

PHYSICAL CULTURE

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PHYSICAL CULTURE is Published Monthly and is Primarily Devoted to Subjects Appertaining to Health, Strength, Vitality, Muscular Development and the General Care of the Body, and also to all Live and Current Matters of General Interest, Enlivenment, Entertainment and Amusement.

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Ethel

Theodore, Jr.

President Roosevelt

Miss Alice

Archibald

Kermit

Mrs. Roosevelt

Quentin

First Photograph Taken of President Roosevelt's Family Since He was Made President. This Photograph was Taken on July 2nd, 1903, at the President's Home, Oyster Bay, Long Island, N. Y.

HOW PRESIDENT ROOSEVELT PASSES HIS VACATION AT OYSTER BAY

By Gerald Keating



THE time-honored maxim, "Whatever you do, do it well," has top place in President Roosevelt's heart. At his simple home at Sagamore Hill he follows this maxim as literally as he does in Washington, where he is bound by the trammels of social functions, and kept ever busy in the discharge of his onerous and responsible duties. When we think of him in the whirl of his official life in Washington we are apt to regard him with a suspicion of awe; but when we follow him to Oyster Bay, and hear he is having a good time, and a restful and much needed vacation, we naturally divest him of a certain amount of the dignity with which we clothe his life at the White House. In fact, we do what he is pleased to have us do. We take a closer interest in him and in his family.

Oyster Bay has virtually been elevated to the dignity of the Summer Capital of our great American Republic. It is the home of President Roosevelt, who has for his neighbors a large and rapidly increasing number of well-known and prosperous citizens. It is an ideal spot in which to spend the summer months, and offers more facilities for yachting and inducements for outdoor exercise than any other nook in Long Island. The bay itself offers safe and convenient anchorage for the Seawanhaka Yacht Club, a noted organization of yachtsmen who make Oyster Bay their active headquarters. Life at the Bay centers around the water, whether in bathing, yachting, fishing or cruising. Back from the shore beautiful drives and well-kept roads open up through the woodlands, and all roads lead to Sagamore Hill.

Many have the impression that while at Oyster Bay the President throws the reins of government to the winds for two

or three months, and that he is out for enjoyment alone. This is a mistake. The President keeps as closely in touch with all official matters during his quasi vacation as he does when he is apparently up to his neck in work down at the White House. There is this difference, perhaps: At the Summer Capital the President is relieved of pretty nearly all the tedious minutiae which make up an ordinary day's work in Washington. He does not, for instance, have to go through so severe an ordeal of handshaking at Oyster Bay as the nature of his duties at his winter headquarters calls for. For every hundred who think they have official occasion to see him when work in Washington is in full swing, only one aggrieved citizen or official dignitary seeks opportunity to offer the President the glad hand or worry him with matters of state down in Long Island.

The President's life at Oyster Bay is the ideal American home life. It is all simplicity, and an excellent and easily possible model for even the poorest in the country. The whole family is out of bed at seven and usually spends an hour about the grounds before breakfast. This meal is of the simplest kind, and, at this, as at the other meals—lunch and dinner—the President always insists on his entire family taking seats at the same table and at the same time. The President has Mrs. Roosevelt sitting opposite him, and his strenuous sons and daughters make up a party which ought to be the happiest in the world. It is the same bright picture at every meal.

After breakfast the President glances hurriedly over the papers, giving his attention only to marked articles. Never does he descend to what make-belief busy boors are so fond of doing—he never looks at a paper or reads a letter, no matter how important, or pressing, or short it may promise to be, until the meal is over. This is a lesson which ninety-nine out of every hundred husbands might dwell on to advantage.

After getting through with the morning papers he, as a rule, confers with Secretary Loeb, and, after satisfying himself that the great wheels which set the United States rolling upward and onward are in good running order for another day's work, he rigs himself out in riding breeches and leggings for his morning ride. Usually Mrs. Roosevelt accompanies him in these rides. It is quite a pleasant sight to see the whole family riding out in force, and charging over the country roads. When his family accompany him he gives his favorite jumper a rest and mounts his sure-footed Bleistein, one of the best all-round hacks in the country, who knows exactly how to vary his pace and cater to the nerve of a timid or reckless rider. The President is also fond of throwing his leg over Wyoming, another favorite animal, broken to the saddle with great care, and well able to carry the weight of the President. Of all his mounts the President is never happier than when he is astride of Renown, who has about the same regard for a five-bar gate, a stone wall, or a water jump as a bulldog has for a puddle. Nothing pleases the President more than tearing across country on Renown at a breakneck pace, clearing difficult water jumps in the shape of streams, or topping hedges and clearing over gates on his way. His riding is characteristic of the whole man. He wants to get what he is out for, and the more difficulty and excitement there is in getting what he is after the better he is pleased. He rides as the crow flies, and does not swerve in search of an opening or break in a fence.

Of outdoor sports and recreation, the President's attention is chiefly given to tennis. This is his favorite game. He is not very partial to golf. That there are no links within convenient range of Sagamore Hill may account for this, but it is thought the game which hails from north of the Tweed is not strenuous enough for him.

The President attended the finals of the International Tennis Tournament last year, and so pleased was he with Larned's excellent play that he invited the champion down to the Sagamore Hill tennis parties. The President himself is a keen

and fast player, and gave Larned a very close run in the five or six sets he played with him. The courts at the President's home are of grass, and are at all times springy and in excellent order. Almost every afternoon things are pretty lively there, and nobody enjoys a pleasanter evening than Mrs. Roosevelt as she watches the President playing a set or two with the boys.

The President varies his days still further during his vacation by gathering his entire family on the beach. Here he reclines as carelessly as the youngest member of the family, and enjoys the zest with which his own or his neighbor's children plan and build miniature sand fortifications on the beach. Then again he has facilities for bathing right on his own grounds, in clear water which runs out from Owl Creek, an outlet of Oyster Bay.

The President is as much at home in water as he is on horseback or out in search of big game. He is a past master of every stroke and may be called a fast and strong swimmer.

The U. S. yacht Sylph is at the President's disposal down on the Sound waters. She is a floating palace, but it is only very seldom her commander, Lieutenant Preston, U. S. N., is asked to get up steam for the President's pleasure. In fact, she is seldom boarded by the President's family except when they decide on a picnic or a clambake up the Sound to relieve any threatening monotony in their usual amusements. Even then the President prefers to set out by himself in a rowboat long before the Sylph is ready to start, and he has been known to row about 20 miles on one of these excursions without turning a hair.

Such is the manner in which the President puts in his time at Sagamore Hill. It is an open question whether physical or mental recreation has the greatest attraction for him, and when we consider how well abreast he keeps of current literature, and consider also the heavy demands of his official duties and the opportunities he finds for outdoor sport, we can only marvel at the strenuous and methodical life of this man who directs the destinies of Uncle Sam from 7 a.m. to midnight daily.

PHYSICAL DEVELOPMENT SIMPLIFIED

A SERIES OF LESSONS FOR DEVELOPING THE HIGHEST DEGREE OF VITAL, FUNCTIONAL, NERVOUS AND MUSCULAR VIGOR. LESSONS ARE GRADUATED AND ARE APPLICABLE TO THE STRONG AND WEAK OF BOTH SEXES. ALL THE INFORMATION PREPARED FOR THE BOOK "PHYSICAL DEVELOPMENT SIMPLIFIED" PREVIOUSLY ANNOUNCED WILL APPEAR IN THESE LESSONS

By Bernarr Macfadden



The Photographs Illustrating These Lessons Were Specially Posed for by the Editor Himself

LESSON IX

RELATIVE IMPORTANCE OF THE REQUIREMENTS IN THE BUILDING OF BODILY VIGOR—(1) AIR. (2) WATER. (3) REST AND RELAXATION. (4) FOOD. (5) EXERCISE. (6) BATHING.

ADDITIONAL EXERCISES FOR DEVELOPING THE MUSCLES OF THE FOREARM AND THE UPPER LEG. PRACTICAL INFORMATION AS TO THE MOST DESIRABLE METHODS IN CHANGING FROM A COOKED TO AN UNCOOKED DIET.

IN the two preceding chapters I have confined my remarks to the apparent theoretical advantage of following an uncooked diet. In this chapter, I will endeavor to give my readers some practical information as to what constitutes an uncooked diet and as to the best methods of changing from the usual diet. A raw or uncooked diet has many advantages besides the mere benefits that will result from following it. It is far more easily secured

PHOTO
No. 79, Ex-
ercise No.

43. Assume a squatting position, then balancing the body by placing the fingers of one hand on the floor, raise the left leg as high as you can. Same with the right leg. Continue the movement until the muscles tire. For strengthening muscles and tendons of abdomen, groin and extreme upper leg.

and prepared. It is more cleanly in every respect and the work of washing dishes after a diet of this kind is reduced to a minimum. It should be



welcomed most heartily by housekeepers and overworked wives, as it will lessen their labors by half.

Many will ask "how should the change be made"? Should one suddenly stop eating the cooked and begin with the uncooked food? Should a fast intervene between a change, or should the change be made slowly by the "tapering-off" process? It is not particularly serious which method is adopted, but the most satisfactory method is, probably, to make the change slowly. In other words, begin by introducing with your meals various uncooked foods that you consider palatable. Gradually increase the quantity used at each meal. This is probably the easiest and the most satisfactory method of making a change from one food to the other. When the diet is changed by this method you hardly realize the difference and, furthermore, it has another advantage. Before deciding on an exclusive uncooked diet, an appetite for the uncooked foods is developed. And just here it will not be out of place to emphasize the necessity for making your foods palatable.

No matter how wholesome a food may be, it cannot be assimilated satisfactorily, unless it is eaten with keen enjoyment.

This fact should be kept well in view when changing your diet.

To get good results from uncooked foods you must thoroughly enjoy eating. The more your hunger is excited, the more you linger over the delicious taste of each morsel, the more freely do the digestive juices flow and therefore the more effectively are the digestive processes performed. Some prefer to fast for two or three days prior to making a change from one diet to another. This, of course, has its advantages because after a fast of this nature, wholesome foods of almost any kind would naturally be greatly enjoyed. Even if the "tapering off"

PHOTO No. 30, Exercise No. 44. Assume position shown in illustration, placing the hands on the outer side of each leg. While pressing inward with the hands, bring the legs outward, (See next photo.)

process, previously described, is adopted, it is well to do a little fasting or at least to make your meals a little less frequent. This will make your food at all times more appetizing and will vastly aid you in making the desired change.

One must be really hungry in order to enjoy the most nourishing foods. The more "tickling" your appetite requires the less benefit you will get from food. You cannot enjoy the so-called coarse foods if your stomach is in need of a rest. Sauces and condiments may excite a false appetite, but food eaten under such circumstances is rarely of even slight benefit.

Now the ordinary uncooked or raw diet consists of fruit, nuts, vegetables, grains, milk and eggs. Even at the table of the average family, fruit, nuts, milk and vegetables are served uncooked, so the change is not so startling as one might at first imagine. No one ever heard of nuts being improved by cooking, but few will admit that good ripe fruit is improved by the cooking process. It is questionable whether radishes, tomatoes and turnips could be made more palatable even to the most conventional taste with the aid of the cook stove.

Of course, many claim that milk will not agree with them and as long as this idea is retained it will not be a satisfactory food, but milk is a decidedly different food when used with a raw diet. Then, too, milk should not be quickly swallowed just as you would water or other liquids. It should be sipped slowly. Every portion should be thoroughly mixed with the saliva before swallowing, just as it is in infant life. Under circumstances of this character, the digestion of milk is quite easy.

Now, when you desire to change your diet, at each cooked meal, have various foods selected from the list given. Raw



rolled wheat or oats makes a very appetizing food and can be secured

PHOTO No. 81, Exercise No. 44—Continued. To position shown in above illustration. Continue the movement until the muscles tire. This exercise is especially good for developing the muscles of the outer side of the upper leg, though of course the crouching position is inclined to round the knees and develop all the muscles of the upper leg,

at any grocery store. Of course, as sold in the stores, they have been put through a steaming process in order to moisten and swell the grain before rolling, but they are practically a raw grain and taste but little if any different from the grain that has been untouched by heat. These rolled grains can be eaten just as you eat any breakfast food, with cream and sugar. But perhaps the most palatable method of preparing them, is first to mix from two to three tablespoonfuls of the finest grade of olive oil with a teacupful of the rolled grain. Stir thoroughly so that the oil will moisten every part of the grain. Then eat with cream and sugar, or mix with fruit, such as dates, figs, apples or bananas.

I do not believe in too great a variety of foods at one meal. Two or three articles are far better than three or four. My meals usually consist of two or three if I am able to make a selection to suit my own taste and am not required to eat with others.

The raw grains can be eaten whole just as they come from the field and they are very palatable this way if chewed with nut

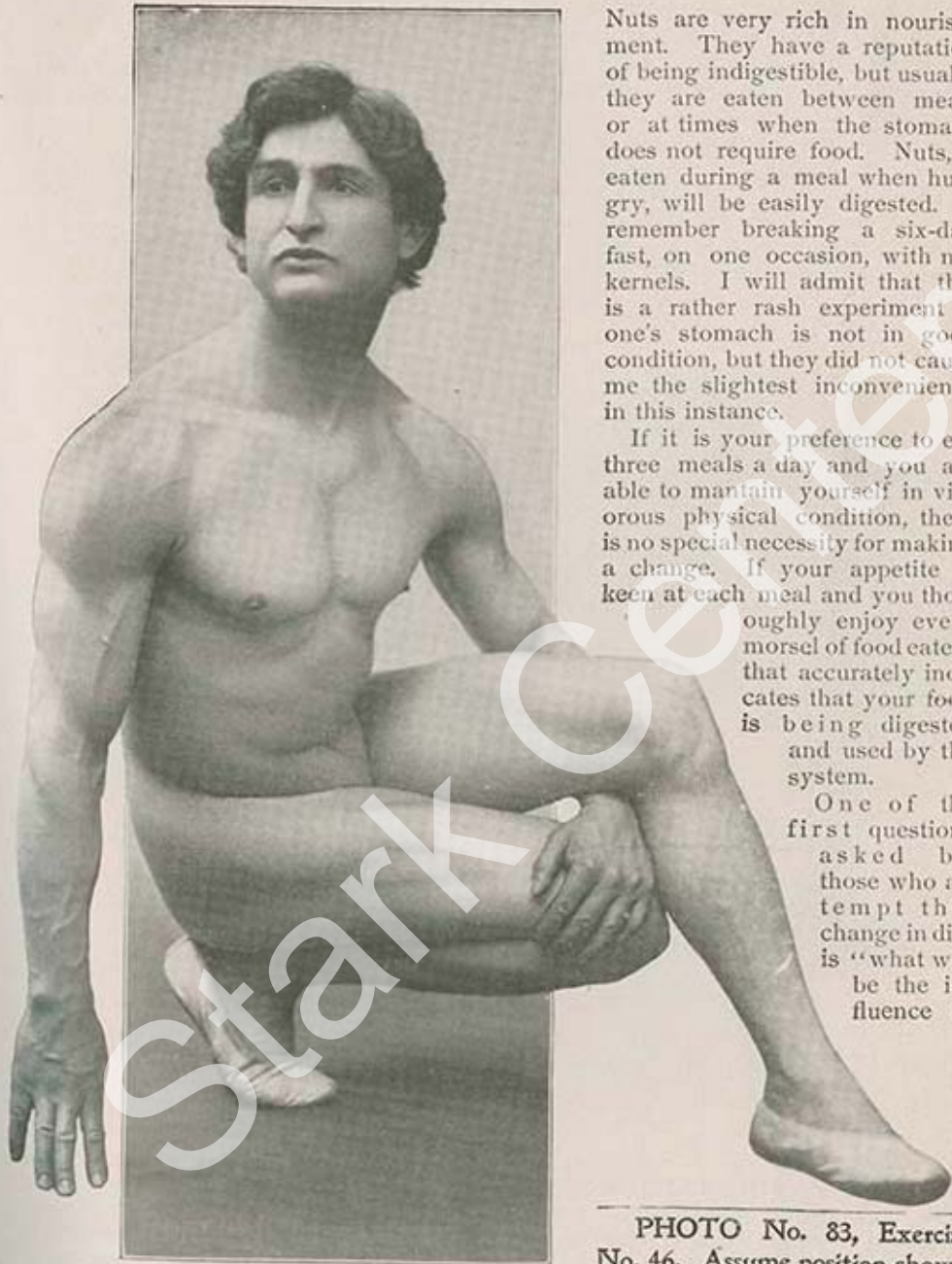
kernels of some kind, but very good teeth are required for this.

I would not advise that much milk

be used until after the diet consists mostly of raw foods. Eggs are made palatable by stirring them with milk and if necessary adding a small quantity of sugar.



PHOTO No. 32, Exercise No. 45. Assume position shown in illustration. Place the fingers of the right hand on the inner side of the left knee as shown, then bring the left knee inward toward the right leg, pressing against the movement with the right hand. Continue the movement until the muscles tire. Same exercise with the position of the body reversed. This exercise is specially inclined to develop the muscles of the inner side of the upper leg.



Nuts are very rich in nourishment. They have a reputation of being indigestible, but usually they are eaten between meals or at times when the stomach does not require food. Nuts, if eaten during a meal when hungry, will be easily digested. I remember breaking a six-day fast, on one occasion, with nut kernels. I will admit that this is a rather rash experiment if one's stomach is not in good condition, but they did not cause me the slightest inconvenience in this instance.

If it is your preference to eat three meals a day and you are able to maintain yourself in vigorous physical condition, there is no special necessity for making a change. If your appetite is keen at each meal and you thoroughly enjoy every morsel of food eaten, that accurately indicates that your food is being digested and used by the system.

One of the first questions asked by those who attempt this change in diet is "what will be the influence of

PHOTO No. 83, Exercise No. 46. Assume position shown in illustration, placing fingers

on the floor to maintain balance. Clasp, the outer side of the right leg with the left hand, then endeavor to bring the right leg outward away from the left leg as far as you can. Continue the movement until the muscles tire. Same exercise with position reversed. But little movement can be made in this exercise. It is a very good exercise to assist in developing the outer muscles of the upper thighs, and for general leg development.

the change upon my weight?" Will my weight decrease or increase? The answer to this question will depend entirely upon your physical condition—whether or not you are under or beyond the normal weight. If you are too fleshy to be normal it will in every case decrease the weight. If you are thin and angular and under the normal weight, it will in nearly every case result in a gradual increase after the organs of assimilation have become accustomed

and eggs are used very freely, it will be necessary for you to make free use of acid fruits, otherwise there is a possibility of inducing a bilious attack. In fact, if there are any symptoms of this at any time, it may be necessary for you to use considerable lemon juice. The juice of one lemon taken fifteen minutes or half an hour before meal time precludes any possibility of biliousness. When milk and eggs are used, raw grain should also be used liberally. They have a very

wholesome effect upon the entire alimentary canal. The stomach and every part of the bowels are kept cleansed and active by these raw grains. Even if your teeth are poor, you should be able to use the flaked grain as previously described.

If the teeth are especially bad, oatmeal can be used instead, eaten with cream or fruit as desired.

It is well to remember, however, that the condition of the teeth depends largely upon how much they are used. Very frequently poor teeth can be greatly strengthened if compelled to chew foods that require a great deal of vigorous mastication.

DAILY RÉGIME.

I herewith repeat the daily régime.

The pupil should now be advanced sufficiently in this course to determine fairly well just what particular parts of the body are most in need of development. I would, therefore, advise each



to the change in diet.

If desirous of gaining in weight, considerable milk should be used with your foods. If eggs are also added they will assist in bringing about an increase. If too fleshy and desirous of decreasing weight, these two articles of food should not be used. It would be well to remember, however, that if milk

PHOTO No. 84, Exercise No. 47. Place the left thumb under the right wrist and the fingers of the left hand over the right, as shown in illustration. Now, pressing against the movement vigorously, bend wrist, (See next photo.)

one to select from the exercises previously given those particular movements that are apparently of special value in remedying defective parts, or building strength, wherever it may be the most needed. Of course, if you have plenty of time and are fairly strong, the entire course which precedes the movements herein shown can be taken, though these are hardly necessary if you are merely exercising for health and do not care par-

inclusive, can be added with advantage.

If you are weak and are just beginning, rest when the slightest feeling of fatigue is noticed. If you are fairly strong, each exercise can be continued until the muscles are rather tired. The exercises should be taken in a room with the windows wide open and with as little clothing on as possible. Cultivate the fresh air habit. Leave the windows of your sleeping room wide open at all



ticularly for possessing an extraordinary muscular development.

About the best all-around exercises to precede those shown in this lesson, if you are simply desirous of accelerating the circulation throughout the entire muscular system, are exercises Nos. 12 and 13, though, of course, the exercises for building vital strength, Nos. 14 to 18,

times. The colder the air the harder you have to work to bring about a feeling of warmth to the external surface.

Follow the morning exercises with a dry friction bath. This can be taken with a dry rough towel, which should be

PHOTO No. 85, Exercise No 47—Continued. To position shown in above illustration. Continue movement until muscles tire. Same exercise with the position of the hands reversed. This exercise is excellent for developing the muscles on the back of the forearm.

rubbed back and forth over every part until the skin is pink from the increased amount of blood brought to the surface by the friction. Follow this exercise with a cold sponge bath. Have the water as cool as you can bear and still be able to recuperate with a feeling of warmth. Unless working very hard at manual labor, two meals a day should be sufficient, though many working men

impression that you cannot improve by eating three meals a day. I advise the two-meal plan to guard against the liability to overeating.

Acquire the habit of drinking one or two glasses of water before or after exercise, before retiring and on arising in the morning. Although I advise that you drink freely of water, I do not by any means recommend that you imbibe vast quantities. You can overload your stomach with water to disadvantage.

Ordinarily you should drink from three to six pints of water each twenty-four hours, though if you perspire freely the quantity required increases greatly. Masticate every morsel of your food to a liquid. Avoid all liquids during meal times, unless especially thirsty.

If thirsty, satisfy your thirst freely, but do not use liquids to assist you in swallowing food that you have failed to thoroughly masticate.

If accustomed to a drink at meals, and it seems difficult to break the habit, you can use cocoa or a cup of hot milk after finishing the meal, drinking it very slowly.

If preferred by the pupil, all this exercise can be taken in the evening before retiring, instead of in the morning, though ordinarily it is advisable to take a few movements in the morning. It will thoroughly awaken you for the day's work. If

you are working hard at manual labor, the exercises which demand the use of the same muscles as are employed in your work should be omit-



are able to thrive better on two meals each day

than on three. If you do eat three meals a day, be careful not to eat more than you can comfortably digest. I do not by any means wish to convey the

PHOTO No. 86, Exercise No. 48. Begin with the wrist of the right hand bent inward as far as possible, and turned far over as shown in the illustration. Now place the left hand on the right, and resisting the movement slightly twist the forearm and turn the wrist upward, (See next photo.)

ted. Two or three evenings during the week a hot bath should be taken before retiring, and in every instance the exercises should precede it.

These exercises for the forearm, together with those illustrated in a previous issue, form a complete course of exercise for developing every muscle of this part of the arm. They are sometimes a trifle tedious, but will be effective for the purpose designed.

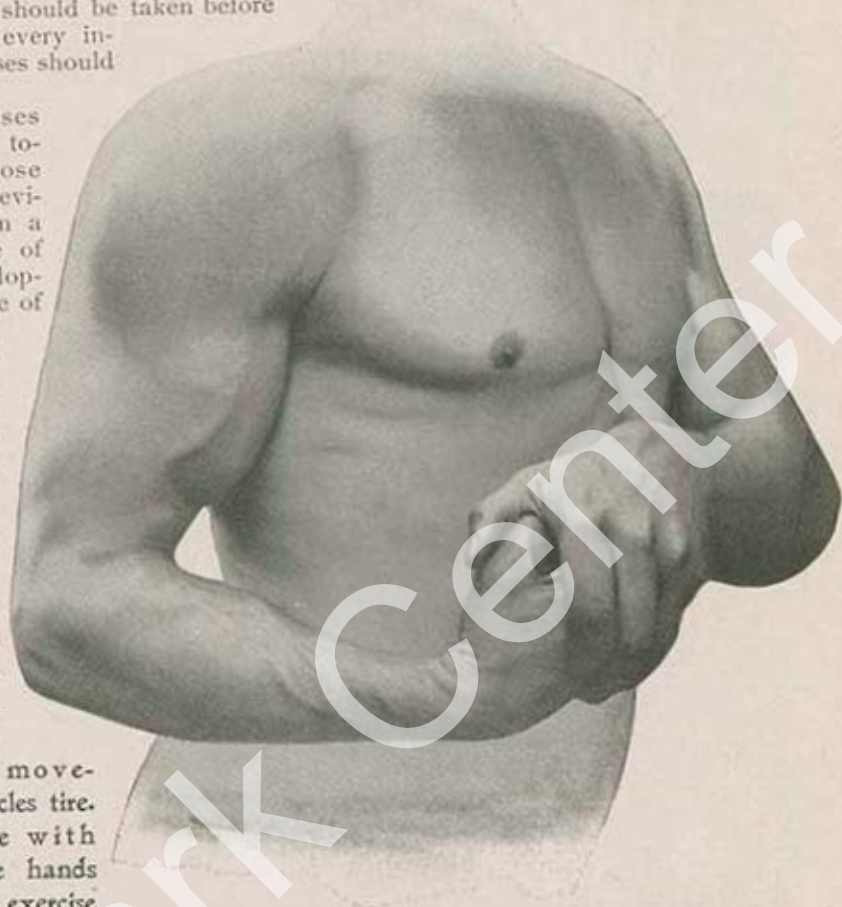


PHOTO No. 87, Exercise No. 48—Continued. As shown in above illustration.

Continue movement until muscles tire. Same exercise with position of the hands reversed. This exercise develops the muscles of the forearm, and also a small muscle of the upper arms.

Living on Uncooked Foods Makes This Man's Friend at 59 Look Only Half His Years

To the Editor:

I take the liberty of addressing you, for it seems that I am already acquainted with you, as I have been a constant reader of your magazines and books for over a year. I think beyond a doubt that you are fulfilling one of the most important missions in this world that it is possible for one man to fill. My wife and I have been following your hints on diet and bathing, with wonderful results. I myself have taken several fasts, the longest one of five days' duration, and I very

seldom touch breakfast. For several months I have with a friend lived on uncooked food, and we are gaining every day in strength and vitality. My friend is 59 years old, but does not look half the age. He takes a cold-water bath every morning, and in the evening, in addition to our regular exercises, we run foot races, and he declares that he is feeling younger every day.

V. T. CHAMBERLIN.

Mexico City.

THE MIRACLE OF POPE LEO'S STRENGTH

By George Barton



IN one of the most delightful of his essays, Robert Louis Stevenson says that after a man passes his seventieth year, his continued existence is a mere miracle. If that be true, how are we to regard Pope Leo XIII., who, in his ninety-fourth year, puzzled his physicians and amazed the world by the marvelous vitality he displayed in his picturesque and extraordinary struggle with Death? Considered merely in the natural order of things, it was the logical outcome of a long life of proper living. Cardinal Gibbons, himself the model of a precise and well ordered life, says that the abstemious life of Pope Leo has been such as to create a rule of living, and furnish a lesson of value, to every young man in the country.

The life of the illustrious Pontiff has been a magnificent illustration of the wisdom of adhering, with fidelity and persistence, to the immutable laws of nature. A delicate child and a frail youth, in spite of his weak body, his years have been protracted a quarter of a century beyond the ordinary life of man. The story and the moral of his existence, from a mere physical standpoint, may be summed up in abstemious living, open air exercise and constant employment for mind and body. Scanning the facts of the Pope's life one cannot but be impressed with the sensible manner in which he safeguarded his health, by careful diet and by such exercise as his environment permitted. Leading practically a sedentary life, he

thrived on the light and abstemious diet that was suited to him—just as prisoners in a jail, properly fed, enjoy better health than free men who do not eat advisedly.

He enjoyed, to a remarkable degree, the faculty of knowing how to co-operate with and assist nature. Abhorring drugs in all forms, he so ordered his life that light and air, and exercise and repose were the chief requisites, with moderate nourishment, for his physical health and happiness. With him, precept and practice ever went hand in hand. His poems and writings constantly sing the praises

of moderate living. In his poem on Frugality and Old Age—which is already recognized as a classic and is certain to be more famous in the years to come—he paints the virtues of abstemiousness in such beautiful colors as to convert the grossest of mankind. In the same poem he denounces gluttony with all the power of his vigorous mind. The introductory lines of the verses on Frugality, after depicting the beauties of temperance, describe the ideal repast:



Pope Leo XIII.

Seek neatness first; although thy board be spare,
Be every dish and napkin bright and fair;
Next have the beakers foaming to the brim
With milk no thrifty maid hath dared to skim;
No draught than this more wholesome shall
assauge
The thirst of childhood or declining age.

The poet goes on in great detail to describe the other portions of the meal, which includes soup, eggs, greens and cheese.

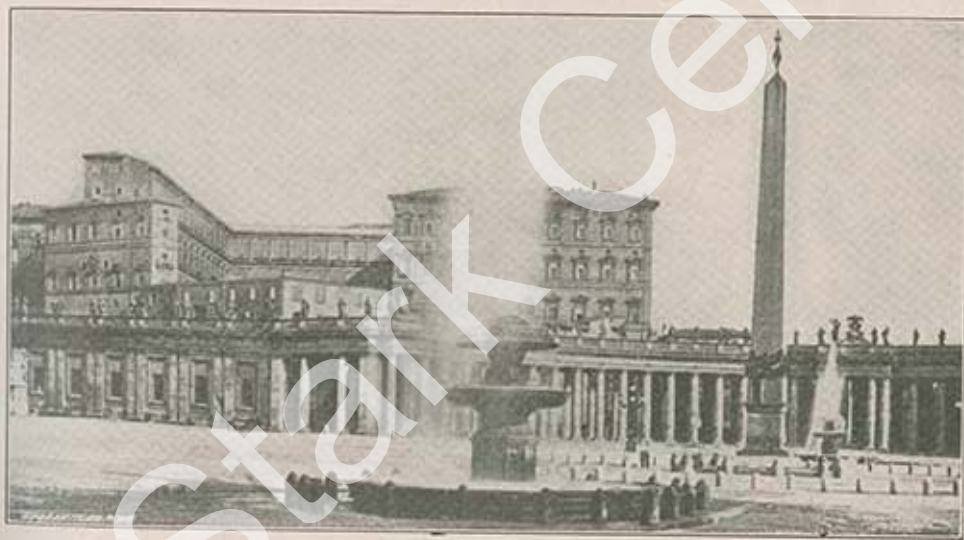
Turning from this picture of serenity he describes and then denounces the Glutton. It is done with an artistic fidelity to nature that is almost photographic. Leo first presents a picture of

the banqueting hall, with the diners reclining on couches of ivory and the air reeking with the perfumes of Arabia. These things, he says, are but snares to lure on the unthinking. Then the guests are shown drinking and gorging themselves with gross dishes. After their veins are filled with wine they "rise to dance where they have come to dine." Then comes the moral:—

But Gluttony looks on the rout, and smiles
To see the outcome of her patient wiles:
How Circe's guests have sunk to shameful sleep,
As sailors perish in the yawning deep;
And how anon the tortured liver wakes
To sudden protest; how the stomach aches,
While steaming sweat bedews the trembling
limbs,
And a thick mist, the bloodshot vision dims,
With the wrecked body brought to such a pass,
Shall Gluttony essay beyond? Alas!
Her arts would seek to bury in the sod
Even the soul—spark of the breath of God!

At nine o'clock arrived the Cardinal Secretary of State with important papers, covering the concerns of the church in every part of the world; at ten o'clock the reception of the remaining cardinals and the keeping of engagements for private audiences and public functions.

At noon came the long waited for stroll in the Vatican gardens. Here the Pope was in his element, relaxing the severity of the churchman to give way to the natural buoyancy of the man—the mountaineer. Those privileged to take the stroll with the Pope say that his vivacity was without bounds. He displayed the strongest possible personal interest in all of his surroundings; seemed to examine each separate plant and flower, commented on the birds and sunshine, and returned to his apartments, an hour or so later, with ill-concealed



The Vatican

Until within recent years Pope Leo rose regularly at daybreak and, after having celebrated his private mass, dispatched a vast amount of current business. His fast was broken about seven o'clock when he usually partook of a cup of coffee with a roll and some fresh fruit. He breakfasted leisurely and during the meal found time to glance at the more important news in the two clerical papers, "Observatore Romano" and "Moniteur de Rome." Then came the reports of the officials at the Vatican.

reluctance. It was this love of the sunshine, of nature, that added daily to the Pope's health account and, with a delicate yet wiry constitution, enabled him to outlive cardinals who were many years his junior.

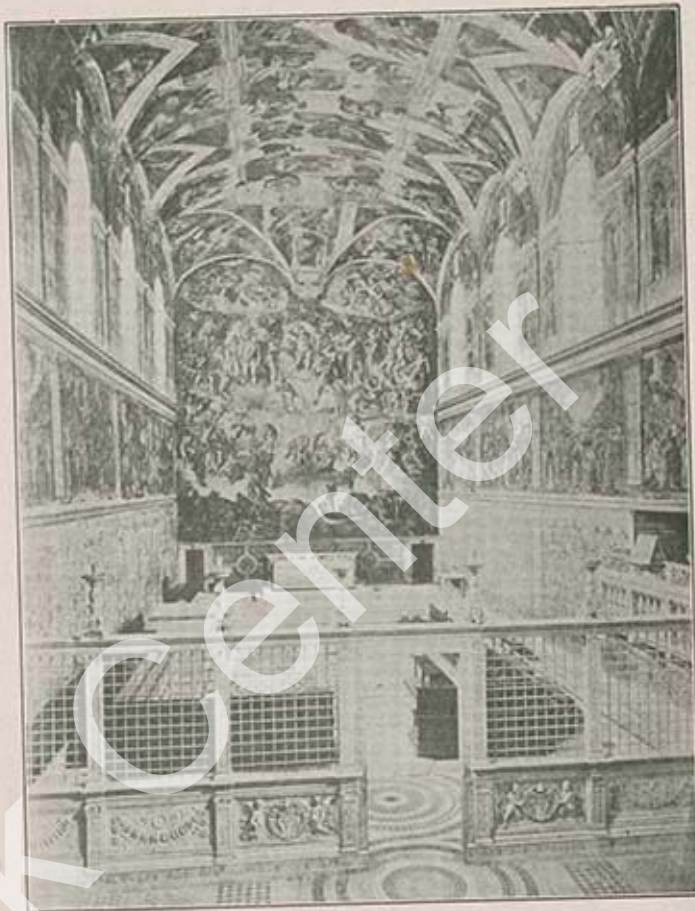
Like most of his countrymen, the Pope ate only one full meal a day. This came precisely at two o'clock in the afternoon. It consisted of broth with an egg, a roast, usually a bit of chicken, and dessert, in the shape of fruit, in season. At times fish was added; and

plain lettuce, with a small cup of coffee, completed the repast. In his later years the Pontiff ate little, if any, flesh meats on account of their indigestible character.

Always temperate in his habits, he was particularly scrupulous in strictly observing the fasts prescribed by the church. His frail body and advanced years would have furnished ample reason for the usual dispensations, but he steadfastly refused to take advantage of the means of relief. Pope Leo enjoyed the absolute harmony of all his organs and of his physical, moral and intellectual qualities. This, it is averred, was the true cause of his great resistance to illness.

It is interesting to note that, in the moderation of his living and in his abstemious habits, the Pope was carrying out, to an ideal degree, the physiological and moral theories involved in the fasting and abstinence commanded by religion, which teaches man that he has two natures—the higher and the lower—and that a lifetime struggle is ever going on between the two. By mastering the merely animal nature man strengthens the spiritual or supernatural, which, of course, carries with it the power of the intellect.

There can be no doubt that constant mortification of the body made a deep impress upon the personality of Leo XIII. It was the absence of the grosser elements in the composition of the man that attracted and startled those who came into contact with him for the first time. No Pope ever glowed more with intellectual light. It was not difficult to appreciate the exclamation, said to have been made by one of the Abyssinians



The Sistine Chapel—Vatican

after an audience with him: "This is not a man; it is a spirit."

It is well known that Leo, originally, possessed a proud, domineering soul. Belonging to the most exclusive of the Roman aristocracy, he was born to the purple, and the right to rule was inherent in the man. But the abstemiousness of his life subdued the spirit of the flesh; and the imperious aristocrat became, and remained, the amiable man, treating all with whom he came in contact with lofty courtesy and a sweet-tempered love. This is one of the traits of his many-sided character that has rarely been dwelt upon and never fully elucidated. But it was there, and the historian of the future who wishes to describe character as well as mere events will find it a profitable as well as a profound subject for his intelligent study.

He possessed, to an extraordinary degree, what might be called a perfect organism. It was a delicate nature, but all of the elements that went to make up the man were in absolute accord. It is significant—to emphasize a point that has already been made—that the more the body was brought under control, the greater, the stronger, the more luminous became that wonderful intellect which, capable of discerning the right, was unwavering and unyielding in maintaining it against all the powers of earth. He was constituted—if the simile be per-

mitted—like a most delicate but most powerful machine, where each tiny little cog and wheel fitted exactly and precisely in its proper place. Little wonder, then, that a man who was such a complete master of himself, and his passions, should possess such a powerful intellect; little wonder that he should have an all-embracing love and solicitude for mankind; a love where heart and brain beat and thought in unison, and that made of him, not only a great Pope, but a just man, a scholar, a statesman, a humanitarian and a philanthropist.

A VICTIM WRITES ABOUT THE ELECTRIC BELT FAKE

To the Editor:

To say I was surprised as well as delighted, would be to express it in easy terms, when I opened my June PHYSICAL CULTURE and saw in big letters the exposure of THE HEIDELBERG MEDICAL INSTITUTE OF ST. PAUL, for I had an experience with these people.

My home is in St. Paul, Minnesota. About a year ago I was taken sick with what I eventually discovered was kidney trouble, and these people being close to our house I called on them for treatment.

I well remember my first visit. I went into the waiting room, and was not favorably impressed with the office force, but, to use a strong phrase, stuck it out till I could see the man whose testimonials and diplomas were hanging on the wall. I went into his private office, and after a personal examination by him I was greatly surprised to understand that I had inflammation of the prostate gland and two or three other things, about which I need not go into details. Last, but not least, he told me that it would take \$45 to cure me. "No pay, no cure;" but I was to sign a note payable in six weeks. I was suffering great pain, and signed the note, and was given an injection. This I used once, and the next night I barely managed to get home. I had also gotten a box of small pills from "The Heidelberg Physicians," which I learned was morphine.

After I had been put to bed, I sent word down to the Heidelberg fakirs and asked them to take entire charge of the

case and come to see me. They nervously told my messenger, after questioning him thoroughly, that they could not make visits.

As soon as I was on my feet and out, I immediately called on them, told them what they had done for me, and I never expect to see again a man so anxious to hand back my note for \$45 and get rid of one whom he had expected to bleed to a standstill.

Their offices make a great show of business, and in their "work room" (that's where they work their victims) there are numerous tanks and machinery for display, of course. They have lovely blue glass in the windows to shut out the sunshine.

After I got next to their game I sized up their patients, whom the doctor laughingly told me were looking for manhood; which I suppose they thought he had stored in the tanks I've referred to, and sold by the quart.

You may use this letter as you see fit, without the signature, which I would not want divulged, for I think a man that would go in such a joint and not tumble to the game deserved to be "worked." I am ashamed of it, but if I can be of use in helping to clean these places out of existence I shall willingly disclose all I know of this Heidelberg Medical Institute swindle.

By the way, the trouble turned out to be inflammation of the bladder and kidney disease.

X. Y. Z.

San Francisco, Cal.



1. O. Isidor Bergman, New York. 2. H. P. Strickland, Toronto, Canada. 3. Albert Abelt, Cleveland, Ohio.
4 and 6. Frank S. Lincoln, Providence, R. I. 5. John W. Glenister, Syracuse, N. Y. 7. Geo. Smith,
Montreal, Canada. 8. James Wm. Mosley, Mass. 9. Geo. Smith, Montreal, Canada.

Eight Likely Competitors for \$1,000 Prize

A MILLION-POUND LIFT

A MARVELOUS FEAT OF STRENGTH AND ENDURANCE



TO lift one million pounds in 34 minutes and 35 seconds sounds like a feat almost beyond human endurance, yet it has been done.

Mr. Gilman Low, of New York, trained for a demonstration of this feat for two months, giving particular attention to his diet and manner of living,

training only with light weights, or none at all.

He had previously attempted the feat and utterly failed, reaching only a little over the half million mark in 25 minutes. Then he ended in sore distress and dizziness. He had been eating two meals daily.

In the successful lift he was in no way bordering on distress at any time during the demonstration, and came out fresh and strong. One thing especially noticeable was his freedom of lung power, so very important, he says, in accomplishing a lift of this kind; for as soon as one ceases to breathe well the muscular power fails.

At no time in this latter lift was he compelled to breathe through the mouth. He set his jaws in grim determination

when the lift was about two-thirds finished, in order to complete the lift in the time he had allotted himself. He figured on accomplishing the feat in 35 minutes, and succeeded with 25 seconds to spare.

During his two months' training Mr. Low lived during the first five weeks on only one meal daily, consisting of three eggs, one-half loaf of whole-wheat bread, fruit, either oranges, grapes, apples or bananas, cereals and nuts, and one glass of milk after the meal; also plenty of cooled distilled water during the day. As an experiment he ate meat twice during the first five weeks, and found he could

do just as well without it.

The last three weeks he lived on four meals weekly, consisting of the same diet as the five weeks previous.

At ten o'clock in the morning on the day that the lift was made he increased the eggs to six, also somewhat increased the bread; otherwise the meal consisted of the same allowance.

A pair of Fairbanks scales (as shown in the flashlight photos) with a strong steel platform built above the main platform, supported by stout iron corner posts, was used for the test. The distance between the platform above and the



Mr. Gilman Low

main platform was forty-one inches.

First the scales were tested, and found to balance exactly; then Mr. Low, the hand stool and back pad were weighed, and found to amount to just 200 pounds; then 1,200 pounds in weighing weights were placed on the beam; every lift of the beam meant that 1,000 pounds dead weight had been raised. This is the amount Mr. Low lifted 1,006 times in 34 minutes and 35 seconds, making a total

during which he lifted 47,000 pounds at intervals to keep in condition; he then raised the beam with 2,200 pounds attached, 22 times in 19 1-5 seconds (beating his old record of 21 times in 20 seconds), raising at each lift one ton dead weight; an intervening rest, and then again one ton ten times in 9 4-5 seconds; another rest, and one ton again 12 times in 11 1-5 seconds, or lifting 44 tons in four minutes flat.

The total amount in dead weight lifted



Mr. Low Getting Under Way

lift of 1,006,000 pounds in that time.

The quickest lift was made on the last 50,000 pounds, which completed the 800,000 pounds, 1,000 pounds being raised 50 times in 13 seconds flat. This was by the back and arms.

The next 50,000 pounds were lifted with the legs alone. This seemed to be the hardest test of all; it naturally would be, as no assistance from the arms favored him this time.

Between the end of the million-pound lift and the ton lifts was a 15-minute rest,

by Mr. Low in 55 minutes was just 1,141,331 $\frac{1}{4}$ pounds.

Between each 50,000-pound lift Mr. Low walked continually and did not sit down to rest. Walking, he claims, was the only resource left him, after he once got into the work, to keep his legs and back in proper condition. Only one glass of water was consumed during the whole time, and that by sipping. Even then one-half was used principally to rinse and cool his mouth.

You can perhaps have a better idea as



Mr. Low after Lifting 1,006,000 Pounds in Thirty-four Minutes Thirty-five Seconds

to the amount of energy expended when you learn that during the 55 minutes Mr. Low lost in actual weight over $5\frac{3}{4}$ pounds.

The lift was accomplished in Prof. Anthony Barker's gymnasium, before about 50 witnesses. Professor Barker acted as referee.

On the whole, it was a marvelous exhibition of what proper training and right living can do for a man. Mr. Low has never used tobacco or liquor in any form, and to this fact he lays a great deal of his wonderful strength and endurance.

A CANNY SCOT.

A sheep farmer in Perthshire, the owner of a fine collie dog, was visited by a gentleman who took a fancy to the animal. He offered many pounds for the dog and bought him. Afterward the gentleman asked the farmer if it would not be more profitable to breed such dogs instead of sheep.

"No, no," said the farmer. "I can aye get merchants to buy sheep, but I canna aye get fools to buy my dogs."—*Tit-Bits*.

THE PROOF OF IT.

Casey (after Riley has fallen five stories)—Are yez dead, Pat?

Riley—Oi am.

Casey—Shurè, yer such a liar Oi don't know whither to belave yez or not.

Riley—Shure thot proves Oi'm dead. Ye wudn't dare call me a liar if Oi wur aloive.—*Judge*.

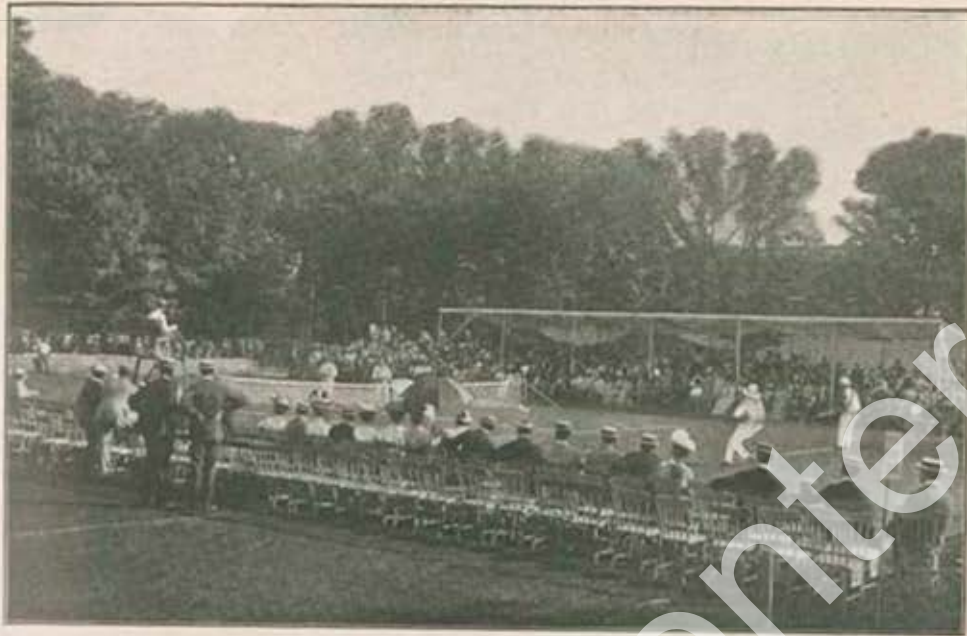


PHYSICAL CULTURE



The Last Roses of Pæstum

From the Painting by Jules Salles



Tennis at Longwood

LAWN TENNIS

By S. Crane



LAWN TENNIS, owing largely to the impetus given the game last season by the visit to this country of the world famous Irishmen, the Doherty brothers, and the revival of the international matches last season, which were unavoidably prevented in 1921, the game this year appears to have taken a new lease of life, if that were possible, and the increased popularity of the game is wonderful. New clubs are being organized by the hundreds and new players, many of them coming champions, by the thousands. The game, too, when once thoroughly understood and played capably and intelligently, is so irresistibly attractive that even new beginners, whether men or women, acquire championship aspirations that encourage them

to follow up the game with the most encouraging persistence and enthusiasm.

While all cannot attain championship form, they imagine they can, and it is just this sentiment, false or real as it may be, that increases the numbers of its devotees so fabulously.

The rules of the game are easily learned, but only by the most constant practice can success in the various strokes be attained. It is little short of wonderful to what a high degree of perfection some of the most prominent women players have reached, and many gentlemen players who prided themselves on their skill at the game have had their pride humbled by the dashing play of a fair opponent.

That women can attain to such a high degree of efficiency at it has added largely to the popularity of the game.

It is a splendid game and should be encouraged, inasmuch as it gives exercise without necessarily violent exertion



Davis Smashing a Ball

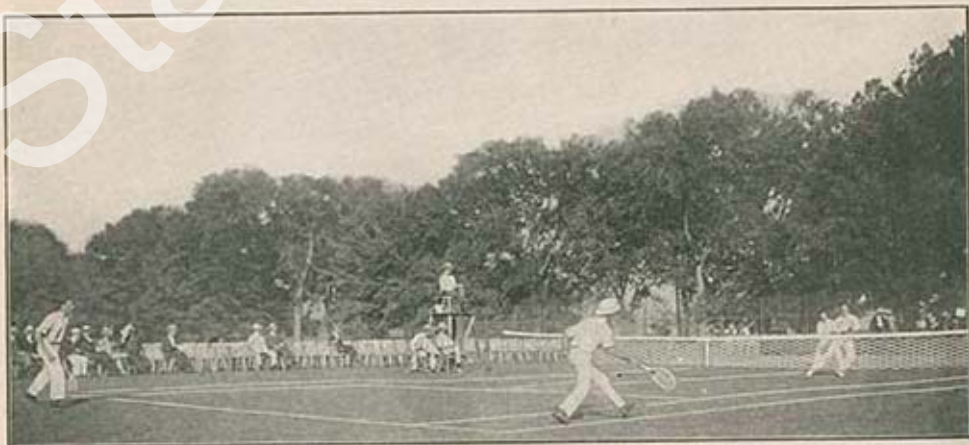
and takes people out of doors. It gives them the benefit of the health-giving ozone of our beautiful climate; it fills their lungs with the free air of nature; it allows them to tread the green grass and affords healthful exercise. It develops every cord and sinew and gives strength and elasticity to every muscle and fibre of the body. What more can the active participant in outdoor sport want? Take it up, therefore, all you who desire the rosy cheeks, the becoming tan, the grace, the suppleness, the form that go with the perfect athlete, and the doctors will take to the woods.

Perhaps there is no other game that both sexes can play and enjoy and also show ability of a high class or that

brings into action so many muscles of the body. It requires first of all quickness of eye, agility, and intelligence. Strength and ability will come with practice.

Lawn tennis was the invention of Major Walter C. Wingfield, of the British army, in 1874; at least, that officer patented it in that year and is given the credit and honor of being the "Father of the game," that is, as we know it. The best authorities, however, disagree as to its direct parentage or

genealogical tree. The first record of any such game as tennis occurs away back sometime in the middle ages, when a crude form of the game was a favorite sport of the Italian and French feudal kings and nobility. It was from the Italians that the French seem to have borrowed the game, and the volatile Frenchmen are said to have taken it up with avidity and played it with all the ardor for which the race is noted. The French game was played originally with a cork ball, struck with the hand over a bank of earth, which served the same purpose as our modern net. Later a crude racket with a wooden frame and handle and gut strings was introduced, probably to protect the delicate hands of the French



Tennis at Longwood—An Exciting Moment

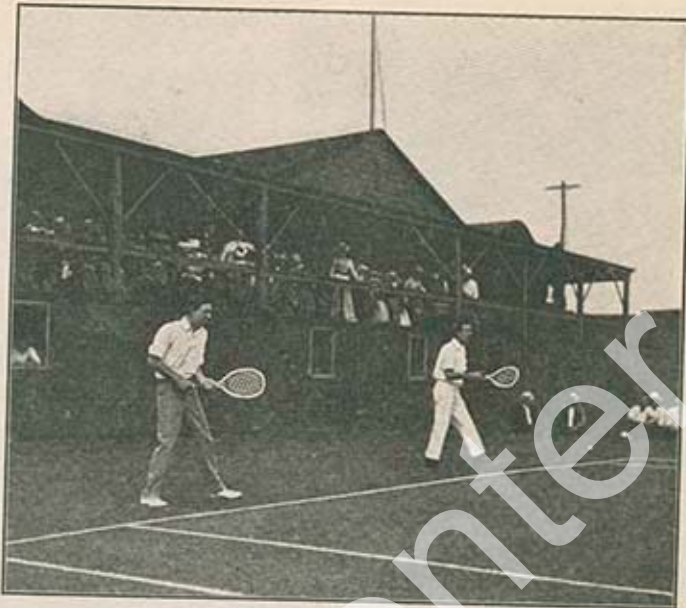
dandies and noble ladies of the Court.

Major Wingfield's game was played on an hour-glass shaped court, sixty feet in length and thirty feet in width at the base-lines. In the center was stretched a net twenty-one feet wide and seven feet high at its sides, which sagged to four feet eight inches in the center. The old method of racquet scoring was used, and the server was required to stand within a marked space in the middle of the court.

In 1875, the first regular laws for the game were formulated by the Marylebone Cricket Club, of Lords. The club's committee selected the name of "Lawn Tennis" and promulgated a set of rules. They set the length of the new court at seventy-eight feet and there it has remained to the present time; the same hour-glass form was retained, but has since been changed to its present shape.

Nahant, near Boston, Massachusetts, a seaside resort, holds the honor of having the first lawn tennis court in this country, and that was in 1874, the same year of its introduction in England. A Bostonian traveling abroad brought home a set of Wingfield's rules and implements for the game and introduced the sport. It sprang into immediate popularity and the next spring a court made its appearance in Newport, and later, in 1875, the Staten Island Cricket and Base Ball Club took up the game. The Young America Cricket Club of Philadelphia, introduced the game in the Quaker City very soon after.

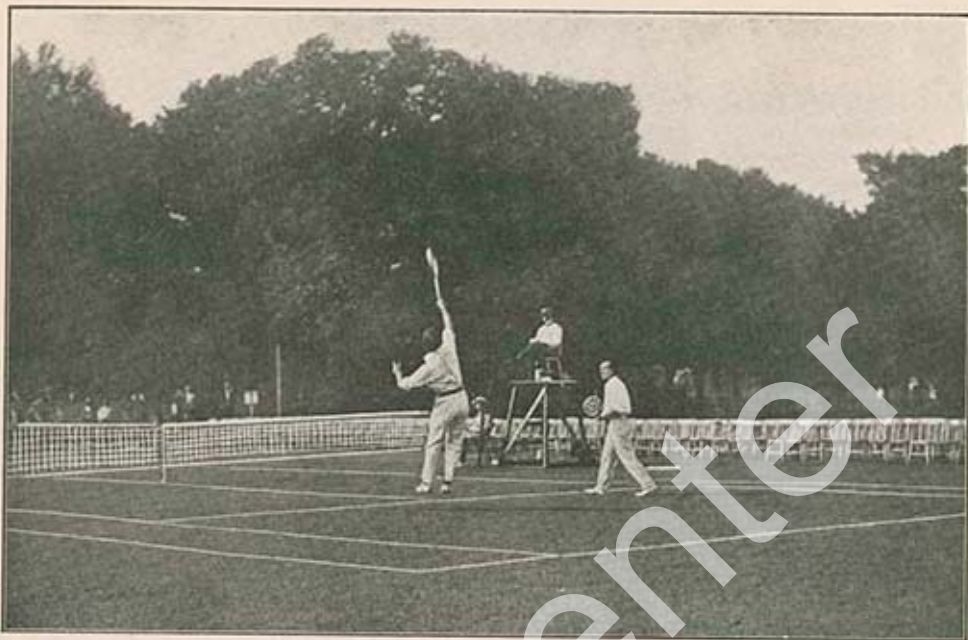
Owing to the confusion existing on account of the widely different conditions that the game was played in those early days, a meeting was held in New York in May, 1881, to remedy the evils, and the present United States Lawn Tennis Association was formed. Richard D. Sears and James Dwight, of Boston, were then



Wrenn Brothers

the champions and the most famous players in the country, and Mr. Sears retained his title for seven years, when he voluntarily relinquished it in 1888. It was in 1881 that the Newport All Comer's Tournament was formed that has been continued annually at the Newport Casino ever since and is second only to the Wimbledon meeting in England.

Lawn tennis is played by two, three or four people (very seldom by three) on a smooth stretch of ground called a court. The playing surface of the court is twenty-seven feet (for singles), thirty-six feet (for doubles) in width, and seventy-eight feet in length. The court is marked out with white lines indicating the boundaries, and the space is divided in the center by a net three feet in height. Each player is armed with a racquet, which is a wooden frame, about a foot long and eight inches wide, the open oval space being covered with a fine network of catgut strings, the handle is about fifteen inches long. The ball used is two and a half inches in diameter, of thin rubber filled with compressed air and covered with felt. The ball is knocked from one side of the net to the other back and forth until one side misses it—that is, fails to hit it at all, or knocks it into the net, or out of the court. Either side



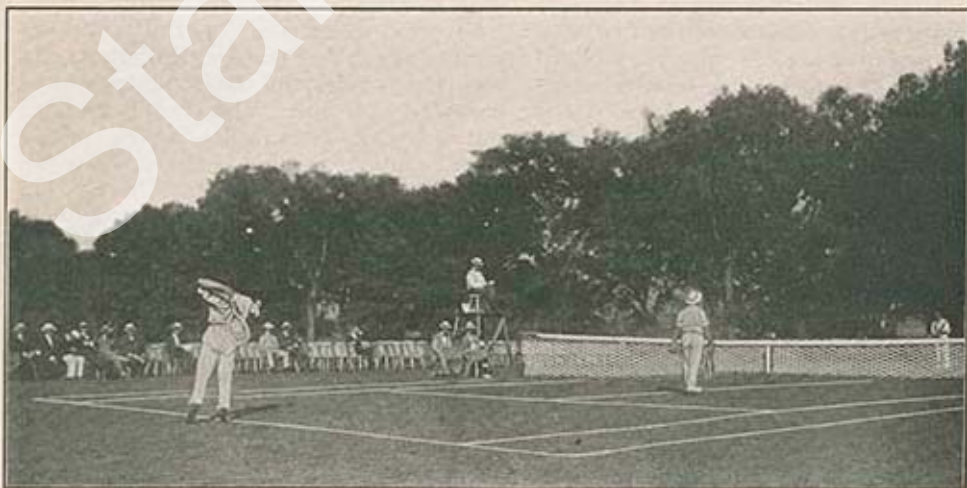
Well Saved

scores a point when the opponent fails to return the ball into his court. The object of the game therefore is, to knock the ball into the opponent's court so that he cannot return it.

There are four strokes; the drive—a fast hard stroke played underhand from the back of the court; the smash—an

overhand volley drive; the lob—ball knocked into the air to pass over an opponent's head, when he is close up to the net, and the cut—a sideways blow to make the ball so that it will "break" when it touches the ground.

The following advice by an English



Serving

expert will be of value to old players as well as beginners:

By F. W. PAYN,

(Reprinted from *English Lawn Tennis*.)

The three kindred games of eye and hand—lawn tennis, golf and billiards—have the one great feature in common that the man who is able to retain control over the ball for the longest time *after* he has struck it with his racket, club or cue is generally the most successful player. It is the hardest thing to do in all these games, but in proportion as a player masters the art of it he can put the ball with certainty wherever he wants. One of the best examples of this fact is provided by any really good billiard-marker. If he be carefully watched when play-

ing, it will be seen that there is hardly any preliminary pulling back of his cue before playing the stroke, but that the latter consists almost wholly of *pushing forward*, which continues long after the ball is struck by the point of the cue. We do not here mean the foul slow-push stroke at all, but an ordinary stroke.

The present champion of the United States at singles is William A. Larned, of Annapolis, Md. The champions at doubles are Robert D. Wrenn and George L. Wrenn, Jr. This pair was defeated by the Doherty brothers, of England, last year, but Larned kept the laurels in the singles over this side of the pond.

Elementary Logic

To the Editor:

I knocked pleurisy "sky high" by a fast last summer, and when my various doctor friends offered to "TREAT" me FREE, I emphatically said "No. I have tried your methods, and am through with them for good." They thought me a crank, and extremely foolish to fast, but I thought them cranks, as well as fools, to try to RELIEVE A SYSTEM OF POISONS by ADDING MORE POISONS to it to be thrown out also. I had such absolute faith in NATURAL methods that I was willing to stake my life on them, and they didn't fail to cure me.

HARRY B. BRADFORD,

Washington, D. C.

A Few Soft Words

To the Editor:

I feel like patting you on the back and saying, "GO IT, YOU ARE ON THE RIGHT TRACK."

Your magazine is true to a strict dictionary definition, namely: A STOREHOUSE FOR HIGH EXPLOSIVES ADAPTED TO DISRUPT AND DESTROY CITADELS AND STRONGHOLDS OF FAKE, PREJUDICE, SUPERSTITION AND THE LICENCED MURDER OF THE IGNORANT AND INNOCENT BY MODERN COMMERCIAL DRUGGERY.

I. A. TYRELL,

Brooklyn.



Napoleon on Board the Bellerophon

By Orckarlson



Gymnasium Team on Parallel Bars. Exhibition Work

HOW COLUMBIA UNIVERSITY TRAINS HER FRESHMEN AND SOPHOMORES IN PHYSICAL CULTURE

A STUDY OF THE GYMNASIUM METHODS OF NEW YORK'S GREAT UNIVERSITY

By Thomas P. Austin

Illustrated by Photographs Specially Taken for PHYSICAL CULTURE

FIRST PAPER



IN these days, when physical degeneracy is so prevalent, it is refreshing to know that at a great university, where the young men are under constant mental and nervous strain, physical culture is compulsory. At Columbia University, in New York city, all freshmen and sopho-

mores are compelled to take the gymnasium course unless so seriously disqualified physically as to render exercise out of the question. No able bodied man in the two lower classes can hope for his A. B. degree upon graduation unless he has met with the gymnasium requirements.

Combination of mental, nervous and physical power are expected of the Columbia student. There is no desire to produce too brainy a man at the

expense of his body. Nor is it part of the plan to produce giants whose minds are not sufficiently developed. The happy medium of intelligence, education and health is what is aimed at.

For the physical part of the work at Columbia, which will be described in this article, most ample preparation has been made. The gymnasium is under the direction of Dr. Walter L. Savage, who has under him a staff of instructors

or nerves. Columbia students whose minds are not sufficiently trained in the medium of intelligence and health

and rubbing. There are also forty-two dressing rooms for individuals, each room being framed by opaque glass. The shower, needle and tub baths number twenty. In the pool there are some 200,000 gallons of water. This water is filtered at all times, and in winter it is somewhat warmed. At one end the depth of water is four feet, at the other ten. Here swimming is taught, and no man is permitted to graduate from Columbia unless he has mastered the



A Feat on the Flying Rings

who are in thorough touch with his ideas of the proper development of physical manhood. It is Dr. Savage's firm belief that no man who is able to walk about and study need be a weakling.

In shape the general exercising floor is apsidal, the measurements of the axes being 168 feet by 134 feet in the clear. There are about fifteen thousand square feet of surface on this floor. The ceiling is 35 feet from the floor. There is abundance of ventilation, combined with artificial and natural lighting. Apparatus is so installed that athletic, gymnastic and calisthenic work can go on at the same time. Twenty-two feet above the general floor, at one side, are special rooms for the practice of fencing, boxing and handball, separate rooms for officers and students, 32 shower baths, and 1760 lockers of steel and wire. On this same floor is a running track, eleven feet in width, and ten laps to the mile. Despite the shortness of the track it is a well rounded one, with gradual, banked curves, and great speed can be obtained on this course. Here, in the winter, candidates for track team work practice until the arrival of seasonable spring weather makes outdoor work practicable.

Down below the general exercising floor there is a semi-circular swimming pool of 100 feet by 50 feet. Close to the pool are four large rooms for dressing

art of swimming. On an average fifty men are taught each year how to swim.

On the same floor there is, as well, a special training room for the freshmen and 'varsity boat crews, with separate bath and locker rooms.

Not less than two hours' work a week are permitted to freshmen and sophomores. Upon entering either of these classes the student is required to undergo a physical examination. Each student must take another examination at the completion of the required course, while the same is required of all who take part in the athletic events. Each student is furnished with a statement of his physical condition, and of the forms of exercise that will most benefit him. Some exercises are prescribed; others he is cautioned to attempt in great moderation, while still other exercises are prohibited in his individual course. It is not permitted to carry on any exercise to the point of exhaustion, but every part of the body must be normally developed.

As laid down in the Columbia course, the four arts of self-preservation are boxing, wrestling, fencing and swimming. Each student is taught the elements of these arts. In beginning the student is drilled in classes in free-hand exercises, drills with dumb-bells, French wands, Indian clubs, iron wands, and chest weights. There is musical accompaniment to this work.

Then come graded exercises in squads.



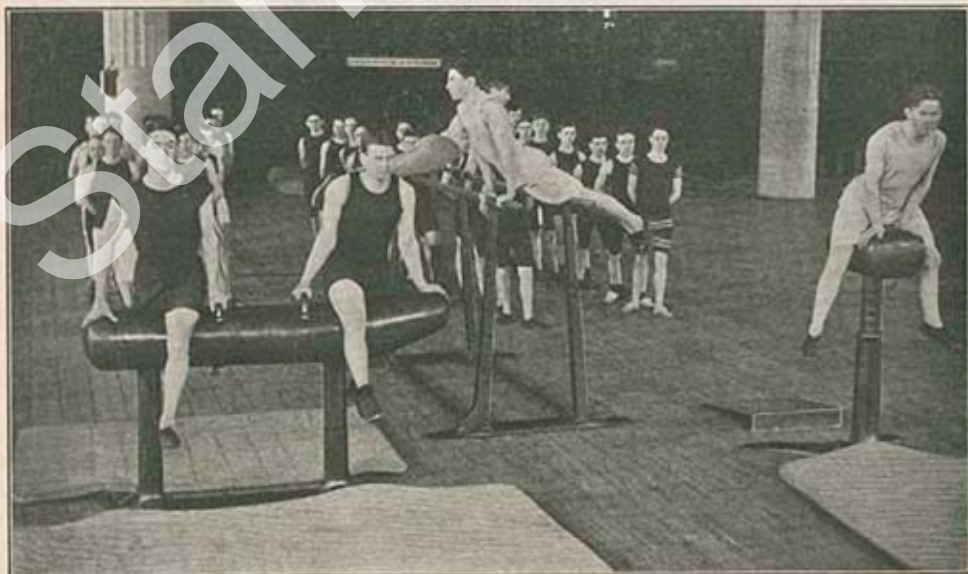
The Mound Ball Game

arranged according to order of merit, on heavy apparatus, such as horizontal, vaulting and parallel bars, flying and swinging rings, German horses and bucks, ladders, tumbling mats, and so on. Having gone through the foregoing work, the student is drilled in gymnastic games that develop agility and the power of instantaneous thought in crisis, after which come the elements of boxing, wrestling, fencing and swimming.

It is impossible to shirk any of this work, and it is dangerous to fail in

excellence. Credit marks are given at each drill, and these marks are as necessary to graduation as is any of the work in the regular academic course.

Persons ignorant of the true principles of physical culture are prone to ask for a description of the best single exercise. Dr. Savage's theory is that there is no such exercise. All parts of the body must be exercised uniformly and rationally. Heavy exercises—that is, the use of heavy weights and the practice of severe tests of strength—tends to make



Squad Work on Parallel Bars, Horse and Buck

strong muscles, while light weights and light work make supple and elastic muscles. The greatest amount of muscle does not by any means denote possession of the greatest or surest strength. Columbia men are taught to work for quality of muscle rather than quantity. For the most sensible development a combination of heavy and light work is advised, with a large preponderance of the latter. Strength, agility, endurance, strength of heart and wind, are obtained by this method of diluting the heavy work with a great amount of the light.

Four of the favorite "stunts" of Columbia are depicted in the photographs used in this paper. The gymnasium team work on parallel bars is shown. This is used only for exhibition work, but it shows a splendid degree of normal muscular power. Squad work on the parallel bars, horse and buck is also illustrated. The work of hanging from the flying rings, first by the right hand, and then by the left, is regarded as being particularly beneficial if it is not carried too far.

Enthusiastic Over Physical Culture

To the Editor:

Two years ago I was a physical wreck. For the last year I have been practicing the exercises given in your magazine and have derived so much benefit from them that I have become a regular enthusiast on physical culture.

Yalesville, Ct.

E. GRINDROD.

Physical Culture Adds Twelve Pounds to His Weight

To the Editor:

During the past year I have added about 12 pounds to my weight by practicing some of your exercises and following your advice regarding eating and bathing.

Port Jervis, N. Y.

J. A. W.



Charge of Dragoons at Gravelotte

A. De Newville



1. O. H. Hart. 2. H. E. Reect, Lincoln, Neb. 3. W. Austen. 4. Clyde Hogue. 5. C. H. Werst, Centralia, Wash. 6 and 8. S. J. Holt, New York City. 7. John Caslavsky. 9. H. V. Landsberg, Balto., Md.

Right Likely Competitors for \$1,000 Prize

THE STRENUOUS LOVER

Original Story by Bernarr Macfadden

Revised with the Assistance of John R. Coryell

"The Strenuous Lover" is being dramatized and arrangements are being made to put it on the stage as early as possible. The difficulty in securing professional or amateur actors and actresses whose physique and development are in harmony with the principal characters in "The Strenuous Lover" is very great. The play will be staged quite as elaborately as any drama of the day, and no expense or pains will be spared in accomplishing this. The author will be glad to receive communications from professional and amateur actors and actresses who deem themselves physically and otherwise capable of doing justice to "The Strenuous Lover." All communications with reference to this matter must be accompanied by photographs of the applicants in costume, together with an epitome of their careers on the stage.—EDITOR.

XXIII



AN ordinary man must certainly have succumbed at once if he had found himself in the situation of Arthur; but he, trained to receive blows and to measure their effects, was no sooner struck than he was on guard with all his wit and strength and cool courage.

He staggered against the damp, freshly-plastered wall, his head ringing from the blow that had fallen on it; but half-dazed as he was, he acted on the experience of many a hard sparring bout, and sought, first of all, to regain his full consciousness.

He realized that the blow that had fallen had been dealt from behind him, and he knew that as long as the light of the dark lantern illumined him he was at the mercy of his assailant.

Instantly he threw himself at the light, striking out with short arm blows in the hope of intimidating if not hitting the man who held it; and that his object was partly attained was evidenced by the wavering of the light, and by the man's oaths and cries for his companions to "down him."

In such fine physical condition as Arthur was, it was only a matter of moments for him to recover himself; and

before those behind could follow up their first blow, he had grappled with the man who held the light, and had with ease swung him around in the narrow hall, so as to interpose his body as a shield between him and the others.

The man struggled helplessly in Arthur's iron grasp, at the same time letting the dark lantern fall to the floor and yelling hoarsely to his companions not to hit him.

Arthur's training had taught him the value of swift and sudden action at the moment when his antagonist was least on guard; so, now, being in full possession of his wits and quite recovered from the blow he had received, he rushed his prisoner before him, shaking him violently and thrusting him forward at those who stood in the narrow passage.

How many might be there opposed to him he did not know, but neither did he know how soon others might attack him from behind. The door out of the house was in front of him, and he wished to get to it as soon as possible.

Almost in an instant he felt the shock of the encounter with the men in front, but the groans and gasping cries of the fellow he was using as a sort of battering ram evidently confused the ruffians and gave Arthur his opportunity.

He released the man he had captured and struck out right and left over his shoulders. Both blows landed and fur-

ther confused the men, who seemed unable to realize the force and activity they had roused.

Again Arthur grappled with the first man, and again he used him against his companions.

There were a few moments of confusion, Arthur pushing his man with one hand and striking with the other, and then a sudden retreat on the part of those in front.

It was probable that they had leaped up the stairs and might be waiting to assail him as he passed; but Arthur took the chances of that and rushed down the hall, swinging his prisoner violently behind him, and leaping out through the open doorway.

Again in the street, he looked up and down for a watchman or a policeman; but there was no sign of either, and he decided to hasten away from the spot lest its loneliness should tempt his assailants to renew their attack.

On the impulse of the moment he set out to find the nearest police station, but had not gone far before he desisted. The police would ask him a great many questions and, as sometimes happened in such cases, might treat him as the criminal.

Then he thought of returning to the stable to demand an explanation of what had happened, but reflected that if they had any knowledge of the matter there, they would be sure to deny it; so he determined to give himself time for consideration by waiting until the morrow before doing anything.

It was a deep disappointment to him to be thus turned from his search for Helen, but he was at once so troubled and so puzzled by the trap that had been laid for him while in the prosecution of that search that it seemed to him that he must abandon it for the present.

He did not mean to discuss the matter with any one, though it had occurred to him at once that Herbert might be able to advise him. He could not, however, bring himself to tell Herbert all that would be necessary to make him understand how he fell into the trap.

He also thought of Amelia as one who would be interested, but he quickly put her out of his thoughts, too, and intended to seclude himself in his room, so that he might study the occurrence fully.

When he was passing Amelia's house, however, he could not resist the desire to see her, and, the bruise on his head being but a slight one, he acted on the impulse and ran up the stoop.

Afterward he was very glad he had acted on the impulse, for when he had been a short time with Amelia, he could not resist telling her, greatly to her horror, what had happened to him, and she at once had made the suggestion that he should employ a detective to look into the matter.

"How clever of you to think of that!" he cried.

"Oh," she laughed, "you know it is out of the mouths of babes that words of wisdom come forth."

"But," he went on doubtfully, "I would not care to let a detective know about Helen. I don't think it would be right."

"Then don't tell him. There is no need for him to know anything about her. Of course you don't want him to know anything about her. Good gracious! It would be horrid to have one of these men poking about one. Why can't you say you were trying to get the address of a model? That would mean nothing to him and would keep Helen's name out of it. The fact is, Arthur, I can't help connecting Charles Morgan with this."

"To tell you the truth he has kept coming into my head all the time. I wonder if he can be so revengeful that he cannot forgive me for taking the championship from him."

"Maybe," she said, with a funny affectation of shyness, "he is a little vexed with you for taking little Amelia away from him."

"Why, of course!" cried Arthur.

"Or for both reasons," she went on, laughing at Arthur's confusion. "Or maybe it is enough for him that he is base and can't help hating you."

"Ever since I met him that night he has kept coming into my thoughts. It certainly was odd that I should meet him just where I did."

Amelia gave a quick, odd glance, but said nothing. She, too, thought it was odd, but she was not prepared to comment on it. The fact was that Amelia had begun to connect the mystery in Helen's life with Morgan, and that made her secretly uneasy.

On the way to the office on the following morning Arthur stopped at a private detective bureau, the chief of which was known to him through some work he had done for a client of his father's.

The detective was one of those men who would never attract a second glance in a crowd, so commonplace and colorless was he in appearance, so lacking in the keen alertness usually associated with men of his calling.

He listened quietly to Arthur's story, only occasionally asking a simple question, apparently to elucidate a matter of time or place; but when Arthur had finished he said to him in his even tones:

"Do I understand that you want me to find out who attacked you?"

"If you please."

"Is it of any interest to you to know why you were attacked in that peculiar way?"

"Naturally."

"But that may involve private history which you would prefer not to have known."

"Why, I think not," was Arthur's innocent response. "Certainly there is nothing I wish to conceal about myself, if that is what you mean."

"I didn't know," the detective said indifferently. "I thought from your concealment about the young lady that perhaps you preferred that I should not go deeper than the identity of your assailants."

"Concealment!" murmured Arthur, flushing; "I did not know I was concealing anything excepting her name. Besides, I don't imagine she can possibly play any part in the matter. That man Morgan may, but I don't see"—He stopped and looked uneasily at the unemotional detective.

"Do you want me to be frank, Mr. Raymond?" the latter asked.

"If you please."

"Well, I presume you are interested in the young lady you call a model, but I take it from what you have said and left unsaid that you really know very little about her."

Arthur started indignantly to resent what the other had said, but remembered in time that his love for Helen and his perfect confidence in her did not in

fact constitute knowledge. He wondered how the detective had guessed so well.

"I don't know a great deal," he answered slowly, and then added a little defiantly, "but I have the highest respect for her; and nothing can shake my confidence in her."

The detective bowed quite calmly, as if Arthur's confidence and respect were all one to him.

"The point I wish to make is this," he went on. "You have not told me all you can tell me. Some things evidently happened in the flat when you went there that may have some bearing on the case. Now, I don't ask for any information you prefer to keep to yourself, but I do say that it may save me time and you money if you will trust me. And I may add that it will be better not to employ me if you do not trust me absolutely; for if I enter upon this investigation I am sure to learn a great many of the things you are keeping from me now."

All this was so reasonable, and the man seemed so indifferent, that Arthur at once decided to relate all the circumstances; and even went so far as to give the detective the bit of torn photograph. The only thing he said nothing about was the glove; and as to that, the truth was that he had not had the courage to take it from its comfortable resting place near his heart.

The detective asked a great many questions about Helen, causing Arthur to protest that nothing must be done to give her the least uneasiness. "Let everything be abandoned the moment her peace or comfort is put in jeopardy," he said earnestly.

"I suppose you would still like to know her address?" the detective said.

"Why yes, I think I would," Arthur answered; "but I don't want her spied upon."

"Nothing that you would object to in relation to her shall be done. I think there is nothing else I need to know."

"I suppose," Arthur said as he rose to go, "you are hardly able to say as yet anything about the possible connection of Morgan with the matter."

"Oh, no."

"Shall I come in to-morrow?"

"No harm in coming in, but it is rather soon to expect results."

"Well, I'll step in as I pass by, and you can leave word in the outer office if you wish to see me."

He did inquire the next morning and the next, and on every succeeding morning for a week, receiving word each time that nothing had been accomplished. Then, at the end of the seventh day, he was ushered into Mr. Boyd's private office.

"You have discovered something?" he inquired eagerly; for since he had, himself, abstained from seeking Helen he had become doubly impatient.

"No," was the calm answer. "I have discovered nothing really. I am on the track of the fellows who tried to trap you, though, and hope soon to make you a definite report."

"But Miss Bertram?" demanded Arthur, who in fact had almost forgotten the assault on him.

"Oh!" was the mild exclamation, "I did find out that the truck driver knew nothing about where she had gone. He only took her furniture to a storage warehouse. The same day she called with a carriage and took away two trunks. I have no clue to her at all. She managed her disappearance very cleverly. Evidently she had no wish to be found."

Arthur winced at a certain dryness in the tone of the man, but refrained from expressing any feeling. Others might think what they pleased of the mystery in Helen's life; he knew her and was certain that the mystery was in no way to her discredit.

"Was that why you saw me this morning?" Arthur asked.

"No, I wanted to ask you if you kept Saturday half holiday at your office?"

"Yes."

"And can you remain there with your father next Saturday afternoon?"

"Of course."

"When will you be sure to be alone? I want the clerks and office boys, everybody but you and your father to be away when I come."

"But my father knows nothing of the matter," remonstrated Arthur. "And there is no need that he should. This is a private affair of my own."

"You are mistaken, sir; your father is even more interested than you, I am sure. When I see you on Saturday I will ex-

plain why I say so. In the meantime permit me to remain silent; I am making sure of my facts."

"You ought to know," Arthur answered, "and I suppose I would better let you have your own way; nevertheless it seems to me that it would be wiser to let me know what you have so far learned."

"Well, Mr. Raymond," the detective answered, "you have engaged my services and if you insist, I must make my full report to you alone; but I earnestly beg that you will trust me so far as to wait until Saturday, so that I shall be able to give you some definite information, and also that you will accede to my wish to report to your father as well as you. I assure you you will be satisfied that I have done wisely when you hear my report."

It was impossible to doubt Mr. Boyd's sincerity; therefore, impatient as he was, Arthur forced himself to assent. He agreed to be alone in the office with his father at two o'clock on Saturday afternoon.

CHAPTER XXIV.

If nothing has been expressly said of Arthur's perturbation of mind during the ten days that had elapsed since losing sight of Helen, it is not to be supposed that he had waited in serenity and calmness while the detective was engaged in his search.

He had discussed the affair with the sculptor, to whom he went daily to pose, but even more fully and confidentially he had talked it over with Amelia who was now his nightly confidant, and with whom he was now on those rare terms of friendship which can exist in their perfection only between persons of the opposite sex.

It had seemed to him that he could not endure the suspense, and if he had known how to set about finding Helen, he certainly would have done so in complete disregard of the detective he had employed.

But he was quite at his wits' end, and so could do nothing but go over in his memory the talks they had had together, recalling the tones of her voice and the expression of her eyes, her smiles and gestures. And these recollections naturally had the effect of increasing the pas-

sionate love that had grown up in his heart for her.

His father had noticed the signs of his inward perturbation, but had refrained from questioning him, fancying that it might arise from some new complication in his relations with Amelia, or even might be due to concern over Maude, who had returned home from the hospital after a "most successful operation," from which she was evidently going to be many months in recovering.

Arthur was obliged to make some explanation to his father, however, in asking him to remain in the office with him on Saturday afternoon; and after baulking it several times, finally told him the whole story, beginning with his chance meeting with Helen and his immediate love for her.

Mr. Raymond, who had been very happy in the thought that a reconciliation had taken place between Arthur and Amelia, and was correspondingly disappointed in learning the true state of the case, nevertheless listened sympathetically to the end.

But when the end came and he discovered that there was a subtle connection between the assault on Arthur and his search for Helen, he looked troubled and gravely shook his head. Nor did he overlook the possibility of Morgan's being a factor in the affair.

"Arthur, my boy," he said, "I am glad you have taken me so fully into your confidence. I shall not say a word against your loving Miss Bertram, who seems from your description to be a most estimable young lady; but because I know I have not long to live and that my duties must devolve on you, I beg you to exercise the greatest caution in choosing a wife. Your mother and your sister Maude, both invalids, will look to you to make the most of the business I shall leave. Of money I have not much—perhaps thirty thousand dollars, too carefully invested to bring a large income."

"There does not seem much of a possibility that I shall win Helen for my wife," Arthur answered.

"At least promise me that you will exercise more than ordinary care in the choice of one. I have a right to ask this of you since by my will you are left in charge of my estate. Say that you will

marry no woman whose life is not as an open book to you."

Arthur saw at once that the asking of such a promise was like a blow at Helen; and for a moment he hesitated lest it might seem that he was consenting to an injurious reflection on her. The next moment, however, he realized that even to hesitate was like confession of a doubt in his own mind; so he answered firmly:

"I promise you I will marry no woman whose life is not an open book to me."

Contented with this Mr. Raymond passed from the subject to others; and the father and son were engaged in a discussion of business methods and ventures when Mr. Boyd put in an appearance.

He entered upon his business with them in a way that was as direct as it was unemotional, saying as soon as the conventional greetings were over:

"Of course we are alone and cannot be overheard?"

"Quite alone," Mr. Raymond answered.

"Will you please permit me to tell my story in an orderly way, so that I may miss none of the links? I shall be as brief as possible."

"Tell your story in your own way, Mr. Boyd; I know you will waste nobody's time," answered Mr. Raymond with a smile. "I ought to let you know that my son has fully acquainted me with as much as he knows of the matter."

"Then I will proceed. When I first took hold of the case it seemed to me one in which I should probably encounter the usual difficulties of an affair in which a mysterious female figured. Pardon my way of putting it, Mr. Raymond!"

Arthur flushed indignantly, but refrained from saying anything. The detective went calmly on:

"I had not gone far, however, before I discovered that, however important a factor the missing Miss Bertram was, there was something going on of more immediate importance even than her discovery, or the discovery of the identity of the man who had assailed you, sir; something that would interest your father even more than you."

Arthur's father started at this intimation, and his haggard face took on an expression of keener interest.

"Interest me?" he said.

"Yes, sir; but it was not until last night that I got the last of the clues into my hands. That man, Charles Morgan, is at the bottom of all the mischief; and I may say incidentally that he is one of the most dangerous men I know. I think he has some cause for hatred of you, sir?" He turned to Arthur as he spoke.

"I was successful in winning the regard of a young lady he wished to marry some time ago; and I won the amateur championship at sparring also from him."

"Do you refer to Miss Bertram?" the detective asked.

"No, another young lady," answered Arthur, flushing under the keen glance of the detective, because he saw that he regarded him as a Lothario.

"Oh, yes, of course," murmured the detective, "you didn't know that the bit of photograph was part of a portrait of Morgan."

Arthur started to his feet, but quickly resumed his seat.

"How do you know this?" he demanded, trying hard to preserve his calmness.

The detective drew from his pocket the torn bit and a whole photograph, both of which he handed to Arthur, saying:

"You will see that the piece corresponds exactly. I think we may safely conclude that the young lady was pretty well acquainted with Morgan. Indeed, the woman and child in the adjoining flat recognized this as the picture of the man who had made several calls on the Bertrams. She said also that he was at the flat a few minutes after you that night."

"It has no meaning, father," cried Arthur, huskily. "If you knew her you would believe it."

"If it has no meaning it will be cleared away," said his father kindly; though in his heart he felt that Arthur had narrowly escaped being the victim of an adventuress.

"I confess," said the detective in his unemotional tones, "that I can see no connection between the young lady and anything that followed. Indeed it is perfectly clear that she has taken great pains to hide herself from Morgan as if she feared him. I know nothing more about her—neither good nor bad, subsequent to her departure from the flat."

"And you have found no clew to where he has gone?" Arthur asked half defiantly, as if he would show by his interest in Helen that he refused to share in any unkind suspicion of her.

"None. I have made inquiries of all who have had anything to do with her in New York, but only to learn that she had conducted herself always in a most careful and exemplary manner."

"You see, father," Arthur cried.

"Indeed I am rejoiced to hear such a report of her, my boy. But, Mr. Boyd," he added, turning to the detective, "in what way am I interested especially in all this?"

"In no way, sir, but it was essential to clear away that matter before going on. I had to discover Morgan's part in the affair, for I suspected him at once and supposed that I would find the solution of the assault on your son through an investigation of Miss Bertram."

"Yes, of course."

"Failing that, I shadowed the man, and in the course of doing so was obliged to spend many of my evenings in a certain gambling hell on One Hundred and Twenty-fifth street, the leading spirit of which is a man well known to the police and who calls himself Red Connor. It was through him that Morgan worked his scheme of vengeance against you, sir."

"Then Morgan was at the bottom of that attack? Have you sufficient evidence against him?" demanded Arthur.

"No evidence at all. I know this, but could not prove it. Oh, no, Charlie Morgan is no such novice in crime as to be easily caught. Besides the assault on you sinks into insignificance in comparison with the more stupendous and at the same time more subtle plot to ruin your family."

"What do you mean?"

"Have you a confidential man in your employ named Arnold?"

"Yes, that is the name of our book-keeper."

"Do you keep close watch on him?"

"Close watch on him!" cried Mr. Raymond, growing paler than ever. "No. Why should I? He has been with me since he was a boy. What do you mean?"

"I mean that he has been Morgan's constant companion at the gambling hell;

and that Red Connor and Morgan have been fleecing him."

"Merciful Heaven!" gasped Mr. Raymond, "the wretched young man will be utterly ruined."

"Do you know if he had much money?" the detective asked, while Arthur listened with a sense of boding disaster.

"He might have two or three thousand dollars."

"He has lost more than that at one sitting."

Mr. Raymond gasped for breath and pressed his hand to his heart. Arthur started up to check the detective's revelations, but Mr. Raymond, having gained control of himself, gasped slowly:

"Sit down, Arthur! You say Arnold has lost more than three thousand dollars at a sitting?"

"I beg your pardon, Mr. Raymond," said the detective, with a face of concern. "I did not know you were ill, or I would have approached this matter more carefully."

"It does not matter now," was the gasping response. "Tell me quickly all you know."

"I have seen the wretched man lose twenty thousand dollars within a week. I did not understand this at first as he used no money, but only gave notes for the sums he lost, but this evening he is to make good somehow; and that is what I wanted to see you about."

"The safe, Arthur!" Mr. Raymond gasped.

Arthur ran to the safe and hastily opened it. Arnold had the combination as well as Mr. Raymond and Arthur; and it was only that morning that thirty thousand dollars' worth of bonds belonging to a customer had been deposited there. And the bonds were negotiable!

Arthur swung the heavy doors open and was at the inner compartment where the bonds had been placed, opening it with trembling hands. His father and the detective stood by his side, watching eagerly.

"Thank God! the package is there!" cried Mr. Raymond, sinking weakly into a chair.

"Open it!" said the detective to Arthur.

Arthur cut the tape that had been wound around the package, and opened

it. The papers inside were worthless; the package had been opened and robbed.

"After him at once! Find him! We can catch him yet," cried Mr. Raymond, as the dreadful truth was apparent to him.

"Have no fear, Mr. Raymond," the detective said: "Arnold doesn't move a foot without being shadowed. He will do nothing with these securities. But tell me why they were put there. Surely that is not a safe place for them."

"I was going to put them in a safe-deposit vault this afternoon."

"And Arnold knew that you would have these securities here to-day?"

"He knew everything. They belong to one of my oldest customers, who was called suddenly to California to-day. I had the order to buy them for him several days ago, and was to deposit them to his order as soon as bought."

"It was Arnold's opportunity," Arthur exclaimed. "You would have put the sealed package in the vault, and the fraud would not have been discovered for weeks or perhaps months."

"Don't bother yourselves about Arnold or the bonds," said the detective, "but overhaul your books and securities and see how you stand. I will communicate with the police and have the arrests made. To tell you the truth, Arnold has done all the harm he can. I discovered at once that he was using no money, but was depending on something to happen to-day by which he could reimburse himself. The fool actually believed he was a match for those sharks."

"In heaven's name lose no time!" Arthur cried.

"Arnold can do nothing," the detective answered; "nor can he dispose of the securities. If he has stolen nothing but those bonds you are safe. I care nothing for Arnold now, but wish to catch Morgan red-handed, so to speak. If I can bag that bird I shall have done society a good service."

CHAPTER XXV.

Mr. Raymond and Arthur were still working at the books when a messenger came from Mr. Boyd asking them to go to headquarters and confront Arnold and some other prisoners.

The other prisoners turned out to be

Charles Morgan and Red Connor, both of whom vociferously denounced the police for their arrest and demanded instant examination before a magistrate; but it was not until Arthur and his father appeared that Morgan suspected that he had been the victim of a counter-plot.

Arnold, who had been put in a cell by himself, was completely broken down. The bonds had been found on his person, but he had refused to answer any questions until confronted by Mr. Raymond, when he broke down completely and made a full confession.

By this confession Mr. Raymond learned that by one device and another his clients had been robbed of nearly twenty thousand dollars. It was not as bad as he had feared at first, but he knew that it meant that his own little fortune would be almost wiped out in making good the defalcations of his trusted employee.

It would serve no useful purpose to follow in detail the legal struggle that followed. Arnold, it seemed, was glad to unburden himself of the guilty effort he had made to get rich in a hurry; and he told a story, pitiful enough as to himself, but fairly hideous as to Morgan.

He told how the latter had lured him on from step to step, insinuating one evil thought after another into his brain, until he never knew whether the theft he committed was suggested by his own thought or by Morgan's.

He made every reparation he could and freely gave evidence against Morgan. His own sentence was made as light as possible because of this and because he pleaded guilty.

Morgan, on the other hand, fought every step of the way; he obtained postponements and stays, and interposed every obstacle known to the law; so that it was Summer before a conviction was finally obtained for him; and even then a year's imprisonment was all that could be dealt out to him in the way of punishment. Red Connor, the gambler, escaped altogether, nothing being proven against him.

Arthur was glad when sentence was finally passed upon his arch foe, but for some time he had ceased to give the matter any personal attention, the matter

having gone at once into the hands of the district attorney, thus relieving him of care or responsibility.

This was the more fortunate that care, responsibility and sorrow too in no small measure had come to Arthur outside of the court-room, but all in consequence of the evil machinations of that villain.

Mr. Raymond had, from the first, thrown himself into the task of straightening out the tangle in his affairs. He was so manifestly unfit to do any sort of work that Arthur and the rest of the family had pleaded with him to rest; but almost sternly he had answered:

"No one else can do what I can. I must not die with my affairs in disorder."

He had not, indeed, died with his affairs in disorder, but death had overtaken him at the close of his task; coming suddenly and mercifully, as it seemed, though it was plain enough from his will that he had known how and almost when it would come.

Everything now devolved on Arthur, for he was left the business and was made sole executor of the will; this having been arranged with the consent of Mrs. Raymond and Arthur's sisters.

He had long since ceased to pose for Mr. Bernardo, though he made him occasional visits, always hoping through him to find Helen; for through all the weeks and months that had passed Helen had remained the lodestar of his life.

He knew very well that no one any longer had any faith in her. His mother and sisters and Herbert, too, knew all about her now; and they hardly disguised their distrust of her. Even Amelia could not hide the fact of her doubt.

So Arthur, steadfast in spite of all, devoted himself faithfully to building up the business which he felt was a trust for his mother and sisters, but never ceased to look for the one woman who fulfilled his ideal.

And now, too, full of his faith in the natural method of cure, and upheld in this by Amelia, who had made marvellous strides in health and physical development, as well as by Herbert and Margie, he sought out the sanitarium where he had learned Robert might be taken with a view to being cured of his terrible malady.

The place was beautifully situated

among the hills, about two hours' ride up the Hudson; and it was evident to Arthur the instant he came upon the grounds that it was in no respect like the hideous asylums for the insane of which he had read such harrowing tales.

The country, indeed, wore its smiling, early-Summer aspect, but nature had been aided to make the sanitarium grounds look exceptionally cheery and comfortable.

Many quiet, well-dressed men moved about in the shady places, or sat reading under trees, or played games in the lawn; and it seemed to Arthur that he could distinguish certain stalwart, alert young men in their midst as the helpers of the institution.

And Arthur was as agreeably impressed by Dr. Wendel, the head of the institution, as by the aspect of the place. He was an elderly man, with a massive head, set on broad shoulders. He wore a full beard, which was almost white and was allowed to grow quite long. His hair was also long and white. He had great, over-hanging eyebrows, deep-set eyes and strongly marked features.

Perhaps the thing that more than anything else impressed Arthur, however, was the fact that whether in the steady glance of his eye, the deep tones of his voice, or the composure of his movements, there was a sense of indomitable compelling force.

He told Dr. Wendel about his brother Robert and asked him to visit him and give an opinion about his case. The doctor listened attentively, asked some questions and looked at his watch.

"I was going to the city when you were announced," he said. "There is still time to catch my train. Let us go."

When Dr. Wendel was taken to the Raymond home and saw Robert, he shook his head pityingly, saying:

"If he can be cured now, he could as well have been cured years ago. I do not know that anything can be done, but if you wish I will try."

"We do wish," Arthur answered. "Can you not give us some hope?"

"If I had not some hope I should not take him," was the answer, "but I may not promise you anything. In case he is restored to reason, you must bear in mind that he will be like a child and will have

to be educated like one, excepting that his progress will be much more rapid. But remember, I can promise nothing."

Mrs. Raymond, who had been opposed to having Robert sent away, and who had yielded at last only reluctantly, had been present listening intently. Now she spoke.

"We have been assured that Robert is incurable, so that we shall have no right to blame you if you do not succeed. I shall be glad to have you try, however, for I am satisfied that you will be kind to him."

"As if he were my own son, madam," was the earnest response.

So it was that Robert was sent away to the sanitarium; and in spite of the conservatism of the doctor, hope prevailed where the afflicted young man's presence had always been synonymous with despair and gloom.

Indeed, Amelia's extraordinary improvement in health, following Arthur's, had greatly affected Mrs. Raymond's opinions on the subject of natural methods of cure, and she was even considering the matter of taking it up for her own cure. Only poor Maude was obdurate and irreconcilable; and she, alas! was fast becoming a confirmed, peevish invalid.

As for little Gertrude, to whom Arthur was passionately devoted, she was looked upon as a magnificent monument to physical culture methods; for she was never sick, was always happy, and could play from dawn to twilight without even a sign of fatigue.

The members of the family, seeing Arthur's passionate love for the baby, said among themselves that it was a very good thing for him that she was there to divert him from the love of which they did not approve, but which seemed to have completely gone out of his life.

But if they fancied anything could divert his thoughts from Helen, they reckoned with a very poor knowledge of him or the overwhelming nature of the love he had given to her.

The fact was that while he absorbed himself in his work and was meeting with marked success in it, yet the undercurrent of his thoughts always was running on her. And when his work was done at

the office he was constantly devising plans for finding her.

But there was another matter, outside of his business, which occupied some of his leisure; though he said nothing of it even to his family, lest they should blame him and call him sentimental.

He had, in the first place, done all he could do to obtain a light sentence for Arnold; and after the latter's imprisonment had gone to him and offered to do whatever he could for his family.

Arnold, altogether penitent and very grateful to Arthur, had accepted the proffered assistance, and had the comfort of knowing that his innocent wife and children were being protected from the utter want and misery that must have fallen to their lot but for Arthur's help.

Employment had been found for the oldest boy in an office, and work at home for the oldest girl; so that with a small sum weekly from Arthur the family was able to feel itself beyond the reach of the sharp tooth of want.

One day in Midsummer Arthur received a letter from Arnold, asking him to visit him if possible at the prison, as he had a communication to make, which he would rather not commit to writing. Supposing it was something concerning his family, Arthur went up to Sing Sing on one of the days when visitors were permitted to see the prisoners.

"It was not to express by word of mouth my gratitude for all your undeserved kindness that I asked you to come here," Arnold said in a low tone, after an involuntary and fervent outburst of feeling, "but in order that I might warn you against the machinations of Morgan."

"Morgan! what can he do?" Arthur demanded in surprise.

"I don't know what he can do, but he is a man whose evil mind is never at rest in working wickedness. And he hates you with a truly diabolical hatred."

"Well, I know that," Arthur answered, "but I don't see that he can do anything until he is free from prison anyhow. And after that I think I shall be able to take care of myself.

"I know you are brave and strong," the other answered, "but the honest are always at a disadvantage with the vicious. The trouble is that you cannot be sure

that he is not working against you even while he is in prison. He told me the other day that he was preparing such a revenge on you as would make you wish you had never crossed his path."

"Well, thank you for warning me, but I don't see what I can do beyond being ordinarily careful. I certainly cannot keep myself in a fever of fear on his account."

"At least be careful. And above all be on your guard against a very beautiful young woman, who, I have reason to believe, is his ally and agent—his wife, in fact."

"His wife! He is married then?"

"He told me so himself after a visit from her a few days ago."

Arthur would not have admitted to himself why he trembled so violently that he could hardly articulate his words as he demanded:

"What does she look like? I ought to know that in order that I may be on my guard against her."

"I cannot tell you what her face is like, for I saw her only at a distance; but it was plain enough that she was young and beautiful, and one of the men here told me she was the finest woman he had ever seen."

"Tall?" asked Arthur in a tone he vainly tried to make careless.

"Above the middle height I should say, but really magnificent in her proportions; and as she moved away after talking with Morgan I was struck by her queenly carriage."

"Well," said Arthur, with a feeble effort to laugh, "I shall be on the lookout for a magnificent woman. By the way! does she come here often?"

"She has been here twice to my knowledge, but may have come oftener."

"Merciful Heaven!" murmured Arthur, when he had left the prison, "why am I so base, so untrue to that pure and lofty nature as to connect her even by the most transient thought with this visitor of that scoundrel?"

And yet he could not keep from his thoughts the haunting image of Helen mingled with that of the woman described to him by Arnold. Nor could he bring himself to tell Herbert the story related to him by the imprisoned man,

Over and over again he upbraided himself for being so far untrue to Helen as to fear to speak of the warning to Herbert; and yet all the while there continued to run in his brain the train of circumstances as they would be sure to present themselves to Herbert or to any one who knew them.

There were the undoubted facts of Morgan's acquaintance with Helen, his occasional visits to her at the flat, his

claim that she belonged to him, his photograph in her possession, a mystery in her life; and finally this visitor to him in prison, bearing such striking resemblance to a correct description of Helen, and Morgan's declaration that she was his wife.

What wonder that Arthur felt despair in the vain effort to unravel the tangle!

(To be continued.)

THOUGHTLESS.

"Jim," said the first tramp printer, as the freight train flew along, "we ought to have waited till to-morrow to make this trip."

"So?"

"Yes; the company runs an excursion to-day and we're only beating it out of \$4.60."—*Indianapolis Sun.*

"After all," complained the melancholy man, "is life worth living?"

"Well," replied the wise old doctor, "that depends largely on the liver."—*Philadelphia Press.*

THE INDESTRUCTIBLE MOSQUITO.

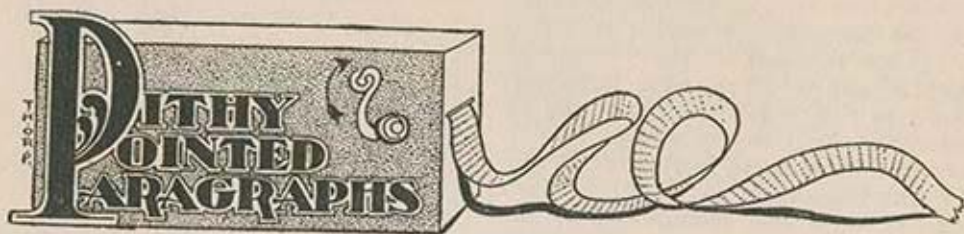
Church—What is the effect of using kerosene on the mosquitoes?

Flatbush—Oh, I guess it makes lightning bugs of them.—*Yonkers Statesman.*

"I am sorry, doctor, you were not able to attend the church supper last night. It would have done you good to have been there."

"It has already done me good, madam. I have just prescribed for three of the participants."—*Tid-Bits.*





The Marvelous Capacity of the Human Stomach



THE amount of food that can be crowded into the human stomach is almost beyond belief. Numerous eating contests have indicated that the stomach can hold at one time enough food to feed an ordinary individual for from one to two weeks.

Tammany Hall has an annual feast in connection with which prizes are offered to those who can consume the most eatables, and in a recent contest Mike Schaufauf ate five and three-quarter pounds of steak, one hundred clams, fifty oysters, one hundred crackers, two loaves of bread, ten crabs and a bunch of asparagus.

Imagine if you can the expression on the face of a boarding-house keeper after catering for a week to the rapacity of this representative of the human race. She would have to prepare sufficient food to feed about twenty and then Mike would probably be calling for more.

Two years ago, at a similar feast, ex-Mayor Van Wyck is said to have eaten eight and three-quarter pounds of beef with trimmings.

Chicago Girls' Feet Reduced by Athletics

Athletic exercises have reduced the size of the Chicago girls' feet! The statement has been made by Dr. Daniel P. McMillan, who recently took the measurements of one hundred and sixty Chicago Normal School graduates, that, thanks to athletic training, the proverbially big feet of Chicago girls are disappear-

ing. The girls whom he measured had to devote regular hours to golf, basketball, walking, running and dumb-bell exercises. He states that in a comparison with the old-time girl of the stay-at-home variety, the modern athletic girl has a larger chest by three inches, her bust has expanded four inches, waist five inches, hips two inches, biceps two inches and shoulders one inch. The average height has increased from about five feet three inches to five feet six inches, and the weight from one hundred and eighteen to one hundred and forty pounds. And her shoe, mind you, has shrunk from No. 5 to No. 4½.

This is probably one of the most emphatic proofs we have seen of the value of athletics for women.

Do Preservative Chemicals Lessen Physical Vigor?

Dr. Wiley, Chief of the Chemical Bureau of the Department of Agriculture, has been conducting a series of experiments to test the effects of preservative chemicals used in foods. One of his tests was recently concluded. The experiments were started last December and are still going on under his personal direction. He has selected several young men from the governmental employ who have agreed to live on these poison-treated foods in order to determine their effect upon the body. The doctor has taken his own meal with the boarders, but said that he has not experimented upon himself. He probably desires to "try it on the dog first."

The preservatives experimented with thus far are borax and boracic acid. As yet the Doctor will not give out any authoritative statement as to the results obtained, as he desires time to get at the facts and to present them in official form.

Fourteen men have been used in this experiment, and there are two divisions. The preservatives are administered to half of them at a time. Preservatives are not mixed with the foods, but are given separately, generally in capsules. At times the doses have been as large as the men can stand, and at other times very small.

The Doctor says that the experiment has been conducted with a view to observing the effects on the assimilation of foods, and that he has carefully noted the increase or decrease in weight following a prescribed course. He has recorded with care the effects of the preservatives on the composition of the blood, and he found that fully nine-tenths of the chemicals passed out through the kidneys, and most of the remainder in the perspiration.

The Superstitious Fear of Smallpox

Of all fanatical superstitions this benighted race indulges in the fear of the smallpox contagion stands pretty high in the list. Say "smallpox" in sepulchral tones and the average man or woman will move as though the Devil himself were in pursuit. Some time ago, at Trenton, N. J., a young man employed in the telephone office was attacked by smallpox. You can imagine the telephone company's difficulty in securing some one to take his place. Finally a young girl came forward and offered her services, using the same receiver that had been strapped to the head of the young man whose work she was to do. Not only was she heralded in her own town as a heroine, because of this remarkable action, but her picture with laudatory comments was published in nearly all the papers throughout the United States.

As soon as the public realize that smallpox and filth are synonymous, and that a clean body cannot acquire a disease of this kind, the vaccination curse and the fanatical fear of this disease will be relegated to savagery.

Child Labor a Menace to the Future of the Race

John Burns, Member of Parliament, known as "Honest John," and the ac-

knowledgeable head of the English labor party, declares that industrially "America is Hell with the lid off." He is specially emphatic in his condemnation of the iniquitous system of child labor existing in many part of this country. He claims that there is reason to believe that it is more to be condemned in the South than in the North.

He calls attention to the breaker boys of the Pennsylvania coal mines, and his words undoubtedly contain much truth. If boys and girls are to be compelled to drudge and slave in mere childhood when they should be growing and developing into vigorous manhood and womanhood, what are we to expect? Without strong men and vigorous women the race cannot be perpetuated. Child labor cannot be condemned in too scathing terms. The child should have the right to grow to complete and vigorous maturity. It should not be weakened and stunted by blighting conditions of servitude, and not only parents, but the Government should imperatively demand and enforce conditions that will insure boys and girls their natural inheritance of health and strength.

City Children May Make Strong, Superb Men and Women

Dr. Luther Halsey Gulick, Director of Physical Training in the public schools of New York, and President of the American Physical Educational Association, made some very apt remarks recently to refute the idea that children cannot be developed into vigorous specimens of manhood and womanhood in the city as well as in the country. He said: "We must get away from the idea that healthy children cannot be brought up in the city, for it is not true. By attention to exercise, sleep, and proper clothing the city child could grow fully as well as the country child, and in many respects better. City business men, too, could keep fully as well as their country brethren, if they cared to do so. A few minutes' exercise night and morning, a few breathing and setting-up exercises at one's office, with judicious use of holidays and vacations, would develop better health and physique than most farmers have.

"Look at the bent-over frame of the average farmer and compare it with the erect form of the alert New York merchant. Where do our great athletes come from? They are city boys. The late William B. Curtis was perhaps America's most famous athlete, and he was a New York City business man; Harry Buer-meyer, a New Yorker, was in business while he was the champion athlete. So was Fred Marriatt, America's half-mile champion years ago; Harry Fredericks, America's one-mile ex-champion; T. I. Lee, ex-champion sprinter; P. J. Walsh, champion runner; Thomas Delaney, runner; J. H. Giffords, ex-champion distance runner; P. D. Stillman, ex-champion distance runner; A. F. Copeland, ex-champion hurdler and broad jumper; Harry Arnold, champion hurdler, and Frank Kilpatrick."

Dr. Gulick believes that the man of the future is the city man, and that judicious physical training is one of the large factors to make him so.

Was this Famous Writer a Victim of Surgery?

Paul Blouet, whom everybody knew as Max O'Rell, recently passed away. He did not enjoy a single day of robust health since he underwent an operation for appendicitis in New York. He was a remarkable man, of great ability, but he is especially deserving of interest to our readers because some time ago, in a well-known New York newspaper, he recommended that whenever a pain was felt in the region of the appendix, one should immediately have the appendix removed. This was no mere jest with him. He experienced a pain of this character and he "took his own medicine," and it is a well-known fact, commented upon freely in the daily press, that he was never in vigorous health after the performance of this operation.

Surgery undoubtedly has its uses, but many a poor man has been sent to an early grave or deprived of his vital vigor and nervous energy because of this insane desire of surgeons to operate under the slightest excuse.

We hardly have proof sufficiently conclusive to assert that Max O'Rell died be-

cause of the operation for appendicitis, but the possibility of such being the fact is not remote.

The Fighting Capacities of the Irish

A humorous incident occurred in the late Boer War, which very emphatically illustrates the fighting instincts of the Irish people. A regiment of Irish Yeomanry were ordered to join a column some forty miles distant. The officer in command started with his men to find the column. This was not an easy task, and it was not surprising that he was unable to accomplish it. After wandering about a few days the colonel concluded to return, and to be sure that they were traveling in the right direction they followed the railroad line. They had gone but a short distance when they were seen by the sentry of one of their own blockhouses. The force in command, mistaking the Yeomanry for Boers, promptly opened fire on the colonel's men.

The gallant colonel, who had come out to fight and was not going to be disappointed if he could help it, at once saw his opportunity. He put out his men in skirmishing order, and made a determined attack on the offending blockhouse. The noise of battle awakened the attention of the nearest blockhouse on the north side, which also promptly opened fire on the right flank of the Irishmen. The battle continued for two hours and a spirited assault was about to be made on the first blockhouse by the Yeomanry when an armored train arrived on the scene, and, the nature of the conflict being discovered, stopped the hostilities. The colonel of the Yeomanry, being asked why he had returned the fire of the blockhouse, replied in excited accents, "Begorra, they fired on me men!" It is said he was ordered to go to Pretoria to explain matters, but his ingenuous reply so charmed Lord Kitchener that nothing further was ever heard of "the battle of Springfontein."

When Shall We be Middle-Aged?

It is a sign of the times that is indeed gratifying to those interested in the main-

tainance of youth to extreme age, that mothers and fathers, even after passing the three score and ten line, no longer consider themselves "on the shelf." They feel young, act young, and, therefore, they remain young.

The *London Spectator* recently made some very appropriate remarks on this subject, and they are reproduced here-with:

If the progress of education, and the consequent general development of the intellect of the individual, the frequency of what our grandparents would have called youthful precocity, is remarkable, almost as significant is what may be described as the refusal of middle age to accept its traditional position in the journey of life. Half a century ago a man of forty-five was regarded almost as elderly, and a woman of the same age was expected to have long since cut herself adrift from all ties binding her to her youth, and to assume the appearance and deportment of a staid, exemplary matron. All this has changed in a particularly interesting way, of which the prominent feature is a seeming contradiction. If the three-year-old child of to-day is as knowing as was the six-year-old of half a century ago, and the ten-year-old boy of to-day is in many respects quite as much a man as was his grandfather at eighteen, one might naturally expect that in due gradation the modern middle aged man should be old beyond his years. But such is not the case. Middle age, so far from hurrying into senility, so far even from standing still, would seem actually to have stepped backward and marched alongside of youth. There is a jauntiness, a buoyancy, an elasticity about the middle-aged parent of to-day which our fathers would have shaken their heads at as unseemly. The gulf which once separated the middle-aged parent from his children has been filled up. The curtain which shrouded the middle-aged man generally from the eyes of the youth, and which caused him to be regarded with respect, if not with awe, has been lifted, and in obedience to the same influences which have made the schoolmaster the friend of the schoolboy, and the regimental officer almost the comrade of his men, the middle-aged man of to-day is never so happy as when working or playing

upon an equality with and actually in competition with youth.

The Pope Not a Prude

A story is told of the Pope in Italy, where he is most popular, even among the anti-clericals. He has some nephews who find it somewhat difficult to extract money from him. The wife of one of these nephews solicited an interview, and having obtained it, said:

"Holy Father, I come to seek your advice. I am poor. I have a large family, and, alas, I am in debt. I have been gifted by Heaven with a good voice, and the proprietor of a large music hall has offered me a large salary to appear on his stage and sing a few simple songs. Ought I accept the offer?"

"Certainly," replied His Holiness, "and I only regret that my official position will not allow me to be present at your debut."

Young Rockefeller's Head is Level

John D. Rockefeller, Jr., who has come into considerable prominence because of his Bible class, has recently begun to advocate muscular Christianity. His father's recovery through persistent golf playing has no doubt had something to do with his recent change. He is anxious to have his Bible class take up strenuous exercises of all kinds, and wants them to develop their arms and legs and increase their chest capacity. With this idea in view he has sounded the members of his class with the proposition of organizing an athletic association as a side issue. He advises that an athletic field be secured with facilities for baseball and tennis, track and field sports, football and bathing. He has sent to each member of the class a letter asking for suggestions, and the members are all heartily in favor of the innovation and have promised to give their hearty co-operation to making the club a success.

Young Mr. Rockefeller expects to take an active part in the games, although he has made no reputation in any branch of athletics.

Anti-Vaccination Lectures

From time to time a strongly expressed desire has reached us from several large centers in the United States and Canada, to hear Dr. Levenson, of Brooklyn, lecture upon the subject of vaccination.

If a tour can be arranged for the coming Fall, the expense could be shared, and so fall lightly upon each locality. We remind our readers that Dr. Levenson is an old man, and that in the course of nature the chance of hearing words of wisdom and instruction from his lips cannot be long enjoyed, though his voice is still strong enough to reach the furthest parts of the largest properly constructed hall.

Persons feeling interested in the subjects of Dr. Levenson's lectures—and especially in vaccination—and desirous of helping to get up such a tour, can address the Anti-Compulsory Vaccination League of New York, 81 Lafayette Ave., Brooklyn, N. Y.

Some Remarks by Mr. Paterson on His Missionary Work

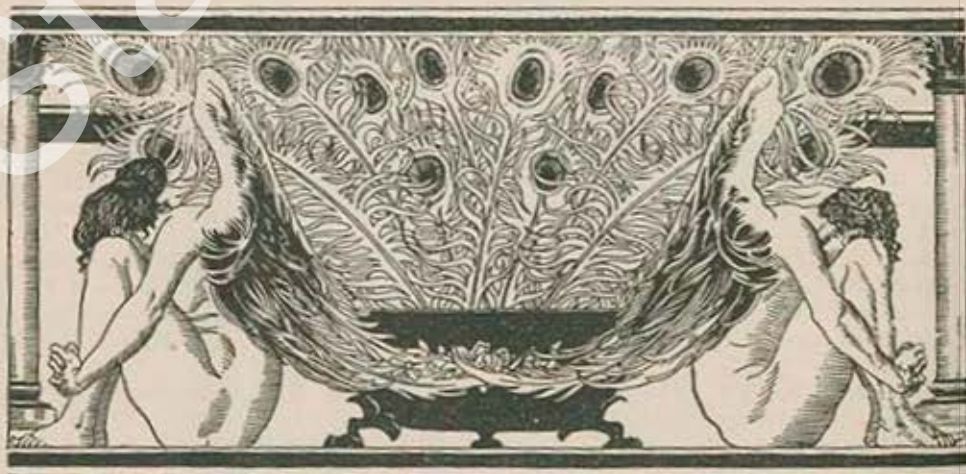
Often reformers, or those who think they have a truth, are over-anxious that every one else should see things their way, and they preach their theory in season and out, though their lives may be a great contradiction to the theory.

On the other hand, a marked example

appeals to the reason of anyone and starts questions. For instance: While giving theatrical exhibitions recently, it leaked out that I did not use booze, tobacco, meat, etc., and the other performers wanted to know how I got such a development and could keep up doing such a severe turn without meat and stimulants. I brought them some experiences, as recorded heretofore in *PHYSICAL CULTURE*—"Value of Raw Food," "How I Feed on Ten Cents a Day," etc. As I was the only one on the stage who had not complained of feeling bad, I offered to bring them a gallon of my drink—buttermilk—in place of their customary beer. They tried it. The result was that every performer but one quit liquor and was glad to pay for a gallon of the new drink (ten cents), which we had each show thereafter, much to the financial and physical good of all, as they freely acknowledged toward the end of the week. Not only that, but some wanted to know all about the ten-cent-per-day diet, and were trying it faithfully when I last saw them.

Instead of boring them, I only replied to their inquiries, and did not seem to care if they tried anything, not even suggesting that it might be good for them, but only that it agreed with me. They knew I was healthy and happy, and wanted the same themselves.

MORAL: Actions speak louder than words.



Sorrow

Christian Wild



Students Watching the Bowl Fight in the University of Pennsylvania

THE BATTLE OF THE BOWL

By H. D. Jones



YOUNG AMERICA, bubbling over with life and surplus energy keyed to concert pitch in vitality and muscular power, must have some opportunity to test the strength of systematically developed sinews or the nation would run to seed. The college faculties of this country, being sensible bodies, recognize the importance of encouraging contests in which brawn is the winning factor, as well as of insisting upon the development of brain.

Hence, if the presidents of United

States universities do not connive at cane rushes, inter-class conflicts, campus battles-royal and the hundred and one mêlées of college life, they at least turn discreetly the other way when the tocsin is sounded and the cohorts gather for the fray. It is seldom necessary to interfere with the student wars. The boys of America can generally be trusted not to allow the fever of fighting to carry them too far, and although from a college battle a youth may retire with a wound that will leave a scar for life, he is sure to be prouder of that souvenir of his student days than of marks received for mental superiority.

In all universities there are peculiar



The Bowl and Its Guardians

struggles that fire the soul of the freshman at the outset of his college career. Some seem absurd to those who have never been to college and do not know how sacredly regarded are the internecine struggles of the classes. The Battle of the Bowl, a yearly fight that takes place in no university but that of Pennsylvania, may cause laughter to the spectators, but the participants are in deadly earnest, for on the result depends

the standing of the youngsters in the college for a whole triumphant or despondent year. No fight in any college, it is safe to say, is more strenuously fought than this one at the University of Pennsylvania. It is a time-honored institution and before describing it, in order to begin this story at the beginning, it is as well to tell how it originated. This will show in what an extraordinary way occurrences that are fraught with deep meaning to college boys have their origin.

It was a hot day at the end of the term. On the beautiful green lawn in front of College Hall, University of Pennsylvania, loitered a group of languid sophomores. Interest in the college course was flagging. Nearly all the examinations had taken place and the boys were looking forward to packing up and flitting to the ends of the earth. Not a boy in the group but was at peace with himself and with the world. But there was just sufficient life in the languid knot of perspiring sophomores to make them wish for some passing thing to arouse them from their torpor. If fate had sent along at that moment an organ-grinder with a monkey at the end of a string, or



The Sophomores Before the Fight

pretty girl acquaintance conversationally inclined, or even a German band, the Battle of the Bowl might never have become an honored institution of the college. Instead, Fate chose to direct that way the footsteps of a very, very diminutive freshman.

So small was this freshman that it was a wonder how he ever came to be admitted to the college. For the honor of the class the boys should have hidden him away until he had grown a little bigger. Probably Fate ordained that this boy should remain small so that that which was to happen should come to pass. Anyhow the small freshman passed across the horizon of the group on the college lawn and the sophomores sprang to life in an instant.

"Ah, little boy? Does Mommer know you're taking a walk?"

"Has nurse washed him this morning?"

"Did the little fellow cry because he couldn't have his bottle?"

Amid a storm of simple and primitive jests handed down by hundreds of generations of boys and dating back to the days of the cave-dwellers, the small freshman pursued his dignified way.



The Freshmen Before the Fight

But the last query, that regarding the bottle, had given the sophomores an inspiration. While one darted after the hapless freshman and held him for further developments, another ran to the nearest drug store and bought a nursing bottle. This was filled with some villainous compound from the shelf of the shop and then the fun began.

The freshman was compelled to imbibe the awful fluid under penalty of



Ten Seconds After the Fight has Begun



The Freshmen Getting the Worse of the Fight

direful things and his protests while doing so were heartrending and ear-splitting.

The noise of the conflict attracted attention and soon the fiery cross had been sent through the freshman quarters summoning the boys to war. A horde of youngsters descended on the struggling group on the campus and then began a furious fight for the rescue of the freshman from his tormentors. Sophomores swarmed to the scene and riot calls were in order. Seniors interfered at last and for the moment peace was restored.

But the little freshman had been badly mauled in the struggle and his associates panted for revenge. It was easy enough to secure another nursing bottle and fill it with the vilest tasting stuff procurable. Easier still to capture a sophomore, overpower him and force him to drink the nauseous mixture. Retaliations were sought by the sophomores and soon the college precincts were in a perfect uproar and the din of battle made life unbearable for the seniors.

Seeing that something had to be done to bring order out of chaos, the seniors, prompted by the faculty, decided to organize the opposing forces and reduce the fight to a scientific struggle.

As a nursing bottle was not a very handy thing to fight for, and broken glass might do irreparable harm to some contestant, it was decided to have the fight take place for the possession of a bowl. A date was fixed, to be known as Bowl Day, and sophomores and freshmen agreed to bury the hatchet and allow peace to be restored until and after the the date of the great fight.

All this happened many years ago, but



The Mêlée



Second Half Sophomores Dragging Freshmen Out of the Scrimmage

the Bowl Fight continues to be one of the greatest contests in college circles. As conducted now, with the seniors as marshals, a timekeeper and a referee, the Battle of the Bowl is a sight worth seeing.

On the day of the fight the sophomores and freshmen line up on opposite sides of a spacious field. Behind the sophomores is a fence that plays a most important part in the struggle. With them when they march on the field the sophomores carry a large wooden bowl, decorated with the crest of the two classes and any insignia that the fancy of the students may suggest. The freshmen bring with them their Bowlman. His identity is kept a strict secret by the freshmen until the battle is about to begin, for the very good reason that the sophomores would kidnap the Bowlman the day before, if they knew his identity. When the lines are formed, the Bowlman is brought to the front and shown to the sophomores. It is the business of the Bowlman, aided and abetted by the freshmen, to scale the fence behind the sophomores before the latter can catch him and touch him with the bowl.

The sturdy students, stripped to the waist, form up about twenty feet apart, the sophomores holding the bowl ready to rush it at the Bowlman, the latter watching his chance to dart around the ends and reach the fence. The signal is

given by the referee blowing a whistle. Two seconds later the two bodies come together with a clash, the Bowlman is enveloped in a ring of sweating freshmen and the sophomores are moving heaven and earth to get at him with the bowl. This year the Bowlman was over the fence within two minutes of the call of time, having been whisked back into the center of the freshmen group, whirled around the ends of the sophomore ranks and pitched head first over the fence by a score of willing hands before the sophomores had discovered in which direction their quarry had gone.

Score one for the Freshman. The second half is even more strenuous. This is fought for ten minutes by the timekeeper's watch. The bowl is placed in the center and around this object sophomores and freshmen struggle in a seething mass until the time is up. Then the referee counts the number of hands holding to the bowl. If there are more sophomore hands than freshmen hands the older students win, and vice versa. This year the freshmen won this half also.

In previous years the weight of the older boys has generally told in their favor. This year the freshmen were a brainy lot and in their secret war council they hit upon new tactics that proved to be too much for the sophomores. Instead of swarming around the bowl and

struggling to get to the center of the mass, the freshmen detailed a picked few to strike for the bowl and hold it at all costs, while the rest skirmished on the rim of the ring, picking up the sophomores bodily and carrying them out of harm's way. With their greater numbers the clever "Freshies" were able to cut out the best of the "Soph" fighters and pin them to earth until the struggle was over.

Leaving two men to sit on a captured sophomore, the freshmen skirmishers would then run back to the scene of the main struggle, capture another Soph, and put him out of the combat. With their forces continually weakened by this splendid generalship, the sophomores could make no headway against the determined attack on the center and the whistle blew with three times as many freshmen as sophomores holding to the coveted bowl.

\$2,000.00 IN PRIZES. \$1,000.00 TO THE MOST PERFECTLY DEVELOPED MAN AND \$1,000.00 TO THE MOST PERFECTLY DEVELOPED WOMAN IN THE WORLD



We are offering two prizes, one of \$1,000.00 for the Most Perfectly Developed Man in the World and another of \$1,000.00 for the Most Perfectly Developed Woman in the World. **PRELIMINARY COMPETITIONS** are to be held in New York, Boston, Buffalo, Philadelphia, Washington, Pittsburg, New Orleans, Cincinnati, Chicago, St. Louis, Minneapolis, Denver and San Francisco to determine the Most Perfectly Developed Man and Woman in the area or district whereof such cities are centers. The winners in each of these preliminary competitions will be furnished with **FREE** Transportation to and from New York in order to enable them to attend the final competition to be held at a mammoth **ENTERTAINMENT** to be held at Madison Square Garden, New York, during the week beginning December 28, 1903.

Contestants from **ALL PARTS OF THE WORLD WILL MEET HERE.** *Preliminary contests* will also be held in the following cities on the other side of the Atlantic, viz.: London, Liverpool, Manchester, Newcastle, Sheffield, Birmingham, Brighton, Bristol, Dublin, Belfast, Edinburgh and Glasgow. Successful contestants in these cities will again compete in the **SEMI-FINAL CONTEST IN LONDON**, and the winners will be furnished with **FIRST-CLASS** passages to and from New York and expenses for a week's stay.

The first four days of the competition at Madison Square Garden will be set apart for American contestants. The last two days will be devoted to determining the winners of the final contest between the man from Europe and the man from America and the woman from Europe and the woman from America. The result of this final competition will determine the winner of the two **ONE THOUSAND DOLLAR PRIZES.**

The successful contestants are to be chosen by popular vote. Every ticket giving admittance to Madison Square Garden will have two coupons attached, entitling the holder to one vote for the Most Perfectly Developed Man and one vote for the Most Perfectly Developed Woman.

No element of favoritism will be allowed to enter into this contest. The man and woman receiving the greatest number of votes will be awarded the prizes.

Send for application blank without delay to

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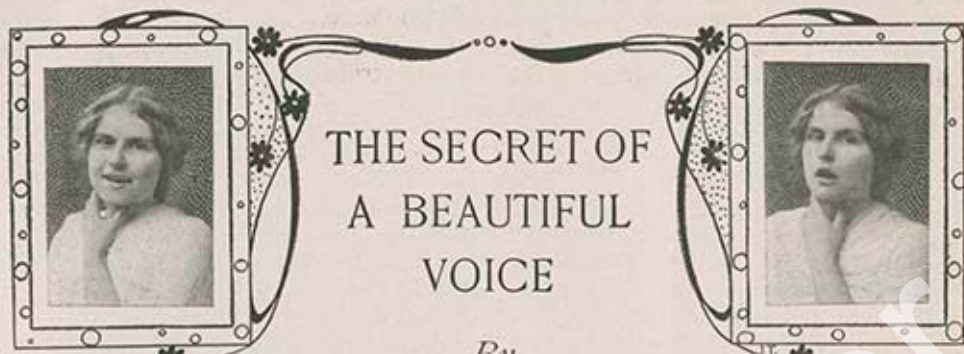


Fig. 1.

Showing features uplifted by muscular contraction. Notice the throat also moves in sympathy

By

W. R. C. Latson, M.D.

Fig. 2.

Features relaxed, allowing resonance cavities to be opened as shown in diagram figure

A beautiful voice is one of the rarest and one of the most powerful attractions which a person can possess. A voice which is clear, musical, sympathetic and powerful is one of Nature's noblest gifts to man or woman. No one who has heard the late Henry Ward Beecher speak will ever forget the thrill produced by one of the most perfect vocal organs ever known. Another remarkable voice was that of Tomaso Salvini. Salvini's voice, in the light passages, was soft, full and searching as the tone of a 'cello. In the strong passages, while no less sweet, the voice had in it a stupendous depth and power. This perfect evenness and sweetness of tone, in both loud and soft passages, is characteristic of all perfect

voices. It is to be heard in the voice of Ellen Terry and in that of Sara Bernhardt. It is also found in the voices of the greatest singers. Mme. Ternina has this peculiar 'cello quality throughout her voice. So has Plancon in his best moods. Of all the male singers now before the public, Carl Dufft has perhaps the most perfect tone in this respect. It is full, rich and immensely powerful and is marked throughout by the 'cello-like quality referred to. What is this peculiar character of voice which we have called the 'cello-like quality? Is it a rare gift bestowed only on certain favored mortals, or is it something that may be acquired?

To answer these questions is the purpose of the present article. Before explaining the



Fig. 3. Profile of Head Showing Resonance Spaces
B. Pharynx. C. Mouth. D. Naso-pharynx. F. Uvula in position for normal tone. G. Soft palate raised, cutting off resonance of naso-pharynx. E. Tongue. A. Point at which initial tone is formed.

nature and cause of the quality in the voice which makes it beautiful, expressive and great, we will answer our second question by saying that the beautiful voice is a gift in some cases and an acquirement in other cases. The most beautiful voice I ever heard was that of a girl of sixteen who had never had a vocal lesson in her life, and who was quite certain that she "couldn't sing at all well." On the other hand, Mr. Beecher's voice was made what it was by hard, persistent drill. He tells us somewhere that he practiced vocal and elocutionary exercises for many years, and, as an instance of the kind of work done, relates that he would often take one word and drill on it, repeating it over and over for two hours at a time. Of the great singers and orators, some have had voice as a natural gift. Others have developed their voices by long and careful drill. It is my opinion that by proper methods every person (save, of course, those whose organs are in some way injured or deformed) may acquire a voice, both for song and speech, which will warrant the adjective "beautiful."

When I say this I do not mean to imply that a beautiful voice may be acquired by practicing the exercises used by the majority of vocal teachers—"tone builders," "voice specialists," etc.—and of teachers of elocution. So far from that I fully believe that many of those who pose as teachers of the voice and of elocution do more harm than good—that they ruin more voices than they develop. No, the acquirement of the perfect tone is based upon principles, of which the mass of voice teachers are profoundly ignorant; and not only is the development of a beautiful voice far more easy than is generally believed, but a great deal of the drill necessary may be accomplished without the aid of a teacher at all.

The process by which the voice (singing or speaking) is produced constitutes one of the most complex acts that we know. When it is stated that in the throat alone there are seventy-eight pairs

of muscles; and that in the act of breathing almost every important muscle of the body is brought into play—when it is understood that any false action of any one of these many muscles will ruin the tone—we may gain some idea of the complexity of the process of voice production.

A full consideration of the various facts and theories of tone production is not here necessary. Voice is now believed to be produced as follows: The human voice is very much like the tone of a violin or a violoncello. In the violin the vibration of the string produces a faint tone which, reinforced by the air contained in the box of the violin, gives the characteristic violin tone. Now, the vibration of the string, in itself, produces a tone which is extremely faint—so faint that if the string were stretched between two points not near the violin box, the tone could hardly be heard. When this faint tone, however, is made near the violin box, the air in the violin box so multiplies or reinforces



Sarah Bernhardt

The "Divine" Sarah, in whose voice the tone of the 'cello is to be found

**Ellen Terry**

Who possesses nearly all the attributes of a perfect voice

the faint initial tone as to produce the characteristic sound of the violin which, as we all know, will fill a large hall.

Now, in the human body we have structures that correspond perfectly to the violin string which gives the note and to the violin box which gives the character to the tone. In the cavities of the pharynx, the mouth and the nasopharynx, which is the large hollow space lying above the roof of the mouth and behind the nose (see Fig. 3) we have the analogue of the violin box. A blast of air blown from the lungs causes the vocal cords to vibrate. This vibration, which in itself produces a quite thin and weak sound, is thrown into these hollow spaces, and so multiplied many times. The pitch of the tone in the human voice depends largely, if not wholly, upon the vocal cord. But

the quality and power of the tone depends upon two things quite independent of the vocal cord—upon the size and shape of the hollow spaces and upon the manner in which the breath is expelled.

This matter is so important that it is worth while to understand it. A simple experiment will help to this end. Procure two empty bottles of different sizes, the larger the better. Now, hold the smaller bottle near the lips and blow across its mouth. The sound produced will be a soft, hollow, booming note, something like a groan. Apply the experiment to the larger bottle and note that the tone produced is larger and deeper. This difference illustrates the prime difference between the tenor and the basso voices. The larger the hollow spaces in the head the deeper the voice. The broad-jawed man has a big voice, usually—always, if he produces his voice correctly.

Now, without going into the anatomy of the throat, we may say at once that the hollow spaces are so arranged that the slightest muscular activity of the throat causes

**Carl Duff**

Whose voice is full, rich and powerful and marked with what is best of the 'cello quality

some of them to close up (see dotted line in Fig. 3) and others to change their form, thus causing faulty tone. This brings us to a definition of a perfect tone which, for our purpose, may be formulated as follows:

A perfect tone is a tone produced by an unimpeded blast of air thrown from the lungs into the unchanged hollow spaces.

Any muscular action of the throat will impair—may absolutely ruin—the tone. Any impediment in the breath will have a like effect. For perfect tone the body must be erect, the weight thrown forward, the chest uplifted and the breath sent easily but with full volume into the hollow spaces. An erect carriage and a large, flexible chest are invariably characteristic of the great singer or orator.

The great secret, then, of a perfect voice, either for singing or speech is to produce the voice by a free unimpeded flow of breath and without the slightest action of the throat muscles. This is not easy, but it is possible—possible, I believe, in every case. I append herewith a few exercises which have been found helpful by those afflicted with faulty tone.

EXERCISE No. 1.

Stand easily, feet together. Now, inhale breath slowly and gently, at the same time raising the hands slowly over the head. When the lungs are full stretch firmly upward and forward, holding the breath. After a moment of stretching, exhale the breath in a gentle sigh and return to position.

This exercise is for the development of position and chest flexibility. All breathing should be done gently and slowly. Forcible breathing exercises have ruined many fine voices.

EXERCISE No. 2.

Stand or sit easily. Relax all the muscles. Assume a sleepy expression, allowing the jaw to drop slightly. Now, exhale and inhale the breath slowly and gently, feeling that it is passing through both nose and mouth.



Plancon

Whose voice in his best moods approaches perfection

This exercise, simple as it seems, is in reality the secret of perfect voice. A free blast of air with the organs in just that position makes perfect tone. The great difficulty is, however, that, with the effort to throw out a strong blast of air, the throat muscles spring into activity; and the tone is thus ruined. The man or woman who would acquire a beautiful voice must practice for many weeks on this soft, gentle breathing exercise and the one which follows.

After the student has, by some practice of Exercise No. 2, gained the ability to inhale and exhale long, gentle breaths without disturbing the position of face or throat, the following will be found beneficial:

EXERCISE No. 3.

Practice one or two breaths, as in Exercise No. 2, and then, as the breath is going out, put into it a very soft sound like a sigh or whimper. You will find

at once that you experience a tendency to make some effort of the throat muscles. With practice, however, you will, in time, be able to make soft, groaning tones simply by throwing the breath freely but gently into the hollow spaces of the head. To develop these into tone is then merely a matter of persevering practice.

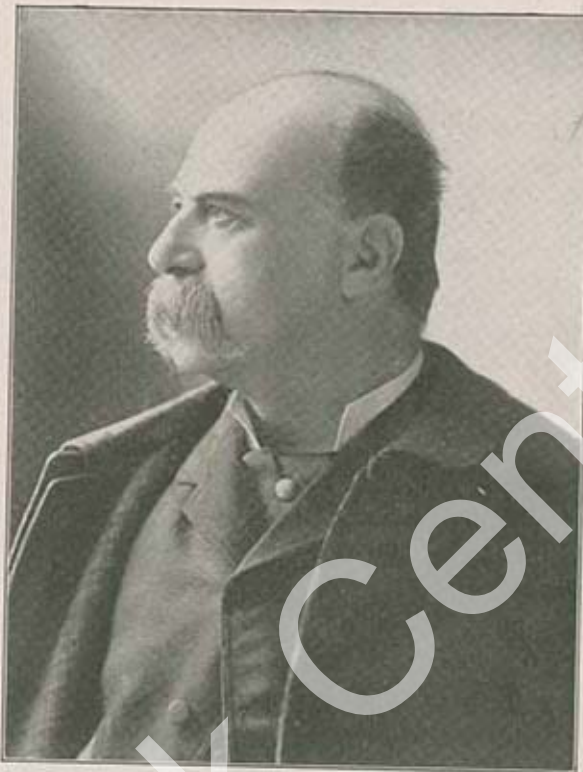
Very often the habit of throat action is so deeply seated that more drastic treatment is necessary. The following exercise is frequently useful:

EXERCISE No. 4.

Place the finger and thumb on the

front of the throat touching very gently the "Adam's Apple."

Relax all the muscles of the face. (See Fig. 2.) Now sing a tone very gently—almost a groan or a sigh, soft and free. If there is the slightest movement of the throat, your method is incorrect. When you can sing or speak a long phrase without the slightest movement of the Adam's Apple, the voice will be practically perfect. Fig. 1 shows the usual method of tone production with contraction of the facial (and therefore of the throat) muscles.



Tomaso Salvini

Possesses a voice of stupendous depth and power with perfect evenness and sweetness of tone

Physical Culture Strengthens His Vocal Organs

To the Editor:

About six months since I wrote a letter to you running something like this: "I am 34 years of age; almost a physical wreck; took the 'Keeley cure' about two years ago; have nervous dyspepsia, weak heart, etc., etc. Do you think a systematic course of exercise would benefit me, and what would such instructions cost?" I accidentally came into possession of a copy of PHYSICAL CULTURE, and immediately began the exercises contained therein. I began to grow strong, so did not mail the letter. I have greatly strengthened my vocal organs.

Coudersport, Pa.

J. F. J.

The Proposed Missionary Department—Another Suggestion

To the Editor:

In regard to the proposed "Missionary Department" I would say that I am in favor of printing well gotten up circulars or pamphlets on the vital subject of health. I, for one, feel the need of such literature, and am sure I could accomplish much toward the betterment of humanity. I borrow my idea from the Unitarians and Socialists, who are doing efficient work this way.

As to prizes, etc., this is a secondary matter. I believe this "department" should be strictly philanthropic, though, of course, a prize or a talk may stimulate.

Say, the August number was a beauty!

JOHN KOWALSKI

Placerville, Cal.

THE LITTLE BROWN MEN OF JAPAN

By Hugh Van Sully



Japanese Wrestling

England has her athletes, huge men of brawn and build, but most often cumbersome and slow in their movements. France has her supple, graceful sons. Ireland, cradle of our modern athletics, has always given magnificent men to the world. Germany, the stolid blue-eyed Saxon, ponderous and mighty. Russia, her bearded, huge-bodied, heavy-handed peasantry, their souls enthralled in the icy grip of the Frost King, that takes men's brains and gives them instead endless layers of fat.

The wondrous, mysterious old East does, and may well typify a decadent people, who, if they have been taught naught else, have learned their bitter lesson of deprivation and deceit—two things in themselves that rob Mankind of its strength and ingenuous charm.

Of our own great and vastly varying citizenship, let it suffice to say, that the best and the worst from the four wide corners of the Earth are ours—seekers for the most part, who must be unlearned

in their maturity the follies and blind "Grandmother-wisdom" of their youth.

It is with the dauntless little brown men of Japan that this article will treat.

There are two Japans—the Japan that stretches back into an obscure land of mythical legends, and mighty gods and beautiful men dwelling together in a

Paradise of Bliss; and the modern made-to-order Japan, an incongruous combination of flowing robes and four-inch collars.

It is the old, old story of the countryman going up to the crowded city to earn, after many weary years of drudging toil, the very peace and con-

tentment he left in his youth—but it is human nature. And what sort of a civilization would we have, think you, if we were not thus herded into vast Wildernesses of Asphalt and Aching Hearts?

Japan has taken from China, that great-grandmother of nations, some of her re-

ligion, most of her language, blended into her arts the fantastic conceptions of the Flowery Kingdom, borrowed and treasured with unswerving fidelity the Chinese veneration for parents and for old age; but the gods were kinder to the Jap, for implanted in every breast is a



Japanese Fire Department



Japanese Shoemaker

desire for cleanliness of person and surroundings amounting to almost a passion, and a loathing of uncleanness that has been a powerful incentive to national and to individual perfection.

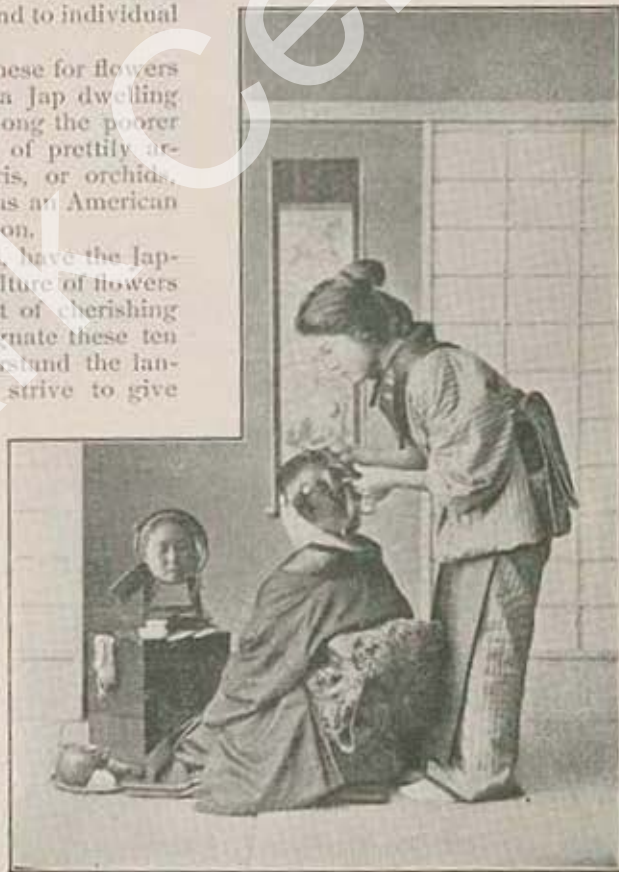
The intense love of the Japanese for flowers is everywhere manifest, and a Jap dwelling house sans a garden, or, among the poorer classes in the cities, a vase of prettily arranged chrysanthemums, or iris, or orchids, is as seldom to be met with as an American millionaire with a good digestion.

To so high a degree, indeed, have the Japanese elevated the love and culture of flowers that, under the pretty conceit of cherishing something beautiful, they designate these ten beatitudes to those who understand the language of flowers—i. e., who strive to give some outward expression to that love of harmony and color which they have within them: The privilege of associating with superiors; ease and dignity before men of rank; a serene disposition and forgetfulness of care; amusement in solitude; familiarity with nature; the respect of mankind; constant gentleness of character; healthiness of mind and body; a religious spirit; self-abnegation and restraint. Not unworthy beatitudes, these, for a pagan people.

That trite old saw, "the

child is father to the man," is exemplified with fine emphasis in the national life of the Japanese. Sir Edwin Arnold, lover of things beautiful, and man of culture that he is, tells us that the young citizens of the Mikado's domain carry themselves with that innate grace and courteous bearing which is the just pride of their fathers; that they are never mischievous—possibly, he naively adds, because there is no mischief to do. There one

would never find the barbaric imprint of hobnailed boots or the



Japanese Girls Making Their Toilet

unsightly little earnest of over-muddy shoes on costly rugs or polished floors.

Visitors do not soil the delicately woven mats covering the floor, for to enter a dwelling place without removing one's street foot-covering is a solicism somewhat analogous to the opposite thing in America; that is to say, making an entry in one's stocking feet. Rudyard Kipling, a little man himself, though a magnificent champion of the "ten-toed man," in contra-distinction from him of the "yellow kid glove and patent leather shoe ilk," says that "one should look to the color and quantity of his sox" before touring Japan.

The children live in the streets, but the outdoor associations do not coarsen them, as seems to be the case with the youth of our

privilege of availing himself of the bathing facilities of the place.

The Japs almost worship cleanliness, both of person and of clothing, and, unlike John Chinaman, who is reputed to wash his clothing thrice a day and himself not at all, they have set themselves a "cleanliness next to godliness" standard, and—weep ye, O my brethren of the road! you "Weary Willie," and you, also, "Dusty Rhoades"—they casually refer to the bath as "the honorable hot water."

Again, to quote Sir Edwin: "The Japanese are not in the least ashamed of the body, the beautiful 'city of the nine gates,' which the soul temporarily inhabits." During the dreamy, yearning Summer



The Hara Kiri Japanese Judicial Tribunal

American cities, and the shameful spectacle of old age or deformity openly insulted, nay, even assaulted, by untutored barbarians, aged from five to twenty, is unknown in Japan. In truth, in a land where staid old gentlemen sit the day through contentedly flying huge kites, and where the veriest stranger will bow most politely in passing, what else could one expect?

As we know them, and most often to our sorrow, there are no tramps in Japan, and the humblest beggar will preface his request for food with a request for the

time, the people take no special effort to conceal their bodies, more especially throughout the countryside, and this exposure goes with perfect modesty—indeed, it may be said to lead to it. Morality rather gains, and sentiment decidedly loses, by this candor of Japanese manners apropos nudity, for no one looks at what all the world may see, and it is the veil which makes the sanctum.

More than 300,000 persons bathe daily in the eight or nine hundred public baths in the city of Tokio alone, at a cost to each bather of little less than a cent.

Verily, here lies good food for thought, City Fathers.

There is a sulphur spring near Kosatsu, famous for the health restoring properties of its waters, and anent it the Japs have coined a little proverb which says, "Here everything may be cured except love." And in such a land, among so delightful a people, one need not seek a cure for love, nor can one remain very long out of it.

The "Rickshaw" man-power vehicle, while not a distinctly Japanese invention, is, nevertheless, in constant use in the island. Some are more pretentious

fate has made them to be burthen-bearers, the broad spirit of toleration in which for centuries they have been nurtured has made them a self-respecting, clean and courteous class. From the standpoint of physical culture—and a very good yardstick with which to measure your breed of man it is—these men are splendid fellows, lithe and well-knit, not abandoning themselves wholly to their appetites, nor especially short-lived nor subject to disease, for all their forty or fifty mile daily jaunts.

The great American people have but now, at this late date, become aware of



Japanese Carriage

than others. The rich in Japan—and the same holds the wide world over—get a thing of utility, begin by embellishing it, and end by converting it into a useless contrivance. But where you would have man-power you must have no puny fragile creature, but a lusty, sturdy fellow, with lungs of leather and thews of steel, a man that does not know the meaning of fatigue.

It would be wrong to glorify these coolies for what they are not, to laud their strength and stamina, and overlook the fact that they were of a low order on the social plane, for no man of intelligence need haul his brother hither and thither for a livelihood. But though their

the fact that that vague, indefinite something, referred to by stealth almost, as "the body," a thing which must be dosed and doctored periodically, when betwixt a stuffing and a starving it most strangely and unaccountedly gets out of whack, is an entity with laws and penalties peculiar to itself, laws made by wise old Mother Nature, and disregarded at one's peril. The Japs for ages have been in touch with Nature, and a Japanese "amma," a "shampooer," or "muscle-kneader," blind perhaps, will have his listless, "run down" patient skipping about buoyantly before your ponderous "general practitioner" has indited his complicated prescription.

WALT WHITMAN'S RESPECT FOR THE BODY

By Horace Traubel



WHITMAN felt that the body belongs to the soul and that the soul belongs to the body. He felt that we use two terms, in fact, to describe different manifestations of the same thing. That is, in any final analysis, body and soul are one. Either word could be made to tell the whole

story. He felt that there can be no real health of soul that is not equally health of body. And conversely, that if a man is square with his body he is to that extent honest with his soul. Whitman did not see a man in pieces. Man was not a fragment or a dislocation. Man was not an arm or a leg or a stomach. He always objected to formal medicine because it treated its patients from the point of view of detail and circumstance. In the larger and not literal spirit he contended for the whole man. If you doctor me, doctor the whole of me. Keep the whole of

me in view. I am not a stomach. I am a man. To Whitman there was no text and context to the constitution of man. There was man. He thundered and he pleaded the cause of unity. Until he saw man whole he was not to see man at all. Man was not evil and good. He was man. He was not a body to be taken care of on one principle and a soul to be taken care of on some other principle. He was all over and all through one man of one purpose whose body and soul demanded the same acceptance. The man was not of two parts, one part belonging to the priest and one part to the doctor. He was of one part and

that one part belonged to the man himself. This may seem insisted upon to the degree of tenuity. But there is no help for it. At the point where the idea slips into the ideal the body of man slips into his soul.

Whitman would not discredit one organ for the sake of another. He would not forsake the rounded man for the angle of any fragment. He offered the whole man in evidence. See this man. See what he



Walt Whitman

is capable of. See how little he is self accomplished. Man lives a half life in the intemperance of his organs. He overdoes and underdoes. He surrenders his brain to his bowels. He sacrifices his stomach to his soul. He overeats and underthinks. He overthinks and undereats. He spends where he should save and saves where he should spend. He forgets himself and remembers his arms. He drags and drags himself. Life is not accorded volition and does not achieve symmetry.

Whitman was not doctrinal. He was affirmative. He very positively reviewed and ordered his personal habits. But he never offered these habits as a necessary course of procedure to any other person. He did, however, believe that every man should accustom himself to self-discovery. You cannot by searching find out what may be needed to round out another life. But you can by searching discover that which is required to make your own life full and equitable. Equity, to Whitman, was not an affair of bargains, of markets, of the soul. It was an affair also of the body. Are you honest with your body? He was always asking that question. And in his own way he answered it. Answered it in his books, in his personal word, face to face with his friends, in the daily life he lived.

The body demands full tribute. It demands its measure heaping over. The body must be tasked. But it must not be overloaded. Not only not overloaded. Neither overladen. The body must not be subjected to any influence. Nor must the body subject any other influence to it. That is Whitman.

Whitman takes the body and the soul, the body that is the soul, the soul that is the body, out of doors. He gives the body to the fresh air. He gives the body to itself. The body must never come apologizing for itself. The body must never come vaunting itself. It must come conscious of its prerogatives and resolved to maintain them. Whitman was not ascetic. He did not preach mortification, denial or sacrifice. He was all that asceticism is not. Whitman was continent. But he was not unfunctioned. He lived in the full round of life. But he left life as round as he found it. He never lived off on abrupt

angles or at tangents with himself. No one member of Whitman could be quoted against another. Give every organ and every function to life. Bathe it in life—soak it full with life. Fill life with hours and days. Do not waste life in the flagrant inconsequence of ennui. But exercise caution. Never drive too far. Never fly too high or dig too deep. Hold life well in hand. Do this in exercise. Do not do it in denial.

To Whitman there was one entire man or no man at all. Strength, to him, was not in the power to lift phenomenal weights or to play Samson or to in any way enact a marvel. It was in the ability to meet the conditions of life. He was never impressed by extraordinary physical feats—by some miracle of athletics. Better simple calm of life. Better an inch of good digestion than a mile of football. Better a good breathing apparatus in a simple man on the solid earth in the everyday tasks than any sort of professional immortality achieved off the trapeze. A good walk may be better than a good book. It may be the best adjunct of a good book. Good health is the first good lesson. It is the one lesson that needs to precede every other lesson. The man who walks around with a disease gnawing at his vitals is a warning and a reproach. We must never apologize for disease. We must never welcome disease. We may not without guilt do that which invites disease. We must come to regard sickness not as a misfortune but as a fault. Men must be as conscientious about betraying the body as about betraying a friend. You are very sensitive about treason to the state. But what do you think about treason to the body? States may rise and fall and man may remain unhurt. Man, indeed, may be bettered. The perturbations of the state may even go to prove the health of the man. But when the body is traduced, when the members are made light of, when physical sanity is traded off for some bribe of immediate joy, the citadel is in danger and you threaten the social welfare at the point where it is least able to sustain a blow. The state may fall and man may rise. But when the body falls man does not rise. With the body lost all is lost. No race of men has ever sur-

vived the loss of its body. Body is soul. Loss of body is loss of soul. That is Whitman.

Whitman's philosophy of the body is sometimes quoted as against the Christian contention for the supremacy of the spiritual instincts. But that is an error. Whitman is, of course, against ascetic Christianity. Whitman does not acquiesce in any philosophy of dirt or mortification. He does not believe that you can prove your pure soul by producing your defiled body. He does not admit that there is any possible holiness which neglects or disparages the body. The body, too, is of holies as holy as the soul. This is the necessary inference of his root belief. He who puts his hand unwarrantedly on the body puts his hand on the soul. The body can be robbed of none of its claims and exempted from none of its obligations.

The ascetic argued that you can only call attention to the soul by diverting attention from the body. The more you discredit the body the more you credit the soul. The ascetic was always engaged in an endeavor to prove the soul superior to the body. The more he mutilated the body the more he proved the soul. The soul could only be absolutely verified by the absolute extinction of the body.

Whitman declared that there was no superior and no inferior. "I have said that the soul is not more than the body, and I have said that the body is not more than the soul." It used to be argued that the man who said this must have meant that there was no soul. Acres of criticism have been printed to show that Whitman was an apostle of the body. No man could have said what he said—as they maintained—who was invested with a proper respect for the spiritual nature of man. Those who have not known the history of Whitman's "Leaves of Grass" are not aware that for twenty-five years phrases like the two I have quoted made Whitman a storm-center of objurgation and diatribe. Even to-day echoes of that old conflict now and then repeat their weakening refrain. Yet Whitman's point of view is getting to be understood. It is becoming plain that instead of being materialism it is the only full and complete spiritual generalization. The old

spiritual philosophies only accounted for a part of man. Whitman accounts for the whole of man.

Whitman was under rapid fire for many years because of his doctrines affecting the body. The correspondence of those who felt constrained to protest to him directly was enormous. Even some of his friends joined the chorus of dissent. Every now and then some anonymous bulletin would arrive. Printed criticism took the field against him in terms more pungent than polite. But Whitman remained unaffected. When James R. Osgood & Co. got into trouble over the "Leaves" in Boston Whitman, rather than surrender, quietly withdrew his plates and published from Philadelphia. Once George W. Childs offered to back a production of the book provided the objectionable passages were removed. Whitman at once but quietly refused the proposition. You will remember Whitman's own story of how he walked Boston Common for hours with Emerson listening to Emerson's arguments in favor of excising certain sex poems from the book. Whitman was firm. He tells us that he could not reply to Emerson's arguments, but that he felt more determined than ever to let the tabooed poems remain. The fact was, Emerson had no arguments. For he did not claim that the poems were bad or should, for any abstract reasons, be thrown out. He simply argued that there was so much else in the book that the people should know and would appreciate that it was a shame to let the few not overimportant poems stand in the way of Whitman's acceptance by the general public. But Whitman had thought all that out to a finish long before. There was but one answer he could make. That answer he made. It was an answer of silence. But it was the sort of silence which precedes an inveterate resolution.

Now as to those sex poems. I am not going to attempt authoritatively to explicate them or to insist upon a single point of view as necessary to their successful elucidation. But what I wish to make clear is their part in Whitman's general scheme. Whitman did not write love poems epic in character and for the purpose of situations or poetic pic-

turesqueness. He wrote lyrics, rhapsodies, warnings, commands, appeals. And whatever he wrote converged to the one point. Whitman was not lawless. He was all through law. But he believed that much of our formal philosophy on the subject of sex had come down from an age tainted with ascetic ideals, or, rather, ascetic idolatries.

There is not a line in Whitman which does not counsel sex faith, sex sanity, sex moderation; not a line which does not command that any act of sex which is not sanctioned by spiritual love is unhallowed; not a line which has not a background of unqualified warning and is not full of hints of what may happen if the sinister agents of excess and of merely animal pleasure are welcomed and condoned. There is not a line in Whitman which is not preservative and does not exalt the mood of sex. To him sex contains all. Sex is all. Here are all starts and all finishes. Here is ruin if the start is wrong. Here is salvation if the start is right. You talk about the soul. But what becomes of the soul if you omit sex? Can you by any paring or extension of life exclude sex from the premiership of the man? The emphasis of sex correlates the emphasis of purity. If sex is so clearly all in all then any blow at sex is a blow at the source of life. Then any blow at sex is a social invasion besides being an individual surrender. If sex so nearly determines and places all the integers of experience, than Whitman's emphasis put upon sex was not the act of a dissolute man maladroitly an Ishmael, but the interposition of a savior who would guarantee life where it is most vitally sensitive to treachery or ignorance.

"Sex contains all," he says. "If anything is sacred," he declares, "the human body is sacred."

Whitman would often discuss this matter with his friends. People would think that if they said Whitman's philosophy was an animal philosophy that was conclusive and enough. But Whitman himself was not awed by an argument so vague and shift. "That," said he to me, "only throws the question back another remove. What is the animal? What are animal things? I do not produce the animals in argument, though much is to

be learned from them and there are ways in which we may receive our best physical lessons from what we are pleased to call the lower grades of being. What is physical—what is spiritual? I do not know. Do you? Does anyone? The point is this: We have bodies. What are we going to do with them? Are we going to abuse them? Are we going to abase them to a set of antique rules of dirt? If you could separate the body from the soul—prove that body and soul have no part or parcel with each other: that a man could maltreat his body or his soul without maltreating both body and soul—then we might perhaps live two lives, one clean and one unclean. But as all the facts seem to be the other way, as no way has been discovered of proving where body or soul stops and body or soul begins or that either really stops or begins anywhere, we are compelled to decide for temperance, health, sanity—for that line between indulgence and overindulgence, between the ascetic and the bestial, which I have tried to hint of, to reach towards, if not absolutely indicate, in the 'Leaves'."

Whitman's habits as a man accorded with his philosophy as a writer. He was fond of simple foods. He never cultivated any expensive appetites. He was not a man to go about placarded for simplicity. He did not reproach any of his friends who loved luxuries and lived the sophisticated life. He was satisfied to put his doctrine into his life. It could hardly be said that he argued for temperance or had logic or reason at command to justify it. His temperance was like his democracy. He did not come to it by a shock or an effort. He lived it by instinct. He believed in the bath. He slept in open rooms. Even in his last days his sick room had no unpleasant odors. His person was always sweet. Towards the close, when he had grown very weak, when the most trifling physical exertion was hard labor, he still insisted on bathing himself, in a movable tub, which at the proper time could be set out on the floor of his own room. He would put a chair into his tub and sit there and painfully sponge his body. When Whitman was sickest he still seemed like a well man. He was always so cheerful, always so jubilantly optimistic, that sickness

never left him its sting, and death, when death came, could claim no victory.

This leads me to an important feature in the health program of Walt Whitman. I mean his cheer. Whitman believed in the gospel of cheer. He was not a disciple of drugs. He resented the use of drugs. Drugs were an invasion. They were aggressions upon the potential perfection of the body. Drugs would only reach consequences. But cheer would get in at the root. When he nursed in the hospitals during wartime in Washington he used this weapon to great effect. He recognized it as the most potent article in the radical equipment of his personal armory. It was the fashion for the doctors in the hospitals to say of a very serious patient: "We give him up. Turn him over to Whitman." Many of these too serious cases Whitman saved. And even where he could not save he modified the conditions of their departure. Whitman was physically big and magnetic. I have in my possession wonderful letters written to him by soldiers after the war. These letters pay all sorts of tribute to Whitman's manner with the patients. One writer says: "You saved me simply by your love." Another says: "When I was just about to step out, or felt like it, you came to my bedside and life came back to me again." From the letter of another I quote these words: "I never knew before what it meant to come into the presence of a real man." One very modern letter remarks: "You taught me how little reliance is to be placed on the professional doctor and how much is to be placed in a man's ability to restore himself." A western farmer wrote: "After the doctors proposed to send me to God you sent me back to my family." This must have been one of the cases the doctors gave up. Whitman himself told me of one New England boy who dismissed the doctors, was stubbornly set against them, and who demanded to be left in Whitman's care. This lad was restored. Whitman demonstrated what could be done by a man of burly body whose animating spiritual atmosphere was charged with unshakable optimism. "What cheer will not do," he said, "taking certain cases, nothing can do." Whitman's experiments went a long way towards making a men-

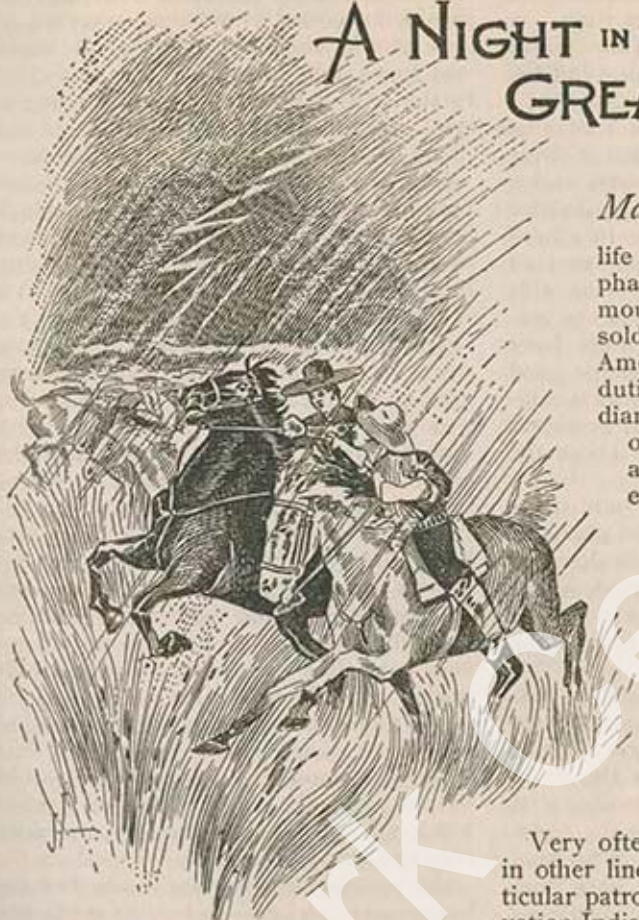
tal science record. He entered the hospitals with his body still enjoying its proudest estate. He came out physically impaired. When asked why he did not try to preserve himself he uniformly replied: "There was no question of that kind possible in that place at that time: there was only a question of work, work, work; and work I did, along through the hardest years, to the end, often with the severest cases, with the gangrenous, the putrid; until at last, one unfortunate day (or fortunate day—who knows?) I got some of that poison into my own veins. The doctors had always warned me of it. I was perhaps not cautious enough; so there it was, never to be wholly eradicated." And that was true. The effects were never eradicated. But the sentiment of disease never gained a lodgment in Whitman. He did not despair with disease. He did not acquiesce in the conditions of disease. When death seemed coming fast home he kept on saying: "We may be near death, but we will not live with that end in view." That was not because he dreaded death. It was because of his invariable and supersensual cheer. He knew death well enough. He felt it finally very near. But he kept on talking life. Not only talking life, but living life. He was the friend of his friends to the very last, contagiously happy, always possessed of bodily and spiritual poise, never a shirker, infallibly the helper and buoy of others, at all times the gladdest of companions and the first to see hope after a dark day.

Whitman saw body and soul one. He lived with body and soul where they met and mixed. He helped along the troubles of one with the surpluses of the other, both ways. That is why no man in literature before or since has said body and soul with quite the same effect, with quite the same immediateness. You may say body and say soul a thousand times and not once say them right. To Whitman the soul had no bargain with the body, nor the body with the soul, to fill a limited contract. The soul and the body enjoyed together a certain immemorial franchise. Therefore, body and soul were friends, amicably of one purport, opening free ways in their unity to the immortal continuance of life.

A NIGHT IN THE GREAT NORTHWEST

By

Mansel Brodrick Green



life in the Northwest in all its phases that I enlisted in the mounted police, a fine body of soldiers and police officers. Among their many and varied duties is that of prairie-fire guardians; during the fall and spring of the year certain numbers are told off and sent to different parts of the country to take charge of the work of keeping down the fierce fires that sweep the prairies.

The plan was to station mounted men at farm houses at intervals of about fifty miles. These men were subject to an officer at the detachment headquarters, situated in a little country town, where they were expected to report once a week.

Very often we had to exert ourselves in other lines of duty while on this particular patrol. An unruly band of reservation Indians might need subjecting, for occasionally they would take it into their heads to lapse into old-time customs and attempt to decorate their persons with a few scalps from the heads of their white brethren. Or again, a man of "leisure," who profited by bartering and selling other people's cattle or horses without having any particular title to them, would need attention. In those days horse-thieving was a capital offense, and hanging was the punishment meted out to the offender. It can be well imagined that only desperate men engaged in so dangerous a pursuit, who once confronted with a possibility of capture fought desperately for life and stolen property.

It was while riding back to the farm where I was stationed one sultry fall evening, after spending the day riding over my allotted territory in quest of possible fires, that I chanced upon the



ES, it had come to that at last, study and hard work had brought me to it. I must either give up my musical pursuits and take a long rest or *give up my life*. The former alternative seemed preferable, hard as it was to have to quit my studies just as I was reaching what some termed, "Fame."

However, by an effort of will, I decided to break away at once and go to the far Northwest of Canada, where I could get physical employment and endeavor to build up my anatomy. Though five feet eleven inches tall, I was anything but well proportioned, my limbs exhibiting a dearth of muscle and flesh.

It was in order to gain an insight into

man who was to give me that night the most thrilling experience of my life.

On the level prairies one can see for miles. Seldom is there anything but the waving prairie grass to intercept one's view; so it was not strange that just about sundown, I should discover three or four miles ahead a dark mass and a cloud of dust, which I at once decided must be either a band of horses or a herd of cattle. But why should a band of horses be roaming the prairie at this time? They should be safely in the corral. I concluded that they must have strayed, or they could be there to no good purpose. My professional instincts suggested inquiry into the matter, prudence to leave it to adjust itself. I chose the former.

The police, while being mounted on fine native horses—well fed and groomed and in the very heyday of health and good trim—were also well armed, carrying in their holsters a heavy six-shooter horse-pistol and a Winchester repeating rifle.

Once having decided what to do, I was not long in forming my plans. If the man with the band were a horse-thief he was undoubtedly from across the Montana border, and, not being familiar with the country, would bivouac for the night, for he could not otherwise hope to keep his band together during the long dark hours. Moreover, he would feel safe from any possible American pursuers, while it was too early in the game for the Northwest Mounted Police to have been notified. All this and more flashed through my mind as I rode. I decided to wait till nightfall, and then come upon him unannounced and request a lodging in his tent over night, trusting to luck for future developments. Fortunately, I had that morning laid aside my uniform and had donned a typical English riding suit, new gaiters, and a large sombrero. In this costume I could not have been very awe-inspiring, and might easily pass myself off as a newly arrived tenderfoot, and thus disarm all suspicion.

About 9 o'clock I came up with my man, who I found had chosen a bluff (a clump of trees to be found dotted here and there over the prairies) by which to pitch camp. The band of horses he had

driven in among the trees and had improvised a corral by winding several lassoes around the bluff. His own horse was just saddle-loosed and picketed close to the tent. A storm, a genuine northwest electric storm, was brewing and likely to burst upon us at any moment.

The man seemed peaceable enough, but with a sinister cast of countenance which boded ill to any one who might venture to interfere with his plans. Accosting him in a genial way I told him I had a ranch many miles away, was new in the country, and in fact had lost my way. A storm was coming up and would he be so good as to give me a night's lodging? He was frank and invited me to sup with him, saying he was a neighbor ranchman and had just come from Montana, where he had been purchasing horses for his ranch. I thought it was rather a big bunch to buy all at once, but said nothing, saying to ask him what part of Canada Montana was in and "did it go anywhere near the Rockies, as I had heard there was some fine big game there, such as eagles and coyotes." He smiled at my verdant ignorance, saying that he thought I had got things a little mixed, but that as we saw more of each other he would tell me about the country. I had not yet lost my English accent and so was easily able to carry my part.

As he wished to ascertain whether the horses were securely picketed for the approaching storm, he took his lantern from a nail in the tent-pole and invited me to go with him and see his "purchases." This was just the opportunity I wanted, for I could then compare the brand on the horses with that on his own mount. If they tallied, the natural inference would be that they all belonged to him, unless his horse also was of the stolen number. This, however, was not likely, as a man engaged in so perilous a business as horse stealing always prefers to have his own trusted and well-trained mount.

As we approached the bluff the horses began to whinny for oats, and I asked if he was going to feed them. He answered that they did not need anything as they had not done any work, but that if my mount needed a feed he was quite welcome to it from Don Pedro's rations,

naming his own steed. While he was baiting my Camel (the pet name I had for my mount) I asked permission to step inside the corral in order to see a Montana horse at closer range. He gave me the desired permission, "if I did not mind how soon my brains were kicked out." Nothing daunted I walked around and noted at once the difference in the brands which confirmed my suspicions, if they needed any confirmation, for no man under ordinary circumstances would attempt to herd newly acquired, strange horses, coming all the way from Montana, single handed.

We returned to the camp-fire, and he asked me all the questions about England and English customs he could think of, answers to which I gave him in the broadest "Cholly chappie" style. We eventually rolled ourselves in our blankets, and, bidding each other "Good night," sought a well-earned rest.

Notwithstanding my resolve not to close my eyes, I must have fallen into a doze, for the next thing I remember was the storm. It must have been at its height for some time. The lightning was blinding, the thunder terrific. The horses in the improvised corral were restive and whinnying with fright, and the heavy downpour had entirely quenched the camp-fire so that all was dark save for the occasional flashes of lightning which served only to make the darkness more intense. I lay quite still listening to my companion's heavy snoring, which told me that neither the "Cholly chappie" nor the storm had any terror for him, and he might have been as innocent of all crime as a babe, so profoundly did he slumber.

A forte of mine has always been my memory for locality, and it stood me in good stead now. I remembered exactly where my nag was tethered, and as I, too, had left my saddle on, all I would have to do would be to tighten the girths and slip on the bridle. Luckily my weapons were at my side; my host had paid no heed to them, no doubt regarding them as the "Cholly's" playthings. I always carried a knife concealed on my person for emergencies, though it did not belong to the equipment of the force. I needed it now. Being well assured by the regu-

lar breathing and occasional snorts from my companion that he was safely in the land of Nod I lifted the tent curtain slightly, just enough to roll myself outside. Having accomplished this much I sat upon the soaked ground to gather my wits. I was not long in maturing my plans. Creeping on all fours, dragging my carbine after me as trappers do, I approached my steed, and, rising suddenly to my feet, I startled him so that he could have no time to whinny. To make certainty doubly certain, I pinched his nostrils and put my head again his damp neck as I was used to do when I wished him to understand that there was something wrong and he must keep quiet. My efforts were successful; he pricked up his ears and stood stock still. The storm was still at its height, but the rain seemed to be abating.

Crash after crash the thunder roared and the occasional flashes of light showed me the corralled horses in mortal terror. I knew that once I got them started in the right direction they would go like the wind. The horse-thief had come from the southeast, my direction to Estevan—a border town where my commanding officer was stationed—was southwest.

Flinging myself into the saddle, I urged Camel toward the corral, and drawing my knife cut the ropes on the southwest side of the bluff. Riding around to the opposite side I charged the terror-stricken horses. The effect was instantaneous; they struggled against each other, heads over backs, in their effort to be first out and away, and it was not many moments before they were sailing in almost a due southwesterly direction with Camel and his rider in hot haste after them. Suddenly I heard a shrill whinny from behind us and I knew from that moment it was nip and tuck and the prairie wolves for the loser, for I had overlooked Don Pedro, who hearing his mates galloping off must needs call to them to be taken along. "Well, you'll be along in a moment," thought I, and sure enough, presently I heard the thundering of horse's hoofs behind me—pound, pound, over the besodden prairie.

"Nip and tuck is the word," thought I. The storm still roared and crashed, the horses still stampeded with Camel follow-

ing, while ever nearer drew the sound of the pursuing steed.

A sudden flash illuminated for a moment the situation, and I glanced over my shoulder. The thief was crawling up inch by inch, and it was only a few moments ere he would be alongside of me.

Suddenly there was a report and a bullet whizzed past my ear. Still we held on our mad career.

It was indeed a race for life. Another roar from heaven's artillery. I whipped out my revolver, and turned in my saddle. The lightning flash revealed my enemy close at my side.

We both shot simultaneously, and I felt his bullet whiz by my ear. I saw my opportunity and knocked his weapon aside, then ordered him to surrender in the Queen's name.

"Only to the devil," he gnashed between his teeth.

"The same take you then," I growled, and we clinched.

Luckily, he had ridden up to my left so that my right arm was free. Quick as a flash I threw my reins over the neck of his horse, and twisting my leg around the stirrup strap or leggediero of my saddle to prevent him from pulling me off, I flung myself at him and we swayed to and fro like drunken men. For some unearthly reason he did not try to shoot again after we first came in contact, and I can only explain it on the ground that he rather admired the pluck of the stripling and never dreamed but that he would come off the victor.

The thunder roared, the rain came down in a deluge, and again our horses, which a few moments before had almost come to a standstill, broke into a gallop, and as their riders fought and struggled their terror increased.

Twice the man managed to get his horny knuckles into my kerchief, but I

bruised them so soundly with the butt of my pistol that he relinquished his hold. It was so dark that I could not discern his movements, until a sudden flash showed him standing in his stirrups and towering high above me. Another moment and he would have crushed my skull with the butt of his rifle, but I threw myself back and the stock was shattered on the horn of my saddle. The unexpected often happens. The man lost his balance—he had put such force into the blow—and he fell almost across my horse's neck. Quick as the recent flash I struck him behind the ear with my pistol and he lay there like a log, as one dead. The horses galloped on, but I scarce sat my seat, so dazed was I. Drawing our horses to a standstill, I exerted all my strength and transferred my prisoner to his saddle with his head hanging to one side and his feet dangling on the other. I then handcuffed him and taking Don Pedro's rein put the horses to a walk. The storm had well nigh spent itself and daylight was breaking. The stampeded horses had recovered from their fright and were grazing about a mile ahead, while my own Camel and Don were foam-bedecked and steaming.

As the daylight approached I gradually found my bearings, and getting my little calvacade in motion by noon I had prisoner and horses safely landed at Estevan. So ended one of the most remarkable expediences in my career in the Northwest.

I spent a few more months in the police and then realized that I was a "new man." I decided to return East and take up my old work. And what have I gained? Health and Happiness, Peace and Equanimity, a fine body, six feet now, with a chest measurement of thirty-nine inches, well rounded limbs, powerful thighs, and a symmetrical trunk. Am I not many times blessed?



THE IDEAL MALE FIGURE

By Gilman Low



THE best way to become familiar with the ideal human form is to study the masterpieces of ancient and modern art, both in painting and sculpture, until we are perfectly familiar with them. Then by persistent efforts in training we can in some degree approach these ideals. There are a few among our modern athletes of to-day who in some ways almost rival the ideal Greek in form, weight and height.

The best representations of the ideal form are the masterpieces of some of the modern sculptors, such as Michelangelo and David Antonio Canova. "The Pugilists," by Canova, especially represent the ideal athletic form, equally developed throughout. No better examples exist in the world to-day than these two warriors, from the Roman school of sculpture.

There has been much controversy during the last three centuries as to whether the ideal figure should be 8 or $7\frac{1}{2}$ heads in height. It has taken 200 years or more to come to anything like an agreement. Each generation of sculptors has had its say, including all the Greek and Roman sculptors of note. Even as far back as the Pharaohs the eight-head figure was the standard.

This was finally reduced to $7\frac{3}{4}$ heads by the persistent and progressive sculptors of Rome, Greece and Italy. It remained at that scale for many generations.

The scale of proportion gradually changed, and the heads of all the models of most of the noted sculptors and painters of the day began to increase in size, till the figures began to assume the proportions as they stand to-day. The change of proportions in the figure from $7\frac{3}{4}$ to $7\frac{1}{2}$ heads was so gradual that it was not

felt; not even remarked upon at the time. For it was some time after the acceptance of these proportions that the general public became aware of the change.

The proportions, as they stand to-day among the best sculptors and painters of the world of art, are comparative proportions. No sculptor or artist of any note pays any attention whatever to girth measurements; symmetry is his guiding star, and many of the gigantic, heavily-built, huge-muscled men of to-day are not in any sense pleasing to the truly artistic mind and temperament. The proportions, as used by artists, are as follows:

The figure, to be perfect, should be $7\frac{1}{2}$ heads in height. From the roots of the hair to chin, first head; from chin to nipple, second head; from nipple to umbilicus, third head; from umbilicus to os pubes, fourth head; from os pubes to just above the knee, fifth head; from just above the knees to just below the knees, sixth head; from just below the knees to just above the ankles, seventh head; from just above the ankles to the heels, seventh and a half head.

The comparative proportions are as follows:

The face (measuring from the roots of the hair to the base of the chin), hand, instep, and width of shoulder from neck, should all be equal in length. The foot and head should be equal in length. The figure, with arms extended laterally, should form a perfect square; that is, the measurement from the extreme tip of one middle finger to the extreme tip of the opposite one should equal the height.

The comparative measurements of the head are as follows:

From crown of the head to the roots of the hair should be one-quarter of the entire head; from the roots of the hair to the root of the nose a second quarter; from the root of the nose to the base of

the nose a third quarter; from the base of the nose to the base of the chin completes the last quarter.

The ear should be on a level with the

Taking the point in one eye, midway between the pupil and corner, and extending across the root of the nose to the same point in the other eye, you have

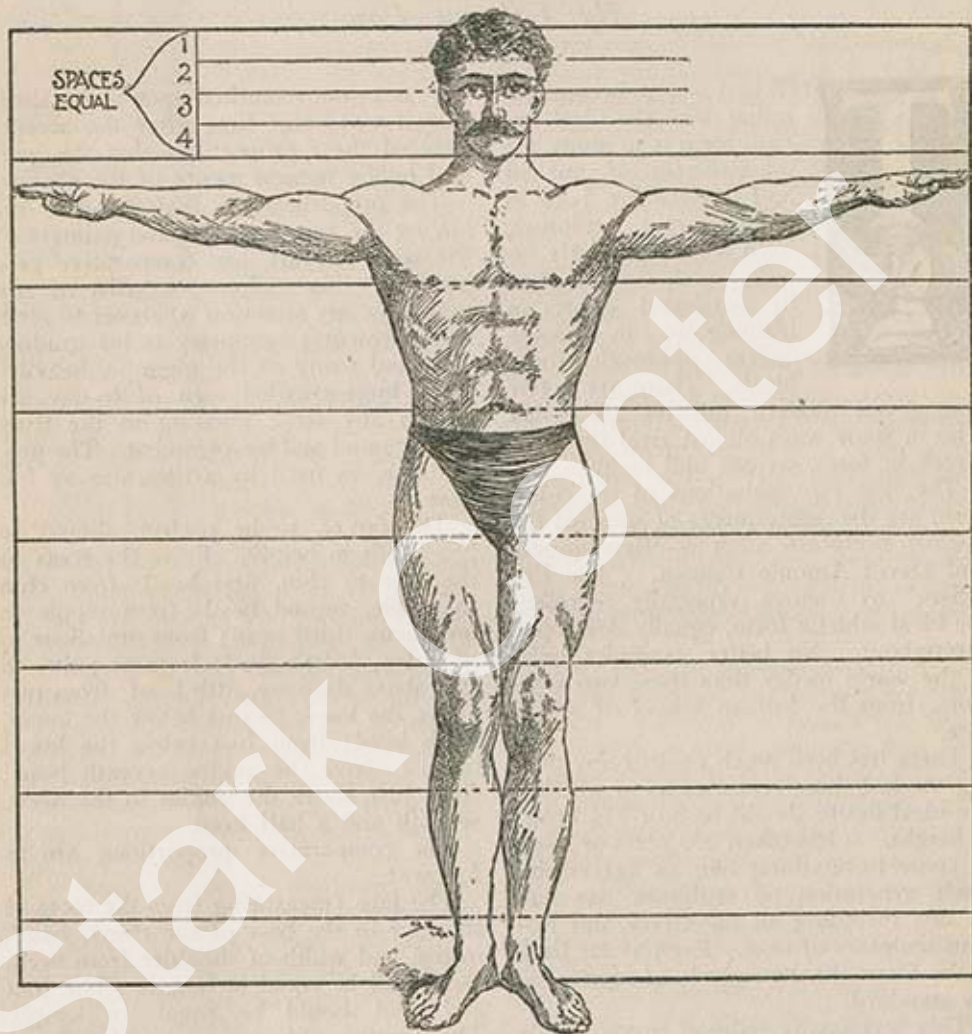


Diagram showing the division of body into heads according to the ideals of some famous masters of art and sculpture

root of the nose, also equal to the length of the nose; the space between the eyes, and the width of the nose at its base, should be equal to the length of an eye.

the length the mouth should be.

With these proportions (if you have them) you are on the border of perfection.



WHEELS AND WALKING

By R. E. Pengelly



NOT only little children, but men and women, are blessed with certain extensions of the anatomy which Nature suggests should be used for purposes of locomotion. There is every reason to suppose these extensions have existed in about the same proportions as at present, from the earliest time. They have not evolved into anything much better than they were when Adam walked around the Garden of Eden; neither do they seem to have deteriorated much—which last is not the fault of men, for their one aim from the beginning has been to get about with the least possible use of them. Man, as a creature, resents having to walk, and always has. To-day he resents it, and the fault is laid at the door of a hurrying, scurrying age. He needs to get about more quickly than he can walk, it is said. Well, well. It is fair to excuse one's own age; but go back. It is not so long ago when it was everyone's ambition to be carried in a sedan chair; and how much more expeditious or reasonable was that method than that of Shank's pony?

No. The distaste for walking is an example of inherent laziness. A love of walking is a cultivated taste, a mark of determined character, an attribute to be proud of. It adds a spice of the heroic to a man's nature—as if he said to himself, "Lo, I will cultivate these awkward and trying elongations; they shall bow to my will, learn to do, to dare, to endure; they shall be taxed and tried; they shall become strong." And by this means the man acquires a reputation for extraordinary strength of mind, or extreme eccentricity, according to his environment or mode of life.

The wheel is undoubtedly responsible for the modern aversion to walking. It is so much easier to propel one's own

weight, and twenty pounds of iron into the bargain, so it be thrown on to the center of the revolving wheel. The wheel is the fulcrum on which rests the lever which moves the world. Take it away, and the modern social systems of the whole universe shall receive their death blow. Steam, electricity, petroleum, would all stop short in their use to man were there no wheel to cajole and persuade and force.

Having made locomotion so easy and rapid by its means, man directs all his energy to minimizing the physical effort which is still necessary for its adequate use. The cycle, a wonderful achievement fifteen or twenty years ago, is now, except by enthusiasts, voted hard labor, and every nerve is being strained to save man's muscle, and drive even that light machine by brain power, as it were, instead of muscular. The time is not far distant (unless something is done to stop it) when motor cycles will be almost the only form of cycles in use. Even the horse will, in his turn, give place to mechanical power; visions of horseless cities are on the verge of merging into substantial facts.

It must be supposed that this tendency of all ages to move about quickly, with as little physical effort as possible, is a good one, generally speaking, for the advancement of the race. The greatest advocates of the naturalness of men were as prone to its temptations as the ordinary run. Ruskin inveighed against the wheel in all the forms in which it supplants human muscle, perhaps more than any modern writer. Railways especially were anathema to him. Yet he was fain to travel by the train, grumbling the whole time. If his spirit inhabits the world a hundred years hence he will probably travel in somebody's glass-bound airship at the rate of about 200 miles an hour or more. The whole of the detail, as well as the essential principles, of the planet, will eventually, it seems, be conducted on a circular or rotary system.

The Degeneration of the French

BY MAURICE MAGNUS



THE decrease in the number of births as compared to the number of deaths in France is largely due to the low physical standard on which the French are raised. The military drill in French schools is of no material consequence; it amounts to no more than a half hour's romping about in a school yard, and this is all that the French boy gets in the way of exercise and development. The child is sent out daily with his nurse for a walk, or plays with other boys—no more exercise than any living being would have under most adverse circumstances. No wonder, then, that he is small in stature, puny in appearance, and that his clothes hang on him unfashionably; that he envies his English neighbors for their fit, their walk, their sturdy and healthy appearance.

All the English tailors could not make him look like the detested Britisher across the Channel. But, no wonder that he is the culmination of all the vices, that he craves but for the highest sensual delights, that the pleasures of health and robustness play no part in his life, and that his artificial ecstasy and morbidness

are only the makeshifts for the greatest gifts of existence.

It is not the outcome of his mode of life to-day, but the outcome of his mode of life yesterday. If he altered his mode of life to-day, the outcome to-morrow would show visible results. One generation, and the tables of births and deaths would be turned from what they are now, and if the Frenchman of to-day were only father in theory and practice of physical development, how bright would be the future for the Frenchman of to-morrow. But gradually, very gradually, the health of the French has been ignored. Intellect was developed to its highest point; the pleasures of the senses followed, and were abused to such an extent that the physical health necessary even to them was forgotten. Instead of generating the higher and better pleasure, only pleasures of the meaner sort, which in themselves were suicidal, were the natural growth. What pleasure can be generated from a mind and body already in its last stage of health? Nothing but a morbid desire, ecstatic, perhaps, at the moment, but leaving a remorse that is not healthy even in itself, and which leads to violent states of pessimism and melancholy. No nation could be made stronger or more easily developed than the French. Their quick wit and ready acceptance of things show an adaptability which is by no means over-estimated.

A French physician once eloquently explained to me the naked facts of the degeneracy of his fellow-countrymen:

"Ah," he said, "we have inherited all the vices of our forefathers, and with them their physical ills, and ills brought forth by those vices. We have made no attempt to eradicate those ills or illimit those vices, nor have we striven to restore our vigor by the infusion of healthier blood. We have allowed no new force to enter into our life. Since 1870 we discourage even German marriage; we

keep among our own caste, who with us are heir to all the ills we are heir to. We do not try to develop what physique we have; we allow our children to drift on in the same channel without trying to correct them. How can we expect anything else but even stronger passions, more concentrated vices, as the immediate result of our own physical degeneration? We become weak. Instead of a walk or some healthy exercise, we brood and scintillate, as the case may be, and instead of living in equal proportion, physically and mentally, as Nature has meant us to live, we live purely mental lives at the expense of Nature and our physical welfare. Instead of excellent, healthy foods our palates have acquired almost unconquerable tastes, to which we sacrifice all substantial foods and proper nourishment.

Instead of healthy drinks, we drink concoctions that stimulate our mentality still further, at the expense of the body, and bring forth desires that are yet more craving—more raffine."

"Remember, I am a Frenchman," he continued, "and a loyal Frenchman, and I am speaking of my own people, but I have to tell the truth impartially and unprejudicedly. I am more doctor than Frenchman, and I deplore the fact that the health of the people I love most is so obviously degenerating, while I stand a spectator of the tragedy.

"Alas! for France and the French. They may yet regain their former pre-eminence, but when Health goes, everything goes—Fortune, Future, Eminence, Power—and there is no glory left but the Past."



OUR MODERN PUBLIC SCHOOL.

Ram it in, cram it in,
Children's heads are hollow;
Slam it in, jam it in,
Still there's more to follow;
Hygiene and history,
Astronomy, mystery,
Algebra, histology,
Latin, etymology,
Botany, geometry,
Greek and trigonometry;
Ram it in, cram it in,
Children's heads are hollow.

Rap it in, tap it in;
What are teachers paid for?
Bang it in, slam it in,
What are children made for?
Ancient archaeology,
Aryan philology,
Prosody, zoology,
Physics, climatology,
Calculus and mathematics,
Rhetoric and hydrostatics;
Hoax it in, coax it in,
Children's heads are hollow.

Scold it in, mould it in,
All that they can swallow;
Fold it in, hold it in,
Still pinched, sad and pale,
Tell the same unvarying tale,
Tell of moments robbed from sleep,
Meals untasted, studies deep;
Those who've passed the furnace through
With aching brow will tell to you

How the teacher crammed it in,
Rammed it in, jammed it in,
Crunched it in, punched it in,
Rubbed it in, clubbed it in,
Pressed and caressed it in,
Rapped it and slapped it in,
When their heads were hollow.

Arthur's New Home Magazine.

SYMPATHETIC.

Toastmaster (to chairman of public dinner)—Would you like to propose your toast now, my lord, or should we let 'em enjoy themselves a bit longer. —*Punch.*

THE RELATION OF BODY AND MIND

By R. Dimsdale Stocker

AUTHOR OF "PHYSIOGNOMY: ANCIENT AND MODERN"; "THE LANGUAGE OF HANDWRITING," ETC., ETC.



SPECULATIONS concerning the basis of the mind have engaged the attention of philosophers for ages. Theories of all kinds—theological, transcendental, rationalistic and materialistic—have been propounded to account for the various passions and sentiments, and the phenomena of reason, reverence, perception, anger, love, fear and the rest, which have surged within the human soul.

Spirits of good and evil have been postulated as the source of what we are pleased to term our "virtues" and "vices"; and, generally speaking, until the present era of scientific enquiry, investigators into such questions have pursued a method of analysis which prompted them to turn their gaze "within"—or, in other words, to sit in judgment on their own mental processes—for information upon the subject.

Any such mode of investigation, beautiful as it may seem to have been theoretically, was bound to fail, as indeed it has failed, in the long run, or practically.

So long as "the soul" was conceived of as an immaterial entity, abiding alone, and distinct from the body, and whilst mankind was regarded as dual in its nature, mental philosophy could not be applied satisfactorily; we were left groping in the dark, wondering what the being, called "man"—godlike and devilish alike by turns—could possibly be.

The doctrine of "grace," and of "original sin" in no way rendered the enigma the easier of elucidation. Indeed, it rather complicated what was at best but a perplexing problem. And it was not until the theories of the phrenologists*—Gall, Spurzheim and Combe—came to be fully

* This term must not be understood to apply to any theory of "bumps."

appreciated, as they were early in the nineteenth century, that the way was paved for an intelligent comprehension of the "mental" organization.

Then it was that men came to see that "mind" was an universal principle, and that it was manifested, not only by members of the human species, but by man's ancestors, the brutes, which he had hitherto looked down upon. This, again, enabled him to locate certain "faculties" in particular regions of the brain; and as he compared crania and watched the habits of both his fellow-creatures and the beasts of the field, he came to see that form illustrated function and so enabled him to predict from a given configuration of skull the nature of the possessor thereof.

But although this accession of knowledge on our part was a step in the right direction, it was but a partial exposition of the problem which we had set out to solve.

We have since found that "character" is indicated not alone by the conformation of the skull, but rather by the *entire physical constitution*.

We find that broad heads accompany wide bodies; and that narrow, tall heads are allied with slim, slender frames.

Now, what does this go to prove? This: That, although the shape of the head may depend principally upon the form of the brain with which it is associated, the shape of the body must bear an anatomical relationship to that of the head. Hence, that mind and body are one—at any rate, in so far as we are able to study the former.

Doubtless, the brain is "the organ of the mind;" but that it is not the mind's sole and exclusive "organ" is proved, inasmuch as we find that mentality may be almost entirely inhibited if we but interfere with the circulating and respiring apparatus to any extent. Indeed, it is not too much to say that "brains" alone, un-

less they are accompanied by an *adequate* condition of the viscera contained in the trunk of the body, are a positive hindrance rather than a help.

"Nerves" are not *ability*; we require a mutual adjustment and balance between all the several component parts of the organization—of blood, and bone, and muscle, and flesh, just as much as nervous substance—to promote real vigor and power.

The mind may be dependent on "superior" means of subsistence to that which the physique affords; but that it is frequently hampered in its manifestation by such a humble (?) contrivance is certain.

During my study of human science, and particularly of that branch known as "physiognomy" (which has occupied ten years of serious investigation at my hands), nothing has shown me more conclusively than the human face that mental conditions are practically identical to all intents and purposes.

The man or woman of such well-ordered *mind* has a well-ordered *face*—and this means that each set of physical organs and functions is well-ordered also.

Such terms as "bowels of mercies," the "jaundiced eye," "hearty," the "milk of human kindness," and such like, are no mere figures of speech. They actually express the true facts of the case.

Certainly "brotherly love" may not be dependent on the bowels for its existence, as an abstract principle, I grant, but that a *well-ordered digestion alone* will ensure good nature, active generosity and friendliness we have very good grounds for believing. A man with sunken cheeks and a pinched, "saplen," insalubrious look, is generally not only a very poor specimen of humanity physiologically, but he is seldom seen among the ranks of mutual improvement societies of Masonic assemblies, or at social gatherings, indeed, of any kind.

A man, again, whose liver is disordered, and whose complexion is sallow, whose eyes are of a yellow tinge, and whose nose is pinched and drooping at the tip, rarely takes a reasonably sanguine view of things. He is never bright or cheerful, lacks animation, and is torpid and needs stirring up—quite as much as his liver. He has none of the warmth and

buoyancy that the individual whose liver is active, and who is rosy and bright-eyed in consequence, possesses. A man of the former type may "seek salvation"—but he will never find it—here below, with his liver—until he takes measures to adopt a hygienic life.

The person with a fine thoracic system, with good chest measurement, and a well-developed nose, with expanded nostrils, is sure to be far more "hearty," emphatic, quick, ambitious, hopeful and progressive than his narrow-chested brother, whose contracted air-passages and chambers prevent him from throwing himself enthusiastically into anything—even into his own body!

The expression "milk of human kindness" is by no means figurative. Affection and love appear to be very intimately connected with the action of particular glands. Where would the "woman's love" be if we robbed her of her breasts? And where were masculine virility unless the male sex were in possession of other equally radical organs.

Dr. Maudsley, in his recent work, "Life in Mind and Conduct," has some suggestive remarks to make upon this question of form, faculty and function. "Give the tiger," he says, "the sheep's foot and tooth, and what would become of its fierce and destructive proclivities? Give the sheep the tiger's tooth and claw, and how long would its inoffensive meekness last?"

This may be "putting the cart before the horse," but, apart from such an objection, there is very much to be said for Dr. Maudsley's theory.

Faith, eloquence, music, even artistic feeling itself, are little else than emotional impulses, which are, after all, indebted directly to the play of the *muscles* for their illustration. Where were the art of the actor, of the painter, of the sculptor, and musician, without the requisite apparatus in the shape of curvilinear extremities and features, signs of muscularity—to enable the exponent to turn his "gift" (whatever that may be) to account?

The fact is that the conclusions to which a study of organized life leads us to are these:—that *mind and body are an unit*, and that mental effort, of any kind, whatsoever, necessitates that the tissues of

the anatomy, as well as the physiological constitution, be sound and so tempered together as to produce harmony and efficiency in every department of the organism. True it is (and medical men are coming to see it clearer and clearer every day), that if one member suffers, all suffer with it.

You cannot be as vigorous and as sound in health, nor so competent in character, if you are suffering—if it be only from the effects of a cut finger or a painful corn on your toe.

A well ordered and perfectly nourished body promotes a healthy interest in life.

Editor PHYSICAL CULTURE:

Dear Sir: I cannot resist writing you to let you know that there is one man in Astoria who is talking physical culture with all his might.

I never knew how to live until I began to read your magazine (PHYSICAL CULTURE). Up until about two years ago I suffered from constipation and indigestion. Now I don't know what it is, and I have learned that there is no excuse for anyone being troubled with constipation and indigestion. Every winter I used to catch a bad cold which left me with a hacking cough. Last winter I did not have a cold all winter long, and the whole secret was knowing how to clothe myself, how to diet and how to bathe.

I would like to devote all of my time trying to teach people how easy it is to enjoy good health and avoid paying doctors' bills. I buy several copies of both PHYSICAL CULTURE and WOMAN'S BEAUTY AND HEALTH every month, and send them away to friends, and I am sorry that I cannot afford to buy more of them. I learned a great deal from your book, "Strength from Eating."

Wishing you all the success possible,

Very truly,

E. E. MERRILL.

69 Monson Street, Astoria, L. I.

Editor PHYSICAL CULTURE:

Dear Sir: I owe you and your valuable little paper so much that it would be injustice should I not let you know the good I have received from it.

Last March, while on the road, I bought your February number, and after reading it carefully I decided to diet and begin to exercise to see how much good it would do me.

I had at that time a very bad stomach and could not eat fruit nor sleep well. I ate meat three times a day, was never satisfied, and weighed but 133 pounds. It was pretty hard for me to leave meat alone, but I decided to at least try the diet which you advocate. I am glad to say that I have not eaten one pound of meat since.

Deep breathing makes for courage, energy and mental, moral and physical activity, as well as for lung power and circulatory vigor. Even *memory* is largely a matter of health and muscular development—and rest assured that where we see *mental degeneracy* of any kind—which proceeds from each of concentration and volition, quite as much as from a want of sensibility and intellectual susceptibility—we may be perfectly certain that there is evidence of physical inferiority also.

"The soul is form,
And doth the body make."

The following will explain itself:

March, 1902.	July, 1902.
Height, 5 ft. 7 in.	5 ft. 7 in.
Weight, 133 lbs. stripped	149 lbs.
Chest, normal, 31 in.	33 in.
Chest expan., 34 in.	37 in.
Waist, 29 in.	27 1-2 in.
Right arm up, 10 1-2 in.	12 3-4 in.
Left arm up, 10 in.	12 1-2 in.

Age, 22.
I can now eat any kind of fruit, sleep well, and enjoy life.

I wish to state that although vaccination was compulsory in Pittsburg, I was not vaccinated and never intend to be. I was vaccinated at the age of three months, but the vaccine did not take effect, I am glad to say.

Very truly,

D. W. PRISSEAU.

246 Third Avenue, Pittsburg, Pa.

Editor PHYSICAL CULTURE:

Dear Sir: Having read PHYSICAL CULTURE for some time, I cannot refrain from writing to you. I am a young man twenty-one years old, and until about a year ago really never did know what it was to be well and strong. About that time I accidentally got hold of one of your magazines, and I am now one of your most faithful followers, who does not refrain from speaking his mind openly on the medical question, condemning all druggery, and expounding your theory at every available opportunity to the best of his ability, which, if not very brilliant, is at least sincere. I have been greatly benefited by the physical exercises and advice given by you in your magazine, and I fully appreciate the value thereof.

I was greatly troubled with indigestion up to about a year ago, but since I adopted your "two-meal-a-day" plan, have been constantly improving in body as well as in mind.

Yours truly,

AUGUSTUS A. NOELTE.

469 Fulton Street, Troy, N. Y.

THE MAYOR OF TOLEDO IS A THOROUGH PHYSICAL CULTURIST

DEAR MR. MACFADDEN :

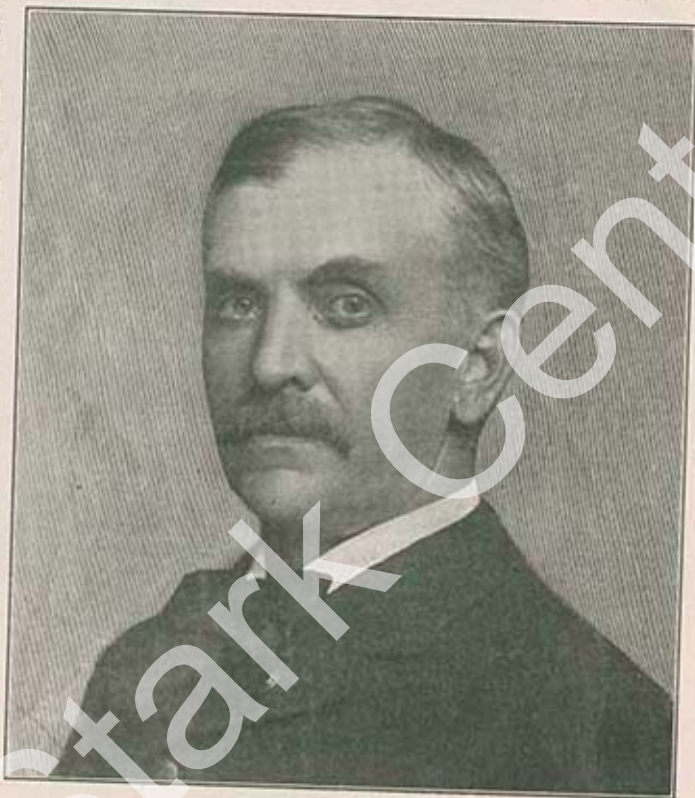
Replying to your request for something about my outdoor sleeping apartment, I send you a photograph, and have to say that I find the experience of sleeping in the open air delightful and healthful beyond my fondest expectations.

I first tried sleeping outdoors in northern Michigan last summer, and as I would lie prone on my back looking up into the immensity of space, I found it a great opportunity for the expansion of one's thought, for "hitching one's wagon to a star." During these times I fell to reflecting upon the importance of air as compared with food, and though in our common life the emphasis is all placed upon the food, it being everlastingly dinged into our ears that a man must eat, yet I reflected that the relative importance of each is indicated by the fact that while one can live only a few minutes without air, it is possible to live weeks and months without food, provided we have plenty of air and water; and so sleeping outdoors, I would fall asleep with the thought in my

mind that I was drawing great drafts of life in every breath; that I did not have to take it warmed over, poisoned or mixed with the fumes or gases of an unhealthy nature, but that I could breathe health and life straight from head-

quarters.

On awaking in the morning, the first thing I do is to repeat the deep breathing operation. Then on rising, I take a lot of exercise, usually topping off with a little heavy work, such as, for instance, standing on my hands with my feet against the wall and lowering my head to the floor and rising several times. I have practiced



Mayor Jones of Toledo
(The Golden Rule Mayor)

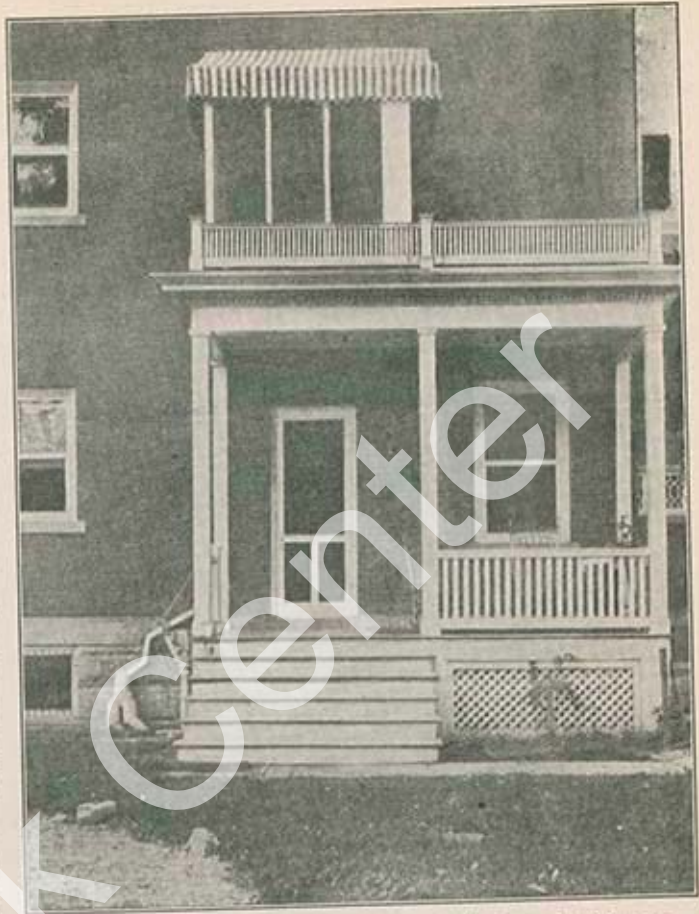
the head-downward work a good deal, believing that to be helpful in getting rid of catarrh, that I have had for thirty years, and the asthma that has bothered me for the last ten years.

To-day I have practically the strength and vigor that I had at thirty or thirty-five. Though I am nearly fifty-seven years *young*, I can to-day run as fast as I ever could, jump as high, kick as high, stand on my head, stand on my hands, do a great many stunts on the hori-

zontal bar and flying rings—in fact, do anything I could do when I was a boy and a lot of things that I have only recently learned, and, best of all, I feel positively certain that I am on the road to perfect health.

Two years ago, I was so bad with asthma that I had seven straight months in which I never missed one night in which I did not get up from once to three times to burn nostrums to get my breath. I am so much improved that I have not had a dozen serious attacks in a year. I used to weigh two hundred and five pounds; I now weigh one hundred and sixty pounds, and I believe that I could do a day's work of common labor and stand it as well as I could twenty-five years ago.

I believe in PHYSICAL CULTURE, and I think the teaching of this magazine and the work of the physical culture advocates throughout the country are doing a whole lot to develop the real American, for we shall never have the real American until we have a race of healthy, able-bodied fathers and mothers. Good health is the basis of good citizenship, for health means harmony, and harmony means happiness. But I think it will be well if physical culture teachers will emphasize the truth that the very best form of physical culture is that which is attained when the energy is expended in productive employment. It is commonly admitted that people who "work" do not need physical culture; they get the necessary "exercise" at their work. Very well, then, why not convert exercise into work and actually do something? It may be said that it is not convenient for all to have work for exercise. Perhaps



View of Mayor Jones' House, Showing His Open Air Sleeping Apartment

that may be true at present, but the best of us can find some work if we really set ourselves about it. I am sure I should far rather saw wood than go through the motions of sawing wood. It would add very much interest to the exercise to see a wood pile growing smaller on one side and growing larger on the other; to know that I was ministering to human needs. I should rather row a boat and have the benefit of the open air and the freedom suggested by being on the open water that nobody owns—our water—than to pull a rowing machine in a gymnasium. And so with woman's work. Plenty of household work is the very best kind of exercise, and if the "fine ladies" would set themselves to it instead of thinking that they are God's favored ones because they are able to pay other peo-

ple to take the part of slaves and do their work, they will find that it will bring the color of the rich red blood to their cheeks and strength to their arms and legs that they never can buy with all their money, or get possession of by the aid of any claptraps of the doctors. Sweeping a room is splendid exercise; dusting a ceiling is the very best kind of over-head work; turning a mattress will develop the biceps and the muscles of the arm, chest and back quite as well as exercise; and, finally, making a bed and putting a room in order is a real work of art when done properly, provided, of course, that the room is not littered with gew-gaws or bric-a-brac that is made for no earthly use except to make work; for, be it remembered, that the work that comes in taking care of useless things has not even as much spiritual value as that which attaches to exercise. Dusting, polishing and placing useless things—things that do not minister to human needs—this is the veriest drudgery and by all means ought to be avoided.

Yes, let's have exercise and lots of it; let's get as much as possible in the open air. Let's have done with drugs and doctors, and let's learn to believe in God, believe in the good that is within ourselves, and to have implicit confidence in the potency of Nature's forces. She is willing and able and ready to take care of herself.

Finally, let me say that I do not care a hoot for the criticism and fun that people have over what they call "Jones' fads." The local theaters have had many a laugh over my physical culture ideas, and I am glad of it, for one can hardly have a hearty laugh

without being the better for it. It illustrates, however, the depravity into which the "refined" and "cultured" men of to-day have fallen. It is really believed in refined and cultured quarters that to be dignified a person occupying the mayor's office or occupying the position of a business man should move about with great deliberation, should be careful never to run or go at a rapid walk, but proceed slowly, if, indeed, he ever ventures to walk at all; the proper thing for such a person to do is to ride in an automobile, be attended by a valet, eat dinners of five courses, have his own private physician and very often terminate his career with apoplexy, "honored and respected," of course.

Now, I am perfectly willing that every one who wishes to adopt this program shall do so. I do not ask any one else to be able to run because I do, but I delight and rejoice in having the strength and ability to run; and as for being ashamed of the fact that I can stand on my head, I am proud of it, and thank God that I have a head to stand on; and to conclude, let me say, in a word, I am more thankful for having learned that the source of health and strength and life itself is in the elements, is within one's own self, than I can find any language to express.

Yours for physical culture and the raising of able-bodied fathers and mothers for the future of America.

Sam Jones



MUSCLE AND HEALTH FOR BOYS

By *Bernarr Macfadden*



A Nine-Year-Old Boy Who Shows the Remarkable Results of General Physical Training

to be men, and I know that you all wish to be strong men. I have never seen a boy who did not desire strength. All his ideals are strong. If the boy had the making of himself he would be a big, fine, courageous man.

And now, before I go any further, let me try to impress upon every boy that he does really make himself. Of course, I must admit that inheritance has considerable influence. If your father and mother were very strong you would naturally inherit considerable strength. But, even when inheritance is considered, you have within yourself the power to make yourself almost what you choose. You can be strong or weak, ugly or handsome, healthy or diseased, just as you desire. It all depends upon yourself.

And now, boys, I want each one of you to take up the exercises I am going to illustrate in this department and practice them faithfully. They



WOULD like every one of my boy readers to look upon me as a special friend, for I want you all to grow into strong, magnificent men.

I was a boy once. In fact, I feel like a boy now. I expect to feel like one all my life. And, boys, I would advise you never to grow dignified, unyielding, phlegmatic. You all want



EXERCISE No. 1—This Photograph illustrates an exercise or contest that boys will find very interesting. You notice that the boy on the right is holding his left thumb tightly in his right hand. The boy on the left is endeavoring to pull the hands apart. Ordinarily it does not require a great deal of strength to hold the thumb tight enough to prevent your opponent from pulling your hands apart. The positions should be reversed that each boy can get all the exercise that can be secured from the contest.



EXERCISE NO. 2.—First let one boy lie flat on the floor, keeping the body perfectly rigid. Now interlace the fingers underneath the head and slowly raise your companion to the position shown in illustration until you get him upright on his feet. It is particularly important in this exercise that the boy who is being raised keep his body perfectly rigid and hands at side, as shown in illustration. This Exercise will use nearly all the muscles of the body, when each boy alternately assumes the reclining position. It is rather vigorous, though should not be otherwise than beneficial to boys accustomed to active play.

will broaden your shoulders, deepen your chest, brighten your eyes, make you more vigorous and healthy and happy. Write me a confidential letter once in a while and tell me how you are progressing. Of course, you must remember that I receive thousands of letters, and you cannot expect me to answer



EXERCISE No. 3.—Stand by a chair or low table in position shown in illustration. Now keeping the body rigid, straighten the arms, raising the upper part of the body. This is especially good for the development of the arms and chest, and if a boy will practice deep breathing exercises with this, it will make a very radical improvement in his chest and shoulders.

every one, but you can depend upon it that every letter that contains words of appreciation or suggestions is read with great interest.

I want this department to be for the boys. I want my boy readers to take an active interest in it. There are many boys who may have suggestions to make that will help me make this department interesting. And remember that boys are a great deal alike. What one likes another would usually favor. So send on your suggestions and I will do the best I can to make this department not only of the greatest possible interest, but will give exercises and advice herein that I am satisfied will make every one of you stronger and healthier and better in every way.

THE FOUNDATIONS OF A FAMILY

By Camillus Phillips

IT would, perhaps, be too great an estimate to say that, in the United States to-day there are eighty millions of people whose chief aim in life is to found a family. And yet, in all civilized life, where marriage, and inheritance, and a decent pride in progeny prevail, the founding of a family of more or less merit and distinction is part of life's daily affairs.

Social conditions here, particularly during the past ten years, have become more and more uneven, if not unequal. Fortunes have run to so huge an estate, in the very lifetime of their creators, that wealth of Croesus' greatness has proved empty and disappointing at the last. Like men of all other nations, and all other times, Americans are turning from satisfaction in the possession of wealth—which they thought, formerly, must be the most complete happiness in life—to the primal instincts, of which the longing to see one's prowess and one's strength perpetuated and embodied in descendants, has ever been a conspicuous feature.

Superficially informed, not a few of our more pretentious and affected Americans have taken to the adoption of coats of arms, for the mere reason that the possession of a crest was some sort of a patent of distinction. The main value of the heraldic device—and the only real value—has been almost entirely overlooked.

Originally the device in heraldry was given for some noteworthy feat of arms, or some remarkable exhibition of the qualities that go to make the strong, healthy, loyal and resolute man.

To-day, the qualities of body and mind which won esquires in mediæval Europe to the honor of knighthood, are

the very qualities which in the tremendous struggle of industrial and commercial competition, fit a man to rise above his fellows, and to leave to the men of the family he may found an inheritance of force, vitality, intelligence and courage; and to the women, health, virtue, and honorable pride of family. Parallels could be found in every city of the country for the deeds of daring or the examples of mental clarity which have been told, in the romance of chivalry, or in the traditions of nations, in connection with the coats of arms that serve as playthings in an American society that has no comprehension of their true and wonderful meaning.

Every one of these old devices tells a dramatic tale of the sound mind, of the sound body, or of both. Every man who gained the honor first, had acquired, by steady discipline and hearty life, the right to lead his fellows. When he came to wed, and to found a family of his own, he transmitted, in a greater or less degree, the virile virtues he possessed. Instinctively all mediæval Europe recognized the prime importance of that heredity, which the nineteenth century, like a child teaching its grandmother how to suck eggs, flaunted before the ages as a fresh discovery. And every one of the families, established first upon the initial powers of a single man joined to a worthy mate, has endured, or has disappeared, in the ruck of generations, according as its successive members lived healthfully and mated wisely.

The Medici of Florence, when they had attained to their greatest splendor as a family, and hung the six red balls of their device as a flaring sign post of their power to the passing world, were merely bankers, whose keen intelligence let them handle money with a success as great as that of the pawnbrokers of to-day, their servile imitators in a familiar advertisement. But there is a magnificence of

courage in the story recently discovered of the manner in which the Medici first gained their coat of arms.

The Florentines were at war, and the Medici ancestor, small of stature, but hardy, nimble and adroit, picked out the mightiest warrior among the enemy—a giant in height, and a Hercules in strength. The battle raged between these two, for both the armies, stricken with awe at the daring of the Florentine man-at-arms, watched the combat quietly and in silence. Again and again the mace of the giant resounded upon his opponent's shield. Six times he struck, and six times a dent was made. Then the Florentine delivered his blow. The giant, slain at a single stroke, fell over, dying. And his blood, pouring over the shield, made pools in the dents his mace had driven. Ever afterward the men of the Medici, however wealthy and however powerful they became, treasured as their priceless inheritance the memory of that ancestor whose coat of arms was hammered by his enemy, and colored with the blood of the defeated foe.

A heraldic device that is borne by some American families of Scotch descent is the Bloody Heart of Bruce. This hero of Scottish history left directions in his will that his heart should be removed, encased in a box, and carried to Jerusalem, where it should be deposited in the Holy Sepulchre. The country that Bruce ruled was, perhaps, the poorest in Europe, but rich in men, hale and strong, accustomed to defend their liberties against the encroachments of English kings, and to gain a precarious living from a sterile soil under inclement skies. A band of faithful followers, under Lord Douglas, carried out the wishes of their king, and started on their perilous journey through France and Spain to the Holy Land. In the fights in which they engaged the Heart was thrown time and again into the ranks of the enemy, and rescued by charges of the Scotch guard.

In commemoration of their adventures the Douglas family bear on their arms a crowned heart. Sir Simon Locard, a sturdy Scotchman, who accompanied the expedition, changed his name to Lockhart, and took for his arms a lock with a heart, and the Logan family still bear

a Bloody Heart, together with three nails of the Saviour's passion, perpetuating the exploit of their ancestor and his visit to the Holy City.

The battle of Hastings, which gave the English crown to William of Normandy, was the occasion of a grant of arms to the Eyre family, which has numerous branches both in England and America.

The English, under Harold, had taken up a strong position on the crest of a hill, and had covered their front with a stockade. The invading army had been living off the country, and had no alternative but to retreat or fight. William, with his Norman forces in the center, and his French auxiliaries on the sides, charged the stockade. The battle axes of the English could be heard amid the roar of combat clanging on the shields and armor of the Norman knights.

"Out! Out!" the bodyguard of Harold roared, as they repulsed the attack of the enemy.

Again the Normans charged, only to meet with as stout a resistance, and William was thrown from his horse. His helmet was beaten into his face. In that day, when the general of an army led the fighting, rather than directed the battle, his death meant defeat; and the Normans, seeing their leader fall, looked on in dismay. A Norman knight, named Vraiamour, stout of arm, and of great strength, observing his chief's overthrow, pulled off the helmet of the Duke, and with a superb effort heaved him back into his saddle. William of Normandy said:

"Thou shalt hereafter, from Vraiamour, be called Eyre (Air), because thou hast given me the air I breathe."

After the battle, the Duke, finding him severely wounded in the leg and thigh, ordered him to be attended with the utmost care, and after his recovery granted him a crest of a leg and thigh in armor.

The well-known name of Armstrong is derived, as is the crest, from the mighty deed of another man of strength, like Normandy's Vraiamour. An ancient Scottish king had as an armor bearer a man of great muscular power and courage, named, from his fair and ruddy

countenance, Fairbairne. In battle the king had his horse killed under him. He was immediately seized by his armor bearer, who caught him by the thigh and placed him in the saddle. In consideration of this service, and to commemorate the way in which it was rendered, the king changed his name to Armstrong, and granted him for his crest an armed hand and arm, holding a leg and foot in armor.

The Gordon family of Scotland has for its crest an arrow that records the marksmanship of an ancestor, Bertrand de Gourdon.

Richard Cœur de Lion, the hero of the Crusades, while planning an attack on the French king, was informed that one of his vassals, the Sieur de Chalus, in the Province of Limousin, in central France, had found a treasure trove—twelve golden knights seated around a golden table. As superior lord, Richard claimed the find for himself as a means of replenishing his treasury, and of meeting his expenses for his war with the French. The finder of the treasure refused to surrender it, and Richard, gathering his forces, marched against him and laid siege to the castle of Chalus. The siege lingered on, for the besieged held out, and Richard swore that when he captured the castle he would spare no one, but would hang all—man, woman, and child at the breast. In the midst of his threats, as he was prowling about the walls one day, at what seemed a safe distance from the archers, Bertrand de Gourdon seized his long bow, and exerting his great strength, took aim, and shot at the king. The arrow, drawn by the brawny arm of de Gourdon, reached its mark. The dying Richard forgave his slayer, whose descendants retain in their crest the record of the steadiness of aim and strength of arm that ended the life of the adversary of Saladan.

In the days of chivalry the women not only encouraged the men in deeds of bravery, but at times emulated their example. The father of Agnes Hotot had a dispute concerning title to a piece of land. The two claimants agreed to meet on the debated land and decide its proprietorship by a personal combat. On the day appointed for the combat the

Sieur Hotot was laid up by an attack of gout. His daughter Agnes, his only child, who had been brought up to field sports and manly exercises, rather than lose the land, determined to take her father's place. Putting on his helmet and suit of mail, and mounting her father's steed, she went to the place of combat, and after a stubborn contest, succeeded in unhorsing her adversary. She unloosened her throat latch, took off her helmet, and let her hair fall about her neck, disclosing her identity to the astonished spectators.

Her hand and fortune were afterward bestowed on a member of the family of Dudley, and her adventure is preserved to memory by the coat of arms of that family, which is a ducal coronet and a woman's head with helmet, hair dishevelled, and throat latch loose.

The crest of the Cheney family of England and America is derived from a brave and eminent soldier who joined the revolt of Earl Richmond against Richard III., and fought at Bosworth Field. Sir John Cheney sought out the king in single combat, and was felled to the ground. His crest and the top of his helmet were knocked off and his head laid bare. For some time he was stunned. Recovering, he crawled to where the hide of an ox lay, and cutting off the skin and horns of the head, he placed them above his helmet and returned to battle. After the battle the Earl of Richmond was proclaimed king, as Henry VII., and he granted Sir John Cheney a garter, and assigned him as a crest the impressive front of the bull, whose power he rivaled, and whose prowess he surpassed.

Treasures of memories such as these are being more anxiously garnered, more religiously preserved now, in Europe, than ever before. And in Europe, as well as America, members of prominent families are coming to realize, more intelligently than they have for years past, the importance of physical health and moral strength. To-day, among the first and most anxious cares of every European family of distinction, in the way of making marriages, is to see that the blood runs pure.

MEDICAL AND LAY READERS FROM ALL PARTS OF AMERICA ADMIRE OUR EXPOSÉS

A Doctor Writes:

To the Editor:

The keen exposé of the Koch tuberculosis Cure in *PHYSICAL CULTURE* was a delight to me. *You have given it wide publicity.* It will reach more of the people in your magazine than if it had been in all the medical magazines. I enjoyed your patent medicine fusilade also. Gratefully yours,

WM. B. CLARKE, M.D.,
Indianapolis, Ind.

What Another Doctor Says:

To the Editor:

Permit me to express my great admiration for the uncompromising manner in which you expose those most inhuman vampires—the manufacturers and venders of patent medicines. In this fight against the terrible drug delusion, your magazine is certainly one of the foremost champions, and deserves the undying gratitude and support of the human race. I sincerely trust that it may soon find its way into every American home.

AUG. F. REINHOLD, M.D., Ph.D.,
Little Rock, Ark.

Finds the Exposés Full of Interest

To the Editor:

I am reading with great interest the articles of exposure appearing now in your magazine. The exposure of the "Koch Lung Cure Institutions" is one of the best I have ever read.

J. EVERETT EWING,
Atlantic Highlands, N. J.

Another Warm Admirer

To the Editor:

I desire to congratulate you on your August issue of *PHYSICAL CULTURE*. It is full of good things. It is making great headway in quality and quantity. Don't let up on the Patent Medicine Fakes.

Go at the fakes with hammer and tongs. There is only one fit place for patent medicines; that is, in the sewer—and I pity the sewer, especially if it is a human one.

Draw the strings tighter on the curse.

I have just returned from a three years' trip through the Great Northwest. I saw *PHYSICAL CULTURE* everywhere. My wife and I ride our twenty miles on our wheels every morning before breakfast. How is that for a 56-year-old boy?

Well, we practice what we preach; that is where I have the advantage of many preachers; we *preach* health and *live* it.

May success continue to be yours.

EDWARD B. WARMAN,
Oskaloosa, Iowa.

A Sixty-Year-Old Real Estate Agent and War Veteran Corroborates What Our Exposés Say

To the Editor:

I have read with much interest your exposé of the fake Koch Doctors and of the Heidelberg Medical Institute of St. Paul, Minn. (my son being a subscriber to your valuable book). I have no desire to see my name in print, but feel that substantiating your exposé of the Heidelberg swindlers would be a kindly act.

I am sixty years of age, served in the War of the Rebellion, and have for years been afflicted with rheumatism. "Drowning men catch at straws." I saw the offer of the Heidelberg Institute and wrote them, stating that I was no beggar, could pay for treatment, and that if their belt cured me of the rheumatism that I would willingly pay for the same. In return I received a symptom blank which I filled and returned, telling them that if they wished to live up to their offer to send on the belt and I would give it a fair trial. I have written them no word since, and having received no letter since April 1, I conclude that they have given me up as a bad case.

A. H. R.,
Merrill, Wis.

Another Reader Enthusiastic Over Our Exposés

To the Editor:

I have read the thorough exposés in your magazine with great interest and hasten to tell you what I know of Dr. Koch. Right across the street from

where I live, in Philadelphia, resides a friend of mine, who doctored eight months with Dr. Koch. Lung trouble was supposed to be the affliction. During those eight months he visited the doctor sixteen times, for which he paid one hundred and seventeen dollars. He was guaranteed a cure, but none manifested itself. He is coughing yet after "coughing up" all that money to the quack. The only reason he wasn't bled to a greater extent was because I gave him a copy of your magazine. The poor fellow was a beamer in a woolen mill, with nothing but a twelve-dollar per week salary to depend upon; house rent, wife and child to provide for also.

About a week since a representative or canvasser for the Philadelphia Press called upon me with a view of having me subscribe for that paper. In the course of our talk we drifted on to shams, frauds and humbugs. Pointing across the street I remarked, "A man lives there who was duped by a medical quack out of one hundred and seventeen dollars." Of course, I mentioned the name of Dr. Koch. I immediately went into the house and brought him the last number of your magazine. After looking over the exposure of Dr. Koch he grasped my hand, shook it heartily and said: "My friend, I cannot tell you how thankful I am toward you. Every cent I have—thirty-four dollars—is at home to pay for oily vapor which I expect to-day or to-morrow. You and PHYSICAL CULTURE have saved me and my money from what I now know to be a fraud." He was a religious man and thought the hand of God was plainly visible in what seemed to me a singular or peculiar coincidence. So you see, Mr. Editor, you, using me as an instrument, in this one cure saved a man and his thirty-four dollars from a medicine shark. This man said he would write you. It gives me great pleasure to convey the information I have. By the way, I notice the ad. of this quack has disappeared from the Philadelphia papers. He or they occupied a nice three-story brownstone front building at 1316 Arch street, Philadelphia.

E. W. E.

Manayunk, Philadelphia.

Still Another Admirer of the Patent Medicine Round-Up

To the Editor:

Having heard of and read the excellent exposé, I thought I would add my name to the long list of enthusiastic subscribers to your splendid magazine and also tell of my experience with PHYSICAL CULTURE.

Last May I bought my first copy on the news-stands, and started in exercising. Then I weighed 103 stripped and could expand my chest only one and one-half inches. I exercised every morning for ten minutes. Now I weigh 118 pounds and can expand my chest three inches. I am 5 feet 5½ inches in height and only seventeen years old.

I am just going off to our bath to practice your swimming lessons. I hope these lines will interest some of your readers, and hoping you will deep pound away at those medical quacks. Say! you gave it hot to the Koch imitators. I remain a true son to your methods, and sign
THOMAS SCHUYLER, Albany, N. Y.

Another Word of Praise

To the Editor:

Let me commend you for the good work you are doing in exposing the Consumption, "Patent Medicine," "Electric Belt" and other Fakirs.

Don't you see how these "sharppers" have unconsciously combined against you by increasing the enormity of their advertisements?

Last Sunday I counted over fifty patent medicine and similar ads in one of the New York leading Sunday papers, yet the editor thereof speaks continually against "whiskey," ignoring the fact that these "health" wares advertised in his paper do as much if not more harm than drink. J. ROSENBERG, Raleigh, N. C.

Short and Sweet

To the Editor:

I have read your articles in PHYSICAL CULTURE on the Heidelberg outfit in St. Paul, Minn. Had a like experience with them, the only difference being that their lowest offer to me was two dollars. The Koch Doctors must have been great swindlers. Keep up the good work.

Wishing your success in your undertaking, I am, yours truly, J. L.,

Green Bay, Wis.

THE CAUSE AND CURE OF HEADACHES

By *Bernarr Macfadden*

THOUGH not a particularly serious complaint, this ailment is often the cause of great pain and discomfort. Not infrequently it accompanies or indicates the presence of a far more serious disease. It is often extremely annoying, and one can do nothing while it lasts except devote his

remaining energies in providing a remedy.

The ordinary remedies used deserve to be most emphatically condemned. The use of various headache powders which simply deaden the nerves, does not in any way change the condition. It simply fills you with dope and makes you incapable of feeling the pain. Where these remedies are relied on and used continuously a serious condition is often induced.

A headache nearly always indicates functional disorder of some kind. If this is ignored and nerve dopes turned to whenever the pain appears, the headaches are almost sure to gradually grow more painful or appear more frequently.

There are various kinds of headaches. Some medical men divide them as follows: "Congestive, anæmic, sympathetic, bilious and nervous." In general they can be divided into two kinds, anæmic and congestive.

General Symptoms.—No description is required to indicate to a sufferer the presence of a headache. The only object of stating symptoms would be to determine the character of the headache, whether it is anæmic or congestive. Anæmic headaches ordinarily attack only those of advanced age. In the vast majority of cases headache is congestive in character.

In congestive headaches the face is flushed, head hot, eyes red, and the throbbing of the arteries of the neck can frequently be felt quite plainly. Stomach disturbances of all kinds are frequently present.

General Causes.—It would be a difficult matter in a short article to enumerate in detail the various causes of this annoying trouble. Those who suffer from periodical attacks can simply blame them to their own habits of life. The occasional headache is usually induced by some extraordinary divergence from the usual habits in diet or otherwise.

Constipation will be found present in nearly every instance, and the use of those foods which are inclined to induce this must naturally bear considerable of the blame. All articles of food made from white flour, supercooked dishes of all kinds, and complicated mixtures which must be highly seasoned with strong condiments, are frequent causes.

Though unwholesome, indigestible foods may have much to do with causing this trouble, over-eating of the most wholesome foods is a frequent cause. Drinking insufficient water is often a contributory cause. The lack of general exercise, breathing the stagnated, close air of badly ventilated rooms, and an indoor life generally, are often responsible.

The above causes apply mostly to congestive headaches. Excessive worry and over-work will frequently bring on a nervous headache, but even in a case of this kind the functional condition is usually in an abnormal condition and contributes much to the result. Anæmic headaches may be caused by any debilitating influence.

Physical Culture Treatment.—If subject to periodical attacks the treatment must be constitutional and continuous. After having been relieved of one attack you must remember that the system has developed a habit of ridding itself of the various impurities at certain periods in a manner to induce the headache, and you must build up sufficient functional vigor to avoid the necessity of this abnormal manifestation.

Long walks in the open air, deep breathing exercises, a regular systematic course of movements for building vital

and external vigor, an appropriate diet, are all of great importance in accomplishing this object. The exercises illustrated in the March issue of *PHYSICAL CULTURE*, for building vital strength, are especially commended.

For most quickly remedying an acute attack various methods can be recommended. Massage of the head is valuable. Applications of hot and cold water to the entire surface of the scalp, alternating from one to the other, will nearly always produce benefit. Probably about the most effective remedy, however, will be to drink several glasses of water, in all from one to two quarts, within as short a period as you can without discomfort. This water should either be as hot as you can drink it or else should be of a moderately cool temperature.

A long walk in the open air will frequently be found of advantage if the patient feels he has sufficient strength to

adopt a remedy of this kind. No food of any kind should be taken while the pain is present, though if an extremely keen appetite is felt for some particular article of food, it is in some cases advisable to satisfy it. Acid fruits, oranges, apples and acid fruit juices are the best foods on which to break the fast.

You should immediately relieve any constipation that may be present. This can be done by drinking large quantities of water, or else using the internal flushing treatment.

A rather violent remedy is often beneficial, which may be termed the Vibration treatment. Secure a tennis racquet or something of that nature and strike the head mildly in all portions with the center of the racquet. This naturally accelerates the circulation in all parts of the head, and for those for whom the treatment is not too severe, it will undoubtedly greatly assist in rapidly eradicating the trouble.



Scene at the Polo Grounds, Showing Thousands of Baseball Admirers



Question Department

By *Bernarr Macfadden*

It is impossible for the editor to give individual advice outside of the columns of the magazine. All those desiring advice for their individual needs are requested to consult some good Physical Culture teacher or natural cure physician.—EDITOR.

Q. Please advise a common sense method of remedying round shoulders?

A. Would refer you to lesson in Physical Culture Development, January and February issues, for desired information.

Q. I like the diet of fruits and nuts very much, but want to ask if they alone are sufficient to thoroughly nourish the body?

A. There is no question about nuts and fruits furnishing sufficient nourishment to maintain health and strength of the body. The truth of this conclusion has been demonstrated in a number of cases. In fact, those who live on this exclusive diet maintain that they are in far better health than when living on the ordinary diet, and in most cases there is ample evidence to indicate that they are in a vigorous condition.

Q. How much water can a person drink daily?

A. We have no data at hand to show how much water one can drink daily. We have heard of cases where as much as three or four gallons were used. This, however, is certainly excessive. Under ordinary circumstances, from three to six pints of water during the day is sufficient. If engaged in some active work that requires very copious flow of perspiration, or if living in a very hot country, this quantity should be increased.

Q. Would you please give me a remedy for abnormal hair growth of chest and arms?

A. There are several caustics for removing hair from the body, but the writer knows of none that proves effective in every case except by that very painful and tedious method of plucking the hairs and then killing each hair root with an electric needle.

Q. I sprained the muscles of my knees two years ago, and cannot effect a cure. What would you advise?

A. Apply wet cloths to your knees at night and allow them to remain until morning. Use the greatest possible care to avoid an additional strain of the affected muscles. No movements of any kind should be made which induce pain. Strengthen all the adjacent cords and muscles by exercise and massage.

Q. Have had a cold and loud, harsh cough for several weeks, and cannot get rid of it even with warm weather. How shall I treat it?

A. Fast every other day for two weeks, allowing yourself only two meals per day on the days you eat. Eat rather freely of honey at your meals. Acid fruits, coarse vegetables, green salads would be also of advantage to you.

Q. I find after taking exercises, or when making my muscles hard, that they cramp. Sometimes I can hardly straighten my limbs out. What would you suggest for me?

A. Rubbing and kneading the affected parts would undoubtedly be of advantage. If a little pure olive oil is used on the hands, the process would be more pleasant and probably more beneficial. It might be well to remember also that there is a possibility of your exercise being too straining. In this case, take more speedy active movements.

Q. Have been troubled with weak eyes and notice a sty appearing. What would you suggest for a cure?

A. A sty usually indicates poor constitutional condition. All those methods for building up the general functional, muscular strength could be recommended. A very moderate diet is especially required. The one-meal-a-day plan, if adopted for a week or two, would be of great advantage to you. Bathing the eyes and the affected part in very strong salted water would be of especial advantage. Styes are often directly induced by overwork of the eyes, although it is the condition of the blood which makes this result possible.

Q. What is the cause of a coated tongue?

A. A coated tongue shows the condition of almost the entire alimentary canal. It indicates an effort on the part of the functional system to change the alimentary canal from an organ of assimilation to one of excretion. The body is so filled with impurities that the ordinary depurating organs are unable to eliminate the surplus, and the alimentary canal is called on to aid in this cleansing process. If the tongue is coated, at periods when you are eating your usual meals, it indicates the need of a fast. Though sometimes the neglect to drink sufficient water is a contributory cause, eating beyond the digestive capacity is the usual cause.

Q. Will you suggest a cure for nose-bleed, with which I am bothered a great deal, especially on warm days? I eat no meat, but take lots of fruit.

A. A trouble of this kind is usually induced by the debilitated condition of the general system, or else by an excessive supply of blood. As you build up your general health and increase in strength, the trouble will gradually disappear.

Q. I suffer from great shortness of breath, palpitation of the heart, gas and wind in stomach and bowels, and constipation. Please suggest remedy.

A. We would refer you to article in March issue of "Beauty and Health"—"Cause and Cure of Constipation." It would be necessary for you to first remedy this trouble before the other ailments can be cured. The general system of

physical upbuilding would be necessary to remedy your various troubles. What you need is greater functional, muscular and nervous strength. The exercises illustrated in March issue of PHYSICAL CULTURE for building vital strength would be especially valuable in your case.

Q. Will you kindly tell me if suspensories are of value or not? Have noticed no difference in my condition with or without one. Some advise them, others condemn them. I would like to know.

A. Suspensories are of value in some cases. Ordinarily they should not be used. The tissue should be capable of supporting every part. Any external aid which may be used is naturally inclined to weaken the tissues that are ordinarily used for support. There are certain cases where a defect or weakness of some kind is present that the use of a suspensory is valuable for a time.

Q. I wish to grow taller. Am seventeen years old, weight one hundred and thirty-five, but am only five feet high and have not grown any taller for two years. Am out of proportion, and would like to know if any form of exercise will help me gain in height.

A. There is no special form of exercise that is guaranteed to increase your height. Ordinarily, running and walking will be inclined to make you more vigorous functionally and vitally and would naturally help your growth if anything will. Stretching exercises, reaching up as far as you can, are recommended by many as being of value. If you take good care of yourself in every way, eat proper foods, allow yourself sufficient sleep and take those exercises essential in developing your strength to a normal degree in every part, there should be no doubt of your being able to add additional inches to your height. Even those who have considered themselves as having attained full growth apparently increase in height after adopting methods for strengthening the body when special attention is given to those movements inclined to maintain the body in a more erect position.



Quatre-Bras, 1815

Elizabeth Thompson

EDITORIAL DEPARTMENT



Accept every conclusion you find in this magazine for whatever your own reason shows it to be worth.

There should be no authority for you higher than your own intellect.

No human being is infallible. Every one makes mistakes; therefore no one has the right to place himself on a pedestal as an authority on any subject.

If you accept absolutely, without full and due consideration, the theories of any one it is an acknowledgment of your own mental deficiencies. Accept nothing that your own common sense, your own reasoning power, does not endorse as truth and fact.

MEDICAL HUMBUGS ARE DOOMED. The wheels of Justice grind slowly but surely. It is the unswerving purpose of this magazine to expose every hypocritical murderer who feeds upon the vitals of human weakness and ignorance. No other publication has ever taken upon itself this revolutionary task. Let the weak and ignorant protect themselves, is the business policy of to-day.

Medical Institute Sharks

Our medical exposures have opened the eyes of thousands and perhaps millions of people. And before we consider our task finished we want to annihilate the superstitious confidence of the public in these medical quacks.

As these words are being written, the proprietors of the Koch Lung Cure are squirming as the electric light of publicity is turned upon them. One newspaper, the *New York Herald*, has taken up our exposure, and this action on their part has compelled others to do the same.

But turn from the editorial to the advertising department of many of these papers. Although the editors condemn the methods of the Koch Lung Cure in the most scathing terms, nevertheless seductively worded advertisements invite their readers to patronize these fraudulent concerns.

The *New York Herald* in a recent editorial made what they believed to be some most astounding statements in reference to the methods of the Koch Lung Cure. It seemed surprising to them that it was the deliberate purpose of this company to deceive their victims in every way. It surprised them that their physicians were instructed to diagnose all cases alike. Whether or not you had consumption made but little difference. If you applied for examination you would be diagnosed as a consumptive.

It was a money-getting business pure and simple. That was their one and only object. The curing of disease was secondary and incidental.

Now, all this information apparently surprised the editor of this paper, and

perhaps was more surprising to the general public. But if the facts were really known, there are hundreds of medical institutions in this country which are conducted by similar methods. Their one and only object is to get the money. They pose as honest professional men, the friends of the weak and "heavy laden," and while extending their hand in friendship they rob you of every penny they can possibly obtain.

WHY IN HEAVEN'S NAME IS THERE NOT SOME LAW TO REACH THESE UNPRINCIPLED SCOUNDRELS? A COMMON EVERY DAY BURGLAR IS A HIGHLY RESPECTABLE CITIZEN COMPARED TO SUCH AS THEY. A burglar may sneak around at night and rob you of a few dollars in cash, but these medical blacklegs are not satisfied with merely robbing you of money—they steal your health and strength as well.

It is exceedingly gratifying to note that the work of exposing this Koch Lung Cure swindle has resulted in such wide publicity. **IT SHOWS THE POWER OF THIS MAGAZINE.** It proves the value of the work we are doing. But, my friends, this is only a start. Every one of these medical fakirs must be exposed in the same manner.

Help us in this greatly needed work. If you have any information of value about any "fake" medical company, send it to us. If you know the inside workings of some big medical concern whose sole business is to rob the public, send us the information and we will see that your words are heard throughout the country.

Write a complaint to the newspapers which publish their seductive advertisements. Get your friends to write. **DO NOT BE SATISFIED WITH ONE LETTER. WRITE TWO, THREE, A DOZEN, EVEN A HUNDRED.** They may not pay attention to the first two or three, but newspapers are published for the people, and if they receive a large number of requests for the elimination of any particular advertisement, these requests will ultimately be given attention. Do not let this suggestion pass by as unimportant. I say again, write and write again and again to the newspapers about any advertisement which they publish that you know is inclined to deceive and rob the readers.

If the readers of this magazine would adopt this suggestion, every quack medical company would be quickly compelled to go out of business.



FOR our frontispiece of this issue we present about the best photograph of the President and his family that has ever been published. It shows that the President believes in physical culture not only for himself, but for his entire family. Every member appears to be in vigorous health. The President seems especially vigorous, and a perusal of the article appearing in this issue, giving a brief description of his daily habits, will undoubtedly be of interest to our readers.

Our Athletic President

President Roosevelt furnishes one of the most striking examples of the benefit to mind and body that can be secured from active, athletic habits. He believes thoroughly in the theory that the body, to maintain its health and strength and suppleness, must be given regular and active use. His remarkable working powers clearly indicate that physical activities add to his mental capacities. He does not believe in growing old in body

or in mind. He keeps every part of his body supple and fresh and young, and as a natural consequence his brain is always free and clear and ready to act where important decisions must be quickly made.

Read the brief description of his daily habits, and you will learn much that will assist in solving the secret of his wonderful success.

A LETTER follows herewith which should be of interest. There is no question that an exchange of ideas among those who are living on uncooked foods would be of greatest possible advantage. But little is known about this new diet which is in reality as old as the human race. I would like every reader of this magazine who is living upon a satisfactory uncooked diet to adopt the suggestion made in this letter and send in some menus for publication. We can undoubtedly be of vast help to each other, and if enthusiasts can be induced to exchange ideas all would gain thereby.

**Suggestion for Raw Diet
Enthusiasts**

DEAR EDITOR:

If some "new diet" man in each city could make known, through the dailies, that he wanted the names of all those who were living on the new diet, and the names of all who wanted to know more about it, it seems to me there would be generous responses.

If, then, those who were so living could give their menus, in a brief talk, to a gathering of these people and experiences could be given, ideas exchanged, and various ways of preparing raw food—vegetables especially—it seems to me that it would result in good to all concerned. The few that I know follow different methods. I eat scarcely any vegetables, as I do not know just how to so prepare them to make them palatable. I know full well it would be better to make use of a variety of them did I but know how to go at it. I do know that I have lived the new way for over two years with great benefit.

My family are living east, and I have my gas stove, which I use simply to make cocoa. I eat several eggs daily, beaten up in lemon juice, a little sugar and often a little grape juice added. I take an egg so treated and a cup of Plasmon cocoa for breakfast, then nothing until past noon, when I eat raw rolled wheat, together with a little cheese, nuts, prunes, figs and other fruit, eating but little of each, also another egg-lemonade (or orange). Generally finish with a little sweet chocolate for dessert. If there could be a sort of exchange of "menus" of a large number of persons, some, at least, would get new ideas.

J. W. LILLY.

ALL believers in the theories advocated in this magazine must have felt a wave of sympathy for the dying Pope as they read the details of the treatment used during his illness. Dr. Chas. E. Page, the veteran physician and hygienist, states, in an article which follows, that he firmly believes that if he, a healthy man, were subjected to the same treatment as that given to the Pope, he does not believe that he could have survived. No one doubts that the Pope's physicians were conscientious, but they followed modern ideas of scientific methods.

**Physical Culture and
Pope Leo**

They closed the windows of the patient's sleeping room. They were afraid of draughts. They tried every means to induce a false appetite. They even placed food in the mouth which the Pope refused or could not swallow.

And then again and again you would hear that the POPE WAS BEING KEPT ALIVE BY DRUGS AND STIMULANTS.

Ask any hygienist, any medical man who has studied natural curative methods, and he will, in most emphatic terms, inform you that stimulants never on any occasion kept a human being alive.

If a human heart has sufficient strength to be spurred to increased action by the presence of a poison which it recognizes as an enemy and makes every possible effort to eliminate, it has far more strength than needed to maintain life.

Read, my friends, the comments of Dr. Page which follow. Thousands of physicians familiar with the natural methods of treatment will endorse every statement made by this famous hygienist. On considering the terrible strain required in eliminating and resisting the stifling effects of poisons, one is indeed amazed at the astounding vitality manifested by Pope Leo at his advanced age.



\$100.00 Prize
for Stories

Writers must not forget that we are offering a prize of \$100.00 in addition to regular space rates for the best story we receive during this year. All stories published will be paid for at space rates.



The Physical Culture City

A large number of letters have been received from those interested in the Physical Culture City. Several real estate firms have approached me and the dream may after all be realized. Something practical may result and enthusiastic followers of Physical Culture may have the opportunity of living in a city of their own.

LESSON OF THE POPE'S SICKNESS

By Charles E. Page, M. D.

"Minorities lead and save the world and the world knows them not till long afterward."—*John Burroughs.*



NOTHING quite so well as the history of medicine illustrates the truth of the saying, "What the many think is likely to be wrong." Since "loyalty to the profession" is apt to be so construed as to compel the well-informed physician to be disloyal to the people, it is, and has always been, the minority's privilege to be sneered at and reviled for exposing the errors of the majority.

In 1799, when George Washington was murdered in his bed by blood-letting at

the hands of the kindest and most honorable of medical men, the minority of physicians knew as well the blundering folly of the practice as the majority do to-day. But thousands on thousands of good men, women and children were sacrificed to the ignorance of the majority during the century of bleeding for fevers that for the most part would have yielded to a few days of therapeutic fasting, profuse water drinking and appropriate bathing.

Succeeding the blood-letting treatment, the depriving of fresh water to fever patients—a folly practiced by the great majority for fifty years—caused many thousands to die the most torturous

death imaginable, from thirst, though begging, shrieking for water, and then, as now, known by the minority to be the only food demanded during the progress of all diseases of high temperature.

"For a patient perishing from thirst, water is the most nourishing food," says Frederick P. Henry in his contribution on Typhoid Fever—"A System of Practical Therapeutics." The minority of medical men knew this as well during the entire period of this most brutal and murderous practice as the majority do to-day.

And what of the prevailing drug treatment of the present day? In the case of the lamented Pope we have had a typical illustration of its life-destroying effects. No one can question the honesty, the gentleness, nor the hearty sympathy of the physicians that were his, but the treatment employed, albeit along the most regular lines, must be regarded by all students of hygienic medicine as the cause of his death, rather than either his disease or his age. Though about ninety-four, we have it on the authority of his medical attendants that the illustrious patient was possessed of a most perfect and symmetrical organism; and surely he has exhibited vitality enough in withstanding the natural effects of food-and-drug-slugging during the past fifteen days to have carried him safely to the century mark, and possibly to a decade beyond that, could he have had life-conserving in place of life-destroying treatment.

Among the many pathetic incidents of the vivisection room, the torture-room of that precious art "which by irony is called the healing one" (to employ the language of Professor Semmoia, director of the Therapeutic Clinic of the Royal University of Naples), and which employs all the potent poisons of the materia medica in its treatment of the sick, one of the most touching was that of a dog with pleading eyes fixed upon the face of the vivisector and licking the hand holding the dripping blade. This scene was again brought to my mind as I read in my morning paper of July 14, "but the Pope could not even speak to them, merely giving them his hand to kiss!"

The authorized bulletins told us of more changes of drug-poisons than of the air in the sick-room, though its foul air

was doctored with artificial oxygen. During his illness the Pope is reported to have said: "What I need is air—fresh air. And it is not right to compel an old man to lie down when he feels better up." We read that his bedroom windows were closed during the night, though the doctors allowed him the "breath of life" in the morning. "Then the windows were opened for a change of air, the sun streaming in, together with a light, refreshing breeze from the Mediterranean." The best soporific and the best remedy for a wakeful, restless patient of ninety-four years or ninety-four days is fresh, cool, night air; but this had been denied the illustrious patient, and he had been drugged instead. And the oblivion produced by chloral they were pleased to call "sleep"—chloral! the drug that has so often caused "the sleep which knows no waking," till comparatively few physicians have the hardihood to employ this most deceptive drug of late years.

On the 12th this: "Twice during the night the physicians administered injections to the Pope, once of digitalis to strengthen the heart, and another of camphor-caffeine to overcome the patient's growing depression." And so it was throughout the Pope's illness; digitalis, strychnine, caffeine and chloral; chloral, caffeine, strychnine and digitalis. And forced feeding to the limit, in face of lack of appetite, in face of nausea, even, till upon at least one occasion a galloping diarrhoea emptied the crammed intestine of its load of putrescent and blood-poisoning food substances, even more life-destroying, because of its great amount, than the other drugs named. But the staunch organism was at one time equal to the work of thrusting out the artificial filth and of living on for a few days more; but what shall we say of the kind friends who thrust it in in spite of the protests of the wise old man?

And now, can we wonder that the time has come when "he is more docile in taking nourishment (!) and medicine," and that he "cannot even speak to them, merely giving them his hand to kiss?"

Except for the animus in the one case, the brutal ferocity of the ignorant and vicious boys, in contrast with the gentleness and kind intent of the Pope's physi-

cians, I cannot help feeling that there is a very close analogy between the action of a lot of street arabs in badgering, stoning and clubbing a little innocent kitten to death, on the one hand, and, on the other, the procedures of the doctors during the long, long days, their drugging and food-slugging, so unnatural, irrational and devitalizing, and so well adapted for the prevention of all hope of the Pope's recovery, or, indeed, the recovery of any patient at any age in any condition of either health or disease.

On the 20th of July we read: "When an attempt is made to administer restoratives he does not swallow them, although they are placed in his mouth. The Pontiff's physicians fear he may never emerge [from coma]—seven injections and stimulants given in twenty-three hours."

Dr. Lapponi said to the correspondent of the Associated Press: "He can no longer turn in bed without assistance, and is being kept alive by artificial stimulants." (God help us!) And he added: "During the last twenty-three hours he has had two injections of camphorated oil, three of caffeine, and two of salt water, besides drinking stimulants."

And during sixteen days and nights this wretched work had been going on, till I cannot drive the thought from my mind that if this kind of treatment were peculiar to Italy, if it were not rather along what is termed "regular" medical lines, the accounts from the Pope's bedside would long ago have aroused the indignation of the other nations to the pitch of conjoined action in sending a fleet of gunboats and an army and a corps of wise physicians to the Pope's relief.

The present writer regards himself, and is generally regarded, as one of the soundest, most robust and healthiest of men; but by light of his thirty years' observation in the active practice of "medicine," and of the study of medical men and methods, he would now declare as his firm belief that were he put to bed to-day and subjected to the identical treatment

from which the Pope suffered he would probably not last as long as the Pope did. The electric chair would grant a more merciful ending, indeed.

Nor are we shut up to the tender mercies of the faith-cures—Mental Scientists, Christian Scientists, so-called, or other more or less deluded "healers." Between *no* treatment, e. g., "Christian Science," and *bad* treatment (mere drugging), there is a genuinely curative method of inestimable value in the saving of life. An eminent regular, who has done yeoman service in propagating the method herein referred to, says: "If a tithe of the interest manifested in new drugs, which in most instances benefit only the manufacturer, and leave physician and patient deluded and disappointed, were devoted to the study and practice of hydrotherapy, our knowledge of this subject would be enriched, and suffering humanity would rise up and call us blessed."

Dr. Austin Flint, in his posthumous address on "The Medicine of the Future," prepared for the meeting of the British Medical Association, in 1886, said: "It is a pleasant thought that, hereafter, the practice of medicine may not be so closely interwoven as hitherto in the popular mind, with the use of drugs. The time may come when the visits of the physician will not, as a matter of course, involve the co-operation of the pharmacist, when medical prescriptions will be divested of all mystery and have no force in fortifying the confidence of the patient. The medical profession will have reached an ideal position when the physician, guided by his knowledge of diagnosis, the natural history of disease, and existing therapeutic resources, may, with neither self-distrust nor the distrust of others, treat disease by hygienic measures without potent medication. When this time comes, a system of practice which assumes to substitute medical dynamics for the *vis medicatrix naturae* will have been added to the list of bygone medical delusions."

