

February 1923

Strength

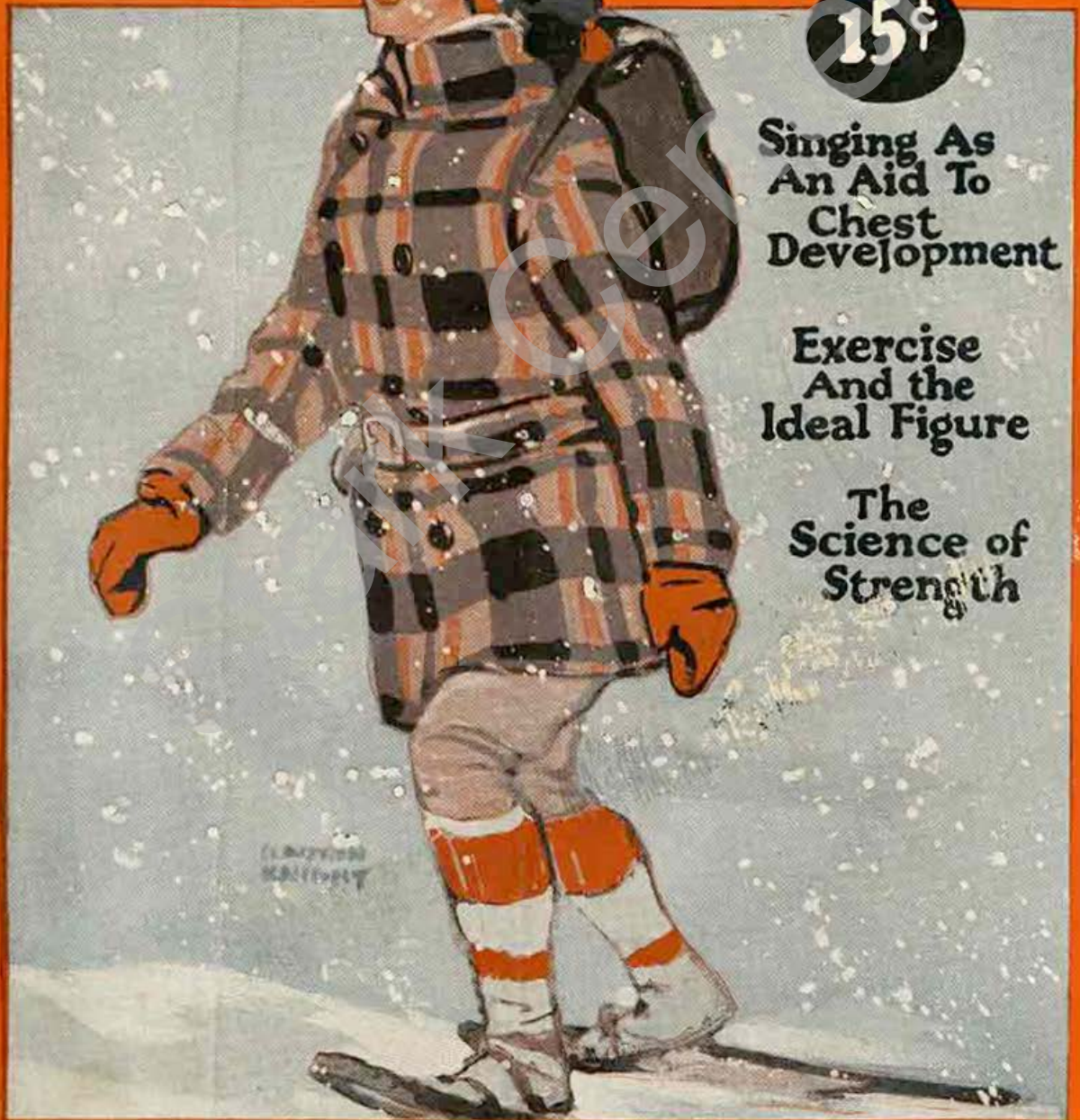
The Magazine of Good Health

15¢

Singing As
An Aid To
Chest
Development

Exercise
And the
Ideal Figure

The
Science of
Strength



What Kind of a Man Will You Be a Year from Now?

MOST physical culturists keep in condition. They know the value of health and also know various exercises that maintain health. But when a man takes up a definite training program, a "system," or "course," he does so not merely to "keep fit" but to *improve himself*. He wants *gains* in size, strength and vitality, and furthermore he wants *big gains*; to justify the time and exertion spent in training.

The Results You Can Expect!

Our experience (not our theory, mind you) enables us to say that through the practice of graded weight exercises, almost any man or boy can acquire a chest which, when measured in *normal* position, will measure 63% of his height. That is to say, a man or boy standing 5 ft. 8 in. (68 inches) can develop a chest measuring 43 inches. **WHAT DOES YOURS MEASURE?**

A well-proportioned man's chest should be at least 8 inches larger than his waist. **WHAT DIFFERENCE DO YOU SHOW?**

The development possible for the arms and legs is dependent largely on the bone-size. Roughly speaking, if your wrist measures 6 $\frac{1}{2}$ inches it is possible for you to develop a 15 $\frac{1}{4}$ inch biceps. **SOME OF OUR PUPILS HAVE BEATEN THAT PROPORTION!**

No Preparation Required!

Some people have the odd idea that they must spend months slaving with 5 lb. dumb-bells before even looking at a bar bell. As a matter of fact any man who can "chin himself" once, can handle a 40 lb. bar bell with *ease* in such exercises that call into play the great muscle groups of the shoulders, back and legs. And surprising as it may seem to you, we are much keener on back and leg power than on mere arm development. Even the heaviest bar bells we make can be adjusted down to 15 lbs.—some of them as low as 5 lbs.



Sigmund Klein—A Milo Product

These two men are fair examples of the degree of physical perfection and strength that can be acquired through the right methods. Almost any man trained by us can perform this stunt after finishing his instructions.

OUR DOUBLE - PROGRESSIVE SYSTEM MAKES A MAN OVER!

We build up our pupils by a system of graded-weight exercises that develops every part of the body. No system will produce results unless it contains the progressive element. Some systems attempt to do this by increasing the *amount* of work, but our plan is a gradual increase in the *quality* of the work. You develop size and strength of a muscle by increasing its power to contract. You can create muscle-power by progressive exercise just as you can develop a child's brain by advancing it gradually from the multiplication table to higher mathematics. Our system enables you to gain steadily without increasing the time required. Both beginners and advanced pupils need to exercise but two hours per week.

Our "Old Pupils" Are Our Particular Pride

We have been making adjustable bar bells and teaching graded weight exercises for twenty years and we are constantly meeting men who took our courses in 1902 or 1903. These big unstanding men are now past middle age, but have retained the shape and muscle we created for them years ago. Even now they are as strong as two or three ordinary men.

The reason is simple. When you enroll with us every detail of your physical make-up is considered in the planning of your particular training program!

SEND FOR FREE BOOKLET

"Health, Strength and Development—how to obtain them."

The Milo Bar Bell Co.

Physical Culture Specialists and the largest manufacturers and distributors of bar bells, dumb-bells and kettle-bells in the world.

Dept. 35, Third and Diamond Sts., Philadelphia, Pa.

SPECIAL

When sending for our booklet, ask for our special pamphlet, "What should I weigh and how much should I measure."



Do *You* want to be a good Boxer?

Do you want to be able to put the gloves on with any of your pals, and more than hold your own? Do you want to know how to defend yourself if attacked? Do you want to be able to use the blows and guards developed by the top-notchers of the ring—the Benny Leonard Triple Blow, the Jack Dempsey Triple, the Fitzsimmons Shift, the Mike Donovan Leverage Guard, etc. In short, do you want to be a good boxer in a very short time and at very little cost?

Marshall Stillman's Shortcut System makes it easy for you to learn boxing. In this unique course the lessons are practised right in your own home before a mirror. You do not have to submit while learning to the punches of some one who knows far more about boxing than you do. We start you with simple movements you already know—reaching out your hand for a coin, the breast stroke in swimming, etc., and step by step lead you into the movements in boxing. Before you realize it, we have you striking scientifically, guarding, ducking, feinting, side-stepping, etc., just as though you had a real opponent before you.

After you've mastered the fundamentals, we teach you every good blow and guard used in the ring—how to land the blow, where to land it, and how to guard against your opponent's counter. Then we teach you *Shadow Boxing*—take you through three lively rounds for daily practice; this develops your speed and wind.

To develop you physically, we give you a complete set of muscle-building and breathing exercises. And to complete your knowledge of self-defense we teach you 15 Judo-Jitsu holds and 14 wrestling holds—how to disarm an opponent, how to break a strangle hold, etc.

The course includes a History of Famous Boxers with their pictures—from famous Mike Donovan to the latest champions, Siki, Pancho Villa, Joe Lynch, Johnny Dundee, etc.



FROM A PUPIL

At the time of subscribing to your course I was entering the amateur ring. After studying the course I found that it helped me beyond my expectations. I am now fighting professionally and can truly say that the Marshall Stillman Course has contributed more than anything else to my success. I have found it possible with your guards to hold my own against the blows of much heavier men than myself.

GORDON E. MONDAY,
Troop H, 12th Cavalry, Machita, N. H.

Complete Course only \$3.85

This famous course originally sold for \$10. Now you can have it on trial for only \$3.85—6 volumes of 30 complete lessons and over 200 illustrations!

10-Day Trial—Send No Money

Simply fill in and mail the coupon. When the postman hands you the course, hand him a dollar merely as a deposit. Use the course 10 days. At the end of that time, either send us the small balance of \$2.85, or return the course and we'll send your deposit back.

COUPON

MARSHALL STILLMAN ASSOCIATION,

Dept. 1723-B, 42nd St. and Madison Ave., New York.

You may send me on approval the Marshall Stillman Course, price of which is \$3.85. Upon its receipt, I agree to pay the postman \$1 as a deposit. It is understood that I am to pay the balance (\$2.85) or return the course within 10 days after I receive it. If I return it, you are to refund my dollar.

Name

Address

Note.—Canadian and foreign orders must be accompanied by cash (\$3.85 U. S. funds) subject to money back if not entirely satisfactory.

STRENGTH

Vol. 7

FEBRUARY, 1923

No. 6

Entered as second class matter at the Post Office at Philadelphia, Pa., November 20, 1920.
under the Act of March 3, 1879.

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Published Monthly by The Milo Publishing Co.

Alan Calvert Ralph Hale T. von Ziekursch, Editors
D. G. Redmond, Publisher O. H. Kosyk, Assistant Editor
Publication Offices, 301 Diamond Street, Philadelphia, Pa.
Subscriptions, \$1.50 per year. Canada, \$1.75. Foreign, \$2.00.
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Science Discovers the Secret of Caruso's Marvelous Voice

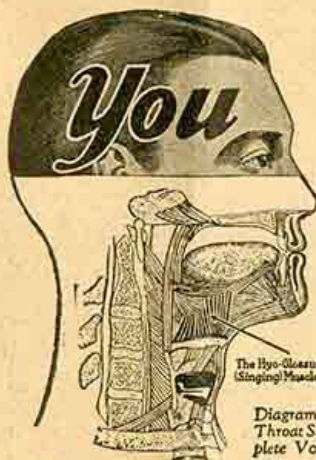


Diagram of the Normal Throat Showing the Complete Vocal Mechanism.

Caruso's Throat and Yours

Why is it that the humble peasant boy of Italy became the greatest singer of all time? This diagram of his throat will show you. Caruso's marvelous voice was due to a superb development of his Hyo-Glossus muscle. Your Hyo-Glossus muscle can be developed too! A good voice can be made better — a weak voice become strong — a lost voice restored — stammering and stuttering cured. Science will help you.

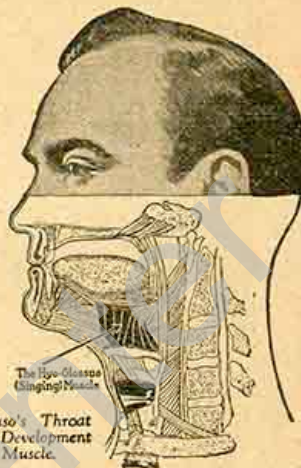


Diagram of Caruso's Throat Showing the Superb Development of his Hyo-Glossus Muscle.

We Guarantee— Your Voice Can Be Improved 100%

EVERY normal human being has a Hyo-Glossus muscle in his or her throat. A few very fortunate persons—like the late Caruso—are born with the ability to sing well. But even they must develop their natural gifts. Caruso had to work many years developing that muscle before his voice was perfect. Whether your voice is strong or weak, pleasant or unpleasant, melodious or harsh, depends upon the development of your Hyo-Glossus muscle. You can have a beautiful singing or speaking voice if that muscle is developed by correct training.

Prof. Feuchtinger's Great Discovery

Professor Feuchtinger, A. M.—descendant of a long line of musicians—famous in the music centers of Europe, Munich, Dresden, Berlin, Bayreuth, Vienna, Paris and Florence, for his success in training famous Opera Singers—discovered the secret of the Hyo-Glossus muscle. Dissatisfied with the methods used by the maestros of the Continent who went on year after year blindly following obsolete methods, Professor Feuchtinger devoted years of his life to scientific research. His reward was the discovery of the Hyo-Glossus, the "Singing Muscle". Professor Feuchtinger went even farther into the Science of Singing.

He perfected a system of voice training that will develop your Hyo-Glossus muscle by simple, silent exercises right in your own home.

Grand Opera Stars Among His Students

Hundreds of famous singers have studied with Professor Feuchtinger. Over 10,000 happy pupils have received the benefits of his wonderful training.

There is nothing complicated about the Professor's methods. They are ideally adapted for correspondence instruction. Give him a few minutes each day; The exercises are silent. The results are sure.

The Perfect Voice Institute guarantees that Professor Feuchtinger's method will improve your voice 100%. You are to be your own judge—take this training—if your voice is not improved 100% in your own opinion, we will refund your money.

A Beautiful Voice for YOU

You do not know the possibilities of your voice.

If you want to sing—if you have always felt that you could sing but lacked the proper training because you had not

the time nor the means to study—here is your chance. Professor Feuchtinger's course will improve your voice 100%. You can now learn to sing at a very small cost and in the privacy of your own home.

If you want to improve your speaking voice—if you stammer or stutter—Professor Feuchtinger will help you.

Professor Feuchtinger's Book "Voice Culture" Free

Send us the coupon below and we'll send you FREE this valuable work on the Perfect Voice. Do not hesitate to ask. Professor Feuchtinger is glad to have us give you this book and you assume no obligations whatever by sending for it.

You will do yourself a great and lasting good by studying this book "Voice Culture". It may be the first step in your career. Do not delay. The number of these books is limited. Send for "Voice Culture" today.

Perfect Voice Institute

Studio 5772 1922 Sunnyside Ave., Chicago
Please send me FREE Professor Feuchtinger's book "Voice Culture". I have put X opposite the subject that interests me most. I assume no obligations whatever.

Singing Speaking Stammering Weak Voice

Name _____

Address _____

Age _____

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1922 Sunnyside Ave., Studio 5772, Chicago, Ill.

Free Proof You Can Learn to Dance In One Evening at Home!

Why be a wallflower? Why miss most of the real fun when you can so easily learn to dance in a single evening right in the privacy of your own home?



This is Arthur Murray, Dancing Instructor to the Vanderbilts and many other fashionable people. He has taught more than 60,000 people how to dance, through his unique easy learn-at-home methods.

WEEK end parties — little social affairs — formal and informal occasions — regular dances — the phonograph or orchestra going with toe-tickling music — couples whirling around, dancing the very latest steps — everybody happy, carefree, and having a fine time!

It's a shame for you not to know how to dance, when it is so easy to learn. Arthur Murray, America's greatest dancing teacher, has perfected a wonderful new method that enables you to learn any of the very latest dances in a few minutes — and to learn all of them in a few hours.

Even if you don't know one step from another, you can very quickly learn to dance in a single evening through this method. You don't need to leave your home to learn — you can master any dance in your own room after a few practice steps. And you can now prove it — at Arthur Murray's expense. He will teach you to dance in one evening or your lessons won't cost you a cent. Then, at the very next affair when dancing begins, you can step right out with absolute confidence that every movement you make is perfectly correct, whether you are dancing the Fox Trot, One Step, College Rock, Conversation Walk, Waltz, or any of the newer steps.

Learn Without Partner or Music

With Arthur Murray's remarkable correspondence method, you don't need anyone to explain the simple instructions — neither do you actually require music. After you

have learned the steps alone in your own room, you can dance perfectly with anyone. It will also be quite easy for you to dance in correct time on any floor to any orchestra or phonograph music.

Arthur Murray is recognized as America's foremost authority on social dancing. Such people as the Vanderbilts, Ex-Governor Locke Craig, as well as scores of other socially prominent people chose Mr. Murray as their dancing instructor. In fact, dancing teachers the world over take lessons from him. And more than 60,000 people have successfully learned to become wonderful dancers through his learn-at-home system.

Special Free Proof Offer

Private instruction in Mr. Murray's studio would cost you \$10 for each lesson. But through his new method of teaching dancing in your own home, you get the same high class instruction at a ridiculously low price. And if you aren't delighted, it doesn't cost you a penny.

Here is Mr. Murray's special offer—made for a limited time and the right is reserved to withdraw it at any time without notice. He will send you the following sixteen lessons for five days' free trial:

The Correct Dancing Position—How to Gain Confidence—How to Follow Successfully—The Art of Making Your Feet Look Attractive—The Correct Walk in the Fox Trot—The Basic Principles in Waltzing—How to Waltz Backward—The Secret of Leading—The Chasse in the Fox Trot—The Forward Waltz Step—How to Leave One Partner to Dance with Another—How to Learn and Also Teach Your Child to Dance—What the Advanced Dancer Should Know—How to Develop Your Sense of Rhythm—Etiquette of the Ballroom.

Send No Money—Not One Cent

All you need to do to get these sixteen lessons is to simply fill in and mail the coupon and the complete sixteen lessons will be promptly sent. When the postman hands them to you, just deposit \$1.00 with him, plus a few cents postage, in full payment. Then



Aren't they foolish to envy your wonderful dancing ability when they could so easily and quickly learn to dance in their own home?

Here's What a Few Say:

I am well satisfied that your way of teaching is best. I have taken lessons from dancing teachers in Huntington, W. Va., Chattanooga, Tenn., and Birmingham, Ala. Your instructions are better than the personal teachers, and through your methods I am becoming a good dancer. I will do all in my power to get new pupils for you.
J. T. BERRY,
Anniston, Ala.

I want to tell you how wonderful your course is. I was taught by other dancing teachers, but I prefer your lessons because I accomplished more and learned more quickly through your lessons than by other teachers. I am now enjoying myself very much, and advise all those who want to know the correct way of dancing to take your lessons. I am enjoying many pleasant hours.
E. P. MORRIS,
3497 Elgin Ave.,
Winnipeg, Manitoba, Can.

I am delighted with the lessons. People are amazed at the ease with which one grasps the idea from your directions. I feel grateful to you.
GRACE THREFFALL,
Guler, Wash.

I have made use of all the instructions sent me and am well pleased with the course.
BEULAH ROGERS,
4471 Monroe Street, Chicago, Ill.

Your course has given me a good knowledge of dancing. I am getting along fine.
WILLIAM KOLICH,
Elizabeth, N. J.

I know your lessons pretty well. I attended a dance Thursday and got a compliment on my dancing. You know I never danced before and when I got into the ballroom I was the equal of them all. They sure were surprised.
ARMOND MAROHL,
Mayville, Wis.

I must say that your dancing course is just simply great! Last night was the first time I danced. I even danced with the best dancers around here, and they all marvelled at how well I danced.
HILDA WERTH,
Hampton, Neb.

examine the system carefully for five days, follow the easy instructions and prove to yourself that you have found the quickest, easiest, most delightful method to learn to dance. If, within 5 days you desire to do so, return the course and your dollar will be promptly refunded to you. But if you decide to keep the course—as you surely will—it is yours without any further payment.

You positively cannot fail to become a perfect dancer if you follow the few easy instructions. In fact your satisfaction is guaranteed. Remember, you send no money in advance, just sign and mail the coupon and the complete sixteen-lesson course will come to you by return mail. But mail the coupon now—you may never see this offer again.

ARTHUR MURRAY

Studio 610

801 Madison Avenue, New York

ARTHUR MURRAY, Studio 610
801 Madison Avenue, New York

To prove that you can teach me to dance in one evening at home you may send the sixteen-lesson course and when the postman hands it to me I will deposit \$1.00 with him (plus a few cents postage) in full payment. If within five days I decide to return the course I may do so and you will refund my money promptly and without question.

Name

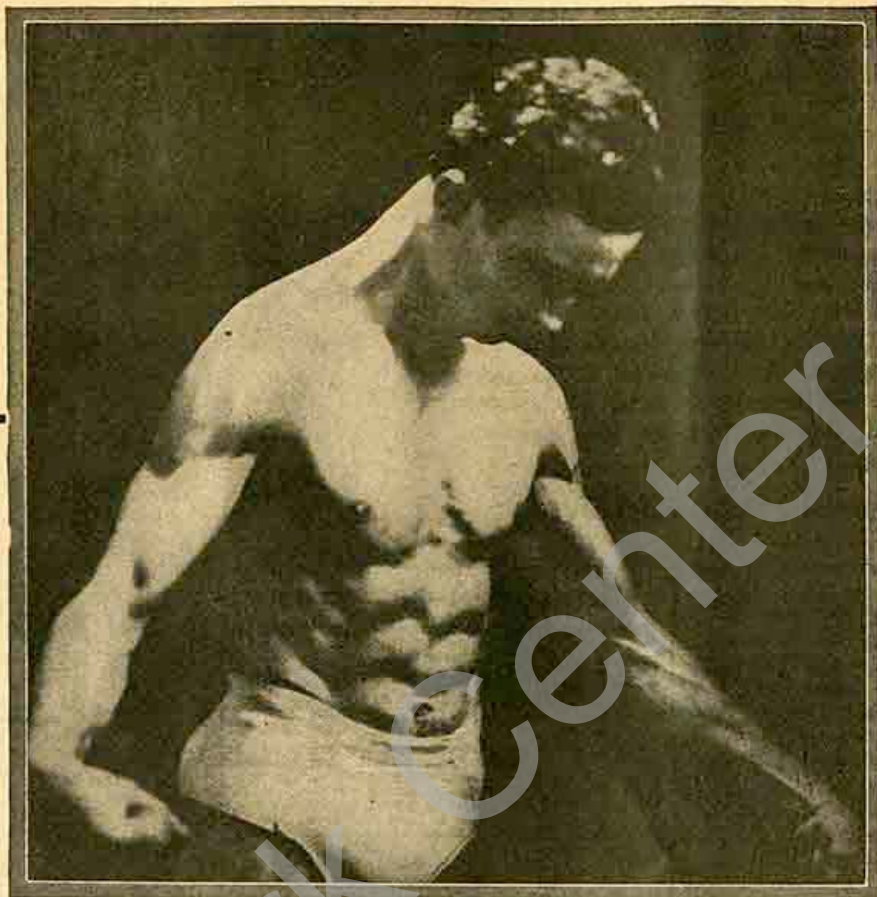
Address

City

State

If apt. to be out when postman calls you may send the dollar with coupon and we will pay postage.

Price outside U. S. \$1.10 cash with order.



Be An All-Round Strong Man!

THOUSANDS of men and boys with powerful biceps, thighs and legs are not making the most of their Strength because they have not yet learned the secret of a powerful abdomen.

Science discovered long ago that the condition of a man's midsection had more to do with his all round strength and general fitness than any other part of his anatomy. Big bulging muscles are a wonderful asset to any one, but unless they cover one's *entire* body you cannot do them justice. Practically all feats of Strength require that the muscles of the abdomen co-ordinate with those of the legs and arms, yet very few courses of physical education pay them more than casual attention.

As you will see from the above photograph, which I had taken for one of my articles in *Physical Culture Magazine*, the muscles are developed to a remarkable degree. If you could meet me personally you would know how powerful they really are—how when contracted they appear just as hard as the ribs. It is to these muscles that I must give most of the credit for the many feats I perform.

Most people are surprised when I tell them how I attained this wonderful development. Yet, it's a simple logical method that will enable any one to increase their general fitness 100% and make their abdomen many times as powerful as at present. I used no weights or apparatus of any kind, and the only reason I ever go to a gymnasium is to practice "stunts" or meet friends. Yet, many mistake me for a finely trained boxer, when, as a mat-

ter of fact, the only training I do is a few minutes each night at my home.

The amazing development my method has enabled me to attain so easily and the great strength it has brought many of my friends, made it easy for the publishers of STRENGTH to persuade me to publish it for the benefit of their many readers. This advertisement is my invitation to you to find out just exactly how much stronger and healthier you will be thru following the instructions in my course, "ABDOMINAL CONTROL."

I honestly believe that "ABDOMINAL CONTROL" is better than any course of physical instruction ever published. It is so very easy to follow the instructions and they take up so little time that the results will surprise you. It will enable you to accomplish things which are now impossible, it will make you exceptionally strong, it will enable you to overcome indigestion, thinness, vital depletion, skin disorders, round shoulders, weakness and many other ailments.

Every one who really cares to have a strong, beautiful body and perfect health should take advantage of this opportunity to secure a copy of "ABDOMINAL CONTROL," at the present low price. It will be sent anywhere upon the receipt of \$2.00 cash, check or money order; all charges prepaid.

JOHN M. HERNIC

547 Riverside Drive Apt. 5-B New York City

ARE YOU A MAN?

A man who has spent countless hours at exercising, and is still a long way from being *really* strong, or *really* well built, or *vigorously* healthy? Then you should

Read CHECKLEY'S BOOK

It will teach you the fundamental principles of body building. *It will show you how*, to acquire certain bodily and muscular habits, that will *automatically develop* a big, high-arched chest, a flat back, powerful arms and legs, and above all, the organic vigor that furnishes steam for your bodily engine.

ARE YOU A WOMAN?

A woman who hates exercise, and yet *craves* beauty of form and abounding health? Then you should

Read CHECKLEY'S BOOK

It will tell you how to go about getting the finely modeled neck and shoulders, the rounded limbs and the long lines that make the figure at once beautiful and graceful. All without the bother of tiresome and fatiguing exercises.

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ONLY \$1.00 brings this complete, scientific Violet Rays outfit to you. Treat yourself and family at home, save delay and costly doctors and medicines. Thousands are using Violet Rays successfully at home to overcome pain and relieve sickness. These are the identical outfits doctors have bought from us for years and which they are using in the successful treatment of the ailments listed in the coupon below and many others too numerous to list. Free Violet Rays Book sent on request explains how plain folks and doctors get results with that marvelous new force, Violet Rays.

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The genuine Vi-Rex Violet Rays is most pleasantly soothing and quickly calms and relaxes the nerves. Relieves congestion at any point, improves the blood and stimulates circulation. We gladly send copies of letters from doctors and plain folks who completely prove that pain stops and health and vigor follow the use of Violet Rays.

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Violet Rays work at once, you feel results immediately. "Violet Rays is the finest thing I ever used to relieve congestion in any part of the body, and to relieve pain. Treatments are so pleasant that all my patients like it," writes Dr. Duncan, Kewanee, Ill. You can use it at home and get splendid results yourself.

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Acts without drugs or medicine, it's scientific, goes after the cause, that's why it gets results. Note the list of ailments Violet Rays treats successfully, and many others. Success in Business and Social affairs depends on health.

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Brings natural, magnetic beauty of health, no dieting, exercises or drugs. Home treatments save money. The free book explains how famous high priced beauty specialists use Violet Rays to improve scalp and skin.

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Explains how Nikola Tesla discovered Violet Rays, how it works, why it heals. Tells what doctors and plain folks accomplish in conquering pain, disease and nervous troubles. Shows charts of the human body, explains where pains start, how to banish them. Offered FREE for a limited time only, to introduce Violet Rays.

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Complete Scientific Outfit

Others
Charge \$25.00

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—Send No Money

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Here is a partial list of ailments successfully treated with Violet Ray:

Catarrh	Eye Disease	Nervousness	Sore Throat
Chills	Falling Hair	Neuralgia	Sprains
Colds	Hay Fever	Neuritis	Tonsillitis
Constipation	Headache	Paralysis	Whooping Cough
Deafness	Goitre	Piles	Asthma
Eczema	Insomnia	Rheumatism	
Erysipelas	Lumbago	Skin Diseases	

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Dept. 1002, CHICAGO

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Write—quick—for particulars of this extraordinary offer; an opportunity you will never forget if you take advantage of it. Ten lessons in effective public speaking absolutely FREE to those who act promptly; to introduce our course in localities where it is not already known.

What the Course Teaches You

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- How to tell entertaining stories.
- How to make after-dinner speeches.
- How to converse interestingly.
- How to write better letters.
- How to sell more goods.
- How to train your memory.
- How to enlarge your vocabulary.
- How to develop self-confidence.
- How to acquire a winning personality.
- How to strengthen your will power and ambition.
- How to become a clear, accurate thinker.
- How to develop your power of concentration.
- How to be master of any situation.

We Teach You by Mail

We teach you by mail to become a powerful and convincing speaker—to influence and dominate the decisions of one man or an audience of a thousand. We have trained hundreds and helped them to increase their earnings and their popularity. Learn in your spare time at home how to overcome "stage fright" and conquer fear of others; how to enlarge your vocabulary; how to develop self-confidence and the qualities of leadership; how to RULE others by the power of your speech alone; how to train your memory. Our

NEW, EASY METHOD

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FREE LESSON COUPON
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How to Rid Yourself of Your Catarrh



R. L. ALSAKER, M. D.
Founder of
The Alsaker Way

QUICKLY!

PERMANENTLY!

Without Drugs or Medicine of any Kind

By R. L. ALSAKER, M. D.

THE majority of the people in our country suffer from catarrh. Some have it from time to time, others have it all the time.

"Catarrh of the head is troublesome. Catarrh of the throat causes coughing and much annoying expectoration. When the catarrh goes into the chest it is called bronchitis. If it is allowed to continue it becomes chronic, and chronic bronchitis means farewell to health and comfort. It robs the sufferer of refreshing sleep and takes away his strength. It also weakens the lungs so that the individual easily falls a victim to pneumonia or consumption.

"Then there is catarrh of the stomach and small intestines, which always means indigestion. Catarrh of the large intestine often ends in inflammation of the lowel bowel—colitis.

"Catarrh of the ear causes headache, ringing in the ear and general discomfort.

"Catarrh of the liver produces various diseases, such as jaundice and gall-stones, and often ends in much suffering from liver colic.

"All who easily catch cold are in a catarrhal condition. Those who take one cold after another will in a short time suffer from chronic catarrh, which will in turn give rise to some other serious disease—as if catarrh itself isn't bad enough.

"Either you personally suffer from catarrh, or some member of your family is afflicted. Isn't it time to give this serious danger a little attention, before it is too late, and solve the problem for yourself? You can do it. It's easy.

"Catarrh can be conquered easily and permanently. It has been done in thousands of cases. You can cure yourself—and while you are losing your catarrh you will lose your other physical ills. That discolored tongue will clean up; that tired feeling will vanish; that bad taste in the mouth will disappear; that troublesome gas will stop forming in the stomach and bowels; and the pain will leave your back; headaches will take flight; rheumatism will say good-by and those creaky joints will become pliant."

Realizing the great need of definite, practical information regarding this terrible disease, Dr. Alsaker has prepared a plain, simple instruction book on the cause, prevention and cure of catarrh, asthma, hay fever, coughs and colds. This book is entirely free from fads, bunk and medical bombast. It sets forth a commonsense, proved-out PLAN, that is easy and pleasant to follow—a plan that teaches the sick how to get well and how to keep well. The name of this book is "Curing Catarrh, Coughs and Colds." It tells the true cause of these objectionable, health-destroying troubles, and gives you a safe, simple, sure cure without drugs, medicines or apparatus of any kind. You apply this wonderfully successful treatment yourself, in your own home, and without the expenditure of an additional penny. There is nothing difficult, technical or mysterious about this treatment. It is so easy to understand and so simple to follow that anyone, young or old, can reap the utmost benefit from it.

If you suffer from colds, coughs or catarrh in any form, send only \$3 to the publishers of "THE ALSAKER WAY," THE SUCCESS MAGAZINE CORPORATION, Dept. 751, 1133 Broadway, New York, and get your copy of this valuable instruction book. Follow the instructions for thirty days; then if you are not delighted with the results—if you do not see a wonderful improvement in your health—if you are not satisfied that you have made the best \$3 investment you ever made—simply return the book and your money will be promptly and cheerfully refunded.

Remember this: If you want to free yourself forever from catarrh, asthma, hay fever, coughs and colds, you can do so. Dr. Alsaker's treatment is not experimental. It is proved-out and time-tested. And it includes no drugs or serums, sprays or salves. And it costs nothing to follow it, while doctors' bills, prescriptions, and so-called patent medicines that do not cure, soon eat a big hole in any man's income. Send for this book to-day. Follow it faithfully and you will experience the same splendid results that thousands of others are receiving.

Perfect Men Are MADE—NOT Born !



CHARLES ATLAS Twice selected by *Physical Culture Magazine* as the World's MOST PERFECT MAN

FACTS: Chas. Atlas has the largest pectoral (chest) muscles in the world! He is FAR STRONGER than any other physical culturist! He is better developed than any other man who ever lived! Thru faithfully following his methods you will soon rank with the world's finest built men! Chas. Atlas can PROVE all of these statements. Send for his booklet and MAKE him!

You can easily develop a body as strong and beautiful as mine.

The enormous strength, health and muscular development that can be acquired easily and quickly through following the methods I have discovered has amazed everyone. Physicians, physical culturists, professional strong men and scientists declare that there has never been a method so quick, so sure, so permanent.

From a frail weak boy I developed a superb physique that was admired by everyone. Four years ago I was in an accident and was unable to walk for 17 months, at the end of which I was a mere skeleton. But I built up my body for the second time and today I am the finest developed man in the world and am far stronger than any other physical culturist.

The methods which enabled me to perform this miracle TWICE will do just as much for you. My pupils are making wonderful progress and many of them will compete with me in the next show to select the WORLD'S MOST PERFECT MAN.

What kind of a man will YOU be at the end of 1923? You CAN be just as strong, just as beautifully built, just as healthy as you wish if you take advantage of the offer in my wonderful book, the "SECRETS OF MUSCULAR POWER AND BEAUTY." It is the most elaborate book of its kind ever printed, illustrated with numerous large photographic pictures of me in beautiful poses.

Let me prove that I can make you STRONG, HEALTHY, ENERGETIC and WELL DEVELOPED. Fill in the coupon today, right NOW! It leads the way to all things which are really worthwhile.

Charles Atlas
Suite 102
Temple of Health
Woodcliff-on-Hudson
N. J.

MAIL THIS COUPON NOW! Strength February 1923

Chas. Atlas,
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Temple of Health
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Hudson, N. J.

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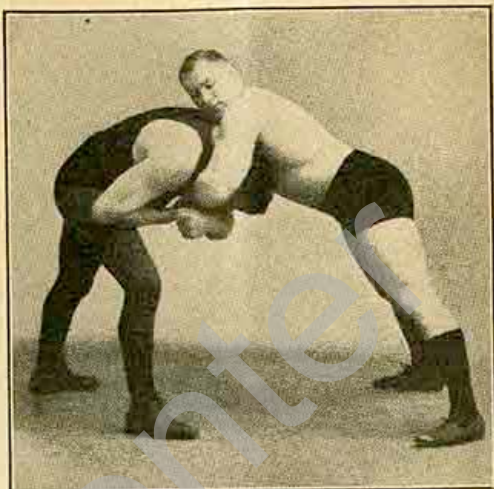
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Do you want to be a weakling all your life? Will you be satisfied with the average development, or do you want to be better than the average in strength and sports? Do you want to be a real man?

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You can have the broad shoulders, the deep chest and the sturdy back that you long for. You can develop vitality and strength, endurance and a clear-thinking brain through sports. Mental and Physical Power can only be developed through interesting and pleasure-giving exercises. Make your daily exercises fun, not work.



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The name of this book is sufficient explanation of the contents. Mr. Hackenschmidt not only explains the practice of wrestling in a clear and concise manner but also explains thoroughly the theory.

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By publishing this course in book-form we are able to offer you this remarkable bargain, a complete, well-illustrated course by the former world's champion heavyweight boxer, Tommy Burns.

Some of the main points included in the course are: Footwork, Position, Feinting, How to punch effectively, Defense and Counter-hitting, Tommy

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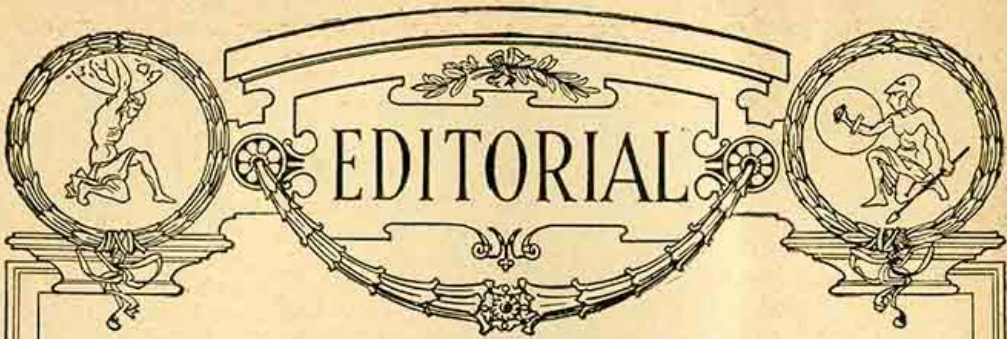
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Competitive Athletics

SOME business men doubt the truth of the statement that "competition is the life of the trade," but it is positively established that competition is the life of athletics.

Ask the head of the Department of Physical Education in any big university and he will tell you that, while students have to be forced to take the gymnasium exercise necessary for the maintenance of health, there is never any compulsion needed to bring out candidates for the various sports where *competition* is a feature.

While we admit that the average student is proud of representing his college on the diamond, gridiron, or track, we feel that there is another reason for his eagerness to secure a place on one of the big teams. He loves the joy of *competition*, the lust of battle, the opportunity of matching his brawn and speed and wits against those of worthy opponents.

Inter-Collegiate Athletics Are the Backbone of Amateur Sport

SO long as a youth is in school or college he always has the facilities for engaging in competitive sport, but after he is out in the world his opportunities in that line are not nearly so great.

To be sure he can always play tennis and golf. The immense and deserved popularity of these two games is due to the fact that it is so easy to secure an opponent.

Clubs are plenty, large teams are not required and a couple of minutes on the 'phone will always locate one to three opponents who are simply aching to trim you.

There Are Not Enough Athletic Clubs

BY the above we mean clubs which are devoted to *all* branches of competitive athletics. Big industrial and business concerns support athletic teams in season, and there are numerous amateur baseball, football, hockey and basket ball associations; but still there are too few clubs which foster *all-year-round activities*, and can put teams in the field at any season and for any sport.

We Are Starting "Strength" Clubs

THIS magazine has long been regarded as the spokesman for the sports of weight-lifting, and hand-balancing. It has gotten so that we are daily in receipt of letters from amateur lifters and hand-balancers, asking us to put them in touch with other amateurs who are interested in the same lines of athletics. Also, we have frequent requests for information as to the best method of starting lifting clubs. On top of this it has been practically de-

manded that we formulate a set of rules governing individual and inter-club contests.

An Extension of Our Readers' Service Department

IT is true that we have, among our readers, some thousands of men and boys whose favorite winter sports are lifting, boxing, wrestling and other vigorous indoor activities. We cannot undertake to start lifting clubs for you, but we can and do, offer our co-operation and assistance to those of you who wish to start such clubs. Furthermore, we feel that we can render a really valuable service by publishing lists of newly formed Strength clubs and thus promoting inter-club activities and competition.

It often happens that in a town of 50,000 population there are several dozen amateur lifters, most of whom are strangers to each other. Most of these chaps are readers of this magazine, but as we do not keep our subscription list by localities, but alphabetically, the first move must come from you.

Send in Your Name

IF you would like to help form a Strength club, send in your name and address to the Readers' Service Department and we will undertake to bring you into communication with others in your town, or neighborhood, who have sent in their names.

Our extremely wide distribution enables us to cover the whole country, so no matter where you are located we can introduce you to fellow-enthusiasts.

We Can Make Constructive Suggestions

WE have already assembled and collated a lot of correspondence on this subject, so we can offer valuable suggestions as to securing location, new members and equipment, as well as rules and regulations concerning lifting and competition.

You Will Be Doing Yourself a Good Turn

JOINING a Strength club will be of immense value to you for it will give you the benefit of your fellow-members' experience, the use of the club apparatus, and above all the *stimulus of competition*. We will be proud if we can help bring a lot of you good fellows together, so do not hesitate to call on us.

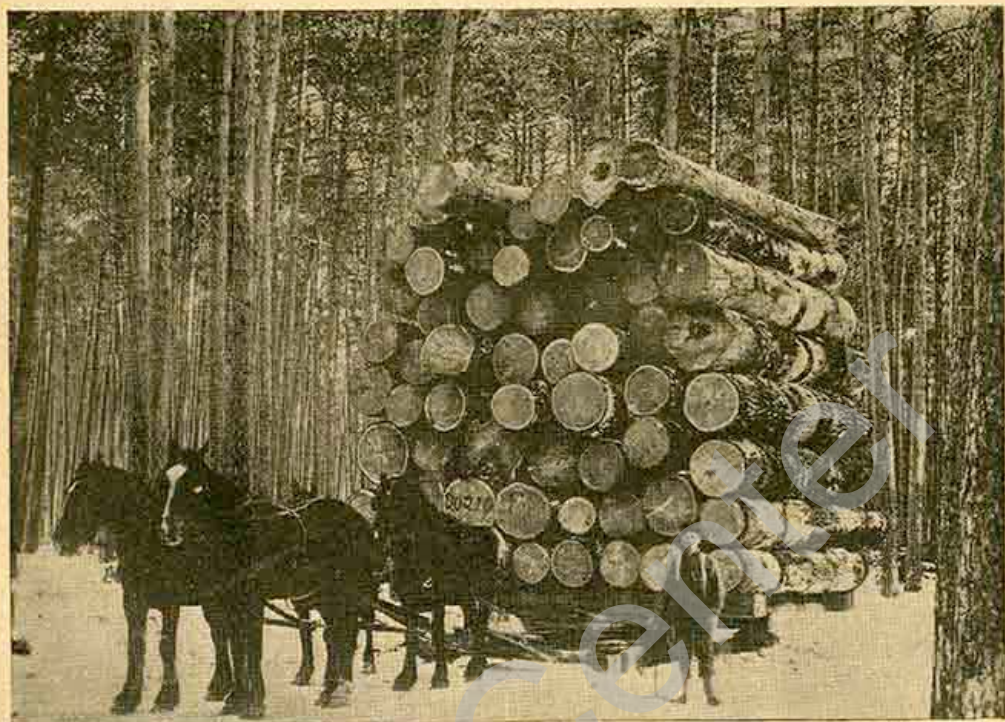
No Challenges Published

WE make only one restriction. While we will be glad to give publicity to the movement, by affording clubs the use of the columns of **STRENGTH**, we cannot publish individual challenges. By this we mean that we will not publish pictures of lifters, boxers or wrestlers, with the statement that the man in the picture claims the championship of a certain class or weight, and challenges, etc., etc.

No! We will gladly put clubs in touch, through the mail, with other clubs who are seeking matches for teams or individuals, and we will publish accounts of notable matches and pictures of winners—but no challenges. Competitions are interesting news but mere challenges are not.



Here's a game which breaks men or makes them.



A big load on its way to water

The Lumberjack

By T. von Ziekursch

*"Roll out!" the cookee yell,
"It ban morning; vat da hall!"
"In swamps it ban daylight, yu guys!"
Den out of varm bunk
We skol falling kerplunk,
And rub like da hall at our eyes,
We eat an' den vork lak mule,
Lumberjack faller ban damn fule.*

PERHAPS it would require more than an advocate of free verse to show any appreciation for the above. We cannot vouch for where we heard it, but believe it had something to do with a trip during the past summer into the big timber country of northern Wisconsin and Michigan, where the "lumberjack" of fable and fact has one of his lairs in these United States.

And the same "lumberjack" is quite some character. He is a motley array, taking him as a whole. In the eastern sections he is usually of pure American stock, but he is scattered widely and in each section he seems to be of different lineage. In the land of lakes and swamps of Wisconsin, Michigan and Minnesota a large percentage are Norwegians, in Canada there are many Scots and Irish min-

gled with the French Canadians. In the far northwest he is again mostly of pure American stock.

Around him has been built a literature of fiction that is based on some facts and which pictures him, usually, as a regular Hercules person looking for new labors to perform. He is supposed to have muscles the like of which no human being ever had, and to be entirely without nerves, and also to be capable of eating alive wild wolves, bears, rattlesnakes, and even the dangerous, highly poisonous hot dog of the one-day circus, besides drinking liquor that would burn holes through a copper boiler.

But he is quite some person individually and collectively and worth all that has been told of him. He is as separate and picturesque a breed as your old time cow-puncher and in one way he probably stands alone. From his habitat in the Louisiana swamps to the Peace River System he is and must be a pretty fine physical specimen.

To get the proper perspective on

this same lumberjack, his prowess and his sports, his life and the kind of a fellow he is generally, you've got to have some idea of the tremendous things he does. Consider for a moment the fact that there are something like sixty billion board feet of lumber used in this country annually and you will realize that it will require quite a few "gangs" to axe and saw down enough trees for that amount.

But this is a tale of the jack himself and not a recital of the statistics of lumbering.

His is a game that makes men—or breaks them. No pastime for the soft muscled and shaky-nerved, this role of the lumberjack. That is, it is no task for such unless they want to harden up those soft muscles and steady those jazzy nerves.

"Vatch out!" de boss shout, "Tree fallin' dat vay."

Ant missed by an inch but dis yob ban a skinch. Lumberjack laugh; vy you scare away.



Bunk houses for the "timber gang"

That's him again. He has his own little rhymes and limericks that tell of his job and his sport. He takes both in all seriousness and there probably isn't a class in existence as proud of its prowess and strength individually as the lumberjack, unless it be the professional strong man.

And we rise here to lay ourself open unto vitriolic criticism when we assert our belief that there probably is not another profession possessed of such stamina, endurance and strength as these wielders of the axe and saw of the big woods.

All of which brings us down to the matter of what basis there is for such a claim. In other words, what is it they do that develops the remarkable physiques found among them? A majority of those we have seen have been large men of the type that Glen Warner would call ideal for a football team, six-footers without an ounce of fat on them and averaging say about one hundred and eighty pounds. But not all of them by any means. You will find the small wiry man and the medium sized stockily built one among them just as well as elsewhere. And we have even known the comparatively soft city dweller in poor health to seek the lumber camp as a means of regaining strength to make good.

First we'd say the air of the woods played a big part. And then there is the way of the work. Up at day-break; breakfast of the most solid kind of food and then W*O*R*K spelled in capitals, until mid-day when another husky meal starts off and an afternoon as full of toil as was the morning.

Let us spend a few minutes with a gang up in the north woods, working



The timber runner

a hillside above one of a chain of lakes that feed a river.

Here is an individual who looks like a blonde edition of Jack Dempsey. Perhaps his face is considerably scarred where a pal walked on it with calked boots during a friendly altercation after a pay-day souse. At present his antagonist is a fifty foot Douglas fir. He swings a long handled axe, this lumberjack. First from the right side he drives that keen edged steel into the trunk of the tree, twists it loose with a knack that is highly skilful and the next blow comes from the left side. He is a two handed battler, this chap, equally expert from either side, and after you watch him a

minute or two you'd be willing to lay a small wager that he could split a toothpick with that axe.

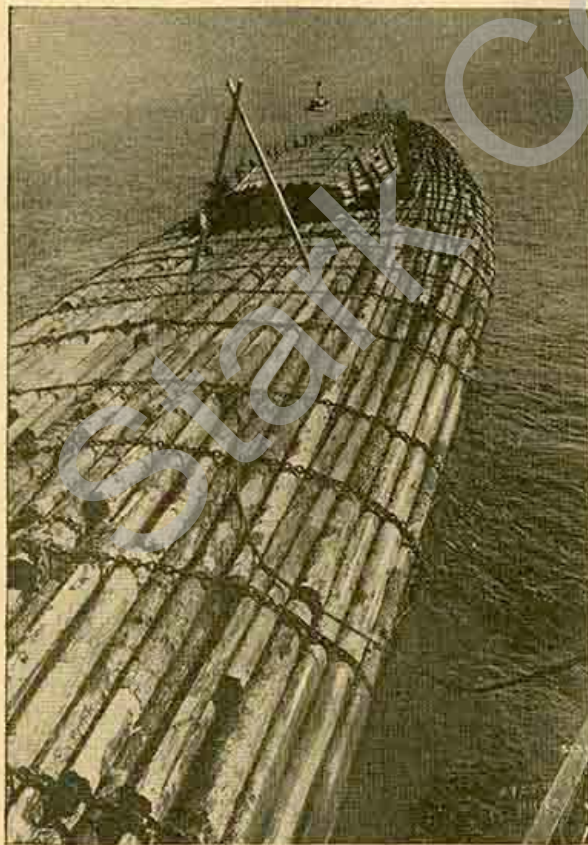
Fifty yards away the buddy who walked on this one's face with his calks is wielding a huge cross-cut saw and you wonder that any pair of shoulders possesses the power to drive that blade through the massive forest monarch he has tackled with it. Back and forth without interruption except that possibly he withdraws the saw to rub it with kerosene that makes for less friction in green wood, and soon those two giants come tumbling down in just the right direction to be rolled down that hillside into the waters of the lake. Perhaps one of them didn't fall just right. Do they send for a derrick and a stationary engine? Not so you could notice it. They either lift

the end of it by the sheer strength of those mighty muscles or they cut a sapling and use it as a pole or a jack. After that you'd swear those boys could pick up a caterpillar tractor.

And then they tackle the next one.

Why bother about resting up? They don't need it. This is their job. It would kill the ordinary mortal to go for one of those trees—not the lumberjack. A dozen are as easy as one except that they require more time. There is deep snow, and a bitter wind whips down out of the north, but that does not matter. Blood runs fast and warm at this task and the timber runner has picked the location of those trees that are to be cut today. Perhaps there are enough right on this hillside to keep the gang busy for a week and then this same timber runner will have selected the next location and they will move on. To them it does not matter. He is the scout, they are the army that attacks.

And they go on throughout the long winter, day in and day out, rising at dawn, eating much and working hard, playing cards in the bunkhouses at night, listening to the genius of some buddy brought out to be exercised on the accordeon, and looking forward to the payday that comes more often at the end of the season than monthly. And their sport is wrestling. For boxing they care little and know less, but that does not bar fights. In the northern camps their encounters would put an exponent of the well-known Queensbury rules to shame. These are a combination of boxing and the savate of the French, and a kick in the stomach with a hobnail boot is a mighty effective method of punishment.



Lumber on its way to the saw mill



This kind of work requires dexterity.

However contrary though it may be to the popular fiction conception of them, we have found these lumberjacks, especially in the north, to be a happy-go-lucky, mild mannered breed and have the word of more than one foreman and superintendent that they rarely fight except after payday when the stuff that Mister Volstead forbids mention of flows.

Why are they strong? Why gifted with the superb endurance that enables them to swing an axe almost without interruption from seven in the morning until dark?

The answer is easy. In the first place most of them are the children of fathers who did the same thing and passed along a heritage of fine bodies. Secondly, they are living under conditions that would be just about ideal for the training of athletes. Out in the woods all day with the worst vice possible, a pipeful of tobacco; rough, solid food, plenty of sleep; is there any possible reason why a man should not develop to the ultimate degree of his physical power under such conditions?

And then you meet a couple of them

down in Chicago some summer morning after the last drive is over and they have come to the city to have some fun and the panga (money) has all been spent. They are hanging about the row of employment offices opposite the Pennsylvania station looking for a job in the harvest field that will hold them over until the call comes from the lumber camps again. And they have big heads just the same as anybody else would have under the conditions; they are lumberjacks and they know when the foreman will be recruiting the gangs and they come back to the land of big woods.

But that is only telling a little of it. There is a heap more to be said. One might think from this that theirs is not a hazardous task. It is all of that and then some. There is the tree that doesn't fall just right and it takes nimble feet and a quick eye to avoid it. And there are the dozens of different ways of handling the logs to get them down to the mills. Where they are snaked out with teams it is back-breaking, man-killing toil. But where

(Continued on page 70)

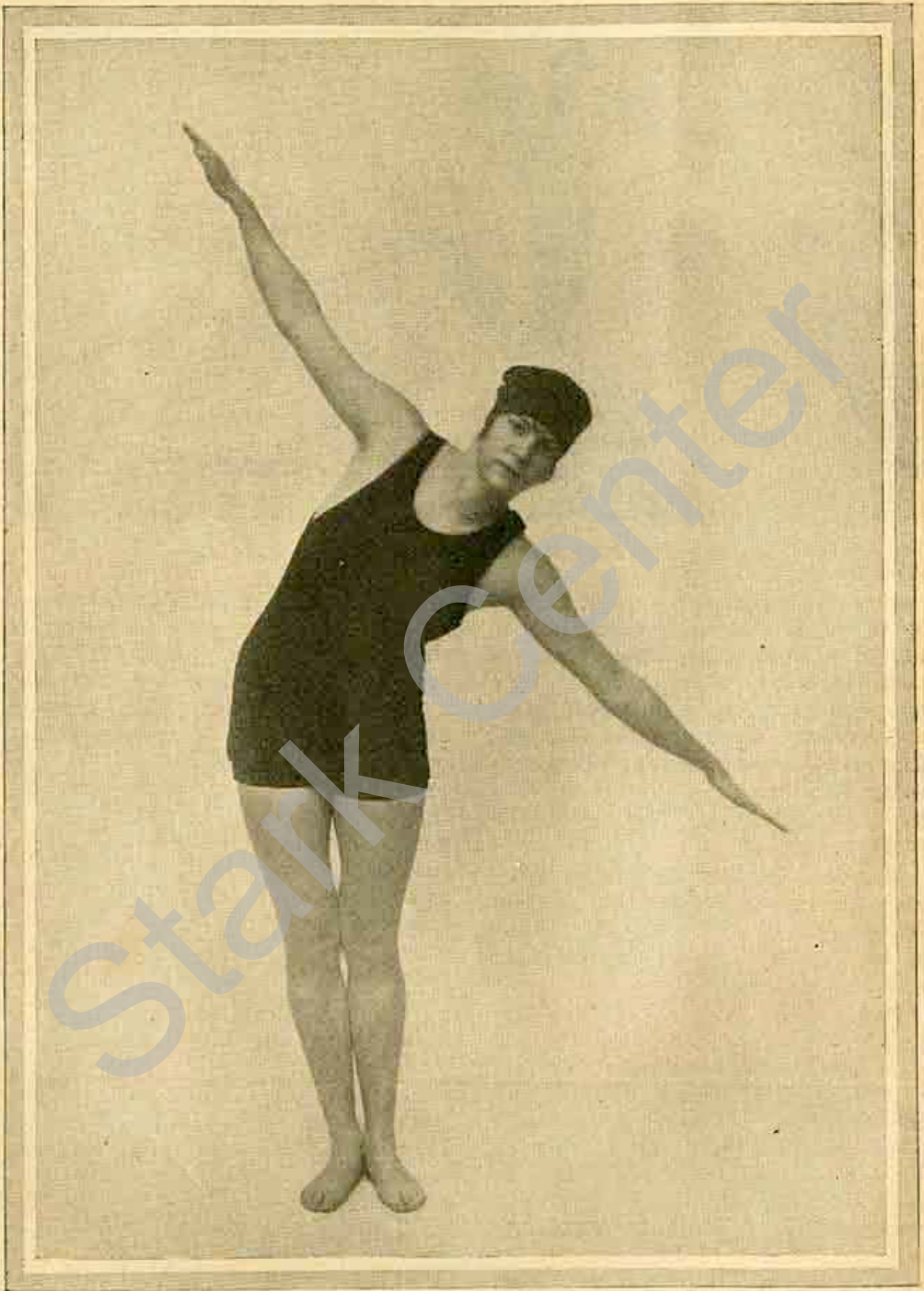


Fig. 3—Illustrating Exercise No. 3

Keeping Down Flesh by Means of Exercise

By Gertrude Artelt

who has been acclaimed as America's "Most Perfectly Formed Woman"

As dictated by Miss Artelt to David Wayne of the STRENGTH staff of writers.

Poses and advice by Miss Artelt and a description and analysis of Miss Artelt's exercises by Mr. Wayne.

"YES! Mr. Wayne, you don't have to tell me that. Every woman wants to be slender nowadays. Goodness! I hear them talk about it all the time, and many's the giggle I've gotten when I hear some of them talk about their *plans* for reducing.

"Usually it's diet, diet, diet, but sometimes it's hygienic belts, or Turkish baths, or massage. I think massage appeals to most of them because they all have friends who take 'treatments,' and it is fascinating to a woman because *she* gets the benefit while someone else does the work.

"Not long ago I went to an afternoon bridge, and when the refreshments were handed around, half the girls said, 'Oh! I think I'd better not. They say sweets are fattening and I'm getting something awful to look at!' But when the hostess seemed hurt, they pitched in and did their share. You know how it is. If you had ordered a lot of nice 'cats' and no one touched them, you would feel sore. When the party was over they all *rode* home, even the ones who lived only a few blocks away. I thought to myself, 'Goodness, young ladies, if you only spent one-tenth of the time at exercise that you do in playing bridge, you wouldn't have to worry about getting stout.'

"A friend will say to me, 'Gertrude, I know you do a lot of swimming, and all that, but you're slender, and I thought exercise made one big and husky. Do you diet?' and I always say 'My dear child, when I exercise I don't *have* to diet, and neither does anyone else.'

"You know, Mr. Wayne, that last spring I decided to give up swimming. I had been at it for three years, in and out of season, and I felt that I had earned a rest. So I stopped going to the club and the gym, and didn't do a thing except read and go to parties and shows. I even stopped my little daily routine of exercises. At the end of eight weeks I stepped on the scales and found I had gained sixteen pounds. And most of it was right along the front of my body, and I could see that my hips were getting a little 'bulgy.' So it was back to exercise for me!

"I didn't swim, but I resumed my daily calisthenics and I started to play golf. (By the way, Mr. Wayne, remind me to tell you something, later on, about the golf-swing as a flesh reducer.) I started off easily and each day did a little more, and in a month I was below my normal weight. In fact, I lost twenty-three pounds without missing a meal, or even going without the things I like. Then I picked up again and now I am where I want to be—my normal weight of 160 pounds. (Miss Artelt is over 5 feet 10 inches tall.—*D.W.*.)

"Honestly, Mr. Wayne, I feel sort of silly trying to tell other people how to exercise. All I know is what I have been taught. Now if it were swimming I might be able to give a friend some helpful hints, but if the girls and women that read your magazine want to know what *I* do to keep in shape, I will be glad to pass on to them the things that were taught to me; and since pictures are

easier to understand than any directions, you can have the pictures, and you can tell them better than I just *why* the exercises are helpful.

"Perhaps I have an advantage over most girls, for I was brought up on exercise. As far back as I remember I have exercised almost as regularly as I have eaten and slept. My father is a physician, and I have often heard him say that it is more important to *keep* people well than to *make* them well.

"When I was a child my father,



Fig. 1a—Illustrating Exercise No. 1

mother, brother and I would assemble in a room, and Dad would open all the windows and lead us in a calisthenic drill. Of course, at that time, I did not realize why I had to do the stunts, but after I was old enough to take part in athletics I could see what an advantage I had over most of my competitors, for my early calisthenics had made me much more active and enduring than they were.

"When I got older, father sent me to a gym, where I learned all the usual free-hand drills. I never went in for real advanced acrobatics. I can do some of the conventional stunts on the vaulting horse and rings and parallel bars, but I never did learn to do a hand-stand.

"Personally I think that advanced stuff is *not* necessary. It is far better to take a few mild exercises and do them every day than to go to a gym and do tumbling once or twice a week.

"Mr. Wayne, you probably know a lot more than I do about exercise, but I don't believe you realize the attitude of most women toward it. Most of them are willing to play games like tennis or golf, but many of them don't know or care a thing about individual calisthenics. The stout ones are the very worst. They think that exercise is something like an operation. Some of them actually believe that they can go take a dozen lessons on 'reducing exercises' and that the lessons will make them slender and *keep* them slender, even if they never practice *once* after they finish the course. They have the idea that a 'professor' can reduce their figures just as easily as the hair-dresser can give them a permanent wave. They just *won't* understand that they have to practice regularly; that activity

means slenderness and laziness means fat.

"And the ones who do take up calisthenics quit so easily. I was taught that in each exercise you must repeat until the muscles used commence to tire. I don't mean until you are utterly exhausted, but that if you are doing a bending exercise for the side muscles you must keep on bending until those muscles ask for rest. But some of these women stop after the first week because they do feel the muscles working." The sensation is so strange that they think something must be the matter.

"I know one young woman who was getting quite plump—not her arms or her legs, but her body looked stouter—so she started one of these courses of 'so many minutes a day.' When I asked how she was getting on, she answered, 'Oh, I stopped. I didn't like it. Do you know that there was one exercise where you rotate your body, and it made me so sore! I'm sure I never expect to use those muscles.' It took me a long time to make her see that one reason she was getting stout around the body was that she carefully avoided using those muscles. (This exercise was No. 4—D.W.)

"I wish it were possible for women to take part in games the year 'round. Some

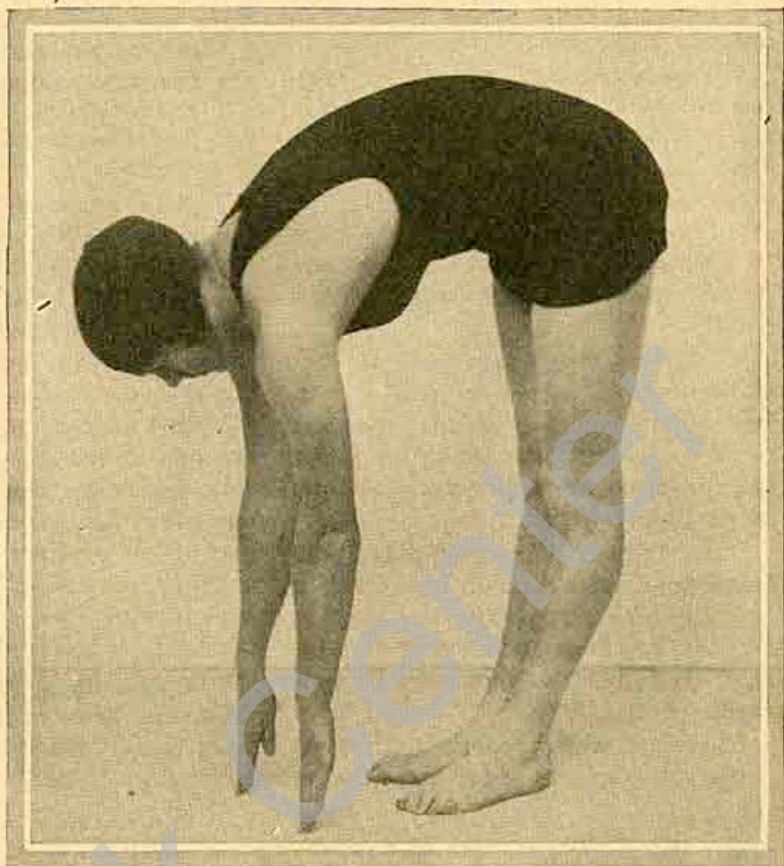


Fig. 1b—Illustrating Exercise No. 1

of the country club crowd can, and do. They never get stout or loggy.

"The tubby ones are the ones that like bridge and the movies and 'feeds' better than they like swimming and tennis, hockey and skating.

"There is nothing like *fresh air*. When you are exercising you must have it. When I asked my father why he always opened the windows before our daily drill, he told me that when you exercised your heart beat faster, the blood traveled faster, and you must have the oxygen from the outdoor air to purify the blood.

"I think the best times for exercising are just after you get out of bed in the morning and before you turn in at night. Even if the morning is cold, leave your window up during the drill. It will make

you put some 'pep' in the exercises in order to keep warm.

"Women who have never tried calisthenics should begin with easy movements like the ones I am going to show you. And since fat always makes its appearance on the abdomen first, I think I had better show you the exercises I use to harden the abdominal muscles, and maybe one or two that keep the hips slender.

"You probably know them all, but maybe they will be new to some of your readers, although they are the same ones that I was taught years ago by my father and the instructor at the gym. I did not invent them.

"Mr. Wayne, do you suppose I can make your readers understand that it isn't the *hard* things that keep you in shape? Tell them for me that it is the *easy* things, but that they must be done regularly.

"Say that, when it comes to these exercises, 'five minutes a day keeps the fat

away,' or something similar to that.

"And try and make them see that if any one particular exercise makes them stiff and sore for a day or two, it means that that is the very exercise of all others that they need.

"I have heard my trainers talk often enough to realize that a muscle that is surrounded by fat tires very easily, because it has lost tone. And so if a woman is getting a large waist line she *can't* reduce by waving her arms about or by taking gentle strolls. She must go after the waist muscles, because the excess fat around the waist region simply can't exist against the attack of these bending exercises. As the muscle comes the fat goes. They need not be afraid of getting unsightly muscles. Even when I am in hard training I never show any muscles. My lines get better, that's all.

"Impress upon them that there is a difference between being slender and being thin. That is why I am not keen about diet. I think diet is a help, but



Fig. 2—Illustrating Exercise No. 2

that it doesn't work the same way as exercise. I have known girls to half starve themselves and, of course, they lost a lot of weight. But they got skinny, their collar-bones showed and their necks got stringy. Exercise reduces you, but it *rounds* you at the same time. My father, who is keen on exercise, rarely says anything about *diet*. When I was putting on weight last spring, he looked at me one day and said, 'Daughter, you must be getting lazy.' He knew that I needed more exercise rather than less food."

* * * *

The following is a description of the exercises which Miss Artelt practiced when she started to reduce her weight as described on page 23. As her muscles gained tone, she substituted the slightly more strenuous exercises which will be suggested in the two following articles by Miss Artelt.

First. She stood erect, as in Figure 1-A, with her arms stretched straight out in front of her. (This, by the way, is the regular diving position.) Without bending her arms or her legs, she leaned forward by bending at the waist, and touched the floor with the tips of her fingers, as in Figure 1-B. As Miss Artelt is at present in fine condition, this exercise was very easy for her. She is so limber that she can lean over and put the palms of her hands flat on the floor without bending the legs at the knees, but she said to touch with the finger tips is enough for the ordinary person, and that she repeated the exercise twelve times. When you perform this exercise you will find that as you bend over the muscles on the front of the abdomen contract, and



Fig. 4—Illustrating Exercise No. 4

this contraction helps to eliminate the excess fat. When you stand erect you call into play the muscles on the small of the back.

Second. She sat down on the floor and leaned forward and touched her toes as in Figure 2. The important thing in this exercise is to keep the legs straight; that is, you must not allow them to bend at the knees. This exercise is very similar to the first one, but it is less fatiguing and can be repeated two dozen times in succession.

In the *third* exercise Miss Artelt showed how to reduce the rolls of fat which accumulate on the sides of the waist and the upper part of the hips, by a movement which brings into play the muscles of the sides. She stood erect with her arms stretched out horizontally to the sides. She bent over to the left at the waist until she was in position of Figure 3. Then she bent her body to the right. Her legs did not sway sidewise. All the bending was done from the waist. It is

important to keep the arms in one straight line. Unless you are careful, you will find that you are moving your arms up and down, instead of holding them rigid and doing all the bending at the waist. This is the exercise that gymnasium instructors call the "walking beam."

In the *fourth* exercise Miss Artelt again stood erect with the arms held out sidewise and rotated the body to the left until she was in position Figure 4. Then she rotated in the opposite direction until the left hand was in front of her and the right hand behind her. This exercise, which is also an old favorite with gymnastic instructors, is extremely valuable, because it calls into play *all* the muscles of the waist region. When you first attempt this exercise you will find an almost irresistible impulse to allow the hips to

swing as the shoulders swing, but you must resist and hold the hips and legs firmly in one position and rotate the shoulders only. It is not enough to merely swing the arms. If you will look at Miss Artelt's picture you will see that the shoulders are actually at right angles to the hips. Remember the arms help to rotate the body, but they must be continually held in the same line because that makes the body twist on itself with the hips as a pivot. This exercise should be repeated at least fifteen times; that is, you should make fifteen swings in each direction.

Exercise five. Miss Artelt claims that this exercise is a wonder for reducing the size of the hips. She stood with the right hand resting on the back of a chair, swung her left leg high to the front, as in Figure 5. Then she swung it high to the rear and kept on doing it until she had made a dozen repetitions. Then she faced about and put the left hand on the chair and swung the right leg forward and backward. You must keep the leg straight as it swings upward, although you can allow it to bend a bit at the knee as you swing it backward. It is a good idea to breathe out as the leg goes forward and to breathe in as the leg goes backward.

Exercise six. This exercise looks very difficult, but Miss Artelt claims that it is very much easier than it seems. She stood between two chairs, rested her hands on the backs of the chairs, and raised her feet upward, as in position Figure 6. Then she lowered them and repeated the movement six times. I noticed that when Miss Artelt did this she rolled up a couple of handkerchiefs and held them in the palms of her hands so that the backs of the chairs would not bruise her hands. I do not know



Fig. 5—Illustrating Exercise No. 5

whether all of you will be able to repeat this exercise six times without stopping, so I recommend that after each time you raise the legs to right angles with the body and lower them again you stand between the chairs a moment and rest before you make the next attempt. If you can not raise the legs straight out, as Miss Artelt did, raise them as high as you can. I certainly advise using a handkerchief or other pad under the hands.

It is impossible to lay too much stress on Miss Artelt's statement that mild exercises performed daily are better for keeping one in condition than strenuous exercises performed only once or twice a week.

Miss Artelt owes her superb figure to the fact that she has exercised regularly all her life. I suppose you know that Miss Artelt is in the very front rank of women swimmers; she holds some of the world's records. In addition to being a swimmer she is a wonderful all-around athlete. In the standing broad jump she has a record of 8 feet, 1 inch. I wonder how many of the men who read this article can make as big a jump as that?

I believe that Miss Artelt could reach championship form in any sport or branch of athletics. It would be just as easy for her to make world's records in running, jumping or rowing as it was for her to make records in swimming. Her habit of exercise has given her a wonderfully proportioned body and perfect control of her muscles. She is physically



Fig. 6—Illustrating Exercise No. 6

equipped for any kind of sport or game.

Miss Artelt's next article will be "Sports and Exercises That Produce the Youthful Figure." Along with the article will be six more exercises and more pictures of Miss Artelt.

In the April number Miss Artelt will write on "All-Round Athletics and Their Effect on Health" and with that article we expect to show you some splendid pictures of Miss Artelt doing some fancy diving, as well as still more pictures showing the more strenuous exercises which she recommends to those girls and women who wish to acquire the strength of body and power of endurance which will enable them to take a winning part in competitive athletics.

Strengthening the Arches of the Feet by Exercise

By J. Leonard Mason

Mr. J. Leonard Mason, the author of the following article, is Assistant Physical Director at the University of Pennsylvania. As in all other large institutions, the Physical Department of this university is deeply concerned with the physical welfare of the students.

Exercise is compulsory, both on account of its value in maintaining health and because of its function in the elimination of bodily defects. Mr. Mason has long specialized on corrective work, and for this reason his article is based not on theory alone, but on his experience in helping hundreds of people to get rid of the painful affliction known as "fallen arches."

As this is a really helpful and instructive article, we have not attempted to introduce pictorial effect in the illustrations. The pictures are for one purpose only, and this is to act as a guide to those who wish to cure themselves of fallen arches.

MANY people suffer from weak arches of the feet, which is commonly known as "flat-foot or fallen arches." This is a handicap to the man in business or professional life, and to the woman in the home.

During the examination for military service in the World War a large number of men were rejected on account of flat-feet. Soldiers must have good sound feet to undergo long marches. Stout persons suffer most from this trouble, but those of less weight are by no means free from it. If one's occupation requires standing for long periods, the muscles of the feet and ankles become tired and relaxed causing the arches to flatten and the ankles to sag inward. At first there may be only a tired, uncomfortable sensation, but later this may develop into a really painful condition.

Artificial supports give but temporary relief and that, only, when being worn. The ultimate goal is to strengthen and tone up the parts affected so that the natural support will be regained. It is with this idea in mind that the several good foot and ankle exercises in this article are given. Many persons have been helped by faithfully



Fig. C



Fig. A



Fig. B

practicing them, and others can also get good results. In the more serious cases of fallen arches it is best to consult a physician who is familiar with the thorough treatment of such cases.

To better understand what occurs in flat-foot conditions let us consider the structure of this part of the foot. The small bones in the instep are held together by short strong tendons, ligaments and muscles. The bottom of the foot is, therefore, built up somewhat like an archer's bow. When the feet are in good condition these arches form a natural spring as the weight of the body rests upon them. But when these ligaments, tendons and muscles become stretched and lengthened, the arch flattens, the natural spring is lessened, and the feet become more or less painful. There is generally a falling or sagging of the whole inside region of the feet and ankles which is known as pronated feet.

Nature intended that we should never have any trouble with our feet, just as she intended that we should have no trouble with other parts of our anatomy.

But do we not transgress nature's laws daily? In our quest for money and power have we not gone far from the way nature intended us to live? Even those races who lived closest to nature may have had foot troubles just as we have. For example, the Indians wore moccasins and did not incase their feet in tight-fitting boots with high heels. Having no authoritative word at hand on the subject, we can only guess that even some of these children of the woods

had flat-feet, especially as they grew older and fatter. Perhaps fallen arches didn't bother them much; then, again, some of these fellows may have had pretty painful feet and wished for a cobbler to nail heels on their moccasins. At any rate, just because some other races wore sandals and moccasins this does not necessarily mean we should do so. Walking on hard pavements and solid floors is a different matter than treading the soft surface of the field and forest.

But the constant wearing of very high heels, as many women do, is quite liable to destroy the natural position of the feet. On the other hand, a young lady recently told me that after a summer spent almost wholly in low rubber soled shoes, her arches gave her considerable trouble. She began wearing her regular shoes with a "sensible heel" and the trouble disappeared. The "sensible heel" is neither too high nor too low and is familiar to nearly everybody. The occasional wearing of high-heeled shoes (which custom seems to require at social affairs) ought not to cause any great injury to the feet. Neither should the wearing of flat-soled shoes for sports and games cause lasting trouble. It is the going to extremes in the shoes we wear that will cause foot trouble; therefore, we should use good judgment in the selection and wearing of our shoes for everyday purposes. There are exceptions to all general rules, and while some people are fortunate enough to suffer no discomfort from excesses and irregularities in dress and action, others

very quickly feel the ill effects from these things. Adults, as well as children, should go barefoot some of the time during the summer months. It is impressing how tender we find our feet have become when we walk barefoot at the seashore or in the country. But soon we find ourselves walking around with ease and enjoying the freedom from conventional shoes. Rough roads, stubble fields and stony beaches should obviously be avoided. We soon learn to pick the smooth spots after a bump or two on a rough stone.

There is a well-known saying, "to effect a cure, remove the cause of the trouble." When possible this theory should be carried out. But it is not always convenient to do so. For instance, many people suffer from flat-feet due to having to stand for long periods without rest, as in the case of housewives, nurses, policemen, clerks and waiters. Standing is harder on the feet than walking and moving about. It is not usually an easy matter to change one's occupation, but one can form habits of standing and walking which will tend to strengthen the weak parts and give welcome relief.

A weak standing or walking position is when the toes are turned out to any marked degree, as shown in the illustration, Fig. A. A strong position is when

the toes are pointing straight ahead or perhaps just a very little outward, Fig. B. The weight of the body should be carried well on the balls of the feet and tend toward the outer borders of the feet rather than the inside. A little practice will make one accustomed to the strong position.

Stout persons naturally have more tendency to fallen arches than slender people, although the latter are not entirely free from this trouble. Stout persons should study their diet and exercise regularly, both for the sake of lessening the load on their feet, and for their general health and comfort.

Laziness may be responsible for some broken arches. The shambling flat-footed gait will in time have a bad effect. Contrast this with the springing step of the alert, active individual whose every movement seems alive with energy. Slothfulness begets physical ills, while action begets strength.

Get rid of any foot or ankle weakness before it reaches the serious stage. If there is any tendency to such weakness improve the walking and standing positions and practice the exercises as herein described. This will repay you many times over for the little time and slight inconvenience involved.

These methods have proved successful in many cases, but should the trouble be

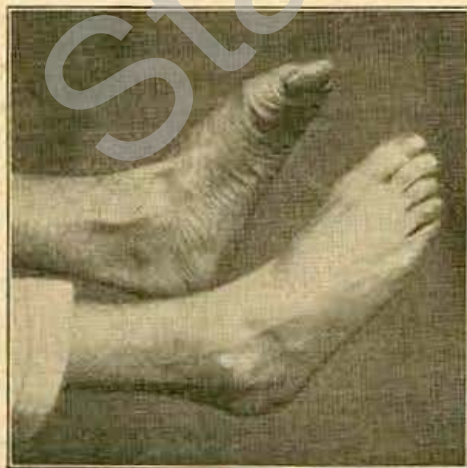


Fig. 1



Fig. 2



Fig. 3



Fig. 4

of such a serious nature that these simple measures fail to give relief then a more thorough treatment by orthopedic methods is necessary.

It is hoped, however, that these exercises will be sufficient in aiding some readers of this article to strengthen their arches and to gain good, sound, dependable feet.

TREATMENT

For tired, aching feet, first bathe them in hot and cold water alternately. The hot water relaxes all parts and has a soothing effect on the nerve centers. The cold water gives a contrasting reaction which has a tonic effect. If it is not convenient to use foot tubs, use large towels. Soak the towels in hot and cold water and wrap them around the feet and ankles. Next give the feet a thorough massage, using the thumb and finger ends, Fig. C. Begin at the toes and work up toward the ankle along the bottom and inside border of the feet. This accelerates the blood circulation. Follow this with the exercises. Avoid standing on cold floors in bare feet. The exercises may be done on a rug or carpet in bare feet or with stockings on, or in soft-soled slippers.

EXERCISE I. Sit on bed or table with feet extending beyond the edge in order to give them free movement. First extend the feet, pointing the toes, then turn the bottoms of the feet inward and draw them up in the position shown in Fig. 1. Straighten the foot and con-

tinue as before. This involves a rotary motion and by practicing this movement a strong contraction of the inside foot muscles will be acquired. Repeat fifty times.

EXERCISE II. Stand with the toes of both feet together, heels apart, Fig. 2; rise on the toes carrying the weight to the outer sides of the feet. Repeat fifty times.

EXERCISE III. Stand with weight resting on outsides of foot, Fig. 3, keeping feet parallel; while in this position walk fifty steps.

EXERCISE IV. Walk, keeping the weight entirely on the balls of the feet and extending each foot well as it is placed on the ground, Fig. 4. This walking exercise can be practiced any time, anywhere, whenever you feel you will not make yourself conspicuous by it.

Reverse this exercise by walking backward in the same way, Fig. 5. Take fifty steps at a time.

NOTE: The number of times each exercise should be done and the number of steps to take will depend upon the condition of the feet. If the feet are quite weak begin with only half the number of counts each day for a few days then gradually increase the amount of exercise to what you feel you can best stand. Exercise enough, but in your enthusiasm do not overwork these small muscles. Let your judgment guide you in this and only good results will follow.



GEO. F. JOWETT. The breadth of this back helps you understand why his normal chest measures $45\frac{1}{2}$ inches.

THE SCIENCE OF STRENGTH

and Its Chief Exponent

Mr. George F. Jowett

Here is an article about the man who helped many of you to improve your lifting records. Mr. Jowett is unquestionably the most scientific lifter in America, as well as being the most powerfully-built man of his height in the world.

We are fortunate in being able to introduce to you a man whose example has started so many men in the pursuit of bodily strength, and whose precepts have done so much to elevate the sport of lifting.

By Alan Calvert

I TAKE particular pleasure in introducing you to Mr. George F. Jowett, lifter extraordinary. Most of you will remember the articles by Mr. Jowett which have appeared in the pages of *Strength*. No more valuable advice to lifters was ever given than in Mr. Jowett's article on "The Conservation of Energy".

Mr. Jowett is a rare example of the preacher who practices what he preaches. He can not only write entertainingly and instructively about the science of lifting and the way to acquire muscular development, but he can also demonstrate to you the lifting methods he describes. In addition, the fact that he has developed a most remarkable body lends authority to his teachings in regard to the acquisition of muscle.

Mr. Jowett is a life-long physical culturist. His wonderful development and strength were not acquired in a few months training, but are the result of many years persistent activity in all lines of athletics. He is of an inquiring frame of mind. His career has brought him into personal contact with most of the great strong men and athletes of the present time. He has never missed an opportunity of adding to his store of helpful information. He is not one of

these "know-it-all" people and is always willing and anxious to learn the experience of other stars in order to still further increase his own fund of knowledge.

Mr. Jowett was born in England and moved to Canada at the close of the Great War. He took up athletics at a very early age. First he went in for wrestling and was a devoted disciple of the famous George Hackenschmidt, then the idol of European wrestlers. Hackenschmidt, as most of you know, was a man of immensely powerful physique. He stood about five feet nine inches, and Mr. Jowett stands but five feet five inches in height; but the outlines of their figures were so similar, and they were so constantly in each other's company that they became known as "Hack" and "Little Hack". In fact, Mr. Jowett adopted the nick-name and wrestled for several years under the name of "Little Hackenschmidt".

Like almost all wrestlers, Jowett became interested in lifting and in this he had the enthusiastic co-operation of Hackenschmidt, who himself was one of the greatest lifters of all time. More of that later.

Now, if you permit, I will digress for a while and tell you something about the respective lifting methods in England

and in this country. In England, the terms "physical culturist" and "weight-lifter" mean almost the same thing. Practically every Englishman who goes in for bodily exercise, devotes a certain amount of time to training with bar-bells and dumbbells. Therefore, they have thousands of well-trained lifters. As the distances in England are comparatively small, there is a great opportunity for lifting competitions. In all the English sporting magazines you continually see reference to a lifting match or a lifting tournament which took place in London, or in some smaller city. It appears that lifting matches are almost as common with them as basket-ball games are with us.

When an Englishman trains he always

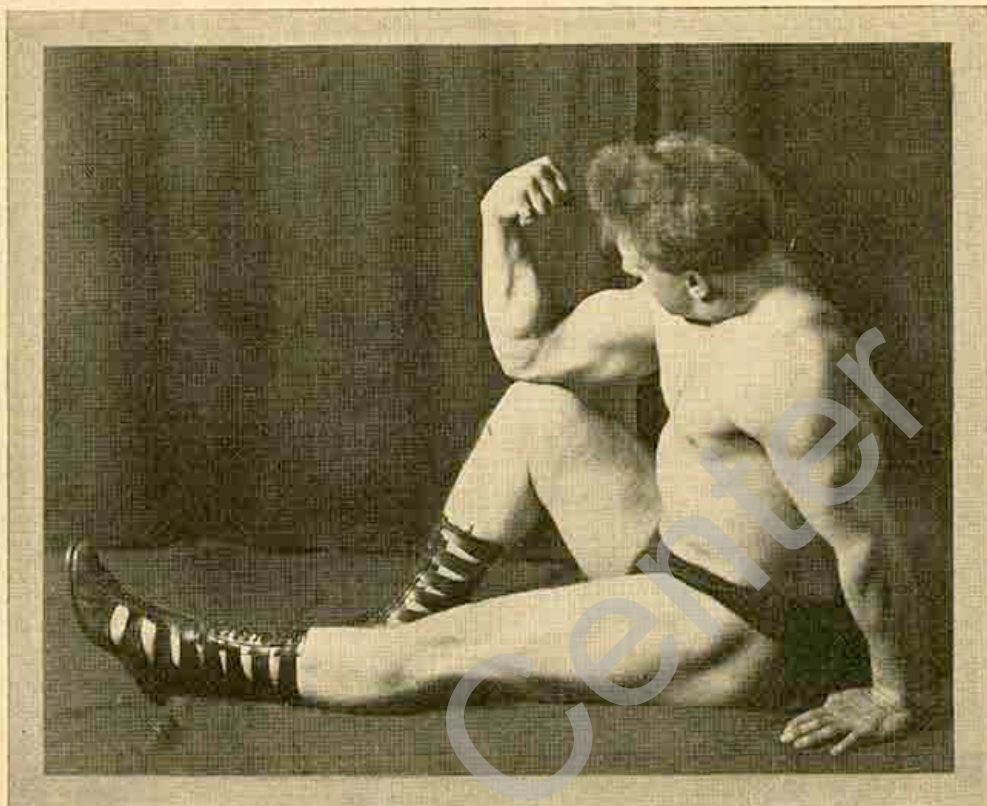
has in view, either some future competition, or else an attack upon the existing records. Therefore, an Englishman devotes a great part of his time to the study of the *science* of lifting. He learns the best methods; he studies the technique of each and every lift, and devotes his time to acquiring the art of elevating the heaviest possible weights.

This fact has always impressed itself upon me. In the articles in the English magazines more space is devoted to the records made than to the development acquired by their lifters. In this country we have worked along different lines. Bar-bells have been used as a means of acquiring strength and building up the body, rather than for the creation of records. Understand we have quite a number of record-holders, but their records have been made incidentally. By this I mean that where the Englishman's whole training is directed to the making of records, the American's training is aimed more at body-building. I do not mean to criticise the English method. They have developed many wonderfully built athletes, and their lifters *as a class* are unquestionably more skillful than the lifters of any other country. They absolutely have lifting down to a fine art.

My experience has been, that it is sometimes a mistake to plunge too quickly into record-lifting. I have always believed that a man should spend several months practicing exercises with bar-bells before even attempting the standard lifts. I have found that when a man starts actual lifting too early in the game, his muscles tend to become hard, and that this in some mysterious way prevents them from obtain-



GEO. F. JOWETT. This picture gives you a good idea of the arm and leg muscles that have made lifting history.



GEO. F. JOWETT. A companion piece to Hackenschmidt's famous pose in this same attitude.

ing the maximum size and strength. Suppose, for example, that a man weighing 140 pounds should start in at the record-making program. His constant lifting would bring a certain development to the muscles and would tend to "shape" them. The acquisition of strength would be very rapid, but growth would stop in a comparatively short time. In a few months the lifter would have increased say to 155 pounds, and would be tremendously strong for that weight, but the trouble is that he would never get much above 155 pounds and would be barred from competing with bigger and heavier men. If the same man had spent his first year with bar-bells at body-building work, pure and simple, he could have probably increased his bodily frame-work and his muscular development to such an extent that he would

weigh 175 or 180 pounds, and if he then took up record-making work, he would rise to much greater heights than he would at the weight of 155 pounds.

Having gotten that off my chest, I will return to the case of Mr. Jowett. You might think that, as I am writing about a graduate of the English school of lifting, I might be more tender of Mr. Jowett's feelings. I have no hesitancy in expressing myself because I consider that Mr. Jowett is one of the great exceptions to the rule. His program has always called for strength and development primarily, and lifting records only secondarily. All his life he has been practicing developing exercises. His work and his exercise have alike been of the most strenuous character. He has a positive fondness for forms of exercise that make him exert his full powers.

For example, his neck measures a clean $18\frac{3}{4}$ inches, which is something extraordinary for a man his height. I once asked him if he hadn't spent a lot of time specializing on lifting bar-bells in the wrestler's bridge position. He replied that he had, and also that he had done a lot of neck work in connection with his wrestling, but that his neck started

to develop when he was quite a young boy. He lived for a while in one of the East coast towns in England, and for a while worked on a fishing boat. When the boats returned after a successful trip the fish were thrown in big baskets. The sailors jumped over the rail into shallow water, balanced the baskets on their heads, and waded ashore.

Mr. Jowett said that he did so much of this work as a boy that he easily developed a tremendous neck, and that even today when he has to carry a very heavy weight he always balances it on his head instead of resting it on his shoulders; and that it is no trick at all for him to walk with 400 pounds balanced on his head.

In our *December* issue we had an article on the development of the lower leg, and its author, Mr. Ralph Hale, mentioned that Englishmen had very fine calves, owing to the fact that they walked in a certain manner. After that issue appeared, I got a letter from Mr. Jowett stating that Mr. Hale did not go quite far enough. Here is what he said. "Englishmen generally have good legs, but you know their great pastime is walking, and they think no more of walking twelve miles for a stroll than Americans do of motoring the same distance. When I was a boy my place of employment was seven miles from home, and I walked both ways every day, reporting at 6 A. M. and quitting at 6 P. M. Some times I *ran it* for a change. My calves measure $15\frac{1}{2}$ inches, which is far above the average for a man of five feet five inches."

After Mr. Jowett had been wrestling for a couple of years he was so unfortunate as to break his knee, so he had to retire from that game, and there-



GEO. F. JOWETT. Another back view that shows his great breadth of shoulder. Literally the man is almost as broad as he is long.

after devoted most of his time to lifting. He had already trained for several years with bar-bells, and had reached the weight of 140 pounds, and had acquired a tremendous development; and I believe that the time he spent at wrestling, walking, swimming, jumping and using bar-bells for *development* purposes, was the very best preparation he could possibly have had for his career as a record breaking lifter.

As soon as he devoted his attention to the mastery of the art of lifting, he commenced to make a place for himself in the lifting world. Although he weighed but 140 pounds, he succeeded in making a one arm bent-press with a bar-bell weighing 224 pounds. After he had been lifting for a while his weight increased to 154 pounds, and at that weight he made the following remarkable records. His official record in the one-arm bent-press is 256 pounds; that is 102 pounds in excess of his own body weight, and once he got 280 pounds to arms length, but could not stand erect with it. Even more remarkable than this is his two-arm military-press of 230 pounds. That lift is the greatest test of pure strength, because the lifter must stand absolutely erect and elevate the bell solely by the strength of his arms and shoulders. In the two-arm-jerk he has lifted 210 pounds; in the one-arm-jerk he has raised 200 pounds overhead.

HERE IS WHAT MR. JOWETT SAYS ABOUT HIS OWN PERFORMANCE

"At one time I was on the staff of some of the best boxers in the world



GEO. F. JOWETT. Showing his breadth of chest and a pair of forearms bigger around than an ordinary man's neck.

of fifteen years ago, as clinch worker. I had some ability as a boxer, and often boxed with them. In fact they were more interested in me for my boxing merit, as I could take all they had, and was quick enough, and they often begged of me to quit the wrestling and lifting and box. I did accept an offer once just to please them, and boxed a draw with one of the best Northern welters of that time, but I never liked the looks of broken noses, split lips, and those cauliflower ears, and did no more.

"Perhaps the greatest asset of my strength laid in its ability to apply itself to any demand of the moment, which often killed the knockers who claimed that scientific strength could only be applied on bar-bells.

(Continued on page 64)



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MISS MARY GARDEN, whose activities as singer, actress and Director of Opera are a striking proof of Mr. Hale's claim that these deep-lunged singers are possessed of super-energy.

Singing as an Aid to Chest Development

By Ralph Hale

We have received many letters from our readers asking us to run an article about our great singers.

Mr. Hale has consented to write us a two-part article on this subject, and in this issue he tells us about the wonderful development of these singers.

The second section of this article will appear in the March number of STRENGTH and in it Mr. Hale will describe, in detail, the exercises practiced by singers as a means of developing lung power.

We hope the readers will find this article as interesting and helpful as they have found Mr. Hale's previous articles.

THE day after M. Clemenceau attended the opera in New York, Mr. Krehbiel, the musical critic, wrote as follows in the New York Tribune:

"When Mr. Chaliapin was here in 1907 he bared his breast and arms with decorum in the presence of Maestro divino, but in the company of his filthy subjects on the Brocken he cast off his cloak and bared his body to the rump. A superb body, of course, like that of an ancient gladiator, who would have challenged wagers of thousands of sesterces from the curly-locked young bloods of Rome. Yesterday he went only half way, but made a splendid spectacle on which the grand old fighting man of France (who saw him from Mr. Gatti's box) must have smiled in admiration. Picturesque, splendidly picturesque, but dramatic. Was it in keeping with Boito's poetic and philosophical scheme? Why trouble to answer? It evoked a hurricane of enthusiasm. Therefore it served."

Chaliapin is at present the dominant voice and personality in the world of grand-opera. A perfect giant of a man! whose fine acting and magnificent stage-presence are as compelling as his glorious voice.

Mr. Krehbiel mentions his "superb body—like that of an ancient gladiator." We subscribe to that, but would have

been surprised, if, being a great singer, he did not have a superb body.

Singers as a class are better-built and more vigorous than the average, and great singers possess many times the vitality of the average run of folk.

Think it over. Most of you have heard these operatic stars, and many of you have seen them across the footlights. Can you recall one among them who was wry-necked, or round-shouldered, or flat-chested? If so, which one?

If you are not an opera-goer, look over a few copies of any musical magazine (or better still, run over a few pages of the Victor monthly catalogue) and pick me out one singer, great or small, whose personal appearance suggests anything like physical or constitutional weakness.

Your search will be fruitless. What you will find is pictures of a lot of superbly vital men and women. All of them obviously have erect figures. Their necks are rounded, their chests large and capacious, their backs are straight and flat. You may find some who look slender, but on closer examination, you will find that though built on slender lines their bodies and limbs are singularly well-rounded. This applies especially to the great women singers; I might almost say to all women singers. For you never find that the possessor of a good, big soprano or contralto voice

has bony shoulders or a scrawny neck and arms. These ladies have no worry about wearing evening gowns. They look their best dressed that way, and, bless you! they know it.

Almost the funniest thing in all grand opera is the last act of "Traviata." The heroine is supposed to be dying of consumption, and it is hard for the audience to feel really sympathetic, for they fail to connect their idea of tuberculosis with the deep-bosomed, ivory-shouldered, round-armed soprano who is trying vainly to camouflage her glowing health.

I believe I could write a book about singers I have seen and singers I have known, and fill it with stories of their unusual physical strength and vigor.

Chaliapin is not the only one, great as he is. I recall Tamagno, the great Italian tenor before Caruso. A huge man, Tamagno, with a voice like a silver trumpet; a voice that rang out over the loudest chorus and orchestra. He could have qualified as guard on any football team, and it is said that he could break iron horse shoes with his bare hands.

I remember

Victor Maurel, baritone and actor extraordinary, and the darling of the French opera-goers. Tall, handsome and statuesquely formed, and no more proud of his voice than of his fame as one of the best fencers and the best hammer thrower in France.

And the De Reszke brothers! Jean the tenor, was a supreme artist, but his face and figure counted as much as his singing in making him the most admired man in the New York of his day. Edouard, the basso, was another physical giant, with the build of a Hercules and a voice whose deepest notes made the building shake.

Their day has gone. There were giants in those days. But the world goes on, for there are giants in these days also. I might tell you that a generation ago the Metropolitan had four leading sopranos: Melba, Calve, Eames and Nordica, all of whom were statuesquely built; and you could counter by asking if they were any more beautifully made than Jeritza, Farrar, Garden and Raisi. Singers come and singers go, but what remains is the fact that



© Keystone View
The late ENRICO CARUSO, owner of the "Golden Voice."
A man of powerful physique and titanic energy. Supreme lung power was the basis of his inexhaustible working powers.

almost all great singers are wonderful physical specimens and that they all have a sort of super-vitality.

LUNG POWER

If there is one thing that all singers have in common it is high-power, high-quality lungs. Unusual lung power has several invariable accompanying features. *First:* A large chest. *Second:* Great flexibility of the rib-box. *Third:* Complete control of the diaphragm.

There are some singers (not among the great ones) who have neither large chests nor great lung power. Such individuals may have a sweet voice, but it is invariably a thin voice or a small voice.

Funny thing—this lung-power! It seems to be pretty well established that anyone who is so fortunate as to be possessed of large, high-quality lungs has a great advantage over the rest of humanity. The big-lunged man seems to have more strength, greater endurance, and vastly more *vital force* than his small-lunged brother. The woman with high-quality lungs seems to have a greater amount of feminine charm. And the great-lunged of both sexes undoubtedly have a sort of compelling personal magnetism, *plus the power of accomplishment*. I have often wondered whether this high degree of lung power was an inborn quality or an acquired possession.

WHAT EVERYONE BELIEVES

The possessor of a "great" voice is a highly-favored individual. He, or she, occupies a class apart, and a highly distinguished class at that, for there is no other purely physical gift that brings equal fame.

We envy the owner of the voice; not merely for his power of making song but because we, *all of us*, have an instinctive feeling that the marvelous voice is a sign of life force; just for example, as we believe that absolutely sound teeth and very thick hair are similar signs of vigor.

Naturally there is a reason for the



© Keystone View
FEODOR CHALIAPIN, the colossus of the Operatic World. So fascinating is his act, his voice and his personality that the Opera Company gladly pays him \$4,000 a performance.

belief. The voice perfects itself as its owner reaches maturity, and the voice deteriorates, or fails entirely, as its owner passes middle age or suffers any sharp decline in vital power. Further, we are confirmed in this belief by the fact that the singing voice disappears just as soon as its owner gets to the point where his hair begins to fall, and his teeth decay or drop out. That is one of the things we all know instinctively, even though we do not put it in as bald words as these.

VITALITY—CAUSE OR EFFECT—VOICE

Philosophers have argued as to which came first, the hen or the egg. It is still undecided.

Now, can *you* answer me these questions?

1. Is the great voice merely the accompaniment and sign of great natural vital force; or can such vitality be cultivated, with a fine voice as the result?

2. Is the highly unusual lung-power a natural gift (just as is unusual height, or curly hair) or can such lung-power be acquired through cultivation?

3. Will improvement in the quality of the voice follow an *increase* in vital-

ity, just as surely as the voice deteriorates with a *decrease* in vitality?

or

4. To put it plainly, is a singer born or can he be made?

Can I answer them myself? I wish I could! I have my own *opinions*, based on random observations and deductions, and if you don't mind I will pass them on to you. It is not that I know more, but by virtue of my occupation I may have *heard* more than you have.

Others besides singers have great lungs. I do not wish to imply that everyone with this unique lung-power is bound to have a musical voice, although such persons usually have voices of tremendous volume and fine quality.

It takes more than mere voice to make a singer; one must also have what is called "a musical ear."

You doubtless remember how DuMaurier dealt with that feature in his novel "Trilby." She, as you may recall, had a big voice and absolutely perfect vocal organs, but as she was equally absolutely tone deaf, her attempts at singing were ludicrous.

In the conclusion of the story, DuMaurier made her the world's greatest vocalist through the medium of being hypnotized by the arch-villain, who happened to be also an arch-musician. In other words the musician simply supplied musical sense to one having the right kind of lungs and throat.

That is all very fanciful, and not to be taken seriously, and I mention it merely as corroboration of my statement that fine voices do not always make fine singers.

I happen to know three individuals (two men and one woman) who have what I call super-vitality, and the voice



© Keystone View
TITTA RUFFO, in company with Mme. Walton-Mouvet, the well noted French dancer. A pose which shows the perfect poise and buoyant carriage so characteristic of all the great singers.

that goes with it. Each one of them is a physical marvel; each of them has a wonderfully strong, wonderfully clear and wonderfully vibrant voice. But none of them can sing; all tones are alike to them. I know two other men who have the same bodily characteristics *plus* the musical sense, and if necessity demanded they could make fortunes on the operatic stage, but they prefer finance and business, in which they are pre-eminently successful. That is the trouble with some of these gifted people; they cannot explain how they "get that way," nor do they care to exploit their own gifts.

For instance, take the case of the late Tommaso Salvini, the Italian tragedian, and conceded to be among the dozen greatest actors of all time. In his autobiography Salvini says that as a young man he hesitated in his choice of a profession. Some of the greatest singers of the day urged him to join the operatic forces, and a circus manager wanted to hire him as a professional strong man; but he finally decided to be an actor. Undoubtedly he would have been a success whichever career he had chosen. He had all the gifts. No one who ever saw him act will ever forget his sonorous voice and Herculean physique.

Salvini is not a solitary example. Sometimes I feel that the so called "artistic temperament" is a physical rather than a mental manifestation. I mean that the temperament goes with a



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MISS MARIE JERITZA, the Viennese Prima Donna, whose beauty of voice, face and figure has taken New York by storm.

certain type of body and that type has the physical gifts; the thick hair, the white teeth, the beauty of face and form and voice, the manual dexterity, the muscular strength and the sense of rhythm. How else can you explain the fact that so many singers could have been equally good painters (Lucien Muratore, for example) or that so many painters have such wonderful singing voices, or why so many of painters, sculptors, singers, pianists and violinists are so amazingly strong. Josef Hofman and Martinus Sieveking, the pianists, would make star "strong men" and Ole Bull, the great violinist, could grab a big man by the neck and knees and "muscle him out."

I once had a friend who was a music lover and who collected the autographs of the great artists. I remember a card he got from Nellie Melba, who wrote over her signature the words "A beautiful voice is the gift of God."

That's that! Seems to leave the rest of us ungifted people rather flat, doesn't it? Sort of goes along with the story

that Galli-Curci never had to be taught to sing; that from her very first attempt all runs, "trills," cadenza and vocal ornamentation were as easy for her as singing a scale is for the ordinary musician.

Most singers, however, have to be taught. Any of you who are interested in singing know that there are few apprenticeships as long or as arduous as that of an opera singer. Not only are they taught the musical part, the interpretative part of their profession, but also they are taught the physical part. Else why do we hear of voice-production, voice-culture and breath-control? There are specialists in all those branches, for it is a complicated thing, this art of singing.

There are famous teachers who specialize on the placing of the voice, and others who specialize on building up the upper, middle or lower registers of the voice, and these teachers are unquestionably successful in building up and improving the quality of the voice itself.

So you see there are many sides to a great singer's training. He must study music, he must practice vocal exercises to render his voice flexible, and as he progresses he must have special coaching in the interpretative side of his art, and always he *must* be the absolute master of his breathing.

When you listen to a really great singer it never seems that he (or she) has any trouble about breathing. The pauses, trills, runs and sustained notes are produced without a hitch and without apparent effort. The trained singer has such extraordinary lung capacity, and such absolutely perfect control of his breathing, that he is able to subordinate it to the niceties



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CHARLES DALMORAS, the great French tenor, who according to Mr. Hale, has almost perfect chest and shoulder development.

of phrasing, the "painting" of sustained notes, or the other necessities of the instant.

I believe it is an accepted fact that the quality of the voice *does* improve as the singer develops lung power and consequent mastery of breathing.

That can be explained in more than one way. In order to produce a perfectly even sustained tone, which involves a continuous exhalation, the singer must have perfect control of the diaphragm. Singers continually practice diaphragmatic (or abdominal) breathing, and by persistent exercise gain such control of the diaphragm that they can quickly depress it and as quickly fill the lungs with air; or gradually raise it as they emit a sustained note or a long-continued phrase.

The constant use of any muscle will cause it to increase in power, but the same use of the diaphragm does more than that for these singers; because it definitely increases the lung capacity.

In addition to abdominal breathing, singers necessarily have to include the costal (or upper chest) breathing, which in turn means more lung room.

Among physical directors it is axiomatic that lung capacity means vigor. The person with a big, roomy chest-box, with flexible walls, uses *all* his lungs. His blood is better oxygenized, his heart has more room to work and his muscular power is, like his lung power, far above the average.

For singing, and even talking, is



© Keystone View
MISS GERALDINE FARRAR, a Prima Donna in both the operatic and the movie world. Noted for her personal beauty, her artistry and her immense capacity for hard work.

exercise. If you doubt this, just sing vigorously, or talk vigorously, for half an hour at a stretch, and notice how when you are through, your whole body is in a glow.

That is because your lungs have been working freely, and the circulation of the blood has been accelerated, with the consequence that every part of the body has felt the beneficial effect.

I have sometimes wondered if the extraordinary physical vigor and muscular strength of the great singers is not due to the fact that they get all the benefits of muscular exercise without the fatigue consequent upon vigorous muscular

(Continued on page 74)

Lengthening Our Lifetime

By Bertha Hasbrook

LET'S look at it in this way: Suppose that, upon entering this world in the stork's bill, every normal baby finds a sum of about 150 years of life credited to his account in the National Bank of Health. It is his absolutely, without any strings attached; his to do with as he likes, to save or to waste, to use to the best advantage or the worst. He can squander it in riotous living, or he can use it wisely, drawing only the interest, and possibly making it grow. It might even be considerably extended—but only by the wisest handling of the principal. Think of it—more than 150 years of lifetime! To motor in and dance in and go to the theater in and eat turkey dinners in! Don't be a cynic, and add, "To mow the lawn in, and sweep rooms in, and drudge over an office desk in, and *cook* turkey dinners in!" Because, if you properly use this bank account, life will be not only longer but jollier! Now then, what's the idea?

It's not the idea of any idle dreamer, I would have you know, but a thoroughly scientific theory to which many physicians and other scientists have of late been giving grave attention. It is the idea that we, as members of the human race, are permitting our lives to be

clipped off altogether too soon. The Biblical conception of "three-score-and-ten years" is a tradition, and nothing more. But man has allowed himself to become the slave of that tradition. From the time he can walk and talk he begins to sense the vague conception of a limited span; and by the time he knows anything

about death, he is discovering that grandparents live to be somewhere around seventy years old and then they don't live much longer unless they are remarkably "smart," and everybody seems to expect them to drop off at almost any minute after that age is reached. The world has formed a picture of a seventy- or eighty-year span, has held it firmly and lived up to it. Why not alter the picture?

Science shows us that we have every right to do so. In fact, our conception of so short a lifetime is absurd, compared with the lifetime of the other animals. Their lifetime has been found to be in proportion to the time it takes the osseous (bony) structure of the body to solidify; four or five times that period represents the span of life. Thus, it takes the bony structure of man about 25 or 30 years to reach its complete solidification; by computation, his life-span should be from 100 to 150 years.

LIVE TO BE 150!

Science shows that unless we were living under wrong physical conditions we would have a longer span of life. Miss Hasbrook's rules for long life, in brief, are:

1. Eat good food, properly prepared and with menu properly balanced.
2. Linger over your food: Never "bolt a meal." Masticate properly, eat with moderation, and chat while eating.
3. Sleep in a dark, cool, thoroughly ventilated room. Allow plenty of time for sleep.
4. Bathe daily. Brush the teeth twice a day, wash the hands frequently and always before eating—in short, be scrupulously clean.
5. Spend a reasonable time each day out-of-doors, and never let a day pass without such physical exercise as results in perspiration.
6. Provide yourself with recreation—games, music, pleasant reading and conversation—what you will; but never fail to play!

But even this would represent only a beginning. For this period would compare with that of the animals which submit to the laws of Nature without improving them. They creep or fly, live or die, as Nature happens to see fit. Whereas Man worked himself up from a creeping posture to an erect, then built himself wings and took to flying. Why, therefore, shouldn't he use his intelligence to build himself an even longer life-span than Nature, unassisted, would dole out to him? So that, in the end, the 150 years originally designed would look no more than a childhood?

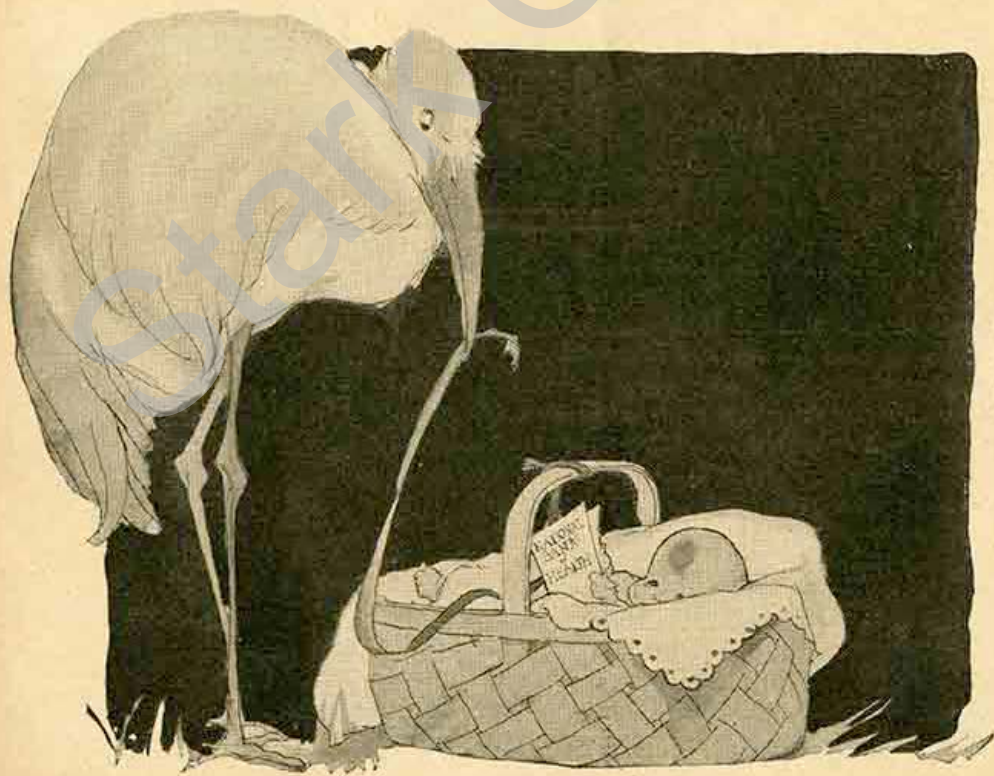
But this is speculation—even though it's fairly sound speculation and endorsed by some men of science. It's for you and me to get down to brass tacks, and this much we do know: that the length of human life can be and should be made much greater than it is today, and that already improvement is shown by a good many statistics, and that it is up to every one of us to take hold of those statistics

and shove them along. Every normal child born among us has a birthright of a great many more years than we have realized. The trouble is that we have been letting our children (and grown-ups) lop off years from their credit, and often so early in life that the account in the Bank of Health is alarmingly reduced almost at the outset.

Some of the most interesting studies of longevity have been put forth by Prof. Irving Fisher of Yale University, and Dr. Eugene Lyman Fisk. Dr. Fisk makes this arresting statement:

"Youth, actually, is not a function of time, but a physical state."

Think of all that statement implies! That, in a certain sense, youth and age have no more to do with the calendar than have measles and health. You may have measles, or you may have perfect health—it doesn't matter how old the family Bible or your mother says you are. You may have age or you may have youth—these are states of being, not



measures of time. We have grown so accustomed to associating limber bodies and lively minds with the earlier years of life; and stiff joints and rigid ideas with the latter, that we can't break loose from our preconceived notion all at once. But, as a matter of fact, you—as an individual—may be either young or old, largely as you determine to be, without regard to the years already spent by you upon this round, green apple.

If we can once get the idea firmly implanted that we have a normal right to, say, a century and a half of life, we shall at once begin to move along our youth to correspond. If you could know positively that you were to have 150 years to the full, you (supposing you are seventy) would begin to think, "Dear me, I'm not half through yet. I'm really only at middle age. I'm only just prepared for life. I must take up work in earnest, and make a great success of my profession!"

Immediately your entire mental attitude would change. It would be like finding, all of a sudden, that you were living in a large house instead of a tiny apartment, and you have all the room you want to move about in. You will draw a long breath of relief, and prepare to settle down comfortably and enjoy yourself as you have never hoped to do.

Now this change of the mental picture of our lifetime is a perfectly reasonable change to expect, on the basis of the osseous structure principle; but, as usual, there's an "if." And that "if" is the one that confronts us when we consider the agreeable prospect of moving into this larger house of life. "If" we have hoarded that bank account of health! If we have conserved it to the full, never spending a cent beyond our income—never over-drawing a dollar's worth of nervous energy or wasting a bit of principal in dissipation, or neglect of symptoms. "If" we have treasured that bank account of health, in short, to the utmost, have kept it under ideal conditions—and not one among us has. We have all over-

spent. We shall none of us, here today, see the full of our 150 years. But what about the coming generations?

Unless we were living under wrong physical conditions we should have a much longer life-span, science is agreed. Many experiments have been made upon organisms of a lower order, and it has been found that life can be greatly prolonged in these by giving the organism conditions highly conducive to greater length of life.

The tadpole was put under scientific experiment. It was found that its length of life was greatly affected by feeding it thyroid extract. Here was a substance, then, that did far more than affect a living creature's health; it actually changed the life-span. If something can so affect a tadpole, why should not something affect man in the same way?

The unfertilized eggs of the sea-urchin and of the star fish have usually been short-lived. The supply of oxygen was reduced, and the life decidedly lengthened.

The scientist Carrel experimented on the cells of the chicken embryo. He found that for many years he could keep these cells alive, and how? Simply by nourishing them properly, and *protecting them from the damaging influences that tend to shorten life.*

Ah! There's where the trick lies! Not in any magic potion, any elixir of life—neither in a mythical Fountain of Youth, nor in sour milk—but in constant protection from those forces that cause our once-normal bodies to degenerate before their time! Eternal vigilance is the price not only of liberty but of long life. A vigilance that warns on the instant of the slightest approach of danger—is a lung a bit troublesome? Is there a hint of a heart murmur? Is there a suspicious tooth left neglected? These are some of the damaging influences that will rob us in the end—if we let them.

Of course, it isn't possible, all in the twinkling of an eye, or even in the twinkling of a generation, to re-make what



150 years would look no more than a childhood

centuries have been at work making. We can't, as a race, expect to alter our life-span to any great extent for a long time. But the sooner we are about our task the better, and perhaps we shall be surprised at how rapidly a change will show. Already the enhancement of the public health conscience is showing results.

The New York State Charities' Aid Association recently issued statistics showing that the average individual is stronger and lives longer than formerly. The estimate for the United States as a whole is that four years have been added to the life of the average citizen during the last eleven years. In Massachusetts, where statistics have been kept for over 100 years, it is now known that the "expectation of life" has increased from 35.5 years in 1789 to 55.2 years in 1921.

These figures show a decrease of pre-

mature death; the same results might conceivably be obtainable even though no man lived a day beyond the traditional three-score and ten. But they are full of encouragement, for the reason that they demonstrate that, by persistent effort, we are able profoundly to alter the so-called "natural" order of things to which we have been slaves—so greatly to improve the average human's health that it follows logically that we can likewise increase his maximum period of enjoying it.

What Carrel did with the chicken embryo, Loeb and others have done with the fruit fly—that is, by giving the creature an ideal environment, its life-span was prolonged to such an extent as to seem almost indefinite. In fact, it was increased by 900 per cent! I'm afraid very few of us would feel prepared at

present to accept a gift of 900 per cent additional years of life, if any scientist-magician could hand such a gift to us! We aren't ready for quite such an opportunity of achieving fame and fortune. But there's no fear of a sudden surplus; it may be fairly easy to lower the temperature in which the fruit fly is kept, and so slow down the chemical reactions of its body, but it's far from being as simple an affair to arrange matters ideally for the preservation of human life.

There's the difficulty. You can compel the fruit fly, the tadpole, the sea-urchin egg or the chicken embryo to remain under ideal conditions; but it's another matter to keep the busy, bustling, impatient, petulant, reckless, spendthrift human being under such a regimen. And until everyone of us learns to meet this demand, we shall keep on robbing our health bank account and digging our own graves—not alone with our teeth, as the quotation goes, but with every sort of carelessness and self-destruction.

Dr. Fisk, in making a list of the destructive influences that tend to shorten human life, calls attention to the fact that not one of them is *time*. We are used to associating them with time, as their cumulative effect shows more and more as life goes on, and finally reaches a climax in death. But this is not because of the action of years. If we could do away with the influences, the years would play no part in our lives. Merely of themselves, the years do not destroy us.

"How to Live to be a Hundred," was the title of a pithy little talk given recently by Dr. Royal S. Copeland, Health Commissioner of New York City. In it he quoted the old philosopher's saying, "Man does not die, he kills himself." And he added the remark of a well-known modern physician, who observed, "I know how to live to be a hundred, but I am not living that sort of a life."

"Both these philosophers were stating the same truth," said Dr. Copeland, "for surely the second man, if he knows how

to live to be a hundred, is killing himself if he does not apply his knowledge to his own salvation."

Dr. Copeland believes that the majority of chronic diseases may be traced to wrong eating. The basic rules for long living may, in brief, be stated as follows:

Eat good food, properly prepared and with menu properly balanced.

Linger over your food; never "bolt a meal." Masticate properly, eat with moderation, and chat while eating.

Sleep in a dark, cool, thoroughly-ventilated room. Allow plenty of time for sleep.

Bathe daily. Brush the teeth twice a day, wash the hands frequently, and always before eating—in short, be scrupulously clean.

Spend a reasonable time each day out of doors, and never let a day pass without such physical exercise as results in perspiration.

Provide yourself with recreation—games, music, pleasant reading, conversation—what you will. But never fail to play.

These are the simplest and most obvious laws of hygiene. And, simple and obvious though they are, it is amazing to learn how many people disregard them. Hardly one of us will fail to say, offhand: "Oh, I do all those things—why, of course! I always lived by those rules!"

Pin yourself down: Do you, really? Are you sure? I'll wager you'll find that you've been omitting the out-of-doors exercise lately; or you have been giving less time to recreation than usual; or you've been swallowing your breakfast whole, to catch a train; or you've been cutting off a half-hour of sleep. We all know the rules of the game, but we seldom play fair.

So much for the general laws of good health, which lead, if closely followed, to longer years. These laws apply to everybody. But they cover only a part of the procedure. The other part lies in

(Continued on page 78)

The Battle of the Century

A
Ring
Story
by
Harry
Paschall



YOU still hear a lot of squawks from wise-crackin' sportin' writers regardin' the "Battle of the Century," meanin', of course, the late Carp-Dempsey quarrel. But take it from me, Bo, that battle was nothin' compared to the one I figgered in a few days since. This little ruckus lived up to its name!

It all come about through me pickin' up a new Ham an' Beaner some six months ago. I've been runnin' a stable of so-called fighters for more winters than I'd care to mention off-hand, and I had it figgered that I'd seen just about all the known kinds and varieties of fisticufflers and fightin' temperaments—but this last bird turns over a new leaf in the book of knowledge for yours truly.

His real name was Reginald Van de Water and he hails from one of the once first families in Columbus, Ohio. Accordin' to him his antecedants, or what ever you call 'em, had come over in the steerage with old Chris Columbus. Anyhow, it was the same old story—the old line had run to seed; and when Reggie busts out of Ohio State the family funds give out, and it's up to the lad to dig in and make a livin' by the sweat of his brow. It so happens that I've got a couple of alleged pillow pushers on a card at the Fairmount A. C. just at the

time Reggie breaks loose from college, grippin' a neat and nifty embossed diploma in one hand and 37 cents in the other (which sum represents the net total of his worldly wealth). On the night of the fracas one of my prelim battlers had the good luck and bad judgment to trip down a flight of stairs on his collarbone and bust an arm—and it begins to look like I was gonna be out the fifteen berries his efforts was supposed to net me. In the hopes of snarin' a substitute I hikes down to the arena where they is generally a gang of would-be pugs hangin' out on the eve of battle. An' there I runs into Reggie. He's standin' outside lookin' at the posters when some cheap tough bumps up against him and plants a hoof on his pet corn. Just as I come up I see him wipe out the insult with a perfectly timed right hook to the jaw—and the hard guy immediately loses all interest in the proceedin's. I didn't wait to see no more. I grabs Reggie and hustles him back of the arena. "Boy," says I, "How would fifteen smackers look to you for about ten minutes interestin' work this evenin'?" "As big as the State House Cupalo!" he comes back. "Well," says I, "if you're willin' to git into a ring here tonight and swap love taps with another bum like the

one you just put away—the coin is yours.” He don’t fall right off—but after some little argument and a careful consideration of the lonely small change in his pocket, he succumbs.

To make a long story short he kayoes his man in the first stanza and I sign him up for a year. After that I swing around the Ohio circuit with him and a couple other punchers in tow, hittin’ Cincy, Dayton, Canton and Cleveland—an’ Reggie beats every bum he starts against. When I get back to Columbus with him the fans are hailin’ him as a native son and clamorin’ for me to start him against a real scrapper. At that, the kid is clever—but he ain’t as yet what you’d call a real top-notch. He’s lucky, packs a wallop, and has got some brains—which is what most fourth raters has everything else but. But to my mind it would be

nothin’ short of criminal to stick him in the ring with a first class battler.

Howsomever—after winnin’ two or three local starts against some boys which was even worse than he was, he gits his opportunity to step out against real class—and as Bill Shakespeare so aptly remarked—“and thereby lies a tale!” This is how it happened. Johnny Slipovitz, the swelterweight champ, was tourin’ the country takin’ on a local set-up in each town. Whenever he felt mean he flattened his so-called opponent in the first round—but if he’d had a good supper—and felt cheerful like, an’ the local lad didn’t get too strenuous, he’d sometimes let ‘em stay till the last bell rung. Columbus was on his route, and nothin’ must do but I trot out Reggie to defend the honor of the old home town. The local bugs had it figgered that the Champ would be a lucky dog to last three rounds with their Reggie. So I has a little talk-fest with the Fairmount promoter and he agrees to put up two thousand cold

for my boy’s end—an’ I figger we might as well git it while the gittin’s good. So I signs for Reggie and runs down to the Neil House to break the news to him. I find Reggie settin’ in his room with his nose buried in a bulky volume named the “Outline of History” by a guy named Wells. When I spring the layout on him his face turns green at first and he starts doin’ a caged lion prowl up an’ down the room. Then, suddenly, he grins, snaps his fingers, and yodels: “Eureka! I have it!” “Well,” says I, “now that you got it, whatcha gonna do with it—eat it?” “Hush, says he, “I’ve figgered out a way to beat the Champ!” “Sure,” says I, sar-castic like, “It’s easy—all y’gotta do is put a coupla horse shoes in your gloves!” And I take the air in disgust, leavin’ him there grinnin’ like one of these here Cheschire cats of fairy tale fame.



“Reggie wipes out the insult with a right to the jaw.”

The next week starts trainin'—my one idea bein' for Reggie t' sell his life as dearly as possible, for it's a pipe the Champ won't be in any too good shape and if Reggie gits toughened up he may stay the limit. But Reggie don't buckle down to rope-skippin' and shadow boxin' and other trainin' tricks with any great amount of enthusiasm and eclat, if you git what I mean. He insists that he can flatten the Champ with one hand tied behind him and figgers it's a waste of time to bother with tiresome exercise.

It wasn't till the day before the fight that Reggie slips me the low-down on his secret. And Man! It was a Cuckoo! I had my eyes opened then and there to the value of a college education and the study of such sciences as Psychology or somethin' similar. When I heard the works I almost gave Reggie an even chance to come out on top the next evenin'. In fact I goes out and bets fifty smackers right on his nose at fifty to one.

At three o'clock the next day we slips down to the arena to weigh in, an' on the way we stop at one of Uncle Sam's depositories where I smilin'ly change two tens, four fives and three twenties for a new and bright hundred dollar bill. All Columbus seemed to be out that evenin' to hoot the Champion and root for Reggie. They can scarcely wait for the prelims to be run off in their anxiety to crown a new champion of the world. And crown is right, thinks I, the boy'll git crowned if anything slips! Finally they sweep out the remains of the last two ham an' beaners—the fat announcer gits up and requests that gents kindly refrain from consumin' the filthy weed—and proceeds to introduce the two principals of the evenin's festivities. Slipovitz, the Champion, is a tough slippery feller from



"Eureka! I have it!" he yodels

New York's East Side—and looks the part. Honest, Man, I believe that bird could smell a dollar clear acrost High Street with that long curved beezzer of his. And when it comes to collectin' and hangin' on to the long green, he is every inch a champ! But at that they is no flies on him when it comes to what the Frogs call "makin' the Box." He's as far ahead of most of the boys in his class as Jack Dempsey is ahead of Joe Beckett, the Englisher's Pride and Joy. Which is somethin' more than several kilometers. He also looked like he was in pretty fair shape too—which fact bodes no good for my meal ticket.

When the fat guy introduces Reggie a

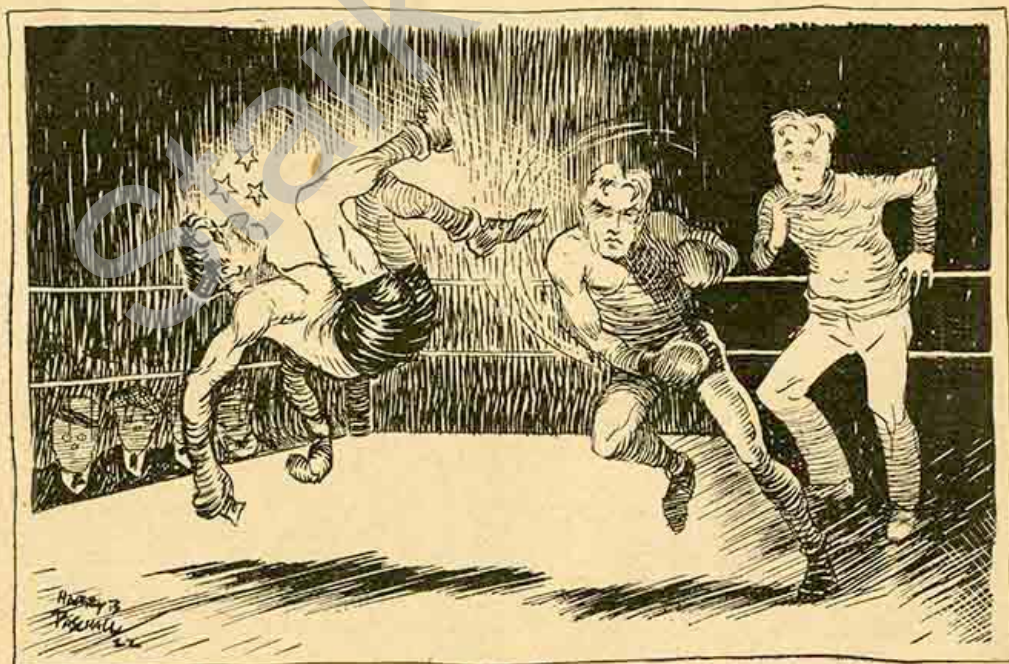
roar goes up from several thousand throats. He retaliates by wavin' his hands and grins confidently at the cuckoo crowd. At this point the Champ uncorks a wide smile and winks at his seconds. Evidently he's figgerin' on how much he can alter that grin in the next few seconds.

After the customary ceremonies the two boys come out of their corners for the first round. The Champ dances out confidently and leads a snappy left. He hits Reggie seven times right on the proboscis without a return—whereupon he decides to step in and finish the entertainment. So the next time he leads he follers up the flashy left with a bone crushin' right cross to the jaw. But Reggie ain't there when it lands. He's on the floor takin' a count of nine—which shows that the boy's brain was startin' to function. He gits up on the nine count just as the champion rares out of his corner with blood in his eye—and the chase was on! It seems as though Reggie had been a passin' fair track man at Ohio State—and he certainly showed the

cash customers a grand exhibition of high and lofty sprintin' durin' the next two minutes, with Slipovitz in close pursuit. The Champ was gittin' madder every minute and so was the crowd. There was a loud chorus of "Stand up and fight, ya big Bum, etc., etc." But I got to hand it to Reggie. He knew what was best—and he also knew he had to last till the break came. So he keeps on runnin' and fallin' till the bell.

I jumps in to the ring at the gong and starts fannin' my racer with a towel. Under cover of these maneuvers I whispers: "When?" He says, "I guess we better make it snappy—cause I'm no marathon runner." So accordin'ly I pulls a small package outa my pocket and slips it in his glove. Then the bell rang summonin' 'em back to conflict.

The Champ comes out of his corner in round two with a different expression on his mug. He refuses to chase Reggie any longer—an' decides to wait until he gits one good openin' and finish the fight with a punch. Reggie stands up and
(Continued on page 79)



"He turns a triple backward somersault. . . ."



BOXING

Prepared by William J. Herrmann

of Herrmann's Institute of Physical Training, Boxing, Fencing, Wrestling and Selfdefense, of Philadelphia

LESSON I

(Continued from January)

RE—THE EYES

OF course, it would be superfluous to tell you to keep your eyes on your man. Nevertheless, there is a right and wrong way of using your eyes to best advantage. Don't concentrate your gaze on any one point, as, for instance, on his eyes, because your opponent may fool you by deceiving glances. Neither always keep watching his right fist, nor any other one point of your opponent's body, but learn to take in his eyes, head, arms and body all in the one glance. Keep his entire body within range of your sight, because oftentimes the movement of his feet, knees or body will betray his intentions more than any motions of his hands. Also avoid showing, either by look of eyes or any "give away" facial expression, when, where and how you intend to hit. Good use of keen, watchful eyes is an important factor.

RE—PRACTICE

The "on guard" position just described might more or less be termed the academic position, because it is the position usually taught nowadays in most of the modern boxing schools. Nevertheless, the thorough student should study, learn and accustom himself to several good "on guard" positions in order to increase his proficiency and versatility. Besides, a student of various styles will be less uncertain as what best to do in case he runs up against some highly unorthodox style.

The greater variety of effective positions one can easily adopt as combat conditions warrant, the greater the chances of successfully puzzling and confusing an opponent, and thereby contributing towards his defeat.

The boxer should stand at ease, with the muscles of his arms, legs and body supple, pliable and ready for action. Never stand stiff, strained or rigid. Keep muscles loose, not bound. Stiffening of the muscles is a waste of energy. It makes arms, legs and body movements slow and clumsy, and, besides, it is very tiresome, especially to a beginner or the untrained athlete. So don't stand lifeless like a statue, nor pose like a model, nor swell up your muscles like a strong man at a side show, because it takes time, even if but a fraction of a second, to relax tensed muscles before they can move to hit or guard quickly. A free, easy hitter possessed of less physical power but greater speed can score a more telling hit than a physically stronger man who hits with tense set muscles.

Speed is everything. By keeping your muscles and joints free and flexible you can get into quicker action. No time is lost, and, besides, there is so much more kick to the punch. A powerful dray horse may give a heavy pushing sort of a kick which may severely hurt and bruise, but a racehorse will let out a slasher which will break any bone in your body.

If, in first taking up this lesson study in position, you can secure the services of a good instructor, so much the better, because a good practical illustration is bet-

ter than a long explanation. If, however, you are unable to enjoy the benefits of an able teacher, then try and secure the co-operation of a congenial fellow student. Choose as a sparring partner an interested friend or companion, one as near your own height, weight and size as possible.

You will both get along much better at first if neither partner has any decided physical advantage over the other. Agree to mutually aid and assist each other in getting well grounded in



JACK JOHNSON

the important fundamental principles. In this manner you will both progress together more rapidly. Besides, when the time comes to take up the more advanced work you will both understand each other better. Later on, after you have both advanced to the point of boxing fairly well, don't hesitate to face any man in a friendly contest in order to gain experience as to the best way of handling opponents of every size, weight, style and build.

However, even if you should be unable to secure the services of a competent teacher or the help of a good sparring partner, you, nevertheless, need not despair. You can still make considerable progress by faithful and intelligent study and practice of these lessons. To such mirror practice will be decidedly helpful. In fact, a certain amount of mirror practice of this, as well as some of the following lessons, will be helpful to any student of boxing. So put in some practice on this lesson if possible before a full-length mirror in order that you can more readily note and correct any glaring defects or errors. Besides, it will help hold your attention, due to interesting your mind through the medium of your eyes.

It is of paramount importance that a man should stand well in order to get about well. In no sport is the temptation stronger than in boxing to run before you can walk. To secure a good foundation you should first acquire a good position. Don't make the mistake of following your natural inclination to hit, guard or step about before first knowing how to properly stand. Such practice usually results in the establishment of bad habits that, later on, may be difficult and at times almost impossible to correct.

Do not be too anxious to hurry through or to pass by this lesson. To those naturally eager to quickly advance to the more exciting parts of the lessons in this course it may seem more or less a drudgery to repeatedly drill themselves in mere position. Nevertheless, the conscientious student can depend upon it, he will be

amply repaid for any extra time and attention given to the acquirement in good form and style of a safe, easy and graceful "on guard" position. Besides, he will be better prepared to take up the lesson in foot work that follows.

LESSON II

FOOT WORK

After you have acquired a fairly good guard position on the lines described in the preceding lesson, you are then ready to take up your first lesson in foot work. Of course it is understood you cannot expect even a good position in itself to be sufficient protection. Although a good position is of vital importance, it, nevertheless, is merely the fundamental position from which any plan of attack or defense starts. In consequence, don't pose nor stand still like a statue, but instead keep moving about in order to worry and confuse your opponent as to what may happen next. You can always start your body better if it is in motion, besides, a moving target is obviously more difficult to hit than a stationary one.

When a novice was awkward in his movements old time teachers were known to remark, "He has no feet." The clever boxer, like the graceful dancer, is the embodiment of "poetry of motion." To this end there must be harmony of action and ready co-ordination of every part of the body. The possession of a good boxing balance, and the ability to instinctively make good use of the feet in order to effectively move about and still keep in a good fighting position, is a valuable asset.

Good foot work is vitally essential. Many times well intended and vicious



BOB FITZSIMMONS AND SON

blows can be avoided, and turned to naught by quick foot movements of but a few inches. But like the apparently simple step of the dancer, the sure catch of the juggler, or the quick wrist work of the swordsman, these movements are not as easy as they seem.

To do any of them in a flash, as is the proper thing to do when it is necessary to do them at all, requires, first, that they should be thoroughly studied so that they may be perfectly understood and then faithfully practiced, slowly at first, to get the proper action and balance, and then rehearsed frequently every day until you can do them at full speed in the best of form and style.

Few young boxers appreciate the value of constant practice in foot work. Barring the professional dancer, no athlete is more graceful in stepping about than the skillful boxer. Always well poised, perfectly balanced, every muscle alive and in action, ever ready to maneuver for an opening, advance or retreat, spring in or spring out, take

ground or break ground, back step or side step, slip or shift to best advantage; never bewildered, confused or rattled by the wildest of swings nor the most furious rushes of an opponent, yet always with nature weapons ready and in position to attack or defend as combat conditions may warrant.

This coolness, poise and grace of movement comes only from serious practice, yet any boxer can acquire it by constant study and application just as our marvelous dancers, jugglers, acrobats and equilibrists attain their skill, grace and ease of motion by faithful, consistent and intelligent practice.

Persevere in your foot work even though it is one of the hardest lessons to learn well in boxing. Practice before a mirror is helpful in that it enables you to more readily note and correct any glaring errors. After you can do your steps in good form, then work up speed as well as correct execution. Get fairly well up in your preliminary foot work before any attempt is made at guarding, hitting or taking a turn with the gloves. Careful and conscientious instructors,

who know the value of good foot work as a first essential, strive to perfect their pupils in advancing, retreating, and circling around and about their man, both to the right and to the left, before allowing the novice to put on a glove.

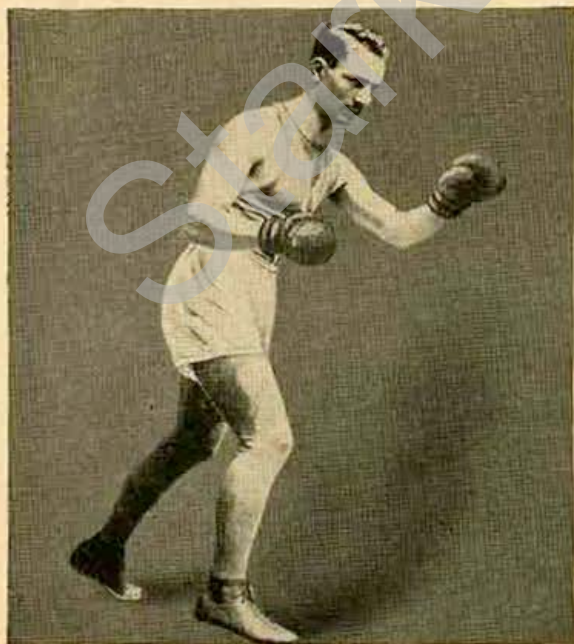
ADVANCING

In taking up foot work it is advisable to first learn how to advance in the direction of your opponent. Although one of the simplest, it is also one of the most important of foot movements to first acquire. Never advance in boxing as you do in walking. Walk steps are dangerous, especially when in hitting distance, because if your opponent should land as your legs are crossed, or at the moment one leg passes the other, you are likely to be floored.

To advance, step forward a short pace with your left foot in the direction of your opponent. Immediately the left foot lands, let your right foot follow an equal distance, so that your feet will again be the same relative distance apart as they were just before you made your advance. This places you in position a short distance in advance of the spot you originally occupied.

Don't get your feet too close together or a blow landed at that moment would be likely to drop you. Heels too close together does not permit you to sufficiently brace yourself against a punch, nor does it allow you to "snap back" or "pull away" from a lead, nor does it enable you to recoil with a blow in order to minimize its force in case you were hit. Besides, if your feet are too close together, you will be more easily upset by an opponent's rush.

However, don't go to the opposite extreme and slow up your foot work by standing with your feet too wide apart. If feet are spread too far apart you are more or less anchored on the spot, as you will be less able to make



BENNY LEONARD

quick changes of pedal positions, and this you must be able to do in order to move about effectively.

In advancing it is vitally important to keep your feet the same relative separating distance apart as when standing "on guard." Of course, in following your man around the ring, advance steps will naturally be longer or shorter according to requirements, nevertheless, the separating distance between your heels should practically remain the same. As the length of your advance, to a certain extent, is dependent on the length of your adversary's retreat, be careful your opponent does not tempt you to over-step, lose your balance, nor trip yourself up with your own feet in a scramble.

Advance steps are mostly used in order to get in proper hitting distance should too great a space separate the combatants. Should your opponent give way, keep in hitting distance by correspondingly advancing as your adversary retreats. However, should your opponent "tin-can" around the ring or practically run away from you, then, in such a case, there would be no necessity of strictly adhering to this rule regarding advancing. "Pass-steps," if necessary, could then be used in order to more quickly close up a wide gaping distance. Just as soon as you again near hitting distance be sure your left foot is in front of the right, and also that the toes of your left foot point directly forward at your opponent, and last, but not least, be sure that when



Philadelphia Jack O'Brien

in good position you move your left foot first, should combat condition warrant an advance.

After you can do advance steps in good form and style, learn to also advance by springing instead of stepping in. Spring steps are good practice and besides develop a good boxing balance. However, don't go to the opposite extreme and act like a jumping jack nor dance and prance about like a balletmaster. Unnecessarily raising the feet too high off the floor is a waste of energy, and besides, may lead to your downfall if hit at the moment both feet are off the floor.

Also practice advancing in a less pronounced manner, one in which you slide,



James J. Corbett on left

glide or move your feet cautiously and even stealthily forward in order to enable you to creep up and advance on your man, if possible, without his being aware of it. Keeping your feet close to the floor will conserve your strength and also enable you to more readily "set yourself" in order to deliver a more "telling hit" should an opportunity to do so suddenly present itself.

Observe that you maintain good position while making quick changes of ground. Don't move about in a stiff nor awkward manner. Holding a set, contracted position is exhausting and detracts from your speed not only in effectively moving about but in hitting and guarding as well. Practice advancing in every style. Step, spring, glide, or creep in on your man until you have acquired all types of good, clean advance steps in a well poised, easy and graceful manner.

As you advance, don't keep your hands in one set position. In advancing move your left hand forward in a threatening manner as though you intended to hit. Timing the forward motion of your left hand with the forward step of your left foot as you advance, is good practice.

Move your left wrist and forearm as though they were one piece. Don't wobble your hands, uselessly twist your wrists, awkwardly wing your elbows nor otherwise perform aimless and unnecessary movements that serve no particular purpose. Such motions are but a waste of energy and characteristic of the amateur. Besides, it puts your hands out of position to quickly hit or block effectively. Also be sure you never drop your hands when advancing or you are likely to walk into a well timed punch. Always have both hands in good position to instantly hit or guard as combat conditions may warrant.

RETREATING

Retreating is practically the reverse of advancing. To retreat, step backward with the right foot, following in like manner with the left. The left foot is drawn backward the same length of distance first cleared by the right. This places you again "in position" but some little distance to the rear of the spot you originally occupied. At the finish of your retreat step your left foot is still to the front and the toes of the left foot pointing directly forward at your opponent. In retreating, as in advancing, be sure you keep in good position and be careful you do not get your heels too close together, nor too wide apart. Always keep your feet approximately the same separating distance apart as they were when standing in a good "on guard position." Avoid all awkward, clumsy, shambling movements, or you are likely to trip yourself up with your own feet.

The retreat is mostly used to keep proper distance and to prevent your opponent from creeping up or getting too close to you. It is also used in case of attack by a superior or heavier opponent in order to minimize the force of his

(Continued on page 77)

Dead From the Neck Down

"He thought he was alive because he worked with his brain—but his body was fit for the undertaker."

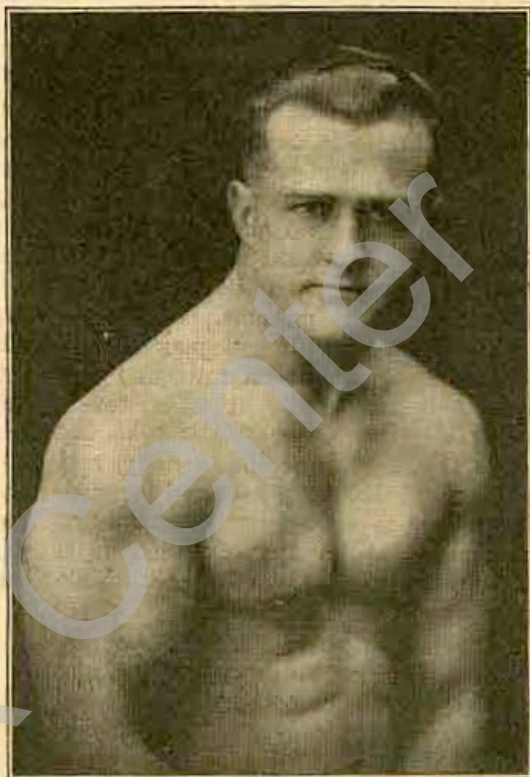
Can you imagine such a fellow calling himself a man? And still there are thousands like him—narrow chested, round shouldered, weak-kneed specimens of humanity. They would rather take a box of pills than do five minutes' exercise.

What Kind of a Man are You?

Has life lost its thrills for you? Do you arise in the morning full of pep and ambition for the day's tasks before you? Or do you just drag yourself through life in a lazy, indifferent way?

There Is Hope—

If there is a spark of manhood left in you, I will give you a body to be proud of. I guarantee to put one full inch on your arms in the first 30 days. And from then on, just watch 'em grow. I will build out your chest, broaden your shoulders and put real pep in your old backbone. You will have the flash to your eye and the spring to your step of a real athlete. Your whole body (inside and out) will function as it should, sending life giving blood to your brain and every part of your system. I don't just promise these things, I guarantee them. Come on now and make me prove it. That's what I like.



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The Science of Strength

(Continued from page 39)

"On one occasion I saw three men laboring with a telegraph pole, and I passed a joke with them about requiring so much man power. One replied that he supposed I could lift it alone; and I said I would be ashamed if I could not raise it overhead. To their amazement I "bent-pressed" it. (That is, put it up aloft with one hand.—A.C.). I suppose it weighed about 190 or 200 pounds. Yet it was the awkwardness of the object more than the weight that made the lift remarkable. I have an anvil weighing about 178 pounds, and I have often laid it on my hand and pushed it overhead. It calls for a powerful wrist, as the side is oval, and bends the hand back considerably, and is like all anvils, badly balanced for such lifting, and requires a certain amount of confidence, as the apprehension is a greater strain; many would not tackle it with two hands.

"Another occasion I remember. A friend and I were caught by the tide, and being raised on the coast, we were good climbers, and our only way lay in climbing the cliffs, that were on an average about 200 feet high. All was going well, till we were near the top, and the chalk was very bad, and my companion began to lose his head. I could see it, and was prepared for what followed, and kept near to him and made sure of my holds. He slipped, and I grabbed him, and helped him to his foothold, but the test came in the next move. The chalk gave way, and he fell clean away, and my first grab I missed, but quickly I grasped his upper arm, and held him dangling in the air, with only one handhold, and he having lost his head so bad he could not stop kicking, which strained my grip. At last he got pacified, and I got him back and practically carried him up the last lap.

"This required tremendous effort on my part, as he was no light weight, being nearly 175 pounds and whilst some

would not comprehend the significance of this lift, I know you will.

"In giving you my lifts, I have given you my best efforts under official tests. My bent-press of over 280 would have been called a lift in some places, where they think all you need is a straight arm. I have often done 265, but did not stand with my feet together and straight, as called for by the association ruling.

"I guess I have told you all about myself, and can say that lifting was always my first love, although I have excelled at every branch of sports, winning titles and championship medals, and it never made me slow. In fact I always was very supple for a short, stocky man, and can bend yet till my head touches the floor and pick up an object and raise, or do any kind of a balance."

HIS MEASUREMENTS

During the last couple of years Mr. Jowett has had to do a great deal of traveling and has had little time for training. Consequently he has gained somewhat in weight, and at present weighs 170 pounds. When he visited me in Philadelphia, he was kind enough to pose for the pictures which accompany this article. He actually apologized for being so fat, and said that if he had known I wanted pictures of him, he certainly would have exercised for a couple of weeks, as in that time he could easily take ten pounds off his weight and make his muscles stand out more clearly. I know that I am satisfied with the result of his poses, and I think that you will be. Mr. Jowett is certainly built on powerful lines, and while he makes no claims, I think that surely he must hold record measurements for a man of five feet five inches. His normal chest measures 45½ inches; his biceps 17½; his forearm 14¾; his wrist 8¼; his waist 32 inches; thigh 24½ and his

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HERE IT IS IN A NUTSHELL—You, Mr. Reader, can harden your arm muscles; you can "make biceps" at will. If you do it a couple of *dozen* times daily you will not only keep your arm muscles in condition, but you will make them increase in size and shapeliness. But can you, at will, thus harden the muscles of your legs, shoulders, abdomen and small of the back? Do you realize what it would mean to you in health, strength, development and vigor if you could?

This book of Maxick's shows you *in detail* how to gain control of every muscle in the body. It has more than 50 full-page illustrations showing the exact positions which enable you to voluntarily contract and relax each muscle. It's easy, fascinating, and once learned, never forgotten.

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because you soon get the art of flexing (and thus exercising) every muscle in the body. In fact, while in your seat in the middle of a long railroad trip you can, by Maxick's method, get as much muscular exercise in five minutes as you could from an equal time spent at tumbling or wrestling—and all without attracting the attention of your neighbor, without getting red in the face or once breathing rapidly.

The author, by means of muscle control, obtained what is acknowledged to be the finest developed body in the world, and incidentally acquired such strength that he is conceded to be the strongest man of his weight in the universe to-day. He takes *his* exercise while sitting in a chair reading the daily paper.

This book has run thru edition after edition. Not a general discussion of the subject but a complete detailed course. Remember its name.

MUSCLE CONTROL

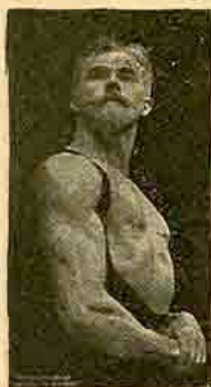
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Mr. Anton Hromatka, City Infirmary, St. Louis, Mo., sends records of his results, which he secured with my machine and instructions in four months.

Strength of	First Record	Second Record	Strength Gained
Thighs	754 lbs.	2,000 lbs.	1,246 lbs.
Knees	754 lbs.	1,800 lbs.	1,046 lbs.
Calves and Ankles	410 lbs.	892 lbs.	482 lbs.
Back	508 lbs.	1,382 lbs.	874 lbs.
Shoulders and Arms	356 lbs.	641 lbs.	285 lbs.
Neck	185 lbs.	375 lbs.	190 lbs.
Biceps	87 lbs.	250 lbs.	163 lbs.

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which gives a full description of the Automatic Exerciser, how it works, what it will do, etc. Don't judge my machine until you have read this booklet. I will send it on receipt of 4c postage.

PROF. ADRIAN P. SCHMIDT

Suite 310, 1947 Broadway, New York City

Whatever Your Question

Be it the pronunciation of **Bolsheviki** or **soviet**, the spelling of a puzzling word—the meaning of **blighty**, **fourth arm**, etc., this **Supreme Authority**—



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calf $15\frac{1}{2}$ inches. His bones are large, but not extraordinarily so. His back is marvelously flexible. He can bend further over backwards, without losing his balance, than any man I have ever seen. His spine is as flexible as a rope.

MR. JOWETT'S MISSIONARY WORK

As Mr. Jowett is apparently too modest to write much about himself, I am going to try to give you an idea of what he stands for in the world of athletics.

In the first place, Mr. Jowett is our leading authority on the scientific side of lifting. He probably knows more than anyone else on this side of the water about the best methods of performing the various Standard Lifts with bar-bells and dumbbells. I know that, because every time Mr. Jowett has written for us an article about lifting, we have had a flood of letters from lifting enthusiasts who wished to express their appreciation of the assistance they had gotten from reading Jowett's advice.

He thoroughly understands and can demonstrate the absolutely best method for performing each and every lift. In one or two of the lifts such as the two-arm-jerk, his style is admitted to be better than that of any other expert. This means that he gets bigger results in comparison to the strength expended.

Some of you on reading this may think that this is proof that lifting is all a matter of knack. I know so many people who hold that belief. Knack and skill are all right in their way, but knack alone will not enable anyone to lift heavy weights. It goes without saying that if two lifters are of exactly the same strength, the most skillful one will win; and if there are two lifters of exactly even skill, the strongest one will win. Competition nowadays is so keen that no matter how strong or how speedy a man is, he cannot hope to reach the top rank unless he masters the form, or knack, of his particular sport. I can see no reason for disparaging the performance of any lifter because he employs science

to better his records. If you were a big, husky fellow, and wished to take up shot-putting, or hammer-throwing, could you afford to disregard the advice of an experienced coach, or a champion weight thrower? Skill counts for a lot in throwing weights. A man who has mastered the proper method of putting the shot, will send the ball 50% farther than an equally strong man who knows nothing of the game. In hammer throwing, method or knack is an even greater factor. An expert will throw the hammer *twice* as far as will an equally strong, but uninstructed, novice. So if we permit science to play a part in weight-throwing, why not in weight-lifting?

As a matter of fact, Mr. Jowett would be a great lifter even if he did not employ science, for he is possessed of phenomenal bodily strength. His record in the two-arm military-press proves that, because that lift is a test of strength alone; skill plays no part. Further, Mr. Jowett can lift enormous weights from the ground by employing the trained strength of his back and legs. In wrist wrestling he has put down the arm of every strong man in Canada, and this includes not only bar-bell lifters but laborers, porters and giant backwoods men.

Nevertheless, it is fascinating to watch Mr. Jowett perform one of the quick lifts in which skill and agility are such large factors. In making a two-arm jerk with 310 pounds, he puts forth far less exertion than in his two-arm-military press with 230 pounds. In such lifts as the one-arm-s snatch and swing, his style is something to be envied. He has an exhaustive knowledge of body leverages, he is an adept at timing (that is, knowing exactly when to bend his knees so as to get under the rising weight) and when he employs these things to augment his strength, it is no wonder that he makes such remarkable records.

Mr. Jowett's high position in the esteem of all lifters is not due merely to his lifting performances. His great-



Shapeliness

of arms, legs, back, bust, abdomen, thighs, hips and ankles. In women and men is accomplished in the privacy of one's own room, by a few minutes' use each night and morning of the internationally famous invention—**The Dr. Lawton Guaranteed Fat Reducer.** This is a suction vibrating device with which you perform a gentle, but deep rooted massage, thus breaking down the undesirable fatty tissues.

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est value is as an example and inspiration. Every celebrated "strong man" has a host of admirers and imitators, and Mr. Jowett's exhibitions, lectures and writings have started hundreds of young men in the pursuit of strength and development. He has devoted his life to the furthering of the cause of lifting and heavy athletics, and he stands for all that is best in the game. He has a manufacturing business of his own, but he devotes all his spare time to interesting young men in the cultivation of health and strength. His eminence in his chosen field is largely due to the fact that he has always stood resolutely for honesty in lifting. When Mr. Jowett says that such a lift has been made, you can know that it is so. More than once he has withheld his sanction from a competition because he knew the result was framed. More than once he has refused to allow his name to be mentioned in connection with an exhibition because the amount of weight lifted was exaggerated in the announcement of the results. I am pleased to be able to tell you that we will shortly run another article from Mr. Jowett's pen describing the phenomenal strong men of Eastern Canada. Mr. Jowett, who has traveled all over the world, insists that the French Canadians are the strongest race in the world, and he has unearthed a number of muscular phenoms whom he will describe in his next article.

HIS PICTURES

First, I invite your attention to the back view on page 34. I can recall only two men, namely, Hackenschmidt and Joe Nordquest, who had a broader back than Jowett has. When you study that vast expanse from arm-pit to arm-pit, it is not hard to see why Mr. Jowett's normal chest measures 45½ inches around. In the other back picture on page 38 you get a striking impression of Mr. Jowett's sturdy build and great breadth of shoulder. The front views on pages 36 and 39 were taken to display the muscles of Mr. Jowett's

How to Make a Hit with Influential People!

SOMETHING about Richard Bradley made him attract unusual attention wherever he went. You would instinctively pick him out of a crowd as worthy of note. In a gathering of any sort—at the club, at dinners or business meetings—the most important people present could always be found around Bradley, eager to make friends with him. And as for the ladies—well, to use a colloquial expression, they literally “threw themselves at him.”

It wasn't Bradley's physical appearance, or the way he dressed or acted, that caused him to attract such favorable attention. In these things he was not unlike other men. But there was a vividness and charm about him which you felt the moment you saw him; and in his eye was the glint of steel acquired only by men who are doing things in a big way.

Yet he had started life as an errand boy with a grammar-school education. And now at 29 years of age he was making \$12,000 a year in a keenly-competitive business in which none but mature men of high education were supposed to be able to succeed.

BRADLEY and I saw each other often, and, naturally, I valued his friendship highly. One day he dropped in to see me with a “tip” on a big job he said I could get if I'd go after it. It was a big job—right in my line—but I felt it was altogether too big for me at that time. I doubted if I could get it; and even if I could, I didn't see how I could possibly be worth the large salary it paid. As I told this to Bradley a look of surprise, then of utter amazement, flashed across his face.

“Too big for you!” he exploded—“what nonsense! Nothing is too big, or too important, or too good for you—or for anyone else. Get that foolish nonsense out of your mind. The reason why you and lots of other fellows aren't getting more money is because you let the world bluff you. You've already got the ability—much more than many men holding high positions—but you haven't yet learned the knack of making people pay you big money for it.”

Bradley then told me some astonishing things about men and women, life, business and the world in general. I was utterly astounded at what he said. It seemed as though a curtain had suddenly been lifted from my eyes and I could now see clearly for the first time. Then he drew his chair close to mine and told me a mental knack to use in dealing with people so as to immediately destroy any advantage they have over you, and to gain the advantage yourself.

“And now,” continued Bradley, in a tone of friendly command, “telephone to the man I told you about and ask for an appointment.”

I SAW my man the following day, and did exactly what Bradley told me to do both before and during the interview. And I got that job! Yes, actually landed a job I was afraid to tackle until Bradley told me such astonishing things. You can well imagine my delight! It pays me three times more than I ever thought myself capable of earning! All my friends are wondering how I did it! I've the satisfaction of knowing I'm making good in a big way—got it straight from the president at luncheon. If it hadn't been for Bradley I'd still be asleep in a rut letting the world bluff me out of money which is rightfully mine. But now I know the knack of getting big money!

WHAT Bradley told me was this: “You know that until recent generations our ancestors, as a race, were oppressed, exploited and held down by the governing classes. They were bluffed into believing that kings and the ruling classes were infinitely better and altogether superior to them. The ruling classes forced this bluff on the people by means of artificial standards of society and a lot of flub-dub magnificence.

“Today you and the rest of us laugh at this. We know it to be bunk. But just as we inherit our type of body, so do we inherit our state of mind. Our ancestors had a high respect for—*even fear of*—people in authority. Recent researches in psycho-analysis prove that even today most of us have an *undue respect for, or actual fear of*, people in positions of authority. We may not realize it. *Consciously* we may not have this fear; but, nevertheless, we have it—planted deep in our subconscious mind—*inherited from our ancestors*.

“That is why so few people get the rich rewards they are entitled to. They know they are worth more money, but they dislike to face the boss. They know they have the ability to hold a bigger job, but lack the know-how and the nerve to get it. *Tens of thousands of natural-born money-makers and leaders of men are today held down to underpaid jobs, simply because they are bluffed by other men.* And many splendid men and women find themselves unable to enter high social circles, simply because of an inherited state of mind.

“But there's a simple way to quickly overcome this inherited handicap,” continued Bradley. “It will not only wipe out your fears, but give you *inimitable courage, dash and intrepidity* which sweeps everything

before it, and makes people view you with amazed admiration. It will enable you to *dominate* other people instead of being dominated by them.” And then he told me the *actual methods* to use—the methods which enabled me to win and hold my big job which pays me *three times more than I ever thought myself capable of earning*.

THE whole of these astonishing facts, with all the powerful methods, are clearly and fully told in “NERVE,” a remarkable 6-volume, pocket-size Course by William G. Clifford. That is where Bradley got his information which enabled him and his friend to accomplish such remarkable things. Within one hour after you start to read this astonishing Course your eyes will be opened as they never were opened before! There is nothing to laboriously study or learn. You can apply at once the powerful methods it gives you—methods which will immediately thrill you with invincible courage and give you *great power* over men and women and the world at large.

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mighty arms. I particularly like the one on page 39 because it will give you an idea of his wonderful forearms, which are as big around as the average man's neck. In both these front views you can see, not only his great width of shoulder and chest, but also the unusual development on the outside of the thighs which is so characteristic of bar-bell users. When you see a man whose thighs bulge out at the sides as Mr. Jowett's do, you can feel sure that he has very strong muscles at the sides of his waist, and that both thigh and side muscles were developed through the practice of the one arm bent press.

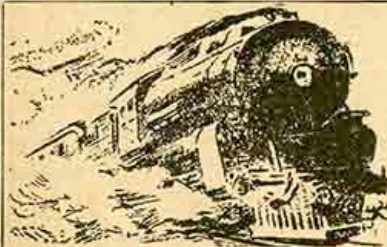
The seated pose on page 37 is copied from a similar pose by Hackenschmidt. Mr. Jowett said that he had always wanted to be taken in this pose so that he could see how he showed up in comparison with his beloved friend in the same position. I personally find very little to choose between the development shown in the pictures of the two athletes.

The Lumberjack

(Continued from page 21)

they are floated there is the charm and the picturesque, the danger and the thrill. Perhaps they are to be carried fifty or a hundred miles down stream. Thousands of them have been cut and rolled to the edge of the ice-locked stream to wait for the Spring thaw when the water will rise and carry them down.

Some years ago the writer went through a big drive one Spring. Sev-



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eral million feet were waiting the break-up of the ice and all preparations had been made for it. Every last log of the Winter's cutting was ready to be harvested, which is not such a bad parallel as it may seem.

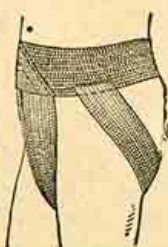
Many of the logs had been bound together in great rafts with saplings holding them and on these the more adventurous of the lumberjacks, their Winter's cutting completed, were prepared to ride down stream until they came to the mills where the great booms extending into the river formed huge pockets to gather in the floating harvest and hold it until the saws were ready. There was a feud on between two of the jacks and we heard that it had developed from an argument as to which was the better axeman. The foreman of that particular section had refused to decide, being a diplomat, when he found that there were many wagers on it.

The break-up came unexpectedly. It must have rained a regular cloudburst somewhere back in the hills the night before. That morning there were sounds as of a right joyous gun fight and the ice on the river began breaking and rising.

The water must have risen at least a foot and a half in two or three hours and down went the logs, ice and rafts, all together with jacks riding the rafts and as happy as if their lives were not often hanging in the balance of a hair on some of the turns where the river looked like a boiling cauldron. One man was lost when he tried to show off by riding two logs that he had bound together with withes and they went into a jam at an eddy where several thousand had been swept out of the current and were grinding like a lot of jumbled, gargantuan machinery. But the others didn't worry so far as we could notice.

For two days and two nights that river was one solid mass of logs, or so it seemed. It looked like a run of some gigantic breed of salmon. Here

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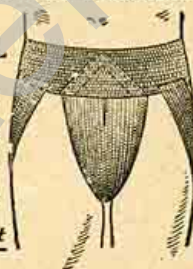
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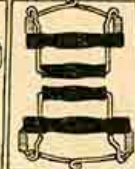
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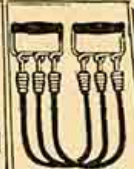
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and there the ends of huge logs would jut suddenly over their fellows and the whole mass would seethe and whirl. Dozens of them were thrown up on the banks and the gangs that had remained behind patrolled like sentries to roll these strays back in at the first opportunity.

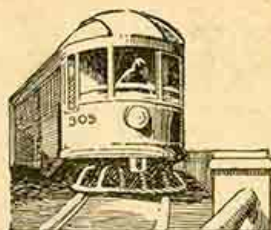
How much longer this weird parade continued we don't know, for the third morning there came word of a huge jam three-quarters of the way down to the mills and the superintendent of the company with a dozen of the most capable foremen rushed off downstream to break it. That jam was an impressive sight. Somehow a number of the logs had caught at a turn where there were many large rocks in the river and it seemed as though an entire forest had piled itself up. The force of the water had thrown them up until hundreds were entirely clear of the stream and they stretched from bank to bank like some crazy puzzle.

This is one of the worst situations the lumberman has to face, a log jam on the break-up. The water finds its way through and the jam simply has to be broken up before the river falls or thousands of feet of timber will be left high and dry. It required nerve to tackle that mass of grumbling, writhing timber. The slightest slip and a leg might be crushed between them or an entire body for that matter. But there was not a bit of hesitation. The superintendent and two of those who had come down with him went out on it and located the spot where the original logs had caught. Then it was a matter of waiting a couple of hours until the dynamite arrived and the superintendent himself, with one of the foremen, went out to place it. There was no holding back, no sending for a couple of plain, ordinary jacks to take the risk of a slip and explosion, the big boss did it without any hesitancy. But he had been one of those who came up from the ranks. Somehow he got back on shore and we all made a run for it

in time to reach safety and look back as the dynamite went up. Logs flew like matchsticks but the blast did not displace the original cause of the jam and it took two more charges before the trouble makers were either torn loose or blown to tinder.

Occasionally one of the booms breaks under enormous pressure and then a whole fortune goes swirling down river often to be lost entirely or to make trouble on its way.

On this particular drive the final settlement between those two jacks who had developed a feud as to which was the best axeman was settled in the river near the mill and would have chilled the nerve of a high trapeze artist in a circus. When the worst of the drive was over and those thousands of logs safely nested behind the booms this pair shoved off from the end of one of the booms riding a massive pine log. Out near the middle the current caught them, both stripped of pants and shirt and boots. Then they began birling to settle it, and birling, it might be added, is no child's pastime. It consists of trying to keep a footing on the log and at the same time turn it to throw the other fellow off into the water. Face to face like a couple of game cocks or vaudeville clog dancers they jiggled while occasional tree trunks that had escaped the drive floated past. For all of five minutes they hopped and twisted, first one, then another losing his balance only to regain it. At last the calks of one



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Watch for the March issue of STRENGTH. We are getting together some very interesting articles, the kind all our readers like and ask for. Mr. Calvert's article will be more interesting than ever and Ralph Hale has something important to tell.

seemed to stick, for he couldn't lift his foot quickly enough and he tumbled in that ice water with a splash to be fished out by a couple that had gone out in a leaky old scow for just that purpose.

In brief this sums up some of the things that will show why the lumberjack of our forests is quite some physical specimen. He has to be or he couldn't last. This is a game that has bred a race of physical giants and most of them are not what has come to be termed the genus "dumbbell" mentally, either. Life and health often depend on quick thinking and intelligence. And most of them are men who were born under American skies. A pretty fine crew in all.

Singing as an Aid to Chest Development

(Continued from page 47)

effort. Exercise (that is movements of the body and limbs) is valuable because it invigorates the organs through increased blood supply; and if singers can get that increased circulation without tiring muscular movements, it might ac-

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count for their extraordinary physical vigor.

For they *have* the vigor. They *have* the strength, and they *have* the build. You can't get away from that.

I have already given you some illustrations, but here are more. On page 46 you will find a picture of the French tenor, Charles Dalmoras. That picture gives but a faint idea of his build. Like most singers, Mr. Dalmoras attends every performance of his company, whether or not he is on the bill.

Several times, during the *entr'actes* at the Metropolitan Opera House at Philadelphia, I have seen Mr. Dalmoras among the crowd, and he was always noticeable by the set of his evening clothes on his almost perfect chest and shoulders. His figure is the very beau ideal of the athlete.

I am showing a picture of Titta Ruffo, which shows the great size of his chest, and the way he carries himself. His poise is characteristic of all the great singers. They have a certain firmness on their feet, a certain jauntiness in the way they hold their heads, a certain squareness of shoulder that are unmistakable indications of vigor.

To return to Ruffo. He is not a big man but he has one of the biggest voices on Record (the Red Seal record, if you will excuse the pun), and he is the very personification of energy. Every action, every movement betokens the athlete. When he first came to Philadelphia, he was welcomed as the great man he is, and was taken to see the sights of the city. While being escorted over the Baldwin Locomotive Works, what he liked best was the smithy. Explaining that he knew something of a blacksmith's work, he went to an anvil and taking a hammer commenced to beat a piece of iron into a horseshoe. The workmen gathered around and in a minute Ruffo's tremendous voice broke out into an Italian "Song of the Forge." The song and the horseshoe were finished simultaneously and Ruffo got an impromptu

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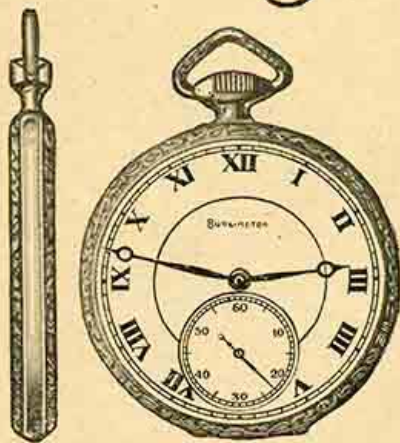
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ovation. One of the workmen said later "That Ruffo has a voice almost as loud as the noon whistle, and he sure is one husky guy."

EXERCISES TO DEVELOP THE VOICE AND LUNGS

It is my intention to tell you about the breathing exercises that are practiced by these wonderful people, in order that you can try them for yourself. If you do, I can promise you that you will be surprised at the way your chest will increase in size and the endurance that you will acquire.

I cannot promise that you will develop a voice, although I know that in some cases singing voices have been created, as it were.

Did you ever hear of the late David Dowd? No? Well, this Dowd was a thin man who wanted to be strong. He exercised and got his desire. You will find his name in the record books—"Dead Weight Lift—1440 pounds by David Dowd, such and such a date." The unusual thing about Dowd was, that as he developed a Sandow-like body, he developed an unusually fine singing voice. He claimed it was all in the management of the throat, and that anyone could develop a pleasing singing voice by holding his throat muscles in a certain way.

Did you ever hear of William Blaikie, author of "How to Get Strong"? In that book Blaikie tells of a Boston physician, whom he alludes to as Dr. G—.

It seems that Dr. G— actually was well on the way to tuberculosis, but by diligently practicing breathing exercises he cured himself. As Blaikie puts it, "His chest was the deepest I have ever seen, fully 14 inches through from front to back." And he tells how the doctor could run 100 yards on one breath, and could tire out opera singers.

As consumptives rarely have either big or fine voices, Dr. G— must have gotten his singing voice as a sort of by-product of the work he spent in developing his great lungs.

(To be continued)

BOXING

(Continued from page 62)

blow, in case you are hit. It also, at times, is used when you merely wish to avoid a blow by means of a retreat step without striking back, in order to give you a better chance to study your opponent if uncertain of your own plans or puzzled by your opponent's actions.

If your opponent follows you up very quickly, it is necessary at times, to make two or three retreat steps in succession, providing there be sufficient space to your rear in which to step about.

Threatening or striking at your opponent while retreating often helps you to keep your man at a safe distance and, besides, may even score a hit in your favor should your opponent uncover himself while persistently advancing towards you. However, repeatedly retreating without good cause is an error, as you cannot readily both retreat and hit an effective punch at the same time.

In actual boxing refrain, if possible, from taking more retreat steps than are actually necessary. One retreat step will nearly always suffice to take you safely out of danger. Besides, this will place you in better position to instantly take advantage of any opening that may suddenly present itself. This is because the average boxer, in his eagerness to land, is likely to hit wild or to "open up," exposing himself to a telling hit on the part of a cool and skillful boxer who retreated in good form, or who purposely stimulated an apparently careless retreat in order to draw on his opponent's wide open advance.

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clinch, one retreat step is usually sufficient. So do not get into the habit of taking three or four useless retreat steps in succession every time you break away from a clinch. Such action, unless done to save yourself or to get out of distance, carries you so far to the rear and away from an opponent who fails to follow you, that you would be obliged to take three or four advance steps in order to again get back in hitting position. Besides, your opponent in the meantime has had ample opportunity to pull himself together and be in good defensive position awaiting your attack, in case he failed to follow you up.

In retreating, or in advancing, never drop your hands. Always keep them up in good position in readiness or to protect both your head and your body.

(To be continued in the March number)

Lengthening the Life Time

(Continued from page 52)

careful study of individual warnings, and a prompt heeding of them. The first hint of an ill, from the top of your head to the soles of your feet, must be noted, and preventive measures taken at once to check the spread of the trouble. Halt the enemy before he reaches the gate; drive him out with every weapon at your command.

"If every man and woman twenty-one years of age, provided there has been a normal childhood and youth, would govern the daily life by the routine prescribed, there would be every prospect of living to be a hundred," says Dr. Copeland.

And that is the prospect for this generation! And if, even now, we can look forward to a hundred years of life, how much may every generation to come add to this span! It's not only for yourselves, but for your children, that you must lay up a bank account of long, vivid years; and it's the way to do this that we're going to talk about in the articles to come.

The Battle of the Century

(Continued from page 56)

boxes with him and the crowd cheers. They trade wallops near the center of the ring and just as Reggie sees a hard one comin' he drops to the mat like a flash and the Champ's swing goes over his head. As he gits up at nine he sidesteps quickly to avoid the intruding Champ, and opens his gloved hand. The little slip I had folded in it between rounds flutters to the canvas. Does the Champ see it? He does! He pauses a minute, fascinated. His beak begins to quiver like a bloodhound's on a scent. He drops his hands and stoops, grasps the paper and starts to straighten up,

with a grin of perfect bliss on his countenance. At that moment somethin' which must have felt like a ton of brick bounces off his jaw and he does the prettiest triple backward somersault you ever saw!

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Laugh that off.

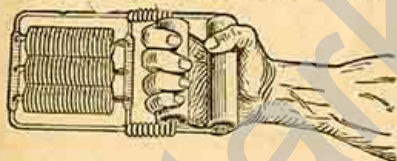
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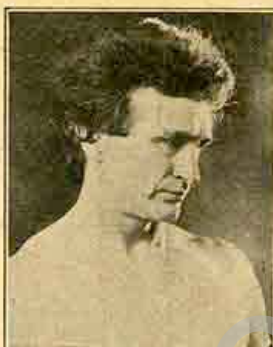
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is the way you feel. Health means more than having just enough energy to get through your daily work. Real health means the possession of considerable muscular strength combined with great powers of endurance. It means that your internal organs are in first class working order. It means that immunity from temporary sickness and chronic disease which shortens life.

The next most important thing is "*the way you look.*"

Your personal appearance counts for a lot in these times. It is nice to look well in a bathing suit; but it is far more important to be able to create an impression when in your street clothes. To have people exclaim, "My, what a *finely built* chap!" after one glance at the broad shoulders, deep chest, trim waist and beautiful proportions which are noticeable even when you are fully dressed.

Your aim in training should be, *not health alone, not appearance alone, not strength alone,* but that

combination of all three which is the surest sign of real vigor.

I am looking for the man who wants to save time. The man who knows that he needs to improve his physical make-up, who has very little time to exercise and who *must have results.*

I have an **entirely new training method** which contains a time-saving element found in no other course of training. The principal muscles are exercised in groups. There are but few exercises in each lesson and after you

have mastered these exercises you drop them and substitute the more advanced exercises in the next lesson. Under my tuition you never have to practice more than a few minutes a day. The effect is so sure and rapid that:

1st. Weak beginners, who can't even chin themselves with both arms, soon find that they can easily chin the bar with one arm.

2nd. The stout beginners who cannot even reach their ankles can soon learn to bend over and put the palm of their hands on the ground, without bending their knees (and incidentally reducing their waist girth by 8 or 10 inches).

3rd. That scrawny beginners soon find themselves gaining weight and shapeliness as a result of their increased digestive powers.

4th. That undeveloped beginners soon find themselves taking pride in their unusually large and clean-cut muscles.

5th. That non-athletic beginners soon find that they are in possession of

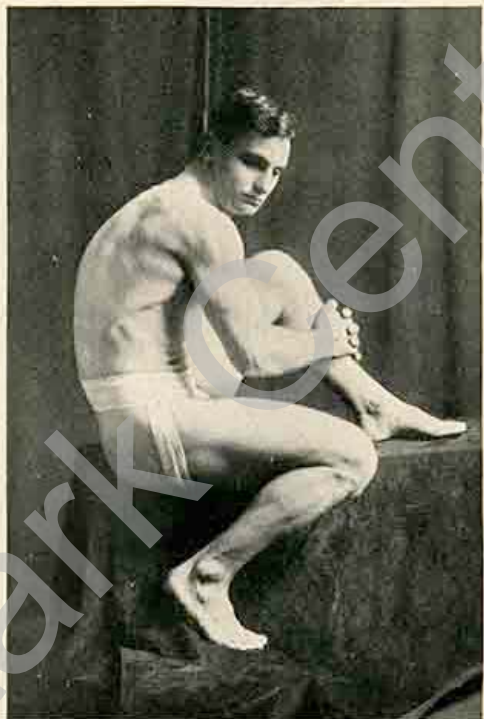
the speed and strength that makes them winners in sports and games.

I suggest that you send 10 cents (stamps or coin) and obtain one of my art booklets. The name of the book is **THE ROYAL ROAD TO HEALTH AND STRENGTH**

It explains *how and why* my pupils make such tremendous improvement in such a short time.

CHARLES MAC MAHON

5519 N. Fifth St., Studio A-2, Philadelphia, Pa.



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Previous Experience Unnecessary

L. L. COOKE
CHIEF
ENGINEER



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You don't have to be a College Man; you don't have to be a High School graduate. If you can read and write English, my course will make you a big success. It is the most simple, thorough, and Successful Electrical Course in existence, and offers every man, regardless of age, education or previous experience, the chance to become, in a very short time, an “Electrical Expert,” able to make from \$70 to \$200 a week.

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As Chief Engineer of the Chicago Engineering Works I know exactly the kind of training a man needs to get the highest salaries. Hundreds of my students are now earning \$3,500 to \$10,000 a year. Many are successful ELECTRICAL CONTRACTORS.

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