room, with a small, but well selected and growing library. Good books and periodicals are here available for those who desire to enlighten or entertain the mind. Although these places are principally for





A play festival scene, showing women's gymnastic drill and its great crowd of interested spectators. Director De Groot's favorite play-ground picture.



physical exercise and recreation, the library feature is found to receive an encouraging degree of attention by the patrons of the playgrounds. Many people, of course, do not have good reading facilities offered them elsewhere.

Besides the regular, paid employees, there are several workers who donate small and yet important services. In a few localities, these outside helpers do

far broader enterprise than the name would at first suggest. While not intended to be directly educational, it is very highly educational. It teaches many valuable principles of life both to those who do not have the advantages offered by the regular public schools and colleges and to those who do have these advantages. It unquestionably serves as a wonderful factor in counteracting



Typical outdoor gymnasium for women and girls. The training received here helps greatly toward strengthening womanhood and improving the human race.

some special community work, giving the people of the neighborhood additional teaching along the lines of diet, hygiene, and sanitation. Such activities, however, are not a part of the regular work of the playgrounds. To be sure, the trained instructors in charge of the gymnasiums and playgrounds teach in a very practical way the value of exercise, bathing, and healthful habits in general.

Thus the playground movement is a

and lessening the various vices and numerous unhealthful influences of city life, and in building a stronger, cleaner manhood and womanhood. Its workers are enthusiastic, sensibly so, and well deserving of the trustful co-operation of the public. The evidence is most convincing that the money wisely expended in equipping and maintaining public playgrounds is invested in a highly efficient and economical cause.

### Thankful for Improved Health

TO THE EDITOR:

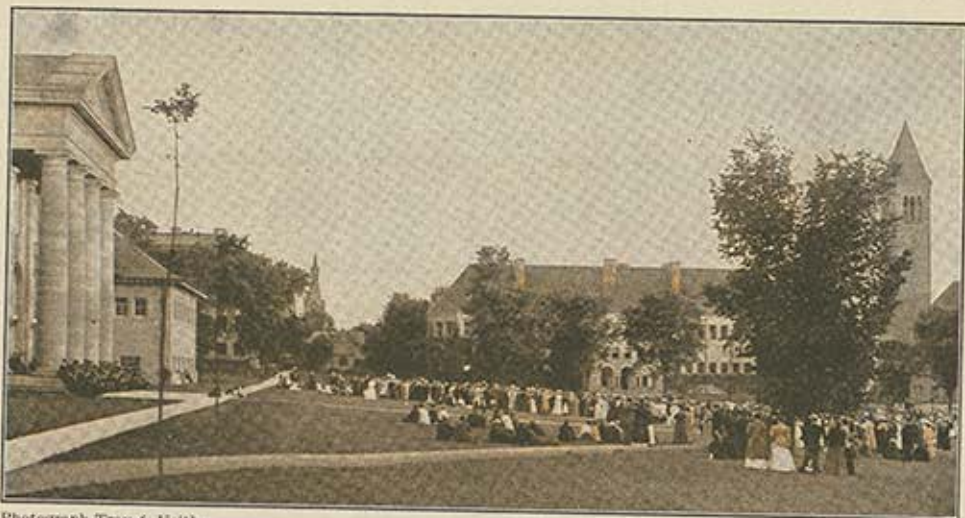
Am very much pleased with your publication, which has been a great help to me for the year past. Have had some trouble with my stomach. For the last season have been well.

I live on two meals a day, eat plain food, and exercise regularly, and am thankful to our Heavenly Father for what Physical Culture has done for me.

Hadley, Mass.

A. D. DINSMORE.





Photograph Troy & Kelth.

Some of the magnificent buildings at Cornell. In this photo are shown the seniors singing on the steps of Goldwin Smith Hall.

## Moral Influences at Cornell University

By James J. Green

HOW THE STUDENT IS SURROUNDED BY SEVERE TEMPTATIONS OF MANY KINDS, BUT ALSO OFFERED HELPFUL ASSOCIATIONS—THE VALUE OF COLLEGE ATHLETICS

The following discussion of the influences which surround students at Cornell University indicates that the general tendency of the surroundings of students there is of a nature to improve them in body and mind. It is none the less plain, however, that the exaggerated importance which the student body attaches to some of the social features of university life are a great hindrance to their mental and physical betterment. The moral would seem to be, that the faculty and the undergraduate organizations having the best interests of the university at heart would do well to take measures to render impossible the existence of meeting-places or resorts which have an evil effect upon the morals of the students who are tempted by them.—Bernarr Macfadden.

THE problems that confront the young man of to-day in entering the life of a great university community are perhaps no greater nor more acute at Cornell than in half a dozen of the other large institutions of higher learning. It is probable, however, that such problems will nowhere be found more clearly defined, nor is there another institution that affords a greater opportunity for studying them.

Cornell is one of the largest of our universities. Its students come from all quarters of the globe and from practically

every state in the union. Founded primarily for the industrial classes, it has added to its colleges for technical training courses in the professions and liberal arts, which make it a university in its broader sense. Starting as a poor man's institution, it has drawn more and more from the well-to-do middle class, and its student body is probably more representative of the American public of to-day than that of any other eastern institution.

By geographical location it should be affiliated with the east; in educational





Photograph Troy & Keith.

Finish of the Cornell-Harvard crews on Cayuga Lake, in 1909. Cornell winning by two lengths.

tendencies, spirit and thought it perhaps leans toward the west. It was founded as a non-denominational institution, yet supports one of the finest chapels of any university in the country, and a vigorous Y. M. C. A. It has a highly developed social system, including one of the strongest groups of fraternities in the country. In intercollegiate athletics Cornell is forging ahead steadily; while probably nowhere has intercollegiate sport, among the separate colleges, been so highly organized or encouraged. The student activities cover a wide range.

The beauty of its location, its comprehensive courses, its libraries and laboratories, its environment and its religious opportunities open wide the door for the development of the intellectual, moral and aesthetic natures of its students. On the other hand, all of the vices that are found in communities which are largely made up of young men exist here. It

affords a good field for the study of moral conditions in our universities to-day.

Founded in 1868 by Ezra Cornell, the university has rapidly grown to one of the foremost in the land. It is the only institution of its character, combining Federal support, State support, and private endowment. Founded for the industrial classes, it has long maintained excellent colleges of mechanical, electrical, and civil engineering, architecture, agriculture, and veterinary medicine. An excellent college of liberal arts, a capable law school and a medical school of merit have been added. The agricultural and veterinary colleges are State institutions.

There are now resident at Cornell over 4000 students, two-thirds of whom are in engineering, technical, scientific or agricultural courses. In the winter from 300 to 400 sturdy sons of the soil come from the farms to take the short course



Photograph Troy & Keith.

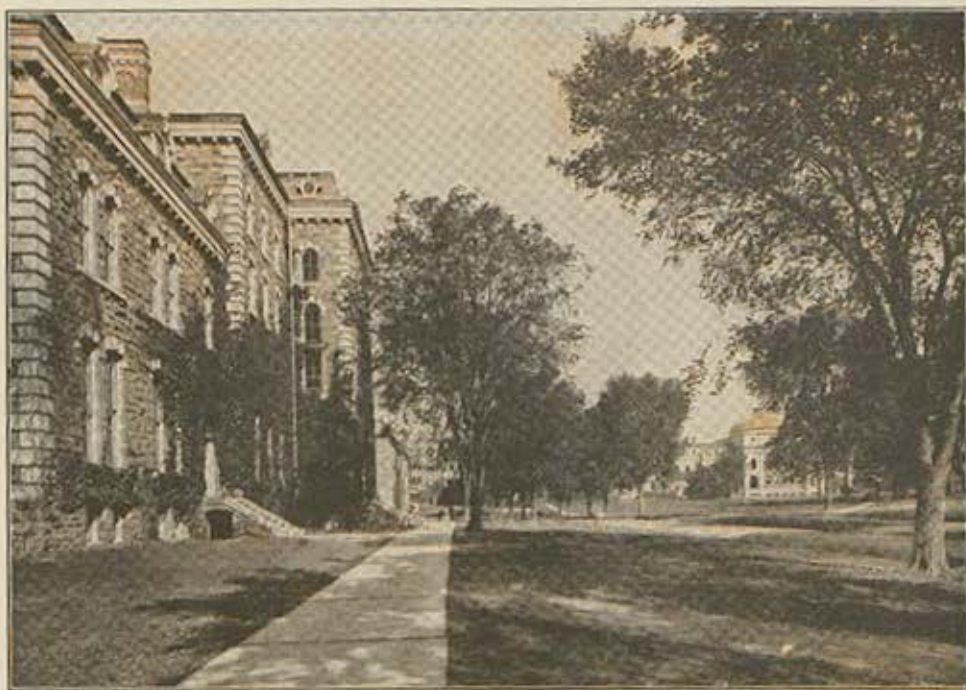
Intercollegiate baseball on the playground of the Cornell Campus. College of Agriculture in the background.





Photograph Troy & Keith.

Barnes Hall, the home of the Cornell Young Men's Christian Association, and Central Avenue, looking south from the library.



Photograph Troy & Keith.

View of the northwest corner of the quadrangle, showing McGraw, White, and Franklin Halls, and the Sibley College of Engineering.



in agriculture; in summer over 800 young men and women study in summer school. The total annual attendance is over 5200, while the staff of instructors numbers 640. These students come from forty-nine states and territories; the technical courses draw them from all corners of the globe, there being thirty-five foreign countries represented. Differing in race, tongue, religion, philosophies of life, customs, habits, thought and training, they make up a most cosmopolitan colony.

The majority of students coming to Cornell are direct from high school. A few, however, come from preparatory schools, and a few others already have their bachelor degrees from other institutions. Most of them, however, come direct from their homes and for the first time in their lives are free from all home influences.

They come to what is largely a free community and work out their lives as they see fit. There is a faculty committee on student affairs which has power to punish breaches of discipline, fraud and cribbing in examinations, places limitations on students, activities and deals with those found guilty of gross immoral conduct. They have no direct supervision of the students, however, so that the men are practically free moral agents.

The warmest friend of the university admits that social life among the students is exaggerated; given entirely too much prominence and wastes much valuable time. There are thirty chapters of national fraternities and nine local clubs resembling fraternities at Cornell to-day. There are thirteen honorary societies, six or eight semi-literary clubs, an important dramatic organization, and two large musical clubs, to say nothing of the other thirty odd social clubs.

The fraternities present one of the great problems in the university and probably will continue to do so until dormitories are provided. In the absence of dormitories, however, fraternity life is inevitable; in fact, the fraternities in providing for the physical and social welfare of their members accomplish a great good.

Most of these fraternities own their

houses, costing from \$15,000 to \$50,000. Most of them are luxuriously furnished, and with their tennis courts and other accessories cause the students to acquire extravagant habits which cling to them in after life. It takes a great deal of money to build and maintain these houses, so that fraternities are barred to the poorer students. The average fraternity man spends from \$800 to \$1000 a year; many spend more; some as low as \$600. Many fraternity men, by spending excessive amounts at the tailors and haberdashers, at the theatre, and for dances, and in the student resorts downtown, waste a great deal of money and cultivate tastes which will handicap them in life and make the first few years out of college a bitter struggle.

The freshman who appears to be "eligible," *i.e.*, who has the appearance of making a good fraternity man, finds himself the center of many attentions from the fraternity men, who begin to "rush" him for their respective chapters as soon as he steps from the train. He is feted, dined, taken to the theatre, made the world of, until he accepts the invitation of one of them. This attention is enough to turn the average freshman's head, and gives him an exaggerated idea of the importance of a fraternity. By joining a fraternity he withdraws from the common brotherhood of the entire university and enters an exclusive circle composed of the members of his own and a few rival fraternities.

This exclusiveness may result in his acquiring a feeling of superiority over his less fortunate classmates and gives him an artificial view of life. He does not lose this until out in the world—after four years which might have been rich in developing him through association with the members of a cosmopolitan student body have been lost.

Idleness is another evil which has cropped out of the fraternity system, though it is by no means peculiar to fraternity men. The comfortable life in the fraternity houses is more of an incentive to idleness. Frequent trips downtown, to the Dutch Kitchen, the Alhambra, Zink's, the Senate, and other well-known student resorts are the result. To the idlers the fraternity life is detrimental.



Many fraternities, however, by having a system of upper class supervision keep close track of their men and do much to overcome this tendency. There is no more drinking and immorality among the fraternity men, however, than among the general student body, except that perhaps there are more social gatherings among the fraternity men. In most of the houses the importation of liquor is forbidden; gambling is tabooed, and honest efforts are made to improve the moral conditions not only in their own midst but in the university in general.

Fraternities, however, accomplish a great deal of good which at Cornell far outweighs their evil effects. They take care of the social and physical welfare of their members and foster, support, and express college spirit, for it is the fraternity men who support most of the undergraduate activities. They help their men in whatever field of activity they enter and back all movements helpful to the university.

The drinking or social clubs, like the Mummy Club, Nalanda, Bench and Board, and Undine, have most of the vices and few of the virtues of the fraternities. Fair-minded men unite in the opinion that Cornell would be better off without them. The literary clubs, however, are helpful in guiding men to higher things and preserving moral standards.

Tales of drunken orgies at Cornell after athletic victories are no longer true. In the past some athletic celebrations have resulted this way; for instance, the great celebration in the spring of 1905, when Cornell won four important athletic victories in one day, including the first intercollegiate track-meet Cornell had ever won. But in recent years the tendency has been away from this. The notorious Senior Banquet, which meant a drunken carousal from noon till midnight has been abolished. It took a warning from President Schurman to accomplish this, but the senior class last year held a dignified banquet. Probably forty or fifty per cent. of the students drink beer occasionally, but the city authorities say that forty or fifty men do all of the hard drinking.

A cause which has contributed largely

to the reduction of drinking among the students has been the increasing strictness of the faculty in regard to the work of the students, which has led President Schurman to make the boast that "this is the hardest working university in the country." Cornell men pride themselves that theirs is not a community where idling is fashionable. There is no question but that most of the students have enough university work to keep them fairly busy. This is especially true in the technical, industrial and scientific courses, in which by far the majority of the men are enrolled, for the laboratory and shop periods take a great deal of time. In the Arts course, however, there are students who are trying to get through with as little work as possible. It is probably fair to say that Cornell men work harder than men in the average college and that hard work keeps them out of mischief and helps to maintain good moral standards.

"Student activities" threaten to swallow "studious activities" and President Schurman has seen fit to warn the young men repeatedly that the real purpose of the college education was to educate. From the moment he gets here the freshman is told that in order to "make good" he must enter some line of activity where he can win honor. The athlete, the editor, the comedian, the soloist, is a figure of more importance in the average student's eyes than the scholar and the rewards from such activities are the most coveted prizes. A freshman like that one who the other day dropped out of the competition for the college paper, even though he was ahead, because it interfered with his university work, is an anomaly which the average college man cannot understand.

Cornell is suffering from the same disease as Princeton and many other large universities; the development of outside student activities out of all proportion, and probably this is a menace to intellectual development. By interesting so many men, however, it keeps them busy, teaches them the discipline that comes from keen competition, keeps them out of mischief by providing an outlet for their energies, and instilling into them the lesson that nothing is



gained without hard work. This unquestionably serves to lift and conserve moral standards.

In no other university has the student activity been developed to a higher degree than at Cornell. Varsity athletics each year call out three hundred men; minor sports an even larger number; intercollegiate sports between six and seven hundred. There are six college papers with over fifty men in the editorial boards; glee and mandolin clubs with a membership of over one hundred and twenty-five; the Cornell Masque, a dramatic organization with a membership of one hundred; six or seven semi-literary organizations with a membership of from two to three hundred; some seventy-five men working as candidates for managerships of the various teams; scores interested in religious work, and so on.

Athletics play a large part in student life at Cornell and have a very beneficial effect upon the student body. They can be divided into two classes, intercollegiate and intercollegiate athletics.

There are varsity teams in the four major sports, football, baseball, rowing, and track, which call out the largest number of men. To these as major sports at Cornell might also be added cross-country and lacrosse, for they also have an important position in athletic here. The teams in association football, fencing, wrestling, basketball, tennis, hockey, and cricket, are combined under the Minor Sports Association, composed of faculty members and representatives of the various teams, which has supervision of these teams.

As has been pointed out, between seven and eight hundred men spend a part of each day training for their respective teams. This keeps the men so busy that they have time for little else besides their university work, and consequently this is another factor which is conducive to raising the moral standards in the university.

Intercollegiate athletics at Cornell have been put upon a very high plane and no student who comes merely to indulge in athletics and not for serious study remains in the university very long. The faculty keep very close watch

of the work of the men on the athletic teams and if it falls below the required standard they are immediately put on probation and not allowed to represent the university. This gives the men an incentive to keep up their university work and the small number of athletes who are dropped for not passing their examinations shows that it is possible for men to indulge in athletics without its interfering with their studies.

Cornell has been fortunate in having entered in her classes very few preparatory school stars, who come primarily for athletics and for what concessions the university is willing to make to them. The reason for this is that those interested in athletics at Cornell feel that athletics are not the principal thing for which a man should come to college, and so no concessions are made to a man simply because he is an athlete; in fact, he is watched more closely than the ordinary student.

Another strong moral influence upon the men in athletics at Cornell has been the character of the coaches, all of whom stand very strongly for clean manly things and do all in their power to instill into the men under them the fact that they are playing for sport and not to win at any cost. Any man who has been fortunate enough to be on the teams coached by such men as "Jack" Moakley, "Danny" Coogan, and "Old Man" Courtney, cannot help but come to feel that it should be sport for sport's sake and that they should conduct themselves as gentlemen at all times. The influence of this is plainly shown by a remark which a graduate from the University of Pennsylvania made to the writer shortly after the Cornell-Pennsylvania football game at Philadelphia last fall. The Cornell team had stopped at the Hotel Normandie, in West Philadelphia, and as it was the end of the season it was expected that after the game the men would break training and indulge in a wild carousal. The fact that they did not do this made a very strong impression upon all those at the hotel and the Pennsylvania man said, "the whole Cornell team instead of getting drunk, as so many teams at the Normandie have done, conducted themselves like gentle-



men and there was no sign of drunkenness whatever." When athletes have such ideals and do not break training even at the end of the season, but conduct themselves like gentlemen, the writer contends that athletics are not in vain.

A great feature in athletics at Cornell is the strong system of intercollegiate athletics which have been fostered under the direction of Professor C. V. P. Young, head of the Department of Physical Culture. Under his guidance, series of games are now held between the various colleges in the university in basketball, association football, and baseball. An intercollegiate crew regatta, an intercollegiate track meet, and an intercollegiate cross-country run are also held. No student who is connected with one of the varsity teams is allowed to compete on the team representing his college. This elimination of all the leading athletes has resulted in bringing out between seven and eight hundred students of average ability who are not on any of the varsity teams to try for their college teams.

Also for gymnasium work, which is required of freshmen who are not drilling and of sophomores, credit may be received for taking walks to stated places each day, or for a cross-country run, or indulging in any other form of athletics, so the student is not compelled to enter a gymnasium class in a stuffy room.

The situation of Cornell, in a small city where there is plenty of opportunity for the students to be out of doors and to indulge in various forms of athletics has done much toward causing all of the students to get outdoor exercise. The university authorities have done all in their power to foster this idea of athletics for all and this has led to the development of the system of intercollegiate athletics, for which purpose a large playground is being provided for the general use of the students in connection with the new varsity athletic fields.

It can very easily be seen that a man who is spending a couple of hours a day in athletics, besides keeping up his university work, will not have much time to spend in the drinking resorts downtown. Consequently this provision of athletics for the whole university is another factor

which is contributing toward a sane and healthy student life, and consequently reducing more and more the number of those students who indulge in the usual student vices.

The only definitely religious work which is done at Cornell is under the auspices of the Cornell University Christian Association, which has its home in Barnes Hall, the beautiful building which was the gift of Alfred S. Barnes. The only other religious services in the university are the chapel services on Sunday.

One of the most interesting features of the work of the Christian Association is the Bible classes in the fraternity houses. These classes take up regular Bible study courses and are conducted by some one of the students or by the secretary of the Association. These have done much toward enlisting the interest of the fraternity men in the work of the Association.

Besides the definitely religious work, the Christian Association carries on religious and philanthropic work in various parts of the city and surrounding country. Barnes Hall is the only building which can be thrown open for the social use of the students and this building is used very largely by the various clubs and literary organizations in the university. The Christian Association in providing for the social use of the students, including a well equipped reading room and splendid Biblical library, exerts a good influence in the university community.

It is useless for those who are seeking for the facts regarding college life to blind themselves to the temptations which surround student life. It is undoubtedly true that the freedom of a college community brings a man face to face with the temptation to drink and indulge in various forms of immorality. Many of them yield although there are hands stretched out on all sides to help them. From my observation, that man who goes to college with serious intentions, the will to do right, and the determination to resist temptation, will be able to go through Cornell with a clean record and at the end of his four years feel that they could not have been more profitably spent.



# The Ideal Diet—How May We Find It?

By Upton Sinclair

Few indeed are those who have investigated and experimented to solve the diet problem as has Upton Sinclair. It must be borne in mind that while he speaks always in the first person and deals with causes and effects as he has personally found them, he has been a close observer of the results that have been attained through various methods of health-building by many of his friends and acquaintances, and members of his own family. His experience has certainly been most interesting, and should be read by every health-seeker with great profit.—Bernarr Macfadden.

THE articles which I have been contributing to PHYSICAL CULTURE have brought many letters from readers, who have questions of all sorts to ask me. There have been so many that for the future I shall have to ask to be excused from answering them individually; but from time to time I will answer some of them in these columns. Most of the queries so far have had to do with matters of diet, and it would seem that I have not gone sufficiently into detail upon that important and interesting subject. This month I have decided to give a general account of the experiments I myself have made in that line, and the convictions that have come to me.

First of all, to explain my attitude: The more I go into the question, the more I become convinced that it is very difficult to lay down rules that will apply to everyone. I have found that every human organism is a problem in itself, with peculiarities that have to be discovered and allowed for. And I am inclined to think that it does not matter so much what one eats, provided that he does not eat too much of it, and provided that it agrees with him. Unfortunately, however, it is no simple matter to know whether food is agreeing with you; for you may have been sick all your life, and have no idea what you would feel like if you were really well. There are many ways that food poisoning may affect one besides a violent stomach-ache, or chronic dyspepsia. And there is no way of being sure, except to experiment, watching one's own case, and taking the experiences of others as a guide.

The general rules are mostly of a negative sort. There are many kinds of

foods, some of them those most generally favored, of which one may say that they should never be used, and that those who use them can never be as well as they would be without them. Such foods are all that contain alcohol or vinegar; all that contain cane sugar; all that contain white flour in any one of its thousand alluring forms of bread, crackers, pie, cake, and puddings; and all foods that have been fried—by which I mean cooked with grease, whether that grease be lard, or butter, or eggs or milk. It is my conviction that one should bar these things at the outset, and admit of no exceptions. I do not mean to say that healthy men and women cannot eat such things and be well; but I say that they cannot be as well as they would be without them; and that every particle of such food they eat renders them more liable to all sorts of infection, and sows in their systems the seeds of the particular chronic disease that is to lay them low sooner or later.

There are a number of other things, which I do not rate as quite so bad, but which we bar in our family—simply because they are not so good. For instance, I am inclined to regard beans as being too difficult of digestion and too liable to fermentation to be eaten by anyone who can get anything better. And I personally do not eat peanuts, because I have found that I do not digest them; and I do not use milk (except in the exclusive milk-diet), because it is constipating, and I have a tendency in that direction. Almost everyone will discover idiosyncrasies of that sort in his own system. One person cannot digest cheese, another cannot digest bananas, another cannot stand the taste of olive oil. You



may read a glowing account of some diet system by which some other person has worked miracles, and you may try it, and persist in it for a long time, and finally come to realize that it was the worst diet you could possibly have been following. I have always counted orange juice as the ideal food with which to break a fast; yet a friend whom I was advising broke his fast with the juice of half an orange, and had a violent cramp. He had been so confiding in my greater knowledge that he had omitted to tell me that any sort of acid fruit had always made him ill.

Such things as this are of course not natural; but a perfectly normal and well person is, under the artificial conditions of our bringing up, a very great rarity; and so we all have to regard ourselves as more or less diseased, and work towards the ideal of soundness. We must do this with intelligence—there is no short cut, no way to save one's self the trouble of thinking.

I used to think there was. I would discover this or that wonderful new diet-wrinkle, and I would go round preaching it to all my friends, and making a general nuisance of myself. And some one would try it, and it would not work; and often, to my own humiliation, I would discover that it was not working in my own case half so well as I had thought it was.

The beginning of my health experiments was through reading Mr. Horace Fletcher. I had been brought up to over-eat recklessly, and had suffered more or less from dyspepsia whenever I was doing hard brain-work. I accepted with fine enthusiasm Mr. Fletcher's comforting idea that if you will only chew your food, you will not over-eat, and nature will tell you exactly *what* to eat. At the time I began I was in the pink of condition—I had been on a long out-door "roughing-it" adventure, and I weighed one hundred and forty-one pounds. On Mr. Fletcher's system I took off fourteen pounds in as many days, and it is only recently, four years later, that I have got to over one hundred and thirty pounds—so long has it taken me to make all the mistakes that are advocated by all the diet-cranks! (I might say that I am sixty-seven and one-half inches high, and

my tendency is to lose weight whenever I am in poor health; I now weigh one hundred and forty-two pounds). The reason for my sudden loss was that the foods my "nature" craved were starches and sugars, and these of the most unwholesome sort. Many a day, downtown, I have eaten a luncheon consisting of a piece of apple-pie and a cup of custard and a couple of dough-nuts, all buried under sugar. I would "fletcherize" these religiously, and wonder why I had a headache afterwards. And then for dinner I would have a baked potato and an egg, and some white-bread toast soaked in butter. On such meals as this I would have a movement of the bowels once a week—this too being according to the rules of the cult.

I used meat occasionally, according to Mr. Fletcher's advice, until I came under the influence of Dr. Kellogg, and read about all the millions and billions of *anaerobes*. Then I adopted the vegetarian religion, and lived on Dr. Kellogg's "malt-honey" and "oses" and "enes" of various sorts. The bacteria which thrived upon these were *aerobes*, I was told, and did one good; and meantime the constipation got worse and worse. As long as I stayed in a sanitarium and took fomentations and water-treatments I was well, and could write books about health; but the moment I went out into the world I got the grippe.

Then I tried Metchnikoff, and his buttermilk, and yogurt, and fancy germs from Bulgaria and Switzerland and Kamtchatka. I tried a lot of other things, needless to bother with, and then I solved the problem by going off by myself and living on raw foods. That was a year and a half ago, and my problem would have stayed solved forever, if only I had not got reckless and saucy. I got to feeling that I could never again be sick with anything—and after six months of raw food, I began to visit friends, and travel about to do some lecturing, happy in the ability to "eat what other people eat;" and so in a couple of months I was ill again. And my recovery was greatly retarded by the circumstances that I did not let well enough alone, but set out to try a new plan; I wanted to live on the exclusive nut and fruit diet. Now the



exclusive nut and fruit diet I believe is the ideal one—Mr. Macfadden tells me that he so regards it also. But he adds that he finds that when he is doing hard brain-work he cannot keep up strength on it—and I for my part have found that when I am doing hard brain-work I cannot digest it.

Many of the letters that I have received have related to this diet, and to difficulties which the writers have had with it; so perhaps it will be of interest to tell in detail of my experience. I tried to follow it for the reason that I had a friend who had done so for several years, with apparently the best results. He was a young man of twenty-four, weighing one hundred and sixty-seven pounds, a good deal of an athlete, and a picture of health—which not all vegetarians are, by any means. His food consisted of nuts, bananas, prunes, and oranges or apples, and cost him less than ten dollars a month. He ate a certain specified quantity three times a day, and he never had any slightest craving for anything else, and no tendency to over-eat. Inasmuch as nuts and fruits are almost always to be had, it seemed to me that the final solution of the diet problem lay here. So I set to work to drill myself to live on nuts and fruit.

The fact of the matter is that this diet takes a very strong stomach to manage; for the reason, I think, of the great quantity of acids that one takes. Perhaps if I had gone at it gradually, and when in perfect health, it would have made no trouble; but after an illness, it did make trouble, and the longer I stuck at it the more trouble it made. I kept at the experiment for nearly a year. There were times when I was taking a great deal of exercise that it seemed to be all right—but then the moment I got down to hard mental work there was fermentation and distress after meals.

And yet, there is something very important and interesting to be noted—annoying as this distress was, it caused nothing like as much physical ill as other diets which had given me no stomach trouble at all. This, I think, has been the experience of everyone I have ever known who has tried any sort of a raw-food regimen. The reason is that raw

foods at least keep the bowels open freely, and so, whatever poisons may be generated by fermentation do not have time to be fully absorbed. It was my invariable experience that whenever I would give up the nut and fruit diet and take to eating such things as rice and potatoes and zweiback, my stomach would fairly lie down and purr with relief—but almost instantly the effects of constipation would manifest themselves in a violent headache. The conclusion to which I have finally come, as a result of studying, not only my own case, but those of many other people, is that the most destructive articles of food that civilized people eat are the highly concentrated and refined starch and sugar foods; and for this reason I place at the very top of my forbidden list cane sugar in every form, and white flour, polished rice, and mashed potatoes. This is as near to a universal rule of health as I would ever attempt to formulate. Polished rice causes beri-beri in Japan; potatoes eaten without the skins cause pestilences in Ireland; and white flour and sugar cause falling hair and decaying teeth and sallow complexions and sluggish bowels—and even more serious derangements—and consumption and neurasthenia and all the chronic ailments of our civilization.

The solution of the problem in my own case was therefore to find a food that was not acid like the fruits, and yet not concentrated and constipating. I tried various forms of raw grain, but this was never a success with me—perhaps for the reason that my distaste for them was so great that I was never able to make them an important article in my dietary. I found the solution in the modified raw-food diet which I have recommended to the readers of this magazine in previous contributions—nuts, fruits and green vegetables, and such articles of cooked food as whole-wheat bread, shredded wheat biscuit, and whole corn-meal and water baked in flat cakes. Since those articles were published I have come upon another discovery, which I regard as more important yet; in fact I don't know of any discovery in the food line that has ever meant so much to me as this last one—I am almost tempted to say that I would part with all other knowledge I



have ever gained on the subject, rather than with this.

I have reference to whole grains boiled—especially wheat. It is such a simple idea that I wonder I should have been all these years coming upon it; especially I wonder that I never heard of it from Mr. Macfadden, and did not find it upon the table at his sanatorium. Certainly no food could be cheaper or more easy to procure and prepare. A bushel of wheat costs about a dollar, and that is more than a man can eat in half a year; and as it is best eaten cold, and will keep cooked for several days, you can stew a whole potful, and your cooking is all done until it is gone. I have yet to find a person who likes wholesome food of any sort who does not enjoy it, and it has become the staple article in our family at all three meals. I eat a small soup-plate full of it three times a day, and I cannot imagine myself ever growing tired of it.

Get the best grain you can, and soak it a day or so, and then boil it three or four hours. Eat it with a little cream and some raisins or other dried fruit, and see if it is not the most magical food that you ever took into your stomach. You simply *have* to chew it; and when you have finished it you will find that an apple or an orange is all the dessert you want. Also, unless you have a very bad stomach indeed, you will find that it digests perfectly, and you will find that it cleans out the bowels in most extraordinary fashion. It may be that a palate accustomed to hot waffles and batter cakes and muffins soaked in butter will find it a trifle uninteresting; but you ought not to mind that if you really want to get your health back. When you have once learned to enjoy this royal food, you curse your folly for each separate loaf of baker's bread that you ever bought at five cents per soggy loaf, and for each separate package of wheat flakes and oat-flakes and corn-flakes for which you paid the grocer fifteen cents a package.

The difference in price is what you pay to have the food put through a lot of patented processes, the only effect of which is to remove all the rough and cleansing particles. You may go down the ordinary menu from the soup to the coffee and crackers and cheese, and you

will scarcely find a single article which has not been put through some such process, and some of them have been put through a dozen. In some cases the cost of the food has been increased a thousand per cent. by all this preparing; and the only thing that has been accomplished is to make it impossible for you to know how much you ought to eat, and to make it certain that what you do eat will lie stagnant in your bowels for days, and fill your whole system with poisons and diseases. It is enough to make me shudder whenever I think of my own ignorance on this point, up to a year or two ago; and the suffering with which I paid for it.

When my little boy was a year old he suffered from malnutrition, because he had been nursed by a mother who had simply lived on white bread, and was all but a nervous wreck in consequence; and we took the boy to a specialist in children's diseases, who laid out a *ménu* for him. He had to be fed eight times a day, and what brings the matter to my mind at the moment is the injunction which was laid upon my wife—that the stewed prunes that were fed him should have every particle of the skins removed. And I recall the fidelity with which we carried out this order, shuddering meantime at the thought of the frightful destruction that would be wrought to the precious infantile insides by those paper-like prune skins. I wonder what that doctor would say if he were to see the boy now—rosy and sound in spite of all the pneumonia and bronchitis and croup brought on by that regimen of stuffing—and eating three times a day a plateful of wheat-hulls, and nuts, and raw raisins with the seeds!

When I came upon Mr. Fletcher's teaching, I became still more strenuous on the subject of getting all the waste out of my food. Imagine, said Mr. Fletcher, the labor of one's inwards, having to push through the thirty feet of the alimentary tract all this rubbish! So I would even chew out the skins of young green peas, and set them to one side on my plate. I have referred to this matter before, but it needs to be said again and again, for I know it is a frightful blunder. For the two years that I was a disciple of



Dr. Kellogg, I would eat his "hulless baked beans" and his white flour "breakfast toast" and his pure distilled "malt honey"—and then take his "colax" to give bulk to the intestinal contents! I still take the colax now and then, for the more bulk the merrier with me; but what harm can the hulls and the skins and the straw do—if they are not nutriment for me they are surely not nutriment for germs!

I used to have an idea that these rough things would perhaps tear the intestinal walls; I had an image of them somehow scraping the skin off. Since that time, however, I have passed several gallons of sand through my system, and countless bushels of wheat hulls and raisin seeds and date pits and orange peelings; and so I have a new conception of the toughness of the inner tract. Some time ago I remember reading in the London *Lancet* an article to the effect that the prevalence of appendicitis might be due to the use of American milled flour, which contained minute fragments of the steel rollers from the mills. I remember how I

shuddered at the image of myself lacerated internally by steel spikes; but now-a-days if I had to live on white flour, I should greatly prefer it mixed with particles of steel, in proportions of say one of steel to two of flour. The article did not say whether the surgeon claimed to have found any of the steel fragments in the appendices of his victims; but I think it would be a safe guess that he must have found American white flour in a great many of them—and British white-flour also.

There is yet another interesting diet question which I have of late been trying to work out for myself—that is the question of meat. For three years I was a rigid vegetarian—in practice, if not upon principle. Then I read Mr. Norton's articles in this magazine, dealing with the Salisbury meat-diet system. I had accepted and believed so many false things in the course of my gropings that it occurred to me to wonder if this might not be another one. In a future issue of *PHYSICAL CULTURE* I will relate how I made out with the Salisbury system.

### A Physical Culture Girl Husks Eighty-six Bushels of Corn in One Day

TO THE EDITOR:

I have been teaching music almost ever since I left Michigan. Had seventeen pupils, most all summer. Walk most of the time or go horseback.

Last winter I walked through all kinds of storms and weather and I never was so happy. Last fall I husked 1116 bushels of corn in seventeen days; averaged seventy-two and a half bushels a day. One day I fasted and husked eighty-six bushels, the rest of the time ate two meals a day. I've often walked sixteen miles, although when you first wrote to me that by long walks you meant fifteen miles, I never thought that I would be able to live to do that. But all your treatments are fine if they are kept in practice—still wear bloomers and sandals at home. Always have a longing for the old Health Home.

MISS MARY HULSEBUS.

Defiance, Iowa.



Miss Mary Hulsebus, Defiance, Iowa, in teaching costume, and also in her favorite garb for outdoor exercise.



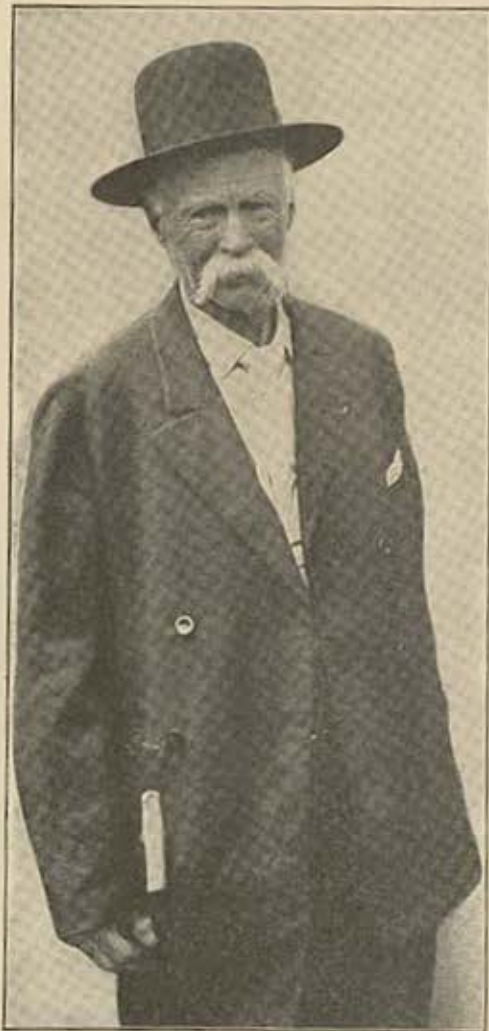
## On the Road with Weston

By H. C. Long

As the forms of this issue of PHYSICAL CULTURE close, the daily press of the entire country is ringing with the news of Edward Payson Weston's remarkable transcontinental pedestrian tour, recently finished in New York City. Weston is truly a remarkable exponent of the value of exercise and sane living in prolonging life and retaining strength. In ripening years his strength and endurance, far from diminishing, seem to have markedly increased. It is interesting to observe that this startling example of athletic manhood—now seventy-two years of age—was a puny weakling in youth, and that his strength and endurance have been gained largely through his walking tours and the observance of rational rules of living. The contribution which follows was penned by a companion who accompanied Weston for many miles of his recent journey, and our readers will find his recital a most interesting one.—Bernarr Macfadden.

**E**IGHTY-FOUR thousand miles is a good deal, even if you say it quick. It is over three times the circumference of the earth, and it is a noticeable fraction of the distance to Mars. Not one person in ten thousand has ever travelled so far by railroad or steamship. Edward Payson Weston has walked the entire distance, covering it by means of as sturdy a pair of legs as Nature ever gave man. Because he has walked those eighty-four thousand miles in long and short distance tests of endurance, he is with little doubt what he is universally acclaimed—the greatest pedestrian the world has ever seen.

Weston has just accomplished the supreme effort of his life. On February first, last, he



Edward Payson Weston, at seventy-two, when his recent long journey was nearly ended. This photograph was taken at Buffalo, where he arrived fifteen days ahead of his schedule.

left Santa Monica, Cal., eighteen miles from Los Angeles, with the determination of walking across the continent to New York in ninety days. The distance is 3483 miles; so that the pedestrian bargained to cover, no matter what February and March blizzards or April rainstorms he ran into, a distance of more than forty miles per day for ninety consecutive days. The adjective "consecutive" must be qualified by the fact, known to many, that Weston never walks on Sunday.

Weston reached Fredonia, New York, after covering three thousand miles of the journey, seventeen days ahead of his schedule. As Fredonia is only five hundred miles from New York city, he ascended the steps of City Hall, Manhattan,



despite accident and untoward circumstances, on Monday, the second day of May.

Remarkable as this great feat must seem to the public at large, it is infinitely more remarkable to those who, like myself, have been on the road with Weston and watched his progress day after day. As a staff-correspondent of a New York daily newspaper I met him on the Santa Fé railroad tracks and accompanied him through in an automobile, on his course eastward along lake shore and central New York turnpikes.

I shall never forget that day when I first saw him on the road. I had gone south with Roadmaster Thompson, of the Santa Fé, in his three wheel railroad runabout. Being curious about Weston, I kept at Thompson to know what sort of a man he was.

"Well, you don't want to expect to see a limited express come by," said the roadmaster, alluding to what I found later through the eastern middle states was a popular superstition in regard to the pedestrian's rate of speed. The average farmer who had never seen him expected to be startled by a cloud of dust approaching at a terrific rate. The proprietor of a hotel at Ligonier, Indiana, asked me in a perfectly rational manner whether Weston ever went faster than fifteen miles an hour. Again, the motor-man of an interurban car near Erie, Pa., said that his grandfather saw the veteran pedestrian do one hundred miles from dawn to sunset between Buffalo and Erie.



Weston in action along the tracks of the Santa Fé, en route from California to Chicago.

"I'll tell you just about what to look for," continued Thompson. "You'll see a little man with white whiskers, carrying a short stick, and walking all over his body. He'll be moving sort of slow; yet take your eye off him and he'll be out of sight before you know it."

The phrase—"walking all over his body"—proved extremely accurate. The first thing I could distinguish as the walker gradually came within the range of vision down the long air-line was an astonishing swing of the shoulders. It seemed as though he forged ahead as much through that

swing as through his steady stride.

When he came nearer and nearer I saw that his head, his waist, his forearms, moved in harmony with the backward-forward throw of the shoulders and the forward-backward push of the legs. The sight impressed me so vividly that I well recall the momentary tingle that passed through me.

Weston was dressed in khaki, wearing knee breeches, cavalry leggings, and a soft shirt. His face, under a curved and pliable straw hat, was burned a deep red—a color which set off to great advantage his drooping white moustache. But before I had taken him in he had swung by and was off down the track.

"What d'you think of him?" asked Thompson. "Good example of feeble old age? Just tottering into his grave, eh?"

I admitted that the man who had just gone by did not seem to be an invalid.



Yet, despite his freshness and the vigor of his step, I had felt that Weston was not a strong man physically and later I was not astonished when he himself told me that he had been born weak and sickly, weighing at birth but four pounds. Through youth he was called puny, and it was not until he was twenty that he showed even ordinary powers of endurance. But he was from youth a walker; and constant exercise, before he knew it, had made him a bundle of well-controlled nerve and muscle.

Another thing that struck me the first time I saw Weston possesses considerable interest—that is, the peculiar cut of his legs. They are shaped rather like a fowl's, without being in any way ungainly; when he walks, they spring apart, and you can see daylight between the thighs from the knee to the perineum. In discussing this characteristic of the walker with a physician later, I was told that it was extremely rare, and due to a very broad pelvis. What assistance it must be to a pedestrian can be guessed from the fact that the spread of the legs renders chafing impossible.

Weston himself, who undertook his present coast-to-coast walk to prove that any man between thirty-five to fifty-five years of age can walk four

thousand miles in one hundred days, never alludes to the physical peculiarity which is of such assistance to him. It is only natural that he should not, for he persistently disclaims any individual share of the praise that comes to him.

"It's not for me," I have heard him say; "It's not for me as E. P. Weston that I am shown consideration and courtesy from one side of the continent to the other. It's because I'm demonstrating that walking is the most un-

tiring of man's powers. I'm showing what the human being can do. When people praise me they're praising the model in which they, too, are cast."

Of course he's right. The fact that his legs are cut in cleaner shape than those of the average man does not alter the principle at stake. And yet it is a significant fact, having its place in a discussion of Weston as a great pedestrian.

"Well-controlled nerve and muscle" is what I called the walker. This control and the mastery he has of his reserve strength, is perhaps the most wonderful thing about him. He can plan and carry out any special *tour de force* without a falter. On his seventy-second birthday, for instance (March 14), he walked seventy-two miles along the rock-ballasted Santa Fé,



Weston, at the outset of his trip, as he reached a village in California after an early morning walk of twenty miles,



In emergencies his reserve is even better exemplified. I recall his anxiety to reach Toledo by Saturday night, April 10th. Three days before, he had written his old-time friend Perry D. Knapp, the Toledo Chief of Police, that he would meet him in the outskirts of the city at dusk Saturday. Then misfortune came in bunches. A crowd of boys near Brimville, Ind., overenthusiastic, but meaning no harm, jostled the old man and one of them bruised his heel. Weston turned aside to take no chances, and had his trainer care for the heel at once. The next day he was able to go on,—as the bruise turned out to be superficial and not muscular—but between Edgerton and Bryan, Ohio, he strayed from the road and lost some valuable miles. Then he discovered two errors in calculation in his private time-table which added twelve miles to the distance to Toledo.

Weston was not the man to lose heart. He merely swore and kept on. He had had no noonday rests for two days, and a noonday rest is a necessity for the long-distance walker. Yet he decided to omit his sleep again, so as not to break his word with Chief Knapp.

But one more bit of ill luck awaited him. Leaving Swanton, Ohio, he ran into a stretch of road shameless in deep white sand. The automobile accompanying him got stuck, and after being pulled out by a team of mules, went ahead in a long detour. For seven miles Weston kept plugging on as best he could through the sand, without nourishment or rest.

Chief Knapp was waiting for him where the asphalt road began again, and walked with him into Toledo, a distance of eleven miles. Experts who followed the walk across the continent agree that Weston's ability to reach Toledo that night as he promised was well-nigh marvellous. Everything that could possibly hinder him occurred to do so; but his nerve took him through it all.

Weston ordinarily rises at four o'clock and takes the road before five. He has two breakfasts. At both he eats heartily of poached eggs on bread and butter and wheat cakes. He has an aversion to toast. If he can get straw-

berries he likes them; otherwise he takes prunes or sliced oranges. The griddle cakes, of course, supply the body of the meal, and give him staying power; while the eggs yield the vital strength.

Occasionally he takes a light supper, but ordinarily he cares for no more nourishment than he gets along the way from his automobile. Dundas Kinnaird, the pedestrian's chauffeur and trainer combined, has instructions during the trip to keep ahead of him one mile when it was dark, four miles when it was light, always waiting until he came up to make a fresh start. Weston would then take from the car a handful of graham crackers, some sweet chocolate, an apple or an orange, a bottle of sarsaparilla, or whatever else he cared for. Two or three times a day he would be sure to ask for an egg and milk, and cold coffee was another favorite beverage.

In the ordinary sense of the word Weston is not a careful eater. That is, he is not a dietarian; anything fried, however, he avoids; nor is he fond of most vegetables. Meat he ate only on Sundays, and then it must be ground fine.

Each day was broken by the pause for the second breakfast, usually about eleven o'clock, and by a nap for an hour or so some time in the afternoon. Weston usually left the road about nine o'clock at night and went to bed directly. Mondays were always big days with him. He would get up at midnight, and walk under the friendly stars till daybreak, then stop for a bowl of hot chocolate made at a wayside campfire. On Monday's his midday naps were often extended to two hours or more.

Weston never uses alcohol in any form. Most of his life he has been an occasional smoker, chiefly of cigars, though he never smokes now. For cigarettes he has an extreme abhorrence; and if I heard him once advise boys along the road never to use the paper cigarette, I heard him a thousand times.

People are naturally curious about Weston's feet. They ask him what he does to relieve blisters and swelling. He answers that he is never troubled with either affliction, whereat incredulity is writ large on his auditor's faces.

Yet so far as a month's observation



will go—and I saw the pedestrian's feet every night—I would hesitate at no enthusiastic comment on their condition. I never even saw them feverish. They were always white and smooth, and much more like a girl's than a seventy-two-year-old-walker's.

He took no more care of them than to have them well bathed in witch hazel three times a day, and to wear a medium weight wool sock with enough silk in it to give it a velvety finish.

Weston's tramp from Chicago to New York was one continuous triumph. When cities were approached, such as South Bend, Toledo, Cleveland, and Buffalo the police heads would invariably go out on the road to meet him and to see that he was guarded with care through the almost impenetrable crowds.

All America has taken a deep interest in the man who could perform better than it has ever been performed before in written history one of the simplest, but most neglected, functions of the human being.

"Anyone can walk," says Weston.

It's free, like the sun by day and the stars by night. All we have to do is get on our legs, and the roads will take us everywhere.

"It's too easy. It doesn't cost anything; therefore we have no use for it. If we had to pay to walk as we do to ride on the cars, or in automobiles, or on bicycles, we'd all be crazy about it."

It was to inspire a renewed interest in walking that the old man started on his long tramp. As he constantly says, what he wishes above all else is to teach the children that they can walk. What walking did for him when he was young he knows it will do for others. It is the one perfect exercise. Swimming approaches it, but swimming has that swing of the arms over the head that strains the heart.

Weston himself seems to have become a better long-distance walker as he has grown in years. He has repeatedly broken records of late that he made in his prime. The public ought to put faith in what he says about walking, for he is a doctor who takes his own medicine and thrives on it.



Weston alighting from an automobile at City Hall Square, New York City. To the right is seen the "World" Building—the City Hall is the white structure in the background.



# The Symptoms, Cause and Cure of Whooping-Cough

HOW THIS MUCH DREADED CHILDREN'S DISEASE MAY BE PREVENTED—HOW TO SECURE QUICK RELIEF WHEN ITS UNPLEASANT AND SOMETIMES DANGEROUS SYMPTOMS ARE IN EVIDENCE

By Bernarr Macfadden

WHOOPING-COUGH is regarded by most parents as a necessary evil. Their children are expected to suffer from this complaint at one time or another during their years of childhood. It frequently occurs in babyhood; though the attack rarely occurs during the first three or four months of an infant's life. The reason for this apparent phenomenon is probably due to the fact that whooping-cough is brought about by certain conditions, and during the first three months of existence the causes that produce the complaint have not had sufficient time to operate in order to develop it. True, the average physician will tell you that whooping-cough is a contagious disease, but I think this article will prove that it is really made possible by vital depletion, or by the presence of certain poisons in the blood that are continuously seeking an outlet. One might say that we could hardly find a nursery which has not been visited at some time by this familiar and unpleasant ailment. Sometimes its attacks are not very serious in nature—when the symptoms are hardly sufficiently noticeable to be termed a dangerous ailment—but there are cases where it becomes a terrible and death-dealing disease. It is said to cause the death of one-fourth of all the children who die under the age of five, and that three out of four of these deaths occur in infants under two years of age. Some physicians claim that the complaint is communicated only by the breath of an infected person; that the clothes of a child suffering from the disease cannot convey the infection, as they are supposed to do in other diseases of children, such as scarlet fever, small-pox and measles. Other authorities, however, maintain

that it is possible for one who may be visiting a whooping-cough patient to carry the disease to other children.

The name of the disease has come to us, no doubt, from the whooping sound which accompanies the cough. This is due to a spasm in the upper part of the windpipe that frequently follows a paroxysm of coughing, which ends in a long breath accompanied by a whoop. An attack of whooping-cough usually begins like an ordinary cold, when directly after the cold has disappeared the cough becomes more frequent, grows more severe, is accompanied by paroxysms, and ends with the long breath and whoop which characterize whooping-cough. One fit of coughing is hardly over before the patient is attacked by another, equally severe, or even worse, and at times the child does not quiet down until he is almost exhausted by his efforts.

In some few cases the health of the child continues fairly good. It is merely the intervals of coughing which seem to indicate the ailment. For two or three weeks the cough gradually increases in severity, and the attacks during the night usually become very frequent. Then for a week or ten days the symptoms may remain unchanged. Thereafter there is a lessening of the more severe symptoms, and the night attacks are not so frequent. As a rule,—under ordinary treatment—it takes about six weeks or more for a case to move definitely and permanently towards recovery. Apparent recovery from this complaint, however, is often misleading, and symptoms appear and re-appear in many instances from trifling causes, or from no cause that can be readily traced. In many instances, for many months



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after a child has supposed to recover, he may acquire a cold that may be attended by fits of coughing that are not unlike whooping-cough, though it is said a child in this condition cannot communicate the disease to others.

The possibility of death through this disease is frequently caused by an affection of the head or lungs. Congestion of the brain is in many cases produced, as it is in croup, by the very frequent interruption to breathing. The fits of coughing are often so violent that the face of the patient becomes livid, and instead of each coughing fit ending in a loud whoop the paroxysm assumes an extreme form, and the child often sinks into a comatose condition. Where the cough is so violent, and where symptoms of this kind appear, the disease has reached a very dangerous stage. When the complaint is complicated with bronchitis, and when the extreme activity of the breathing which follows and precedes a fit of coughing does not subside, the patient's condition is also serious. When the patient is apparently at ease after fits of coughing, after the excessive activity of the breathing disappears, then there is no especial cause to worry. When a long, noisy whoop follows each cough, and the child becomes livid, not merely red, during the cough, and does not fully recover, and complains of frequent headaches; occasionally spits blood, and there is bleeding at the nose; is feverish, or depressed, or drowsy, a serious phase of the ailment is in evidence.

It is said also that not only is there the possibility of death to fear in whooping-cough, but that subsequent to an attack of the complaint symptoms of chronic laryngitis or pneumonia are frequently observed—these in some cases injuring the health of the little one for many years thereafter. By some it is declared that contagion takes place by means of exhaled air and mucus, or the vomited contents of the stomach. All authorities practically consider isolation absolutely essential in this complaint. This is said to be especially necessary in public institutions, such as schools, and the like. Naturally this advice is no doubt wise when a child is weakly, or does not

ordinarily appear to be immune from children's diseases. Where there is vigorous health, and the causes of this complaint (which will be dwelt on later) are avoided, there is practically no danger from this so-called contagion. The advice given in the treatment of this complaint will nearly always include a very distinct warning against drafts; fresh air is supposed to be dangerous.

Schliep, one medical authority, treats his patients in a pneumatic chamber. He keeps them, together with their attendants, in compressed air. He claims that this method is especially effective, and not only reduces the number and severity of the attacks, but materially lessens the duration of the disease. He is of the opinion that recovery was brought about through the increased amount of oxygen inhaled and a diminution of the congestion of the mucous membrane. It might be well to say right here that if an increased supply of oxygen is of value in the treatment of whooping-cough, that the best way to secure this oxygen is from outdoor air, carried as directly as possible to the patient, and there is no quicker or better way to carry outdoor air to a patient than by what is ordinarily termed a draft.

Dr. Jacobi believes most emphatically in the drug treatment of whooping-cough. Among the numerous drugs that he recommends are the following: Alum, tannin, turpentine, bicarbonate of soda, salicylic acid, powdered sulphur, chloral hydrate, bromide of potassium, chloroform, quinine, antipyrine and belladonna. Imagine, if you can, a child struggling with the exhausting paroxysms of whooping-cough, and at the same time being compelled to resist the influence of some of the strong drugs to which I have referred! No wonder such an army of the poor little mites pass away to the cemetery, as the statistics of mortality from the disease prove! One out of four children die of this complaint, so the medical authorities say. I am inclined to think that they are decidedly mistaken. They do not die because of the whooping-cough, but because of the treatment which is administered. In other words, the very drugs



and methods that are being used now to cure this disease are in frequent cases the direct cause of death. There is no special reason for this disease being attended with fatal results, provided treatment is begun early enough, and the proper methods are used to relieve the system of the severe effects that often appear.

Of course the first object in view in treating this complaint, where the diagnosis is definite, is to relieve the severe coughing fits, and to immediately lessen the number of attacks. It is especially important to insure restful sleep to the patient. The vomiting should be stopped and naturally the course of the disease should be arrested as much as possible, and efforts should be made to avoid the untoward results that often follow it. If the complaint is detected in its very early stages, the inflammation of the mouth and pharynx can be very materially lessened if the parts are promptly cleansed with salted water, or lemon juice and water. In fact, if lemon juice is not displeasing to the taste it can be used in the proportion of about a quarter or half a lemon to a glass of hot water and given to the child to the extent of its desires.

I am a very great believer in the use of hot water in the treatment of children's diseases, and one might say that this particular remedy is of special value in the treatment of whooping-cough. This is especially true in the acute stages of the disease, while the attacks are frequent and severe. Simply encourage the child to drink all the water he possibly can, and this water can be flavored with lemon juice, with honey, or with any fruit juice that the little sufferer might fancy. During severe attacks, or the acute and serious stages of the disease, it is well to encourage the drinking of large quantities of hot water. If there is constipation, then an enema of either soapy water or oil should be used to relieve the bowels.

In addition to the drinking of hot water, towels just as hot as can be borne should be wrapped around the chest, shoulders and neck of the patient. The patient should be heavily covered to insure warmth, though the windows lead-

ing to the outside air should be wide open. If necessary, in order to retain the heat of the body, hot water bottles can be used at the feet, but under no circumstances should a patient be kept in a closed room. As a rule, if a patient is placed in a hot pack, and drinks water quite freely during severe attacks, he will go to sleep soon thereafter. If this does not occur, the drinking water process should continue and the hot packs should be changed, though remember that as soon as the paroxysm passes off the child should be allowed to rest. Let me again warn those who may adopt this method to avoid giving too much treatment. It is easy to treat a patient beyond his power of recuperation, and under such circumstances harm is liable to result therefrom, instead of benefit. Remember no food of any kind should be given during the acute stages.

If the complaint has assumed a chronic form, and has no especially serious aspects, then the ordinary methods for building vitality should be adopted, for effecting a cure. As a rule it is a splendid plan to compel a child to fast from one to three days, if he can be kept satisfied. Following this fast allow three meals a day, consisting only of sweet milk and whatever fruit the child may desire, but no other nourishment of any kind. The milk is better if taken moderately warm—that is, warm enough to be gratefully pleasing to the stomach—but it should never be boiled, or heated beyond this temperature. In addition to the milk, very ripe bananas, dates, figs, apples, peaches, pears, or in fact any fruit for which he may have a strong craving. If the child has fasted then of course care must be observed to avoid eating too much food during the first meal or two, though thereafter he can usually follow his desires.

Encourage the child to remain out of doors as much as possible. Encourage him to play games. By all means do not be afraid of drafts, even though at times they may temporarily add to the severity of a cold. This symptom will simply bring about recovery more quickly. The outdoor air is just as beneficial to a child suffering with this disease as it is to a victim of consumption.



The chronic sufferer will find the very free use of honey most beneficial. It should be used at meal times, and be kept at hand for use whenever a child seems to be attacked with unusual paroxysms. You need not fear the child's eating too much of this food. After the first day or two it can be allowed to fully satisfy its appetite with gratifying results. Honey is a splendid thing to have at hand when there are night attacks. Simply give the child one or two spoonfuls, and frequently he will lie down and quickly fall asleep.

Where the complaint has assumed a chronic form it is a good plan to give a wet sheet pack of about an hour each day. In fact, the child could take its daily nap in the wet sheet pack. Under these circumstances simply swathe the entire body in a sheet placed in cold water and afterwards wrung out. The body should be wrapped in blankets, and a hot-water bottle can be used at the feet if the child is not able to quickly recuperate with a feeling of warmth from the shock of the cold water.

Of course one might say that the two phases of whooping-cough, that is, the acute and the chronic phases, should be treated practically as though they were two different diseases. In the acute stage the use of the hot pack of the chest and neck and the free use of water, with the occasional use of a little honey, will usually be found effective. The honey should not be used unless the patient enjoys the taste of it, though if honey is not enjoyable, in nearly every case lemon juice can be given in hot water, as previously mentioned.

The fruit and milk diet recommended for use in the treatment of chronic cases may at first cause constipation, though there need be no bother about this, as it will usually disappear after following the diet three or four days. Remember, that the child should really follow his appetite, and after two or three days of the diet he should use milk freely.

It is comparatively simple to clearly define the causes of whooping-cough. It is first of all caused by overfeeding, or the use of indigestible or unwholesome combinations. The breathing of impure air, confinement in hot school rooms, or

poorly ventilated living rooms, are frequently contributing causes of the disease. The lack of exercise, so absolutely essential to child life, is another frequent cause of this complaint.

Let me here emphasize that no germ can have the slightest effect upon your child if you give him the diet, exercise and fresh air that are so essential to his growth, health and development. Why are some families able to avoid all these children's diseases that are supposed to be unavoidably associated with child life? Is it due to an act of Providence? If you were to study carefully the homes of those who are not visited by these ailments that are so frequently attended with serious results you will soon be able to understand why their children are immune.

In closing, let me specially emphasize the importance of avoiding the half-hearted policy of trying to combine the methods herein described, with the drug treatment. You cannot combine the two. Either use this treatment alone or else the drug treatment exclusively. One method is diametrically opposed to the other. They cannot mix any more than you can mix oil and water, and if after treating with these methods you then resort to drugs, you have to use extraordinary care. Remember that the cure is effected through our methods by developing extraordinary sensitiveness of the nervous system, and it is this delicate sensitiveness of the nerves that enables them to guide the process of cure, and that if, after developing this extraordinary sensitiveness, you proceed to use a drug, the effects of that drug are many times more powerful than under ordinary circumstances. But you need not fear results if you begin early enough, and follow out the suggestions I have made. It will take but a short time to absolutely convince you beyond all possible doubt of the value of the methods I have here advocated. A change for the better in your patient will usually come quickly, and though under ordinary methods the disease is greatly prolonged if you follow the advice given in these pages it will often last but a few days and at most should be cured in from two to four weeks.



# Roadtown—A Mecca for Physical Culturists

By Milo Hastings

It is gratifying to note the tendency on the part of thinking men and women the world over to search for some means of counteracting the blighting influence of the highly concentrated life of our great cities. The novel methods of transportation and housing described in the following contribution seem to offer a practical and adequate remedy for urban congestion and its coincident evils. There is no doubt that the results attainable through this system would soon compensate for any difficulties which might be encountered in its inception. Certain it is that any plan which tends to permit the dwellers of our crowded centers of population to secure the benefits of country homes without prohibitive expense and loss of time in transportation is worthy of thorough consideration.—Bernarr Macfadden.

THE proverb says that man has grown weaker and wiser. Some will point to the splendid records of modern athletes, which far surpass those of the ancients or of savage peoples, as a proof that the proverb is untrue. Considered from all its viewpoints there certainly is room for a good deal of argument as to whether civilization as a whole has aided or hindered the evolutionary progress of the physical man, which is the fundamental basis upon which not only all the splendid mechanical civilization, but the mental or spiritual life rests.

But of this we may feel sure—civilization has taken comparatively little thought for the permanent consideration either of the physique of the individual or of the race. Occasionally we drain a malaria-in-

fested swamp or make some real improvement in nature, but for the most part the efforts of the hygienist and physical culturist are spent in attempting to ward off physical evils inflicted upon man by civilization.

Our city hygiene and anti-tuberculosis campaigns are but heroic attempts to overcome the evil effect of city conges-

tion, brought about by the mechanical and commercial progress. Our gymnasium and athletic grounds are at best a faint protest against a civilization that has replaced the muscle of man with expanding power of steam. Our dyspepsia tablets are but silly efforts to relieve a case of stomach fermentation and a conscience guilty of an over indulgence in the products of a civilized kitchen. Our preaching against



Edgar S. Chambless, inventor of Roadtown.



corsets and French heels, and our fight against the social evil is but a reaction against conditions brought about by the development of economic conditions which makes it possible, and too often necessary, for the woman to earn her living by pandering to the sexual instincts of the wealth possessing male.

Now the ideals of physical culture and eugenics are glorious as ideals, and ideals are necessary for progress, but we should not let the possession of such ideals obscure to us the realization of the fact that the cause which determines the immediate action of the typical man is the immediate pleasure he gets from an action, or money he gets which will buy other immediate pleasures around the corner. With none of us does the future weigh as strongly as the present. We eat seven-course dinners now because we like them even though we know it will result in dyspepsia later on. We take the car to get there quickly and to work longer and make more money, even though we know that we would live longer if we walked.

Granting then this fundamental human weakness for immediate pleasure and immediate profit, all those who have the physical welfare of the race at heart, will take keen interest in the Roadtown project, an invention which promises to bring about a great advance in the physical life of the race, and one which ought

to establish itself quickly because the new living scheme promises to pay from the start. In other words the inventor

claims that Roadtown: will be built because they are economical, and that once built the people will move into them because Roadtown rent will be about half that of present rents, and that once the people move into Roadtown, an improvement in health and the adoption of a better régime of living will come about because the environment is such that it cannot be otherwise.

The Roadtown is not a single invention, but a plan

to combine many inventions, and to combine them in such a way as to involve a saving in construction and operation so remarkable, that the new plan, whether developed by capitalists or co-operation, will be economically inevitable.

The Roadtown is a continuous house or row of connected dwellings, built over a noiseless railroad, and wired and piped in an open basement. It is a line of city through the country, and combines home, factory and farm.

The Roadtown is a skyscraper built on low-priced land and laid on its side—obviously the least expensive position in which to construct it. As the skyscraper, for one rent, provides the tenant with water, heat, light, power, elevator, etc., so the same facilities (substituting a noiseless railroad for an elevator), may be provided for the tenant of a con-



This sketch illustrates the weird appearance of the Roadtown as it disappears over the distant hills. At the lower right hand corner is shown the manner in which trains will travel under the structure.



tinuous house, the construction of which is not so great a protest against the law of gravity.

A fanciful dream, you say—think again.

Modern civilization is a matter of rails, pipes and wires. Rails, pipes and wires can be most economically placed in a straight line. Houses can be built in squares, cubes, circles, or sown broadcast on the land. They can also be built in straight lines. And when they are so built there is a material saving of expense of construction without any material loss of light or air or privacy or contact with the soil, to gain which we now choose an isolated cottage in preference to an elaborate suite in a city apartment.

We already see the tendency where rapid transportation is provided, for civilization to string itself out in lines. But the imperfect service of cumbersome steam trains or the reduced speed and danger to life from surface trolleys has not allowed this tendency to exert itself to any where near its mechanical possibilities. As for the pipes and wires, the present method of burying them beneath city pavements and leading a

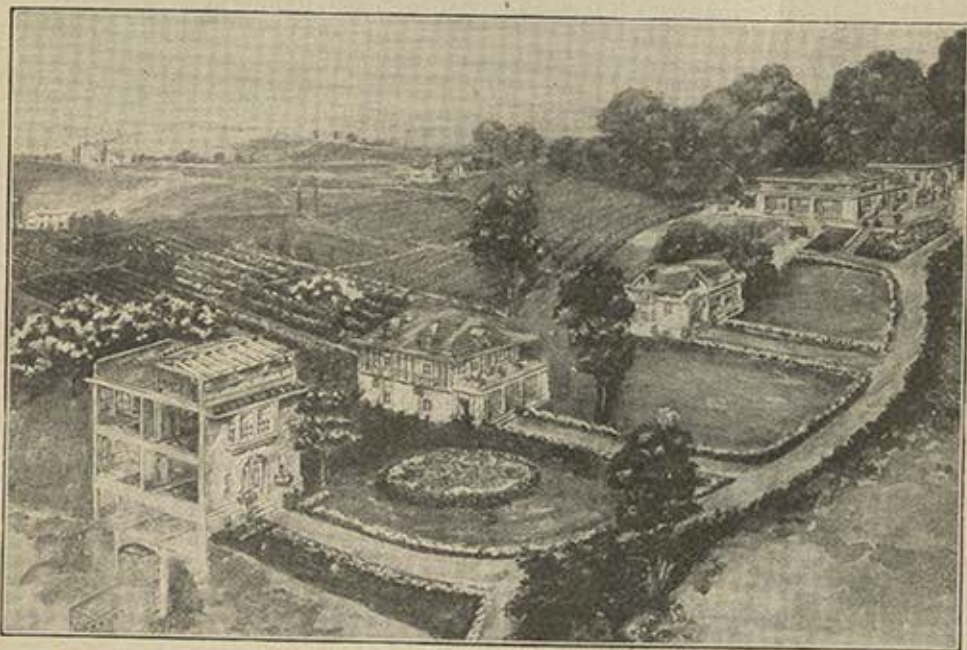
branch off under the sidewalk and through the foundation of each house is a method which represents the height of civilized absurdity.

The first mechanical necessity to the realization of the Roadtown or continuous house is that of a rapid and noiseless method of transportation. The mention of the bicycle and electric automobile should satisfy the reader that noise is not essential to a rapidly moving vehicle.

Of the various devices available for the purpose, Mr. Chambless considers that the Boyes Monorail best fits the Roadtown transportation needs.

The Boyes system, the patents of which have been donated to Roadtown use, is not dependent upon the gyroscope for its stability, but straddles the rail, which stands several feet above its foundation. The supporting and propelling wheel of the train is incased within the body of the car.

These heavy drive wheels form the armature of the motor, thus eliminating gearing. They are faced with leather and with the aid of rubber washers between the couplings, all sources of noise are eliminated. A further point of



Villa effect in Roadtown, where unsightly wires, pipes and rails are all laid underground.



advantage is in the fact that the leather faced wheels give better traction grip than steel wheels, and hence make it possible to construct very light cars on the order of a bicycle instead of immensely heavy ones, as in the case of present high speed locomotives and electric traction. This feature means economy in construction and operation, and gives great efficiency in quick starting and stopping and speed generally.

The monorail will be placed in a trench beneath the house. It will here be out of the weather and out of sight, which for a high speed structure is desirable. The ventilation will not be deficient, as in a city subway, for there will be a continuous opening beneath both sides of the house.

Complete monorail service will require three tracks, one local and one express track for trains running in either direction. These three tracks will be beneath one another, for as the cars must be entered from both sides, this will require less climbing than if side by side. Express stations will be four or five miles apart and local stations about every hundred yards. From these local stations a continuous platform will extend beneath the houses along which the resident will walk till he comes to his own front door, that is, to a stairway leading to a private house above.

The main body of the Roadtown building is to be constructed of cement. The walls that separate each private house from the one adjoining will be poured in monolithic fashion, which means in one solid block, and this be sound proof, fire proof and vermin proof. Thomas A. Edison, who, as many of our readers know, has perfected a scheme of pouring cottages of cement, has offered Roadtown free use of his patents. In the Roadtown there will be two important savings in addition to those of pouring cement; first, the elimination of one-fourth of the wall area; second, Roadtown excavation would first be made with a steam shovel and a railroad laid in the trench upon which work trains would be used to move the excavated material—the cement, sand and crushed rock for the building, and the heavy steel moulds for pouring the walls. In short, the en-

tire construction will be a matter of steam power as compared with human labor, and railroad hauling as compared with horse carts.

The completed Roadtown will have stairways leading from each dwelling to the roof above, and just as the monorail in the basement will be the means of rapid transit for business purposes, so the roof will be used for walking, bicycling and skating with rubber tired skates. Certainly a more unique location for a "street" could not be imagined than this roof promenade.

The roof space may be laid off in separate paths for bicycles going in each direction, and likewise for skating. The walk for pedestrians will be in the center and will be covered with a rubber mat and roofed over for protection from the weather. It will be entirely feasible to side up this path in winter with glass panels, forming a continuous sun parlor which will be provided with resting alcoves and drinking fountains. On the outer edges of the roof, alcoves and parapets built for architectural variety, will also furnish location for seats, fountains and pots of earth for climbing vines.

In addition to the railroad in the cellar and a street upon the roof, the Roadtown will have even more remarkable features, due to the fact that the present enormously expensively system of street piping will be replaced by a continuous accessible runway, in which will be placed pipes and wires to convey every conceivable utility, many of which are not available under present housing conditions, even in city life.

Among these utilities which may be brought into every Roadtown home, are:—sewage, hot and cold water, steam or hot water heat, gas for cooking, electricity for lighting and power, vacuum devices for sweeping and dusting, refrigerating brine for cooling the house in summer, spring water or distilled and aerated water for drinking, telephone, dictograph or loud speaking telephone, the telegraph or recording and repeating telephone, and music and lectures by wire, either directly transmitted by dictograph or recording and transmitted by telegraphy.

There are several applications of this

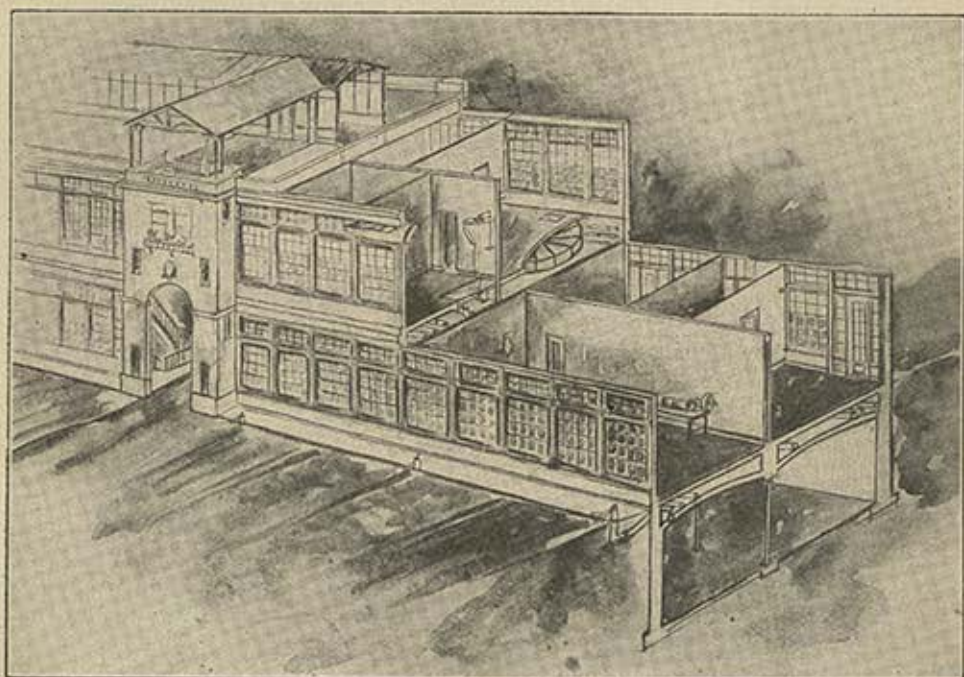


cheap pipe and wire service that may not at first be thought of. Cheap plumbing will mean that every sleeping room may have a shower bath. Power in every home will mean that many little tasks can be made automatic. Among these, Mr. Chambless suggests that the bedding, including a light pad or mattress, may be attached to a frame, that, moved by electrical power or air pressure, will swing the entire bed up and around into a closet, one side of which is formed of shutters that freely admit the outdoor air. Thus the bed will be daily aired, and the sleeping room converted into a library or living room in the day time.

An even more suitable scheme that Mr. Chambless has in mind, is, to pipe this closet for a disinfecting gas. By tightly closing the outdoor shutters it will be possible to annihilate all vermin and disease germs. Certainly such a device would eliminate one of the most unpleasant duties of the present-day house-keeper, to say nothing of the general sanitary effect of thoroughly airing and disinfecting the bedding, clothing, and

for that matter, by vacating the premises for a day, the entire house could be thus fumigated.

Still more remarkable in its effect upon household life will be the cheap and ready service in the transportation of all commodities. Co-operative laundries and co-operative establishments for the preparation of food will follow as logical results of the putting of transportation facilities in the home. The objection today urged against co-operative food preparation is, that it breaks up family life; and so with present arrangements, it does, but the Roadtown permits of all the advantages of such co-operation without in any way interfering with family privacy. The Roadtown bill of fare may be sent out daily from the food department, and the people will order by telephone. Deliveries can be made by the monorail, or a still better system will be that of mechanical carriers, which may be set with keys to switch off at any house. Such automatic delivery cars are good to carry any amount up to fifteen or twenty pounds. A meal for a family



A short section of Roadtown, showing workroom, combined toilet and shower bath, and covered promenade on roof.



can be delivered in two such cars, one hot and one cold. The dirty dishes may in turn be sent back to be washed, hotel fashion.

The probable effect of such a system of food distribution will be of great interest to physical culturists. Let it be clearly understood that neither Mr. Chambless nor the other enthusiasts on Roadtown wish to force conformity in the bill of fare. When we order food at a restaurant we can only get certain foods cooked certain ways. The Roadtown food department will be a combination of co-operative grocery store and cook shop, and will keep on hand at all times all food materials cooked or uncooked for which there would be a demand. Another point to be considered is, that the Roadtown co-operative cook shop would be without inducement to adulterate, color, flavor and complicate food, as is now done under the competitive grocery and baker shops and delicatessen system.

People who now favor simplicity in diet are fought by all commercial forces in the food trade, for the simple reason that complexity means profits. With the co-operative distribution of food which will in the Roadtown be of such easy attainment, the manager's profits, *i. e.*, his appreciation and promotion, would increase, as he taught the people to use wholesome and simple food, instead of the enormously profitable products of the food trusts, canning factories and bake shops. To illustrate my point, let me ask if any one can doubt that the reason cleaned whole wheat cannot be purchased for human food is because, if the customary rate of profit was charged, the price would be so visibly extortionate that the people would object. So the grocer pushes his meats and canned goods and other foods wherein the profits are obscured by the manufacturing processes.

Another wonderful effect of the Roadtown style of city building will be, that by supplying power directly to the homes of the people, it will render possible the re-instatement of the industrial conditions prevalent before the invention of steam took work out of the hands of the worker, and made him a wage slave to the factory proprietor. With

power in the homes and a ready means of transporting the raw material and the finished product, there is no more reason why the worker in many of the lighter manufacturing industries should be a wage slave, than there is reason why a farmer should be a wage slave. There have been abundant efforts of moneyed interests to buy up land and hire farmers to work it, but their efforts are almost invariable failures because a man working for some one else is not so efficient as a man working for himself. The Roadtown will put light manufacturing in the same economic class as farming.

The agricultural opportunities of the Roadtown can hardly be overestimated. The excellent living quarters and the close contact of an advanced form of civilization with the soil, is bound to result in a great boom for intensive agriculture.

Will there be enough land? In reply I will say that with twenty-six foot houses there will be two-hundred houses to the mile, which will give within one mile of the Roadtown line over six acres per family. This is an ample acreage to support a family at market gardening or fruit culture, or in any kind of agriculture that results in the direct production of human food from the soil, except grain growing. Such an area would also do very well for poultry raising, and for dairying.

As a matter of fact, but a portion of the residents will engage in agriculture as a leading occupation, so that the land area for those so engaged will be considerably more than that given.

Moreover there is no reason why farmers cannot live in Roadtown and have peach orchards or grain fields several miles back. There are a hundred times as many reasons why a man's home should be in Roadtown line than in his wheat field, which he needs to visit but a few days each year. In practice the class of crops grown on the land will undoubtedly arrange themselves according to the frequency with which they will need attention. The more distant fields the farmers will visit at harvest or seeding time, and may even carry camp outfits and stay on the ground for a week at a time, returning to the Roadtown to



work the rest of the season at gardening or indoor machine work.

The advantage of the Roadtown farm in the way of market facilities is at once apparent. At the present time only about one-half of what the consumer pays for farm products goes to the producer, the rest being eaten up by middle men and transportation agencies.

The Roadtown itself will be the farmer's best market. Cost of living experts say that about forty-five per cent. of our expenditure is for food. Therefore forty-five per cent. of Roadtown population could be food producers without over supplying the home market. For the over-flow product there is the best kind of transportation to the city markets.

This opportunity to mix occupations is one which will mean much for human welfare in the future. Under the factory system and the large farm, great specialization in industry has occurred, with the result that the indoor machine worker becomes merely a human automaton, and the farmer works fourteen hours a day at monotonous back-breaking toil during the hot days of summer, while on rainy and wintry days he sits around the fire and toasts his corns.

The Roadtown, by taking electric power and a railroad station into every home, will do much to break up both systems. Every "factory worker" can have his garden and chickens, and the farmer can provide himself with some sort of indoor labor, so that he need not work so hard during any one season.

The location of the Roadtown in the country gives freedom for the outdoor work and play, the denial of which to the city man, and especially the city child, is one of the glaring crimes of civilized society but one which cannot be changed until we find some better fashion of living than is at present in vogue.

On the other hand the present farm is far from being an ideal place to live—it is lonesome, and lacks the social life necessary to the development of the best in recreation and sport. The Roadtown will offer the best and cheapest kind of transportation imaginable. The result will be that the entire population will be free to gather at the games and festivals.

The very love of social life which is largely responsible for the growth of city life, and yet the best of which is lost by the crowded and artificial environment of the city, can be restored in the Roadtown to an extent that will surpass the days of Greece and Rome. Such great social and athletic centers owned by the people and equipped with gymnasium and athletic fields, swimming pools (or located on natural bodies of water), theaters, lecture halls, dance halls, museums and art galleries are part of the Roadtown plans as mapped out by the inventor.

Of course the point will be raised that other dreamers before Mr. Chambless have devised like schemes, but other social schemes had only enthusiasm back of them; they lacked the economic foundation for success. The Roadtown, if we may believe the engineers' figures, will, because of the fundamental economies in construction and operation, offer homes at bargain rates, and the co-operation and magnificent social life will follow because of the superb opportunity to develop it.

Many of my readers will wish to know if this article is only a description of a dream, or if the Roadtown is to be a reality. In reply I will say that it will cost between half a million and a million dollars a mile to build Roadtowns. There are plenty of men in the country rich enough to build a Roadtown from New York to Philadelphia, or even from Chicago to St. Louis, but the inventor does not expect the Roadtown to fall into private hands. He believes that the Roadtown can be financed by bond sales under a plan that will make the ownership and government entirely municipal.

It is not to say at this date just what will be the outcome, except that many men of prominence and large human interest approve of Mr. Chambless' plans, and that we can rest assured, that the Roadtown when built, will not be a private money-making scheme for any individual or group of individuals, but a truly co-operative enterprise for those who live and work in this twentieth century town, which is to have the advantage of both city and country and the evils of neither.



# Prince Hagen

A Phantasy

By Upton Sinclair

Author of "The Jungle," "King Midas," Etc.

SYNOPSIS.—While camping out in the mountains, the narrator spends a warm summer afternoon in company with the score of Wagner's "Das Rheingold," and is startled by hearing a growing volume of music, and by the onset of a number of the dwarf-like characters of the "Nibelung Ring." By these, he is conducted to the bowels of the earth, and presented to King Alberich, king of the Nibelungs. Alberich exhibits to him some of the vast hoard of gold he possesses, and offers to reward him to remain in Nibelheim, and train his grandson, Prince Hagen, who is descended from a self-willed and uncontrollable father, and who is a child of violence and crime. The author declines, but suggests that Prince Hagen accompany him to the earth, to be reformed by contact with our Christian civilization. Subsequently, Prince Hagen arrives at the author's cabin and is conducted by him to a school for young men, in charge of a clergyman. Prince Hagen proves himself an eager and apt pupil, but entirely disregards the discipline of the school, and after physically conquering every one of his schoolmates, becomes their leader. Hagen refuses to attend school longer, and goes to New York with the avowed intention of making politics his profession. He gains much prominence as a Tammany politician and as a campaign orator. Meanwhile the author receives a message from Nibelheim, announcing the death of King Alberich. Traveling to New York, he imparts the tidings to Hagen, after the latter has made a stirring campaign speech denouncing the greed and avarice of the wealthy, and the resultant suffering of the poor. Far from being affected with grief at the news of Alberich's death, Hagen surprises the author by his hysterical joy at the prospect of gaining control of the wealth of the Nibelungs. He deserts the party whose cause he has espoused, and hastens to the National headquarters of the Republican party's Campaign Committee, where he presents a note of introduction written by himself, and accompanied by a check for \$100,000. Hagen's entry into New York's most exclusive social circles, is attended by a display of luxury and splendor that causes comment on every hand. He has many of the richest treasures of Nibelheim transported to his magnificent mansion to serve as decorations which astonish the world by their magnificence. The author meets Prince Hagen and the latter declares his intention of becoming lord and master of the whole system of society, through control of the world's finances and of the commodities of life. Coincidentally with stupendous movements and fluctuations in the stock market the announcement is made that Hagen has become engaged to the wealthiest heiress in all America, whom he afterwards marries. The Prince announces to the author his resolution to teach the Nibelungs the banking methods obtained upon earth, in order that he may have the use of their gold in his attempt to secure financial mastery of the world.

## SEVENTH INSTALLMENT.

### CHAPTER IX.

"I HAVE been down to Nibelheim twice since the death of dear grandpa," said the prince. "The first time, as you imagine, there was tremendous excitement, for all Nibelheim knew what a bad person I had been, and stood in deadly terror of my return. They had a few hopes, of course, for Alberich had spread the news of my journey to the world to be reformed; but I fancy most of them thought they were doomed. I got them all together and told them the truth—that I had become wise and virtuous, that I meant to respect every man's property, and that I meant to consecrate my whole endeavor to the developing of the resources of my native land. And then you should have witnessed the scene! They went half wild with rejoicing; they fell down on their knees and thanked me with tears in their eyes; I played the *Pater Patriæ* in a fashion to take away your breath. And afterward I went on to explain to them that I had discovered very many wonderful things up on the earth; that I was going to make a law forbidding any of them to go there, because it was so dangerous, but that I

myself was going to brave all the perils for their sakes. I said that there were many wonderful things known to the earthmen which I meant to teach them; first of all, I told them about a wonderful animal that was called a steam-drill, and that ate fire, and dug out gold with swiftness beyond anything they could imagine. I said that I was going to empty all my royal treasure caves, and take my fortune and some of theirs to the earth to buy a few thousand of those wonderful creatures; and I promised them that I would give them to the Nibelungs to use, and they might have twice as much gold as they would have dug with their hands, provided they would give me the balance. Of course they agreed to it with shouts of delight, and the contracts were signed then and there. They helped me get out all my gold, and I took them down the steam-drills, and showed them how to manage them; so before very long I expect to have quite a snug little income."

Prince Hagen paused and knocked the ashes from his cigar. "What do you think about that?" he asked.

"I wish you joy," I said.

"You still don't think you'd like to come help?" he inquired, mildly.



"No," I said, "I don't think so."

"You might be high priest to all Nibelheim," said Hagen; "it would be a paying position."

"No; I'm sorry, but I have other things to do."

"It all comes to the same thing in the end," he observed. "I had as soon you stayed here to strengthen your own people in their moral ideas. There is a time of trouble coming, you know, when I get my hands on things. I promise you the world will be managed differently from the way it is just now. When there is no more competition, men will have to work for what they can get; and then there will be no more extravagant and empty display on the part of the rich, I can assure you. If I do not turn their Fifth Avenue mansions into lodging-houses, it will be because my plans miscarry."

"You will leave just one for yourself?" I inquired.

"Oh, no," he said, easily, "I have decided to build my mansion in Central Park."

"Perhaps," I suggested, "you have not always remembered that you live in a republic."

"I live in a country," was the answer, "where the power that rules is money; where the man who has money may have whatever else he will."

"I have some doubts of it," replied I; "you may find public opinion troublesome; you may be hampered by the law."

"I will bribe the voters," was the response.

"But if the opposition becomes too strong?"

"Then I will buy the legislators," answered Hagen, and laughed.

"That is all very well," I exclaimed, impatiently; "but if you intend to subject all civilization to your will, and to make all men your slaves, you will waken in the end a power of rage that nothing can withstand. You will suddenly find laws passed to deprive you of your wealth all at once."

"Ah, yes," laughed my companion, "in that case I will call for assistance upon you."

"Upon me!" I gasped.

"Upon you, of course, and upon all

other moralists—upon all who believe in public honesty, and in the sanctity of property; upon all who respect the deep fact of morality, that it is better to suffer any evil than to soil one's conscience; upon all decent people; in short, upon all who have learned God's command, 'Thou shalt not steal!'"

I said nothing; Prince Hagen smoked.

"Understand me," he continued, after a time; "I am no fool, I have seen all the consequences of my actions. I know just what must be when my work is completed, when all wealth, all power, all command is in the hands of one selfish man, and all the rest of men are his slaves, compelled to toil night and day for his pleasure, and receive a bare existence in return. I know that they must watch me in my splendor with hungry eyes; and I know that they can be held back from it all by nothing in the world but one thing—their conscience! And if I dare set to work to bring about such a state of affairs, it is only because I have come to believe that morality has been so strong a habit with men that they will stand the strain. I see the same thing about me now, you know, everywhere in the world. Am I not living in a palace now? And down in Hester Street are there not ten thousand people crowded into a smaller space? And yet do they ever dream that it must not be just so? Wait until the time comes, and watch how I make the fight! If it does not prove a thrilling spectacle, it will not be my fault, I promise. You must, of course, not expect me to speak as a cynic, as I do now; I shall be virtuous and indignant; I shall say that the interests of the working classes must be trusted to those to whom God, in his infinite wisdom, has given control of the property interests of the country. I shall have right and justice on my side; I shall stand sublime upon my pinnacle of virtue, crying that the first man who lays hands upon my power is a thief, and that the government which sanctions him stands self-perjured before the judgment throne of heaven. I shall call all the sanctity of religion to my aid, and all the dreadful majesty of justice. And do you think that I shall not find honest men to stand by principle—that no prophet will arise



to thunder against those who appeal to violence and fraud? Who knows but you might be that prophet yourself? You would recognize the fact, would you not, that the employing of violence against me, or the robbing of me with the aid of ballots, would mean a denial of the moral law, and the proclamation of a reign of anarchy and crime?"

I did not attempt any response to this eloquent appeal; I was striving to conceal some little agitation.

"You do think that my case is hopeless?" asked Prince Hagen, with feigned anxiety.

"Not entirely," I said.

"And if I fail," he continued, "if I bring down this flimsy Phantasm Structure of a civilization about my ears—if I reduce society once more to a Rousseau 'state-of-nature,' what difference will that make? Shall I not be Prince Hagen? And Nibelheim will perhaps be more preferable as a dwelling-place by that time, anyway; what do you think?"

It was hard for me to realize, somehow, that all these things were actual possibilities—nay, that they were even then beginning to be. I was staring at him, and he smiling, as he watched the look of perplexity on my face. He was reclining in his chair, his arms outstretched wide; his whole presence at that moment seemed to me to be so much that of a demon that I shuddered.

"At any rate," he said, his eyes gleaming, "there is one thing very certain, that wherever I am, here or in Nibelheim, I shall always be a prince; whatever there is to rule I shall rule, and rule it alone. I am getting to feel my wings in these days, and to know my power; and, if any man thinks he can match it, let him only come and try!"

And he laughed; he had gotten up suddenly from his chair, and was standing before me; then, as he continued to gaze at my face of anxiety and wonder, he put his arms on his hips, and bent over and began to shake with laughter.

"Idealist!" he chuckled. "Ha, ha, ha! Idealist! Tell me, have you nothing at all to say about it?"

I had nothing at all.

"And you will write your sublimities still—with never a doubt?" he inquired.

"And be just as altruistic and enthusiastic and generally seraphic? I ought not, as a matter of fact, to tell you all these things, for they shake your faith; and you have the makings of a moralist in you, I think; you might influence many people to love meekness and unselfishness. I must cherish and encourage every influence of that sort I can find, you know."

There was a long pause after that; I sat with my eyes fixed upon the Nibelung, and he with his mocking laugh returned the gaze. I had never attempted to answer his arguments before, but just then, as I sat there, a striking thought came to my mind.

"Prince Hagen," I said, suddenly, "would you like me to tell you one of those instances of virtue such as you are seeking?"

"Yes," he answered, "by all means. Go ahead."

"It happened many hundred years ago," I said, "but its influence is none the less potent for that, and you might find it useful in case of need. It was one of those men whom you call moralists, one who believed with all his soul that this morality came from God, and that it was more precious than many kingdoms. He gave all his life to teaching it, to practising love and meekness; and in the end he allowed himself to be crucified, that he might attest his faith in his message."

"Such instances are very curious," observed Prince Hagen, as I paused. "I have heard of them."

"This man founded a great religion," I said; "you have heard of him, too."

"Ah, yes," was the reply, "but why do you tell me about him now?"

"I was going to tell you one of the sayings that tradition puts into his mouth," I answered. "It is a little story, a very curious one, and one that I am certain you would find useful in your attempts to impress upon other men the fact of the vanity of riches."

"Ah," said Prince Hagen, "that is good; let us hear it."

I sat for a few moments gazing at him; then I said:

"The ground of a certain rich man brought forth plentifully:



"And he thought within himself, saying, What shall I do, because I have no room where to bestow my fruits?"

"And he said, This will I do: I will pull down my barns and build greater, and there will I bestow all my fruits and my goods.

"And I will say to my soul, Soul, thou hast much goods laid up for many years; take thine ease, eat, drink, and be merry.

"But God said unto him, Thou fool, *this night thy soul shall be required of thee*: then whose shall those things be, which thou hast provided?"

And I stopped; Prince Hagen stood still, staring at me.

"Is it not an interesting story?" I asked, gravely.

"Yes," he answered, "very." And then he stretched his arms, and forced a laugh. "It makes me thankful that I am a Nibelung," he said, "and have thousands of years to live."

"Are you very certain that you have so many?" I inquired.

"Fairly," he responded, laughing.

"Have you never thought that perhaps, while you are crushing all civilization with gold, some fanatic might take the law into his own hands? Have you never thought that even now some unexpected sickness, some accident—"

"Oh, come, come!" exclaimed he, impatiently, "you are talking nonsense!"

And I stopped; he seemed a little angry. A moment later he took out his jewelled watch and glanced at it; I took the hint.

"It must be getting late," I said, rising; "it must be near the hour of your wedding."

"Yes," he replied, "it is."

"Forgive me for taking your time," I put in.

"Oh, that's all right," he said, condescendingly; "I could spare it."

"And forgive me for disturbing your peace of mind; I regret—"

Prince Hagen waved his hand. "It is nothing," he said; and then, laughing with his usual carelessness, he escorted me to the door of the apartment and opened it.

A tall attendant stood there, and took me under his charge. "Good morning," said the host, as I started; and then he

added to the servant, "The carriage in ten minutes."

Afterward I heard him close the door, and I followed the man down the broad hallway. I had much to think of, but I could not forbear to gaze about me at the wondrous place, at the magnificent tapestries and paintings, the floors of rare and wondrous marbles, the long rows of jewelled vases of gold, gleaming in the sunlight. So I passed down the great staircase, and to the hall below, which shone like a vision from the Arabian Nights; I paused for a moment to gaze at the marvellous Coronation Cup, with its groups of sea-nymphs and Tritons supporting a jewelled crown; and then I passed on to the grated door, and so out into the street. I heard the barriers clang behind me, and I took a deep breath of the fresh air.

The way was blocked tight with a staring crowd, but I forced myself through and went on down the avenue. I felt pretty much as a man in a dream; for I had not yet realized the fearful things that Hagen had told me; it seemed a nightmare, a phantasy of my own brain. I whispered to myself again and again: "Can it be true that this man will master all society—that he will turn all the vast machinery of human progress to his demon's use?" I thought of what he had already done, and I shuddered; the form of him loomed up before me, like some giant spectre overshadowing my soul.

"It is a ghastly thing!" I whispered. "What can one do against this power of evil? Must the world always be at the mercy of the wild beast of selfishness? must high and sacred things be always the prey of brute force and cunning?"

In general, I do not torture myself with images of evil; but just then they were forced upon me, and my being writhed at this sight of black injustice enthroned and defiant. "What can be done?" I exclaimed to myself. "What can be done? This man is master of everything, or will be; and who can overthrow him? I, and others, who are laboring for art and beauty, have scarce bread enough to put in our mouths; and the wealth of men, the labor of millions, that might be of sacred use, must go for



the glory of this wretch! He stands there upon the pinnacle of his power, and mocks at all opposition; is there nothing left for faith to do but cry out in despair and rage? Of what use is it that a man strives for the high gifts of the soul, when all the world is filled with the wonder of such things as these—when Hagen and Hagen's power and Hagen's glory are the talk of all, the ideal of all?"

And so I went on, not heeding where I walked, or what passed about me; my soul was swallowed up in bitterness and hate, a mood that I suppose all true men must sometimes know. I saw nothing to do but live apart like a Timon, and let the world worship its own idols, and be of the devil quite altogether as it chose. I thought of the press—I thought of the politicians—I thought of the "elite" and their inanities—and it seemed as if God's fair earth had all at once become a carnival of apes.

"Let him master them," I muttered, "and let them serve him, just as he says they shall. What difference will it make? He is a devil; but is he any worse than the people who gape at him and toady to him? He happens to be the victor of the moment in this miserable jangle of vanities. He stands now at the summit of his triumph, knowing that he is secure, and mocking at man and at God—"

And then suddenly I came out of my reverie with a start: I was still on the busy avenue, amid the noise of eager crowds and hurrying vehicles; but my attention had been suddenly caught by a loud shout that rang above them all. I stared for a moment, taken at a loss; and then, as the cries grew more frequent, I saw that people were pointing up the street in the direction from which I had come. I turned, and then gazed, transfixed with sudden alarm.

Some four or five blocks up the avenue there was a commotion apparent among the crowded vehicles; they were scattering to right and left in confusion, amid cries of warning from the throng of people. A moment later I saw a carriage come through the space thus opened, drawn by two horses that were galloping like the wind. It was evident in a second that they were running away; and pandemonium reigned. Coachmen

turned their teams into side streets, shouting as they lashed their horses; others drove upon the sidewalks, while the crowd scattered in every direction, men leaping over railings, and women and children seeking refuge upon the steps of dwellings.

There was a horse in the middle of the street that had taken alarm and become unmanageable; I rushed with several others to seize the bridle and force it to one side, the cries in the meantime becoming more and more a bedlam. A policeman flashed by me on a bicycle, riding at full speed and sending a warning shout ahead. And in the meantime the team of runaways came nearer and nearer, until I could hear the rattle of their hoofs upon the pavement.

Somehow or other the crowd got the refractory horse to one side; I gave a swift glance down the broad avenue, and saw that it was clear for a block or two more, and then I turned to look again at the approaching horses.

They made a thrilling picture; they were only about two blocks away at that moment, and racing like mad; behind them there was a driving cart swaying from side to side. I saw one figure in it, and I whispered in terror, "God help him!" And then suddenly I bent down, leaning forward and staring, my eyes starting from my head. I caught at a lamp-post, and then all at once gave a shout that rang out above all the noise and excitement. I had noticed the horses, that they were chestnut in color; and then as they came a little nearer I had recognized them—recognized it all—the red driving-cart, and the black figure and the madly galloping team. They were the Persia horses! It was Prince Hagen!

Men had heard my shout, and they stared more wildly than ever. And meantime the horses were glunging frantically on, galloping, galloping, galloping, their hoofs beating sharp thunder on the pavement. They were wild horses anyway, lithe, trembling thoroughbreds; and now they were stretched out in fierce race, necks extended, nostrils quivering, eyes red and staring in terror. The reins were loose, flapping madly about their legs, causing new and new



exertion. It was like standing by a track and watching an express-train sweep up with ever-increasing speed and rattle. The carriage swayed and rocked, and the people screamed in fear; for there upon the seat—alone and helpless, and wholly paralyzed with terror—sat a man, a small, black-clad figure crouching upon the seat, clutching the rail with convulsive grip, and staring ahead with dilated eyes,—Prince Hagen!

My cry had been passed on, and the street rang with it: "Prince Hagen! Prince Hagen!" And meanwhile nearer and nearer! So long as I live I shall never forget that face—the face of that lord of millions and master of men, whirling onward in mad race, bent forward and with set teeth, his hair flying backward, and his face as white as paper. And so he shot by like a flash of light, the horses panting and the vehicle rocking in delirious nightmare dance. And an instant later came a shrill scream from it, and a shout from a thousand throats. A man had leaped out to stop the horses, and, quick as lightning, they had swerved in alarm. The crowd scattered on the pavement, and an instant later, with a fierce, sickening crash, the carriage hurled itself against a lamp-post. I saw the figure on the seat shoot forward like an arrow through the air, and I heard the thud, as it crashed head-first against the stone corner of a flight of steps.

Most of the people stood still, sick with horror; but one or two bounded forward. They seized the bridles of the plunging horses, and I—I darted wildly to where Prince Hagen lay. I saw blood flowing as I bent down. The man rolled over—there was a great gash in his forehead, but he was still alive. He half raised himself, his hands quivering; there was a look of frightful struggle on his face, fierce pain and terror battling in the grip of death. His lips moved once; he clutched wildly in the air; and then he gave a gasp and fell back. A gurgling sound came from his throat, and a great gush of blood from the open wound. One quiver shook his frame,—and then not a motion more. I gazed once, and then turned away my head.

Prince Hagen was dead!

*New York Evening Whirled.*

EXTRA!

EXTRA!

"HAGEN KILLED!"

PERSIAN HORSES RAN AWAY! JUST BEFORE WEDDING! FIFTH AVENUE CROWDS HORRIFIED BY ACCIDENT!

"This afternoon, at ten minutes past twelve o'clock, just two hours before he was to have been married, Prince Hagen was driving down Fifth Avenue, when his famous team of horses took fright at an automobile, bolted down the avenue, and finally, at the corner of Fortieth Street, collided with a passing ice-wagon, throwing the prince from his seat, and killing him instantly. The accident, which was one of the most thrilling ever seen in New York, was witnessed by crowds of people, who thronged the avenue.

"The day was to have been the most eventful in Prince Hagen's life. All preparations for the great wedding had been made, and all day the happy bridegroom had been receiving the congratulations of his friends. Just before the catastrophe, he had been closeted with a well-known society leader, and, after his friend took leave, he ordered his horses, for what purpose could not be learned. His leaving the house was witnessed by a crowd of people, who had been gathered about the building all day.

"It was noticed that the Persian horses were fiercely restive; it was all the groom could do to hold them. Prince Hagen, however, showed no sign of fear, but took the reins at once and drove away, cheered by the crowd. The team had gone about ten blocks down the avenue, when an automobile whirled out from a side street, causing the horses to shy in fright. At the same time, the reins in some way became entangled, and a moment later the horses broke into a run. The groom at once leaped to the ground, escaping with a fractured collar-bone. Prince Hagen, however, pluckily held to the reins, endeavoring with all his power to stop the maddened team.

"At no time during the wild ride that followed did he lose his head, but guided the maddened creatures on their long run down the avenue. The race was watched by terrified crowds; the horses ran like the wind, the driving-cart swaying from side to side. All efforts to stop them proved of no avail, and likewise Prince Hagen's own brave fight was in vain. At Fortieth Street, an ice-wagon passed directly across the avenue, and the team crashed straight into it. Prince Hagen was thrown, falling into the middle of the street, and fracturing the skull on the left side. A *Whirled* reporter was the first person to reach him; he raised himself half-way, gasping 'My wife!' and then, with a groan, he sunk back dead.

"The city is electrified by the tidings of the fearful calamity. The bride lies at her home prostrated," etc., etc., etc.



*New York Evening Journey.*

EXTRA! *New York Evening Journey.* EXTRA!

**"PRINCE HAGEN DEAD!!**

DREADFUL ACCIDENT ON FIFTH AVENUE! PERSIAN HORSES BOLTED! TRAGIC END OF A WEDDING-DAY!

"This morning, at fifteen minutes to twelve o'clock, almost at the very hour of his greatest joy, the career of Prince Hagen was cut short by the running away of his Persian horses. They broke into a run without any apparent excuse, crashed into the curb at the corner of Forty-first Street, overturned the carriage, and instantly killed the prince. Fortunately, the avenue was not crowded at the time, or yet more ruin must have been caused by the maddened steeds.

"The magnificent horses gave no sign of any wildness, and no one had the slightest warning of the fearful calamity impending as Prince Hagen paused for a moment to stroke the heads of the beautiful creatures, of which he is said to have been passionately fond. He also gave one glance up the street, where stood the mansion in which his blushing bride was even then preparing for the wedding ceremony.

"He then mounted into the carriage; at the same instant—the groom had scarcely had time to step to one side—the horses bolted fiercely away, dashing down the avenue at full speed.

"The whole fearful accident happened with such lightning rapidity that no one had time to realize it.

"Prince Hagen appeared to lose his head, for he dropped the reins and seemed on the point of leaping to the ground. He was not quick enough, however, for the team, which was now wild with terror, ran only two or three blocks before the tragic end came. The wagon, which was flying from side to side, collided suddenly with the curb, overturning instantly. Prince Hagen was thrown against a lamp-post with fearful violence, fracturing several ribs and sustaining internal injuries. The *Journey* reporter was the first person to reach him, lifting him from the ground. Prince Hagen's last words were never uttered, for a sudden rush of blood choked him, and he sunk back and died several minutes later.

"Society is horrified by the accident. The bride is said to be hysterical with grief," etc.

*Grand Chorus of all Papers.  
(Three Days Later.)*

"The funeral pageant was the most magnificent and impressive that this city has ever witnessed, etc. . . . The bereavement was universal, etc. . . . The friends of good government had not forgotten Prince Hagen's services; and likewise the best of New York's society turned out to honor the deceased, and to mourn his untimely end, etc., etc.

"The saddest and most touching sight

THE END.

of all was the bride and her family, all in deepest mourning. The circumstances that Prince Hagen had met his death at almost the very hour of his wedding made the whole scene fearfully impressive to all. As the sobbing bride was led up the aisle, there was scarcely a dry eye in the massive temple, etc. . . . The low, mournful music of Chopin's funeral march increased the tragic effect, etc., etc. . . . After the mourners marched in solemn procession, etc., etc. . . . Then was heard from the choir the thrilling voice of Madame Paganini, who had been engaged (it is said for a tremendous sum) to sing at the wedding three days before, etc., etc. . . . Archbishop Sullivan officiated at the ceremonies that followed, assisted by Fathers O'Donnely and Rafferty, Fathers Murphy and McGinnis, who were to have assisted at the wedding.

"In fact, every circumstance served only to recall the event so tragically interrupted, and to increase the awe in the hearts of those present, etc., etc.

"The funeral oration was delivered by Archbishop Sullivan, and was a magnificent tribute to the virtues of the deceased, as a useful and philanthropic citizen, a faithful son of the Church, and a pattern to all the ages of what a man of wealth should be. He spoke of his public-spiritedness, and his interest in the welfare of Democracy; of his private charities, and of his generous hospitality, which made him honored of all as a shining example of the liberal-mindedness which characterizes our society. He alluded then in touching terms to the bride and her tragic bereavement; and said that, if God, in His unspeakable Majesty and unfathomable Wisdom, had chosen to cut short so bright a career, we could only bow our heads before His judgment, and know how small before His glory was all our human greatness; that all men must take this dreadful warning to their hearts, and strive more than ever to feel that 'in the midst of life, we are in death,' and that we must, at all times, be prepared to render account for the great blessings which Providence showers upon us. The oration follows in full," etc., etc., etc.

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# Menus and Recipes for Three Days

## Cooked Foods

Readers will please note that all the foods embraced in these menus, as well as the products represented on our advertising pages, are given our endorsement as of first quality, and as fully complying with the Pure Food Law.—Bernarr Macfadden.

### FIRST DAY.

*Breakfast.*

Oranges	Bananas
Poached Eggs on Toast	
Rice Flakes with Cream Milk	

*Dinner.*

Cream of Vegetable Soup	
French Fruit Salad	
String Beans	Escalloped Corn
Young Onions	Creamed Turnips
Date Bread	Butter
Apricot Tapioca Pudding	
Sponge Cake	Grape Juice

### SECOND DAY.

*Breakfast.*

Cherries	Dates
Scrambled Eggs	
Toast	Butter
Cocoa	

*Dinner.*

Lettuce Salad	Cheese Wafers
New Potatoes	Buttered Beets
Creamed Asparagus	
Onions	Radishes
Nut Bread	Honey
Strawberries	Macaroons

### THIRD DAY.

*Breakfast.*

Fresh Fruits	
Cream of Wheat Served with Sliced Bananas	
Corn Meal Muffins	
Apple Sauce	
Cocoa	

*Dinner.*

Cream of Barley Soup	Croutons
New Potatoes with Peas	
Stewed Celery	Rice Croquettes
Spinach and Eggs	
Banana and Pineapple Sauce	
Oatmeal Wafers	Nuttet Apples

## RECIPES

#### *Cream Vegetable Soup.*

One pint navy bean pulp, one pint corn pulp, one-half pint mashed potatoes one and one-half pints strained tomatoes, one small onion or a little celery, one piece of butter the size of an egg, or four tablespoonfuls of olive oil. Heat all together and add enough milk to make it the consistency desired. Add butter and salt just before serving.

#### *French Fruit Salad.*

Peel and cut up two oranges, skin and seed two dozen white grapes, slice three bananas, shell and halve one dozen English walnuts; mix, arrange on lettuce leaves and cover with mayonnaise.

#### *Creamed Turnips.*

Cut peeled turnips into half-inch dice, boil in salted water and drain. Pour over a cream sauce made of one cup hot milk poured gradually over one tablespoonful each butter and flour rubbed together. Season and serve. All vegetables cooked in this style should never be allowed to get cold before cream or sauce is added. When allowed to become cold they are not as easily digested and do not absorb the cream or sauce.

#### *Date Bread.*

Dissolve one cup of dates in one cup of warm water. Pour the mixture into a colander and drain the water off the seeds and fiber. Then dissolve one-half ounce



of compressed yeast, add one heaping teaspoonful of salt, five tablespoonfuls of olive oil, and three quarts of entire wheat flour. Knead into a dough (which should be about the same consistency as a dough for white bread), mould out in pans at once, allow it to raise one hour in a warm place, put into steam cooker and steam for one hour; or, if the loaves are large, steam an hour and a half. The dates give the bread a pleasing, sweet flavor, and the combination of entire wheat, olive oil, and dates is very nutritious.

#### *Apricot Tapioca Pudding.*

Wash one-half cup of tapioca, and pour over it three cups of warm water. Let stand over night. Then place in the bottom of a baking dish one pint of soaked apricots and pour over these the soaked tapioca. Add three-fourths cup sugar, put the pudding into a moderately hot oven, and cook until the tapioca is tender. The pudding should be stirred once or twice in order to mix the ingredients and give a nice fruit flavor.

#### *Sponge Cake.*

Beat the yolks of eight eggs well, and add gradually one pint sugar and the grated rind of one lemon. Beat whites of eggs to a stiff froth, and add to yolks and sugar alternately with three gills of flour, stirring very gently and just enough to mix well. Then add juice of one lemon. Bake in small loaves twenty minutes.

#### *Scrambled Eggs.*

Take the number of eggs desired and beat them until the whites and yolks are broken up. Then for each egg add one teaspoonful of melted butter and a little salt. Pour them into the inner vessel of a double boiler, and cook in boiling water in the outside vessel. Stir constantly until the eggs are of the consistency of soft boiled eggs. This way of preparing the eggs is far superior to the ordinary method of scrambling them in a skillet with smoking lard or butter.

#### *Macaroons.*

One and one-half cups powdered sugar, whites of two eggs, six ounces of

almond paste. Beat the whites very stiff; add the sugar and the almond paste, the latter chopped fine. Make into balls with the fingers and bake in very well greased pans in a moderate oven. Take out when they are a delicate brown, but do not remove them from the pans until they are perfectly cold.

#### *Cream of Barley Soup.*

Wash thoroughly one-half pint pearl barley, and let it soak for eight hours in sufficient water to keep it covered. Then place over fire and simmer (do not boil) for four or five hours, or until very tender. Then add one quart of strained tomatoes and one-half pint good cream. Bring to boiling point, add salt to taste, and serve.

#### *Stewed Celery.*

The outer stalks of celery which are unfit for serving raw may be used. Cut into inch pieces, put into boiling salted water, and boil thirty to forty minutes. Make a sauce by adding to one cupful of the water in which the celery has been stewed, two tablespoonfuls condensed milk (or cream), and one tablespoonful butter; thicken with one tablespoonful flour, and pour over the celery.

#### *Rice Croquettes.*

Take two cups cold boiled rice, one well beaten egg, and one teaspoonful butter, and salt to taste. Work the butter, egg, and salt into the rice, make into croquettes with the floured hands, and fry in oil.

#### *Rye Muffins.*

One cup rye flour, one-fourth cup sugar, one-half teaspoonful salt, two teaspoonfuls baking powder, one cupful white flour, one egg, one cupful sweet milk. Mix well, put into hot muffin pans, and bake in a hot oven fifteen to twenty minutes.

#### *Nutted Apples.*

One-half glass apple juice, two large spoonfuls of ground nuts, any kind desired, and one egg lightly beaten. Sweeten to taste with honey.



## Menus and Recipes for Three Days

### Uncooked Foods

#### FIRST DAY.

##### *Breakfast.*

Puffed Wheat and Bananas with  
Berry Sauce  
Layer Raisins      Cashew Nuts  
                         Radishes  
Lettuce Hearts with Mayonnaise  
Dressing  
Nut and Pineapple Salad  
Orangeade

##### *Dinner.*

Entire Wheat Bread  
Creamery Butter      Nut Cream  
                         Young Onions  
Radish and Nut Salad  
American Cheese      Pressed Figs  
Fruit Jelly with Cream  
Welch's Grape Juice

#### SECOND DAY.

##### *Breakfast.*

Cereal with Fruit Cream  
Oranges      Shelled Pecans  
Shredded Lettuce with Hygeia  
Dressing  
Dates Stuffed with Cheese  
Brazilian Fruit Salad      Egg-nog

##### *Dinner.*

Unfired Bread  
Blanched Filbert Butter  
Persian Dates      Vegetable Salad  
Mixed Nuts      Bananas  
Shredded Wheat Dessert  
Fruit Trifle

#### THIRD DAY.

##### *Breakfast.*

Cream of Oats  
Ripe Olives      Lettuce Hearts  
                         Breakfast Delicacy  
English Walnuts      Seedless Raisins  
Lettuce and Pineapple Salad  
Apple Juice

##### *Dinner.*

Olive and Nut Sandwiches  
Young Onions  
Brazilian Nuts      Malaga Grapes  
Fruit Mousse  
Sumik

## RECIPES

### *Puffed Wheat and Bananas with Berry Sauce.*

Serve the puffed wheat in a cereal bowl and slice a very ripe banana in thin slices. Arrange this as a layer on top of the cereal and pour over it a generous amount of the berry sauce.

#### *Berry Sauce.*

To one cup of crushed strawberries add the stiffly beaten whites of two eggs, four tablespoonfuls of cream and honey enough to sweeten as desired. Stir very thoroughly and when using on cereals bring to proper consistency by addition of cream or milk. Make just in time to serve.

### *Strawberry Cream.*

One large spoonful of strawberries mashed and stirred to a liquid. Then add the beaten white of one egg, two spoonfuls of honey and two large spoonfuls of cream. Beat thoroughly and add milk enough to fill the glass. Sprinkle with Mixed nuts or cocoanut.

#### *Crushed Fruit Sauce.*

Use any kind of berries in season and after mashing stir to almost a liquid. Honey or finely chipped dates may be added to sweeten and can be served as a plain sauce or with whipped cream and garnished with nut meats or shredded cocoanut.



*Nut Cream.*

Use any kind of nuts preferred, and after grinding very fine bring to a creamy consistency by stirring in olive oil, milk or cream. A little salt may be added if desired.

*Radish and Nut Salad.*

One-half cup raw peanuts, or any nut preferred, and one cup of sliced radishes chopped together until quite fine. Stir in one-half cup of cottage cheese and a liberal amount of mayonnaise dressing. Serve on a lettuce leaf and garnish with thin slices of radishes.

*Fruit Jelly with Cream.*

Select well ripened bananas and macerate to a jelly. To one cup of this, add the same amount of ripe strawberries mashed to a pulp with a fork, and two teaspoonfuls of pignolias. Stir well together and serve with whipped cream.

*Cereal with Fruit Cream.*

Use any favorite cereal with this fruit cream poured on just before serving. For the cream take two very ripe bananas and after crushing to a liquid with a fork, stir in two large spoonfuls of ground nuts, three spoonfuls of mashed strawberries, six dates chipped in very small pieces and the stiffly beaten white of one egg. After beating all together thoroughly, bring to desired consistency by adding cream or milk. This can be made sweeter by the addition of more dates, or if a tart flavor is preferred, use a larger quantity of the crushed berries.

*Brazilian Fruit Salad.*

Take equal proportions of chipped dates and sliced strawberries. Add the desired quantity of sliced Brazil nuts. To one cup of this mixture add the beaten white of one egg and serve.

*Vegetable Salad.*

One half cup of grated radishes, one half cup of minced young onions, tops included, a generous quantity of shredded lettuce, one-half cup of chopped pecan meats and one-half cup of grated cheese. Mix well and serve with hygeia dressing.

*Shredded Wheat Dessert.*

Cut a square in the top of a shredded wheat biscuit, removing all the shreds, until it leaves merely a shell. Fill this

with sliced strawberries and pour enough honey over them to slightly sweeten. Cover with whipped cream and daintily arrange a few pecan or walnut meats on top.

*Fruit Trifle.*

After macerating one-half a banana to a liquid add three large spoonfuls of grape juice, the beaten white of one egg, four large spoonfuls thick, sweet cream and one-fourth glass of milk. Beat well together and serve in a glass with whipped cream on top.

*Cream of Oats.*

Allow one-half cup of raw rolled oats to each person served. Put to soak in milk enough to cover well. Slice two well-ripened bananas in a cereal bowl. To the stiffly beaten white of one egg, add the same quantity of whipped cream. Stir well together and add the soaked cereal. Stir thoroughly and if not the desired consistency add milk or cream. Then pour over bananas and sprinkle with pignolias.

*Lettuce and Pineapple Salad.*

Chop about equal quantities of lettuce and pineapple together until rather fine. To one pint of this mixture add one-half of English walnuts broken into quarters. Make a dressing of one-half cup of whipped cream, two spoonfuls of honey and juice of one orange.

*Breakfast Delicacy.*

One-half cup of mashed bananas, one-half cup of grated apple, one-half cup wheat flakes and three large spoonfuls of pignolias. Mix well and serve with thick cream. Sweeten with honey.

*Olive and Nut Sandwiches.*

Ripe olives pitted and chopped very fine with same amount of pecan meats. To three spoonfuls of this mixture add one spoonful of cottage cheese. Mix thoroughly and place a generous layer between well-buttered triscuit or graham bread.

*Fruit Mousse.*

One cup of grated apples, one cup of mashed bananas, one dozen chipped dates, two oranges cut very fine and one-half cup chopped Brazil nuts. Mix thoroughly and serve with whipped cream. Decorate with raisins.



# Sex Separation as Well-Known Educators View It

SOME INTERESTING COMMUNICATIONS FROM COLLEGE  
AND Y. M. C. A. OFFICIALS ON OUR RECENT DISCUSSION  
OF SEX SEPARATION IN EDUCATIONAL INSTITUTIONS

By Bernarr Macfadden

IN the March number of *PHYSICAL CULTURE* there appeared an article from my pen advocating abolition of the prudish restrictions which forbid young men and young women from mingling socially in the Young Men's Christian Association, the Young Women's Christian Association, and other institutions for the training of the young throughout our land. As announced at that time, I determined to secure the opinions of some of the splendid men and women who are devoting their lives to the cause of educating the youth of America, on the advisability of permitting the members of both sexes to mingle freely while attending centers for education and recreation.

The number of communications I have received anent this matter, and the liberal and broad-minded views expressed by those who have written me concerning it, offer the strongest possible confirmation of the fact that the imaginary need for separating the sexes for which a minority of ultra-conservatives contend is a mere bugaboo, inspired by motives of prudery.

As a preliminary to publishing some of the very interesting letters which have been forwarded to me on this topic, I can do no better than quote from the inaugural address of Professor Joseph Swain, President of Swarthmore College. Swarthmore is a remarkable example of the beneficial influences of co-education in a university of large scope and great size, and numbers among its graduates some of the most successful men of substance and of letters in the United States.

That its students are far from being mollicoddles is proven by its position in the athletic world, to which it has supplied some of the most conspicuous

and striking figures the last generation has known. In the course of his inaugural, President Swain, among many other noteworthy things, said:

"Swarthmore has been from the beginning co-educational. An eastern professor lately visited a western college and asked one of the seniors what he thought of the question of co-education. 'I beg your pardon,' said the student, 'what question do you mean?' 'Why, co-education,' said the professor, 'the education of women in colleges for men.' 'Oh,' said the student, 'co-education is not a question here.' Co-education is not a question in Swarthmore, but as it is a question with many colleges of the east it may not be out of place at this time to emphasize our belief in it. It is no longer a question in the United States whether women shall receive higher education. Each year new facilities are provided and a larger number of young women are going to college.

"There is one criticism made by the opponents of co-education on physiological and psychological grounds which is not so much an argument against co-education as against one prescribed course of study for all. There are mental and physical differences between men and women. No two persons should be required to pursue exactly the same course. Our course of study should be broad enough and varied enough for all kinds of minds.

"The experience of co-educational institutions justifies the statement that the young women are amply able to hold their own in its classes. Young girls are no more likely to fail in their work than young boys.

"The contact of young men and women in general in the class room and out



is for the good of both. Teachers coming from men's colleges with a prejudice in favor of separate colleges for men and women almost always find the theoretical consideration or inherited prejudice which they have considered fatal to the best interests of the student in co-educational institutions disappear. They recognize the great value to both men and women of their association in college life.

"Co-education is conducive to good order. This is true not only within the college but in the college community and in society. Higher education in this country is decidedly co-educational in its trend. After all, however, when it comes to some boys and some girls there is room for difference of view as to what is best. It is fortunate that this great country affords opportunity for higher education both in co-educational and separate institutions.

"I believe the statement of the first President of Swarthmore College, Edward Parrish, fully expresses the experience and the belief of the Friends of Swarthmore to-day. 'Impressed,' he says, 'with the great loss resulting to society from estranging young men and young women from each other during the years that are especially devoted to moral and intellectual development, we mean to seek after and follow the natural law of social and domestic intercourse, and to strip their converse as far as possible of any glowing halo of romance and to clothe it with an investment of friendship and good sense.'"

The wisdom and truth of the words last quoted have been proven by the thousands of young men and young women who have been graduated with honor and success from Swarthmore. But President Swain is not alone in this opinion. I take pleasure in quoting the views of others who have devoted much thought and study to this question, and in few cases indeed do they dissent from the opinions I expressed in the contribution which they comment upon:

TUSKEGEE INSTITUTE, ALABAMA.  
MR. BERNARR MACFADDEN,  
Physical Culture Publishing Co.,  
Flatiron Building, New York.

MY DEAR SIR:—

I was very much interested in the paper you sent me in regard to the advisability of admitting both sexes to the Y. M. C. A. and Y. W. C. A. organizations. This, as you know, is a co-educational institution. We could not reproduce here, as we are seeking to do, the conditions of a real industrial community if we did not have women to do their share of the work. For that reason, if for no other, we are bound to maintain a co-educational school.

I think there are some advantages and perhaps, some disadvantages to co-education. On the whole, I am heartily in sympathy with the statements you have made.

I am,

Very truly yours,  
BOOKER T. WASHINGTON,  
*Principal.*

NORWICH UNIVERSITY,  
NORTHFIELD, VT.

MR. BERNARR MACFADDEN,  
Editor PHYSICAL CULTURE,  
New York City, N. Y.

DEAR SIR:—

Your circular letter of March 24th with the accompanying extract came duly to hand.

In the years past I have taught in preparatory schools for boys and girls, and in the public schools. Making due allowance for an inherited environment, I am not at all sure that there was any essential difference in the moral tone of the young people in these various institutions. In each where there is any considerable portion of time not fairly well taken up with work or active play there is bound to be more or less of the disorder to which you refer. If it were feasible to separate your groups of young people so that their associations should be amongst themselves, and not reach out to the outsiders, the plan which you suggest I believe would be most wholesome.

Without that possibility I am not sure but that you would aggravate an evil condition rather than cure it.

Very truly yours,  
C. H. SPOONER,  
*President.*



THE UNIVERSITY OF OKLAHOMA,  
NORMAN.

MR. BERNARR MACFADDEN,  
Editor PHYSICAL CULTURE,  
Flatiron Building, New York.

DEAR SIR:—

Replying to your circular letter of March 24th, would say in brief that in my experience, extending over more than a quarter of a century of work in co-educational institutions, I have never met any serious cases of difficulty arising as a result of the sexes meeting in educational work. I feel very strongly that schools where there are large dormitories in schools confined to either sex, are among the most dangerous places for young people during the formative period of their lives. I believe that we have to plan much more fully than has been done yet for social gatherings and amusements in which there will be a natural mingling of the sexes under wholesome conditions. At the present time it seems to me the work of a great many good people has been altogether too much confined to merely restrictions and not enough to the development to that which ought to crowd out evil association.

Yours very truly,  
A. GRANT EVANS.

LAWRENCE COLLEGE,  
APPLETON, WIS.

BERNARR MACFADDEN,  
Flatiron Building, New York.

MY DEAR SIR:—

I am in receipt of your favor enclosing a reprint of an article which recently appeared in PHYSICAL CULTURE. You ask my views upon the matter of separation of boys and girls in educational institutions. In reply I would say that in the sixteen years I have had charge of a co-educational college, we have had no serious case of discipline growing out of the relations of the students of opposite sexes. My belief is that co-education is in every way advantageous to both boys and girls. I do not care to enter into the discussion of what might be advantageous in Y. M. C. A. and Y. W. C. A. work.

S. PLANTZ.

OHIO WESLEYAN UNIVERSITY,  
DELAWARE, OHIO.

MR. BERNARR MACFADDEN,  
New York City, N. Y.  
MY DEAR MR. MACFADDEN,

In answer to your inquiry, I am not prepared to express any opinion on the question of the union of sexes in the work of the Y. M. C. A. and Y. W. C. A. These questions to my mind are not so much a matter of general theory as of specific practical wisdom, so that I do not think any general rule can be laid down. Local circumstances would largely determine the question. I think there is force in the arguments which you present.

Cordially yours,  
HERBERT WELCH.

GREENACRES, WASH.

MR. BERNARR MACFADDEN,  
Editor PHYSICAL CULTURE.

Your communication of April 4th, addressed to me, care Y. M. C. A., Williamsport, Pa., has just reached me at this place. Have read your article urging joint-work in associations of young men and young women.

Your article contains no new matter, same arguments have been pressed for sixty years past and the Y. M. C. A., during the first twenty years or so of its existence in this country did what we call "a mixed work" (men and women co-operating), it was also an anemic, ineffective work, and until the association as an organization determinedly and aggressively entered and occupied its true field the Y. M. C. A. was an organization of mollycoddles, is so in spots to-day.

Attempts at "joint-work" has successfully killed some Young Men's Christian Associations. The writer has gladly, cold-bloodedly and successfully killed some "joint-work" in its incipency and side tracked more girl movements, within the organization, as his experience covers twenty years, took him from "coast to coast" as General Secretary, State Secretary, Special Secretary, etc.

The Y. M. C. A. exists for the purpose of turning out good and efficient men-machines, capable citizens, it is not a pink tea or sewing circle affair.

The attempt to draw a comparison be-



tween a preparatory school or college and the Y. M. C. A., is not exactly fair, as members of the Y. M. C. A. attend meetings, classes, etc., at their option and for short periods, it is not so with the first mentioned institutions.

If you care to use this, you are at liberty to do so providing that in quoting you do not distort matter.

GEO. SUTHERLAND.

SHIPPENSBURG, PA.

BERNARR MACFADDEN,  
Editor, PHYSICAL CULTURE,  
New York.

DEAR SIR:—

The Secretary of the Y. M. C. A. handed me your letter of April 4th (and requested me to answer. Nothing could afford me greater pleasure. I have always admired your broad views, and keen sense of penetration, your comprehension of mankind is marvellous. The relation of the senses to the physical self, and their relative value and abuses are certainly no mystery to you.

In your article on "Is Separation of the Sexes Advisable?" Of course we well realize that unguarded association of the two sexes on a plane of easy familiarity would undoubtedly terminate in a moral catastrophe, but you have treated the subject in a clear feasible and admirable manner, clearly demonstrating the moral advantages to be obtained from the wholesome, thoroughly guarded intermingling of the sexes, which would stimulate the desire of each sex to develop both morally and physically the best advantage.

Such advantageous association would undoubtedly culminate in many happy unions and greatly advance the morals of society.

ROBT. PIPER.

Formerly of Bellevue Hospital, New York City.

THE UNIVERSITY OF CHICAGO.

MR. BERNARR MACFADDEN,  
Editor, PHYSICAL CULTURE,  
Flatiron Building, New York.

DEAR SIR:—

Your favor of the 4th inst., is received. I see no reason for a change in the Young

Men's Christian Association, which would not involve more loss than gain, so far as what you call sex separation is concerned. It is not an abstract question at all, but simply a practical one, as I look at it. There is a life of young men among young men which is extremely valuable, and which would be entirely sacrificed if the associations should be merged.

Very truly yours,

HARRY PRATT JUDSON.

LELAND STANFORD JUNIOR UNIVERSITY,  
STANFORD, CAL.

MR. BERNARR MACFADDEN,  
Flatiron Building, New York City,  
New York.

DEAR SIR:—

I am very strongly in favor of co-education in colleges and universities. If proper care is taken for the housing of students, there is no rational objection to co-education, especially in the West, where no unnatural ideas on the subject have sprung up. It is better for the men and better for the women, for the most part.

I am not, however, convinced that the work of the Christian Associations in the cities could be carried on to any better advantage if the two sections were together. In fact, as I understand that work, it can be handled very much better as it is now, the men and the women having separate buildings and carrying on the work separately. It is not because of sex matters that I would think that a separation would be better, but because the administration of the Association is very much more practicable under the present conditions. I may be wrong in this, as I certainly have not given the matter any very serious thought.

Very truly yours,

DAVID STARR JORDAN.

Other letters on this subject, received too late for insertion in this issue will appear in a forthcoming number of PHYSICAL CULTURE.



# General Question Department

By Bernarr Macfadden

Our friends will please note that only those questions which we consider of general interest can be answered in this department. As we can only devote a small portion of the magazine to matters of this kind, it is impossible for us to answer all the queries received. Where the letters, however, do not require lengthy replies, the editor usually finds time to answer by mail. Where an answer of this kind is required, please enclose a self-addressed stamped envelope.

## Sunbaths

Q. What benefit is derived from sun baths? Would they benefit a nervous person?

A. Sun and air baths are especially beneficial for a nervous person. They seem to have a quieting and soothing influence upon the nerves that is quite pleasing in character. Just what physiological changes are brought about through the influence of a sun bath which make it beneficial I cannot answer. The light of the sun, however, practically furnishes all the energy that we see manifested. The body can be improved by a judicious use of sunlight just the same as plant life, and I would certainly advise frequent sun and air baths as a means of adding to the strength and vigor of the entire organism.

## Milk with Other Foods

Q. When and how often should milk be taken when one who eats two meals a day must drink from three to five quarts daily?

A. I very much question the advisability of drinking such a quantity of milk in addition to two meals a day. The results in nearly all cases will be disastrous, if you are eating two hearty meals of cooked food, though you might be able to take this much milk if you are using raw foods only. As a rule, when you are going on a sweet milk diet it is advisable to avoid foods of all kinds, and take as much milk as possible, taking it every half hour or hour. One can frequently follow the milk diet by taking from two to four glasses at one time, taking the milk as warm as possible to be pleasing to the taste.

## Fasting in Constipation and Dyspepsia

Q. Is it advisable for a person troubled with chronic indigestion and dyspepsia, and walking twelve miles each day, to fast? Will the waste matter left in the colon not cause trouble unless removed before beginning the fast?

A. A fast can be of very great benefit in constipation and dyspepsia. As a rule, however, if you will follow a proper regimen while taking

walks of the length you mention, you should not suffer from either constipation or dyspepsia. A fast will in all cases tone up the tissues of the alimentary canal, and it is the prolapsus, or falling down, and weakening of these tissues which make constipation and dyspepsia possible. Naturally, after you stop eating the stimulus to the peristalsis that comes from eating ceases, and very materially lessens the activity of the bowels. In some cases, throughout a fast there is no desire for a bowel movement. If one possesses a fair degree of health there is no special necessity for forcing a movement through the colon flushing treatment, though when following this abstemious regimen in the treatment of disease it is in many cases of importance to cleanse the colon at least once every two or three days.

## To Remedy "Nose-Bleed"

Q. About once or twice a week my brother is affected by bleeding at the nose. Can you furnish a remedy?

A. As a rule, a symptom of this kind indicates a lack of the coagulating fibrin in the blood, or in other words, a defect in the quality. The blood does not contain all the elements necessary to properly carry out its legitimate processes. In nearly all cases, through vitality-building methods you can depend on remedying this particular trouble. Dieting is frequently of very great importance, as in many cases where this particular symptom appears too hearty eating is connected with it, or else the food does not contain the proper nourishing elements. By following the general advice found in this magazine for building increased vitality the trouble can be remedied. A good way to stop this symptom, when it appears, is to hold the hands as high as possible over the head, standing with the back against the wall. This will in nearly all cases stop the flow in two or three minutes.

## Mastication

Q. When thoroughly masticating walnuts and almonds, should the parts that cannot be reduced to a liquid be swallowed, or removed from the mouth. I find it requires forty-five minutes to thoroughly masticate a cupful of nuts (three ounces), and there is about half a



cupful of waste which I find it impossible to reduce to a liquid, as it is quite tasteless.

A. If proper activity of the bowels is being maintained at all times there is no need of the woody fibre, which is a large part of the waste such as you mention, for accelerating the activity of the bowels, and you can safely chew out the waste to which you refer. I am of the opinion, however, that this is carrying mastication to an extreme which is not natural, and unnecessary. It is practically admitted by everyone that a certain amount of bulk is really essential to the proper digestion of food. Those who possess very strong assimilative powers can usually follow out this extreme mastication process and thrive under it, but where conditions are the opposite there seems to be a necessity for more bulk, and under such circumstances I am firmly convinced it would be better not to masticate to the extent mentioned. Simply reduce the food that you may be eating to a liquid, or until it passes down the throat without any special effort to swallow. Mastication beyond this I do not consider essential.

### Yeast Bread

Q. Is yeast bread unwholesome? Kindly state your opinion as to whether or not yeast bread is wholesome, and also if you are familiar with the process of raising bread by compressed air.

A. Bread which is raised without the aid of yeast would unquestionably be much more wholesome than that in which yeast is used. The process of fermentation generated by the yeast gives the bread at least a slightly bitter taste, though it may be unnoticeable. Where bread is raised without yeast it has a sweet, nutty taste which is never present when yeast is used. I am not familiar with the process of raising bread by compressed air, though unfermented bread is made from newly ground flour made from the whole wheat, and enough air is worked into the dough to lighten up the bread to a certain extent. We have an example of this in the making of what is termed "graham gems." By beating the mixture very thoroughly we have as a result a light, tasty food, which unquestionably comes from the influence of the air that has been beaten into the mixture before being placed in the oven. Biscuits made from whole wheat flour that has been made into a dough with milk are very palatable, though they never possess the lightness of the ordinary biscuit. Their flavor, however, is far superior.

### When To Drink

Q. I do not take breakfast. I have a light lunch at noon, and a hot dinner at 6:00 P.M. I do not drink after my lunch, and do not feel thirsty, but drink freely

of water after dinner at night. Is this a wise system?

A. It would be advisable for you to acquire a habit of at least taking some water during the day, as a rule, though of course it is not absolutely essential, if you drink enough water before retiring. The organism requires a certain amount of water to properly liquefy the fluids of the body. If you were to eat more heartily at lunch you would probably feel thirsty thereafter. After eating a hearty meal of course there is more of a demand for liquid as a means of assisting in the process of its digestion. As long as your physical condition is satisfactory there is no material harm in following the regimen mentioned.

### Drinking with Meals

Q. What do you think of the theory recently advanced wherein the statement was made that considerable gain in weight had been secured while drinking a quart of water at each meal?

A. If one was not in the habit of drinking sufficient liquid, and should suddenly begin using a quart of water at each meal, at least giving some consideration to his desire for liquid, he could probably gain in weight. I believe it is positively an advantage to drink at meal time provided there is an actual thirst. In fact, I believe digestion will be carried on far better if this desire is satisfied. The food must be practically liquefied in order to be properly and quickly digested, and of course where there is not sufficient liquid in the system the digestive juices will not flow so freely. I realize that many argue that to take water at meal times weakens the digestive juices, and this theory is unquestionably accurate under certain conditions, but there is such a thing as going to the opposite extreme. Therefore I am inclined to think it is better to follow the dictates of your desires.

### Fasting and the Milk Diet for Nervous Exhaustion

Q. Would a two days' fast, followed by a milk diet, be beneficial to a young man suffering from nervous exhaustion brought on by mental worry?

A. A remedy such as you mention is perhaps about the best that could be suggested for the treatment of the particular trouble to which you refer. There is nothing that has such a soothing and strengthening effect upon the nervous system as a milk diet, preceded by a short fast. Of course it is important that some knowledge be had of the various symptoms which are almost sure to occur, though in some instances there are no changes that are in any way serious. Therefore one can frequently follow a regimen of this kind with benefit, particularly so if the disease is not especially serious in character.





## THE VIRTUES OF OUR METHODS PROVEN

### I've Wandered Far Away from Nature—Now I'm Going Back

TO THE EDITOR:

It is impossible for me to convey to you how much your magazine has meant to me.

I hold it as a sacred possession; for the influence felt through it and by it, I cannot better describe—than to refer to it as a "Minor strain in the soul's harmonics."

I am nearer to my Creator; my outlook upon life is greatly changed, and I am in so many ways different, that I sometimes wonder if I am the same person I used to be.

I cannot say enough in praise of your splendid work; and whenever opportunity presents itself I expound the truths of a natural life as advocated by your magazine, and although results may seem discouraging at first; these attempts at convincing must have their influence. I do have patience, for I know how long I was ignorant and how slow in believing.

May God bless your efforts.

MRS. B. J. CARPENTER, JR.

White Plains, N. Y.

### Values His Physical Culture Knowledge at \$150,000

TO THE EDITOR:

I recently performed a feat requiring great strength; I walked from Geneva, Nebraska to Fairmont, Nebraska, a distance of nine miles in one hour and twenty minutes. Not so bad, is it?

I am going to walk from Omaha to Denver in the near future and although I do not think I shall ever beat Weston's record, I am going to try to make at least forty-five miles a day on my tramping spell. To say that a man does not need to exercise to be a man as I have heard a lot of people say, is all a mistake. I have found that plenty of exercise is the making of a man. I would not take \$150,000 and be placed where I was three years ago and know nothing about PHYSICAL CULTURE.

Fairmont, Neb.

HARRY EATON.

### A Four-year-old Lad of Unusual Health and Vigor

TO THE EDITOR:

The sturdy boy whose photograph is enclosed is Donald Van Meter, of Parsons, Kansas, aged four years and one month; height, three feet, eight inches; weight, forty-eight pounds. He has been raised according to physical culture rules, plenty of

fresh air and exercise, very plain, nutritious food and an abundance of sleep.

He is wonderfully strong and vigorous, glowing with health and spirits, and is never sick.

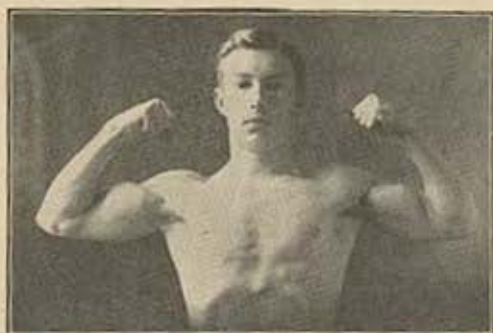
Parsons, Kansas.

I. D. VAN METER.



Donald Van Meter, a young pugilist from Kansas.





Geo. H. Nagle, Columbus, Indiana.

#### Stops Eating Meat and Gains Wonderful Improvement

TO THE EDITOR:

I am sending to you a picture of myself, as the results I have obtained from reading *PHYSICAL CULTURE*. I have taken your magazine for two years, and have made a study of it, which proved to me to be the best study of any subject. I have turned against the meat diet, and have found the results, of better health obtained by doing so.

My principal foods are fruits, eggs and milk. I have also adopted the two-meal plan, and found it to be a good preventive of over-eating. I thank you for what your good work has done for me. I am a firm believer in physical culture, and will always remain so.

Columbus, Ind.      GEORGE H. NAGEL.

#### Round-Shouldered, Awkward Boy Becomes Athlete

TO THE EDITOR:

As I have been a "physical culture crank" for ten years, I have decided to come out from under cover and declare myself. What I have to say might be of interest to the regular readers of *PHYSICAL CULTURE*, and to those who only casually glance at the magazine at the book stores.

After some of these casual observers see



Bruce Hodgman, Ogden, Utah, a physical culture "crank" for ten years.

something that happens to strike their fancy it is not so very hard to make physical culturists out of them. Physical culture is a habit far stronger than the drug habit inasmuch that when it once gets a clutch on you, you can't quit, nor do you desire to quit.

Some ten years ago I was a round-shouldered shuffle-gaited boy right from the farm. The hard work that I was used to brought on the round shoulders, while the tramping after the plow all day in clodhoppers brought on the slovenly gait.

One day while glancing over some magazines at a book store I espied *PHYSICAL CULTURE*. Seeing the photograph of the manly young men shown in it, I became aware that I was not up to the standard. I then and there decided to be a man. From that day to this I've gone through a physical culture stunt every morning.

I have gotten into a habit of grinding back my shoulders; any time during the day that I find myself stooping over, and the beauty of it is that I throw my shoulders back instinctively. I credit the muscular development of my back



Master Fred. Monroe McFadden, a Buck-eye baby, who joins his parents and brothers in praising the principles of physical culture.

and the increased size of my chest to this instinctive throwing back of the shoulders.

I do not employ more than three to five minutes for my morning exercise. I do not use any weights, pulleys or springs, but employ the tensing and resisting exercises as shown in your series of twelve graduated lessons shown in the supplement to *PHYSICAL CULTURE*.

I firmly believe that after one becomes a muscular and healthy person that five minutes of steadfast and consistent exercise each and every day is ample, along with the drawing back and straightening of the shoulders several times a day. It is to be expected that we should do more or less walking each day.

I hope that you win over a great many converts during the coming year.

Ogden, Utah.      BRUCE HODGMAN.

#### A Whole Family of Physical Culturists

TO THE EDITOR:

I note in a recent number some fine specimens of physical culture babies and I take the



liberty of inclosing you a picture of our baby taken the day he was five months old. This picture was taken in the home by an amateur photographer, and was taken within five minutes after the baby had awakened from his regular afternoon nap and as he lay upon the center stand in the room.

He is the fourth child, being the third boy, all of whom are physical culture children, taking regular exercises. The girl of ten years, the next a boy, at seven and a half, the next boy at four and a half, all of whom are exceptionally well muscled, large for their age and very hearty and healthy.

We have never lost any sleep with any of our children, which fact we believe to be the result of physical culture intelligence, both before and after birth. The boy as you see him in this picture is five months old and weighed twenty pounds on that day. His favorite exercise is to lie flat on his back, draw up the legs and kick straight out at the same time throwing his arms from the sides backward over the head. Another is the sweeping arm motion and hand clap in front. He can lift his own weight with both hands. He delights in the bath and loves to be massaged, never cries himself to sleep and always wakes up with a smile and has a laugh ready for any one all day long. Not one of our babies were raised on the bottle or any kind of baby foods, other than mother's milk.

MR. AND MRS. T. E. McFADDEN,  
56 N. Princeton Ave., Columbus, Ohio.

#### Young at Fifty-three, Due to Physical Culture

TO THE EDITOR:

I have most of Bernarr Macfadden's works, and would not part with them for any money if I could not replace them, for they have done me a world of good. I am a barber and I got so nervous that I could hardly work at my trade and had been taking all kinds of dope (that did me no good), but it was not long after I began taking physical culture before I was all right, and I have kept myself in fine shape for eight years and feel much better and stronger than I did at thirty-five and I am now fifty-three. Plenty of people think I am not over forty-five at most. You think that I ought to pass my magazine to some one else after I have read it, and I do when I find some one that I think will benefit by it, and by doing so I make a subscriber for PHYSICAL CULTURE, but I am very careful to get my book back.

With best wishes for PHYSICAL CULTURE.  
FRANK MOORE.

615 Beck Bldg., Portland, Ore.

#### Gains Forty Pounds—Cures Rheumatism

TO THE EDITOR:

I will say this in testimony of your methods. Four years ago I was a nervous wreck, besides having my body filled with rheumatism and kindred ailments. I weighed less than one hundred and sixty pounds, and was six feet, one and a half inches in height. I used to weight my stomach down with all kinds of

"junk" and wonder why I didn't get "fat" I happened to be at a friend's house, and he tried to interest me in physical culture; but I had the "medicine" habit so thoroughly imbedded in my mind that I thought were I to give that up I would be a subject for the undertaker in short order. Six weeks in the hospital convinced me that doctor's don't cure. When I was sufficiently recovered to sit up in bed, I started reading PHYSICAL CULTURE. Now I can't get along without it. I am twenty-eight years old and weigh two hundred pounds stripped, and there isn't a bit of rheumatism in my body. If I have any nerves, I don't know it. My greatest trouble now is to keep from getting fat. That is one of the reasons I want to be in physical culture work. I want to do my share of crushing out the "dope" habit.

DORMAN EDWARDS,  
1170 Belmont street, Portland, Oregon.



Master Arlein McCormick Wilson, a Minnesota athlete.

#### Parents of Healthy Baby Praise Physical Culture

TO THE EDITOR:

Inclosed please find photograph of our Fourth of July athletic boy, Arlein McCormick Wilson, now six months old, weighing twenty pounds. He is very good, healthy, strong and bright.

We are readers of PHYSICAL CULTURE and owe a great deal to it.

MR. AND MRS. H. G. WILSON,  
Ihlen, Minnesota.



bringing these isolated kindred spirits in touch with one another, and supplying the needed stimulus and encouragement, through exchange of experiences and views upon subjects of mutual interest. Who seconds the motion?

C. Q. D.

#### A Prisoner Finds Health

TO THE EDITOR:

It is a great pleasure for me to greet you and wish you success by a few words of appreciation. As I have had the benefit of your most valuable advice and instruction on the subject of physical culture for the past four years; and as I have been greatly benefited by the same, I deem it but fair, to you and the system you teach, for me to acknowledge the satisfaction and appreciation I must naturally feel toward the author of my present and most satisfactory state of health.

About six years ago I was sentenced to prison and the confinement, inactivity, and scarcity of pure air and out-door exercise very soon made appalling inroads on my health. For two years after my incarceration the steady decline of my former good health and strength were my greatest source of apprehension and sorrow. Then my anxious mind began forging, seeking to discover something that would alleviate my growing distress and physical decline. Physical culture appeared to be the most applicable remedy to be found and I accepted it as one would grasp the hand of an old friend who promised to conduct him from a maze of difficulties.

Perseverance has won, and I am happy to say that the day of my liberation (which is July), will find me in perfect condition—thanks to you.

WILLIAM E. BELL.

Clinton Prison, Dannemora, N. Y.

#### A Letter From Hungary

TO THE EDITOR:

My sisters and myself are very much indebted to you for a number of suggestions and better ways of living, published in your magazine. Our acquaintances are sometimes much surprised, but we let the results justify us.

I heard and read about a physical culture colony to settle in San Juan County, New Mexico, and would like you to publish some information regarding this movement in your esteemed magazine.

My sister Corinne is rapidly becoming a blooming and vigorous physical culture girl, she is taking a cold bath every morning even if she has to break some ice to do it, and has not found a girl so far who can outdo her in swimming.

We are just coming to realize the health-building powers of a raw diet and the tremendous advantage of its followers in difficult physical or financial circumstances.

Moson, Hungary.

AUREL ERDOS.

#### Physical Culture Farmers Selling Meat

TO THE EDITOR:

The farmer who inquires in a recent issue in regard to the moral propriety of disposing of beef to be used as food, when the seller believes its use to be injurious, has certainly given the subject conscientious thought. Still, he makes a rather sweeping statement when he declares that farming or dairying cannot be conducted with profit unless the male "critters" and superannuated cows be sold. The fact is that many dairymen kill their male calves as soon as they are born. Of course, they keep some males for breeding purposes. Furthermore, a good milk cow will pay for herself in a very few years and will yield enough profit before she becomes worthless, to prove herself a paying proposition without taking her carcass into consideration. The same principle may be applied to hens of good laying breeds.

Or, we may perhaps justify the selling of meat as long as the public continues the use of white bread. For, as Bernarr Macfadden shows in his "Strength from Eating," meat furnishes some necessary food elements that are very much absent in white bread. The working classes, as a whole, are perhaps better fed with meat than without it; for, having little knowledge of food values, they merely lean more heavily on their "staff of life," in the absence of meat. So, I think that my brother farmer and I can sell our beef and poultry until the public becomes educated in the subject of eating; and by that time we shall undoubtedly have had ample opportunity to seek some other means of livelihood, if our conscience forbids the continuance of farming.

Beach, N. D.

A. E. SWAN.

#### Morality Among Eskimos High

TO THE EDITOR:

In a recent number, I read your editorial on "Style in Eskimo Land." It recalled to my mind what was told me by a man who had been among those who rushed to Alaska after the discovery of gold there. He said that the morality among the people at that time was very high. He and a companion stopped with a family—living in one room—where the daughters, young ladies, thought nothing strange of disrobing and exposing the figure, when it came time for all to retire.

Since coming to college I have found health-improvement and curtailed expense in adopting the two meal plan. Chiefly for the social time I have taken dinners at the college dining hall. But I have made a raw food diet for suppers, following some recipes in old PHYSICAL CULTURE numbers, from whole wheat, cheese, milk, dates, figs, bananas, prunes, raisins, honey, olive oil, peanuts, peanut butter, chocolate and various cereals.

May your light long shine for the purifying and improvement of man.

(Rev.) EDWARD T. RADLEY.

Worcester, Mass.



## A Reply from a Prohibitionist

TO THE EDITOR:

I have been a reader of your publication, for almost four years, and have been greatly benefited by doing so, yet some articles therein would not stand a "Trial of fire," such as a letter from a Mr. De Vos, entitled, "Fighting Against God," published some time ago.

Why? Let us see: He quotes Romans, 13: 1-5: "Let every soul be subject unto the higher powers, for there is no power but of God; the powers that be are ordained of God." I will admit the truth of that statement as it is meant, but will say this: God does not ordain or approve an evil thought, act or power. To prove this, did not the conclusion of Adam and Eve, as to the fruit, bring down His wrath? Why? It was evil. Did not the act of Noah, in building the ark, save him and his? Why? The action was good. Did not the power of King Belshazzar fall? Why? His power was evil.

I cite these examples to show that we, as people, as Christians and powers should discern good from evil. (Hebrews, 5:14.)

Now in view of this, I'll ask, do either the Republican or Democratic parties (the powers that rule and have ruled our United States' government for years), place good above evil, when they positively ignore the cause of quarrels, fights, murders, widows, fatherless children, broken-hearts, hunger, poverty, and any nation's disgrace? Christians should not put a stumbling block or an occasion to fall in a brother's way (Romans, 14:13)—and the surest way to save a brother is to take it out of his way—but do they place good before evil in voting for such powers? Is a voter even a genuine citizen who will let such a damnable curse go rampant? I say damnable, because it is evil, sinful, unrighteous, therefore is it damned by God above.

Is there a discernment of good from evil in a government that fails to annihilate such a curse? Is there a discernment of good from evil in a government that will not strike a blow at prostitution and the social evil?

Is there a discernment of justice from injustice in a government that will not grant any citizen a fair and open trial, and permit him to face his accusers in a court of record, above postal department decisions—read "The United States Government's Shame."

His text says, "rulers are not a terror to good works, but to the evil." Are the present rulers a terror to the powers of evil that exist to-day? Again it says, "do that which is good, and thou shalt have praise of the same." "But if thou do that which is evil, be afraid." Does not his very text, instruct individuals and powers how to govern themselves?

I am a prohibitionist, and my opinions are dictated by a Christian conscience, and I feel free to say, that the prohibition movement is in no danger. Why? Him that knoweth to do good, and doeth it not, to him it is sin. (James, 4:17).

I trust my letter is plain enough to be understood, and sincerely hope our party will soon

win, and thereby greatly improve the nation physically, morally and spiritually.

Oaktown, Ind.

F. G. CHARLEY.

## Walk from Chicago to Milwaukee

TO THE EDITOR:

We are firm believers in physical culture and spend most of our spare time in walking, from which we derive great benefit, we have not much time to walk in the mornings, except on Sunday. Every Sunday we walk twelve to fifteen miles before breakfast. Last summer we had an opportunity to take a longer walk. We walked from Chicago, Ill., to Milwaukee, Wis., a distance of eighty-five miles, in thirty-five hours and ate nothing else but two apples and two oranges three times a day. We did not feel a bit tired out when we arrived at Milwaukee, and would have walked another eighty-five miles had it not been that our time was so limited. We made this walk to convince our fellow-workers (who are non-physical culturists), that a long walk can be made with very little nourishment.

After the walk we had a sleep of seven hours, after which we went to work as usual, but, feeling more capable to fulfill our days' duty than ever before. We must admit that we each lost nearly seven pounds on the walk, which naturally would be the case under these circumstances.

HENRY KRAUSE.

Chicago, Ill.

JOHN BEZOLD.

## The Horrible Results of Vaccination

TO THE EDITOR:

I saw in one of our evening papers, not long ago, an article on vaccination, in the schools. In spite of the parent's protests, it is expected that no child not vaccinated will be allowed to attend school. I should like to tell you of a few cases which have come to my notice.

Two children, in one family came down with smallpox one week after vaccination. A boy had smallpox in his arms as the results of vaccination, the arm swelling and turning black, until the doctor, very much frightened told him never to allow anyone to vaccinate him again.

A girl friend of mine was vaccinated on the leg, it swelled and she was very sick and has never been well since.

Another girl after vaccination had boils break out all over her body, the doctors treated her, but she got worse; went into consumption and died. Another case was a young lady in good health and very pretty. She was vaccinated, it poisoned her blood and broke out in eczema on her face, it grew worse steadily. She went to different doctors, they all treated her and from the size of a dollar, it spread all over her face, it has now drawn her lower eye lids down out of shape, eaten the bottom of the nose and the rest of the face looks red and raw and is very painful at times. The once pretty girl, has no hopes of recovery and is forced to cover her face with a heavy veil when she goes out, thanks to the doctors' treatment.

Hoping this may open the eyes of some of the doctor's dupes.

San Diego, Cal.

M. LEWIS.