

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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Marauders

From the Painting by Scalbert

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 VII

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

SPECIAL EXERCISES FOR DEVELOPING THE FORE-ARMS—WHAT IS THE BEST DIET—VEGETARIAN, NATURAL FOOD AND MIXED DIET

THE question of diet is of primary importance to every student desirous of building a strong and beautiful body. His attention must be carefully given to it at the very outset of his endeavors to attain a high degree of physical development. The following questions will suggest themselves to him. What shall I eat? What kind of food and what quantity will best nourish the body? What will give me the greatest strength, and what foods will enable me to speedily build up muscular tissue all over the body? These are important questions and call for careful

consideration. The average individual who has been able to maintain an ordinary degree of life,

notwithstanding the dietetic evils against which his functional system has



PHOTO No. 62. Exercise No. 34.—This exercise consists simply of gripping the hands as tightly as possible, as shown in the illustration. First grip right hand with left, and then left with right, alternating from one to the other. Continue the exercise until the gripping muscles of the forearm are thoroughly tired.

constantly contended, usually seeks to "make fun" of you when you talk of dieting. He will tell you that he has lived on 'ordinary' foods all his life, that he is healthy, and that his parents were healthy before him.

"Don't bother with diet. Eat plain, wholesome foods, and don't be led into a lot of foolish experiments by cranks," is the advice that will frequently be given you. Your friends may be considerate and careful in their remarks, but your near and dear relatives will have no scruples about your feelings. They will not hesitate to tell you candidly that you are a fool and that you must, indeed, be going crazy. And not infrequently, although you may be convinced beyond all possible doubt that you are right, you will remain in the "old ruts" merely to avoid the irritation of being

with every phase of this subject. I will try to consider carefully all the advantages that are supposed to accrue from following various diets, and will then draw impartial conclusions.

First of all, what is the object of food? You will answer, to nourish the body, that it may at all times be maintained in the highest degree of health and strength. How can we determine what are the best foods to nourish the body? Probably the best method would be to compare the results that follow the use of each of these various systems of diet. I must admit however that such a comparison is exceedingly difficult to make.

The human organs of digestion must possess most wonderful powers. No species of the lower animal world could exist on such a variety of foods as does man. No lower animal could abuse his organs of digestion as do many human beings and still be able to maintain life. An ostrich is said to have a strong stomach, but it would soon turn up its toes if it were



PHOTO No. 63. Exercise No. 35.—Hold the arm in the position shown in illustration with the wrist bent and twisted over far to the right. Now pressing vigorously against movement with your left hand, twist the right wrist inward as far as you can. (See next Photo.)

constantly nagged by those with whom you live.

Now I intend to discuss diet from an absolutely unprejudiced standpoint. I would like my readers to be familiar

compelled to live on the abominable mixtures that human beings often eat. And it is the remarkable power of the digestive organs of man that make it possible to secure nourishment from

almost any food that may be furnished.

Following our previous line of reasoning, the object of food being to nourish the body, then that article of food which most perfectly performs this purpose would undoubtedly be called the best food. This necessarily brings us to a consideration of the varying conditions and needs of the body. At one time a certain article of food is needed. At other times another article is best. The best food, therefore, is that which supplies the body with the particular elements of nourishment needed at that time.

Therefore, with this fact fully considered, we cannot say that any one article of food is always best.

Variety in food, to a limited extent, is to be desired as long as the foods are wholesome. If we were to confine our diet to two or three articles of food, after a time they would cease to be appe-

then, is the physical culture student to be guided?

Here is shown a very wise provision of Nature. THAT FOOD WHICH IS MOST NEEDED AT A PARTICULAR TIME IS ALWAYS CRAVED BY THE APPETITE. The normal appetite is always the best guide.

Although theories of this nature are undoubtedly of interest, the theories advanced by those who favor the various methods of diet would, no doubt, be considered of far more importance.

What are the advantages of these unusual dietaries over the ordinary cooked food as used by the average individual? Although there are, perhaps, a vast variety of dietaries advised by persons who have closely studied these sub-



jects, the systems of especial interest besides the usual mixed diet, are, no doubt,

PHOTO No. 64.—Exercise No. 35 Continued. To position shown in above illustration. Take same exercise with the position of the hands reversed. Continue the exercise until tired, and be careful to keep the wrist bent as far as possible during the entire movement.

tizing. This would not in any way be serious, as a short fast would soon cause the appetite to return with renewed vigor. If certain articles of food are adapted to nourish the body at certain times, how

- (1) Vegetarianism, and
- (2) Natural or Uncooked Diet.

Now what is a vegetarian diet? Wherein does it differ from ordinary diet, and what advantages, if any, does it possess?

Before answering this query I would like to call attention to the digestive processes. The illustration here presented shows the entire alimentary canal.

The changes that take place in the food in the process of digestion really begin in the mouth. This indicates very clearly the importance of thorough mastication

in the stomach and the small intestines.

After the entrance of the food into the stomach the digestive fluids gradually permeate it, and these fluids with the aid of the churning motion of



Showing the entire alimentary canal where the digestive processes are carried on.

the stomach, induce changes that slowly but surely bring the contents to a state where the particular elements of nourishment needed by the body at that time are absorbed.

Now all that is absorbed from the contents of the alimentary canal is

PHOTO No. 65. Exercise No. 36.—Place left hand in the right palm as shown in illustration. Now resisting the movement with the left hand bend right wrist and force the hand upward. (See next Photo.)

tion. For the more thoroughly the food is ground by the teeth and mixed with the saliva, the better it is prepared for the stomach and intestinal digestion.

The absorption of food also begins in the mouth, and continues almost throughout the entire alimentary canal, though this absorption process is mostly carried

“nourishment.” All that cannot be used is “waste.” This is a wise provision of Nature, which gives these delicately constructed organs the power of choosing the particular food elements needed.

But the “waste” is also of importance as it gives a requisite bulk to the

food and it facilitates the peristaltic action of the bowels so necessary to the regularity of the excretory processes.

Now some foods contain stimulating substances, in addition to the nourishment and harmless waste. A stimulant is always an element harmful to the body. The organs with which it comes in contact recognize it as a poison and every effort is made to accelerate its elimination.

Foods therefore contain both

- (1) Nourishment, and
- (2) Waste.

They may be

- (1) Non-stimulating, or
- (2) Stimulating.

They may be

- (1) Digested normally, or
- (2) Digestion may be made more difficult by elaborate mixtures or prolonged preparation.

Now the ordinary diet of the average person contains, in addition to the foods providing sufficient nourishment and waste,

mild way it is similar to alcohol in its influence. Hot biscuit, rolls, and bread made from bolted white flour are always difficult to digest. Improper preparation increases the difficulty of digestion of many others.

Therefore, in the ordinary mixed diet, there is much waste of functional



PHOTO No. 66. Exercise No. 36. Continued.—To the position shown in the above illustration. Take same exercise with the position of the hands reversed. Continue the exercise until the muscles of the front part of the forearm are tired.

many articles that are made difficult to digest by improper preparation, and articles that are stimulating in their influence. Meat, for instance, contains a certain amount of impure foreign matter, which acts as a stimulant to the functional system. In an extremely

strength. The nervous energy is required to eliminate the foreign and impure matter in the meat. Much energy is also wasted in digesting unwholesome and improperly cooked foods. There are two classes of vegetarians, those who use milk and eggs, and those

who absolutely refrain from every food of an animal nature. In recommending a vegetarian diet to one accustomed to meat, I would suggest that class which includes milk and eggs. Not that I believe we could not be properly nourished without these two articles of

Now a properly arranged vegetarian diet contains nourishment and waste. There is no stimulating food in it. It supplies the body with all needed nourishment, and contains only sufficient waste to enable the eliminating organs to properly perform their duties.

I must admit that many who call themselves vegetarians seem to be poorly nourished. They often look weak and wan and thin. If one leaves meat out of his dietary he must use substitutes that will furnish similar elements of nourishment. Whenever you find a vegetarian who does not look healthy, you can depend upon it with absolute certainty that he is either not eating the necessary substitutes for meat or else he is not taking the exercise essential to maintaining the body in perfect condition.



PHOTO No. 67. Exercise No. 37.—Grasp the left hand with the wrist bent as shown in illustration. Now resisting the movement with the right hand, straighten the left wrist, forcing the hand upward as far as possible. (See next Photo.)

food, but for those accustomed to the ordinary diet a change from the mixed diet to a strictly vegetarian diet is rather severe. It would be well to note, however, that milk and eggs if used when fresh, do not contain the same impure elements which give to meat its stimulating qualities.

Now let us turn to the natural or uncooked diet. What are the advantages of this diet over the vegetarian and the ordinary diet?

Every physical culture student who knows anything of physiology understands that no deorganized elements of any kind can serve the body as food.

In other words, food must be taken in chemical combinations such as we find in the vegetable or animal world. A chemist can take a grain of wheat, for example, analyze it in his laboratory, and supply the same elements exactly. But these elements in this state would be useless as food.

When animal and vegetable substances become deorganized, and are brought back to their original elements they lose their food value. A grain of wheat con-

tains, in almost perfect proportions, the elements that are needed to maintain life and health and strength, but if this grain of wheat is moistened and goes through the process of fermentation, changes take place which make it less valuable as a food.

There are certain changes,

Now the advantage of natural foods over cooked foods lies in the fact that they contain more life-giving, nourishing elements. The process of cooking destroys the life of the cells of the food. It deorganizes and turns them back to simple compounds. To be sure,

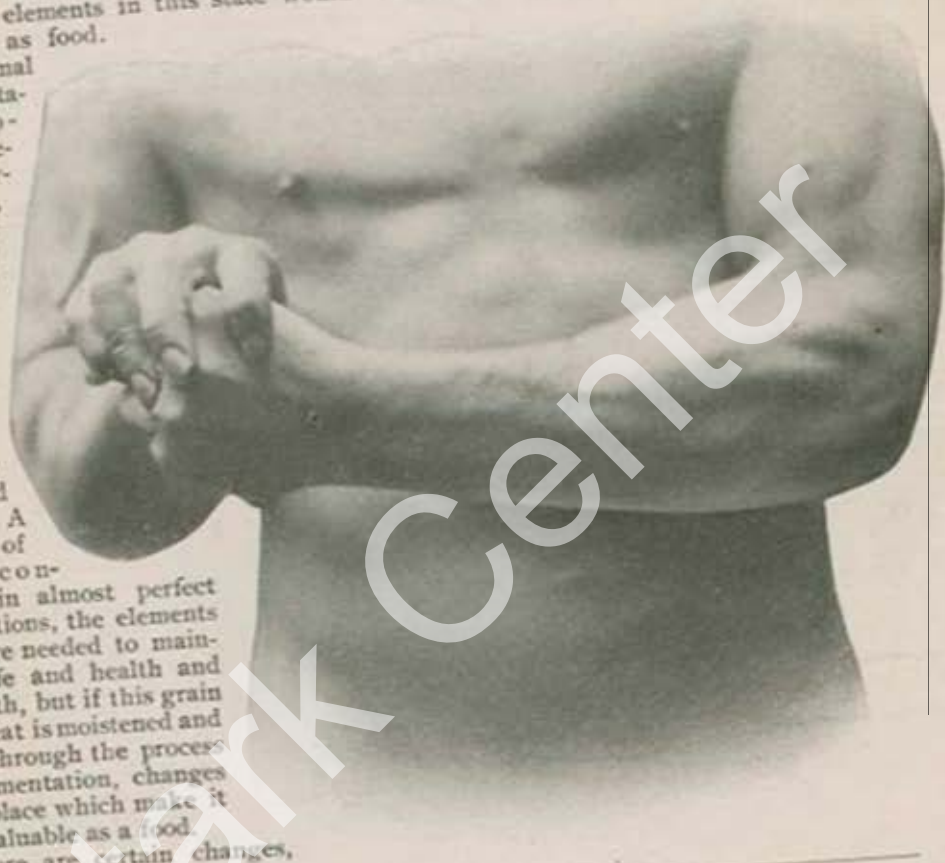


PHOTO No. 68. Exercise No. 37 Continued.—To the position shown in the above illustration. Take same exercise with the position of the hands reversed. Continue until the muscles on the side of the forearm tire.

which Nature has made provision to carry on in the body. If these processes could not be done better by our digestive organs than on the stove, we would not have been given organs for that purpose. Many of the imperfect changes which take place in food in the process of cooking, would take place in a proper way if our food came to us in a natural state.

authorities maintain that food is far more easily digested when cooked. This conclusion has not been proven by any means. And, even admitting that uncooked food requires a longer time to digest, would not the increased amount of nourishment obtained be worth far more than the extra efforts essential in the digestive process?

COOKING DESTROYS THE LIFE CELLS OF FOOD, AND MAKES IT NECESSARY FOR YOU TO INCREASE THE QUANTITY EATEN IN ORDER TO SECURE THE SAME AMOUNT OF NOURISHMENT. Cooked food contains far more waste matter than uncooked food. This additional waste must be eliminated by the functional system.

DAILY REGIME

I herewith repeat the daily regime. 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 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 particularly 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 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



PHOTO No. 69. Exercise No. 38.—Grasp right wrist with left hand, with the wrist bent as far over to the right as possible. Now resisting the movement with the left arm, bend the wrist inward and toward the left shoulder as far as you possibly can. (See next Photo).

More energy is, therefore, required to dispose of cooked than uncooked foods.

In the next issue a more detailed discussion of the uncooked food diet will be given and the fact that almost all athletes of to-day live on a mixed diet will also be discussed.

taken in a room with the windows wide open, and with as little clothing as possible. Cultivate the fresh air habit. Leave the windows of your sleeping room wide open at all 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 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 workmen 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 impression that you cannot improve by eating three meals a day; I advise the two-meal plan to guard against the liability to over-eating.

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 use 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

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 use the same muscles as are employed in your work should be omitted.

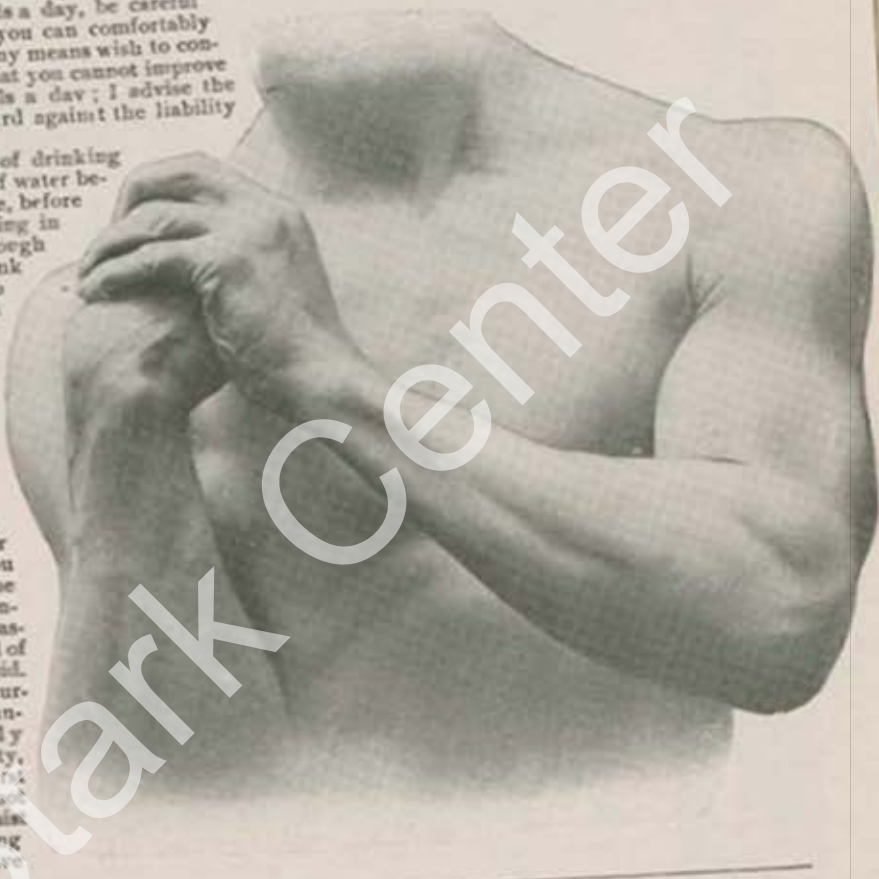


PHOTO No. 70. Exercise No. 33 Continued.—To the position shown in the above illustration. Take the same exercise with the position of the hands reversed and continue with each until the muscles are tired.

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

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



BLANCHE BATES
In the "Darling of the Gods"

SOME STAGE FAVORITES

By La Pierre



IT MUST be conceded by any thoughtful observer that to become a stage favorite demands not only unquestionable talent but in some instances a large outlay of money, and in most cases considerable time; very often bitter years of waiting that no future fame or fortune

can repay.

To be able to charm across the footlights, to be welcomed as an ever returning star, steadily increasing in splendor and magnitude, to retain the esteem of the fickle public and to be always sure of applause without the help of paid clappers (the "claque" is an acknowl-

edged institution of the French stage and it is not unknown in America)—this, too, is a consummation devoutly to be wished for, and possible only to the exceptional few who are blessed with either genius, talent, grace, magnetism, or physical attributes of no ordinary kind.

A judicious use of printer's ink will sometimes accomplish wonders, but after all, if the one who poses for popular admiration does not possess personal qualities that are admirable in themselves, then the public soon sickens and turns away in disgust, and flaring headlines and press notices are no better than election posters the day after the contest. In fact it is much better to be modest in making announcements, because if the star is of the lesser magni-



RICHARD MANSFIELD

Whose manliness stands out prominently in everything he does. His broad shoulders, muscular arms, well developed legs and strong, resonant voice express the distinctness of his individuality and greatness of his manhood.

tude no disappointment is felt; and if a really great luminary should appear, no adventitious aid is needed, for all

the world cannot help but stop and gaze when such a bright light appears in the dramatic firmament. Of course we all know that an artistic stage setting enhances the appearance of a star as much as a Tiffany setting does that of a diamond, but the star must shine by no borrowed light, just as the stone must be of the first water, or else the effect is only cheap, tawdry and unreal. The three greatest masters of stage-craft on the English speaking stage are Irving, Mansfield and Belasco. They have a few rivals amongst the opposite sex, consideration of whom I will leave to some future occasion. They all three strive to be historically accurate in every detail and they generally succeed in accomplishing this, so that a harmonious whole is the result of their efforts. They

have special music composed or arranged for their plays by good, often eminent composers; and suitable music, to my mind, greatly aids and embellishes a stage representation of whatever kind. Eleanore Duse is of an opposite opinion and she, no doubt, lives up to her convictions; but she is the exception that proves the rule.

Though the three great stage managers we are considering will agree with each other on many points yet each will reach a different final result. For instance, there is something about the regulation of the lights that belongs alone to Irving. Mansfield has his own simple arrangement for the introduction of supernatural effects. He is forever changing and polishing his productions. In Julius Caesar the arrangement of the Forum scene was completely altered from the first presentation, and his delivery of lines, stage business, etc. underwent a gradual and, in some cases, a complete change as the season advanced. But the true artist will never stop short of perfection. He is never satisfied with what he has accomplished because his ideal ever beckons him on to higher points of vantage and clearer fields of vision.

Genius is possessed of the divine unrest, the desire to animate, to create, to put life into earthly moulds; and the nearer one approaches to Genius, the less satisfaction will be found in things of the present, the more will one seek for new worlds to conquer.

David Belasco is lavish in his expenditures: producing effects that are extraordinary, spectacular and sensational. In his "Darling of the Gods" with Blanche Bates in the title role and "Du Barry," giving Mrs. Leslie Carter the chance of her life time as the capricious and childlike favorite of Louis XV., we have stage realism carried to the topmost pinnacle of modern endeavor.

Mrs. Carter has certainly fought hard to conquer and retain public opinion, and if the favor of the populace is hers to no small degree is it due to her own unremitting labor under competent direction. A pupil of Belasco's, she owes all, or nearly all, to his training—that is to say, all that a pupil can ever owe a teacher, for instruction is useless unless put into practice and David Belasco certainly had in her one who believed in his methods thoroughly and spared no pains to produce the desired results. Mrs. Carter's training was largely along the lines laid down in Physical Culture and Belasco, in speaking of it, acknowledges that some of the exercises were rather

rough, but the end justified the means, and Mrs. Carter's improvement from every point of view speaks volumes for a natural school of acting based upon the physical and not neglecting the mental, but rather strengthening the mentality, and giving new life to the emotional, intuitive and spiritual phases of being. For it is a fact that the physical acts and reacts upon the intellectual, and we can no more have as true or great a thought, and give it adequate dramatic representation with a weak puny body, than we can live without proper food and amid foul surroundings without in some degree being contaminated. Of course I know that some celebrated instances, apparently to the contrary, might be quoted, but in each and every case it will be found that the will of the man conquered in spite of physical imperfections; and given the same degree of will-power, with perfect physical conditions, what a still more glorious result would have been obtained. We might then indeed have believed that the Gods had come down and dwelt among us!

At a recent presentation of *Du Barry*, an intelligent woman—an actress by the way—remarked to me, anent Mrs. Carter—"her form is divine!" This was certainly high praise from a woman in the same 'line of business.' If a man were to say the same thing, some might be apt to think he was unduly intoxicated by her graceful lines and curves, the gleam of her red, red hair, and the supple movements of her sinuous body. But a woman! Then it must be so!

Undoubtedly Mrs. Carter stands as the triumph of the physical culture school of acting, because without her strength and grace, developed according to the best athletic rules, one cannot imagine her occupying a place anywhere near her present position. Not even Belasco with all his skill, with all his clever devices and stage tricks, could suffice to make of her a first-class star, were it not for the rigid training he bestowed upon her, which resulted in her lithe movements, general good health—in short physical perfection. But let us rather praise Belasco for going about his work in a sensible manner, laying a physical foun-

dation and thus avoiding attempting the impossible as a less clever star-maker would have done. It is this disposition to go to the root of things, to take into consideration the material and tangible; to build upon a solid, satisfying, physical basis of truth and Natural Law that makes any art-work meritorious or enduring. The author of *Du Barry* recognized this truth, otherwise Belasco would have spelled Fiasco.

Julia Marlowe is another star who has great strength and vitality and very seldom succumbs to the severe strain she necessarily undergoes while acting her romantic and heroic roles, unless when disappointment in the production of a play and the difficult task of bringing a company, always composed of some raw recruits, exalted up to the standard of her own idealistic vision, re- temporary breakdown. Miss Marlowe is blamed by the critics, and rightly so, for not giving more of the heroines is so well portray.

With a figure that could never as voluptuous, *Juliet* would charm us with the same girlish of demeanor her first appearance when only a slip of a girl caused

the figure that be styled today with the sweetness that marked her appearance an untried girl and the great



MRS. LESLIE CARTER

Whose success, mainly at the hands of David Belasco, was attained by her unremitting labor and adhering closely to common-sense physical training

Ingersol to prophesy for her a wonderful future; in which he did credit to her and proved himself, at least in her case, more of a seer than a sceptic.

A little story was told me not long ago about the kind treatment, flowers, carriage-drives, little delicacies and of course money, showered upon a young girl who was so unfortunate as to be seriously injured in a scene with Miss Marlowe. It is rarely that such attention is given to another as was bestowed in the case of this young actress. And this is not an isolated incident. Clever amateurs have very frequently received their first engagement from the lady who is now being urged by so many to leave modern plays to work out their own salvation and to return to the classic drama.

By the way, Mrs. Carter's stage hysterics, of which we hear so much, although they are not really so *en evidence* in "Du Barry" as is commonly asserted, are not altogether assumed. A good, old-fashioned thunder-shower will give Mrs. Carter a worse fit of hysteria than she ever portrayed propped up among the pillows of Louis IV.'s gorgeous bed. That is unless physical culture training has driven the fear of storms from her mind. But, then, women are "queer critters" and early habits cling as close as a Du Barry gown. Does she remember, I wonder, an interview interrupted by a terrific thunder-storm. I have a picture of a clinging, crouching, picturesque woman in a corner of a room, lit up by flashes of lightning and gleams of wonderful red hair. But that was years ago!

Julia Marlowe is an exponent of the Natural School of Acting. She is opposed to the artificial and theatrical.

She spurns traditions and plays as the spirit moves her. A healthy, wholesome spirit of real life pervades her work, and having persuaded herself that she is really living the part she finds little difficulty in taking the audience into her confidence. She is intense, though unassuming and her dramatic touch firm and unerring.

Mansfield though often simplicity itself (notably so when others would be ornate) is oftentimes peculiarly theatrical—for instance, the moment when he stands before Cæsar's empty seat at the close of the great forum scene and deliberately throws his tremendously

long toga down the full length of the tragic flight of steps, clear to the still warm and bleeding corpse. Yet so audacious a stage-trick does not seem to detract one bit from the manliness of his Brutus. And it is this quality of manliness that stands out so prominently in everything he does. His broad shoulders, muscular arms, well developed legs, (though some hint these are padded) and strong resonant voice, all express the distinctness of his individuality and the greatness of his manhood.

He and Forrest are the only great men in his company. Forrest is a magnificent looking animal, and no

one would think of denying that he has a large mental endowment also. He shares the honors with Mansfield and is the favorite with some. But the greatest American actor has a dignity, a repose, a strong man's tenderness and gentleness that is as opposed to sickly sentimentality as light is to darkness. And then his voice—clear, distinct, resonant, rumbling like the thunder of the Gods. I know of no other actor blessed with such a voice.



DAVID BELASCO

Who, more than any other actor or playwright, realizes the great extent to which the physical acts and reacts upon the intellectual and who has proved that it is impossible to obtain adequate dramatic representation of a true and great thought from the medium of a weak, puny body.

THE SUFFERER WHO CURED DROPSY BY FASTING FORTY DAYS



ARTHUR VAN METER, a member of the firm of Van Meter, Harness & Co., of Salt Lake City, has completed a fast of forty days and come out of it greatly improved in health if not completely cured. He had visited California, and while there was tapped twice for fluid

in his right lung, after the doctors vainly trying to carry off the fluid by absorption. On his return to Salt Lake, a general dropsy set in all over him, his lower limbs became swollen to an enormous size, and his abdomen was greatly charged and similarly swollen. After numerous examinations, the doctors concluded that he had enlargement of the liver, and he was treated for this with the best medicines known. Still the dropsical condition failed to improve, and after he had been tapped in the abdomen the doctors said he would die in a little while.

At this critical period, a cousin of Mr. Van Meter, who is a devout believer in fasting, wired him "TO FAST," and save his life in this way. So skeptical was Mr. Van Meter, that he immediately ordered a turkey dinner and proceeded to eat heartily of it. But the idea introduced to his mind was not to be easily dismissed, and be-

fore the week had ended, he had begun fasting, aided by books on fasting and letters received from his cousin, who had been cured in this manner. **WITHIN TWO DAYS THE DROPSY BEGAN TO DISAPPEAR, AND AT THE END OF TWELVE DAYS HE WAS RELIEVED ENTIRELY, AND FOR THE FIRST TIME IN SIX MONTHS SLEPT QUIETLY THE WHOLE NIGHT THROUGH.**

During all the time previous to the fast he could not lie down. He could only sit in certain positions, while a good sleep was an entire stranger to his eyes. He continued his fast twenty-eight days longer. His pulse, which had steadily kept at the hundred mark, came down to normal, and the doctors pronounced his liver normal also. Thus Mother Nature, the best of all physicians, accomplished what all the arts of medical science had failed to do. Nothing but water passed his lips during this long fast. To-day he sits on his front porch, breathing in life and health



Mr. Arthur Van Meter

with every breath he takes of the pure, clear mountain air. A terrible cough bothered him before his fast and his friends feared he was going into consumption. The cough is now gone also and he breathes to the bottom of his lungs with ease and freedom from all irritation.

PHYSICAL TRAINING IN MILITARY AND CIVIL LIFE

By *Lieut. Colonel Douglas, V.C., M.D.*

(Hon. Brigade Surgeon, Army Medical Service)



ABOUT a year ago Rudyard Kipling assailed England's cherished ideal. He attempted to pull down one of the idols of our market places—the athletic young man. He called him names: "flanneled fool" and "muddled oaf." As the notorious Mrs. Malaprop would observe, "Here's a nice derangement of epitaphs." One good has resulted to Britain as a nation from this unprovoked assault; attention has been drawn to the subject of physical education, and the question has been raised whether her system of training the bodily powers of her youth chiefly by games is the



Fine Recruit

best that can be devised, or whether a more general and systematic physical education should not be given, especially to those who cannot receive the physical training they need, owing to the conditions under which they live, in the midst, perhaps, of cities and large towns, where they have not space (except to a limited extent) for games and sports.

When we speak of education we have mental visions

of the school boy with his satchel, of the noisy mansion, where the board school-master or his equivalent distills information and instruction into more or less attentive youthful ears. Elementary education, the training of the young to become good and useful members of society, is three-fold—physical, intellectual, and moral.

The order is important. It is essential, in the first place, that the young of both sexes should be sound and healthy animals. A healthy mind and sound morale are generally the result of a healthy body. These three educations are associated and correlated, and should proceed simultaneously. The characteristics which are found to be defective should receive special attention while the youthful system is plastic.

It would seem to be a popular belief that the spread of intellectual education leads to an improvement in the morals of the community. That there are more criminals proportionately among the educated than among the uneducated, and that the growth of fraud has increased enormously in the last few years together with the growth of education, are facts which ought to help to dispel this illusion. The intellectual and moral educations do not come except indirectly within the scope of my paper.

Physical training—to go on to the proper subject of this paper—is of two



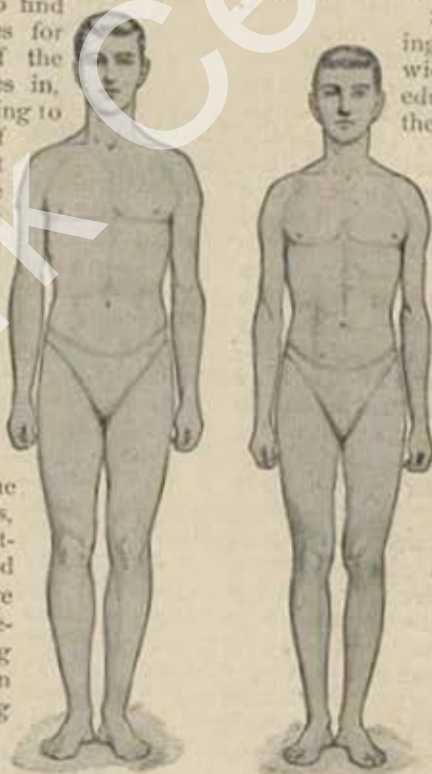
The Pride of the "Forty-Twa"

kinds, natural and systematic. The natural, the need of exercising the muscles which impels the young to play games, run and jump, like healthy young animals abounding with vitality, who feel the pleasure of power in action. "Bon chien chasse de race"; the good Briton plays cricket by instinct, as does the average American play baseball. There is also the natural physical development given by work: the physical development of the agricultural laborers, the gardener, the sailor, fisherman, shepherd, etc.

No doubt there is much to be said for games. They produce fine athletic young men. When properly conducted or engaged in, they may be valuable aids to moral training, and show the necessity of self-restraint, endurance, and that valuable characteristic called "fair play," on which American and Briton pride themselves. The objections to games are that they are irregular and partial in their action. It would be, I believe, extremely difficult to find space and appliances for all the children of the towns to play games in, even if they were willing to take advantage of them. Games cannot very well be made compulsory. To force a delicate, neurotic boy to join in sports, against his will, is not likely to do him any good; and these are the children for whom physical education is most urgently needed.

There is a tendency among us also to pursue certain games to excess, such as baseball, football, lacrosse and cycling, in which there is undue nervous excitement; to make winning the match the main thing, more than playing the game.

President Roosevelt,



Average
American Student

Imaginary
Average Recruit

Imaginary average recruit compared with average American student. The average American student is from Prof. Dudley Sargent's statue.

in his "Strenuous Life," points out that, according to a very acute observer, "not impossibly, excessive devotion to sports and games has proved a serious detriment in the British Army, by leading the officers, and even the men, to neglect the hard practical work of their profession for the sake of racing, polo, cricket, tennis, fishing and shooting, until they received a very rude awakening at the hands of the Boers."

Of course, this means that any healthy pursuit can be abused. It is the excess, not the game or the sport, that is objectionable. The same may be said of violent gymnastics followed in an unsystematic manner, with the desire of developing too quickly a powerful muscular system. I have known many instances of extremely muscular men, gymnastic instructors and others, who appeared to have exhausted their vital powers by excessive exercise, and who have broken down prematurely—become stale, as the expression is.

Systematic physical training and development, in its widest sense, embraces the education and cultivation of the vital powers and stamina of the young, as well as the development and exercises of the muscular system. Of course, a well-devised system of exercising the muscles tends undoubtedly to the strengthening of the vital powers. The digestion becomes better, the action of the heart and lungs is improved, and the control of the nervous system becomes more easy.

I have often had occasion to remark the very great improvement that takes place in the recruits under a careful and well arranged gymnastic

stic instruction. Systematic physical education should begin very early, as soon as the child has sufficient intelligence to understand what is said to it. What may be called personal hygiene, the amount and quality of food and drink, the care of the skin, clothing and ventilation, should be carefully instilled into youthful minds. About some of these things there is an amount of ignorance which is disgraceful to us as a civilized people of an advanced, advancing age. Take, for instance, the important subject of the amount and quality of food required to repair the daily waste of the body under ordinary circumstances.

For some years I had medical charge of a military prison at Halifax, Nova Scotia. The diet in military prisons is calculated on the lowest scale required to keep an average man doing average work in health. For long sentence prisoners at hard labor, the daily allowance consists of: oatmeal, ten ounces; Indian meal, twelve ounces; bread, eight ounces; milk, twenty-four ounces. A first-class pris-



Average Recruit. Selected from Numerous Specimens (Older and Younger)

To put it in more comprehensible language: A first-class prisoner has a bowl or porringer of oatmeal porridge and a mug of milk for breakfast; a porringer of Indian meal porridge and a mug of milk for dinner; a thick slice or chunk of bread and a mug of milk for tea. Three times a week meat and potatoes, or soup with vegetables, for dinner, instead of Indian meal porridge; or twice a week in the case of a second-class prisoner. Now, on this diet, about which there is a good deal of sameness, not only were the military prisoners in better health than the ordinary soldiers—that is, they had fewer cases of sickness and fewer deaths among them—but some of them even gained in weight. When we consider that many of these men were of dissipated habits, with constitutions prematurely broken down, it is rather a striking testimony to the fact that a restricted diet, if not beneficial, is at all events not injurious to the health. Now, how many artisans, working men and others to whom health and economy are, or ought to be, special objects of consideration, have sufficient knowledge of personal hygiene to choose their diet, based not on their appetites or fancies, but on what is required to repair the losses of their systems and keep them in good health?

I cannot go further into the other matters of personal hygiene, such as the importance of getting as pure air as possible by ventilation, the baneful effects of concentrated or excessive alcoholic drink, the necessity of cleanliness of person and surroundings; it would occupy too many pages. All these should be a part, and an important one, of elementary physical education.

The necessity of systematic muscular training on sound principles is now, I think, very generally admitted. That there are an immense number of young men and women of deteriorated physique, must be apparent to any one who will take his stand near the gate of the manufacturing works when the workers, male and female, are coming out at the dinner hour, or examine the crowds of excursionists on a cheap excursion train from one of our large manufacturing towns. How many of these would he pick out as sound able-bodied specimens

PHYSICAL CULTURE



A Special Recruit
for Artillery

of the human race? That there are a number of degenerates among the town population was forced upon my notice by the character of many of the young men who came up for examination as recruits. I think any one who saw these lads must agree with me, unless he is strangely biased, that their weight, chest measurement, general physique, decayed teeth, and so forth, showed that there must be many of the class from which they were selected who are below the average physical standard of youths of that age throughout the country.

Systematic muscular training and exercise is undoubtedly a powerful means of improving the physical development of these youths, and I have often regretted that it was not more universally applied. The improvement in the recruits during a three months course of training was very striking. No doubt the regular, wholesome and abundant food was also an important factor in bringing them into better condition. It is unnecessary to go into details about muscular training. It should be begun very early in life. As before said about training of the stamina, it should be continuous and not by fits and starts. As many muscles as possible should be exercised, and not merely a particular set. The exercise should stop far short of fatigue, and violent straining should be avoided.

As an instance of how muscular power is gained by constant use, the training of apprentices to dentistry in Japan is interesting. A traveler in that country records that, observing a number of youths employed in pulling out pegs which had been driven firmly into a wooden board, he inquired the reason

of this apparently objectless work, and was told they were training to pull out teeth, and that from constant use their fingers acquired such power that they could pull a decayed tooth from its socket. I presume that the teeth are loosened by previous treatment, and also that the tale is not of the proverbial traveler variety.

Drill, to be of use, must not be forced upon unwilling pupils. Conscription, drill and discipline are accepted by continental people as a necessity, a duty a man owes to his country, a lesser evil than his country being overrun by a foreign foe. When this feeling does not exist, when drill is forced upon those who do not see the necessity for it, and to whom it is exceedingly irksome, it cannot but be harmful in its results. I am convinced that a general military training for home defense (not conscription, as ordinarily understood by the man in the street) would be of immense benefit to the majority, or, at any rate, by a large minority.

Systematic muscular exercises, however well devised, do not give the same healthy stamina that is attained by the sons and daughters of the soil. When the agricultural laborer gets a sufficiency of food and a healthy dwelling, the constant slow work in the open air in all weathers, except the very worst, gives endurance and vitality, which the town-dweller whose muscular system has been developed by gymnastics



In the "Chrysalis Stage."
Ordinary Recruit



A Good Recruit—After Two Months' Training

and games, cannot hope for.

The late Richard Jeffries, who knew and described rural life in a way that has been seldom equaled, makes some very pertinent remarks on this subject. In describing a strong laborer of a past generation, he says: "Our modern people think they train their sons to strength by football, rowing and jumping, and what are called athletic exercises, all of which it is the fashion now to preach as very noble and likely to lead to the goodness of the

race. Certainly feats are accomplished and records are beaten, but there is no real strength gained, no hardhood built up. Without hardhood, it is of little avail to be able to jump one inch further than some one else. Hardhood is the true test, hardhood is the ideal, and not these caperings or ten-minute spurts.

"Now the way they made the boy John Brown hardy was to let him roll about on the ground with naked legs and bare head from morn till night, from June to December, from January till June. The rain fell on his head, and he played in wet grass to his knees. Dry bread and a little lard were his chief food. He went to work while he was still a child. At half-past three in the morning he was on his way to the farm stables, there to help feed the cart horses, which used to be done with great care very early in the morning. The carter's whip used to sting his legs, and sometimes he felt the butt. At fifteen he was no taller than the sons of well-to-do people at eleven. He scarcely seemed to grow at all, even

then very slowly, but at last became a tall, big man. That slouching walk, with knees always bent, diminished his height to appearance; he really was the full size, and every inch of his frame had been slowly welded together by this ceaseless work, continual life in the open air, and coarse hard food! This is what makes a man hardy. This is what makes a man able to stand almost anything, and gives a power of endurance that can never be attained by any amount of gymnastic training."

Such a Spartan training as this is, of course, out of the question nowadays. The physical training described was that given about the early part of the last century; and the ideas on which it was based are now generally regarded as erroneous. Child life was little regarded or cared for by certain of the population. The weakest went to the wall at a terrible rate, and infant mortality was enormous. Even of those that survived, few attained the strength and vitality of John Brown. More often their frames never attained full development and strength, but bent and crippled with excessive toil, insufficient food and rheumatism, they became broken down; useless long before what is commonly regarded as old age was reached.

We are, however, beginning to learn that the cultivation of the soil, the primitive occupation of man, should be employed as a means of educating children, and also to counteract the evils of town life, and the deterioration of the human machinery caused by the wear and tear of industries, worked at high pressure. Agricultural colleges, horticultural colleges, training schools of "petite culture," are being established in some parts of the country and it may be that in time the school garden, as well as the school gymnasium, will form parts, and important parts, of our public school education. Something might well be spared from the forcing intellectual education of the youth of the country, diverted to training them to be capable men and women, physically as well as mentally and morally.

In a later article I shall give my views on what to do with our unemployed soldiers.

FREAKS AT BARNUM & BAILEY'S

By Joseph C. Hurley

ILLUSTRATED BY X-RAY AND ORDINARY PHOTOGRAPHS SPECIALLY TAKEN FOR PHYSICAL CULTURE

"Now, by two-headed Jansa,
Nature hath from'd strange fellows in her time."—*The Merchant of Venice*.



NOTWITHSTANDING the theory propounded by Professor Weismann that acquired characteristics are not transmissible, Darwin's conclusion that their inheritance is habitual has many enthusiastic supporters.

The Professor admits that congenital traits are transmitted and therefore, in that respect, is in accord with Darwin's theory of pangenesis—a theory which Huxley said must have been invented if it had not been discovered. Adherents of that theory who have learned the prenatal and subsequent history of the three best known cases of congenital characteristics in the Barnum and Bailey show have found arguments to support it; for in them can be detected instances of both direct adaptation and of the cessation of

action. The father of Rob Roy, the dislocationist, was an articulator of skeletons. That is to say, he prepared and constructed skeletons for scientific purposes. This occupation developed an already acquired knowledge of practical anatomy and of the allied science, physiology. As a boy, Rob Roy was a contortionist, but he soon discovered an ability to dis-

locate many of his joints. At the Barnum and Bailey show, being limited for time, he only exhibits dislocations of the fingers, wrists and elbows. But he can do much more than that. Still, save that Rob Roy is an Albino, as is his son (who does not appear in public), his physique is normal. An X-ray photograph of his left elbow was taken a few

days ago by way of substantiating that assertion as far as was convenient, by Dr. Herman Grad, an expert in radiography at the New York School of Physical Therapeutics. In another picture both elbows were submitted to a four minutes' exposure, hardly long enough to insure distinct lines, but as long as Rob Roy could comfortably bear—long enough to show that it was an actual dislocation—and then the fingers were turned backward as seen downward in the photograph. The dislocation observable in the left thumb was unintentional. It is difficult when exerting certain sets of muscles to avoid the contraction of others that are in sympathy. There being several physicians present, Rob Roy, by special consent of Mr. Bailey, exhibited other dislocations, possibly for their instruction, certainly for their amusement. He threw each thigh-bone out of its socket at the hip joint, and then returned the head of each femur to its acetabulum as easily as he



Rob Roy, His Wife and Son, All Albinos

had displaced it. He dislocated an ankle and made the foot revolve as if it were on a simple pivot. The reduction was just as simple. He turned the sole of each foot inward and walked with his full weight on the outer malleoli, or bony lumps outside the ankle joints. He formed a club foot that would have excited the admiration of Dr. Lorenz and seemingly shook, rather than moulded, it into proper shape. Then, to the surprise of even those who had seen these unusual phenomena, he dislocated a shoulder blade and when Dr. Pilgrim, the professor of psychiatry at the school, endeavored to trace the scapula below its normal position, Rob Roy remarked, "Feel higher, doctor; I'll throw it down next time." He fulfilled the promise, and the Professor said, "It is wonderful."

No witness of any of Rob Roy's feats would deny that, as they are the result only of suggestion, he must have a knowledge of anatomy and, to say the least, a rudimentary knowledge of physiology. Yet he never was taught these

cordingly and Rob Roy limped from the store. By appointment he returned to try on the garment, but before entering dislocated the left hip. The tailor does not yet know whether his vision or the pattern became distorted.

That Rob Roy's acquaintance with anatomy can be practically applied outside of his own framework was demonstrated in the case of his friend, J.W. Coffey, the living skeleton. When the show was in London, the wasting of Coffey's muscles was followed by spinal curvature, accompanied by the girdle and lightning pains characteristic of *locomotor ataxia*. This annoyance was accentuated by the sentimental circumstance that he was enamored with the charms of his landlady's daughter and cherished a desire for marriage. Such an ironical state of affairs inspired Rob Roy with the sympathetic proposal that a supporting corset with provision for suitable articulation might satisfactorily relieve the spinal pressure. Coffey coincided with befitting eagerness and efforts were made to obtain the encasement from makers of surgical appliances. But they failed. At that juncture, Charles Tripp, the armless man, who was a co-lodger, came to the rescue, for having acquired pedalian dexterity—as those who have seen him execute penmanship with his toes know—he had little diffi-



X-ray photograph fingers turned backward, as seen downward; the dislocation of the left thumb was unintentional

sciences. He has learned what he knows of them by intuition and experience.

Rob Roy's Scotch sense of humor occasionally leads him into making fun by his proclivities. In London, when about to be measured for a pair of trousers, he threw the right hip out of joint. The tailor made his pattern ac-



X-ray photograph of Rob Roy's elbows after a four minutes' exposure. The dislocations are plainly seen

PHYSICAL CULTURE



J. W. Coffey, the "Living Skeleton"

culty in constructing an effective support. The curvature was relieved, the pains ceased and Coffey married the girl.

Tripp's father was a bridge builder in the days when derricks were not as much in use as they are now. Continual lifting overdeveloped the muscles of the arms until they were atrophied, so that they were unfortunately not represented on the occasion of Tripp's generation. The idea that pre-natal impressions are directly owing to the influence of the mother does not seem to have been verified in this instance. It is not likely that the mechanical genius was inherited solely from her, although she may have been a reflector of parental skill. To flatter Tripp for his handcraft, by the bye, is not doing him full justice. He is not only an artistic, but an ingenious photographer. The portrait shown here, although not the best likeness of him that has been produced, is the most interesting, for it was taken by himself. Having placed his sister

in focus he changed places with her, assumed the attitude he had assigned her as nearly as he could judge, and told her to drop the shutter. Tripp is a widower, but retaining the tendency which Lowell calls the "fire within," is still—so his *confidés* testify—somewhat inclined to flirt.

In some respects, however, the most interesting study of the cases mentioned is Coffey. His father was a shoer and blacksmith, renowned on the Pacific coast for his intrepidity with vicious horses. The "strenuous" exertion entailed in this occupation led to atrophy of the muscles of the arms and legs, the infirmity from which J. W. Coffey suffers. Not unnaturally, Mr. Coffey has concentrated

his attention for many years upon the outcome of pre-natal influences, and so, when he achieved his matrimonial aspirations, the subject dominated his life. With a view of insuring what he regarded as an essential attribute of marital relationship, he cultivated the idea of cooperation in matters likely to affect the well-being of off-



Mrs. Coffey, the Woman of the "Living Skeleton's" Choice



Little Elsie Coffey, Better Known as the "Little Midget," Their Child, Whose Development is Normal in All Respects

spring. Realizing the desirability of compensation on the maternal side for his deficiencies, he encouraged on the part of the mother appropriate physical culture. And, holding the notion that although the sex instinct is the basis of all that is good within us, affection has its influence on the attainment of the highest mental condition, he, for the sake of anticipating as far as possible a recurrence of his infirmity, secured leave of absence from Barnum & Bailey and lectured in England and Ireland on "Joyous Forms instead of Cripples," many of the latter being depicted by a stereopticon which Mrs. Coffey operated. Toward the end of the lecture season it was found necessary to abandon the tour and presently the parental hopes were consummated by the birth of a girl. As the mother was at her own home, Coffey felt free to rejoin the circus. But he recommenced lecturing as soon as convenient and increased the attractiveness of the entertainment by introducing Elsie as The Little Midget, in which character the accompanying picture was taken at the age of two years and three months. In the interval of the lecture, Mrs. Coffey played the part of a magician, in which rôle she appears in the portrait. In the lecture, Mr. Coffey contended that Elsie was an ocular demonstration of the advantages derived from judicious pre-natal influence and proper physical culture.

From these pretty well authenticated facts it may be fairly inferred that Rob Roy inherited a characteristic that was not congenital in his father and that he



Charles Tripp, the Armless Son of a Bridge-builder,
Muscles of Whose Arms Became Atrophied

assisted in the transmission of a characteristic which was not congenital in himself. Tripp inherited the special intelligence to which his ability for mechanical device is attributable. Both he and Coffey tend to corroborate the idea that a deficiency in the fecundating gemmule may be evidenced in the offspring, and Coffey's chubby looking daughter almost proves that such deficiencies may be atoned for by judicious watchfulness.

Men, arts and science are not cast in the mould, but are formed and perfected by degrees, by often handling and polishing, as bears lick their cubs into form.

The souls of emperors and cobblers are cast in the same mould; the same reason that makes us wrangle with a neighbor causes war betwixt princes.

Never do a thing concerning the rectitude of which you are in doubt.

The disappointment of manhood succeeds to the delusion of youth. Let us hope that the heritage of old age is not despair.

Nature forms us for ourselves, not for others; to be, not to seem.

THE ART OF SWIMMING

By H. S. Horan

Illustrated by photographs of Mr. Horan specially taken for PHYSICAL CULTURE.

Mr. Horan is a teacher of swimming and physical training at Harvard University, and is contemplating swimming the English Channel from Dover to Calais.—EDITOR.

SECOND LESSON.

OVERHAND STROKE.

Figure 6 illustrates the overhand or racing stroke, considered by many to be the fastest method of propelling the body through the water. Any person desirous of learning this style of swimming should first give a great deal of time and study to all details of form, grace and economy of movement, as

opposite directions at the same moment. Then use the legs and right arm, as described in the side stroke, but in this stroke the left elbow is raised until the fingers are clear out and over the water. The hand is then carried forward, back up and in line with the face. It should be dipped without making any splash and then drawn or pulled



FIGURE 6. OVERHAND RACING STROKE. Get well into the water, then fall on right side and shoot the right hand forward at full length in line with the body and slightly under the surface of the water. Simultaneously with the forward part of this movement, the left elbow should be raised until the fingers are clear out of water, the object being to extend both arms to their utmost at the same time in opposite directions.

these important points should be mastered before attempting much speed. I advise you mastering the arm movement first.

Start by lying on the right side, shoot the right hand forward at full length in a line with the body and slightly under the surface of the water, with the left arm straight by the side, as both arms should be extended to their utmost in

through the water, as described in the side stroke.

SWIMMING ON THE BACK.

This style of swimming is very useful, as well as pleasant and restful, and should by all means be studied and practiced by any one who is interested in life saving. This position enables the swimmer to sustain himself much



FIGURE 7. SWIMMING ON BACK. Wade into the water until it reaches the waist, then spring backward to gain an impetus, at the same time throwing the arms well back over the head and drawing up the legs as in the breast stroke, described in last issue.

longer than any other. It will be easily learned after becoming proficient in the breast stroke, as the movements are mostly identical. Its chief value is not for racing, but it is the least exhausting of any stroke in swimming. The

back, being arched and the chest inflated and high, with the chin well up and the head back and resting on the water. It is naturally the easiest and most agreeable of all positions. A good method for the beginner to start learn-



FIGURE 8. SWIMMING ON BACK. In the middle part of the stroke kick the legs out as far as possible.

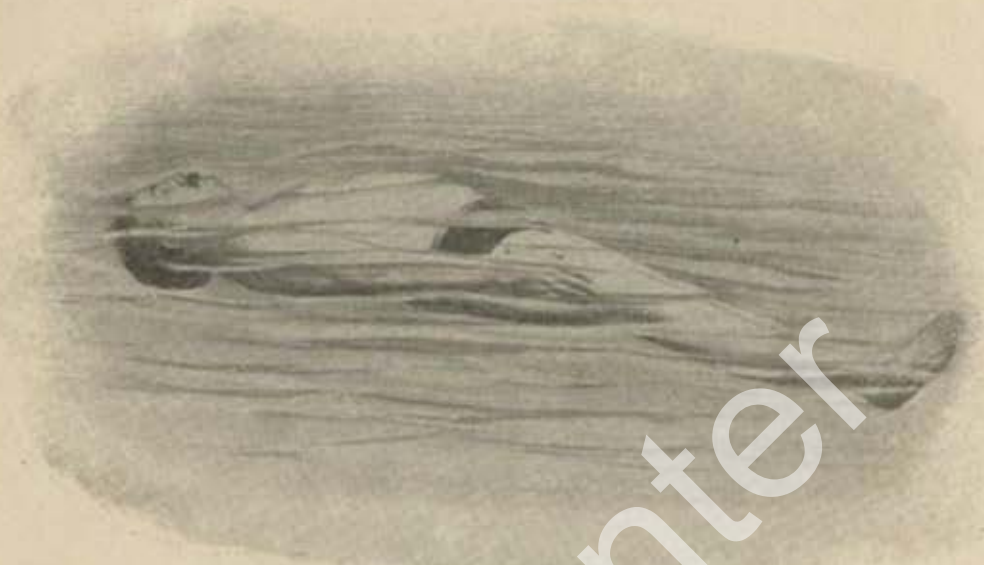


FIGURE 9. FINISH OF THE BACK STROKE. Finish the stroke by bringing the hands through the water in line with the thigh.

ing to swim on the back, is to stand in water which reaches up to the waist and spread the arms out in a line with the shoulder and then fall backward into the water, and in doing so take a slight spring so as to give impetus to the body.

Then kick the legs as far out as possible, as in the breast stroke, then, with legs straight and muscles of the same rigid, bring the heels together with full force and power. The body is then sent forward by this action of the legs, on the



FIGURE 11. FLOATING ON THE BACK. The easiest way to float on the back is to throw the arms back as far as possible in line with the body. This counterbalances in some degree the weight of the legs. Arch the back, keeping the chest well inflated and the mouth out of the water. This position can be maintained as long as deep breaths are taken.



FIGURE 11. This illustrates the position of the body floating or swimming with the arms folded. This position can be resorted to when it is desired to vary the movements. It is not so easy as that illustrated in Figure 10.

wedge of water between them. Then draw the heels as close as possible to the body for the beginning of the next stroke. Then extend the arms behind the head in a line with the body, thumbs up and backs of hands touching each other, fingers closed tight and hand scoop shaped. Arms straight and muscles of same taut. Apply the power from the shoulders and sweep the arms through the water until the palms touch the thighs. The hands can be brought back to first position, either through the air or under the surface of the water. If under the water, palms should be kept down so as to minimize resistance to the negative movement. Keep lips closed and breathe through nostrils. Expel the breath as the legs are kicked wide apart and inhale while the legs are together in making the down stroke. The action of arms and legs should be simultaneous, but a variation can be made in the arm strokes by using each hand and arm alternately.

FLOATING ON THE BACK.

Figure 10 illustrates the position of the body when floating on the back. To a swimmer who really loves the art, there is nothing so enjoyable as "floating at ease." It is the best position of rest for the swimmer, for no artificial bed made by man is as comfortable as mother ocean. One great essential, however, is self-confidence, as with an abundance of that it will be much easier to master the art of floating. Get into the water up to the shoulders and extend the arms from the sides, palms down. Then gently try to lie on the back with arms and legs extended full length, the arms thrown as far back as possible in a line with the body, to prevent the legs from sinking. Arch the back, head well back, chin and mouth well up, lips closed and always breathe through the nostrils. Take long deep breaths. The body will rise with each inspiration and sink slightly with each expiration. Keep the lungs as full of air as possible.

SPECIAL PREPARATIONS FOR RUNNING
EVENTS AND FEATS OF ENDURANCE

By C. Lang Neil

Author of "Modern Physical Culture," etc., etc.



HE physical culturist aims to keep his body always in the best possible state of fitness and is so ready at any time to enter upon a feat or a contest, which would "crumple up" his less fit brother.

But the best developed and healthiest man can benefit by a special training for a particular event.

For instance, if he desires to run a hundred yards in "even time" (10 seconds), he will require quite a different course of practice and somewhat altered diet from that which would be most advantageous were the distance to be negotiated, say, fifteen miles.

It has often been my pleasure to talk over this subject with Harry Andrews, the trainer at the Crystal Palace Track, London, who has, during the last

fifteen years, turned out more champions in varied branches of sport (cycling, running, walking, etc.) than probably any other three trainers together. The embodiment of a few of his ideas on the subject in this paper will doubtless be of interest to its readers.

First and foremost, he sets two things above all others in training, no matter what the nature of the event—walking and massage. The value of the former has now become almost universally acknowledged. The latter is appreciated at its proper worth in the United States, but in Great Britain it is still regarded as a novel innovation, and quite overlooked by most athletes and physical culturists.

The effects of the hard strains and continued exertions, to which the athlete is bound to subject his muscles, are counteracted, and the springy suppleness of muscle, so necessary to perfect development, is better maintained by massage than any other means.



Strip and Massage carefully all over for from twenty minutes to half an hour. Relax each set of muscles that is being pinched. Get another to do this for you while you lie on a bench

Perhaps the most common error among physical culturists as apart from athletes devoted to special sports, is that they do not, as a rule, do enough outdoor walking. It is the easiest, and yet the most sure of all developing exercises. It strengthens every part of the muscular system and, in addition, encourages long, steady breathing of pure air, thus acting most favorably upon the lungs and the oxygenation of the blood—that most vital of the body's functions.

A distinguished young medico, in a recent conversation at which we were discussing the importance of the study and training of the of exerci- dum b- opers and the heart of the physical culturist, exclaimed: "But why go in for any of these exercises at all? Just persuade people to take daily long cross-country walks in pure air, and suck in huge steady breaths of it, then see what is added to their measurements and general development in three months' time; that's the best culture."

Whilst not going quite so far as my friend, I yet know there is much truth in what was said.

But I digress. Now for a few special preparations. First for sprinting. Any distance from 50 yards to a quarter of a mile is termed by runners "a sprint," that is, a race in which each competitor runs at his highest possible speed from start to finish.

For this a light training is desirable. Hardening is not needed; the body having to be prepared for a short, violent burst, calling for but little stamina. About four to five weeks will be long enough for the man who is fit, as against six to eight weeks required to get ready the other who, through neglect, is fat

inside. The best routine for sprinting is to walk easily, not fast, a mile before breakfast, take the meal slowly, and afterward put in another easy walk of two miles, making it terminate at the track. Strip and massage once carefully all over, which will take some twenty minutes to half an hour. This massage is not to be mistaken for glove rubbing, but to be a careful kneading and pinching massage over the whole body. It is best that some one else does this for the athlete, whilst the latter lies upon a bench and relaxes each muscle or set of muscles that is pinched. There is, however, no reason why he should not do it for himself, though there is a little knack to be acquired in relaxing muscles whilst one pinches them one's self.

On reaching the track run fifty to sixty yards just to open the lungs. Next practice three or four starts "out of the hole," as runners say, from the fact that it is usual to make a small hole, about eighteen inches to two feet back from the starting line, to allow the back foot to give a good push off without slipping, and so getting into one's stride as

quickly as possible. At each of these starts, which should be made to the pistol, the runner continues for, say, forty yards. It does not do to pull up too suddenly; the speed

must be gradually slackened, for if a sudden stop were made it

would put too great a jar upon the frame.

After a minute or two, go one hundred and twenty yards, beginning slowly and increasing to a fast pace. It is advisable to get a friend



Photo of Mr. Constantine, London Athletic Club

The correct swing of the hands in running. They should never swing higher than level with top of the hip.

who is fast to run with one, as it draws one out to put effort into the practice spins. If one is so fortunate as to be faster than any of one's friends, then set him ahead a couple or more yards, and run to catch him; it is only in this way that one's fullest speed can be drawn out. It is not a bad fault for a sprinter to be trained a trifle on the heavy side, as he has not very far to carry his weight.

It is most important at practices to keep warm. Some runners wear sweaters, but it is not the best plan. I believe in practicing in racing rig, and having a long coat or dressing gown to slip on between the exercises.

At finish of practice, massage and quickly home to dinner. An hour's rest to follow, and then once more down to the track and repeat the ante-prandial program. After tea another stroll for a couple of miles completes the day's work.

THE HALF-MILE RACE

is a very trying one, for it needs both great speed and staying power, and hence the preparation must be most nicely arranged to harden just so much as can be accomplished without rendering the runner slow. Six to eight weeks will be the best length of training. The half-miler cannot afford to carry any extra weight. Each man must, of course, ascertain for himself what is his best weight. This can be discovered during the early days, by daily taking one's weight and times over a certain distance, and noting weights on the best days, and then striking an average. After this point is settled to the runner's satisfaction, he may keep as near to it as possible, by extra walking if he is going above weight, and adding a little more flesh-forming food to his diet if dropping below. I do not, in this paper, go into the diet question for runners, reserving that for consideration in a subsequent num-

ber. The routine of the half-miler should be something like the following:

First Fortnight.—Walk a mile before breakfast. After breakfast walk three miles to the track. Massage. Run a mile or two miles, three-quarter speed. Massage. After dinner walk two miles to track. Massage, and run three-quarters of a mile at almost highest speed. Massage. After tea, walk from three to five miles.

Second Fortnight.—Walks and massage as before, but morning runs to be from 300 to 600 yards at top speed. (One day 300, another 400, another 600, and so on.)

Afternoon Exercise.—Three-quarter mile at nearly top speed.

Third Fortnight.—Walks and massage as before. Morning and afternoon runs to be now from 300 to

600 yards at fastest speed, with one trial over the full half-mile, against the watch, in each week.

The day before the race, only very light exercise.



The incorrect swing of the hands. Some men work them up and down as high as the head. This "fighting the air" hinders rather than helps progress.

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.

XVII



ARTHUR found posing far more difficult than he had imagined it would be, but Mr. Bernardo not only made frequent breaks for rest, but sympathetically talked of Helen, telling Arthur of her sweet, strong character as it had been revealed to him during the hours of her posing.

"If I only knew," said Arthur once, in a dejected tone, "if there were someone else who had a claim upon her affections."

"I feel that I can assure you on that score," said the other kindly. "She has said many times that she had no acquaintances almost, and was alone with her mother. I think they have quite recently come from Philadelphia."

"It seems impossible that she has no admirers, she is so beautiful, so attractive."

"Ah, yes, but so reserved. And I think I may tell you that from the first she has taken a keen interest in you. I told her the next day after your bout with Morgan about you, and she betrayed the liveliest desire to hear all about you."

"Did she?"

"Indeed she did, and to my surprise was willing to meet you, for she has always refused to dine with my wife and me to meet any of our friends."

"I suppose she wished to see me because of my strength," said Arthur. "She could be moved by no other considera-

tion; and I am sure there is nothing in that to give me cause for elation."

Mr. Bernardo smiled at Arthur's despondent tone. It seemed to him amusing that so handsome a fellow should have such serious doubts of his attractiveness; though, at the same time, he respected him for his modesty.

"It may be no cause for elation," he answered, "but, on the other hand, it is no cause for depression. She knew nothing about you but what I had told her, and naturally I spoke of what had most impressed me—your marvelous development and strength."

It was probably a very good thing for Arthur that he had the kindly, sympathetic sculptor to talk to at that time, for, as matters stood, he could not have gone to Margie to talk of Helen, and but for the accident that made Mr. Bernardo his natural confidant, he would have been obliged to restrain himself altogether and give no audible expression to the strenuous emotion which had so suddenly and completely possessed him.

When at last the posing was over, he did not return to the office, nor yet go home, but struck across Union Square to Fourth avenue, as being quieter than Broadway, and so went up to Central Park, by way of Madison avenue to Fifty-ninth street.

Anything like such a perturbation of mind as he was now experiencing he had never known before. He was at once exalted by the divine passion that thrilled him, and subdued to despondency by a

sense of unworthiness. He was sure that Helen was unaffected by the emotion that mastered him, and he was at the same time determined to win her if that were humanly possible.

At one moment he was amazed at himself for yielding so completely to one he had met but twice; and at the next he was comparing with equal wonder the sentiment which now possessed him with that which he had felt for Amelia. The regard, the love, even, which he had felt for Amelia still remained, but it was no more to be compared with the throbbing emotion which now mastered him than an ant hill is to be compared with an active volcano.

It was late when he reached home, but his long walk had done him good. His mind was clear of small doubts, and his purpose was plain before him. It was not now so much that he was determined to woo Helen as that he knew he must; he was so powerfully drawn to her.

Dinner was over for the other members of the family, when he went into the house, so that he had no hesitation about first having his bath before going to the dining-room.

He ate with a calmness that would have been impossible an hour earlier. He had no more hope of winning Helen Bertram now than before, but he had a fixed and definite purpose, and he knew that he loved her.

It was his custom to go to Margie's room whenever he had any time at home, partly because he and his sister were such good friends, but chiefly, perhaps, because he loved little Gertrude so dearly. All children appealed strongly to him, whether white or black, clean or dirty; but this one little mite was so close to him that he sometimes almost forgot that it was not his own.

It was too late to see the baby this evening, but he went as usual to Margie's room, after eating; and when his sister looked inquiringly at him, she saw that he had come with the intention of telling her something, and at once she leaped to the conclusion that that something related to Amelia.

Herbert, too, suspected the same thing, and in a few minutes made an excuse for leaving the room, thinking to leave them alone to have their talk; but Arthur

stopped him, saying frankly:

"Don't go, Herbert. I want to say something to Margie, but I'd like you to be here, if you don't mind."

"Certainly," Herbert said, and sat down again.

There followed a few moments of embarrassed silence, but before Margie could say anything, with her woman's tact, to relieve the situation, Arthur had exclaimed:

"There isn't any easy way to begin, Margie. It's about Amelia."

"Yes, dear."

"I am sure now that it was all a mistake. I am sure I never felt toward her as a man should toward the woman he would make his wife."

"You didn't love her, Arthur?"

"Oh yes, I did love her, and I do love her, but not as a man should his wife. If I had known the value and importance of physical attraction I would never have made the mistake of asking her to be my wife."

"But you felt that physical attraction before she was sick," Margie said reproachfully, "and you will feel it again when she has recovered her vitality and her beauty, through the efforts she is now making. Why, already she is a different girl, and if she were sure that you still loved her she would improve with marvelous rapidity."

"Margie," Arthur answered, with a conviction born of his new knowledge, "I never felt that physical attraction in its strength and fullness. I did not know what it was. I was ignorant."

"And you know now?" Margie demanded sharply.

"Yes."

"Who is it?"

There was a note of anger in the interrogation, for Margie was a strong partisan of her little friend next door, and was making her cause her own. But Arthur patiently ignored his sister's indignation and answered:

"It is no one you know."

"You are fickle," she cried. "I am not sure that you were not already tired of Amelia, and only made her sickness an excuse for a rupture."

"Don't be unjust, Margie," Herbert said softly. "Don't forget that it was

Amelia, and not Arthur, who broke the engagement."

"He made a condition he knew she would not submit to," answered Margie quickly. "He knew she would refuse to do as he wished when he went to her."

Arthur might have reminded her that all that he did was done in accordance with her advice, but he wisely refrained from doing so, and said:

"I meant to be fair and honorable before, and I mean to be now, Margie; and I am sure you would be the first to bid me make no mistake. I do not love Amelia as a man should love his wife, and for that reason I shall accept as final the rupture which she made."

"It will break her heart," said Margie. "Do you know I sometimes wish Herbert and you would think less of the physical side and more of the spiritual. Why, to be logical, Herbert should separate from me if I were to fall ill."

She said this with an air of having driven their argument into a corner from which it could not escape; but Herbert only smiled as he answered:

"If you are expecting any such outcome as that, Margie, dear, you will be sadly mistaken. My theory of marriage leads to no such pitiful results; but certainly if you were to become in any way a sickly, ailing woman, I would consider myself a criminal if I were to allow you to be the mother of my child; and you know that we do not advocate making the physical the only basis of marriage, although we do make it the most important."

"It seems to me to bear pretty hard on poor little Amelia," sighed Margie. "Here she is working with might and main to be what Arthur wished her to be, and now he says he doesn't care what becomes of her."

"Oh, Margie!" murmured Arthur, in a hurt tone.

"I see it in an altogether different light," said Herbert. "It seems to me that anything that will bring Amelia to robust health must be a blessing; and her heart will be insured against breakage by the very health that is coming to her. Arthur isn't any more the only man in the world than she is the only woman, and you may be sure that when she meets the man who thrills at the sight and touch

of her, she will experience the same feeling, and will realize that in losing Arthur she made the happiest escape of her life. I refuse to feel pity for Amelia. Think of our own happiness, Margie, and do not be so unkind as to wish less to two persons you love as much as you do Arthur and Amelia."

"All the same, I wish Arthur did love her," Margie sighed.

Herbert sprang up and caught her in his arms, laughing, and saying to Arthur as he did so:

"That means that she sees the matter as we do, and will give up trying to force you into an unhappy marriage."

"It means that you have the best of the argument; not that you are right. That I shall have to think over quietly."

But when Arthur rose to go to his own room she laid her cheek against his in a way that assured him that he had her entire sympathy, and that the incident of Amelia was closed for her, so far as he was concerned.

In one sense the situation was no different from what it had been for him, but he went to sleep that night feeling that the last bond with the past had been severed, and that he was free now to turn his face toward the new sun which had risen in his life.

* * * * *

CHAPTER XVIII.

The days that followed were full ones for Arthur. In order to accomplish all the work he had taken upon himself at the office he reached there an hour earlier each day, and worked until he left in the afternoon with a calm intensity that accomplished wonders. Then came the meeting and a few minutes' conversation with Helen; then the posing, and then the long walk, during which Helen engrossed all his thoughts.

But the few minutes with Helen were what he lived for. The old day ended with the meeting and the new day began when she left him.

The day of his second posing, by getting to the studio early, he contrived to have quite ten minutes' talk with her. The next day she hurried away after five minutes with him, and it seemed to him that he caught a look in her usually calm eyes that betokened a disturbed mind. The

following day, although he was early, she was already leaving the house. He cried out his disappointment and chagrin involuntarily.

"Why are you so early to-day?" he demanded, searching her eyes eagerly.

She looked down and answered confusedly:

"I—I was through, and—and I have something to do for mother."

"Oh!" murmured Arthur, devouring her with his eyes, and summoning his courage for one of the most daring requests imaginable. "May I not walk a little way with you? I am not due quite yet, and—and a little more exercise will be good for me."

"No, oh no!" she cried quickly; and it seemed to Arthur as if he had caught a frightened look in her eyes as they first swept the street, and then looked pleadingly at him. "Thank you, but I must hurry. Indeed I must."

"But you will not hurry away to-morrow?" he begged humbly.

"I—I don't know what I shall have to do to-morrow," she answered in a troubled tone. "Good day!"

Arthur watched her as she hurried up the street, and then went dejectedly into the house, the door having been left open for him. He was certain that she suspected his love for her, and wished to show him that it was hopeless. He carried a very heavy heart with him on his walk that afternoon.

It was a good thing for him in these days that he had baby Gertrude to take into his confidence, for he did not feel that he could share this new passionate love with anybody else.

It was plain enough to his sister and to Herbert that the course of his love was not running smoothly, but there was nothing they could do to help, so they held their peace, except for pretending to jealousy because, as they said, he had won first place in the heart of little Gertrude.

The evening after Helen's hurried departure from the studio, Arthur thought the matter over in the sweet calm of the baby presence and came to a determination.

He was at the studio half an hour earlier than usual the following day. That was what he had made up his mind to

do, and he did it, even though he fairly trembled with apprehension when he saw Helen enter the reception room where he sat, waiting for her.

She was undoubtedly early enough to have been gone before his usual time of appearance, and she started with surprise when her eyes fell on him.

He saw her bite her lip as if to suppress an exclamation of annoyance, perhaps, and he went toward her deprecatingly, saying in an apologetic tone:

"I had the time to spare, so I came early, hoping I might have the pleasure of a few words with you."

It seemed to him that it was in her mind to refuse to remain, for she made a gesture as if to leave the room; but if that had been her intention, she abandoned it, and with a deep breath, as if another resolve had determined her, she sat down and smiled at him.

"I can spare a few minutes," she said, in the gracious way that set his heart to beating tumultuously. "How your part of the group grows under the enthusiastic touch of Mr. Bernardo. You and I will have reason to be proud of the part we have been able to play."

From that the talk went on, and Arthur was soon at his ease. He did not reflect at the time on anything but the supreme delight of being in that wonderful presence; but after she had gone he found himself wondering at her sudden graciousness when she had until then been so distant and disturbed; and she had as good as promised to meet him again on the following day.

"Shall you go home early to-morrow?" he had asked.

"No," she had answered, her eyes drooping under his eager gaze. "I shall go at my regular time."

And from that time, day after day, he and she met in the quiet reception room and talked. It is true that with all her graciousness and gentle womanliness she always kept him at a certain distance, but there were times when Arthur's heart was filled with a wild joy over the suspicion that she might care more for him than she was willing to let him know.

Sometimes, at meeting, or at parting, there was a sudden expression in her eyes as if an emotion deep-seated in her heart had caught her off guard and had leaped

up into view; but Arthur could never be sure of this, and his depression after his swift elation was proportionately deeper.

Nevertheless, as the days went by, and no effort of his closed the gap which seemed to exist between them, he began to wonder if it must always be so. He had begged her to allow him to call on her; he had pleaded to be allowed to take his mother or sister to visit her. She had refused in troubled tones and with downcast eyes, but with a firmness that was like adamant.

It began to seem as if there were a mystery in her life, but Arthur would not permit himself to think such a thing. He told himself that it was only necessary to look into her clear, honest eyes to know that her life ran as limpid as a mountain brook in its passage through a quiet pool.

His love increased as the days went by, and if Helen sedulously avoided making any sign of returning his passion yet she no longer discouraged him, but fell into a delightful state of comradeship with him.

He did not mean to utter a word to betray his love, but it was impossible for her to have any doubt of it, for it showed itself in the caressing tones of his rich voice, in the glance of his eye, in the lingering touch of his hand when he bade her good-bye or greeted her.

Finally, one day, she betrayed a certain tenderness for him. He was sure of it, though it was but by a word now and again, by a look suddenly surprised in her wonderful eyes, by a tone or a gesture; and he was beside himself with hope.

When she bade him good-bye her hand trembled in his and was not withdrawn as quickly as usual; from her eyes shot a glance of pleading or pity or love, he could not be sure which, only that it sent a thrill through him; and her full under lip quivered so that her words were not as distinct as was common with her.

That night he was happier than he had been at any time. It was almost as if a hope had been realized. He walked as if on air. He could not help being at the studio earlier than usual the next day.

"Mr. Bernardo wants you to go right into the studio, sir," the door attendant

said to him as he started to enter the reception room, according to his custom.

Arthur looked keenly at the boy, and a question leaped to his lips, but he had the self-control to suppress it.

"The studio!" he murmured.

"Yes, sir. He's waiting for you."

Again Arthur wanted to ask a question of the boy. He would have given anything to know if Helen were in the studio; but he could not bring himself to ask. So he walked toward the studio, at first briskly, then slowly, and then briskly again.

He had meant to knock loudly at the door of the studio so that he might not surprise the sculptor and his model, if by chance the boy had made a mistake, and Helen was posing; but the door stood open, and he realized by the sudden heaviness of his heart how much he had counted on finding Helen there.

"But maybe she is there," he said to himself, starting on again. "Maybe she is through posing."

He did not believe it possible, however, and was not surprised, on entering the studio, to see only Mr. Bernardo there. The sculptor came forward to meet him, contrary to his usual informal way of greeting him unceremoniously.

"Delighted to see you, Mr. Raymond," he said, eyeing him keenly. "I am glad that you, at least, have not left me in the lurch."

"Left you in the lurch!" Arthur repeated quickly. "What do you mean?"

"You did not know, then, that Miss Bertram was not going to pose any more?"

"Not pose any more? Miss Bertram?" gasped Arthur, with a sense of shrinking as one does who anticipates a blow without knowing whence it will come. "Why not? She has not been here to-day, then?"

"No. Instead of coming she sent a note."

Arthur looked at the hand of the sculptor, as if expecting to see the note there. Mr. Bernardo, interpreting the look, indicated his little table at the other end of the studio by a gesture, saying:

"It is there; you shall read it."

Trembling in apprehension of the unknown, Arthur walked in silence by the side of the sculptor to the table, and took

the opened letter which the latter handed to him.

Perturbed as he was, he could not help noticing how firm and bold the handwriting was; and, as a lover foolishly will, felt a thrill of pride that even the handwriting became the noble, self-reliant character of the woman.

The sculptor considerably turned away and busied himself with his group while Arthur read the brief note.

"My dear Mr. Bernardo," it ran, "I know from what you told me yesterday that you can now finish your group without me. I therefore feel the less concern in being obliged to tell you that I shall not be at the studio again. Pardon my abruptness in notifying you of this fact, and please believe that I shall be forever grateful to you for your courtesy and your generosity.

"Will you say good-bye to Mr. Raymond for me, and tell him that I am glad to have had the pleasure of knowing him, and am sorry that I shall never see him again?"

Sincerely yours,

HELEN BERTRAM."

"Never see me again!" muttered Arthur, in a sort of stupefaction. "Never see me again! My God! What have I done that she should say that?"

"It is rather abrupt, isn't it?" the sculptor said, seeing by a glance at Arthur that he had read the note.

"She has done it to get away from me," Arthur said huskily. "I have annoyed her."

"Nonsense, my dear boy," cried the sculptor heartily, approaching him and taking the letter from him and glancing at it. "Would Helen Bertram say she was glad to have known you, and sorry she was not to see you again, if she had been annoyed by you? If you think so, you don't know the quality of her honesty. No, sir. She meant every word of what she said when she wrote that."

"Then why has she done this?" Arthur asked sadly, intent only on a sense of his unworthiness.

"That is more than I can tell you, but I think you may rest assured that it was from no dislike of you. In fact, to be frank with you, as I may fairly be now that this has happened, she has always

been positively enthusiastic about you whenever you have been the subject of conversation, and that has not been seldom, I assure you."

"But I am sure that she has stopped coming in order to avoid meeting me," said Arthur, shaking his head dismally. "You won't deny that?"

"No. I won't deny it. I wish I could. But that is another matter. I don't pretend to understand it, Mr. Raymond, but I am convinced there is a mystery in her life, an understanding of which would be a solution of her conduct just now."

Mystery is such an ugly word, implying so much that is unpleasant, that Arthur shrank from using it in connection with Helen; particularly now that there was something in her conduct that needed explanation. How could there be a mystery in the life of a pure, noble, high-minded girl of her age?

"Why—why do you think so?" he asked. "It seems so foreign to her nature. You say, yourself, that she is so extremely truthful."

"Oh, please understand," the sculptor said quickly, "that I imply nothing to her discredit. I never met a nobler woman than Helen Bertram; but it is not natural for one of her age to be as reticent about herself as she has always been. Indeed it was contrary to her own nature; for often she would be in the midst of some story about herself, and would seem suddenly to fear that she might be saying too much, and would stop. I am afraid there is some trouble in her life."

"That might be," Arthur cried eagerly. "There may be some relative—her father, a brother—who has brought disgrace on the name. Oh, if I could only find her! If I could only win her confidence and her love! You must know her address, Mr. Bernardo?"

"Ye-es," was the hesitating answer.

"You will give it to me?" pleaded Arthur. "It is true she refused to tell me where she lived, but I am sure that she cannot find fault with me for going to her now. I would tell her that she need not fear me. I would rather die than do a thing to make her unhappy. You will give me the address, Mr. Bernardo?"

"She particularly asked that you should not know it."

"But you believe that my purpose is honorable, do you not?"

"Be sure I believe that, or I would not have shown you that note."

"And oh! Mr. Bernardo!" Arthur cried with suppressed emotion, "it may be that at this time, more than any other, she needs a devoted friend. She did not write that note to you lightly; and if you are right, and it was not because she was annoyed with me, then it may be that I can be of service to her."

"You had no suspicion of what was coming from anything she said yesterday? She betrayed no emotion?" demanded the sculptor, who was seeking some excuse for absolving himself of his promise not to tell Helen's address.

"She was kinder than usual," answered Arthur, in a low tone, the recollection of his happiness oppressing him now. "I—I began to hope yesterday."

"It seemed so from your manner. I believed she had given you reason to hope; but I see better now. She knew she was bidding you farewell."

"You will give me her address?" pleaded Arthur.

"If I could only be sure what would be best for her," muttered the sculptor, with a puzzled frown.

"Can I say more than that I love her and would make her my wife?" cried Arthur passionately.

"But if you were to surprise some secret of hers which you have no right to know?"

"I love her! Ah! Mr. Bernardo, do not lose valuable time. How can we know that she does not need me now? Can any secret of hers come to harm when I love her as I do? Oh, trust me, and give me her address!"

"I see how it is," sighed the sculptor, with an air of resignation, "I shall lose both my models. Oh love! love!"

He hunted in the drawer of the table as he spoke, and presently drew forth a slip of paper on which Helen had written her address. Arthur caught at it eagerly.

"One Hundred and Thirty-fourth street!" he exclaimed. "I will go at once. You will forgive me if I do not pose? I could not!"

"Go by all means, and my best wishes with you."

CHAPTER XIX.

For once Arthur did not walk up town; he was in too great haste for that, but almost ran to the elevated station.

The address was that of a neat and modest apartment house, with two small flats on each floor. The name of Mrs. Alicia Bertram was on the letter box belonging to the fourth floor, and Arthur felt his heart begin suddenly to throb as he pressed the electric button belonging to the apartment.

He rang and waited several times, until a feeling of dread began to steal over him, and, in desperation, he pushed the button in and held it there for a considerable length of time. Then, at last, the front door flew open with that click so familiar to those who know flats, and with a sigh of relief Arthur entered the house and mounted the dark and silent stairway.

A woman and a little girl were standing in the hall of the fourth floor, apparently waiting for him, and he began to speculate on what relation they might be to Helen.

"Did you want to see anybody?" the woman said, as he came near the top of the stairs.

"I want to see Miss Bertram."

"She doesn't live here any more," the woman said, eyeing him curiously.

"They moved this morning," the child interjected.

"You keep still!" the woman said imperatively.

"Moved this morning!" repeated Arthur, looking from woman to child. "Then you are not members of the family?"

"We live in here; they lived in there," the woman said briefly, indicating the two doors side by side.

"Do you know where they've moved to?" he asked.

"I guess if they'd wanted you to know they'd have told you," answered the woman with a defiant toss of her head.

"I am a friend of Miss Bertram's," he said, troubled deeply at finding the same sense of mystery pervading Helen's recent home as had been apparent in her conduct.

"He's nicer than that ugly man, isn't he, mamma?" cried the child, whose innocent eyes had been frankly studying Arthur's face.

"You go inside and stay there," the woman said angrily, pushing the child toward the door.

"Well he is, anyhow," pouted the little girl, making a slow retreat.

"You are a friend of hers?" Arthur demanded.

"Yes, I am."

"I am, too," he said earnestly. "I would do anything in the world to aid her; indeed I would."

"I don't know anything about that," was the sharp retort; "but I guess she hasn't so many friends that she would slight the least of them. If she wants you to know where she's gone, she'll tell you all right. Excuse me, but I've got work to do."

"Oh! madam!" cried Arthur, "what can I say to win your confidence? Is there nothing that will make you believe that I am Miss Bertram's friend?"

"I guess not. It's none of my business, anyhow. I think maybe Miss Helen doesn't know you're a friend of hers," said the woman sarcastically.

She was moving toward her door, as if to close the interview, when Arthur, at his wits' end for an argument to affect her, burst out with the simple truth with such passionate fervor as to at least arrest the woman's attention.

"Madam," he cried, "I love Miss Bertram. I love her truly, and with all my soul. I do not know what mystery there may be in her life. I do not know what her troubles may be. I confess that she is avoiding me, but I give you my word of honor that I wish for nothing so much as for her welfare. Will you not trust me?"

The woman, impressed by the passion and fervor of his words, turned and faced him, her hands on her hips, her eyes searching his handsome face.

"You look honest," she said, "but that's the worst of it. Lots of men will be honest about everything else, and liars when women are concerned. I can tell you I won't be the one to add a feather's weight to that girl's troubles. If ever there was a good woman she's the one, and I ought to know her, for she's lived here these four months."

"I would die to save her unhappiness," Arthur said. "I haven't known her very long, but I've seen her every day for a

number of days past, and I have learned to know her so well that I love her as I think man never loved before. If you would tell me where I can find her, I am sure I can convince her that she may trust me."

The woman hesitated for a few minutes, studying Arthur's face the while; then said slowly:

"The fact is that I don't know where she has gone to. She said she would not tell me, so as to be sure no one could surprise it out of me. I guess maybe she knew you'd be hunting her up."

The woman did not mean it as such, but in fact her speech was a compliment to Arthur's noble face. He was not conscious of it, however, for his heart was heavy with the sense of the mystery that deepened about the woman he loved.

"You do not know?" he murmured sadly. "And can you give me no clue?"

"No, I can't, to be honest with you. I did try to find out through the man that drove the truck, but he didn't know himself. She and her mother have been mighty good to us. Miss Helen sat up with my little girl when she was sick, and Mrs. Bertram made nice things to tempt her to eat when she was getting well, though Miss Helen said nobody ought to be tempted to eat; that when a sick person wanted to eat was time enough. But she was like an angel for goodness. And that's why," she went on, with a flash of indignation in her eyes. "I hate to see her pursued by wicked men."

"I assure you I have only the purest motives in—"

"I didn't mean you," she interrupted. "I meant that other fellow."

"Another man?" Arthur queried, misery clutching his heart.

"I might as well tell you," the woman said. "I can see you're another sort. Yes, there was a man came here to see her three times, so far as I know; all within the last three weeks. Some women would call him handsome, but he was just plain devilish looking to me. One of the tall, dark kind, with black eyes, with such a look in them as to make you wish you weren't a woman when they rested on you. I should have thought she'd have hated him; and I don't know but she did. Then, again, I don't know that she did.

Girls are funny about men, and all tastes are not alike. Good thing, too, I suppose."

"But what about him?" Arthur asked miserably.

"Well, he came here, as I say, three times that I know of."

"Four times," piped up the voice of the little girl, who had evidently been just inside the door.

"You keep still!" cried the woman, but smiled at Arthur, as if to call his attention to the cleverness of the child. "What four times?"

"Once when Miss Helen wasn't home, don't you remember?" shrilled the child, triumphantly emerging into the hall. "Mrs. Bertram was crying, and said she would do all she could, and the man was so cross."

"That's so," cried the woman admiringly. "My goodness! It takes a child to remember things. Mrs. Bertram came to the door with the man the first time he came here, and she seemed all broken up. Afterward the man came when Miss Helen was at home."

"You don't know whether he was anything to her or not?" Arthur said huskily.

The woman stopped suddenly and looked at him anxiously. It was evident that her desire to gossip and her regard for Miss Helen conflicted with each other.

"Say! You know I never meant to tell anybody these things," she exclaimed. "I guess Miss Helen knew I'd be sure to talk all right. Well, anyhow, I don't like that other man a bit; but now I think of it, I shouldn't wonder if you were too late."

"Too late? Why?"

"Well, my goodness!" she cried, her face lighting up with a sudden gleam of intelligence, "I wonder if it was you they meant."

"Please explain what you mean!" he murmured in a sort of despair.

"Why the last time he was here, she let him out, and I heard him say—you know it's easy to hear anything that's said in these here halls?"

"I have no doubt."

"Well, I heard him say in a hard, bitter tone: 'Don't forget that you belong to me, and that I won't give you up to

him if one of us dies for it!' I remember his very words."

"That she belonged to him!" murmured Arthur. "And did she make no reply?"

"I didn't hear what she answered. Maybe she didn't say anything. Like as not she didn't, for she was one could hold her tongue when she wanted to. Upon my word, I'm sorry I can't tell you any more."

Arthur's trouble was great. It was possible to think Helen was bound to this unknown rival; it was equally possible to hope that his own star was in the ascendant; but it is the nature of a true lover never to dwell too long on the unpleasant aspect of his own case, and Arthur held to the hope that offered itself but a moment, and dwelt long and miserably on the fear that Helen was bound to another.

"You don't know any more about—about him?" he asked.

"No, I don't; but I'll bet Miss Helen didn't like him. I'll tell you my opinion. I think she lit out of here so suddenly and secretly on his account. Mind you, I don't know, but that's what I think. You see he didn't come often, and he didn't stay long when he did come."

Arthur had a few moments of wretched indecision, and then made up his mind. Helen might be fleeing from him, or she might be escaping from the persecution of this other man. He would find her and learn the truth. There could be no harm in that.

If she were afraid of him he could quickly make her understand that he was too much her friend to even look at her if it troubled her. If it should happen that there was another man in her life who was annoying her, then she could be made to understand that his—Arthur's—life was at her disposal.

Once his mind was made up he acted with quickness and decision. He had quite forgotten the woman while he stood there turning these thoughts over in his brain. Now he suddenly demanded:

"Can I get into the flat? There may be something in there to give me a clue to where she has gone."

"Maybe there is," the woman cried. "Come on! I've the key. Miss Helen gave it to me the last thing. Hattie, get the key!"

But the precocious little flat dweller had already darted away, and was back again in a moment with the key in her hand. The mother smiled at Arthur in silent approval of her clever child, and inserted the key in the lock.

The mother and child hastened into the deserted apartments like hounds eager on the scent, but Arthur hesitated on the threshold, his heart throbbing and his imagination suggesting an impropriety in his thus going into Helen's home without her invitation or consent.

But he conquered that feeling by remembering that he meant her nothing but good, and he stepped into the rooms so lately animated by her sweet presence almost holding his breath in a sense of the sacredness of the place.

"This was her room, mister!" the shrill treble of the child informed him from a little room to his left hand.

He stopped, shrinking from entering her room, as if that surely was a place it would be profanation for him to enter; but the child, whose imagination was not affected by love, screamed out in exultation:

"Here's a picture! and it's hisn, I'll betcher."

A feeling that all this was like spying on Helen revolted his sensibilities, and he determined to put an end to it as quickly as possible.

He strode into the room, and came upon the mother and child eagerly studying a bit of a torn photograph. He took it from their hands and looked at it; it was the upper part, and showed only the face above the brows, really revealing nothing of the person's distinguishing features.

"It's him, all right," the woman said. "He was bigger than you; taller and broader; and he was dark. Some folks would call him handsome."

"Will you see if there's anything like an address in any of the other rooms?" Arthur said, taking the torn piece of photograph and thrusting it into his pocket. He wanted to get them out of that room. It seemed to him that they desecrated it. He longed to be alone in there with the memories Helen had left.

When they were gone he drew a long breath and looked slowly about. In an instant he had pounced upon an object

lying on the floor with the avidity of a miser finding a glittering coin of gold. But in this case it was nothing more precious than a soft suede glove, left behind because it had lost its fellow, perhaps, or because it had been overlooked.

Arthur pressed it to his lips, recognizing it as one he had seen Helen wear. Then he thrust it carefully into an inner pocket and walked guiltily out of the room.

They found nothing in any of the rooms that could give them any idea of where the occupants had moved to, though the woman and child picked up every scrap of paper they saw and examined everything else carefully.

"There isn't much here, anyhow," the woman said at last. "They were awfully clean folks. As for Miss Helen—my goodness! I think she must ha' nearly worn the bathtub into holes with her bathing. You know you can hear through these partitions just as easy."

"I don't think it's worth while to hunt any more," said Arthur, anxious to keep the woman from gossiping. "I'm very much obliged to you for coming in with me."

"Oh, that's all right," answered the woman, as voluble now as she had been disposed to be reticent at first. "I had nothing else to do. Besides, I'd promised Miss Helen I'd come in and clean up after she was gone. You know there always will be a little muss left when folks move—the cleanest of them; and I guess there never were any cleaner than the Bertrams."

"I'm greatly obliged to you, anyhow," Arthur said, putting a silver coin into the hand of the little girl; "and if I may, I'll come again to find out if you've heard anything about them."

"Say thank you to the gentleman," exclaimed the mother to the child, and then with a smile at Arthur, "children have to learn manners, I think. I never did know one that had them naturally. Yes, I'll be glad to see you any time. When I clean up here I may come across something, you know. Of course Miss Helen paid me to clean up," she added as the thought struck her that Arthur might not understand.

"Here is my card," he said, "in case you should have occasion to send me any

word. Of course I will be glad to pay for any expense or trouble you are put to."

"Oh, well," she answered earnestly, "as long as you're a friend of Miss Bertram's I'll do anything. I only hope you'll get her; that's all. Good day! Oh, I say, did you think of trying to find the truckman that took her things?"

"How can I do that?" he demanded eagerly.

"Well, I don't know, unless you go to the nearest stand. There's a big stable over on One Hundred and Twenty-fifth or Twenty-sixth street, near Third avenue. You might go there."

"Thank you!" he cried gratefully, "I will."

It seemed so valuable a suggestion that he hurried down through the dark halls, in which the gas had not yet been lighted, and out into the street. He stood for a moment on the sidewalk in front of the house, undecided which way to go, when around the nearest corner there came a tall man, walking rapidly.

In an instant it flashed through his brain that this was the other man who stood so near to Helen that he could claim her for his. He turned full about so as to face him, and there was instant recognition on both sides.

It was Charles Morgan who approached.

(To be continued.)

THE LIGHT SIDE OF LIFE

By Geo. Schubel

"Goodness! I am cooked almost to the skin."

Husband: "How now?"

"I've been prisoned in a hot, suffocating, weasy room for three hours!"

"What was the occasion?"

"Oh, just a meeting of the Woman's Fresh Air Society."

Old spinster (proudly): "Yes, I had twenty men at my feet in that brief stay in New York."

Young niece (under her breath): "Chiroprpodists."

"These patent medicine quacks," remarked a philosopher the other day, "trick their victims about as kindly in giving them 'Restored Health' as the farmer when he stuck an apple on the cow's horn, where she could not get at it."

"What a pity," remarked Well Broiled, "that as good as Heaven made the onion to taste, it made them smell so horrid."

At the Experimental Restaurant:

"Now how can we divide these five stewed prunes so that each of us five chaps will share one and yet have one remain on the dish?"

"Ah," remarked one of the wisest, "let one take the dish with the stewed prune."

The nephew of a famous Englishman once sought his uncle's advice in deciding to choose a medical career. The great thinker answered:

"No, my lad, don't choose medicine. We have never had a murderer in our family, and the chances are that in your ignorance you may kill a patient."

"What are you doing with my false teeth, Judy!!!"

"Oh, I was only trying to cut the string of my top, mamma."

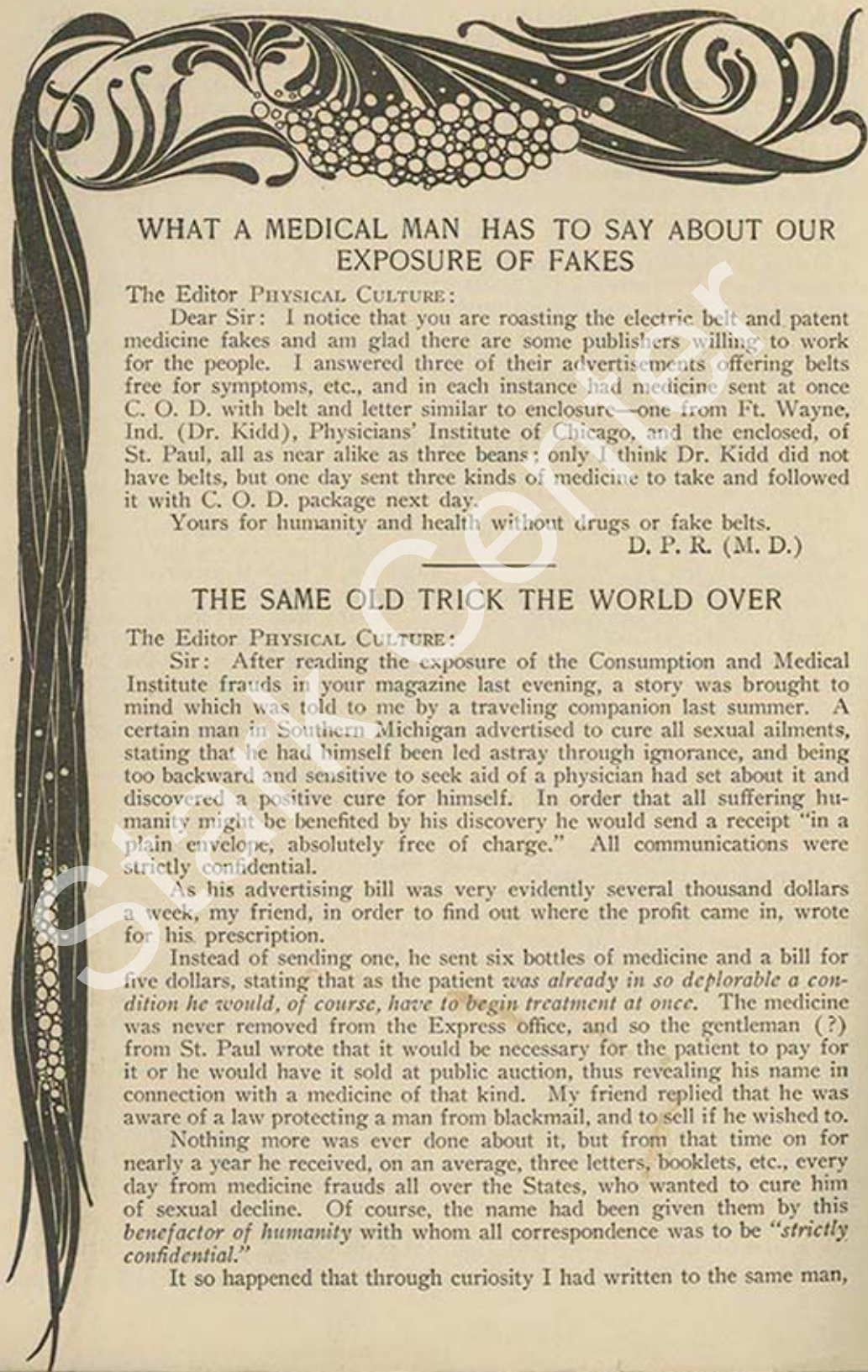
Vaccination Saves!—Plenty of doctors from starving.

Of the reports of the various crops, the best result, it is ascertained, was yielded by the patent medicine almanac crop.

It is whispered among the patent medicine fraternity that as soon as this "Lost Manhood" scare is completely milked they will return to the old reliable tapeworm.

"Fader, give me someding eksiding to peruse. Someding mit vonderful hair-bread eeskaps, marvelous resques, und all dot."

"Sammy, you shall hav it. I vill out cut of dese batent medisn advartizments a lot, at vunce!"



WHAT A MEDICAL MAN HAS TO SAY ABOUT OUR EXPOSURE OF FAKES

The Editor PHYSICAL CULTURE:

Dear Sir: I notice that you are roasting the electric belt and patent medicine fakes and am glad there are some publishers willing to work for the people. I answered three of their advertisements offering belts free for symptoms, etc., and in each instance had medicine sent at once C. O. D. with belt and letter similar to enclosure—one from Ft. Wayne, Ind. (Dr. Kidd), Physicians' Institute of Chicago, and the enclosed, of St. Paul, all as near alike as three beans; only I think Dr. Kidd did not have belts, but one day sent three kinds of medicine to take and followed it with C. O. D. package next day.

Yours for humanity and health without drugs or fake belts.

D. P. R. (M. D.)

THE SAME OLD TRICK THE WORLD OVER

The Editor PHYSICAL CULTURE:

Sir: After reading the exposure of the Consumption and Medical Institute frauds in your magazine last evening, a story was brought to mind which was told to me by a traveling companion last summer. A certain man in Southern Michigan advertised to cure all sexual ailments, stating that he had himself been led astray through ignorance, and being too backward and sensitive to seek aid of a physician had set about it and discovered a positive cure for himself. In order that all suffering humanity might be benefited by his discovery he would send a receipt "in a plain envelope, absolutely free of charge." All communications were strictly confidential.

As his advertising bill was very evidently several thousand dollars a week, my friend, in order to find out where the profit came in, wrote for his prescription.

Instead of sending one, he sent six bottles of medicine and a bill for five dollars, stating that as the patient *was already in so deplorable a condition he would, of course, have to begin treatment at once.* The medicine was never removed from the Express office, and so the gentleman (?) from St. Paul wrote that it would be necessary for the patient to pay for it or he would have it sold at public auction, thus revealing his name in connection with a medicine of that kind. My friend replied that he was aware of a law protecting a man from blackmail, and to sell if he wished to.

Nothing more was ever done about it, but from that time on for nearly a year he received, on an average, three letters, booklets, etc., every day from medicine frauds all over the States, who wanted to cure him of sexual decline. Of course, the name had been given them by this *benefactor of humanity* with whom all correspondence was to be "strictly confidential."

It so happened that through curiosity I had written to the same man,



but had sent only my P. O. box number, so he could get no hold on me
aside from selling my address, which he did.

Angola, Ind.

Respectfully,

J. V.

A SUBSCRIBER TO "PHYSICAL CULTURE" CURES CONSUMPTION BY OUR METHODS

The Editor PHYSICAL CULTURE:

Dear Sir: I believe by the grace of God you were an instrument in
His hands of saving my life.

Two years ago I had consumption. I started to read your books and
magazines on Physical Culture, and to put them into practice. I began
to improve immediately; I was in Buffalo at the time. I went out in the
country and was in the open air all the time, night and day all Summer.
Slept nights between two wide open windows. Ate fruit and nuts, Graham
bread and vegetables. Took air, sun and cold water baths, and plenty of
exercise in the fresh air and also deep breathing exercises. I got as
healthy as a huck, never felt better in my life than I do now. Before
reading your books I got down from 137 lbs. to 120 lbs. I was weak
and had night sweats; a hacking cough; pain in left side and across small
of back; was greatly troubled with constipation. After reading your
book "Strength from Eating" I went down to the mill and got some bran.
It did me so much good that I have been eating it ever since. It keeps
my bowels as regular as clock work. I eat a wineglassful at each meal.

I now only eat one hearty meal a day, but have a light meal night
and morning of nuts and fruit. I have not taken a dose of medicine for
over two years. Before reading your books I took enough to float a canal
boat, but it did me no good, and I kept getting worse all the time.

Bran is an excellent remedy for all stomach and bowel diseases, even
piles. I think you are right in regard to flour being made too fine. The life
or substance is all ground out of the wheat, and, as you say, the best is
taken out, viz., the bran and shoots. Give us back the good old Graham
bread of our grandfathers' days with the bran in it. Take nothing out of
the wheat! Our kind Heavenly Father knew what He was doing when
He made wheat, but poor deluded men think they can improve on His
handiwork. It is a great mistake.

I am glad to see the noble stand you take in regard to vaccination,
and hope you will keep hammering at it till the cursed old humbug is
wiped out of existence. I know by bitter experience of the evils of vac-
cination. A little more than ten years ago I had a lovely family of five
children—two boys and three girls. We never had any sickness, or very
little at least, till after the children were vaccinated. Then the trouble
began. They were always sick with, first one complaint, then another;
each disease worse than the preceding one, till finally diphtheria took two
of my little daughters, seven and nine years old, in less than three weeks.



Their sickness and death had a terrible effect on my poor wife. She was never well after their death, and died with consumption five years later.

I think I have good reason for believing that vaccination had something to do with causing all this affliction. I think a law making vaccination compulsory would be unconstitutional. Very respectfully,

ARTHUR G. PARMELEE,
Rochester, N. Y.

BOUGHT "PHYSICAL CULTURE" IN MARCH FOR FIRST TIME, IS NOW GREATLY IMPROVED, AND SWEARS BY IT

The Editor PHYSICAL CULTURE:

Dear Sir: I am not addicted to writing testimonials; in fact, this is the first I've ever written, but I feel I must say a few things in appreciation of the good work in which you are engaged.

I have seen copies of several magazines devoted to "Physical Exercise" and "Hygiene," but none comes up to your standard. Your "editorials" have a certain vim—an outspoken, manly eloquence which proves that there is a MAN at the helm, and which must eventually bring success.

I purchased my first copy of PHYSICAL CULTURE in March. I was so taken with it I procured the two previous numbers for January and February. Now I am resolved not to be without it in future.

I started taking the "exercises" about a month ago, and I am surprised at the improvement wrought in me in so short a time. My health has always been very good, until about a year ago, when I was silly enough to allow a "specialist" to vaccinate me. As a *direct* result of the vaccination an abscess formed in my left shoulder. It was operated upon, but it was months before either abscess or vaccination healed. Two ugly scars on my left arm and shoulder are left, and I suppose always will be reminders of my folly. But the next "Doctor" who attempts to vaccinate me will want someone to help him hold me down.

In conclusion, let me say that were there more magazines like PHYSICAL CULTURE and more editors as straightforward and plainly outspoken as you are, the world would be all the better for it. Sincerely yours,

Vine St., Philadelphia, Pa.

T. D.

TRIED TO DO WITHOUT "PHYSICAL CULTURE" BUT FAILED

The Editor PHYSICAL CULTURE:

Dear Sir: Have been reading your story the "Strenuous Lover" in the magazine. It certainly pictures a condition and points out the obstacles that confront every advocate of physical reform. The chapter where the hero conflicts with his mother, sister and sweetheart on the subject of rational dress, brings to mind so vividly my own experience some fifteen



years ago, that I found myself suffering over again the trials of that unhappy time. But the world has moved up a few paces since then, and we are not so lonesome now. In those days it required both courage and fortitude to be a physical culturist, whereas now it excites admiration from many and contumely from none.

I have strayed considerably from the straight and narrow path of physical virtue lately, and just so far as I have strayed have I suffered. All my old afflictions are returning, proving conclusively that while medicine may be "founded on conjecture," physical culture is an exact science. But to make assurance doubly sure I propose to resume my old habits of diet and exercise, and know that I will soon be myself again. As a matter of fact, the strong symptoms show conclusively that my vitality is better than ever. Only a strong man can display strong symptoms of disease. I remember years ago contracting malaria while traveling in the South. I was so weak that I could not "shake." I left the South to practice physical culture for a year or two, and then went back. Again I got malaria; but, oh! what a difference. I out "shaked" all the natives. The fever simply raged, and where the reaction came, my perspiring ability rivaled the racehorse. I remember the old landlady at the little hotel insisted in sending for the doctor, and thought I was crazy, no doubt, when I persistently refused. Now, as a matter of fact, I was lost in admiration of Nature's consummate ability to clean house and incidentally take care of my worthless carcass. My one obstacle to recovery was the lack of ice water. I drank so much of it that they thought it was assisting my chills. No doubt it was. My recovery, it is needless to say, was final and complete, though I have no doubt that I left a record as the biggest fool that ever visited that section. Sincerely yours,

1947 Seventh Ave., New York.

ALEX. WHITELY.

WHAT A DOCTOR SAYS ABOUT THE \$1,000.00 PRIZE, AND ABOUT FASTING

This is an admirable letter, and we recommend it for perusal by all subscribers who hesitate to enter for the \$1,000.00 prize. The writer of this letter is entering the contest in the true spirit, and we trust his sentiments will be shared by all competitors.—EDITOR.

The Editor PHYSICAL CULTURE:

Dear Sir: I have no idea that I will get the prize, but I wish to enter my name in the contest for the best-developed man. If I get no prize at all, I will get greater strength and better health by the contest, as I realize I have pitted myself against many of the best men of the world and I will strain every nerve to win the goal.

In my race there are two prizes. One prize is for the winner only. The gold medal, the laurel wreath. The other prize (and the real reward of the race) is gained by every earnest competitor. That prize is the increased power, endurance and will gained in the contest. And so with this contest that you propose. I think it one of the grandest things that

has ever been started. If a thousand men enter this contest, a thousand men will be the gainers thereby. Their gain will be evidenced in their children for generations to come. They will not only develop better physical powers, but they will have larger and better intellectual and moral and spiritual powers, and so make better citizens, better husbands, better fathers and better Christians.

This is one of the reasons why I enter the contest, and will do all I can to induce others to enter. I am determined I shall let no man outstrip me in gaining perfect physical development and health, now that I have found the way.

I would like to tell you my experience with fasting. It a remarkable one. I began it some years ago to cure myself of a dreadful disease, but my trouble would return again and again until I found out the right way to take a fast and what to do afterward. Then I found out that it was the easiest and simplest thing in the world, and am satisfied now that it is the only real cure coupled with Osteopathy and physical culture for the ills of man, so that I have practiced it for the last six

years on all my patients in connection with Osteopathy.

Formerly I only took a fast when I was compelled to. Now I take it as a preventative—a kind of a Spring tonic—and I marvel that the world has never discovered such a tonic before. The only trouble about getting it into general use is that it cannot be patented and manufactured in St. Louis and sold at a dollar a bottle. However, I find no trouble in getting my patients to adopt it, for it is only those who really want to get well that will get well and keep well. Years ago I tried drugs and patent medicines to my heart's content and my body's great undoing, until I began to despair of ever regaining my health and strength. It was then that I decided I would take things in my own hands and find out the way, for I was sure there was one, and my condition to-day proves I was right. I wish you all sorts of success in the good fight. As for me, I shall fight drugs and drug doctors as long as I live, and I expect to live to a hundred years.

E. D. W. (M.D., D. O.)
Minneapolis, Minn.

Old Satan:—"Pull hard, Old Girl, she'll soon be mine for keeps."



Dame Fashion:—"All right, Nick, here goes! Ready, yank it."



Police Parade, 1903. Officers Lining up Before Commissioner Greene for Presentation of Medals for Distinguished Conduct, etc.

NEW YORK POLICEMEN AND HOW THEY ARE MADE

By *H. Irving Hancock*



HERE is no more stalwart, more agile or better fighting body of policemen in the world than is to be found in New York. No small amount of training is needed to produce the types of physical perfection that may be discovered abundantly among the "finest."

In the first place, all but physical perfection is required of the young man who aspires to join the force. All his gymnastic work must be performed before he enters the presence of the examining surgeons. Whatever system or course of training he chooses, it is all one, so long as he can show the

proper bodily development and excellent health of organs. Once in the department, the young policeman is not asked to go to any gymnasium work, nor is he put upon any course of bodily development.

Yet it would be a great mistake to imagine that there is no such thing as good, sound physical training in the police department. In the first place, all young men who pass the civil service commission, and who are appointed probationary policemen, are sent to the School of Instruction at Police Headquarters in Mulberry street. Here they are drilled in all the most important principles of anatomy. They are taught to diagnose all forms of disease, of contusions, sprains and fractures as well as a layman may hope to do.

This preliminary work is carried on under the instruction of a physician employed by the Society for the First Aid to the Injured. During the thirty days in which new men are now sent to the School of Instruction there is much of this work accomplished. In order to secure his appointment as a full-fledged patrolman the probationary officer must be qualified at the end of the month to receive a certificate of his competency in first aid work. Such questions are asked as:

"How would you distinguish with certainty between a case of apoplexy and alcoholism? And what would you do in either case for the man who came under your care?"

Some of the students in the School of Instruction reply candidly that they do not know the difference in the symptoms of the two seizures. Others make ludicrous blunders. The young man who has intelligently mastered the work answers:

"It is very difficult to distinguish between apoplexy and alcoholism. If a man came under my care in the street I would summon an ambulance and stand by my man until the doctor arrived."

And this is the right answer.

But there are many forms of illness, of sprains, of contusions, fractures and wounds which a well-trained policeman can do much to relieve before the doctor arrives. Unless the probationary man can show that he is well up in the work he cannot hope to remain on the force.

A considerable portion of the two hours of daily instruction is also devoted to ex-

planations of the laws of the State and of a policeman's duties and powers. So thorough is the training that probationary officers are very rarely rejected on final examination.

While there is much of real physical culture to be gained from the instruction in first aid work, the real bodily work takes place at present in the Sixty-ninth Regiment armory. Here, during two hours of each day, the probationary policemen are put rigorously through the United States infantry regulations as far as is needed. There is work in the school of the soldier and in the school of the company. In the first place, the new man is taught how to stand properly. This task is described in the regulations in the following language:

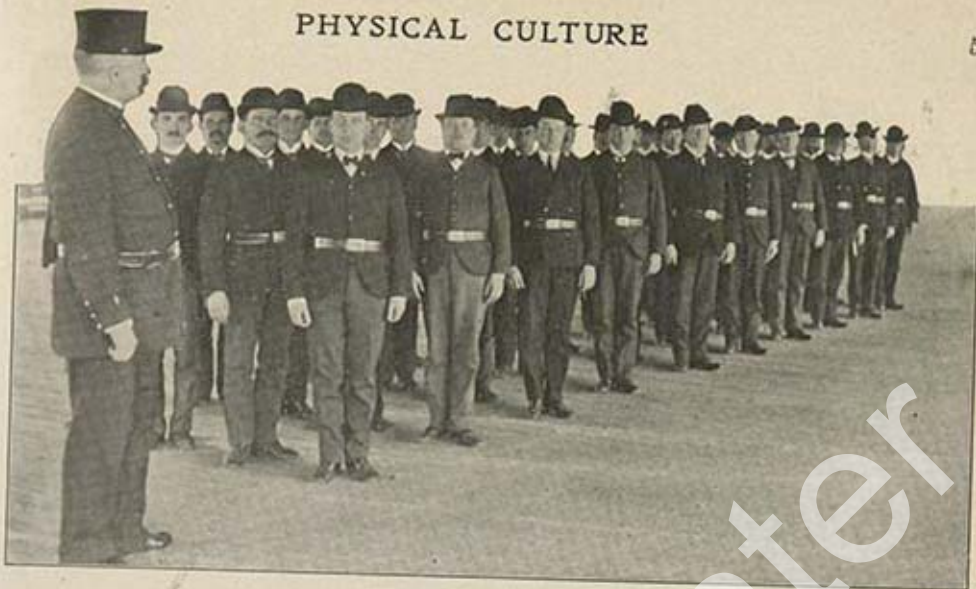
"Heels on the same line, and as near each other as the conformation of the man permits. Feet turned out equally and forming with each other an angle of about sixty degrees. Knees straight without stiffness.

"Body erect on the hips, inclining a little forward; shoulders square and falling equally. Arms and hands falling naturally, back of the hands outward; little fingers opposite the seams of the trousers; elbows near the body. Head erect and square to the front; chin slightly drawn in, without restraint; eyes straight to the front."

When this position has been somewhat properly acquired the men are drilled in squads and are put through the paces of alignment and facings. Then comes instruction in wheeling and in marching in single file, in column of twos and in



Probationary Officers Going Through Their Facings



At Drill in the Armory

column of fours. Poor formations are naturally the rule at first, but in time the men learn to form in nearly as straight a line as the advanced "rookie" in the United States Regular Army.

In the army the men are taught to stand at attention with hands at the sides.

evolution of tactics, that the instructor or his assistants must be able to minutely watch each man's movements. When the squads have become fairly proficient they are merged into one body. Now begins rigorous training in the school of the company. Now, if a probationary man makes

the slightest mistake in executing a command he is sharply rebuked, and by name. Every effort is made to put each man upon his mettle during every minute of the two hours' drill. As each man realizes that his regular appointment to the force depends very largely upon the proficiency he shows in this elementary infan-



A Company of Trained Policemen in the Annual Parade, May 2, 1903

In the New York police department the men, when listening to a brief lecture of instruction, stand in the position of the soldier, but with hands clasped.

At first the men are trained in small squads. They are likely to make so many mistakes, either in carriage, or in



A Troop of Mounted Policemen Approaching the Review Stand in Annual Parade, May 2, 1903



Probationary Patrolmen at Drill

try drill, he is naturally anxious to learn as much and as thoroughly as he can.

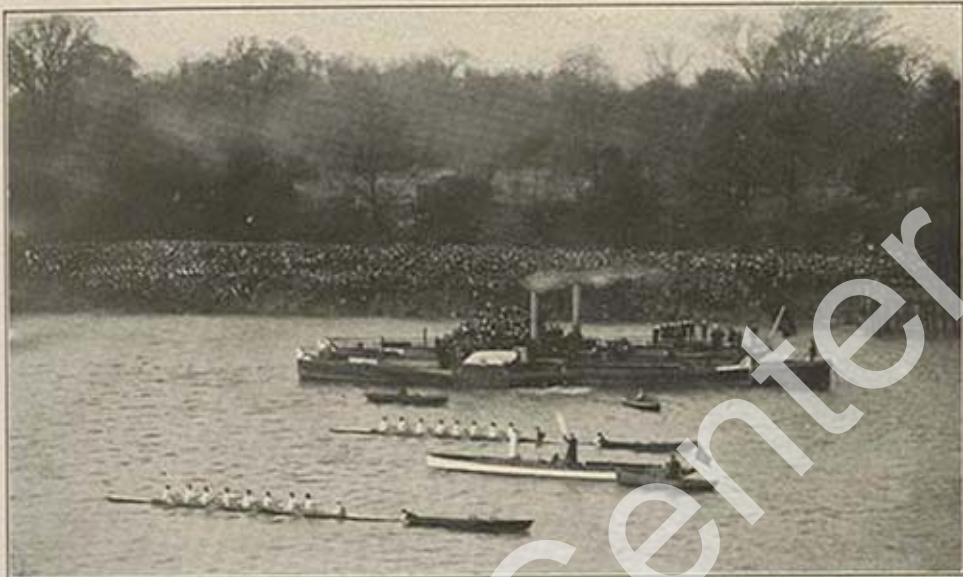
Some part of the time in every drill is devoted to gaining a better idea of the correct carriage of the soldier. One of the illustrations shows the company standing at attention with hands at the sides. Sergeant Schauwecker is shown in the foreground in the exact position which he endeavors to teach the men under him in the School of Instruction. Not all of the men, as will be seen, have mastered either the general position of the body or the correct angle of the feet.

Of course, that part of United States infantry drill which has to do with the use of rifles and bayonets is omitted. The new policeman is taught, instead, a series of drills with the baton. The correct method of drawing the club, of holding it in position to strike, and similar exercises, are given with great rapidity of movement. As soon as the new policeman is through with the School of Instruction for the day he is at liberty until seven in the evening. Then he is required to go out and acquire some of the practical end of the street work of the police. During the first tour of the night, which lasts until 11 p.m., he is required to walk the streets with a full-fledged policeman. In this way he learns a great deal as to the circumstances under which to make arrests, what to do in accident cases, what is expected of him at fires, and so on.

Four hours of tramping are in themselves enough to give a very fair amount of physical training. But the man is also required to walk properly and carry himself erectly during the tour. Even if the older patrolman who has charge of him is lax in enforcing the requirements of walk and carriage, the probationary policeman does not know at what moment the roundsman may happen upon him—and he early learns to stand in awe of the arbitrary despot of the platoon who wears chevrons and an austere expression. And this is as far as the compulsory physical training of the policeman goes, with one exception, which will be explained after a few words more. The tramping, the running, the occasional fights, the strenuous work of the officer who is stationed at a busy crossing—all these give physical work enough to the police department. But, in addition, there are three months before May in which a good deal of time is devoted to regimental drills. And then when the annual parade comes around the men turn out by companies in spick-and-span uniforms, in white helmets and gloves, and take the greatest pride in showing how neatly they can march and evolute according to the precise, accurate standards of the United States regular infantryman. It is the crowning day of the year in the physical, manly exhibition of the training of the New York police department.

OXFORD AND CAMBRIDGE BOAT-RACE

TRAINING THE UNIVERSITY CREWS



Oxford and Cambridge Boat-Race 1903. The Start.

THE annual contest for superiority between the crews selected from the great Universities of Oxford and Cambridge arouses enthusiasm all over the civilized world.

It is in fact the only race, in Great Britain, which all classes of society look upon as being absolutely above suspicion of fraud and chicanery. It is the only contest in which the outside public feels absolutely certain that victory will be the prize of the better crew and that the historic University Boat Race is indeed a bona fide struggle for supremacy between sixteen representatives of the beau ideal of England's manhood.

Conservatism is very strong in the British character and, astounding as it may seem, antiquated methods of training the 'Varsity crews are still in vogue. If modern scientific methods of physical culture were only adopted the athletic world would be amazed at the result; for it must be remembered that the Light and Dark Blue crews are composed of the pick of the muscle and intellect of

young England, which is not so generally the case in other contests. Ever since the inauguration of this truly classic race, it has been customary to pick out a number of likely oarsmen from the ranks of the undergraduates early in the Autumn, and these young men practice daily on the Isis and Cam at "tubbing," and their forms and methods are carefully noted.

Early in January the personnel of the crews is practically decided upon from amongst the most likely, and the men are instructed daily in "tubbing," as it is termed, usually two at a time, by their respective coaches. In the afternoon they generally have a spin along the river for a few miles in the eight, their proceedings being carefully watched and reported, even at that comparatively remote distance from the date of the race. The crews are at this period neither dieted nor trained beyond "tubbing," rowing and walking, and it is not until Ash Wednesday, by which date they are taken to London to practice on the Thames, that serious steps are taken to

render them physically fit.

For the first week the crews row about two miles daily and morning and evening they walk briskly for three quarters of an hour.

Their diet consists of underdone chops and dry toast for breakfast, and not more than half a pint of tea per man.

At noon they are given a piece of currant bread and half a pint of old ale, and an hour afterwards they take dinner, consisting of roast mutton or beef, stale bread or toast and half a pint of old ale. Cambridge men frequently take old sherry instead of old ale.

For tea they have toast or stale bread and water cresses and their supper consists of currant bread and half a pint of old ale.

It is not until the second week that their serious training commences. The men rise at 6:30, and after a vigorous rub down take a brisk three-mile walk. They next take breakfast, which consists of a large chop and plenty of dry toast or stale bread. Very little milk or sugar is allowed them in their tea.

After breakfast they read the papers and kill time till 10 a. m., when they usually go for a pull on the course, if possible against the tide. At its conclusion they are rubbed down, and directly afterwards receive a shower bath followed

by a brisk rubbing until the skin is a glowing pink.

A crust of bread and half a pint of old ale is next given to them at noon, and at one p. m. they have dinner, which consists of roast mutton three days running followed by beef, greens, one potato, stale bread, and three quarters of a pint of ale.

After dinner they rest for half an hour and then go for a walk for an hour and a half. Another pull on the river and a bath follows this and then they have tea consisting of dry toast. If any of the men complain of feeling hungry two light boiled eggs are given to them and with this they rest until 6:30.

They are then weighed and those who are in condition take gentle walking exercise, but those who are too fat, put on double flannels and take a hard run for four or five miles followed by a rubbing down. Of late years gymnastics have been substituted for running and walking by some trainers.

At 9 p. m. they get a crust of bread and a tankard of old ale and then to bed.

The trainers of the University oarsmen are great believers in change of air for their crews and every week end they spend at the seaside, usually Brighton, and on Sundays they have a respite from rowing practice. They are trained in



Cambridge Oxford
Oxford and Cambridge Boat-Race 1903. Cambridge Wins:

this manner allowing for the alterations in the time of tide, for about twenty-eight days and then called upon to compete for the prize.

During this period they are weighed twice daily and the diet and exercise of the individual is liable to be modified in proportion as the trainer considers it necessary to either add to or reduce his weight. Half an hour before the contest if any of them appear nervous they are given a glass of port or sherry, sometimes champagne.

Some very interesting calculations were made some time back with regard to the muscular energy expended by a fully trained eight.

A four mile course was selected. Twenty-one minutes was the exact time occupied by the crew in negotiating this distance; this gives a speed of 1,000 feet per minute.

The resistance to wind and water to be overcome in order to enable the boat to travel at this speed was calculated to be

seventy-five foot-pounds. A foot-pound represents the amount of energy required to raise one pound weight one foot. The crew therefore expended enough energy every minute to raise 75,000 pounds one foot. At the end of the course each individual had done 196,900 pounds of work.

Rowing for a prolonged period at high speed is therefore in all probability the hardest work that the human frame can be called upon to execute, thus emphasizing the necessity for a strict course of training to enable an athlete to undergo such a trying ordeal without running serious risks of affecting the action of the heart.

In the interests of true sport and ideal manhood it is to be hoped in the course of time, when conservatism and prejudice has been overcome, that permission will be given to train these young fellows properly and scientifically, and then the world may indeed expect a conflict of giants.

Ignorance

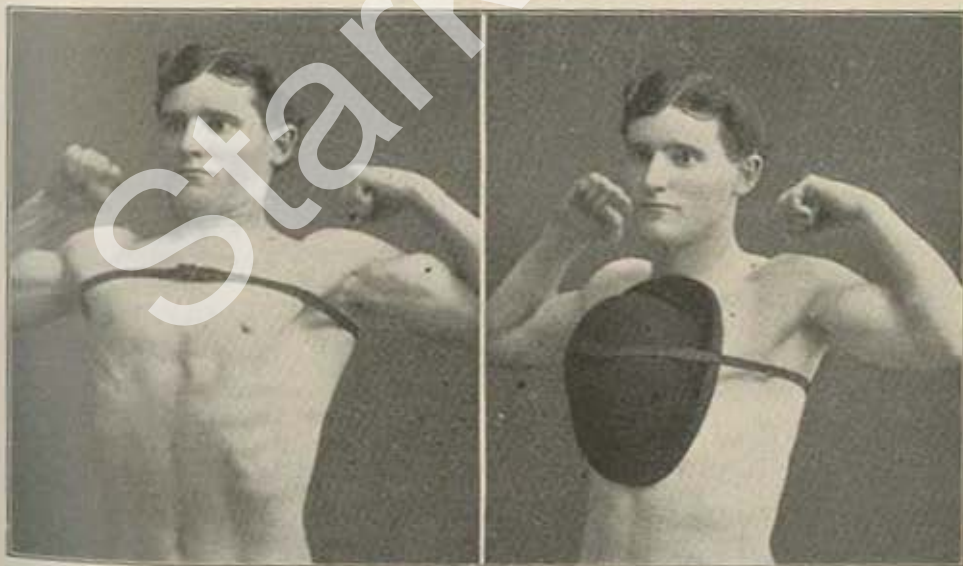
Ignorance of Nature's Laws

Of all diseases is the cause.

A knowledge of them will detect,

Remove the cause and the effect.

Wilbur F. Gearhart.



P. S. TRUESDALL

(Another Likely Candidate For Our \$1,000 Prize)



University of Pennsylvania Fencing Team Practicing for Meet with West Point
Lieut. Terrone, instructor, in center, wears sweater; Knipe, captain, next to him in striped trousers

FENCING AND LACROSSE AS MANLY SPORTS

By H. D. Jones



COLLEGE athletes see in the sudden burst of enthusiasm over two heretofore neglected sports, fencing and lacrosse, a significant change in the spirit of the American young man of muscle. We are going to be more gentlemanly in our university athletic departments, say those who test by straws the direction of the wind in the sporting world. Skill is to be encouraged to take its rightful place with brawn, and the reproach that we admire brutality rather than science in our athletic exercises will no longer apply to college exhibitions.

It is easy enough to understand why lacrosse now claims the calcium in college athletic circles, for the undergraduates of Oxford and Cambridge are coming over to try and beat our best college players at the exciting Indian game. It is international year in lacrosse and the

eyes of the athletic world will be watching eagerly for the result of the games; but the accession of interest in fencing is not to be accounted for in the same way. Whatever the reason for the college boys suddenly going wild over the science of swordsmanship, it is a matter for congratulation that university athletes have turned their attention in this direction. Fencing is pre-eminently the sport of gentlemen, but if anyone who has watched a bout with the foils thinks it a gentle game, a few minutes' experience will convince him that not even boxing is so taxing to muscles and nerves.

Students ambitious to be modern D'Artagnans are crowding the fencing schools in all the university towns. In Philadelphia a team captained by an old Cornell graduate and skilled fencer, Knipe, met defeat, but not disgrace, at the hands of the West Point swordsmen. Since then the students have been practicing hard in the gymnasium of the University of Pennsylvania, determined to make the red and blue swordsmen feared

in fencing circles. An instructor, a former officer in the Italian navy, meets the fencing class three nights a week and the bouts that are seen in the gymnasium are fast and furious exhibitions of skilled swordsmanship. At Harvard, Yale and Princeton fencing has been taken up with a vim and enthusiasm that may make it possible to gather together next year a team from the American universities that will be fit to cross foils with any aggregation of swordsmen at Old World establishments of learning, where fencing is taught as a matter of course.

the swords is to see one of the prettiest exhibitions of delicate movements with the wrist and arm, of lightning-like play with a rod of steel, of swift and unerring judgment in which eye and hand are allied, to be seen in any arena. A clumsy fencer is no fencer at all. Grace and agility are essential to success with the foil. If you see a fencer perspiringly aggressive, furiously energetic, put him down as a novice at the game. A foil is not used like a baseball bat. It is a weapon that must be held lightly in the hand. In the words of the great master



Fencing at Yale

M. Emile Goussy, fencing instructor, on right

"One reason why the sudden craze of American university men for fencing is a step in the right direction," remarked a veteran swordsman to the writer recently, "is that a fencer must be trained early in life, and it is the young men who should be encouraged to take up swordsmanship. The general run of men have a very hazy notion of what fencing really is. A sawing of the air and a cutting movement as though trying to beat an imaginary carpet is considered fencing by some people. To watch a real bout with

Lefaugere, 'the foil should be held as though you had a little bird in your hand; firmly enough to prevent its escaping, yet not so firmly as to crush it.' An expert fencer will direct his foil almost entirely with a wrist and finger movement, using the muscles of the arm but seldom and covering very little ground in his exertions. But don't suppose from this that fencing does not exercise the muscles. It accomplishes the same result as a more violent exercise, but in a much more systematic manner."



Freeland, the Crack Lacrosse Player (and Manager) of University of Pennsylvania Team, Making a High Catch

As fencing is to the more violent of indoor sports, so is lacrosse to field games, like football, baseball or polo; lacrosse is exciting without being risky to life or limb. The game that has crossed the Atlantic and become so popular there that a team from the most famous universities in the world is coming to compete with the players of the country where lacrosse was cradled, is to-day played exactly as it was by the Canadian Indians. It is so simple a game that the rules can be learned in a few minutes. The crosse, or stick with which the ball is thrown or carried, may be of any length to suit the player. The netting is of catgut and must not be bagged. The rules have it that the

netting must be flat when the ball is on it. The reason for this is that a player is at liberty to run with the ball on the net, throwing it when he pleases. As he runs with the ball in this manner, it is the business of the opposing player to knock it from the runner's crosse, using his own stick for that purpose. If the net were bagged, it will be seen that the runner could not be deprived of the ball except by having his crosse knocked out of his hand. The ball used in lacrosse is of ~~solid~~ rubber, weighing about five and three-quarter ounces.

The goals in lacrosse are placed one hundred and twenty-five feet from each other. The tops of the poles are six feet above the ground and six feet apart. The simple object of the players is to shoot the ball through the goal posts by means of the sticks. No player is allowed to touch the ball with his hands, with the single exception of the goal keeper, who may save his goal by knocking the sphere away with his hand or blocking it in any manner with his crosse or body.

The game is a thrilling one to watch. The ball travels so swiftly up and down the field, the play is so clean and speedy, the position of the sphere so plainly visible to any spectator and the technicalities of the game so few, that the excitement never wanes. It is possible for the player who knows his business to hurl the ball a tremendous distance with the crosse. As the ball comes through the air the nearest defender of the endangered goal leaps high, with his stick held at arm's length, giving him a reach considerably higher than the tops of the goal-posts. If he catches the ball in the net of his stick it is his to either return with a throw, or carry toward the opposite goal-post. The fine team work of a crack company of players is shown when the ball is carried down the field by a good dodger. When the runner sees that the way is



Throwing the Ball Underhand

hopelessly blocked, he jerks the ball quickly toward one of his own side, who perhaps passes it to another, who slips it to another. If it falls there is a wild scrimmage, for the ball must be picked up by the crosse and not with the hand. The crosses clash with the sound of a battle royal with single-sticks, and as often as not the shins of the players feel the blows that fail to land the ball on one of the nets.

A match game of lacrosse consists of two 45-minute halves, with an intermission of ten minutes between halves, and the side scoring the greater number of goals wins. The simplicity of the rules

makes it a very popular game with the spectator. The team that is expected to do most to win the international championship for the United States is that of the University of Pennsylvania, which numbers several old players. All the crack players of America will try for games with the Oxford and Cambridge team.



Running Up the Ball

The University of Pennsylvania players will have their chance in these games. Other teams, notably those of Johns Hopkins University of Baltimore, Cornell, Columbia and the Crescent Athletic Club of Brooklyn, also played against the visitors.

EXERCISE.

Exercise makes strong
The body, mind and soul;
According to the kind we take
Will be our future goal.

A shapely form endowed with grace,
A mind well bent in useful thought,
A soul most powerful for good
Cannot in sluggishness be bought.

The lazy are diseases' prey,
The workers gain the goods of life,
For action is the law of growth,
Inaction breeds diseases' strife.

By action all the spheres were made,
Celestial in the spacial depths;
Each moving well in proper place,
To God's great law itself adapts.

So man, within his smaller sphere,
In motion may evolve with God,
To paths of usefulness and joy,
Which mortals yet have never trod.

The heights beyond are limitless,
For those who work with Nature's laws,
Perfected souls are the effect
Of which God's harmony is cause.

—WILBUR F. GEARHART.

JUVENAL IN TRAINING FOR THE DIAMOND SCULLS



ROWING enthusiasts gather daily on the banks of the Schuylkill to watch a single sculler send his boat skimming through the water. The muscular young man who is the target for so many eyes is James Juvenal, whose name has been sent to England as an American competitor for the greatest prize offered to single scullers at the

pions, and defeated them after a hard struggle. In 1896 Juvenal rowed against Cresser in the senior singles of the Schuylkill Navy regatta and defeated him. Aspiring to national honors, Juvenal won his heat at the regatta on Saratoga Lake, but in the finals lost to Whitehead, of the Riversides, Boston, who won the national championship. In 1897 Juvenal met and defeated McGuire, of Boston, at the Harlem regatta, and at the Schuylkill Navy regatta won the senior single championship. Stroking the eight of the Pennsylvania Barge Club at the national regatta the same year, Juvenal brought the national championship for this crew to Philadelphia for the first time in ten years. For six years thereafter, Juvenal won



James Juvenal on the Schuylkill

most important aquatic meet in the world, the Diamond Sculls rowed for annually at the Henley Regatta in London. Juvenal believes he will win the sculls. Any critic who has seen his form since he began training will think twice before arguing the point, for the Vesper Boat Club's crack seems to be and says he is in perfect condition.

Juvenal is a native Philadelphian, having been born in the Quaker City in 1874. He began to row when nineteen years of age, and won his first race, the Single Sculls, at the regatta of the Scranton Press Club, in 1893. The following year he won the intermediate race for single scullers at Scranton and, in company with another comparatively unknown oarsman, carried off the intermediate double race, and, later in the afternoon, won the senior race for double sculls.

In 1895 Juvenal and Van Vliet rowed Rumohr and Russell, the Canadian cham-

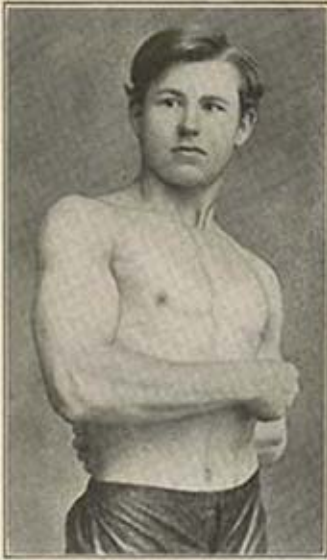


James Juvenal Training for Henley

every quarter-mile dash in which he entered.

Titus was beaten by Juvenal in the Harlem regatta of 1901. Titus is the present open champion of the United States, holding the National regatta championship, while Juvenal holds the association championship. In 1902 Juvenal defeated the Canadian champion at the National regatta, at Worcester, lowering the fastest record time by 17 seconds and winning the association championship.

In rowing condition Juvenal weighs about 168 pounds, a very fine weight for his height of 5 feet 10 inches.



Herbert Frey

THREE LIKELY
COMPETITORS
FOR THE
\$1000.00
PRIZE

Herbert Frey, a youthful admirer of PHYSICAL CULTURE and a likely candidate for the \$1000.00 Prize.

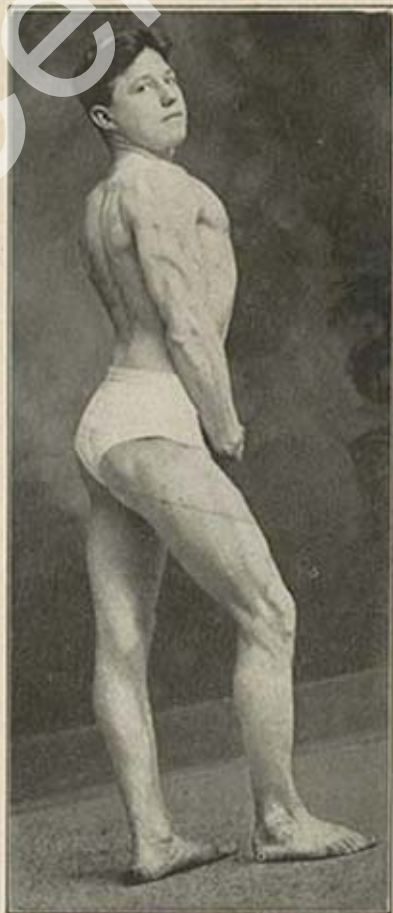
Mr. Frey is 5 ft. 10½ in. in height and weighs 176 lbs. and can put a weight of 116½ lbs. easily above his head.



Herbert Frey



J. Spencer



F. K. Smith



A Striking Example of the Pitch to Which Muscular Harmony Can be Developed in the Whole Arm

WONDERFUL DEVELOPMENT OF A YOUNG ARTIST



Mr. Devine as he Looked Before Taking up Exercises

Bernard A. Devine, of Portland, Me., is perhaps the best known of the young athletes of that city. He is just past 21, and is an excellent example of the good results sure to follow a course of judicious physical exercise.

He was far from being the splendid specimen of physical manhood he is at the present time, when he took up physical culture about two years ago. About a month after he began to exercise he was photographed and the contrast between the poorly developed but brilliant young



Mr. Devine as he Looks To-day

artist of that time and the athlete of the present day is very striking. In fact, the photograph tells, better than words, the story of successful body building.

Mr. Devine has used resisting movements throughout his course of physical training, in

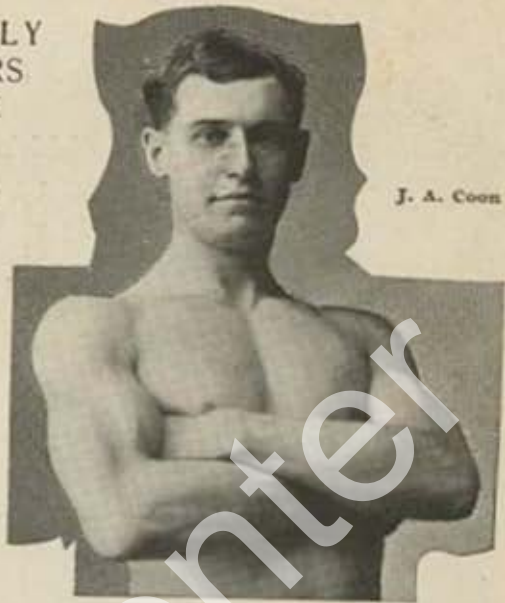
connection, as a matter of course, with deep breathing and a well-selected class of foods. He uses a great deal of whole wheat bread and plenty of fruit, and abstains absolutely from liquor and tobacco and does not touch tea or coffee.



FIVE LIKELY
COMPETITORS
FOR THE
\$1000.00
PRIZE



Douglas Shepherd



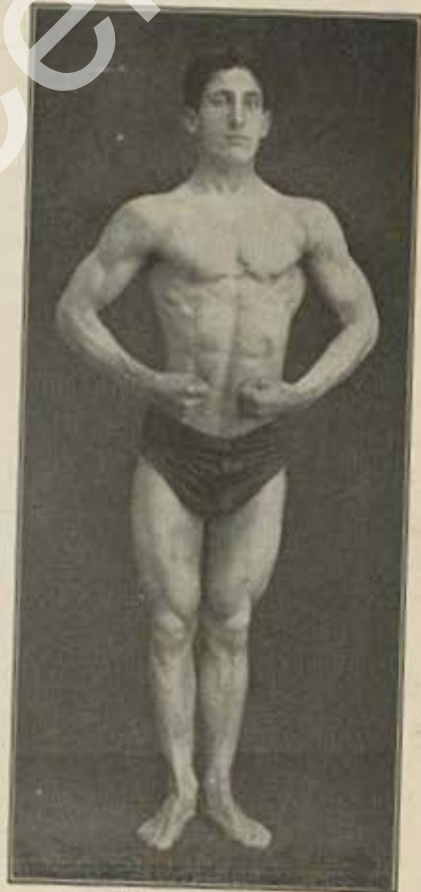
J. A. Coon



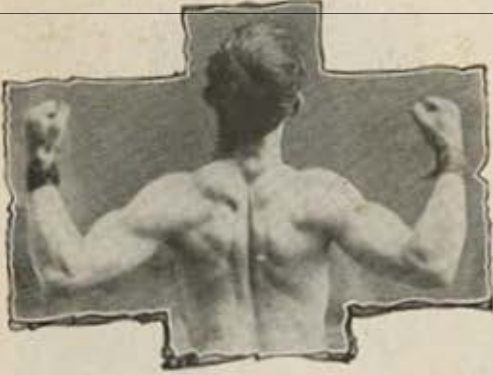
Mark Bailey



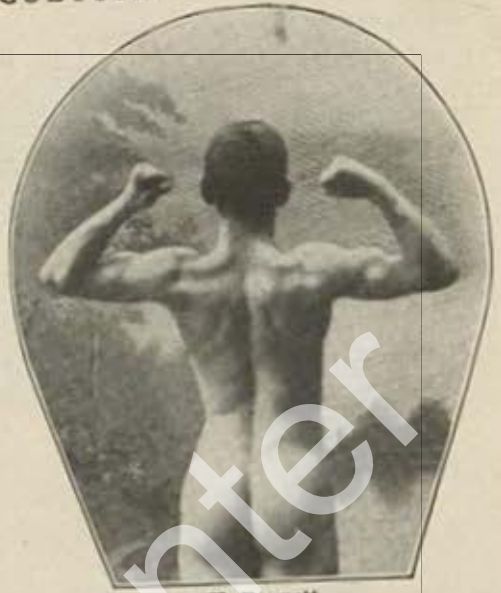
Sam Deanberg



Edward Delleport



Phil Hoartz



H. Bennett



T. K. Ferguson



A. J. Kawski

Likely Competitors for the \$1000.00 Prize

TRAPPED IN THE BLACK FOREST

By

Thos. D. Kemble



evening, I found myself whiling away the time in the little mountain village of Dobel, a few miles from Gennebach, in the heart of the Black Forest in Germany.

I had spent the greater part of that summer in exploring the sequestered nooks, and enjoying the natural beauties of the Black Forest, and to the nature-loving tourist I would say, that for the natural picturesqueness of its scenery and the primeval simplicity of its peasantry, the Black Forest district of Germany holds first place to any in Europe.

To the real naturalist, the most enjoyable excursions through the Black Forest are those made on foot, though carriage-riding in Germany is none too fast to be a hindrance to sight-seeing. They reckon distance not by the mile, but by the hour, and the ambition of a well-trained German horse is evidently to know how to go slowly. You may spin over French roads as though the superintendent of Hades were at your heels, or you may have your bones shaken to dislocation in a transit over Italian cobble stones, but behind a Black Forest horse you can sit still and forget everything but the fairy-



In the happy care-free days of my boyhood I remember how I used to gaze with longing, curious eyes at the distant blue mountains, visible from my home, and inwardly wonder what kind of a strange, big world lay beyond. This yearning for travel and seeing other lands grew stronger within me as I grew up. Finally it obtained the mastery over me; and to-day I look back upon ten or twelve years spent in wandering over a good part of two continents.

Thus it happened that, one autumn

land through which you are passing. Consulting your watch, at the end of the trip, you will very probably remark: "Why, I had no idea it was so late! I didn't notice the time passing."

This land of legendary romance is changing, however. The whistle of the iron horse now resounds through its valleys, once so sequestered. Rustic simplicity is a flower which does not thrive in an atmosphere tainted by the hot breath of locomotives; so those who wish to see the Black Forest in all the charms of its romantic scenery, in all the wild grandeur of its solitude, and enjoy it to the full, should go at once, else they may be too late. But I digress.

I had secured accommodations for the night at the inn of the little village, and, my appetite having been sharpened by a day's tramp over the mountains, I was enjoying to the full the frugal repast of mountain brook trout, black bread and cheese, which the landlord had set before us. The only other guest at the inn that night was an old man, whose snow-white hair and care-worn expression marked him as a man who had had his share of the ups and downs of life, and was now nearing that land from whose bourn no traveler returns. He grew communicative after supper, as we sat together and smoked our pipes in front of the large open fire and in the course of conversation related the following adventure:

"It happened about fifty years ago, young man, when this Black Forest district was infested by mercenary hordes of robber-knights, who were wont to plunder and pillage all before them. I was about twenty then, and a stoutly-built, fearless young fellow I was, if I do say it.

"I had just graduated from college and my father proposed that I take a trip on the continent, partly, I suppose, as an acknowledgment of parental satisfaction at the successful termination of my college career.

"I had read a good deal about the Black Forest and its inhabitants, its fairy tales and romantic legends; so I resolved to visit it. To resolve was to carry out in this case. Like a dutiful child, I suffered myself to be guided by parental authority, and forsook foggy London and its environments for the pine-clad hills

and verdant valleys of the 'Faderland.'

"How many and delightful were the excursions I made up the rugged mountain-sides, by solitary foot-paths, exploring caves and ancient ruins; or gazing with rapt admiration from some high vantage ground upon a picturesque landscape that stretched away below me like a vista of fairyland.

"It was late one lowering autumn evening, as I was returning from a tramp through the Höllenthal (valley of hell). The sky had suddenly become overcast with threatening clouds. The wind had risen and was blowing a gale. Great ominous banks of clouds loomed up over the northern horizon, and the rumbling of distant thunder was becoming momentarily more distinct.

"I have said that I was of a rather fearless disposition, yet I confess I felt something like a nervous quail pass over me as I realized that I was alone in one of the wildest valleys of the Black Forest, with night closing in around me and a storm about to burst over my head. I had taken warning at the first note of danger and hastily retraced my steps toward the little rustic village from which I had set out. But the storm gathered very quickly, and, moreover, I had a long distance to go. My only companion was my faithful dog Roger, a Highland shepherd dog, possessing a degree of sagacity inferior to nothing on four feet. He would run ahead a few steps, then come back, look up at me and whine.

"Night had now fallen, and save for the vivid flashes of lightning, which only served to emphasize the darkness, all was black as chaos. Big drops of rain began to fall. A prolonged flash, a terrific roar, and the storm burst in all its fury. In a few minutes I was drenched to the skin, but I plunged along as best I could, my eyes eagerly peering ahead for a friendly light glimmering in some human habitation where I might obtain shelter from the storm and darkness. If you have ever seen the Höllenthal you can imagine the terrific effect of a thunderstorm among the huge rocky walls of the ravine. Imagine with what a thrill of joy I saw a light glimmering through the darkness a little ahead. This might probably be a wayside inn, or perhaps a hospitable farmhouse. I felt then somewhat as a

condemned man feels when, being led to the scaffold, he hears his reprieve. As I approached a vivid flash of lightning revealed a miserable-looking hut, situated some distance back from the road; an uninviting-looking place it was, but I did not hesitate a moment in reaching it. Any kind of shelter from such a night!

"I approached the door of the hut and knocked loudly. I heard someone move within. Then a croaking voice on the other side of the door inquired, 'Who's there?' I replied that I was a wayfarer caught in the storm and seeking shelter. Almost instantly the door was thrown open and a hideous deformed dwarf stood confronting me. His head was abnormally large and his shoulders came up almost on a level with his ears. A pair of small bleary eyes, peeping out from under shaggy, lowering brows, high cheek bones, bull nose and repulsive mouth made him an object of loathing. He scrutinized me for a moment, then the huge mouth expanded into a smile as he bade me enter. Having closed and secured the door, he placed a chair for me in front of the log fire blazing on the hearth, and bade me be seated. He informed me that this was not an inn; that, as a rule, they did not entertain strangers, but it would be inhuman to turn anyone out of doors on a night like this. He placed before me on a small, rough pine table a loaf of black bread, some cheese and a flagon of wine, remarking as he did so that he hoped I would find enough to allay the pangs of hunger. He meanwhile would see that everything was in readiness for my comfort in an attic room overhead, where I was to pass the night. So saying, he climbed a rickety ladder placed against the wall and pushing open a trap-door disappeared overhead, leaving me to the humble meal, which I rather enjoyed, the wine being excellent.

"I had satisfied the cravings of hunger and given Roger a generous portion of the bread and cheese and was drying my saturated garments in front of the fire when mine host returned and informed me that my chamber was in readiness, and he hoped I would be comfortable for the night. As my eyelids were beginning to feel heavy and I felt a strange numbness in my limbs, probably the result of my drenching, I very soon bade

my host good night and proceeded to climb the ladder to my attic bed-room.

"I had got myself up through the trap-door and was about to close it when Roger made known his determination to accompany me by pushing his head up through the opening and positively refusing to go down again. I caught hold of his collar and tried to force him back, but the faithful animal fastened his teeth in my coat sleeve; nor were threats nor caresses of any avail in persuading him to let go. I let him have his way at last and up he came. As the trap-door fell into place I fancied I heard a muttered oath escape the lips of mine host below. I also noticed that the trap-door could be fastened either above or underneath.

"Roger meanwhile was running around the room, sniffing curiously and whining fretfully. I could not understand his actions; besides, the numb sensation in my limbs was increasing, and I had great difficulty in keeping awake. The room was small and the ceiling low. In one corner stood a bureau, in another a small table with an empty vase on it. Between these was a window which opened on hinges. On the side opposite this window stood the bed—a large, solemn-looking affair, not unlike a catafalque, which seemed to offer a gloomy invitation to 'come up and be dead.' In the remaining corner stood a large time-stained wardrobe, reaching from floor to ceiling. The only other article of furniture in the room was the chair on which I sat making note of my surroundings. Gradually these surroundings seemed to become possessed of motion and swam around before my weary eyes. I felt as if I were being swayed gently to and fro, a lulling sensation crept over me, and very soon I was steeped in oblivion.

"I do not know how long I slept, but I remember being awakened at last by Roger, who stood fairly on top of me, tugging at my coat lapel with his teeth and scratching my face with his damp paw. I sat up and looked around bewildered, striving to collect my scattered senses. I found myself sitting on the floor with the overturned chair beside me. My limbs—in fact, my whole body—felt torpid. The room and everything in it seemed to swim around before my bewildered vision. I felt like one in a wild

dream, whose feet are clogged and unable to move. I instinctively realized the presence of danger, yet had not the power to make resistance. Poor old Roger! If dumb animals were capable of using profane language, I think he must have felt inclined to use some that night. He succeeded in rousing me a second time, however, by rolling me over and alternately scratching and licking my face.

"I dragged myself to my feet, but would have fallen had I not leaned against the wall for support. I felt as if I were going to suffocate. I stumbled toward the window and opened it. Oh, how refreshing was that gust of pure cold air that rushed into the room and into my lungs! It swept the mist from my clouded brain and in a few moments I was able to think clearly. Why this languid torpor which had seized me? The wine I had for supper—could it have been drugged? If so, to what end? My brain was active enough now. I was in a death-trap. Had it not been for the faithful dog at my side that sleep had probably been my last.

"I turned from the window, but left it open to admit the pure air of heaven. The candle had burned low, and was now sputtering in the socket. Roger attracted my attention; he was sniffing curiously behind the old wardrobe. Once he paused, came running across the room, rubbed his nose against me, then ran back. I obeyed this mute appeal and proceeded to examine the wardrobe. I found it quite empty. I moved it, as noiselessly as possible, a few feet from the wall and peered behind it. In the wall, behind hidden by the wardrobe, was a closet, and in that closet—oh, God! it makes me shudder to recall it even now—clothes, wearing apparel of all kinds, belts, daggers and swords; some almost new, others showing the ravages of time; but all spattered with blood. Though the sight inspired horror, I took down one of the garments hanging nearest to me and examined it. It was a military cloak of dark-blue material. On the left side, just below the shoulder, was a large dark-reddish stain and, upon closer examination, I found just above this stain a small round hole, evidently made by a stiletto. A damp sickening odor emanated from this closet, and I turned away

with a shudder. I quickly replaced the old wardrobe in position, then sat down to think. I had fallen into a den of robbers, a human slaughter house, and unless I could effect an escape, and that quickly, my clothes would probably be hanging with the other blood-stained garments in that ghastly closet.

"But *how* to escape? I did not for a moment suppose that the dwarf was the only one connected with this diabolical den. He was, very likely, one of a band; the rest being absent for the time being, presumably on some plundering expedition. The storm had ceased, but it was still pitch dark. Instinctively I took out my pistols to see that every chamber was loaded and ready for quick action. Replacing them, I blew out my candle and sat by the open window to await developments and the coming dawn. Roger placed his paws on the window-sill and, sniffing the air, uttered a low growl. I drew him back and silenced him, because I did not want to alarm the dwarf, or let him know I suspected danger; lest, for aught I knew, he might give an alarm and render escape impossible.

"Hark! what was that? I fancied I heard a sound directly beneath my window. I listened attentively. Yes, there it was again; this time I recognized the thud of a horse's hoof striking impatiently on the damp ground. I also fancied I heard subdued voices in the room below. The situation dawned upon me. Some of the band had returned, and were perhaps even now casting lots to decide who should be the one to strike the blow which would seal my fate. I had taken the precaution to bolt the trap door when I came up, so that it could not be raised from below. I have often since thought that probably I owe my life to that precaution. Roger, faithful companion that he was, would have given a warm reception to anyone who would have attempted to molest his sleeping master; but then his shaggy coat was not bullet-proof, and the result would have been that I should have wakened in another world. I return thanks to Providence that I was still alive, and, imploring that same Providence to guide me safely out of danger, I resolved to lose no time in making my escape. My first impulse was to jump from the window, but I was not sure of

the distance, and if I sprained an ankle or attracted the robbers' attention it would mean capture and certain death. A second thought came like an inspiration. I relighted my candle, and, once more pushing aside the empty wardrobe, opened the door of the closet. I took down several garments and slashed them into strips with my knife. I then knotted these strips together, forming a rope. It was the work of a few seconds to fasten one end of this improvised ladder to the window. Then, taking Roger on my shoulders, I quietly slid down hand over hand until my feet once more touched the green earth.

"The darkness was not so dense now and I could easily discern the figures of two horses standing under a tree by the side of the hut. The horses detected my presence at the same time, and one of them uttered a low whinny. I ventured nearer the window in which a light still burned, and, keeping myself in the shadow, peered into the hut. The dwarf was seated at a table with two companions—brutal, fierce-looking scoundrels they were. A decanter and glasses stood on the table, but the wine which they were drinking was evidently not the same brand which they served to strangers. At any rate, its effect was different, as all three seemed in excellent spirits.

"I lost no time in unfastening one of the horses, and, leaping into the saddle, took Roger up in front of me. I supposed the horse knew the road better than I, so I let the reins fall slack and allowed him to go whichever way he pleased; it mattered not, so long as he carried me away from that charnel-house, where the blood of so many belated wayfarers had been spilled, where so many unsuspecting victims had walked into the death-trap.

"As soon as I felt the highroad under the horse's hoofs I gathered up the reins and urged the animal forward. The first streaks of dawn were brightening in the east as I dashed into the town of F— and drew rein before the principal inn. I gave my horse in charge to a sleepy groom and was soon recounting my adventure to the portly landlord. He informed me that the hut where I had sought shelter from the storm was probably the rendezvous of a band of highwaymen who had long infested the district. That day the townspeople organized an armed posse and, with myself a guide, proceeded to the hut. We found it deserted. The robbers had evidently taken flight when they discovered my escape, probably suspecting that I would notify the authorities. Ample corroboration of my story was found, however, in the blood-stained garments hidden in the attic closet. Finding no trace of the outlaws, the leader of our party set fire to the hut, and we left it smouldering to ashes."

"And did you ever see any of the robbers afterwards?" I asked.

"Some years later," resumed my companion, "I was watching with idle curiosity a crowd of miserable wretches loaded down with chains setting out from St. Petersburg on a journey to that living death—exile in the Siberian mines.

"Among the convicts my attention was attracted to one—a poor deformed cripple, who seemed scarcely able to bear his chains. As he passed close to me I saw his face—it was the dwarf. Considering the number of human beings who came to an untimely end through the instrumentality of that hunchback, I could wish him no better end. Yet, after all I had heard and read of the inconceivable tortures endured by creatures doomed to this exile I could not help giving him one parting look of pity."



COACHING FOR THE KOCH CURE

MORE STARTLING FACTS ABOUT THE KOCH LUNG CURE SWINDLE

By Gerald Keating

We have taken the usual precaution of submitting this article to counsel before sending it to our printers. Though it covers the whole field of the operations of Clark and his colleagues, we must state that it does not exhaust the fund of information bearing on these institutes which is at our disposal at this moment.—EDITOR.

The incidents which warrant a second reference to the gentlemen of Koch Lung Cure fame are reserved for the tail end of this article. We shall get there by a very interesting route, however, and we think that our readers' attention and patience will not be overtaxed if we present them with liberal specimens of the low, unscrupulous and shameful system of intrigue carried on by the fifteen or more (for we now believe there are more) Koch Lung Cure Institutes. We have in our possession original letters from the pen of the gentleman, W. C. Clark, to whom we have already referred as the President of these concerns. All but one bear Clark's signature and reveal the disgraceful task which he has assigned to himself—that of coaching the doctors in charge of his several Institutes in the manner best calculated to deceive even non-consumptive patients into believing that they are afflicted with this terrible disease, and also that of coaching them in an ingenious method of robbing those who apply for relief to these impostors.

The first epistle from the pen of this arch schemer Clark which is here dealt with is a very voluminous one. It is intended to be a general letter of instructions for all his assistants and for the nurses at the Institutes. It tells them in cunning detail how to deal with patients the moment they enter the Institute. It teaches them how to open the ball; how to cultivate the low and sympathetic voice and funereal and hang-dog expression; how to become a successful case-taker; how to work doubting Thomases, and how to work those who come in with a broad grin and maintain a smile during examination. It also lays

stress on the necessity for extracting the almighty dollar when the patient has been sufficiently frightened—frightened into consumption.

We quote from Mr. Clark's letter. Here it is:—

The patient must take off all of his clothing down to the skin and as far down as to the waist. The doctor must make a thorough examination, both back and front and also look down the throat, using the Stethoscope in all cases, also a Pleimeter and Percussion Hammer.

If the doctor says anything while in the booth to the patient, it must only be that he finds the air-pipes somewhat plugged up, and he should request the patient to dress and he will explain everything when they come into the consultation room.

Now begins the clever part of the doctor's work as a case-taker: *The*

first thing is to interest the patient, as without getting him immediately interested as a case-taker the doctor will be a failure.

In all cases they are interested particularly, at this second stage, is what is the matter with them; they are afraid of what the doctor is liable to say to them, and therefore the doctor will explain as follows:

(Here note how the Doctor is instructed to diagnose all cases alike.)

You will notice, my dear sir, according to the picture of the lungs which I have marked on this Case Book, that the small bronchials in your lungs are plugged up. You have probably noticed for a long time that you have had the catarrhal discharge dropping down the back part of your throat. During the daytime you are enabled to cough or hawk this out, but at night while you are asleep it plugs up the air-passages and in the morning you have more or less difficulty in raising the putrid discharge.

After many months some of these bronchial tubes have become more or less plugged up; in fact, in your particular case you are not using the upper part of the right lung because the air-passages are closed up on account of the lungs plugging up.

In this part of the explanation your voice should be very low and sympathetic.

How to Open
The "Ball"

After giving him the scientific part, which may take you at least three to five minutes, you are enabled to show him from your explanations and from your expression of your education and knowledge of this disease and he will from this judge as to whether you are capable and are scientifically educated in your profession.

How to Cultivate the Low and Sympathetic Voice and Fanciful Expression

After this is done you will tell him that unfortunately you have no medicine in your laboratory which he can take into his stomach that will cure this disease. At this point you will wait about ten seconds, giving him a chance to thoroughly appreciate what has been said.

He will naturally ask himself the question, "Then what will cure me?" This brings you to the third stage of the casetaking, and that is "What can be done to save my life?"

You will then at this point carry to his mind what happened at the Inhalation Apparatus, as follows: "You noticed as the nurse allowed the vapors to strike against your hand that they formed an oil on your hands. Now, Sir, if you will allow yourself to breathe these vapors into the air-passages for ten minutes it will fill the bronchial tubes with oil and as a result it will heal them up. Those plugs in the smaller bronchial tubes will be softened and you will be allowed to cough them out and your case can yet be cured."

The Successful Case-taker

At this point the patient will ask more or less questions, but up to this point you must do all of the talking. The physician who allows the patient to do any talking up to this point is a case-loser instead of a case-taker. The physician who fails to keep his patient absolutely interested up to this point is a case-loser.

When a patient enters your office with a smile and keeps a grin on his face during your conversation, you have already lost the case. But the case-taker who is successful in removing the grin and change the face to that of sincerity is a case-getter.

The physician who gets the confidence of his patient in the first place from his explanations and keeps the patient interested from point to point to this point has the battle more than half won.

After all explanations are over and the patient is allowed to talk, the next point that will interest them is, "Well, what will the cost be for this treatment?" The doctor will then produce a bottle of the Koch Tuberculine and state that "This is the most expensive part of the treatment." That it is furnished by the German-American Company and that it costs \$9 a bottle. He will also have in front of him a

The Crisis or the Almighty Dollar Stage

flask and contents which have been used in another case. The Tuberculine mixed in his case will cost \$27, or \$9 per bottle; for our services we charge all the way from \$10 to \$50 a month, and, frankly, I will tell you we charge

our services accordingly to the circumstances of the patient. Our prices vary from \$10 to \$50 a month. We believe that it is worth \$50 a month if the patient can afford to pay it, but you being a workingman we will give you one of the lowest price, \$20 a month; this would amount to three bottles of Tuberculine at \$27, \$20 for services, making in all \$47 for the treatment.

At this point the patient will state in about one-half of the cases that they must go home and ask their father or their husband or somebody else before they start in with the treatment. The physician who allows the patient to do this will lose his case nine times out of ten, and this is the point where his art of persuasion comes in.

The lazy physician will allow him to go out, but this is just the point where he must lay down to hard work. Even if the patient has only a dollar to deposit, tell him the importance of beginning immediately, for how often patients who go out at this time only one will return, as the people at home have not been interested and have not been convinced as the patient has who is in front of you, and they will be persuaded to go to some other physician who will charge much less.

The doctor at this point will have to recapitulate and again bring the patient's interest back to the condition of his lungs, and as he has learned from his talk where the patient is particularly interested he must ply his persuasion in connection with this point.

If the doctor is not enabled after all to secure the case before he allows the patient to go out he will explain that on his return he would like to have him bring to his office the first week the price of one bottle of Tuberculine, or two bottles, according to whatever amount of money he can raise.

Yours truly,
(Signed) W. C. CLARK, M. D.

The next letter shows the stress laid by this schemer Clark on the necessity of having patients continue this fake treatment for at least twelve months after the regulation "four months" period, during which permanent cure is supposed to be effected. Four months is the period they specify to patients on their first visit. This letter was written June, 1902, to the doctors in charge of all the branches throughout the States, and reveals the anxiety displayed at headquarters because of the activity of the rival concerns. You will see how ingeniously reference is made to legal proceedings pending between them and the other swindlers and also how their assistants are urged to bamboozle patients into signing testimonials. This letter also contains

How to Work the Doubting Thomas

a statement which gives them away completely. This is contained in Clark's reference to the fact that he is not now using creosote in his tuberculine. While on this point, we might state that as far as our knowledge goes, this fake treatment is made up of petroleum oil, colored red with alkanet root and creosote with oil of eucalyptus added. It is put up in one-half ounce bottles, instead of one ounce, and the physicians are instructed to tell their patients its costs \$9 a bottle, whereas it costs only from 1½c. to 2c. a bottle. We make this statement authoritatively. Here is the letter:

Dear Doctor:

I would like to call your attention to a few things with reference to the handling of cases.

We notice from the semi-monthly that a great many patients are behind in their payments. We would like to call your attention to the necessity of explaining to them the importance of having their tuberculine added to their flask as soon as possible. Of course, this cannot be done until it is paid for.

After patients have been cured explain to them the necessity of their coming in and taking Inhalation "B-2" whenever they catch cold. Also explain that although their lungs are cured they are always weak after being cured of a disease like this for about one year. During this time they must know the necessity of taking Inhalation "B-2" whenever they catch cold, otherwise the disease is liable to return.

Now, doctor, you are probably aware of the fact that we have for several months been having a suit with another company who have been infringing upon our rights. In this case we have been in court giving evidence and hearing evidence for twenty-one sessions, which has cost this company over \$3,000, but we have this day heard favorable news to the effect that the other side is giving up and things are coming our way.

We have long ago secured contract with every paper in all the large cities which prevent any imitation Koch treatment to be advertised while our contract is in force, outside of two newspapers in New York City. But this has not prevented this infringing company from doing a small amount of advertising in New York, which is only 17 per cent. of the amount they used to do. Yet, for all that they are in existence until the final decree of the court is given, which will now be very soon.

In your office we are greatly in need of good testimonials, as you know that we must be able to prove what this treatment will do, and the best proof of what the thing can do is by what it has done. Kindly try your best and let us know within a week by going over your patients and see if you cannot secure for us one or two good testimonials.

Try and get the patient to make some good strong statement if possible. Have a long conversation with them and write down many of the things which they say, as to what they

thought would happen to their case; what their doctors had said; or what their family had said; or what they thought of their own talk. Write down all you can get from them. This will enable me to secure some good headings, which is very important in using a testimonial.

The catarrh work in the office should be handled as far as possible by the physician in charge, instead of the nurse. The nurse is only supposed to give the catarrh treatment whenever the doctor is very busy.

Now, doctor, if you are not thoroughly up in applying treatment outside of the sprays, I would suggest that you study up this matter thoroughly.

The nurse must read over this letter also, and she must be sure and put on her semi-monthly the date when each examination has been made for each case.

We have now employed an auditor for this company to go around the different offices and check up the work.

All of this work must be carried out according to the directions as given by Dr. Clark, and by the general letters sent to the different offices. No nurse will be entitled to hold her position who is found wanting in doing her work as ordered to be done. Please remember when any part of the pump gives out that we have parts of it in this office which we can send whenever needed.

We find that some patients object to the taste of creosote in the Tuberculine, as they think that it is similar to what they have already used with their physician. We have therefore left it out, but find that it is a disappointment on the part of some patients, as they think it does not taste like what they originally had.

Please let us know if you think there is any better result from the Tuberculine which you have been receiving within the last sixty days.

We now have this Tuberculine with and without the creosote. Many patients having taken so much creosote that they have lost trust in it, and the least taste of creosote makes them think that they are taking the same remedy that they have been taking for a long time.

I would like to hear from you as soon as possible with reference to this matter.

Very truly yours,

(Signed) KOCH LUNG CURE,
W. C. Clark, M.D., Pres.

Here is a personal letter from the notorious EDWARD PHILLIP himself to one of his probationary doctors, with whom he was on very intimate terms. It bids him "Bluff at it strong" and to "Stop his poor man's talk entirely," and finishes with the Institute's Benediction, "God bless you":

My Dear [-]:

Yours received with enclosure. Thanks. Now, in regard to your suggestion. As Dr. Clark has advised you to use your judgment and get cases and money, change your price. First ask \$13 for services and three bottles—

total, \$40. Don't go higher. *Get what money you can on the \$40.* Let office cases begin on part payment. Get their promise for next payment and collect it or stop their treatment. At least, bluff at it strong.

Edward Phillip's Benediction after telling his Doctors they must bluff at it strong and "stop your poor man's talk"

Stop your poor man's talk entirely. It's bad.

Diagnose the case to the patient. Say: "The examination of your lungs shows you have Bronchitis with Asthma or Tubercular Infection and locate where; or, Catarrh of Nose and Throat, or Bronchial Catarrh."

Retain the good points in the talk.

Give medicines indicated. The Anti-Dyspeptic are good in all cases when the stomach and general system need toning up. The I. O. S. Tablets for Anæmic Cases—one hour after meals. Give other medicines as indicated.

Study each case individually. Stop general talk. Be specific. Individualize, and God bless you.

With kindest regards,

Yours fraternally,

(Signed) E. KOCH, M.D.

The next letter is from the fluent pen of Clark. It is a general letter—general letter No. 79—which at intervals is sent out from the head office to all the branch Institutes whenever there is any falling off in receipts. This letter will give you an idea of what a calculating genius the President of the "Old House" is. The Chicago Institute is a chip of the old block, apparently, and tops the ladder for results.

In September, 1902, the Chicago Institute, according to Clark, secured 69% per cent. (yes, Clark worked it out himself) of all the patients who entered the office "whether they were tramps, peddlers or millionaires." Our readers will not wonder at the tone of this letter if we tell them that the gentlemen who conduct the branch Institutes are in some cases struggling physicians or "old-timers," whose probationary positions admitted of a lot of nasty bluff from the "old soldier" Clark.

Koch Lung Cure,

General Letter No. 79.

Gentlemen:

I find that with my general letters some of the physicians pay little attention, showing that it goes in one ear and out of the other. Please remember that this does not pass me unheeded, as I wish to have my orders carried out to the letter, and they cannot be carried out if our doctors in the different offices disregard my requests. I do it as much for the doctors' good as for the good of the business.

We have now in our employ fifteen physicians. Some of them are climbing the ladder very fast and improving in casetaking constantly; some are natural born casetakers, while others have to learn the business by hard knocks. Some of them bring to their assistance the abilities of the nurse, get them to use all kinds of tact in assisting them in securing the cases. The nurse has her part to perform, as is shown by letter No. 55, to which I will refer, while other physicians think they know more than anybody else and think they can do better by doing it their own way.

Our Chicago physician ordinarily only secure for the treatment about 35 per cent, but he was willing to learn and did everything possible to carry out my instructions. He is now taking cases according to the rules of the Old House and, as a result, during the month of September he secured 69% per cent. of all the patients that entered that office, whether they were tramps or regular peddlers or millionaires.

Very truly yours,

(Signed) W. C. CLARK, M.D.

The letter which follows is one written by Clark to one of his doctors in regard to a testimonial which he was very anxious to have from a certain patient. This victim was a difficult nut to crack. He was too much for the doctor who treated him. The veteran Clark tries to help his assistant in getting (?) signature to a doctored document. Before coming to this letter we might here state that among the many original documents in our possession is one very interesting letter signed by Clark and written to a woman who tried the treatment. In this he offered 20 cents for every "kind word" she said in favor of the concern to those who referred to her, and a dollar a head and carfare if she went to the trouble of accommodating them so far as calling on anybody who might wish to have her call to give information about the treatment. They published a garnished testimonial over this poor lady's signature.

Dear Sir [to the doctor in charge of a certain branch]:

I think that by talking with Mr. — and explaining this point before you show him the testimonial he will have no hesitation in signing it. Say to him: "I suppose you have heard of some of the many cures we have made. I say in the testimonial that you knew of other cures." You might also say: "You know I examined you and found your lungs to be as stated in this testimonial. I mention a physician having told you about your condition," etc., etc. It is not necessary for me to tell you how to do this. As a matter of fact

you are clever enough to make Mr. — see a good reason for signing the testimonial.
Hoping that this testimonial will appear in good shape, I am,

Yours very truly,
(Signed) KOCH LUNG CURE,
W. C. Clark, Pres.

To complete this exposé of the *fake* Koch Lung Cure and Consumption Institute there only remains for us to add that the company over which our friend Clark presides were very active just before our first exposé was published. On the 29th of March they caused to be inserted in the Philadelphia Press the following puff:

KOCH'S CURED PATIENTS ORGANIZE.

The cured patients of Dr. Edward Koch have formed a society, calling themselves "The Cured Koch Tubercs," with branch lodges in Philadelphia, New York, Newark, Boston, Rochester, Buffalo, Chicago, Cincinnati, Pittsburg, Altoona, Baltimore and Washington. Dr. Koch is at the head of the society. All members will receive guarantee health certificates and are entitled to receive any treatment necessary at any of the institutions as long as they live. Each member is, as well, entitled to room and board at Dr. Koch's Southern Sanitarium for one month every Winter. Promoters of the society say that there are about seven hundred members, and that its main ob-

ject is to demonstrate the possibility of a cure of tuberculosis by the Koch lung cure method.

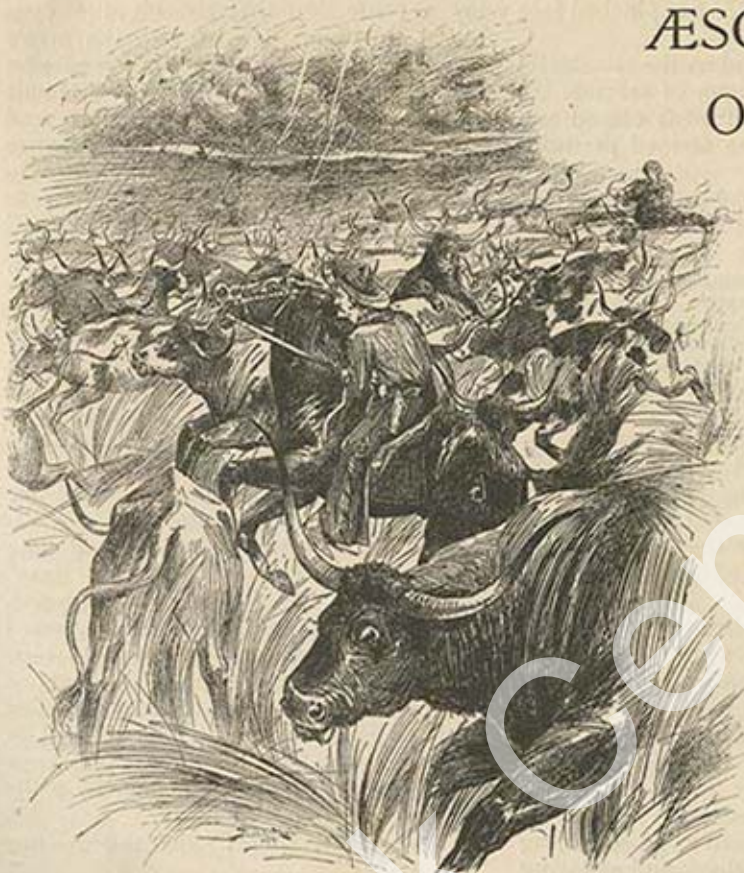
This society business is a farce, and the little paragraph quoted above is but an ingenious way of advertising the Koch Lung Cure fake. Simultaneously with this they flooded the provincial press with half-column advertisements about the great necessity of expanding and establishing institutes in every town and city in the States. They were particularly active in Erie, Pa., where, they stated, careful inquiry made by a number of citizens residing in Erie by visits personally made to the Koch Institute in other cities made it clear that Erie would be humanely served and blessed by the presence of such a Koch Institute in Northern Pennsylvania. It was ascertained by these citizens, they stated, that it would cost \$25,000 to secure the territorial rights from the authorities of the New York company to do business in Erie and vicinity. This is only a specimen of the rignmarole spun together by Clark. They tried the same game in a town called Wheeling. Here they offered \$30,000 worth of stock at 50 cents on the dollar but the trick fell flat.



DR.—GIVE YOUR HUSBAND NO !! YOUR SON NO !! THE DADDY NO !!
YOU TAKE YOUR POWERS!! HERE'S MY BILL.

ÆSCULAPIUS OF THE BORDER

By E. L. P.
Griffith



"Æsculapius was the son of Apollo. When grown up he became a renowned physician and in one instance he even succeeded in restoring the dead to life. Pluto resented this, and at his request Jupiter struck the bold physician with lightning and killed him, but after his death received him into the number of the gods."

—Classic Myths.



HE warm white light of a California morning hung over the Tia Juana¹ valley. The dry sage-covered hills steamed mistily in the glare, but along the sandy river course the cottonwoods, the willows and the vines were still green from the river's underground supply.

Here and there large stretches of indomitable saltgrass wove

¹ Tia Juana—(Tea-Wana).

unending mazes, upon which grazed frowzy, wild-eyed Mexican cattle.

Against the white, uneven outlines of the hills the cactus stood dark and grotesque, while beneath, on the red adobe slopes, sprang young greasewoods. From its covert the rabbits ventured forth in the morning and evening twilights

and on blazing noons; from beneath its brown limbs slid noiseless, sleepless rattlesnakes, invisible and protected on the soil of their adoption.

Following the river's course on the left was the dusty trail of the Mexican guards. The Mexican boundary line lay but a short distance to the south, and from the Custom House daily came mounted good-natured guards to patrol the line. Scuttling, law-fearing Chinamen and reckless, law-defying Americans broke sometimes their noonday siestas; but largely theirs was the vast content of souls absolved through the ministrations of the Blessed Lady of Peace and whose worldly interests were locked in a slumberous manana.²

Down the deserted, sun-scorched path of the guards, wearily and in painful contrast to the strength of her surroundings, came a girl. A queer, dark little thing,

² Manana—to-morrow—equivalent to "by and by." The Mexican apology for doing nothing.

whose great black eyes in her pinched face were almost startling.

She was singing, and as the wonderful voice rose in the abandon of solitude the harsh calls of the wild birds ceased and the hush of the breeze seemed premeditated.

There was the wild bird's note in the voice and with it the inarticulate sadness of the wanderer.

"I am far fra my hame," it mourned,
 "I am weary often whiles
 For the langed for hame comin',
 An' my faeather's welcome smiles.
 An' I'll ne're be fu' content,
 Until mine eyne do see
 The go'den gates o' Heaven,
 In mine ain countree."

The wild feathered songsters of the North speak in lilting praise of warm summers in the South, but through their song always there is the undertone of sadness and the ache of fresh homesickness beneath.

"Well, I will be dod-rotted!" said Jim, by way of applause, after a breathless space, during which all operations had been suspended.

"Who in the name of them seven lovely sleepin'—and here the willows parted and the pathos of the girl's eyes broke and rippled with amusement, as she discovered the big bronzed cowboy sitting before the door of his shack and swearing gently at the saddle-girth he had been mending.

"Can I sit down?" she asked. Her tired eyes had caught sight of an inviting log.

"Free-fer-all," with an ungracious frown; "there ain't nobody goin' to kick another feller offen that kind of a foot-stool."

A pause ensued, during which Jim, completely oblivious of her presence, went on with his interrupted work. Although dressed in the conventional cowboy trappings—flannel shirt, knotted kerchief, sombrero and Mexican hunting belt—it could be easily seen he was no ordinary cowboy. There was something so vigorous and strong about the whole man that it dominated his surroundings and made them appear quite accidental. There was the set of a strong jaw in a brown face, and the straight level look from gray eyes like a pointed gun. But in the curve of the finely moulded lips

lay a confession that though the eyes might threaten, there was in the man's nature a curious depth of compassion and a capacity of sympathy. Animals and—women looked at the mouth and smiled (at least the women) in defiance at the eyes. It was impossible not to trust him absolutely.

"Well, why don't ye trail fer home?" inquired Jim suspiciously.

"If my presence has become offensive," said Ruth, rising quickly.

"Oh, set down!" retorted Jim. "You was singin' about other diggin's. Home-sickness is a fever rather common among the women down here, and I was thinkin' ye ain't likely to get cured of it till ye pull up stakes and move on. I judged ye had folks back East that would mebbe make ye forgit to sing like that."

"Oh, I make my living singing 'like that.' I haven't any 'folks back East,' and it rather looks"—and she stopped, and forgot Jim; and when she continued it was to herself and to the wild bird rendering its tiny throat in a song above her head. "Yes, it rather seems that I'm likely to go 'to mine ain countree.'" And again to Jim, "They tell me I'm not down there," pointing to the gray adobe walls of a sanitarium a mile away.

"You down there!" demanded Jim. "What for?"

"Nervous prostration they call it; overwork; complications—and they want to perform some kind of an operation. They say it's necessary—I don't know."

"Now you look-a-here," Jim had risen and towered ominously over her. "Do you know what I'd do if they wanted to slice me? I'd ventilate the head that could corral that idea."

Jim sat down on the other end of the log and for the first time really considered the girl.

"Yere a queer little coot, and there ain't enough of ye to make a square fight against them infernal cusses, but if ye'll mind me, do jest ex-actly as I tell ye, and follow the lead, we can beat 'em at their own game. I know what ails ye. It's city air and city toggin's and city grub and the whole blamed show that got onto yere nerves. Why, the most of ye live so far away from Nature it's a wonder she'll come to yere rescue at all. But look here, little partner," and Jim's

voice took on a religious solemnity, "ye want to *live!* I don't believe ye know what that means. Don't believe ye *know* what it is to yell and whoop, yet 'cause the sun's shinin', or because it ain't, and because ye're alive. I've layed out here nights under the stars and been so happy over nothing at all that I couldn't sleep. Why, most people hardly exist. But if I ain't hittin' the wrong trail—ye've got pluck, and if ye want to square up the deal with them Docs I'll teach ye how to *live!*"

Ruth's large eyes had dilated under the recital. Jim's enthusiasm had carried a wonderful hope, and his own tremendous personality and immense physical energy had lent the girl the strength to promise to "follow his lead."

A small Mexican boy came at the moment around the corner of the shack, leading a horse upon which Jim hastily threw his mended saddle; talking rapidly to Ruth as he worked.

"Now you go home, back up there, and throw away all their rot they've given ye to take, and don't ye take *anything*—not a thing—to eat or drink except cold water for three days. And *then* you come down here and we'll see whether ye've got *grit* enough to stand them fellers off; and if ye haven't then ye can *exist* as long as they'll let ye, but ye won't ever know what it is to *live!*"

Jim had mounted and the restless pony swung off over the fields. Horse and rider were both picturesquely graceful, strong, exhilarating.

Jim was making biscuits one morning, and it was just as he finished wiping his floury hands on his apron after placing the last batch in the oven that he looked up to see the figure of Dr. Wakefield darkening his doorway and obstructing the entrance of necessary fresh air and sunlight.

It was a figure garbed in an offensively correct black frock-coat, and was further encumbered with superfluous flesh of proportions to make quite an eclipse in the low doorway.

"Hum—m, here's the fatted calf; make a rattlin' fine barbecue," observed Jim silently.

"Aw, beg pawdon, I'm suah. Have I

the pleasuah of speakin' to Mistah Jackson?"

"That's jest what ye hev, and 'Mistah' Jackson has the over-powerin' joy of receivin' a raid from Doc Wakefield," and Jim motioned him on to a bench by the door.

The sallow pouched face of the doctor darkened, and with it his affable manner vanished.

"Called to see you, sir, about a little mattah—er—concerning one of me patients, highly nervous type—fawncies her illness largely, and awfter devoting much time to—er—consideration of conditions it has seemed wise to—er—indulge, as it were—such a fawncy until we adopt a certain course of treatment at the end of which she will have recovered"—

"Yes," interrupted Jim, with dangerous sweetness, "she will have recovered from any *fawncy!* There wunt be no question but that she'll be sick."

"Sir," gasped the man, purple now in hideous blotches over his loosely-hung face. "Sir, I awsk you, what business this is of yours. I awsk you who you are to dare to interpose." He stood and panted. The words had choked in his fat baggy throat.

Jim looked straight into the narrow, cruel eyes with appalling directness.

Then did Dr. Jim give a slow, wicked grin of pure joy, and putting heavy hands on the man's shoulders sank his fingers in their soft mass.

"Why, I thought it wuz a man," he said. "No," running his hands caressingly down the man's arms, "you can't hit me," he began cooingly. "You greased Chineese idol, what right," looking meditatively down in the glaring eyes, "what right have I ter interfere with yere house of livin' sacrifices over there?"

All the while his hand wandered searchingly down the boneless body, punching experimentally, now and then, where a rib ought to be. "Why, yere built a good deal like a caterpillar, and look 'bout moultly enough to go into chrysalis, too."

The man was panting with excitement and indignation. There are few things more humiliating to an angry man than to be handled caressingly, gently, tantalizingly handled by another man who might, but who will not, strike.

"Now," said Jim as he shoved him back on the bench, "yere gettin' heated. Don't do it! You'll go off in one of them fits. Look like ye might topple off any minnit, so don't do it. Before you topple, you'll jest send up orders to yere corral that that little gal is to have free head and no halter."

Under Dr. Jim's dictation a note was dispatched by the little Mexican boy, who, returning within reasonable time for the first time in his life, heard the soothing hypnotic voice of Dr. Jim as he sped his guest:

"Now, all this good advice I've give ye is gratis, ditto the pettin', but if I know of yere rowin' around or baulkin,' you understand, I'll ketch ye—and *handle* ye—and ye'll topple clean off."

When the dust of the doctor's carriage had obscured the road Jim pulled his browning biscuits from the oven, sat down at his table, and, burying his face in his hands, laughed long and loud.

It was on the morning of the fourth day that Ruth again appeared. Jim had been by turns hopeful, suspicious and despondent. She told him (sitting on the log before his door), very white and a trifle dizzy, of the well-nigh over-powering opposition she had met in carrying out Dr. Jim's orders; and related briefly how, only the day before, Dr. Wakefield had sent her word that he relinquished all medical authority over her and should she continue to remain at his institution and persist in carrying out her "outrageous" plans, it must be entirely upon her own responsibility.

Jim grinned an instant in retrospective delight; but, glancing searchingly at the unconscious face, caught its look of seriousness upon his own.

He saw that all along her fight had been carried on in the spirit of one who realizes the struggle is one of life and death and a huge awkward tenderness overpowered him for the moment.

He felt somehow that she had been robbed—cheated of what is far more to every human being than the loss of an estate—and with the pious zeal of an old-time crusader Jim determined to re-establish her claim to Health and Life.

Then followed long days out-of-doors with Dr. Jim, for after the fasting a new

and fuller vitality took possession of the girl. Early in the morning, through the sun-flooded valley, mounted on one of his ponies, Ruth followed Dr. Jim as he inspected the cattle or directed his herders. The joyousness of all living things about her was pervasive. The springing leap of the broncho beneath her, the tug of his querulous bit, and the indomitable physical energy of Dr. Jim as he rode in front with the magnificent abandon of the Western plainsman; all appealed to an hitherto unawakened sense of her part in life, in a life of abounding fullness.

With great pride in the wonderful aptitude of his pupil, Dr. Jim had taught her to shoot, to ride with him on the range and later to throw the lariat with the herders.

The glorious months of the California summer slipped along. Ruth's improvement under Dr. Jim's treatment had been magical. Even the doctors at the sanitarium conceded that there had been a change; and Dr. Wakefield, who, for reasons best known to himself, had ordered a suspension of medical treatment, was warmly congratulated on his success, albeit there existed a regret in the minds of some of the medical fraternity at the loss of what promised to be an interesting and profitable surgical case.

Under the direction of Dr. Jim, but more because of the unapproving criticism of his glance, Ruth had abandoned her city wardrobe. It seemed somehow an impertinence in the simplicity in which they lived, and she had adopted a simple costume whose plain lines, with her increasing physical development gave her a certain picturesque grace. Jim liked her better so. She seemed an integral part of his life, and in the vast serenity of mind which was his habit, he had failed to consider the possibility of an ending to their comradeship.

So entirely frank and wholesome had been their attitude to each other that neither recognized its unconventionality, or what its termination might mean.

Over the coast lay a great brooding oppression. Yellow, low-hung clouds blanketed in a close atmosphere. The trees were dead, and the nearby ocean moved fretfully in an uneasy sleep under

its grassy coverlet that shifted in mocking grimaces at the sky.

In the valley the little metal crickets batted over the dry grass, while the lizards and horned toads scuttled croaking through it. The cattle, quickly sensible of the electric atmosphere, moved uneasily about, swinging restless low-hung heads from side to side.

"Buenos dias, señor," called a voice from the willows. "Him be, Ah bleeve—what you say—eartha-quak, pacotiempo?"

It was a minute Mexican boy, sprung from the obscured mouth of a side trail, who addressed Dr. Jim.

"Even so, and, son of mine," responded Jim in the vernacular, "see thou that there be an eye to the cattle. I like not this sky."

"What did he want?" asked Ruth, riding up.

"Sez the cattle are inclined to jim-jams. It's been thunderin' a little and they git peevish this kind of weather. Want to ride over and see 'em?"

They swung into the long easy lope of the cattle horse, slipping the reins low on the neck, knowing that the instinct of the herder would keep for them the easiest and quickest trail. Then climbing the southern slope of the valley they struck east on the sage-covered mesa that bordered the Tia Juana.

Over the tufted mesa, without speech for a long time, they went. Finally:

"Jim, I have some news."

"Good?" inquired Dr. Jim, sharply curbing his broncho to hear.

"You can judge. My old manager—of the Opera Company—you know," she began with halting thoughtfulness, "wants me in a new opera he's going to put on in New York. He says there will be lots of hard work about it—and I'd better not try it if I'm not pretty strong; but he offers big inducements."

Jim had been staring off across the valley wondering at the presence of a dull heavy ache in his throat, and did not answer.

"Think I'm strong enough, Dr. Jim?" persisted the girl.

Jim understood the ache now. With the intuitive flash of a drowning man, his past, that had been at times so solitary, but which the presence of the girl beside him had so completely filled of

late, all stood out in painful distinctness. Finally squaring his shoulders and with an upward fling of his bent head, he said: "Little Partner, I wish ye luck. Ye are strong enough and we'll consider our partnership dissolved."

Ruth glanced up quickly in time to see him savagely bite a trembling lip, while the gray eyes frowned fiercely along the trail ahead. The cattle were now but a few rods in front, and Jim's absent frown changed quickly to an alert attention as he caught the peculiar rhythmic beat of many hoofs in a restless, aimless march, and saw through the yellow dust the nervous cattle headed by a gigantic Texan steer as they tramped around and around within the confines of scurrying cowboys.

Suddenly the thunder, which had from time to time muttered through the bronzed and blackening clouds, belched up from beneath their very feet; and mighty laborings, as of gigantic subterranean forges, sent up tremors of warning. As the rumbling ceased, a slow powerful swing of awful gentleness took possession of the earth. Quickening and strengthening in force, it took on a swirling motion that crept to the head and filled it with a paralyzed terror. Finally a malicious, wrenching jerk, and then—stillness, thick and appalling.

There is that in the working of the great deeps that stills with its awe the action of all its creatures, and which, with the breaking up of its temporary spell, deprives them of their faculties.

During the shock the cattle had crouched close to each other, wild-eyed and trembling, and in the intensity of the calm that followed were without power to move.

Then, like a trumpet call, into the heavy stillness broke the hoarse, mad bellow of their leader. Tossing up his banner of cruel horns, and shaggy frontlet, he plunged between the cowboys and made for the open plain.

"*Sufre por saber,*"¹ breathed Jim, irrelevantly, sitting rigid and alert. He and Ruth had drawn up near by.

"They're runnin', little one," he said. "Go home. I'll have to stop 'em."

Already the dust from a thousand pelting hoofs had obscured the leader, but racing along the edge of the living stream

¹ "Suffer in order to be wise."—Sp. proverb.

Jim gained a position in front, and shot a flying lariat for the horns of the steer. With a sideway lurch the animal thundered by, and Jim, lifting his bronco to the haunches, and whirling to follow, felt his one rein lax in his hands, and bent to see it ripped in two near the bit.

For a moment a queer, dead light came into his eyes, and he laughed aloud. Then sinking his spurs, he rode with the maddened cattle through a sea of tossing, murderous horns, and in foam-flecked, stifling clouds of dust.

Rapidly had the madness increased, until toward the rear, fighting and pounding, they climbed on each other's backs in the wild frenzy of flight.

Still in the front there was room, but should one stumble—the battering-ram of a thousand hoofs would beat him into the dust.

To stop was impossible, and to fall was instant death. On his unguided horse, unsustained by rein or rope, sat Jim, quietly guarding his eyes from the flying, stinging sand.

"Coming, Jim," said a voice far away in the back of his head, and Jim had time to smile at the illusion before a shot rang out. With a grunt and the gurgling sputter of oozing blood, his mustang dropped dead. With the perfect instinct of the herder, Jim slipped beneath the carcass, and over its top leveled his revolver. Already behind him there lay the struggling bulks of dying steers, and it was now his hope to pile a barricade of

bodies upon which the oncoming stream would divide.

Of a sudden, from out the blackened, frenzied mass, came Ruth. She was crouching low on the neck of a horse, the mate to Jim's own. The way of its accomplishment was obscure, but the instinct of the horse to track its dead mate and the pure reason of a woman's sudden love had brought them both.

When from his barricade Jim had divided the stream, and had packed a mass of dead bodies around which the blind beasts now regularly tore, he turned savagely to Ruth:

"Why in God's name," he said quietly, "didn't you go home?"

In the man's eyes was complete despair and in the tone a sullen resentment.

"Oh, Jim!" she sobbed, clinging to him, "I couldn't go home. I can't! I can't!" And "Oh!" huddling closer, with terrified eyes on the now diminishing cattle, "Oh, what is it all?"

He took her in his arms and regarded with wide, tentative eyes the top of her head. "That," he said, as he strained her to him, speaking absently for the suddenness of his joy, "why *that* is only a stampede."

And when, after the ecstasy of this first expression of his love was over, Ruth lifted from his shoulder her happy face, Jim said with infinite tenderness, "Ruth! I did not dream you could love your partner."



STUDIES IN SOUTH AFRICAN LIFE

MUSH-EATING DAY LABORERS

By M. F. Wilcox



LONG the main-traveled roads of that "Switzerland of South Africa," Natal, what impresses the tourist, next to the rugged beauty of the scenery, is the splendid state of the highways, in spite of the heavy traffic upon them. Caravans of from two to twenty loaded wagons, each drawn by twenty or thirty oxen or a dozen mules, are constantly passing and repassing, while single wagons can be found all along the roads within a day's journey of each other; and yet the roads show little or no wear.

The reason for this is self-evident, for

within fifteen or twenty miles of each other there are scattered by the roadways little settlements of from two to ten huts or ragged tents; and near these there always are sure to be found gangs of sturdy, half-naked Kaffirs wielding pickaxes and shovels in the roads. These are the servants of the government, for the government owns the highways; and, for the sum of four dollars a month with board, these men work on the roads.

These are the typical mush-eating day laborers of South Africa. There are others, team drivers, herders, native police, diamond diggers and gold miners, but none have quite so simple a diet as these. Inasmuch as their hire is cheap, their board is also cheap. From one month's end to another they eat nothing



A Sunday Treat

but corn-meal mush and without the added sugar or cream. Sometimes, usually on Sundays, they buy or have given to them pots of herb or root beer or beef from their acquaintances around on the hills; but the only food provided for them by the government is salt and corn-meal—corn-meal hand-ground in portable machines, unsifted, and usually ground from the cheap imported Australian corn, full of dirt and weevils.

The most remarkable feature about this diet is that the men who live on it are not strict vegetarians. For the so-called Kaffirs of Natal, the Zulu and kindred races, are not, like the Hindoos, a nation of vegetarians. On the contrary, they are very fond of all kinds of flesh except fish and reptiles. I have seen Kaffirs sitting around a pot of boiled beef or venison and making an entire meal out of it. One man makes nothing of a five-pound chunk, while a hundred men can dispose of a whole cow in one day. They are, in truth, meat-eaters, but more cattle means more wives to them, so that they kill but sparingly. They eat meat, though, whenever they can get it, and because they

can't get it these road-workers do not consume five pounds apiece in a year. Yet they thrive, not only on a vegetarian diet, but on the simplest of vegetarian diets.

A large gang of them lived on the river bank below our house at the Umvoti River Mission Station. They were constructing a weir or a ford across the river and I took great pleasure in watching them work. Stone was blasted and then cut by hand from a cliff a few hundred feet up the river; after which it was pushed on hand-cars to the ford.

I never saw a more contented lot of men than these were while performing this heavy work. They acted like a lot of children at play. Every man of them was laughing, or talking, or chanting one of their queer little native songs. Two men usually pushed a hand-car and, no matter how heavily loaded, they always endeavored to take it to the weir at a run. A spirit of friendly rivalry pervaded them, and each tried to outdo the other in boring and preparing holes for the blasts, cutting stone, pushing the hand-cars or throwing stone into the river. They were strong, healthy and happy, perfect chil-



Type of Kaffir Family from Which Day Laborers are Recruited



Posing for their Picture—Group of Day Laborers Gathered at a Neighboring Kraal for a Special Feast

dren of nature and living exponents of the value of the extremest simplicity of vegetable food.

The pampered, bread-eating, tea and coffee-drinking inhabitants of the mission station could not be compared with these. Their bodies as well as their souls had become civilized.

We Americans, who are so afraid of

starving ourselves on too small a variety of food, will do well to study the splendid physique of these day-laborers and then to consider the extreme simplicity upon which they maintain their physique. We could reach but one conclusion, and that is: That instead of starving we are smothering ourselves with too much food.

PROPOSED PHYSICAL CULTURE MISSIONARY DEPARTMENT

[We shall be glad to have our readers send us their opinions on the suggestions here:

—EDITORIAL NOTE.]

The Editor *PHYSICAL CULTURE*—

Dear Sir—Being a student of Physical Culture myself, as well as a reader of your excellent monthly *PHYSICAL CULTURE*, I am desirous of interesting others in the study. To accomplish this I offer the following suggestion to be used as you think best.

I would suggest that a "Missionary Department" be started in *PHYSICAL CULTURE*. By "Missionary Department" I mean a department exclusively for those Physical Culture students who have converted persons to rational modes of living, and to take some system of exercise.

I would further suggest that prizes be awarded at the end of the first year of training to the novitiates who show the best all-around development; also prizes to the students who have converted the greatest number in a year.

If possible, or desirable, I would also suggest that photographs or, at least, the names of the novitiates be secured.

If it is desirable to you, you may publish this letter in your magazine *PHYSICAL CULTURE*, in order that other students may give their opinions on establishing this new department. In my opinion, a vote should be taken so that the exact opinions of the subscribers may be known.

Yours for Health and Success,

ARTHUR K. RUPP.



with the juice of two oranges, and then started a one-meal-a-day plan, as recommended by you. I ate one meal a day for five months, and then went on to two meals. I stopped drinking tea and coffee and did not use tobacco in any form. I am now quite well and strong and still keep up exercising thirty minutes morning and evening, devoting ten minutes to bending exercises. I walk two miles every evening, breathing deeply. I eat meat only once a week. At the present time I am eating two meals a day and gaining weight. When I began the treatment I weighed one hundred and fifteen pounds stripped; I now weigh one hundred and forty-eight pounds stripped.



My measurements now are:

Neck	- - -	15 3/4 in.
Biceps	- - -	13 1/2 "
Chest, normal	- - -	32 1/2 "
Chest, expanded	- - -	39 3/4 "
Waist	- - -	26 "
Thigh	- - -	21 "
Calf	- - -	14 "
Fore-arm	- - -	11 3/4 "

Yours sincerely for health,

ALBERT BUCKBINDER,
Amsterdam, N. Y.

AN OPEN LETTER FROM A YOUTH RUPTURED IN INFANCY CURED AT SEVENTEEN BY OUR METHODS

The Editor PHYSICAL CULTURE:

This letter and my three photographs will doubtless be of interest to you and many of your readers. I will give an account of how I cured myself of rupture by common sense treatment (exercise and dieting) without the aid of doctors or drugs.

I was ruptured in infancy, and from that time until I was sixteen years old I did not know what it was to feel exactly right. Having noticed an "ad." in the PHYSICAL CULTURE Magazine on "Rupture Curable," I sent for the book and studied the instructions and exercises carefully.

I started with a fast of seven days, drinking plenty of water during that period. I broke the fast



THE CAUSE AND CURE OF NERVOUSNESS, NERVOUS EXHAUSTION OR NEURASTHENIA

By *Bernarr Macfadden*



THIS is the great American disease. The hurry and worry coincident to our environment in this modern age are inclined to develop symptoms of this nature. Very ambitious persons are much more liable to be attacked than others. Simple nervousness yields in a little while to natural treatment, but much time and care is needed to cure neurasthenia.

If it be allowed to go on unchecked, conditions are liable to develop that may end seriously. A nervous trouble is a great handicap in life. It is a great waste of energy. If you are unable to sit quietly, or to think consecutively, or even if, when sitting in a chair, you must be twirling your fingers or moving your feet about, you are wasting energy that might be used for other and more important purposes.

General Symptoms.—The difference between simple nervousness and neurasthenia, or nervous exhaustion, is one of degree. The first is accompanied by mild symptoms, while the latter frequently leads to serious trouble. In a general way the symptoms of each are similar, nervous exhaustion being an extreme development of the symptoms that accompany mere nervousness.

You are harassed by imaginary fears. Little things annoy you, you are irritable, and find fault easily. You are unable to sit still, you fidget and move about. You are morbidly sensitive to criticism, usually very timid, easily excited. Unexpected news of any kind which influences you is liable to occasion severe trembling. On retiring at night it is difficult to go to sleep; you are restless, and move about from one side to the other. In extreme cases symptoms of the following nature are liable to occur—spots before the eyes, headache, bad dreams, noise in the ear, desire for stimulants or foreign sub-

stances, palpitation of the heart, excessive ticklishness, cold hands and feet, chills running up and down spine, and, in a few cases, extreme debility.

General Causes.—The main causes of a complaint of this kind are sedentary habits, harassing mental work or worries, dissipation, or eating beyond the digestive capacity. Excessive mental work is considered to be the most usual cause, though this is often an error. Such cases are frequently made possible more because of the overwork of the digestive organs rather than by a mental strain. Lack of sufficient exercise is, of course, a very common cause, for the reason that the functional system, under circumstances of this nature, is not able to effectually carry on its processes. The heart, lungs, digestive and assimilative organs, when compelled to go through their labors without the tonic effect of regular exercise, are considerably handicapped. The cleansing effect of regular exercise is inclined to make all parts of the body far more normal, and forces the blood along with vastly increased speed. It accelerates heart action and respiration. One rarely finds a victim of nervousness who takes moderate exercise regularly.

Stimulants of all kinds are, of course, much inclined to produce troubles of this nature. Whiskey, wine and beer irritate and in time weaken the entire internal functional system. They may spur on your energies for a while, and give you an appearance of false strength, but ultimately they will use all your reserve force. They will also make you eat more and will thus add to the difficulties.

Eating too frequently, and eating without appetite, is another prominent cause. Food, to be of advantage to nourish the body perfectly, must be thoroughly enjoyed, and where it is eaten simply as a duty, forced down in a matter of fact way, just because it is meal time, diseases of some kind are bound to result.

Living in close, ill-ventilated rooms, breathing the noxious air that they con-

tain, is another common cause of this trouble. The excessive use of tea, coffee and condiments are often also contributory causes. Late hours, sexual excesses and the use of tobacco should also be added to the list.

Physical Culture Treatment.—In the treatment of diseases of this character, the cause of the trouble must first be determined, and means must be adopted immediately to avoid them. If you are working too hard, or are worrying uselessly, make some change that will enable you to avoid these damaging conditions.

If your condition is serious it might be well to take a trip somewhere to get away from your old environment. Freedom from mental work and worry, absolute mental relaxation, is one of the first requirements.

One of the best remedies for nervous patients is the air bath. Wear just as little clothing as you possibly can, and at every opportunity remove your clothes and walk about in your room with the windows wide open. If the weather is chilly, exercise a while to thoroughly accelerate the circulation before attempting this. Walking about barefooted will be found of especial benefit in troubles of this nature. The quieting, calming influence of the air as it comes in contact with the skin will avert almost any sufferer from this trouble.

If the patient is not too thin, a fast of from one to four days would be commendable in beginning the treatment. Diet is of extreme importance. Though a recovery can easily be brought about through the aid of wholesome cooked foods, it will be accomplished far more quickly if the diet is confined to uncooked foods.

In detail would advise about the following course for nervous patients: Live in the open air as much as you possibly can and keep the windows of your sleeping room wide open at all times. Immediately upon rising in the morning rub the body thoroughly all over with a rough, dry towel. Follow this by wetting the body all over with a wet towel or sponge, the water being as cold as you can conveniently bear it and recuperate with a feeling of warmth.

Some time during the day take a walk

until slightly fatigued. All during this walk take deep breaths, always beginning the expansion in the region of the abdomen.

As stated before, if you are not too thin, begin treatment by fasting from two to five days. If you are very thin and weak, fast only one day. Confine your meals to two each day, and each meal should consist of the following—fruit, raw vegetables, eggs, milk, nuts and uncooked grain. Uncooked rolled oats, moistened with a very high grade of olive oil and eaten with dates or apples, or almost any kind of fruit, will make a very appetizing, wholesome and nourishing dish. It would be well at each meal to be guided largely by your appetite, though I would suppose that in the beginning at least from two to four glasses of milk should be taken at each meal. Milk should be sipped very slowly, should be masticated just as in infant life, and should be of the best quality.

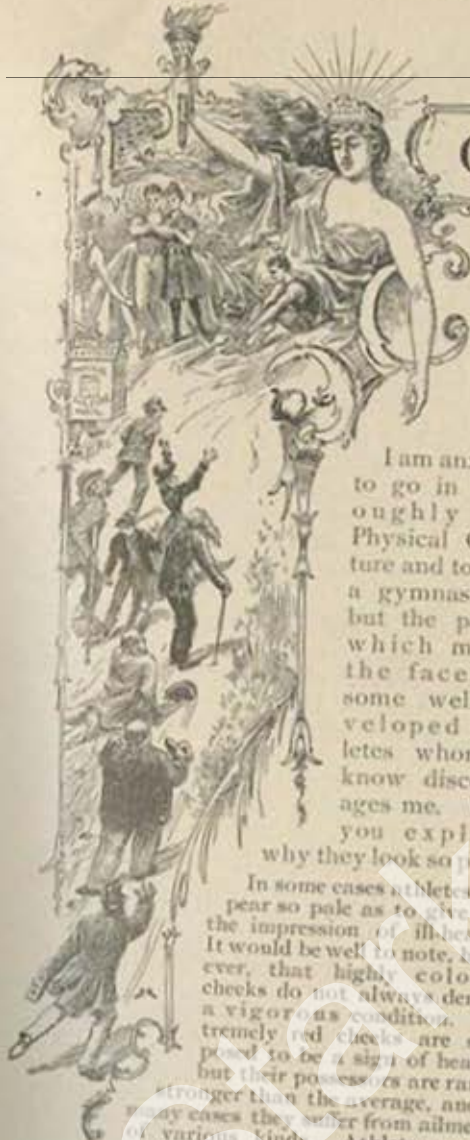
As you begin to gain strength a thorough system of exercise will be necessary in order to facilitate recovery. The exercises given in the March issue of PHYSICAL CULTURE for building vital strength would be especially commended in assisting to remedy a complaint of this nature. These exercises can be taken at almost any convenient time during the day, or they can be taken before retiring, if desired. It is far better to take them without clothing, the exercises and an air bath being taken at the same time.

Two or three evenings a week, before retiring, and after exercising, take a hot bath, using soap freely.

Pure water should be kept at hand at all times, and you should encourage yourself to drink rather freely of same.

Your meals can be eaten in the morning and evening, or at almost any time during the day, providing that at least six hours intervene between them.

Remember that the mental influence is very great in remedying a trouble of this kind, and you should endeavor to put everything aside which is likely to cause needless worry or irritation. Make up your mind that you intend to recover, and work diligently to bring about those conditions that will assist in effecting the desired result.



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.

I am anxious to go in thoroughly for Physical Culture and to join a gymnasium, but the pallor which marks the faces of some well-developed athletes whom I know discourages me. Will you explain why they look so pale?

In some cases athletes appear so pale as to give one the impression of ill-health. It would be well to note, however, that highly colored cheeks do not always denote a vigorous condition. Extremely red cheeks are supposed to be a sign of health, but their possessors are rarely stronger than the average, and in many cases they suffer from ailments of various kinds. Athletes rarely have highly colored cheeks, because their circulation is more equalized. The blood is called to every part in equal proportions. The pores of the skin in every part are in a thoroughly active condition. One who takes but little exercise, clothes heavily, and bathes infrequently, usually suffers from a dormant condition of the pores all over the body, with the exception of the face and neck, which are exposed to the air, and are, of course, frequently cleansed. Under such circumstances, if full-blooded, vastly increased quantities of blood are drawn to the face and neck. Extreme pallor is, of course, not desirable, and usually where it is found the athlete is either training too hard, or is not taking sufficient nourishment, or does not drink enough water.

I am seventeen years old and weigh

one hundred and ten pounds. How can I increase my weight by diet and exercise? Am employed during the day, and take a cold lunch at noon; also eat breakfast and supper.

Follow the system of exercises found in this magazine, giving special attention to the exercises for building vital strength published in the March issue. Long walks and deep breathing in the open air will be of great value to you. In beginning the course it would be advisable for you to adopt the two-meal-per-day habit for a week or two. After that, if you feel able to digest three without difficulty, you might thereafter continue with three meals during your growing years. Your special attention is directed to an article in this issue on diet. An article appearing in the next issue, referring to special diet for increasing weight, will also be valuable to you.

Please give me a cure for pimples and blackheads.

These symptoms indicate poor constitutional condition, and treatment should be directed to bettering general health. Regular exercise, long walks, deep breathing and appropriate diet will do it. The local treatment would be rubbing the affected parts very thoroughly with a soft bristle brush once or twice daily. Never pinch the flesh to force the blackheads out of the skin. Rubbing back and forth with a brush or the hand until the skin is red will in every case accomplish the same purpose. A wet cloth placed upon the affected parts when retiring at night and allowed to remain until morning, is also very beneficial.

Have been troubled with diarrhoea for four years. Have considerable gas in the stomach, and swelling in my left side.

Confine your diet to one meal a day until your recovery is certain. If you would begin by fasting two to five days your cure would be hastened. Have pure water at hand at all times and drink very freely. The uncooked diet—nuts, fruits, vegetables and milk—would be far better for you, for a time at least. Long walks in the open air, with deep breathing, are

especially commendable, and the exercises illustrated in the March issue of **PHYSICAL CULTURE** for building vital strength should be taken once daily.

I am twenty-nine years old and have been troubled with ringing in the ears for last ten years. I also have specks floating before my right eye. There is no discharge in the ears and my hearing is perfect. Specialists tell me they can find no organic disease. Have tried Oxidona, Electric Belts, Big Liver Pills, Little Liver Pills, and all the nerve tonics on the market, but have not been helped. Have had nervous prostration twice. What will help me?

A careful reading of the article on the "Symptoms, Cause and Cure of Nervousness," appearing in this issue, will be of benefit to you. Your trouble is apparently constitutional. Although there may be no symptoms of any organic disease, your blood is not in that condition essential to maintain vigorous health. You need an all-round system of physical culture for general functional and muscular upbuilding, together with appropriate diet. The ringing in your ears, and specks floating before your eyes, indicate an inflamed condition of these parts which is possible only when the blood is filled with foreign matter or impurities. A one-meal-per-day diet for two or three weeks would help you greatly.

Give cause and cure for offensive perspiration.

It simply indicates a feebler condition of the internal physical organism, which can be remedied by exercise, diet, bathing, and other methods essential to bringing about a normal condition. Exercises which incline to induce copious perspiration, like running for a considerable distance, is advised. This should be followed with a hot bath, using soap freely. This bath should be taken while the entire body is wet with perspiration.

Is it advisable to exercise as much while fasting as when taking two or three meals a day?

It is usually advisable to regulate your exercise while fasting according to your own inclinations. If you feel weak, take only those exercises that are easy to you. Usually a feeling of extreme weakness during a fast is remedied by deep, full breaths, a short walk, or almost any exercise inclined to accelerate the circulation and induce a normal condition of the functional system. Some persons exercise as much while fasting as at any other time, and appear to be benefited by it.

Are there any exercises for development of the face?

You can use and develop the facial muscles by contorting the features, just as you can develop the muscles of the arm. A good method for developing the facial muscles is to simply stand before a mirror and draw the features into all the various positions you possibly can. Continue each movement until the muscles used in that

movement are fatigued. Would advise considerable care in taking exercises of this nature, however, as if continued too long, they will be inclined to increase the number of wrinkles.

What course should one in comparatively good health pursue to improve the quality of the blood?

A system of exercises that will use all the various muscles of the body, with special attention to those movements for strengthening the functional system, would be advisable. Take exercises given in the March issue of **PHYSICAL CULTURE** for building vital strength. Diet is also of importance and would advise you make your meal largely of uncooked foods. Green salads of all kinds are especially commended. Onions, if liberally used, would add to the value of these salads in every instance. A complete fast of one day each week would be of considerable assistance.

What is the cause of and cure for mouth breathing during sleep?

The cause of mouth breathing is frequently catarrhal trouble. The first step in effecting a cure is to cure the catarrh, then carefully watch yourself and close the mouth firmly when you find yourself breathing in this manner. This should enable you to ultimately break the habit. Tying a handkerchief or a small towel over the mouth at night on retiring, as illustrated in a previous issue, will be of assistance.

Please give a natural treatment for inflammation of the bladder. Also a list of foods to eat and which to avoid. What is your opinion of the malted breakfast foods? Are they injurious to the kidneys and bladder?

In remedying your trouble it would be necessary for you to drink rather freely of water, to fast two days out of four until the symptoms begin to disappear. It will be far better for you to subsist mostly on uncooked foods, nuts, fruits, vegetables and cereals, though milk and eggs can be added if you desire them. The exercises illustrated in the March issue for building vital strength, would be especially commendable for your trouble. The strengthening of the entire functional system would greatly facilitate a cure. Avoid tea, coffee, and alcoholic stimulants of all kinds. Nearly all of the malted breakfast foods possess merit, and can be used to advantage. They should not be injurious in any way.

I had typhoid fever about eleven years ago; since then my hair has been falling out until now there is little left. What can be done to make new hair grow?

The daily application of hot and cold water to your scalp, alternating from one to the other several times, will undoubtedly result in benefit. The scalp should also be washed with high-grade castile soap every day or two. Light massage would also be beneficial. The general constitutional condition has much influence, and building health through the various natural means will have a noticeable effect upon the condition of your hair.

THIS LETTER TELLS CURE BRIGHT'S DI (7!!) DOCTO

The Editor PHYSICAL CULTURE:—

Dear Sir:—I can hardly find of Physical Culture. I suffered from fatal malady, Bright's Disease of the compelled, according to the doctors, in fact I had no desire to do other by one of the best physicians in my ively three weeks and two months without any results whatever by four

You can imagine what I looked months with the vilest kinds of ally. Every one of my vital organs being especially bad, and I was so stretched almost to bursting. remedy to reduce this without suc breath, and I was simply awaiting

My attention was called to Phy as everything else had failed I saw end (remember, the doctors had it was sure death). I purchased the back as the January number and "Fasting, Hydropathy and Exercise," magazines and books.

The doctors had me taking a hot 6 last I changed this to cold bath week, with cold one immediately exercises which you began in the rxix Magazine. The first two days caused me severe pains in my took my nerve. The third day the peared and I have not been what I

I have not taken a drop of medi been back at my desk for two weeks for an occasional headache when I felt better in my life. I am simply subject for discussion in Ft. Wayne.

occasions but reappeared slightly, but I am quite hopeful of conquering it altogether, and also of effecting a permanent cure, although the doctors still say No. I purchased and read your "Strength from Eating," and am now dieting very carefully, eating a simple lunch at noon, a meal at six o'clock and no breakfast, and am sleeping by an open window.

During my treatment with the doctors my bowels became so bad that purgatives and flushes had to be used daily, and then I would sometimes miss three or

HOW OUR METHODS SEASE WHERE SEVEN RS FAILED

words to express my appreciation that most dreaded and supposedly Kidneys, in a very severe form, being to lie perfectly quiet all the time, and wise. I was absolutely turned down city. Two others gave me respect-time in which to die. I was treated others.

like after being saturated for ten long poisons. I had headache continu-was becoming diseased. My heart swollen that the skin on my limbs The doctors tried every known cess. The least exertion took my the journey to the other life.

sical Culture. I had little faith, but no harm in a trial, even inviting the warned me against exercise, and said PHYSICAL CULTURE Magazine as far became interested. I then read your and several other Physical Culture

sponge bath every night. On March with warm soap bath but twice a after, and started the system of January number of the PHYSICAL CUL-were hard ones, as the exercise kidneys, and the cold baths almost pains left me, the headache disap-consider real sick since.

cine since March 6 and have now doing all my usual work, and, except miss up a little on my diet, I never amazed and my case has become a The swelling left me entirely on three

No. I am quite hopeful of conquering it

four days, which caused severe cramps and almost convulsions. Now they are almost perfect. Think of it, these marvelous results in seven weeks after useless treatments covering a period of ten months! And more marvelous still, *I began to improve the third day.* My chest and arms have increased three-quarters of an inch in the seven weeks.

I would be very grateful to you for any suggestions you may make for my further improvement. I am twenty-eight years old and my business is sedentary. I will never be able to say too much for Physical Culture.

Very truly yours,

J. D. BRADY.

Care of The Wayne Knitting Mills, Fort Wayne, Ind.

\$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

THE PHYSICAL CULTURE PUBLISHING CO.,

1123 BROADWAY, NEW YORK.


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.



THERE is a great amount of unnecessary suffering during hot weather. There is no excuse even for discomfort except when the temperature approaches blood heat, if only an ordinary amount of care and intelligence is used. Reason from cause to effect and you will have no difficulty in learning the real cause of nearly all the suffering which is attributed to excessive atmospheric heat. The explanation is simple. If the body is too easily heated, it means that you are furnishing it with too much fuel; in other words, you are loading your stomach with too much food or imbibing liquids which tend to raise the temperature.

Needless Suffering in Hot Weather

An overheated body is just like an overheated boiler. It is using too much fuel. Under such circumstances a wise engineer lessens his supply of fuel. He puts in less coal. And so it should be with the human system. The quantity of heat generated in the human body is proportionate to the quantity and quality of the fuel, so to speak, that is taken in and consumed in the form of food. We are all more or less familiar with the constituents of our most popular foods. We often read about the presence in certain foods of a greater or less proportion of heat-producing elements, such as starch, sugar, fat and oil. Now, all foods containing these elements create heat when brought in contact with the oxygen present in the system. They burn, as it were, quickly and so inflammable are they in the hot season that they generate and set up a heat which is at times oppressive, if not overpowering.

This frightful heat is, of course, aggravated when the furnace or body which contains it is swathed with heavy clothing.

The above accurately depicts the condition of those persons whom we hear exclaiming, "Oh my!" and "Oh dear! what a hot day this is!" It also explains the cause of this uncomfortable condition which sometimes extends to suffering. We now come to the remedy. If you suffer from heat it is really a very simple matter to get over the difficulty and feel at all times comparatively comfortable.

In order to keep cool, an abstemious diet is undoubtedly first in importance. Lessen the quantity of food. If you are eating three meals a day, only eat two. If you are eating a great deal of butter, fats, sweets and starchy foods, lessen the quantity of these elements in your diet.

You should avoid alcoholic liquors and condiments of all kinds. They build the internal fires to a still greater heat. They stimulate the appetite and more food is eaten than is needed.

The necessity for keeping the pores of the skin in a thoroughly active and healthy condition must also be recognized. Frequent bathing is especially advised as a means of adding to comfort during the heat of summer.

The functional system should also carry on its duties in a thorough manner, and to effect this result the regular exercise of the muscular system is necessary. At a time when one can be clothed in a gymnasium suit, or else no suit at all, some exercise sufficiently vigorous to bring about copious perspiration should be taken, and this at least once daily. This will not only add considerably to the functional vigor, but will also increase the activity of the pores of the skin.

One who is in the habit of daily exercising in this manner can endure the heat much more comfortably. There is far less inclination to perspire under ordinary conditions if active exercise as described is taken daily.

ONE of the most baneful habits, and one which is productive of great injury in the summer, is the ICE WATER HABIT. The introduction into the stomach of water about 60 degrees colder than the temperature of the stomach itself must indeed be a shock to this organ.

You have to learn to drink ice water, just as you learn any other obnoxious habit. Ice water will never satisfactorily quench thirst. It often inflames and produces a general abnormal condition which debilitates the entire nervous and functional system.

Ice Water How to Cool Water

By all means avoid ice water. *Drink water of a moderate temperature.* That degree of coolness ordinarily found in well water or spring water is usually of a satisfactory temperature.

Here is a method of cooling water that can be especially recommended. No matter how high the temperature, by this method the water can be cooled to a degree which makes it a pleasant and a satisfactory and delicious drink. Take a glass jar or bottle, fill it with water, and place it where there is some breeze, and where it is sheltered from the sun. Wrap a wet cloth around the bottle and place it in a shallow vessel of some kind in which you have poured a small quantity of water. The process of evaporation will slowly reduce the temperature of the water in the bottle many degrees lower than that of the air.

The towel may be wrapped around the bottle without using the extra vessel, in which case the towel must be repeatedly wetted.



Shows How to Keep
Water Cool

MY friends who have followed the career of this magazine are asked to compare the present number with those published one, two and three years ago. The difference will very accurately indicate the remarkable growth of our publication, and will show what we have achieved in this new field. The wonderful success of the physical culture movement is the topic of conversation everywhere. The daily papers, and all publications that depend upon the reading

public for their patrons, now recognize its importance. All this has been the development of the last two or three years.

*Physical Culture Wave
Circling the Civilized
World*

This was the first magazine to call attention to the great public need of Physical Culture literature. It was the first publication that

proved to the editors throughout the country that what, more than anything else, the public needed and was willing to pay for, was literature of this character. This magazine, PHYSICAL CULTURE, was the first that ever made a financial success of importance. This, also, is a reason why it is with pardonable pride we take to ourselves the whole credit of starting this **GREAT WAVE OF INTEREST IN PHYSICAL DEVELOPMENT THAT IS SPREADING FROM ONE END OF THIS COUNTRY TO THE OTHER.**

This magazine has succeeded because it had a mission, and is fulfilling it conscientiously and honestly. It filled a great public need. Since raising the price to ten cents we have printed as many as 160,000 COPIES for one issue. Including BEAUTY AND HEALTH, we have a circulation in this country at the present time of nearly a QUARTER OF A MILLION COPIES; and estimating, as is usual with publishers, five readers for every magazine sold, we have nearly 1,250,000 READERS MONTHLY!

After considering these startling figures, turn to England, and you will find that we are doing there what no other American publisher has ever successfully accomplished. We print nearly 70,000 MAGAZINES EVERY MONTH especially for our BRITISH READERS. Many American publishers have tried this, but in every instance they signally failed. We ship magazines as far as Australia, and WHEREVER YOU FIND THE ENGLISH LANGUAGE SPOKEN, THERE YOU WILL ALSO FIND PHYSICAL CULTURE READ.

WE ARE GROWING BIGGER AND STRONGER EVERY MONTH, but we want our readers to realize the great magnitude of the work that we are carrying on. Though this publication is conducted as a business, it is really a HUMANITARIAN WORK OF MORE IMPORTANCE TO THE WELFARE OF THE WORLD THAN ANYTHING WHICH ENGAGES HUMAN EFFORTS AT THE PRESENT TIME. You who have been made to see the light, who have been brought back to health and strength through the information contained in this magazine, are asked to make some return for the debt you owe for the change made in your condition. The only return we ask is that you aid by **SHOWING THE PATH TO OTHERS.** Preach health and strength to one and all. Scatter broadcast the knowledge you have acquired, and thereby you may be able to help many a poor soul from the mire of physical ills and help to restore him or her to that beautiful and enviable condition of bodily vigor which is so buoyantly exhilarating as to make life at moments seem almost like a veritable Heaven.

ONE of the most uncomfortable experiences that one endures during hot weather is sleeplessness caused by the extreme heat. The heat is sometimes so oppressive that one almost feels as if within the confines of an oven.

Here is a simple remedy warranted to induce a feeling of comfort on a hot night that is simply soul-satisfying.

Keep Cool on Hot Nights

Wet one or more Turkish towels and lay them on the bed the full length of the body. Remove all night clothing, and then lie down on these wet towels. The evaporation of the moisture will reduce the temperature of the towels about ten degrees below the temperature of the air, and as you recline on this damp surface a delicious coolness will be felt, and sleep will quickly follow.

In place of towels a sheet or cloth of any kind can be used. **DO NOT FEAR CATCHING COLD**, as it is practically impossible to catch cold under circumstances of this character.



IN New York State there are some old blue laws that make the playing of any game on Sunday a crime. Busybodies spend their Sundays during the summer searching for evidence against boys who play ball on vacant lots. They drive them from the open air into poolrooms, saloons, gambling dens, and other questionable places. You will find them hiding in cellars and in dark corners, playing craps and indulging in other degenerating practices.

Sunday Games

Playing ball on Sunday may be an evil in the eyes of those who hold Sunday sacred to rest, but under such circumstances they must admit that it is the least of a great number of evils.

A recent decision of one of the city magistrates of New York, in reference to this law that prohibits all games on Sunday, is to be commended. He states that when the law was passed against Sunday games of all kinds, even traveling on Sunday was prohibited, fishing was a crime, and all amusements which to-day pass unnoticed were prohibited.

Boys and young men who are cooped up in the city the other six days of the week will find some way to pass their time on Sunday, and any active, health-giving game should be encouraged rather than discouraged. Activity of some kind is really as necessary as food to young men and growing boys. It is admitted that food should be *supplied* on Sunday, and that the *labor* necessary to its preparation is not sinful. If this admission is made, then any other natural and legitimate activity should also be recognized as a harmless necessity. The surplus energies of young people must find some vent. In an interesting game this desire for activity is completely satisfied and in a wholesome manner. If you drive the boys from the open fields into the dark alleys and close rooms of their homes, you create conditions that result in untold evils.

All the Catholic clergymen of New York have most emphatically endorsed the decision of the magistrate who refused to consider the playing of baseball a crime.

The Rev. Dr. Wm. S. Rainsford, Rector of St. George's Church, also strongly supports the magistrate's decision, and referring to it he made the following comments:

"I have been and am in favor of permitting the playing of baseball in open spaces in New York City on Sundays. I am opposed to professional games on Sunday. Our city boys want all the open air and exercise they can get. One of the surest ways to stop drinking and loafing on Sundays is to encourage boys and men to play games. Church people opposing Sunday games in New York make, I think, a grave mistake. The Lord commended the man who led his ox to water on the Sabbath. Boys want exercise as much as cattle want water."

THE APPETITE CRIES OUT FOR FOOD ON SUNDAY JUST AS IT DOES ON OTHER DAYS. HUMAN ENERGIES CRY OUT FOR EMPLOYMENT. *One is just as important, as the other.* In fact, if you satisfy the desire for food, it is far more necessary that the desire for activity also be satisfied.

We gorge, we eat to excess on Sunday. It is the Red Letter Day for big dinners, washed down with ice water or coffee, or soaked with wines and liquors. The logic and principles that would condone the labor that induces this excess and deprecates ball playing must be very attenuated, indeed.



THE charge is often made that hard training wears out the nervous and muscular system, and takes many years from the span of life. There was a very heated discussion in England many years ago as to the influence in middle and advanced life of the hard training adopted by the students in preparation for the University boat races.

At that time, a physician of considerable repute became so interested in the discussion that he took the trouble to fully inquire into the physical condition of all those who had taken part in these races during the years intervening between 1829 and 1869. He determined to positively ascertain if any of these contestants had suffered in after years because of their hard training while at the University. The result of this exhaustive inquiry was published in 1873, and though numerous controversies have been raised in the newspapers since then, it is stated by an authority, that none have been able to disprove the conclusions arrived at by this careful physician. At the time of the inquiry in 1873, the number of men who had taken part in the 'Varsity boat races during the period mentioned was two hundred and ninety-four. Of this number, thirty-nine were dead. The physician succeeded in securing answers from all those alive in 1873, and he obtained full particulars of the causes of death from the relatives of those who had died. The result of this investigation was remarkable and is given herewith.

Of the two hundred and ninety-four athletes who took part in the 'Varsity boat-races during the period over which the investigation extended, one hundred and fifteen described themselves as having been benefited in later life by boat-racing.

One hundred and sixty-two were classed as uninjured.

Seventeen were described, in some cases with considerable reservation, as having been injured. The condition of these seventeen cases was further modified by the statement that a careful examination disclosed either the existence of physical unsoundness at the commencement of the men's rowing career, or that they raced in an untrained condition, or were suffering from illness at the time.

Does Hard Athletic Training Shorten Life?

No systematic attempt has ever been made in this country to secure information of this character. Occasionally some athlete passes away, who has made a great reputation in athletics while at college, and the press throughout the entire country comments on this as proof of the *terribly baneful effect* of the training methods used in preparing for athletic competitions. They absolutely and deliberately ignore the hundreds of cases where boys have been developed into strong, magnificent men by this same athletic training.

There may be an occasional instance where athletics have been overdone. But why should an overdone athletic training be a bigger blunder than anything else that is overdone. Perhaps it is because it is so rare. No matter how intrinsically good a thing may be in itself, it loses all its virtues when it is forced or carried to excess. **NO MATTER HOW GOOD A THING IS, IT CAN BE OVERDONE. YOU CAN OVERDO THE BEST THING IN THE WORLD, AND WHY SHOULD WE MARVEL AT A CASE OF INJURY RESULTING TO AN OVERTRAINED ATHLETE?** Fortunately, in this latter case, where there is one person injured there are perhaps thousands who have been vastly benefited by athletic training.

THE condition of the applicants for enrollment in the British Army during the Boer war furnished information so startling as to thoroughly arouse the English people as to the importance of physical culture. In Manchester during 1900, 12,235 men offered their services, and 8,205 were rejected as physically unfit. In 1901, 11,896 applied and 8,820 were rejected.

These facts have a startling significance. They indicate in a most emphatic manner the physical condition of the average Englishman. It is indeed fortunate that this information was given such wide publicity. It showed the need of some radical measures to avoid a continuance of this racial decay. The schools throughout the entire country are now taking up physical culture, and are giving attention to all the various means that will add to the physical vigor of their pupils.

The examination of the students of the various schools brought to light valuable information. It has shown in a most marked manner the influence of proper environment in the growth and health of children. For instance, in Manchester the pupils of several schools were examined, and their average heights, weights and strength at different ages were ascertained. The information secured from these examinations was compared, and the conclusions derived therefrom overwhelmingly prove the value of pure air, with plenty of room for outdoor games, and other natural environments necessary to the health and strength of children. The reports of two of these schools are compared herewith:

GRECIAN STREET SCHOOL.					JOHN STREET SCHOOL.				
Ago.	Height.	Weight.	Chest.	Head	Ago.	Height.	Weight.	Chest.	Head
	Ft. In.	St. Lb.	In.	Circum.		Ft. In.	St. Lb.	In.	Circum.
8	3 11 $\frac{1}{4}$	3 7	24 $\frac{3}{4}$	20 $\frac{1}{2}$	8	3 10 $\frac{1}{4}$	3 4 $\frac{3}{4}$	24 $\frac{3}{4}$	20 $\frac{1}{2}$
10	4 3 $\frac{3}{4}$	4 0 $\frac{1}{2}$	25 $\frac{3}{4}$	20 $\frac{1}{2}$	10	4 2 $\frac{1}{2}$	4 0	26 $\frac{1}{4}$	20 $\frac{1}{4}$
13	4 9 2-5	5 7 $\frac{3}{4}$	28 $\frac{1}{2}$	20 $\frac{3}{4}$	13	4 5 $\frac{1}{2}$	4 5 $\frac{3}{4}$	27 $\frac{1}{2}$	20 $\frac{3}{4}$

Now, near the Grecian Street School there is a large park, and the hygienic environments are of a superior nature. By glancing at the parallel between these two schools, as presented above, you will note that there is not a great deal of difference in the heights, weights and measurements of pupils at the age of eight years. But now compare the condition of the students at thirteen years of age, and note the remarkable difference. In the Grecian Street School, where superior natural environments obtain, the height of the average pupil is four inches in excess of the average height of the pupil at the John Street School, located in a less inviting locality. This conveys an important lesson—a lesson which should not be lost on parents, school teachers, and school boards.

It is the wish of all parents to have their children grow up strong, hardy and well formed, and yet there is but slight attention given to the physical development of growing boys and girls.



ON the front cover of this issue we have tried to emphasize the relation of brain power to general physical vigor. It is only recently that the public has begun to understand that the energy manifested by the brain is dependent on the general physical condition. It must be admitted that strong men are not always bright intellectual stars, but it will also be noticed that most

*Dependence of Brain
Power Upon Physical
Strength*

men who accomplish anything of very great importance, requiring intellectual ability, are strong physically. Strength of body certainly adds much to one's intellectual possibilities.

The brain is nourished by the blood. Brain power is a species of nervous energy. The kind and amount of work the nerves can do is determined by the purity of the blood supply. The functional processes of the body are entirely physical. They depend upon physical power. As you increase the muscular power of the external muscular system, in the same proportion do you increase the effectiveness of the internal functional system. With better internal organs we have improved quality of blood; it contains more strength-building elements. The brain will be clearer and stronger because perfectly nourished.

When building physical power you do not add to mental power, but you add to your mental possibilities. You have a stronger foundation to build upon. You have better tools to work with. Like any muscle of the body, the brain must be used to be strengthened and made more capable, and if the brain of a strong man is given proper use, it will develop far faster than it will when the nervous and muscular system is debilitated.

If you want to be a strong man mentally, do not under any circumstances forget the necessity of physical strength.



Photographs

The \$5.00 prize for the best photographs published in this issue has been awarded to Edward Frey.

The attention of our readers is called to the fact that several photographs are daily put aside as lost and unknown because the senders neglect writing their names on the backs of same.

IT is now considerably over a year since the first PHYSICAL CULTURE Experimental Restaurant was opened.

This restaurant was opened entirely for experimental purposes. I desired simply to furnish editorial matter that would be of interest to my readers. You can imagine my astonishment when, after having carried out the experiment sufficiently to furnish the desired information, it was shown that the restaurant could be conducted at a profit. This resulted in others being opened, and at the present time we have three down town in New York, and one in Brooklyn.

*Our Physical Culture
Restaurant Experiment*

The first restaurant has now been opened over a year, and shows over one hundred per cent. profit on the actual cash investment. The other restaurants promise a similar profit.

The success of this venture has interested many who believe in this natural diet. A number of enthusiasts have expressed a desire to be financially interested in the business. To give all an opportunity, and to encourage the opening of these restaurants in all large cities throughout the country, a company has been incorporated, and for particulars of this I would refer my readers to the Advertising Department of the Magazine.

*PHYSICAL CULTURE Short
Story Competition of
1903-1904*

FOR the benefit of our new subscribers, we again announce that for the best story published by us in PHYSICAL CULTURE during the year ending March, 1904, we will award a prize of \$100

IN ADDITION TO OUR USUAL SPACE RATES.

Terms of the competition are:

First. No story is to exceed 5,000 words or be less than 2,000 words in length.

Second. All stories entered and published in PHYSICAL CULTURE will be paid for at our ordinary space rates.

Third. The copyright of all accepted stories in this competition vests in PHYSICAL CULTURE.

*Thirteen Prizes for Best
Improvement in Four
Months*

THE application blanks and printed conditions governing this competition are now ready. Send in at once for same, enclosing stamped and self-addressed envelope. No applications will be received after July 30th, 1903.

There will be thirteen prizes, one for each of the thirteen localities of which the following cities are the centers: New York, Boston, Buffalo, Philadelphia, Washington, Pittsburg, New Orleans, Cincinnati, Chicago, St. Louis, Minneapolis, Denver, San Francisco.

The prizes will be for the best all-round and proportionately uniform improvement in development during a period of four months.

See June issue of PHYSICAL CULTURE for preliminary announcement regarding this contest.

Corset Editorial

Want of space compelled us to hold over the usual Editorial on the many virtues of the Corset.

Bernarr Macfadden