

I Tell You This Free Book Will Show You The Way to Amazing Salary Increases

I only ask that you risk two cents on the strength of my word that the contents of this amazing book will show you the way to a prosperity that you never dreamed possible, in a fascinating field that you never thought of entering. This book is now free. Read my offer.

By J. E. GREENSLADE

Read What They Say \$9000 First Year

Ellis Summer Cook, 20 E. Jackson Blvd., Chicago, left a \$25 a week job and last year made \$9000!

\$100 a month to \$100 a week in Only 3 Months

H. D. Miller, another Chicago boy, was making \$100 a month as stenographer in July, 1922. In September, 3 months later, he was making \$100 a week as a salesman.

\$150 to \$500 a Month

W. P. Clenny of Kansas City, Mo., stepped from a \$150 a month clerkship into a selling job at \$500 a month. He is making \$850 a month now.

\$6500 a year

M. V. Stephens of Albany, Ky., was making \$25 a week. He took up this training and now makes five times that much.

Small Pay to Big Earnings

J. H. Cash of Atlanta, Ga., exchanged his \$75 a month job for one which pays him \$500 a month.

Now Sales Manager at \$10,000 a Year

G. H. Mallroot of Boston, Mass., stepped into a \$10,000 position as a SALES MANAGER—so thorough is this training. All these successes are due to this easy, fascinating and rapid way to master certain invincible secrets of selling.

FIRST let me ask you two questions. One: Do you consider that you are as intelligent as the average mail-clerk, farmhand, office clerk, mechanic, or bookkeeper?

SECOND: If you suddenly found yourself with all the money you needed to spend, wearing the best clothes, living in the finest neighborhood, driving a good car and belonging to the best clubs—but having to make good in a job that paid \$10,000 a year, would it scare you? There are men to whom \$10,000 a year is so much that the idea of earning it themselves never occurs to them. They will always be in routine jobs at low pay. Their dreams will never come true. But yours will if you will absorb what I am going to tell you.

Now, in one quick step you can enter the field where opportunities in your favor are ten to one—the Selling field. You know that Salesmen top the list of moneymakers—that the salesman is his own boss—that his work is fascinating, interesting and highly profitable? But the thing you doubt is your own ability. All right, but you can become a first-class, money-making salesman in an amazingly easy way.

Proof That Salesmen Are Made —Not "Born"

The story of six men who once thought salesmen were "born," who did not believe they were "cut out for selling," is on this page.

Thousands of men like these six men who formerly thought salesmen were "born," are now enjoying magnificent earnings in the selling field. They were bookkeepers, mechanics, farmers, clerks—even doctors, lawyers and ministers—but in a few months after writing to the National Salesmen's Training Association

they were out in the field selling—and making more money than they had ever hoped to make in their former vocations.

Sounds remarkable, doesn't it? Yet there is nothing remarkable about it. Salesmanship is governed by rules and laws. There is a way of saying and doing things, a certain way of approaching a prospect to get

his undivided attention, certain ways to overcome objections, batter down prejudice, overcome competition and make the prospect act.

Just as you learned the alphabet, so you can learn salesmanship. And through the NATIONAL DEMONSTRATION METHOD—an exclusive feature of the N. S. T. A. System of Salesmanship Training—you gain actual experience while studying. It is one of the many reasons why N. S. T. A. members make good as salesmen right from the start.

A Lifetime of Selling Experience in a Few Weeks— Then Success

The N. S. T. A. System of Salesmanship Training and Employment Service will enable you to quickly step into the ranks of successful salesmen—will give you a big advantage over those who lack this training. It will enable you to jump

from small pay to a real man's income.

Remarkable Book, "Modern Salesmanship" Sent FREE

With my compliments I want to send you a most remarkable book, "Modern Salesmanship." It will show you how you can easily become a master Salesman—a big money-maker—how the N. S. T. A. System of Salesmanship Training will give you years of selling experience in a few weeks; how our FREE employment service will help select and secure a good selling position when you are qualified and ready. And it will give you success stories of former routine workers who are now earning amazing salaries as salesmen. Mail the coupon today. It may be the turning point in your life.

NATIONAL SALESMEN'S TRAINING ASSOCIATION
Dept. 21-S Chicago, Ill.

National Salesmen's Training Association,
Dept. 21-S, Chicago, Ill.

I simply want to see the facts. Send me free your book, "Modern Salesmanship," and Proof that I can become a Master Salesman.

Name

Address

City..... State.....

Age..... Occupation.....

EMPLOYERS

are invited to write to the Employment Dept. of the N. S. T. A. We can put you in touch with just the men you need. No charge for this service to you or our members. Employers are also cordially invited to request details about the N. S. T. A. Group Plan of instruction for entire sales forces. Synopsis and charts sent without obligation.



Strength

Edited by
Carl Easton Williams

Vol. VIII NOVEMBER, 1923 No. 3



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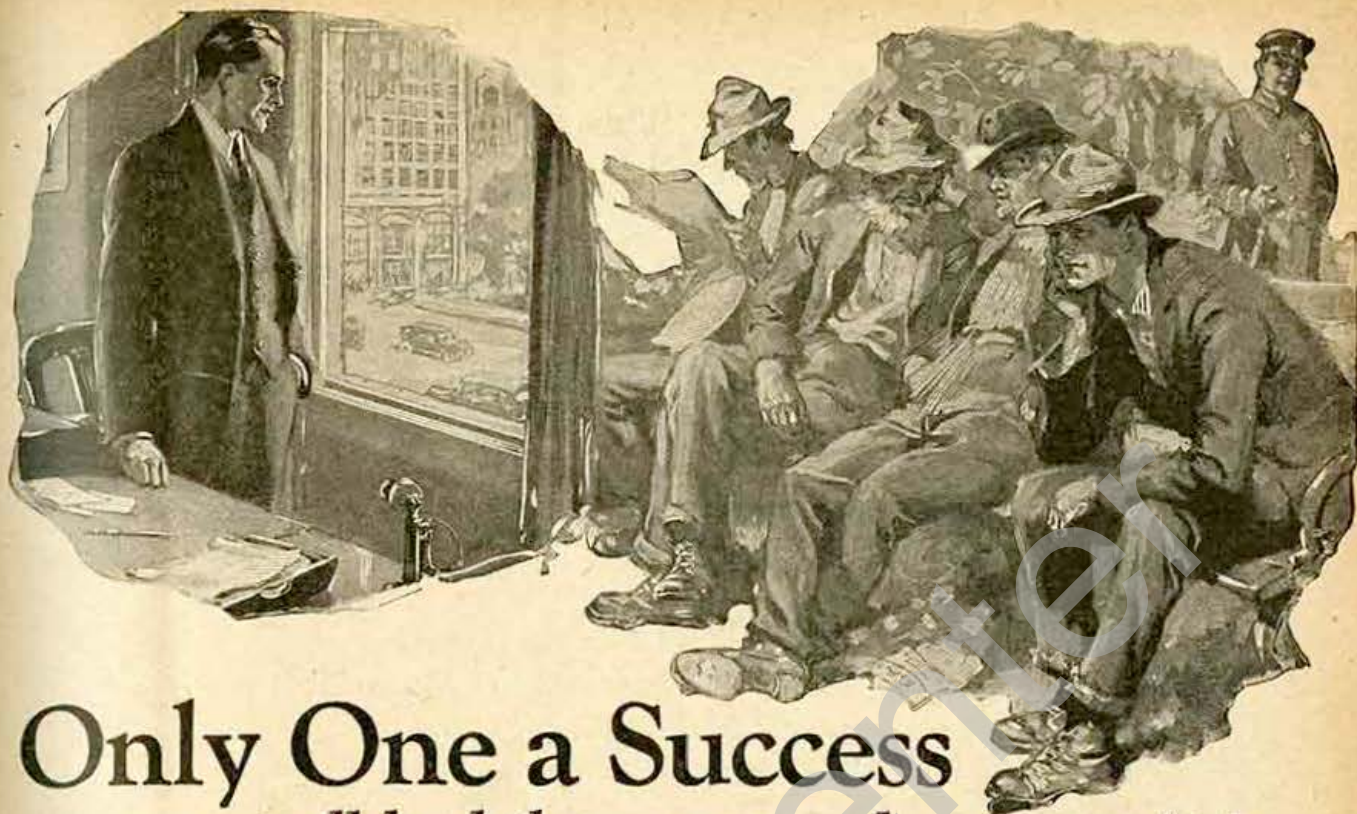
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Only One a Success

—yet all had the same good opportunity!

If someone should tell you that five years from now you would be sunning yourself on a park bench—out of work, out of luck, and convinced that you were a failure—you would probably tell him in no uncertain terms that he was a liar.

And quite probably you would be right.

Every few years, however, the benches are peopled with hundreds and thousands of men in exactly that predicament—and the thing that confounds one is the fact that hardly a man of the lot, five years before, would have believed it possible.

While Others Were Being Displaced This Man Won Promotion

People judge harshly when they say that the men who thus find themselves out of work are not deserving of employment.

There are no finer fellows living than the thousands of men who returned from France to find that there were not places enough to go round. Fortunately, most of these men are now at work. But there was a time—and not so long ago—when they were forced almost to beg for a place.

These men deserved employment, if ever men deserved it—but—business at that time was in such condition that only men who had PROTECTED their jobs by TRAINING—by the development of some special ability to do some special thing—were able to hold their own against depression.

During this period, when men were struggling to get on their feet once more, even LaSalle-trained men did not always have it easy. Demand even for men who have EQUIPPED themselves to perform some special work does not always equal supply.

But—make no mistake—their lot was easier BY FAR than that of the men who could offer merely WILLINGNESS TO WORK.

And in countless instances it was the LASALLE-TRAINED MAN who was retained when others were let go—and in countless instances he won promotion.

There comes to mind, for example, the experience of Sidney Lichtenstein, of Philadelphia, who in August, 1920—just as the

business depression was causing many a concern to shut up shop—enrolled for LaSalle training in Modern Business Correspondence and Practice, and who, in January, 1921, after completing only eight assignments, reported a 40 per cent increase in salary—"when all other employees of the company were being discharged or receiving salary cuts."

"LaSalle," wrote Lichtenstein, "is not only a means for increased efficiency, it is insurance against hard times. As soon as I have completed my present course, you'll find me enrolled for another."

—Not particularly dramatic—Lichtenstein's experience—but it was not selected for dramatic purposes. It is merely TYPICAL.

Secure In Their Jobs and Rapidly Advancing

Times are booming now—there is plenty of work for the routine office man—and if he is content with a handful of chance each week, his employer will likely enough be disposed to keep him. "All's well," says the man who has no ambition. "Perhaps a year from now, three years from now, I'll be sunning myself on a bench and twirling my thumbs—but for today and perhaps tomorrow—All's well!"

If you belong to the great army of the easy-going—and are content to STAY in those ranks—LaSalle can do very little for you.

If, on the other hand, you are in earnest to GET AHEAD—you will find encouragement in such statements as the following—from LaSalle-trained men who are using their evening hours for advancement:

"The knowledge I secured from your Higher Accountancy course and the progressive spirit of your instructors gave me the courage to make a start, and I have since held many responsible positions, conducted investigations, and opened up many sets of books with ease. My present earning power is at least 300 per cent greater than the salary I drew at the time of my enrollment."
L. R. ELSESSER, Michigan.

"Your training in Traffic Management, which I took last fall, started me up the ladder of success and enabled me to increase my earnings \$60 a month—directly as a result of taking your course."

"Words cannot express how much I appreciate your advising me of the position, which I later secured, as rate clerk for the..... Railroad. I like my work and have decided to become an expert in it, with your help; and am expecting to go on up into the bigger and more responsible positions with the railroads."
A. H. WALTON, Georgia.

"Passed the Arizona bar examination last week at the head of a class of seventeen, including graduates from some of the best-known resident

law schools in the country. I certainly do appreciate what you have done for me, and realize better than ever the excellence of the LaSalle course and the methods of teaching you employ."

C. A. CARSON, JR., Arizona.

"Your course in Modern Salesmanship has given me many ideas and plans of action, methods of finding the market for merchandise, making the most of an article's selling points, and approaching the prospective buyer, and has helped me wonderfully in that hardest part of a salesman's job, namely, closing the deal. With my course less than half completed I can emphatically say that the knowledge derived therefrom, if measured in dollars and cents, would exceed \$1,000."

CLARENCE A. EVANS, Ohio.

"When I enrolled for your Business Management course I was just plugging along with an ordinary bookkeeper's job, but today I am proud to say that I am out of that rut and have full charge of all the work in the office. Very often I am left to manage the entire business, and I have also been awarded an increase in salary which up to this time is over 400 per cent."
J. GLENN HOBBS, Georgia.

What Will YOU Write Home to the Folks?

What does the future hold for YOU? Will you write back home, "I've just had a 'raise'—I'm head of my department now"—or—"I had hard luck last week; I've got to look for another job?" There's a little coupon just below this text which has guided many a man into secure and profitable positions.

The man who is sincere in his desire to increase his earning power will do well to mark and sign and mail the coupon NOW.

LaSalle Extension University

The Largest Business Training Institution in the World
Dept. 11389-R
Chicago, Illinois

Upon request, the book "Ten Years' Promotion in One," and material completely descriptive of the course and service that interests you, will gladly be sent without cost or obligation. Indicate your choice by checking, and write below your name and address.

- | | |
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| <input type="checkbox"/> Business Management | <input type="checkbox"/> Modern Business Correspondence and Practice |
| <input type="checkbox"/> Modern Salesmanship | <input type="checkbox"/> Modern Foremanship and Production Methods |
| <input type="checkbox"/> Higher Accountancy | <input type="checkbox"/> Personnel and Employment Management |
| <input type="checkbox"/> Law: Degree of LL. B. | <input type="checkbox"/> Expert Bookkeeping |
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| <input type="checkbox"/> Banking and Finance | |

Name

Present Position

Address

Has the Fountain of Youth Been Discovered — At Last?

Is the Miracle of Rejuvenation an Accomplished Fact? Can we make Old Bodies Young—Weak Bodies Strong—Sick Bodies Well—Almost Overnight? Can We Banish Disease—Cheat the Advancing Years and Regain the Vigor and Vitality of Youth?

IT sounds too amazing for belief. Think of it! A fountain where all may bathe and emerge reborn and vigorous! A fountain where aging, ailing, discouraged humanity may regain the health, strength and energy of youth.

Is it true? Can it be true? Christos Parasco, who has suddenly leaped from obscurity into the limelight as a discoverer says yes. Dr. Benedict Lust, prominent New York Physician, and an expert on hydrotherapy, says yes. Bernarr Macfadden, world famous exponent and teacher of physical culture, says yes, as do many others who can speak with authority.

When this new, wonderful discovery is revealed, it promises to startle the world. Men and women who have made the tests say that "it has made them over." That it has freed them from the shackles of disease; that the years have slipped from their shoulders like a discarded cloak; that they are throbbing once more with energy, vigor and power.

Treatment Amazingly Simple

So amazingly simple are the means employed that it comes as a revelation to all who hear of it.

When Dr. Lust first heard of it, he couldn't believe it. He said: "I know a lot about this kind of treatment. I've been administering it most of my life, but I have never struck anything like this."

Later, after he had personally observed its action on others, and finally tried it himself, he said, "There is nothing in any way comparable to this treatment. I am not exaggerating when I say that it made me, a man of sixty, feel twenty-five years younger."

"Then there is the case of Dr. Warsaw, who weighed 240 pounds and was not well. Also for a year he had had a stubborn bronchial

trouble which had prevented him from singing. This was a great trial to him, for he had long been an accomplished singer.

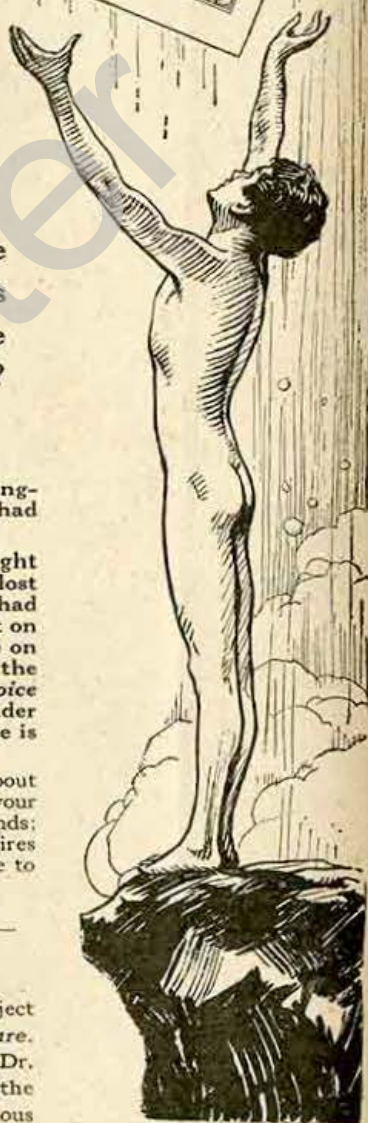
"He took the new treatment for eight hours. At the end of that time he had lost fourteen pounds, and his waist measure had been reduced two inches. He was so light on his feet that he could leap over the table on which he had been lying. And—this is the most wonderful part of it—he had his voice back. With my own ears I heard him render the Prologue from Pagliacci perfectly. He is a man of seventy."

You owe it to yourself to learn all you can about this amazing discovery—which washes away your years, your ills, your aches, your extra pounds; which makes you feel the thrill of renewed desires and impulses, and tunes your body once more to the call of Youth.

Get This Remarkable Book — FREE

A great series of articles on this startling subject is now running exclusively in *Physical Culture*. In addition, Mr. Macfadden arranged with Dr. Lust to write a book covering every detail of the treatment. This book is *not* for sale. So anxious is Mr. Macfadden to put this priceless knowledge within the reach of *everyone*, that he has decided to give the book FREE with a four months' subscription to *Physical Culture*, beginning with the current issue.

The price of the four months' subscription is only \$1.00. Simply fill in the coupon below, attach a dollar bill and send it today. Don't miss the great opportunity to learn the secret of renewed health, vigor and vitality. Remember, the 144 page book is FREE. Attend to this *right* way.



Macfadden Publications, Dept. S-11
1926 Broadway, New York

Here's the dollar. Please enter my name for four month's subscription to *Physical Culture*, starting with the current issue, and send me the FREE 144-page book by Dr. Lust explaining in detail the marvelous treatment described above. Money back if not satisfied.

Name.....

Address.....

City.....State.....

Let the Vanderbilt's Instructor Teach You to Dance This New, Easy Way

Dancing gives poise to the body, grace to movement, helps to overcome timidity and awkwardness and good dancers are popular at every affair. Arthur Murray's New Simplified Method enables you to learn any dance in an evening.

ARTHUR MURRAY is known as America's foremost authority on social dancing. He was selected as personal instructor to such socially prominent people as Mrs. George F. Vanderbilt, Miss Cornelia Vanderbilt, and many other fashionables whose names are found in the "Blue Book" of that very Select circle known as the "Four Hundred."

His amazing new methods have revolutionized the teaching of all popular new dances. Without leaving your own home—right in the privacy of your own room—without music or partner, by just following a few easily mastered diagrams and simple instructions you quickly become an expert dancer of all the newest steps and latest dances. Even though you may not now know one step from another—though you may not even know the names of the latest dances; you can learn to dance all of them in an amazingly short time. The instructions have been so simplified that a child can learn directly from them. In fact, a whole family can learn from the one complete set of diagrams and written instructions. And once you have the Murray foundation to your dancing you can quickly learn any new dance after you have seen someone dance the steps.

Learn Tonight—Dance Perfectly Tomorrow Night

Just as soon as you receive Arthur Murray's complete instructions you can learn the Fox Trot, One Step, College Rock, Conversation Walk, Waltz, or any other new dance, and you won't have the slightest difficulty in keeping perfect step, to lead and follow accurately with the best dancer in your set. You can give your friends a great surprise by choosing a partner and stepping right out with perfect confidence that every step and every movement you make is beyond criticism. In fact, Arthur Murray guarantees your success, or your lessons won't cost you one single penny.

Just think, more than 90,000 people have learned to dance by mail this new way and have been perfectly satisfied with their lessons. And it is certain that if this great number of people can learn in their own homes, there is no reason why you shouldn't learn just as easily and quickly as they did. It is a fact that more than five thousand people a month are learning to become expert dancers through this new, simple, and quickly mastered method of Arthur Murray.

A Generous Limited Time Offer

Arthur Murray is so sure that you will be delighted with his methods of instructions—he is so sure that you won't have the slightest difficulty in mastering all of the steps in each dance that he is perfectly willing to send you an introductory sixteen-lesson course for your five days' free personal trial. Through these sixteen lessons you will learn 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 to Teach Your Child to Dance—What the Advanced Dancer Should Know—How to Develop Your Sense of Rhythm—Etiquette of the Ballroom. You receive all of these sixteen lessons for only \$1.00.

Private instruction by Mr. Murray in his own studio costs \$10 per lesson. But through his new, simplified methods of teaching, you receive the very same high class instruction at a ridiculously low price. And if you aren't positively delighted the instruction doesn't cost you one cent.

Send No Money—Not One Cent

It isn't necessary to send one cent in advance in order to convince yourself that you can quickly become a popular dancer through Arthur Murray's teaching methods. Arthur Murray himself guarantees this fact to you, and if you do not successfully learn, every cent you have paid will be promptly refunded to you.

All that you need to do now is to fill in and mail the coupon—or a letter or postcard will do—and the special course will be promptly sent to you. Then, when your own postman hands the introductory 16-lesson course to you simply deposit with him only \$1.00 plus the few cents postage, and the course is yours without any further payments of any kind. Keep the course for five days. Practice all the steps—learn everything each lesson teaches, because that is the only way you can prove to your own satisfaction that Arthur Murray fulfills every one of his promises. It is the only way that you can prove that you have found the quickest, easiest, and most delightful way to learn to dance in a socially correct manner, and to be expert in all of the steps. And, too, you will have the Murray foundation to your instruction, which will enable you to quickly see into any new dance after a few of the steps have been shown to you.

But if, within five days you are not perfectly satisfied with the 16 lessons and desire to do so, you may return the course and your deposit will be very promptly refunded to you without question or argument. But, should you decide to keep the course, as you surely will, it becomes your personal property without further payment of any kind.

Remember, Your Satisfaction Is Guaranteed

Positively, you take no risks of any kind. If, after reading over the instructions and practising the steps of this new 16-lesson course, you are not satisfied in every particular, Arthur Murray will refund every cent you have paid. Thousands are learning to become perfect dancers through this mail instruction and there is no reason why you, too, should not learn.



First Part of the Forward Waltz Step

1. Begin with left foot and step directly forward, weight on left foot.
2. Step diagonally forward to right, placing weight on right foot (see illustration).
3. Draw left foot up to right foot, weight on left.

That's all. Simply follow the numbers in the footprints. Master this part before going further.



You have always wanted to learn to dance—you have always promised yourself that you would learn. Here is your opportunity, and it isn't necessary for you to even leave the privacy of your own room to become a perfect dancer.

If you are to take advantage of this liberal offer you must send the coupon today for the 16-lesson course, for only \$1.00.

ARTHUR MURRAY

Studio 905

290 Broadway New York

ARTHUR MURRAY, Studio 905,
290 Broadway, 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

Also at 150 Southampton Road,
London, England



Tobacco Is Hurting You

Look at the facts square in the face, Mr. Tobacco User. You may think tobacco is not hurting you.

That is because you haven't as yet, perhaps, felt the effects of the nicotine poison in YOUR system. For you know that nicotine, as absorbed into the system through smoking and chewing tobacco, is a slow working poison. Slow, yes—but sure.

Tobacco is lowering your efficiency. It slows a man down. Makes it harder for you to concentrate your mind on your work. You haven't near the amount of "pep" and energy you would have if you stopped using it. There's many a man twice as old as you in years who's twice as young in energy, simply because he lets tobacco alone.

Some day you will realize to what an alarming extent tobacco has undermined your system.

When your hands begin to tremble—
and your appetite begins to fail—
and your heart seems to "skip a beat" now and then—
and slight exertion makes you short of breath—
then you have a right to suspect that
TOBACCO is getting the upper hand.

Any well-informed doctor will tell you that these are only a few of many symptoms of tobacco poisoning.

And YOU know that the use of tobacco in any form is an expensive, utterly useless habit. You know you ought to quit.

Tobacco Habit Banished Let Us Help You

It doesn't make a particle of difference whether you've been a user of tobacco for a single month or 60 years, or how much you use, or in what form you use it—whether you smoke cigars, cigarettes, pipe, chew plug or fine cut or use snuff—**Tobacco Redeemer** will positively remove all craving for tobacco in any form in a very few days. Not the slightest shock to the nervous system. Your tobacco craving will usually begin to decrease after the very first dose—there's no long waiting for results.

Tobacco Redeemer contains no habit-forming drugs of any kind and is marvelously quick, scientific and thoroughly reliable.

It is in no sense a substitute for tobacco. After finishing the treatment you have absolutely no desire to use tobacco again or to continue the use of the remedy. It helps to quiet the nerves and make you feel better in every way.

Results Guaranteed

A single trial will convince you. Our legal-binding, money-back guarantee goes with each full treatment. We will refund every cent you pay for the treatment if after taking it according to the easy-to-follow directions, it should fail to banish the tobacco habit completely.

SEND Coupon for Free Proof Let us send you our free booklet on the deadly effects of tobacco, together with testimonial letters from men all over the country telling how they have been absolutely freed from the tobacco habit by this simple home treatment. You could not ask for stronger proof that **Tobacco Redeemer** will free you from the habit than the evidence we will gladly send on request. Just mail the coupon—or a postal will do.

NEWELL PHARMACAL CO.

Dept. 974

St. Louis, Mo.



Free Book Coupon

NEWELL PHARMACAL CO.

Dept. 974

St. Louis, Mo.

Please send, without obligating me in any way, your free booklet regarding the tobacco habit and proof that **Tobacco Redeemer** will positively free me from the tobacco habit or my money will be refunded.

Name

Street and No.

Town State

SMASH Your Way THROUGH To SUCCESS

Life's race is to the STRONG. The fittest survive. The weakling perishes. The Law of the Jungle—pulsing and vigorous, vibrant with energy—is the Law of Life. Civilization can't change fundamentals.

YOUR Success in business, in society, as a husband and father—your success in all the relations of life—depends fundamentally on your Physical Power. Health, Strength, Energy, Endurance—these are the vital cornerstones in your success foundation. Without them, you are a beaten man.

Youth! Breeding! Ability!—You may have them all—but if you have some physical weakness gnawing at your vitals and robbing you of the very essence of success, you are on the down-grade to Failure.

Win Life's Biggest Prizes

Life's biggest prizes are YOURS if you have the physical Power to DEMAND them. Take stock of yourself. Where do you stand? Are you a business drudge, a routine slave, without enough pep to strike out for the riches that will bring you all the luxuries you long for? Are you one of the "Yes, sir," boys—humbly taking orders from others who haven't half your ability but who DO have a surplus of Health and Energy?

Or—are you the fighting, planning, thinking DOING sort of MAN who makes people notice him—the man who leads and directs other men—the man who is respected and looked up to by other men and women alike? Are you the kind of man who can look the world fair in the face and with your two bare hands wrest from it the prizes for which weaker men struggle in vain? Are you? You CAN be.

It's Easy

Success CAN be yours; your dreams of money, place, and power CAN come true. Through my amazing discovery of the workings of Natural Forces, the gaining of glorious health and physical strength is EASY and as natural as breathing.

By my exclusive methods, YOU can acquire perfect Health, Lion-like Strength, and compelling Personal Power. Almost instantly you can begin to USE these powerful assets in battling down the barriers between you and success. I can and will help you as I have helped thousands of others. I will put you on the high road to MASTERFUL Achievement. I will put the punch and power in you that will enable you to smash your way through to Success.

STRONGFORTISM Makes Successes

I build men scientifically through STRONGFORTISM, the Modern Science of Health and Strength Promotion. Results from my methods are actually astounding—almost miraculous. I have lifted thousands of men from the deep pit of failure and despair; I have shown them how to easily and quickly gain the Health, Vitality and Stamina necessary to WIN the battles of Life and Love.

No matter what your trouble—no matter if you are weak, ailing, nervous or the miserable victim of indiscretions or excesses

of any kind. No matter if some stubborn chronic ailment has you in its vise-like grip, STRONGFORTISM will put you back in the game. It will give you all the fire and energy that comes from Physical Perfection.

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Founder of Famous Merke Institute, Fifth Ave., New York

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I know you are skeptical. I know that you have tried perhaps dozens of different remedies and treatments without results. I know that you have wasted time and money on treatments which by their very nature could NEVER restore your hair. All right. Perhaps my treatment cannot help you, either. I don't know. But I do know that it has banished falling hair and dandruff for hundreds of others—often with the first few treatments. I do know that it has already given thick, luxuriant hair to people who long ago had despaired of regaining their hair. And I am so downright positive that it will do the same for you that I am entirely willing to let you try it at my risk—and if it fails to restore your hair, then I'll instantly—and gladly—mail you a check, refunding every cent you have paid me. In other words, I absolutely GUARANTEE to grow new hair on your head—and if I fail, then the test is free.

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In all the world there is only one method I know about of penetrating direct to the roots and getting nourishment to them. And this method is embodied in the treatment that I now offer you on my positive guarantee of satisfactory results, or the trial costs you nothing. The treatment can be used in any home in which there is electricity.

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If you will merely fill in and mail the coupon below, I will gladly send you—without cost or obligation—an interesting 32-page booklet, describing my treatment in detail.

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T. C.

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BERNARR MACFADDEN

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 These are only a few of the matters explained in the Encyclopedia.

You can rule your health as surely as you rule your actions. The person who does not understand Nature's method of preventing and curing sickness is ill an average of 21½ days each year. In fact, it is estimated that the average person in a lifetime spends \$4,100 on doctor and hospital bills, loss of time from business, medicine and other expenses due to illness. Thousands of people are living half-powered lives because they are ignorant of the laws of Nature. Many of these people will fill an early grave, when they might easily have lived to enjoy a ripe old age.

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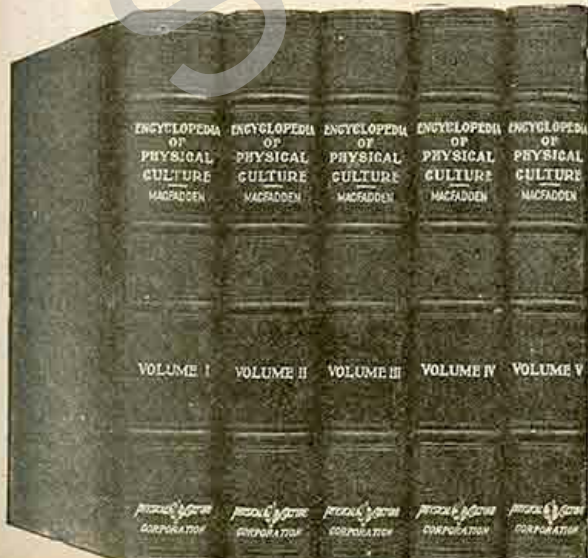
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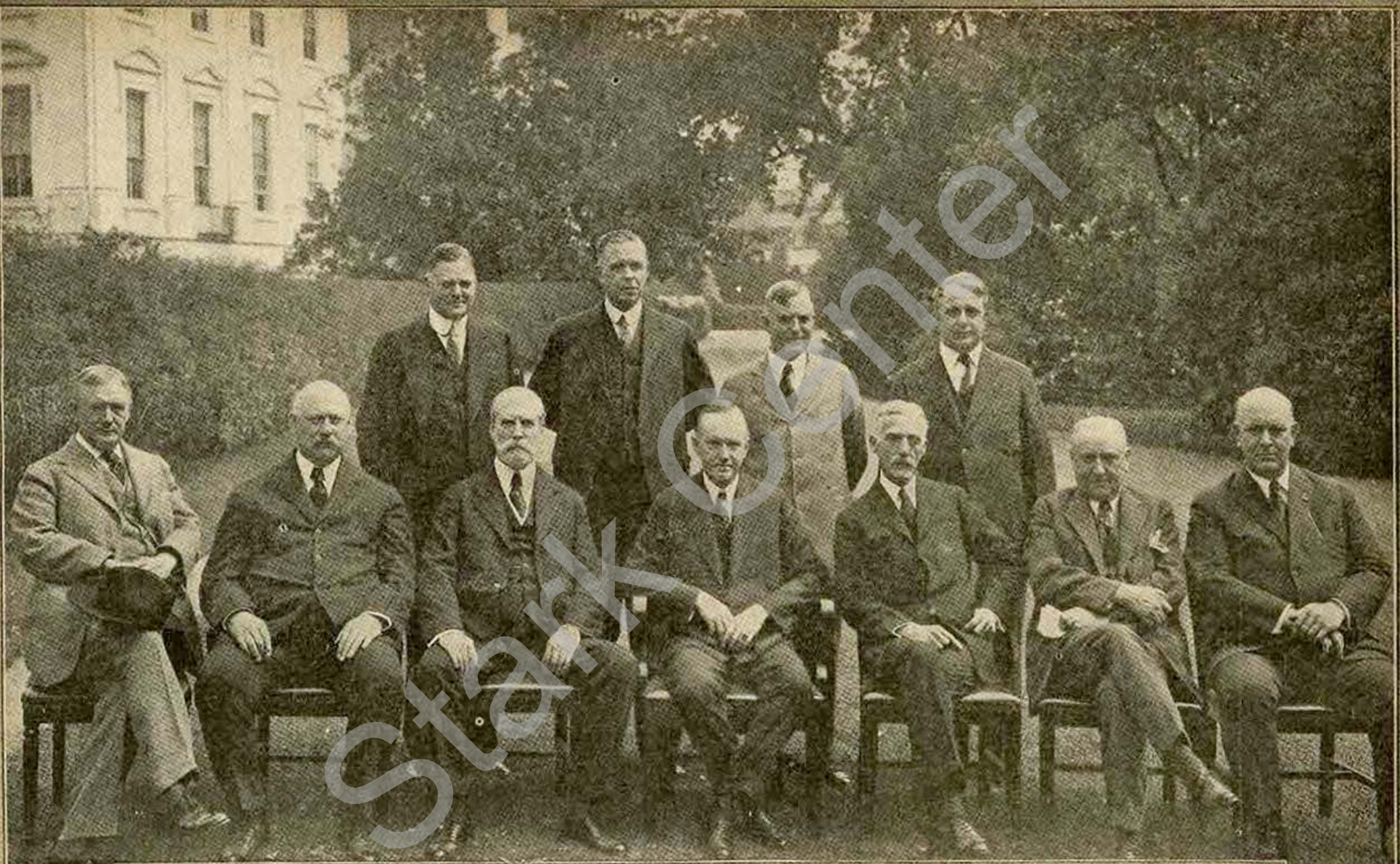
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Strength

November, 1923

EDITORIAL

Does Over-Work Ever Kill?

OF COURSE, you know that peculiar feeling that you get when the life insurance man pins you down to talk business. For the moment you take life very seriously.

Two or three items in this magazine may give you something of that feeling. If so, they will make you think.

One of the things your life insurance man will tell you is that the majority of men who reach the age of sixty-five are then dependent upon others. But if you are the average man you can gleefully dismiss the prospect with the thought: "Oh, well, that doesn't touch me, for I will never live that long."

* * * * *

Of course you might say that, but you don't. For there is only one man in a crowd who can laugh at death. He is the man who is ready to die—because he has lived out his life.

While we are accustomed to thinking of death in the light of a tragedy, did it ever occur to you that at the age of ninety and upwards the sense of tragedy disappears? Because an age like that means fulfillment. That is natural death, and it is nothing to be dreaded. It is simply a matter of going to sleep, tired and satisfied, after having lived out one's destiny. The Grim Reaper is no longer grim.

But as for you and me, it is a long time before we will be ready. And that's what makes us think.

* * * * *

If there is anything more pitiful than the loss of a baby it is the visitation of the Grim Reaper just when a young man or woman has reached mature growth.

And yet, what is maturity? Many animals reach it in one or two years. In higher forms of life more years are needed. The principle applies universally as we go up the scale. We speak of the young man reaching maturity in twenty-one years; although even that is not true. Many continue to grow physically for years after that. But in a mental sense especially the law of delayed maturity holds. Most people doing important or creative work do not grow up before they are forty or more.

Does it mean nothing that our United States Senators are for the most part men in the sixties? Probably in the really big jobs men are not quite ripe or mature until they are fifty or over. Perhaps the time may come when, with higher levels of human achievement and more exacting standards of ability, the world will regard the age of maturity as not twenty-one but fifty.

What's that?—Fifty? Why, that's just when so many of our best men break to pieces. And the bulletins tell us that the very best medical help is of no avail.

* * * * *

It is a quick and easy comment to say that So-and-so worked himself to death. But to say that only raises the question as to whether through stress of mental work one ever actually and directly kills himself. Dr. Henry Smith Williams, whom you will meet elsewhere in these pages, and many others believe that no one ever mentally works himself to death. It is wrong living, wrong eating, inaction of muscles, over-taxation of vitals, insufficient elimination and excessive poisoning of the system that kills.

Of course the way in which over-work may help to bring about a man's physical undoing consists in that absorption in business or in duty which prevents him from securing the activity and relaxation that he should have. But many other men work as hard as those who die prematurely, and they keep on working up to an advanced age. Hard work never killed Edison; and there never was a harder worker.

* * * * *

You will find in this number the story of the health of President Coolidge. It just happens to be the good fortune of the Nation that the President is a healthy man. Coolidge is strong because he is strong; because he eats sparingly and therefore is not likely to develop high blood pressure or premature hardening of the arteries. And he is strong because he is a very well self-disciplined citizen; perhaps the least self-indulgent personage that you could find in public office. It is not probable that even the burdens of the Presidency will ever break down the present incumbent, no matter how long he stays there.

Fifty is the dangerous age. There was the case of Paul Rainey, who died the other day of a stroke, at the age of forty-six. He hunted lions with dogs, he explored the Arctic, he was a sportsman, having enjoyed all the benefits of outdoor life. But it seems that even a sportsman may succumb to the indulgences of civilization, or whatever it was, if he does not know how to live, and especially how to eat. This is not to deny that worry and the strain of office, added to any other factors, will contribute to one's undoing. But if a public office places upon a man's shoulders the kind of burdens that are calculated to kill him, as we are told, is that not all the more reason why he should take thought of ways and means to conserve himself?



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How PRESIDENT COOLIDGE Keeps Fit

Based on Information Gleaned from Official Sources

By *Richard Barry*

THIS is an unconventional account of a man who was suddenly called on to step from an inactive position, of which the chief requirement was that he eat expensive dinners, as an official guest, about 365 times a year, more or less, to the chief man-killing job of modern times, the Presidency of the United States; and who is equipped for it, physically.

How came he thus? Did he "take thought for the morrow"? Or, did it just happen? Has he any special regimen? Or any secret of health? What is the source of his physical strength?

The relation of how President Coolidge keeps fit must be filled with more "don'ts" than "do's." Anyone who reads hoping to find some surprising and delightful secret, some record of physical achievement beyond the sub-average, or even a casual recipe for the maintenance of health will be disappointed.

On the contrary, the reader may here conclude that physical fitness is achieved and maintained, at least in this particular instance, now the most conspicuous within our ken, largely by *abstaining* from regarding the body with any particular attention at all. To use a psychoanalytic phrase, the attention of Calvin Coolidge has always been given "more to the psyche than to the corpus."

Yet, at fifty-one years of age, when he undertakes the chief magistracy of the nation, President Coolidge is practically as fit, regarding him solely from the point of view of his physical equipment, as a champion prize fighter about to enter the ring to defend his title.

So much for a statement of an obvious fact to all who have come in close contact with the Chief Executive, who have felt his hand clasp, looked into his eyes, or had occasion to learn the more intimate details which confirm this judgment.

Let us go beyond the obvious and search the record to find the clues to the method which produced this desirable condition. But first, let us dispose of the pictured anomaly presented herewith.

You will observe a photograph of Mr. Coolidge—and remember that a photograph is scientifically exact and fearless in registering a fact—revealing him in the act of riding a horse. The horse is one known as General, a thoroughbred from the White House stables. On one side is a secret service man; on the other side a stable boy.

You will recall that the President was brought up on a farm where he probably rode horses as a boy; you will see this photograph in which he appears to be a better horseman than either of his professional companions; and you might be justified in concluding that horse-backing is his favorite exercise. But you would be many miles from the truth. Until he went to the White House he had not ridden a horse for twenty-five years. It costs money to ride horses in Northampton, Mass., Boston or Washington, and however much he may have relished it, Cal Coolidge never could afford it. Yet there is nothing to indicate that he relished it. Despite the photograph he is not a horseman. In fact, after two or three tries at it when he first went to the White House, he discarded it in favor of walking.

We also present another photograph revealing the President enjoying a ball game; one of the few pictures in existence showing the whimsical idiosyncratic side of him whom a wag in the Massachusetts legislature once called "Silent Cal, the Cautious Cod."

But he is neither a ball player nor a baseball "fan." He has, occasionally, but not regularly, or with any particular zest, attended ball games. Also, he likes to be "pally" with his sons, of whom he is fond,

Sunday newspapers have published photographs of him on board a yacht. It is a luxurious vessel, once owned by Ogden Goelet, now owned by Uncle Sam, and named the Mayflower. But if you called President Coolidge a yachtsman you would be doing violence to the truth, for only twice in his life was he ever on a yacht before he became President.

We might also produce, if it were not too commonplace, a photograph showing him riding in one of the White House limousines, but it would be extremely fictionative to describe him therefore as a motorist. As a matter of fact, during June and July of this year, when Mr. Coolidge was vice-president, at a salary of twelve thousand a year, but living in an expensive hotel suite in Washington, being then in the throes of debating with Mrs. Coolidge about ways and means of enjoying a vacation, these two necessarily frugal Washingtonians, where taxicabs are high, almost had been able to see their way clear to buying a flivver—next year, if they could manage to hold the expenses of the coming winter down sufficiently. Yet with two growing boys in school the chances of next year's flivver did not rate much above fifty-fifty. And when they went, as usual, to spend the vacation period on the Coolidge farm in Vermont, with the Vice-President's father, they rode up from the station in the village bus because it was too far for the father to come after them in the ancient farm equipage. Therefore, no one could fairly call the President a motorist.

At this point, or perhaps before, the quick-minded reader will possibly be reflecting: "Aha! I see the whole situation. Coolidge is just a regular fellow like the average American. He doesn't go in for any highfaluting exercising. He sticks to shanks' mare. Good for him. No exercise like walking. It's cheap—and all



© National Photo

The President and Mrs. Coolidge. Walking being his favorite exercise, the former Vice President was a familiar figure on the streets of Washington.



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A return to the familiar exercise of his boyhood. The photo shows the President pitching hay on the farm of his father, John Coolidge, at Plymouth, Vermont, shortly before the announcement of the death of President Harding. The photo at the right is an interesting character study, showing the President in a particularly happy and whimsical humor at a ball game.



© National Photo

Below—
A statesman's
recreation.
The President
is essentially a
family man.

© Keystone View Co.

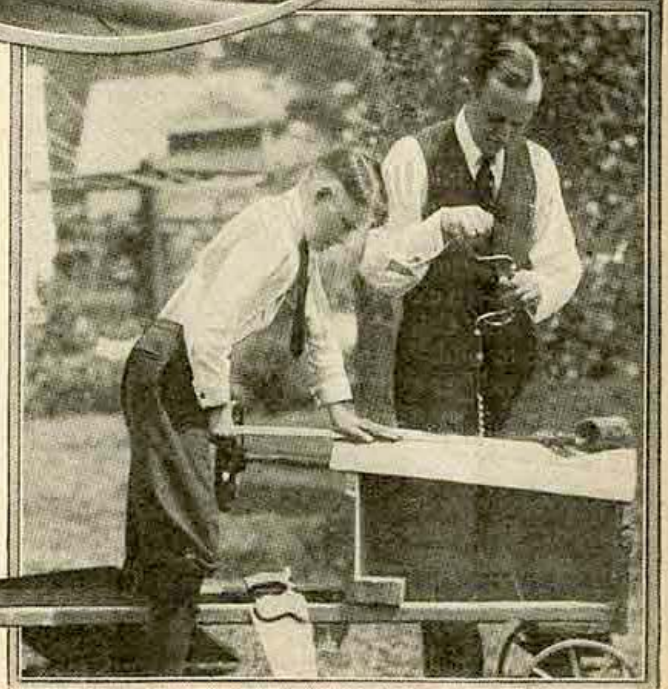
'round—and enough!" Partly right, but not as many have been led to believe.

He is a walker in the sense that that is almost the only physical exercise he has ever had, but he is not a walker in the sense that he makes any special bones about it, or sets himself a certain stint of walking to do each day.

Most of the professional physical culturists who recommend walking as a sufficient exercise are agreed that at least four miles a day is necessary for the normal man to walk if he wants to keep fit. Coolidge has seldom walked more than one to two miles a day in many years.

When he was Vice-President he often walked in the morning after a nine o'clock breakfast, from his hotel to his office in the capitol, a distance of about a mile, but at night he seldom walked home. He took a street car, or taxicabbed, or rode with some obliging friend.

Sundays and holidays and late afternoons he strolled—not walked—with his wife or his boys about the quieter ways



There were motor cars of the first quality, high-bred riding horses and a yacht manned by one hundred and eighty-six sailors and marines, and officered by the picked and favored men of the navy. With a sense of duty rather than of enjoyment the new President undertook to ride and to sail. Gingerly he mounted General for half an hour in the morning. Almost timidly, on Saturday afternoons, after all the regular offices were closed, he would board the Mayflower, with his family and a very few close friends, and sail down the Potomac, but never for more than three or four hours, for the Yankee farmer boy was not confident of his ability to survive any roughness on the water and much preferred the firm greensward of the twenty-seven acres surrounding the White House to the unsteady decks of a steam yacht, however well it might be manned.

Within a very short time, impelled thereto by his medical advisers, the President came to believe that he must allot some of his time for physical exercise. The picture of his two predecessors in office, one maimed, the other killed by overwork, being constantly before him, he was obliged to choose some regimen which he could follow with more or less regularity.

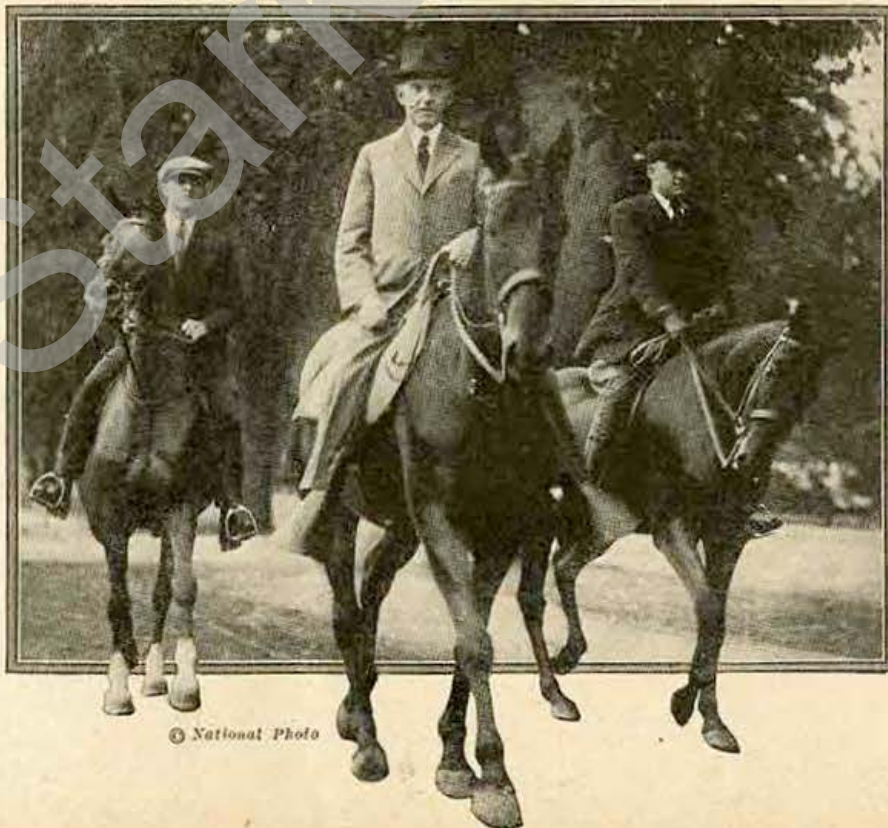
Inevitably his natural predilection induced him to choose walking. If he must have some official form of exercise and must observe it officially let it be walking, he said, in effect. Whereupon he appeared each morning early for a perambulation about the streets of the capital. People concluded he had always gotten up early for a walk. Not so. He devised the exercise to fit the needs of the Presidency and his own tastes.

Promptly, however, Calvin Coolidge learned his first lesson in the limitations of the Presidency. As Vice-President of the United States he could walk up Pennsylvania Avenue to the capitol, rain or shine, as he pleased, and be noted not uncomfortably by very few—just one of many more or less distinguished citizens. Of an afternoon, as Vice-President, he could stroll with Mrs. Coolidge, or with Calvin and John, as he wished through any of the many delightful avenues of the capital, and be unmolested. As Governor of Massachusetts, he had been for three years in the habit of taking his customary common-place walks through the streets of Boston, and only rarely be noticed.

But—there is only one President of the United States. He



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© National Photo

The garden scene above is suggestive of a natural instinct toward outdoor life. One gathers that the President would spend more of his time in such pursuits if opportunity offered.

The President sits astride a horse, very like the Commander-in-Chief of the United States Army and Navy that he is. He rode horses on the farm as a boy.

has no second, no third. There is no one comparable or nearly equal; no one else of such vast potentiality of power; no one else so conspicuous; no one else who begins to come shoe high to the same class with him.

When the President steps into the street the eye of every passerby is instantly arrested. No matter who you are, however rich or poor, however admiring or skeptical, whether a citizen or a foreigner, whether young or old, man or woman, your attention will be drawn, your eyes lifted and you will most likely stop to observe the President of the United States if he is within sight.

Besides, the President is never permitted to be alone. At least one and usually two secret service men are constantly with him, within a few feet of his side. This increases the difficulty of his escaping detection.

Wherefore, the President found it practically impossible to have a morning walk in peace, unless he paced up and down within the White House grounds, like a caged athlete. After only one morning he gave up any attempt to walk abroad in any direction through the streets and decided to confine his romp to the charming and rather large ellipse formed by the acres to the south of the White House, although outside of the Executive Mansion grounds proper. At first he thought, or hoped, that he would be uninterrupted here, as he usually walked shortly after seven o'clock, and just a little before the government clerks are on their way to work. Moreover, the walks around the southern ellipse are seldom frequented, except by tourists, and these usually later in the day.

However, there is a busy "underground" in Washington. Within twenty-four hours it was known that the President might be seen shortly after seven in the morning on the ellipse of the southern mall.

Promptly from the usual number of only one or two persons hastening along that way to some early necessity the ellipse became as crowded at that time as

Dupont or Thomas circles at five in the afternoon.

Even that might have been endured if too great a number of eminent statesmen had not become suddenly converted to the idea that walking is the best form of exercise and the best place to indulge it the ellipse of

the southern mall shortly after seven in the morning. Many of these personages expressed an eagerness to join the President and his secret service companions on the official "hikes."

As the President is a good listener and not a very fast walker—he usually "does" a mile in about 20 minutes—the ellipse seemed to be a better place to put forward the merits of candidates for appointive office than the executive offices of the White House.

That is why the President had to cut out the morning walks early in September when the statesmen began to reappear in the capital from their summer vacations.

Now what shall he do? Take up golf, as many of his friends urge him to do? Cultivate the back of General, as he seems to have a firmer predilection for doing? Or lapse into the established habit of a lifetime and take practically no so-called exercise at all? The probability is to those who know Coolidge that the latter alternative will have a stronger appeal.

After this record has been written the question is still unanswered; how has he become physically strong? We will have to explore, as best we may, his mental habits for the answer.

First and foremost is his ability to say "No." Coolidge for fifty-one years has said "no" to his stomach. He is an abstemious eater to the point of frugal self-denial. If he has any favorite dishes no one in Washington has found it out. An eminent hostess who wished to make an impression on

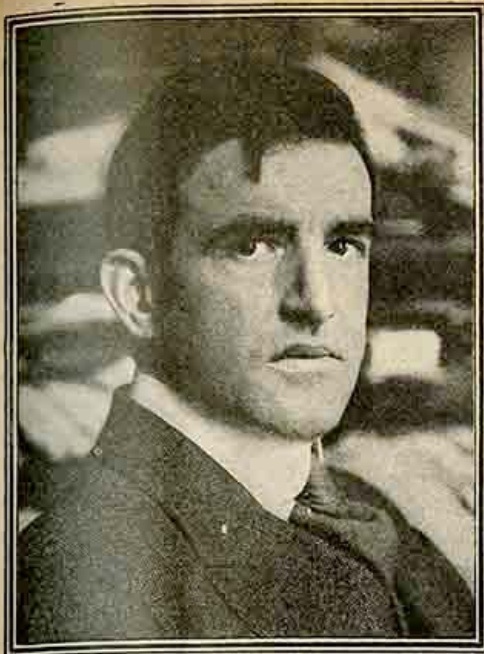
the then Vice-President entertained him at a Thanksgiving dinner. According to old New England custom, she served three kinds of pie, all well and favorably known in the pie belt—pumpkin, mince and apple.

When the pies reached the (Continued on page 74)



© National Photo

The President is wiry, clean-cut, vigorous and strong—a true Yankee type. Such men do not cave in easily.



Insulin

versus

Real Food and Strength

Can You Cheat Nature With the Help of Any
Extract, However Wonderful?

By Alfred W. McCann

WHEN the discovery of insulin was announced by Dr. Frederick Banting, assistant professor of physiology at Western University, Ontario, Canada, the "news" fell flat. Dr. Banting had indeed come down to the December meeting of the American Physiological Society at New Haven, Conn., in 1921, to read a paper describing the use to which he had put sweetbread's fresh from the slaughter-house in manufacturing an extract for the treatment of diabetes.

Whatever the cause, the fact remains that the physicians who composed Dr. Banting's audience paid little or no attention to his paper, his discovery, or his claims. Dr. Banting went back to Canada and took with him the memory of a very disappointing visit to the States.

Little more was heard of the young man or of his pancreatic extract, which he called insulin, until Sir Charles Sherrington, president of the British Royal Society, gave both a terrific boost in an address, advance copies of which were scattered all over the world.

At once the newspapers began to thunder over the scientific miracle. Insulin was described as a positive cure for diabetes. A squirt of Dr. Banting's extract shot under the skin would enable a dying man to get right up on his feet and eat a big meal of the very foods that up to that moment were classified as "sure death."

It seemed that a thousand self-appointed press agents were at work in insulin's behalf, and that the modest claims made by the young physician himself, in the presence of an audience of physicians, only to be regarded with indifference and disinterest, had won an

audience of millions merely by getting into the dime museum and circus side-show class.

This was not Dr. Banting's fault. He can not be censured for the absurd publicity given to his serious and praiseworthy efforts to help the unfortunate victims of a dread and rapidly increasing disease.

Stripped of all extravagance, just what *are* the facts?

Physicians have known for years that when the pancreas of a healthy dog is surgically removed, diabetes results, and sugar begins to appear in the animal's blood and urine. If the pancreas can't function because it is outside the body, and if a diseased pancreas inside the body can function only in a diseased way, and if the

net results in both cases are described as diabetes, it appeared to Dr. Banting that if he could obtain an extract from a fresh pancreas and get it into the body of an animal whose pancreas was diseased, he ought to be able to supply the substance or combination of substances that would act as a substitute for the substances that would have been elaborated naturally by a healthy gland.

As far as the medical world knows, the pancreas turns out two kinds of substances—one that goes to the liver for a definite purpose, and another that goes into the intestines for a purpose no less definite.

The one that goes directly to the liver seems to control

the percentage of sugars that are allowed to get into the circulating blood. The one that goes into the intestines seems to control the digestion of fats.

It so happens that sugars and fats, which include starches and oils of every kind, are not only badly borne by the diabetic but, unless kept down to the minimum, actually hasten death. (Continued on page 92)

Misplaced Emphasis Means Distortion

After all, the really important thing to learn in conjunction with diabetes, as with many other ills, is that they are the result of definite causes in the way of wrong living—sometimes, as in this case, particularly wrong eating. Mr. McCann has no quarrel with insulin as an emergency treatment, but he holds that prophylaxis is far more important than cure, since it is nobler to save ten thousand from the disease than to help one advanced victim.

The trouble with the publicity given insulin lies in the fact that by over-emphasis of the curative value of a certain extract, as beneficial as it is dangerous, the entire subject is distorted and the public is blinded to the big truth as to the relation of diet both to the cause on the one hand, and the prevention of the disease on the other.

—The Editor

"I Want to Live

By Wilbur

ILLUSTRATIONS BY

THE span of life allotted man in Holy Writ is three-score years and ten.

Actuaries for our modern insurance companies figure that the average life of the average business man by and large doesn't pass fifty.

Count in the speeding-up of our intensive civilization, grant that we can't hope to live as long as our forebears, and call it seventy-five years for a man's life.

None too much time to live—to work and play, to have your fling, to settle down a bit, to love and be loved, to marry and to bring about you one or two or three fair-faced little playmates, pals, and admirers—Junior and Jane and Alicia Ann; to develop a philosophy of life, to get beyond the place where you fret and kick against the pricks, to wander about some, to find and make and hold your friends, to read a book or so, to do something worth doing, to spend a few quiet years enjoying it all in retrospect, mellowed by your experience, and then to lie down, quietly and smilingly, until you are lifted up at last by that kindly Host of the Ages, Death! None too much time—seventy-five years.

I want to live the other half of my life.
I'll say I do!

* * *

Just a little while ago a smiling, friendly, able, loved and loving man died, suddenly, at the age of fifty-eight and the world mourned.

Warren Harding seemed a strong and healthy man when he went into the White House. He made some animadversions possible from the Extreme Left by playing a good deal. They wanted something to criticize, and as there wasn't much in his official and public acts and expressions on which they could base a howl they said he spent the nation's time playing golf.



The evidence seemed to be that he was taking good care of himself and that he would live to be a hale, and hearty, and beneficent and honored old man.

But the evidence wasn't all in.

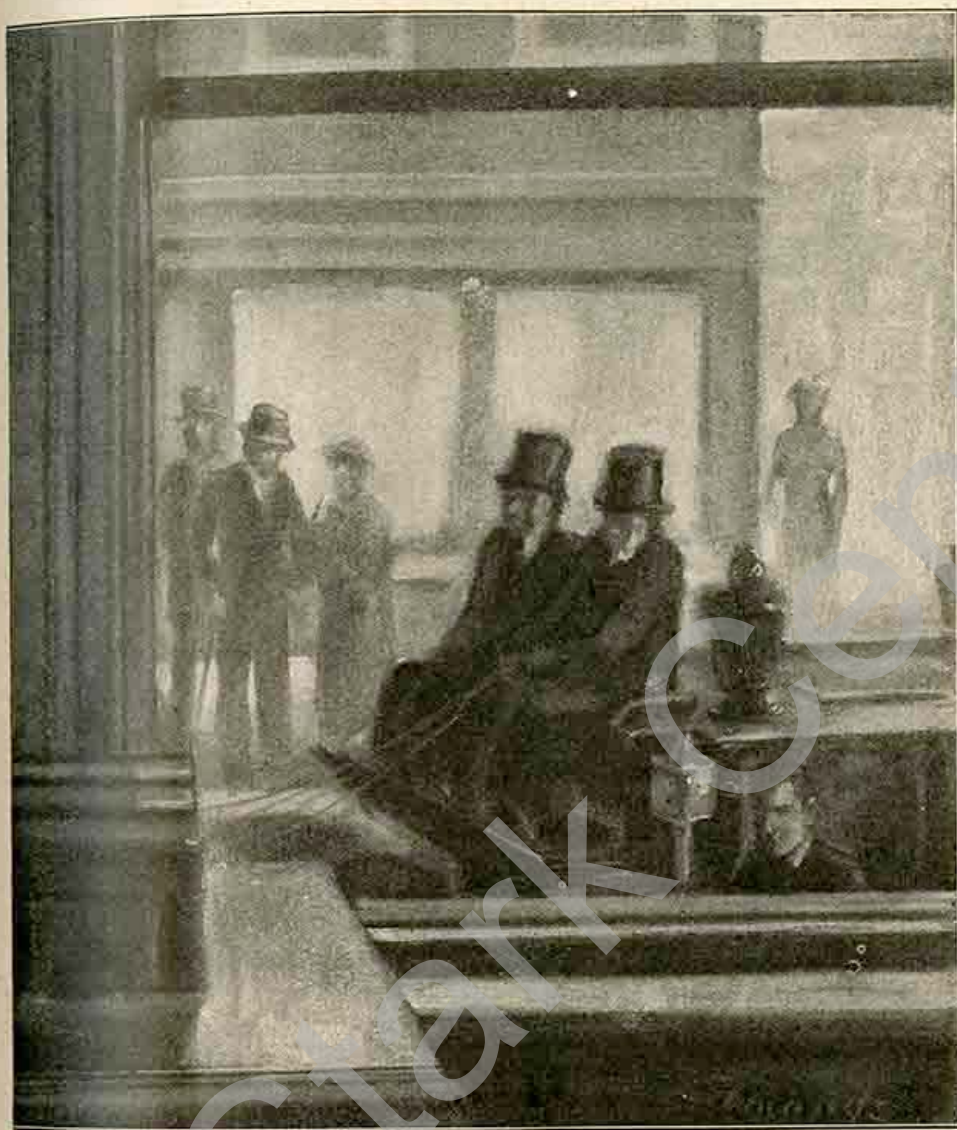
In the first place, as a search of his career will show the skeptical, Harding didn't start to play until he was pretty nearly fifty. He worked hard. He thought a lot. He used his hands and his feet and his head some eighteen hours a day for years. He did go fishing now and again, but his chroniclers tell us that he was often called back because of politics or the Marion newspaper or something, and he never let down entirely until his doctor warned him that he would have to do so or else expect his final summons ahead of time.

In the second place the office of President of these United States is a killer. With few exceptions our Presidents have gone into private life gravely weakened physically—some of them carrying on their grave

the Other Half!"

Hall

JOSEPH ST. AMAND



But the poet laureate of jazz forgot to add: "And this is also the death!"

* * *

One of the three most remarkable magazine editors in America conceived a few years ago that a publication could be popular and profitable in America if dedicated solely to the glorification of business success.

He reasoned, soundly enough, that there is not a man, woman or child in America but has some desire to acquire goods of this world. (The exceptions to that rule are so scarce that they create barely enough evidence to prove the rule!) And he declared that a periodical that would preach success, show how it was achieved, give examples of it, present pictures of it, and deal with it to the exclusion of everything else except an occasional entertaining story or article for contrast, would itself succeed.

faces the mark of the death warrant. The Presidency hastened Warren Harding's untimely end.

Except for assassination untimely death isn't the portion of rulers in other countries, noticeably. The fact is that we work our Presidents to death just as we work our presidents to death, and our general managers, and our department heads, and our chairmen of the boards, and our treasurers and our chief clerks and our salesmen and our bookkeepers and our stenographers and our office boys. That's the whole fact.

It isn't just the Presidency of these United States that is the man-killer.

It is the whole damned system, from top to bottom.

It is our world famous git-up-and-git—that American quality of which we are the most proud and for which we are the farthest famed and before which we fall as half-ripened grain before the untimely mower.

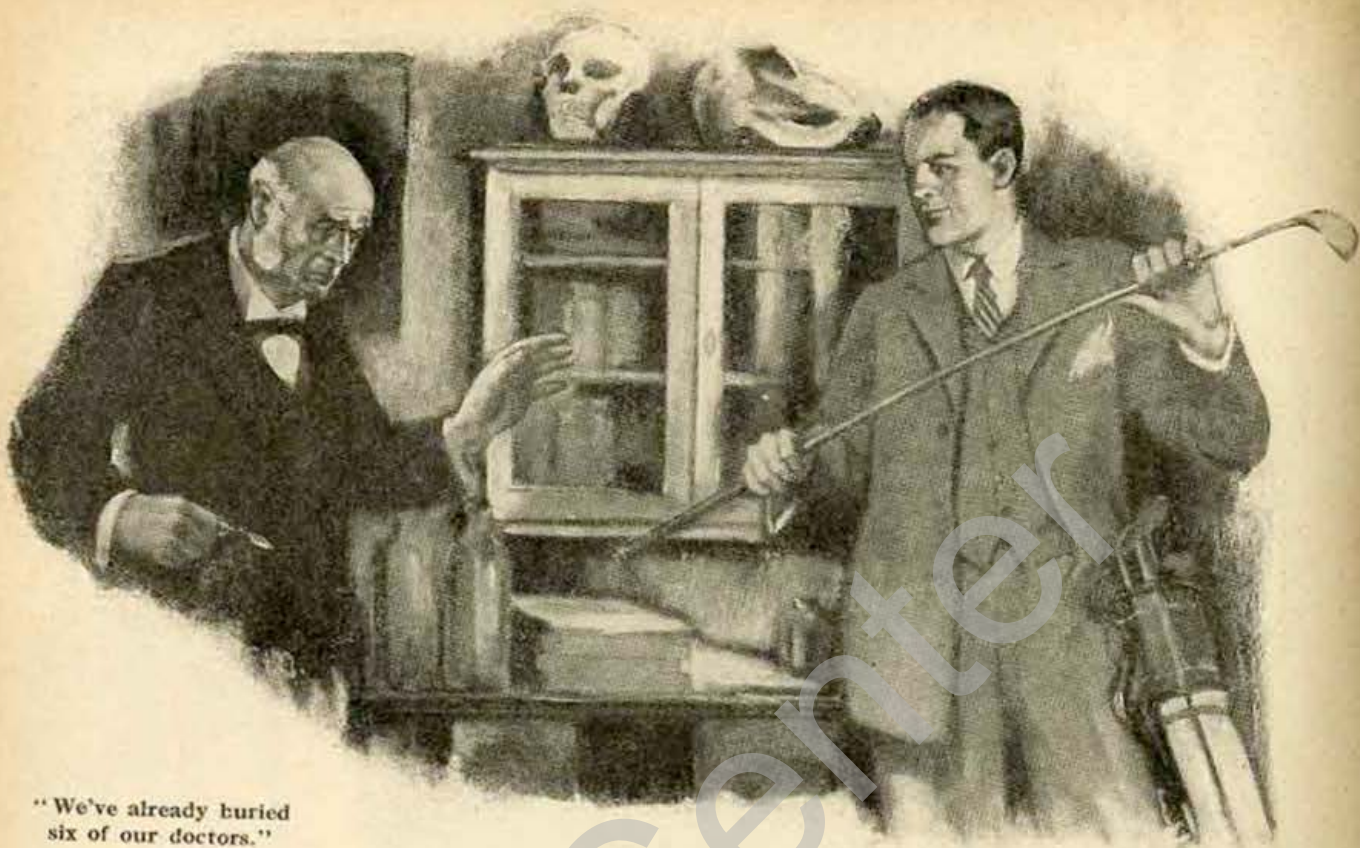
"This is the life——"

Operating on that theory of his John M. Siddall built the American Magazine. It was, under his guidance, not only one of the most interesting and entertaining and instructive and helpful monthly books in the world, but it attained a phenomenal and enviable success, financially and as an influence in the world. John M. Siddall, who was known to millions for the helpful, chatty, pungent little preachments he wrote for his magazine and signed Sid, was a definite, positive inspiration to a nation of business men and women and those who aspired to get ahead.

The other day John M. Siddall laid down his pen—at the age of forty-eight.

He had preached and taught success, and gained it himself, and in the very middle of his work, and in the very prime of his life, he paid the penalty.

He was a lovely, genial, helpful, kindly friend. Hundreds of writers grieved for him personally, when he was gone. He was a fine man, a splendid man, an



"We've already buried
six of our doctors."

unusual man. He might have been a really great man, in every sense of that word, if he had taken thought for his body. He didn't. He just lived and breathed and slept and ate his job. And he died before it was finished.

* * *

About fifteen years ago an emaciated, broken, dying young man came out to Colton, California, to spend his few last weeks in the heat that his physicians thought would ease his laboring lungs. At Colton he met another dying young man; as both of them had been employed by the same big newspaper owner they became friends.

Jimmy Swinnerton, the cartoonist, said to Ashton Stevens, the dramatic critic:

"Hello, Stevens! You're looking pretty bad. How do the doctors figure your case?"

Stevens replied: "Hello, Swinnerton. Yes, I'm in bad shape. The doctors have given me about two months to live."

"How many of them passed on your condition, Stevens?"

"Four, Jimmy. The best men in Chicago."

"Four, eh? Well, they've given me six weeks on this terrestrial ball. Five of them. Four for you—five for me. That makes nine in all. Let's fool 'em, Stevens!"

* * *

Jimmy Swinnerton told me the story the other day. He is now about the size of the town plumber, his chest and shoulders would do credit to a professional wrestler, he has the stamina of a horse, the appetite of a farm-hand, and the general physical condition of a

hammer-thrower. He is ruddy, tanned, full of life, energy, strength of body, mind and purpose, and is just beginning to develop a lot of talent that he didn't know he had. Before he dies he is going to be one of the world's greatest painters of American desert landscapes.

"You pulled through, Jimmy?" I said. "In spite of the nine doctors. Both of you got well?"

"Oh, yes," Jimmy said. "Yes, Ashton and I are both doing as well as could be expected, and probably better. We've already buried six of our doctors and there are two more of them who are weakening fast!"

Jimmy Swinnerton and Ashton Stevens didn't lie down and give up. They caught their trouble in time. They went to the bat. They put up a fight. Jimmy said, concerning the physicians' verdicts: "Let's fool 'em, Ashton!" And they did it.

* * *

You and I aren't in the condition those two men were when they received the death sentences that they refused to accept. Probably we are fair average samples of American business or professional people, with nothing the matter with us at all except that we have a cough in the morning, and a headache now and then, and smoke too many cigarettes, and feel vaguely that there is something in this stomach business after all, and can't eat strawberries or tomatoes or fish or something because, we find, these things disagree with us, and occasionally lose part of a night's sleep through wakefulness, and want to kick the dog or yell at the children oftener than we used to, and are generally just about on the verge of finding out that we have bodies and wondering what (Continued on page 85)

Breathe an Extra Balloonful of Air Each Day

By L. E. Eubanks

ONCE heard a man say that merely to talk about deep breathing was a tonic, that there was something in the expression that strongly suggested strength and vitality. Instinctively we all know, even though we may have but little knowledge of the body, that "air is life." Shallow breathers are bound to be weak and easily fatigued, while deep, rhythmic respiration generally indicates superior physical powers.

But a great many people hold mistaken views on deep breathing. Perhaps all my readers have at one time or another heard the advice to "take a dozen deep breaths a day and keep consumption away." The common impression is that we can take a dose of air as we could a dose of medicine. Many writers on health have stated that five minutes of deep breathing in the morning will fortify the indoor worker, school boy, business man, etc., for the day's confinement, that the lungs can in that brief time store up enough oxygen to supply the body for a number of hours.

This is not true. Much as I would like to encourage you to believe it, I cannot conscientiously do so. If you are in poor health and seeking to improve your general condition, or if you are a husky chap training for athletics—in either case you should have more "additional" air than you can breathe, even by extraordinary efforts, in five or ten minutes.

Old beliefs die hard, but I base my statement on twenty-odd years' experience in physical culture work. Breathing exercises as taken by the average person are of little benefit; but I shall tell you how really to get the maximum value from them. The additional air that you can crowd into your lungs in five minutes of deep inhalations, while it seems large, really is insignificant when we compare it to the volume breathed in twenty-four hours. It is like the proverbial drop in the ocean. Ordinarily the person exercising just stands before the window, "does a certain number," perhaps with his mind on something entirely foreign to the work in hand, then proceeds to

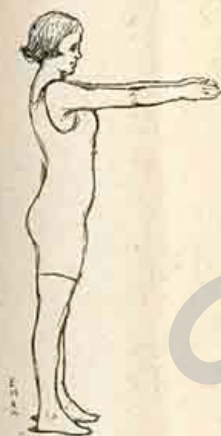
forget all about respiration for the balance of the day.

Deep breathing should be a habit. By this I do not mean that you should take all the air possible at each breath, but that you should breathe more deeply than the average person does. The "tidal air" (the volume ordinarily breathed when in repose) is from twenty to thirty cubic inches. Suppose you so train your breathing muscles that you get just five inches more than this with *each* inspiration. It would be but a slight percentile increase, but figure a moment. If you breathe sixteen times a minute (of course the average varies), you would be getting eighty cubic inches of air more than before training—4,800 an hour, and 115,200 cubic inches every twenty-four hours!

The *habit* of deep breathing is the greatest of the benefits that come from breathing exercises. It is the object for which all systems of breathing gymnastics are devised. But ninety per cent. of these systems are failures, because they fail to take into account the part played by the mind. It does not matter how often or how long at a time we do a thing, if we always do it in a haphazard, absent-minded, mechanical way, the habit will never take a very firm hold.

Without any intention to go deeply into the psychological phase, it is best to explain that habits are developed in our sub-conscious mind. It is a sort of record-keeper; when the conscious mind does a thing many times an impression is made on the sub-conscious mind, and it finally takes over the reins. But a prime essential to this result is that we perform the act consciously, that is, with deliberation, care, *attention*. As an example, you doubtless have noticed that if you go to bed with a determination to wake at a certain time, and think of it often and anxiously before you go to sleep, you awake at that hour or before. "Buffalo Bill" and one or two others of his period are said to have been able to "wake on the minute." This is a practical use of the sub-conscious mind.

So habitual deep breathing de-
(Continued on page 84)



What Makes a Family

The Mainsprings of Family Strength Are
Family, Experimenting With Heredity,

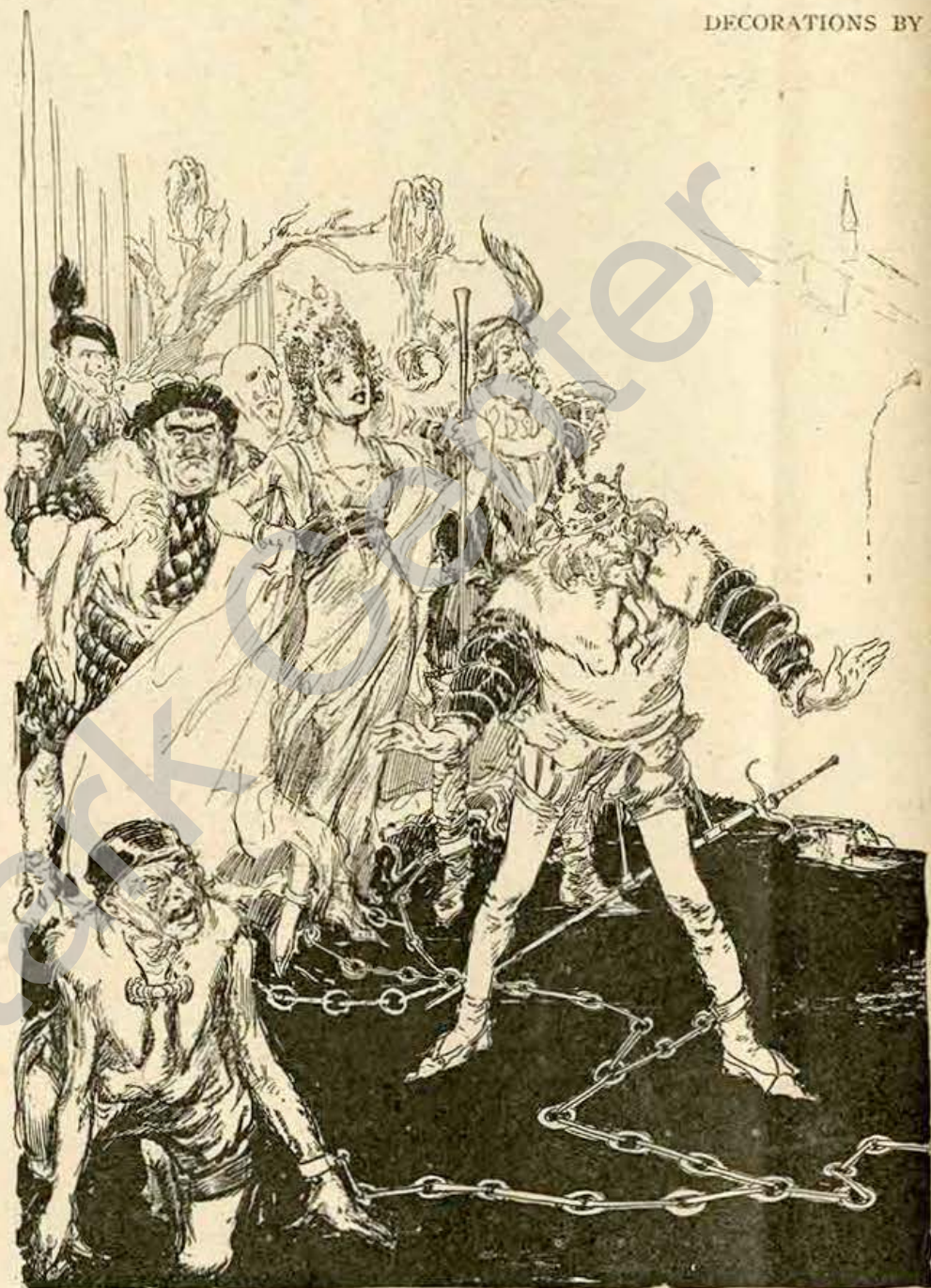
By Albert

DECORATIONS BY

WHEN Admiral George Dewey sank the Spanish fleet in Manila Bay and Sampson and Schley finished what was left of it in Santiago Harbor no one except a few students of biology—the science of living things—realized that here was enacted the last act in one of the greatest marriage dramas in the world's history. Few realized that this was the culmination of a story of heredity, a story of the strength and weakness of human blood, which had been continued through ten long centuries and which came to its tragic end when the curtain was thus rung down upon the drama of Spanish greatness.

It was, as war always is, the supreme test of the strength of two nations pitted with all their wealth and man power against each other. America would do well today to reflect upon what were the *actual* factors that made Spain so weak, tyrannical and pusillanimous, and consider the possibility that her own national greatness and influence might come to the same disgraceful end. Lest history repeat itself.

It was only yesterday—little more than three centuries ago—that Spain was mistress of the world, her armies the mightiest in Europe, her commerce carried to every land, her universities filled with scholars and her ships feared on every sea. Few have inquired why it was that yesterday the word of Spain stood against the world, while today there is scarcely any so poor as to do her reverence. It did not “just happen.” It



was not one of the “accidents of history.” History knows no accidents. It was due to definite causes. We call events “accidents” merely when we do not know their causes. But the biologist has at last unravelled the real cause of Spanish decline. It was a decline in the blood of her leaders. When the strong blood of leadership declines in any nation, that State soon ceases to play a part of dignity and influence upon the world stage.

or a Nation Strong?

Identical With Those of the State—How One Determined the Glory and the Fate of a Nation

Edward Wiggam

JOHN R. NEILL

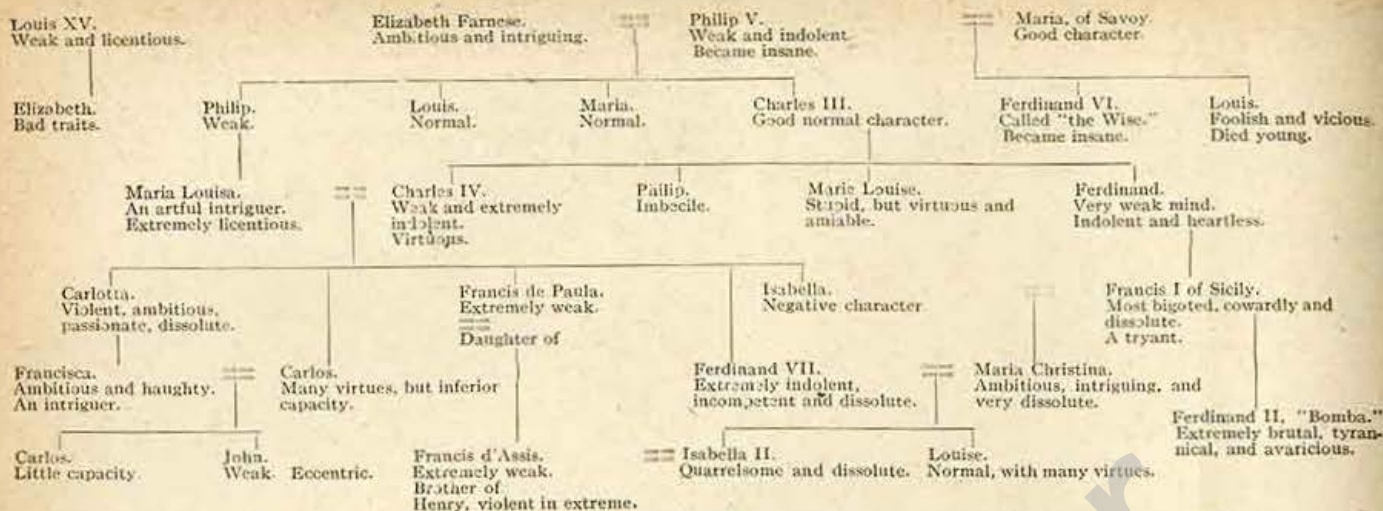


Is America starting upon this downward road—this loss of the springs of national power? Some signs indicate it. Prof. William MacDougal, the distinguished social psychologist of Harvard, who recently came to America from Oxford University, England, after surveying the tendencies at work in American life, sends out this solemn warning: "When I see America dancing gaily, with invincible optimism, down the road to destruction I seem to be contemplating the greatest

tragedy in the history of mankind." These are not reckless words. They issue from a great background of facts and not theories, of sound thinking and not hysterical sensationalism.

It is not my purpose to review the signs of American decay marshalled by Prof. MacDougal, a national service which he performed in his recent book entitled "Is America Safe for Democracy?" I wish rather to turn the reader's mind to the same great lesson of national strength and weakness that lies behind the Spanish-American War. No more instructive picture of what makes a nation strong or weak was ever given to the world. It is the lesson of the quality of the people, of that inner character and constitution which runs in the blood of families and which is handed from parents to their children—the thing which the biologist and psychologist call heredity.

It is due to the genius of Frederick Adams Woods, the American biologist, that we are enabled to unravel this rich and fruitful lesson of national greatness and decay. In his two famous researches entitled "Mental and Moral Heredity in Royalty" and "The Influence of Monarchs" Dr. Woods has submitted abundant proof of two great features of human life and history. The first is that heredity, a man's natural, inborn capacities, temperament and energy, is by far the most important factor in making him what he is, in giving him the thing which in a general rough way we call his "character." The second



The Family Chart of Modern Spain, showing how degeneracy is carried on when once introduced into a family. The double horizontal lines connect husbands and wives; the perpendicular lines connect parents and children. The single horizontal lines connect brothers and sisters.

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is that a nation's leaders are the shaping power in its national life. In Europe for many centuries each nation's leaders have usually been its kings. They do not amount to much now, but Dr. Woods has shown by the history of fourteen countries of Europe stretching over a period in each country of from five hundred to one thousand years that their fortunes have gone up and down just as the blood of the rulers has gone up or down in its quality and power. And the blood of the rulers he has shown in his "Heredity in Royalty"—the most important research in eugenics ever made—has gone up or gone down just in proportion to their marriages into good or bad family stock. As I showed by other evidence in last month's issue of *STRENGTH*, it is at the marriage altar that the fortunes of men and of nations are made and unmade. In the long run it is mainly heredity, the thing that is determined for the children when their parents marry, that shapes our ends, "rough-hew them how we may."

Let us see then how these two theories have applied to Spain, how they account for its good and ill fortunes, how good heredity in its leaders was its source of strength and how bad heredity brought on the national weakness that ended her pride and glory in the disasters of Manila, Santiago and San Juan Hill. For there is no reason to think that America can defy these laws of heredity and escape the same fate. Nature knows no forgiveness and grants no reprieves when her laws are disobeyed. It is a stern but true lesson that America must learn that "We conquer nature only by obeying her."

As I have said, the drama of Spain is the heredity of her Royal Families. For *twenty-one generations*—from Sancho II in the tenth century to Charles V in 1558—every ruler except five had all the virtues that we think of as belonging to a king. They were the real born leaders of their people. When these five weak rulers were on the throne the prosperity, culture and general life of the people practically always immediately declined. But the moment a strong ruler ascended the throne the national life took a new turn and a new mental and physical activity thrilled the common people. Furthermore, all the great rulers, as well as all the weak

ones, are amply accounted for by a simple study of their ancestry. The geniuses and great warriors appear where we would expect them by the laws of heredity, and the stupid and weak sovereigns follow the same rule.

It would be more entertaining, no doubt, to read the story of the noble days of Spain under her long line of wise and virile kings. But I think it will be more instructive to spend some time also in contemplating the days of her sorrow and loss of world power, because these two periods correspond *exactly* with the wise and the unwise marriages of her sovereigns. During the long centuries of her greatness there are ninety-seven princes, princesses and kings whose character and abilities Dr. Woods has submitted to exact study. Out of these ninety-seven there were thirty-nine of heroic abilities, *more than one in three!* By an impartial method Dr. Woods graded all the royal families of Europe over a period of several hundred years in ten different grades for both intellect and morals. And by this method one out of three of these ninety-seven royal personages fall in grades from seven to ten for intellect and average almost the same for moral character.

Unless one reflects upon human beings in general he cannot appreciate what an astounding thing this is. Let him imagine some village of ninety-seven inhabitants producing thirty-nine men and women capable of ruling parliaments, inspiring nations with admiration or fear and commanding armies. Or let the reader look out of his window and count the first ninety-seven adult persons that pass by. Then imagine the possibility of finding among them a dozen or more men to whom a whole nation would apply such eulogies as the following: Sancho II, "The Great;" Ferdinand I, "The Great," "Able general, high abilities and virtue;" Alfonso VI, "The Valiant," "A great warrior;" Alfonso VII, "No common monarch, defeated the Moors, enlarged his dominions;" Alfonso I, "Great warrior, the best king in the world"; Ferdinand and Isabella, "Great rulers, noble characters, patrons of Christopher Columbus;" Charles V, "Greatest man of his time, Emperor of the Holy Roman Empire."

It passes all belief that any sort of education or oppor-

tunity or environment could produce such as astonishing array of truly noble names from so limited a number of persons. One can think of absolutely nothing but blood heredity, that is, inborn natural qualities, that could be the true cause. Education and opportunity do a great deal for a man. If that were not true there would be no use of writing magazine articles or trying to inspire one's fellows to greater achievements. All these efforts are worth while and often produce amazing results. But we cannot rely on environment or education alone. We must have something to build on, something, so to speak, that environment and education can get hold of. No million-dollar genius ever came out of a ten-cent boy, and it is seldom that a real million-dollar boy does not rise and take his place of natural leadership over the rest of us. Among these ninety-seven persons of Dr. Woods's study there were forty-one who were actually sovereigns on the throne. Of these actual kings and queens twenty, that is, almost exactly one in two, are ranked by the impartial opinions of historians in grades seven to ten for intellectual abilities, and most of them rank high in moral character.

But astounding changes in both the family and the nation's fortunes took place in the Sixteenth Century, when Spain and the Royal Family were at the height of their power and greatness. By a series of marriages, too complicated to explain in detail, insanity and imbecility were both suddenly brought into the family. From that hour Spain was doomed. She took the rock foundation of sound heredity from under her national edifice and replaced it with the sand of weakness and folly.

Her people became stricken with poverty, her world dominion vanished. Her course from that day to this has been one long series of misfortunes until the final tragedy came at San Juan Hill and Manila Bay. One need only inspect the family charts presented to understand the true cause of her national decay. The same has always happened and always will happen to the nation that pollutes the blood of its leaders or

allows them to vanish by race suicide as in America.

Spanish greatness came to its culmination with the reign of Charles V in 1558. In his old age he suffered from insanity. This unfortunate disability seems to have entered the royal families for the first time through his grandmother, Joanna "The Mad," who was out-and-out insane. But once introduced it has run down the past three hundred years like a curse from heaven through the royal families of Spain and Austria. I have little doubt now that we know the laws of heredity, that wise marriages will weed this insanity and also a strain of feeble-mindedness out of these families. This is only a surmise. But this can be done in these families by one or two generations of wise marriages as it can in any family. We can breed a family up or down as readily as the stock breeder can breed his animals. It is commonly believed that cousin marriages among the royal families has produced this feeble-mindedness and insanity. This is not true. Intermarriage, *no matter how close*, never creates insanity, feeble-mindedness or anything else. It merely carries along in intensified form whatever is in the breed, whether it be good or bad.

Any cousins who wish to marry—indeed, every one—should obtain the blank family record booklets of the Eugenics Record Office at Cold Spring Harbor, New York. They should then write up the records of their families in these booklets—the records of *both parties on both sides* for two or three generations back. If they will undertake this seriously and furnish full family records the Eugenics Office will then be glad to give advice as to safe and unsafe marriages. Thousands of young people are doing this. The work of the Eugenics Office is free of charge, and any information given to its staff is absolutely confidential. Every family in America will no doubt before long work up their histories and place them on record for the benefit of their children. There is no greater thing parents can bequeath to their children than a full record of *all* the family defects, virtues, achievements, ability and temperaments, the general

(Continued on page 76)

HOW GOOD AND BAD MARRIAGES WILL AFFECT THE STRENGTH OF YOUR FAMILY

These two lists of names show the results of good and bad marriages in the Spanish Royal family. For twenty-one generations the marriages were nearly all good. The noble scions of this stock are given at the left. But in the Sixteenth Century the splendid blood which produced the first list of descendants was married into the bad blood of the Bourbons which has scattered degeneracy all through the Royal Families of Southern Europe. Some of the latter descendants are shown at the right. The descriptions attached are taken from historians who have studied the records. Copied by permission of Dr. Frederick Adams Woods and Henry Holt and Co. from Woods's "Mental and Moral Heredity in Royalty."

A LINE OF FAMILY GREATNESS

Sancho I—"Pious, prudent, great courage and energy."
 Ferdinand, "The Trembler"—"Trembled in battle, but successful warrior."
 Sancho II—"The Great."
 Ferdinand I, "The Great"—"Able general, high abilities and virtue."
 Alfonso VI, "The Valiant"—"Great warrior."
 Alfonso VII—"No common monarch; defeated the Moors; enlarged his dominions."
 Ferdinand II—"Very able general. Estimable and generous."
 Ferdinand III—"Just, able, pious; valiant soldier, triumphed over Moors."
 Alfonso X, "The Wise"—"Advanced learning and science."
 Alfonso XI, "The Good"—"Great warrior." "Best king in the world."
 Ferdinand and Isabella—"Great rulers." "Noble characters; discovered America through Columbus."
 Charles V—"Greatest man of his time." "Emperor Holy Roman Empire."

A LINE OF FAMILY DEGENERACY

Louis XV—"Weak, licentious."
 Philip V—"Weak, indolent, insane."
 Elizabeth—"Bad."
 Charles III—"Mediocre, normal."
 Ferdinand VI—"Insane."
 Maria Louisa—"Intriguer, extremely licentious."
 Charles VI—"Weak, indolent."
 Philip—"Imbecile."
 Carlotta—"Violent, ambitious, dissolute."
 Francis I—"Bigoted, cowardly, dissolute."
 Francisca—"Ambitious, haughty, intriguer."
 Ferdinand VII—"Incompetent, dissolute."
 John—"Weak, eccentric."
 Maria Christiana—"Very dissolute."
 Isabella—"Quarrelsome, dissolute."
 Francis d'Assis—"Extremely weak."
 Alfonso XIII—"Gallant, generous, moderate ability."

Hiking with Jim Hocking

You Would Enthuse, Too, If Walking Made You Younger Each and Every Year

By Alvin F. Harlow

EACH year for a number of years past, Jim Hocking has made it a practice to walk on his birthday as many miles as he is years old on that day. This year the figure was 68—a mere trifle when you remember that the same man has walked as much as 97 miles in a single twenty-four hours. Just how long he can keep up this birthday habit is a matter of much conjecture among those who know him. So far as can be ascertained, no man has ever yet walked 100 miles in a day at the age of 100 years, but it would be just like James H. Hocking to try it, and from present appearances, to do it.

Hocking is perhaps not as well known to the people of America today as he would have been twenty to thirty years ago, before automobiles and aeroplanes had so largely supplanted human feet as methods of locomotion. In those days, one of the long-distance walking stunts of O'Leary or Weston or Ennis was trumpeted from one end of the land to the other. Hocking has broken long-distance records of all three of these men, and in nearly every case at a considerably greater age. In fact, in the last few years he has plumb ruined so many of those elderly gentlemen's records that they are now becoming resigned to the belief that in a few years more, if Hocking doesn't break a leg, they won't have a record left to their names.

Walking for health and pleasure has always been a passion with Hocking. He began it when a boy in England, and the older he grows, the more enthusiastic he becomes. He is truly an apostle of walking—always bubbling over with talk upon the subject. Give him half a chance and he will lecture you about it; and now and then he writes a newspaper article boosting the sport. On his long-distance hikes, numbers of curious folk gather around him at the end of the day's trek, and he never loses the opportunity to tell them of the joys and benefits of walking. One frequently hears him say at such times, "Well, I believe I had a number of converts today," just as if he were an evangelist speaking of the saving of souls. There is no doubt in my mind that his longer, more spectacular walks are undertaken quite as much to spread the gospel of pedestrianism as to gratify his own love of the sport and his desire for records.

Jim Hocking was born in Cardiff, Wales, in 1855. His parents removed to London and then to Amer-



Photos by Keystone View Co.

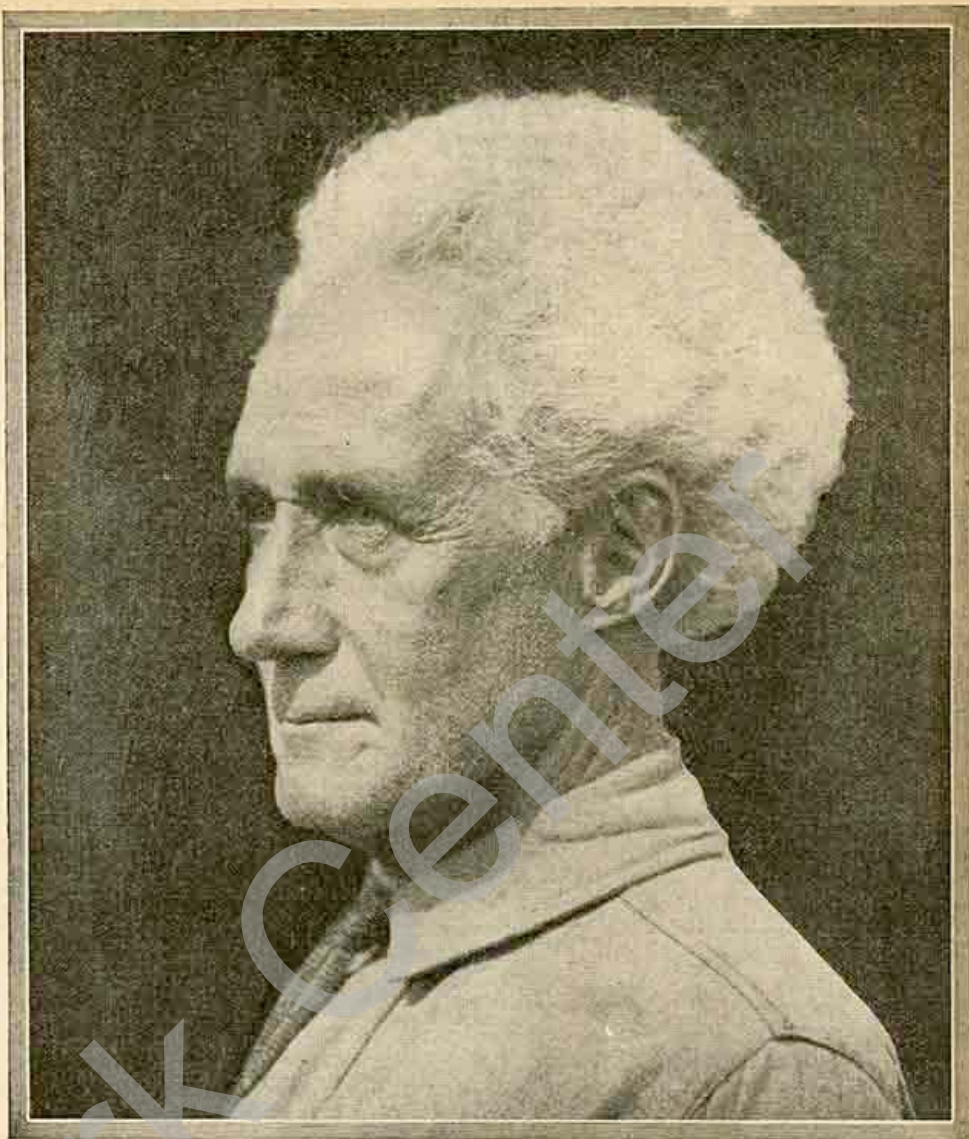
"And when he walks he walks all over." It is not alone the vigorous heel-and-toe action, nor the lifting swing of the arms, but the collaboration of all the muscles of the body that carries him along in that free, beautiful, swinging action that he calls walking. Note the toeing forward of the feet.

ica while he was still a boy, and he graduated from New York City College in 1872. He comes of a family of sturdy lovers of sport and the out-of-doors. His father, Bartholomew Hocking, in his younger days was a famous amateur wrestler in the old Cornish rustic, bare-foot, catch - as - catch - can style. After coming to America the elder Hocking lived in Brooklyn for more than thirty years, and down to within a few days of his death at the age of eighty-three, he walked every day between his home and his cigar store on Wall Street, Manhattan.

Jim Hocking's first public appearance was at Madison Square Garden on March 1st, 1879, when he won the one-mile walk (novice) in 7 minutes, 56 seconds. He won twenty-one prizes during his first year of competition, and did not receive a single caution from the judges for unfair walking. Before the end of the year he had joined the Scottish-American Athletic Club, and carried its colors to victory on many occasions. It was during that year also that he, the late James E. Sullivan and "Father Bill" Curtis organized the first walking club in the United States. During the early '80's he was known as one of the best of American walkers, being placed in from twenty to thirty contests every year. In sharp contrast to his long-distance forte of today, his specialties then were the shorter distances; in rapid succession he hung up new amateur records for the eighth, the quarter and the half mile.

Then there came a decline in the popularity of walking matches and even of walking, which lasted for many years. Veterans like O'Leary, Weston and Ennis went out alone and made records for long distances, but few other persons ever attempted any long walks unless they had to. Jim Hocking was one of those who never let himself get out of training.

Some twenty years or more ago, folks began to take more interest in pedestrianism. It was in 1911 that Hocking joined the Walkers' Club of America, in New York. He was such a regular and enthusiastic participant in the club's hikes and such an authority on walk-



When you see a face like this you may know that the man is a lover of Nature and that he has the soul of a poet. Such a man keeps young, in body, mind and spirit, indefinitely. Every once in a while some creaky elderly gentleman will say to Jim Hocking, "Look here, Jim; you can't keep up those long walks forever. When you're as old as I am, for instance—" Whereupon Jim will break in to say, "Well, how old are you, and how old do you think I am?" And then the elderly gentleman, who feels that he is getting on, replies that he will shortly be fifty-eight or sixty, only to get a laugh out of Sunny Jim, who was sixty-eight on October 8th. Most of the "so-many-years-young" people you meet more or less look their age, except that they look vigorous for one of whatsoever age it may be. But to meet Hocking you would never believe him to be within a couple of that traditional three score and ten. It's not in his face, nor in his body. If enthusiasm is an index of youth, then youthfulness sticks out all over him. He has elasticity, endurance, vitality—the qualities of the champion athlete. James H. lives on South Broadway, in Yonkers, and is superintendent of the building of the American Radiator Company, West 42nd Street, New York City. Let him know you are interested in walking and he will invite you to go out on the road with him. And if he does, do it. He will fill you full of enthusiasm.

ing that he was soon made Pathfinder, a position which he held for many years. At the end of the year 1916 it was announced that he had not missed one of the club's regular Sunday hikes in four years, and had covered 5,000 miles in that time. As these hikes take place on only about forty-two days in the year, his mileage must have been accomplished in 168 days, or at the rate of about 30 miles per day; and remember that these days embraced hot sunshine, rain, hail, snow and sleet, through all of which the redoubtable James never wore a hat. In 1916 alone he walked 1,350 miles on these Sunday jaunts, some of which ran as high as 50 miles.

But in the meantime he was doing some more spec-

tacular stunts. Edward Payson Weston had set the record between New York and Philadelphia, 97 miles, at 23 hours and 40 minutes. Hocking bettered this record by a few minutes, but in 1913 a man named Scott, who was connected with the Wanamaker Stores, walked from that concern's New York store to the one in Philadelphia in 21 hours and 56 minutes. The late John Wanamaker, talking about the feat one day with the head of the American Radiator Company, by whom Hocking was employed, remarked that Scott was 48 years old.

"That's nothing!" remarked the radiator man. "We've got a man 58 years old up at our place who can beat Scott's record any day!"

A jesting challenge followed; and the result was that at 3 A. M. on one June day in 1914, Hocking set out from the company's office in New York and reached Philadelphia at 10.35 that night, having walked the 97 miles in 19 hours, 35 minutes, lowering Scott's mark by 2 hours, 21 minutes. Not satisfied with this, Hocking set out again in 1917, at the age of 61, and did the journey in 19 hours, 16 minutes, clipping 19 minutes from his own record. He felt so fine when he reached Philadelphia that he decided to continue on towards Baltimore next day, which city he reached in the actual walking time of 43 hours, 16 minutes, or an average of 4 $\frac{3}{4}$ miles per hour for the 205 miles. This was nearly 6 hours better than the previous record for the course, made by John Ennis.

Before this last feat he had smashed another of Ennis's records by walking from New York to West Point, about 50 miles, in 9 hours, 20 minutes. On another occasion he walked it by a slightly different route in 8 hours, 45 minutes.

In the fall of 1915 he set out to spoil Weston's record of 6 days and 2 hours for the 252 mile distance from New York to Boston. In this he was decidedly successful, finishing the course inside of five days, or a few minutes less than 60 hours of actual walking time. A peculiar feature of the human economy was made manifest on this trip. During the first three days the weather was cool, and the walker actually gained four pounds in weight. But on the fourth day a heat wave struck New England, and he was not only compelled to slow up in his pace and shorten his hours, but he reached Boston eight pounds lighter than when he started, hav-



This photograph of James H. Hocking was taken in March, 1880. This boy was breaking walking records in the late seventies and early eighties, and never outgrew the habit. He hasn't changed much, except in the color of his hair, and except that he is now a better walker than he was then. There is still the same identical light in his eye.

ing therefore lost twelve pounds in two days. On the way back from Boston, Hocking ambled easily from Northampton, Massachusetts, to Poughkeepsie, N. Y., 142 miles, over the steep, rough grades of the Berkshire hill country, in 45 hours. On this walk again he gained four pounds in weight.

In 1916 his big stunt was a stroll from New York to Albany, in which he put another of Ennis's records into the discard. In 1898 Ennis had covered the distance in 35 hours, 44 minutes. Hocking left New York at 4.15 A. M., and that evening pulled into Poughkeepsie, having done the 78 miles in 16 $\frac{1}{4}$ hours, which was a new record for that stretch through the rough highlands of the Hudson. On the following day he did 62 miles more, and on the third morning walked the remaining 13 $\frac{1}{2}$ miles, making his record for the 154-mile journey 32 hours, 20 minutes. He lost only three pounds in weight, and at the end of the hike felt so fit that he ran up the 150 steps of the State Capitol building. Weston and others had previously gone after Ennis's record without success.

Lest anyone should suspect the genuineness of these long walks, let it be understood that great care is taken to prove their authenticity. The precautions on this Albany trip were unusually elaborate. There were 25-checking stations on the road between New York and Albany. Bicycle riders met Hocking at each checking point and accompanied him to the next station. Each relay signed a book which Hocking carried, and the walker in turn signed a book which remained in the custody of the relay riders. Thus there was a double check along the whole route. Even when he goes out on his birthday hikes, Hocking carries a card on which he gets the signatures of a number of traffic policemen along his route, together with their stations and the time of signing.

Getting spryer all the time, this hiker of then nearly 63 decided in 1918 to show up Weston again, this time on the course from New York City to Buffalo. Weston held the record between those cities at 8 days flat. The route he followed covered 415 miles. Hocking chose one ten miles shorter (405 miles), but greatly bettered Weston's speed, making the distance in 6 days, 4 hours, or at the rate of more than 65 miles per day.

Feeling younger than ever, Hocking now looked about him for other worlds to conquer, and his eye lighted

upon John Ennis' record of twelve and a half days for a canter from New York to Cleveland, a distance of a trifle over 590 miles. This record had stood since 1895, but it struck Hocking as ridiculously slow for so short a walk, and he decided to lower it. So he tripped away from Times Square one June morning in 1919, and 11 days and 4 hours later was shaking hands with the Mayor of Cleveland, thus beating Ennis's time by more than a day. His actual walking time was 137 hours. En route, he also made a new record from New York to Erie, Pa., 500 miles, doing it in 113 hours. It was on this trip that he did one entire day's walk, 65 miles, without a rest.

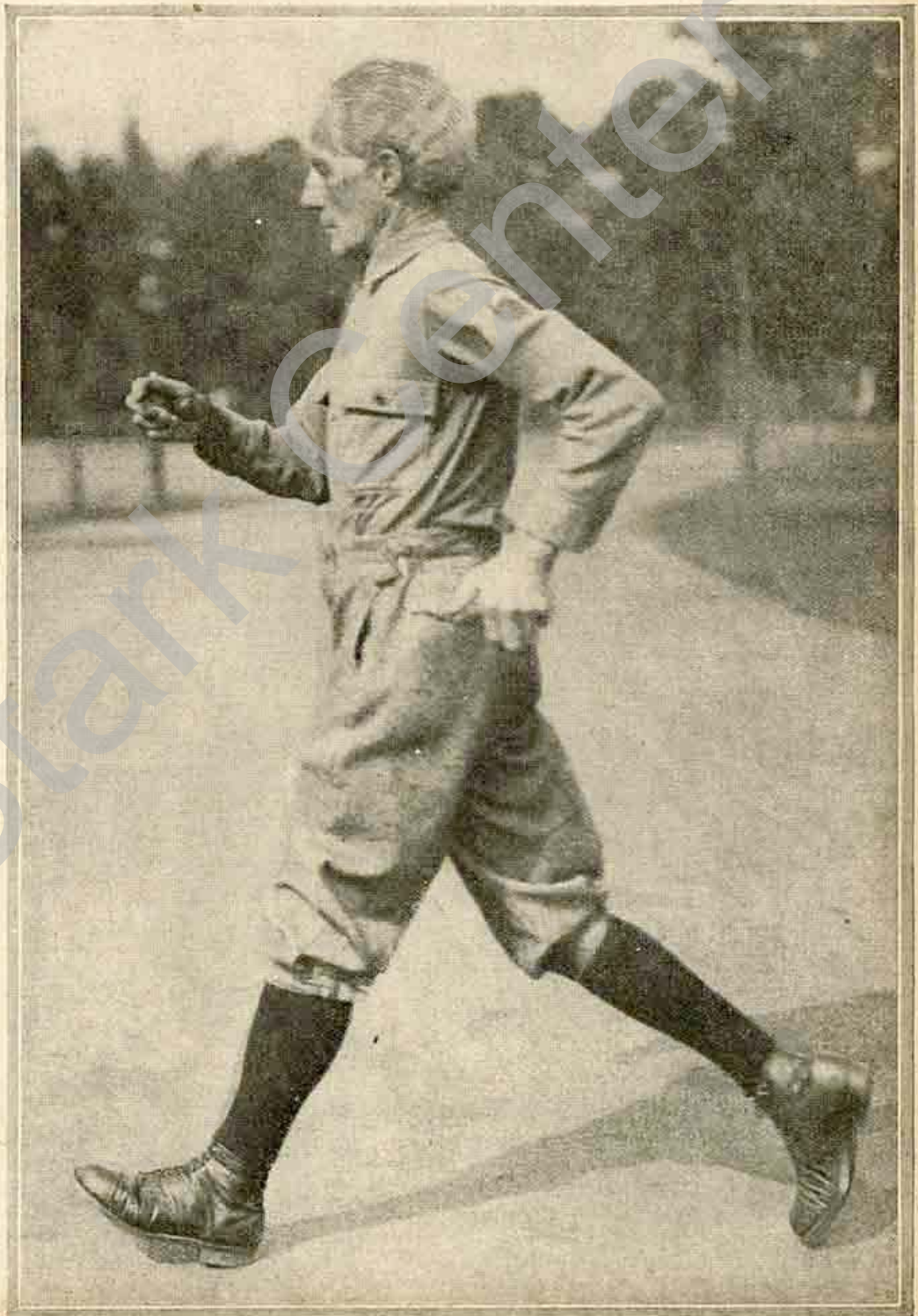
In 1920 Hocking turned his attention to Dan O'Leary, who at 62 years of age had stepped from New York to Toronto, 535 miles, in 9 days flat. Hocking's age was 64 years and 8 months when he attacked this record; and it is a fitting commentary on his condition to say that on the first three days of this walk, when he was toiling through the hill country of southern New York, he did some of the most remarkable walking of his career. On the third night out, he pulled up at Owego, 215 miles from his starting point, having covered 70 miles the first day, 80 the second and 65 the third. Here rain overtook him and slowed him up a bit, but he was still able to eclipse O'Leary's record by reaching To-

ronto in 8 days and 3 hours. He beat his own previous record to Buffalo by 12 hours, and established a new record of 100 hours actual walking time to Niagara Falls, 430 miles.

"If I can get half a dozen converts in Toronto," he said to a reporter after reaching that city, "I shall feel well repaid for my hike from New York." Always preaching the gospel of good health!

In 1921 his vacation walk was a 470-mile stroll through New England, including a climb to the top of Mount Washington. He wore out two pairs of soles and four sets of heels on this jaunt. Incidentally, he eliminated Weston's record of 21 hours, 15 minutes, over the steep 90-mile

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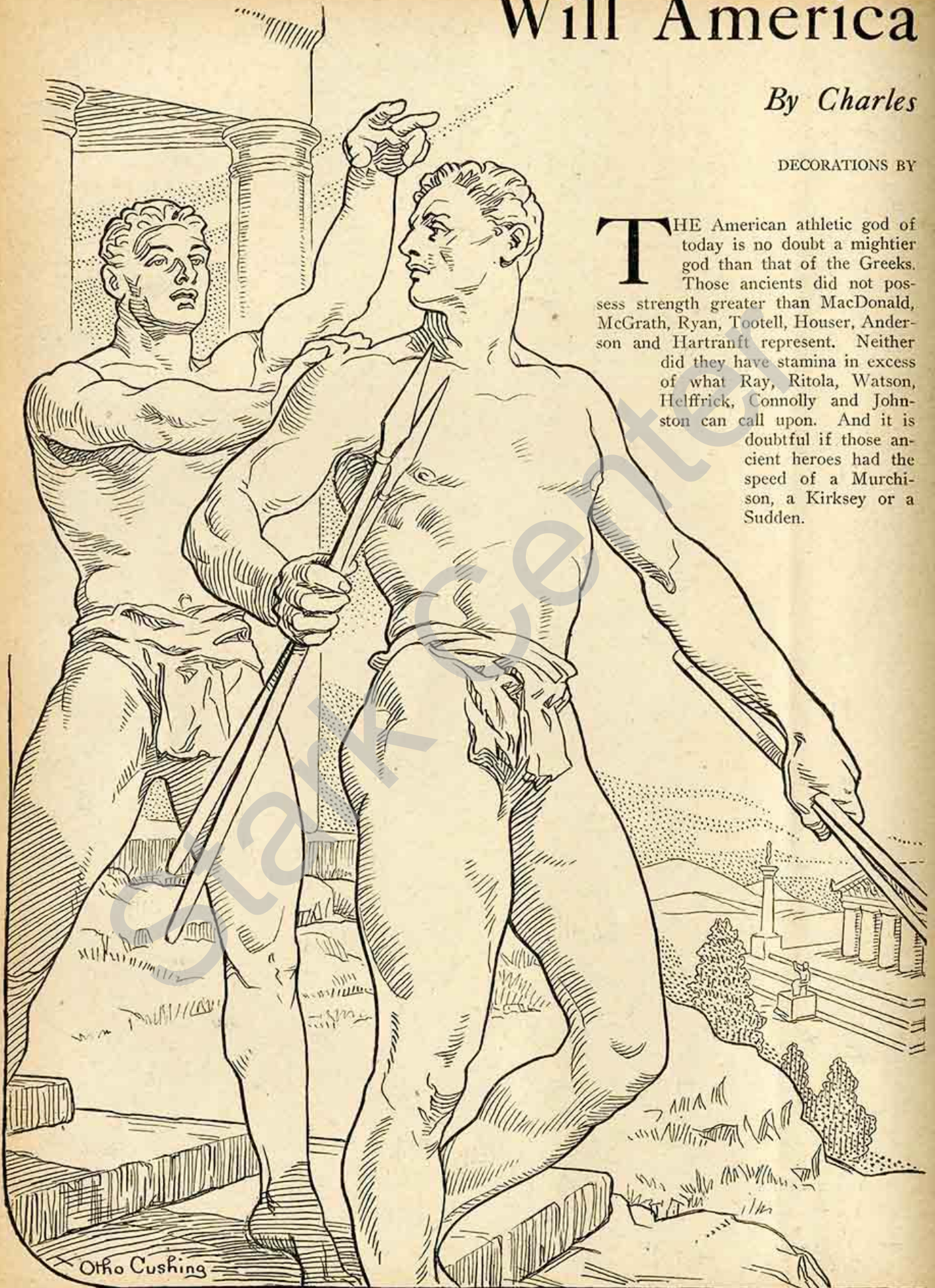
You must have the right swing of the arms to get the right swing of the legs, a forward-reaching, lifting impulse when each arm swings to the front. Likewise the left hip swings forward with the left leg, gaining many inches that way. Try it now. Cover up the top of the photo, thus giving you a "close-up" of the legs, and then measure with your eye the relative length of the shoe and the distance from toe to toe. Rather startling. That's how Jim gets that forty-four inch walking stride. We would not, personally, try to duplicate it, but one can apply the same idea with everlasting benefit.

Will America

By Charles

DECORATIONS BY

THE American athletic god of today is no doubt a mightier god than that of the Greeks. Those ancients did not possess strength greater than MacDonald, McGrath, Ryan, Tootell, Houser, Anderson and Hartranft represent. Neither did they have stamina in excess of what Ray, Ritola, Watson, Helfrick, Connolly and Johnston can call upon. And it is doubtful if those ancient heroes had the speed of a Murchison, a Kirksey or a Sudden.



Otto Cushing

Slip In the Next Olympics?

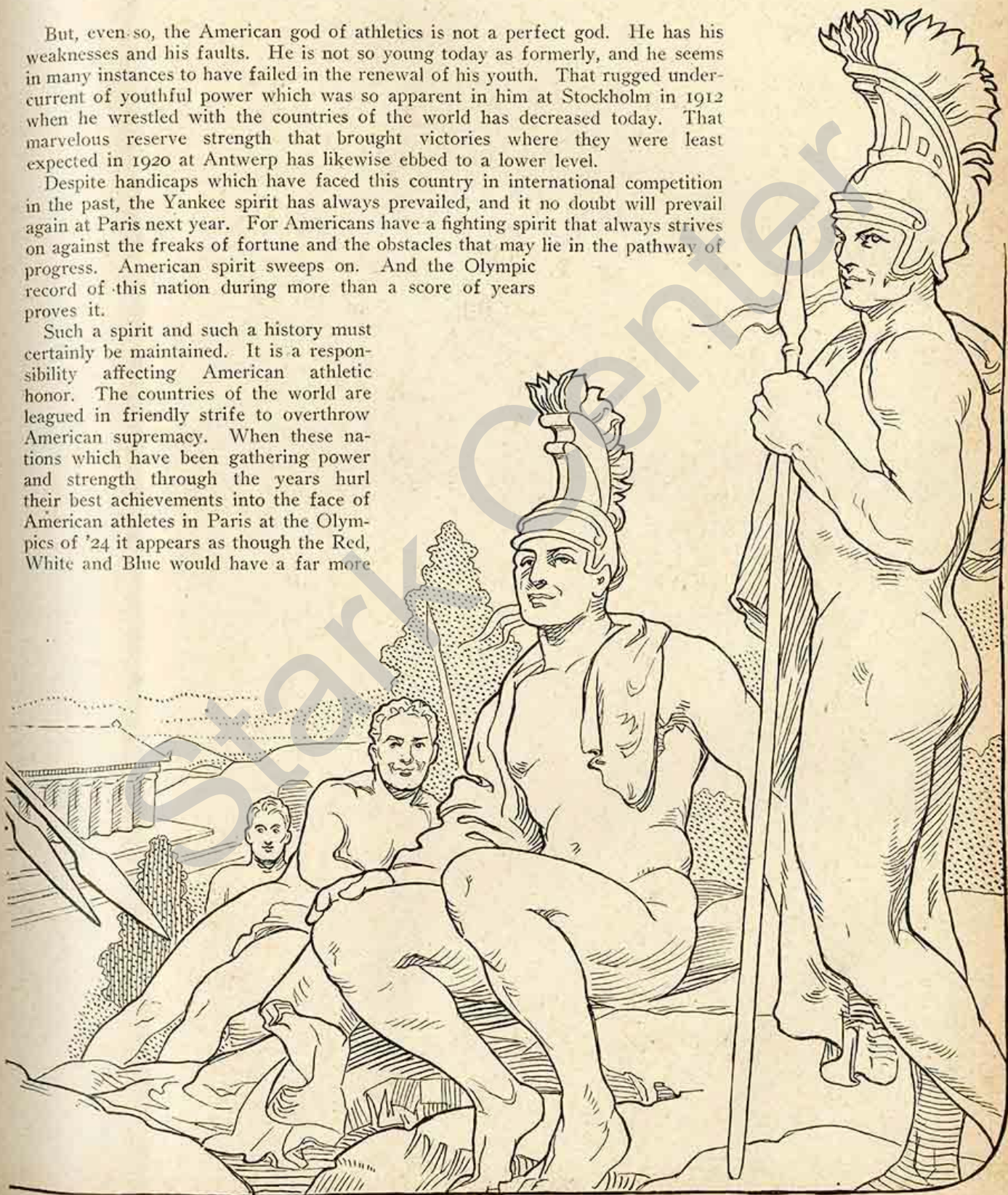
W. Paddock

OTHO CUSHING

But, even so, the American god of athletics is not a perfect god. He has his weaknesses and his faults. He is not so young today as formerly, and he seems in many instances to have failed in the renewal of his youth. That rugged undercurrent of youthful power which was so apparent in him at Stockholm in 1912 when he wrestled with the countries of the world has decreased today. That marvelous reserve strength that brought victories where they were least expected in 1920 at Antwerp has likewise ebbed to a lower level.

Despite handicaps which have faced this country in international competition in the past, the Yankee spirit has always prevailed, and it no doubt will prevail again at Paris next year. For Americans have a fighting spirit that always strives on against the freaks of fortune and the obstacles that may lie in the pathway of progress. American spirit sweeps on. And the Olympic record of this nation during more than a score of years proves it.

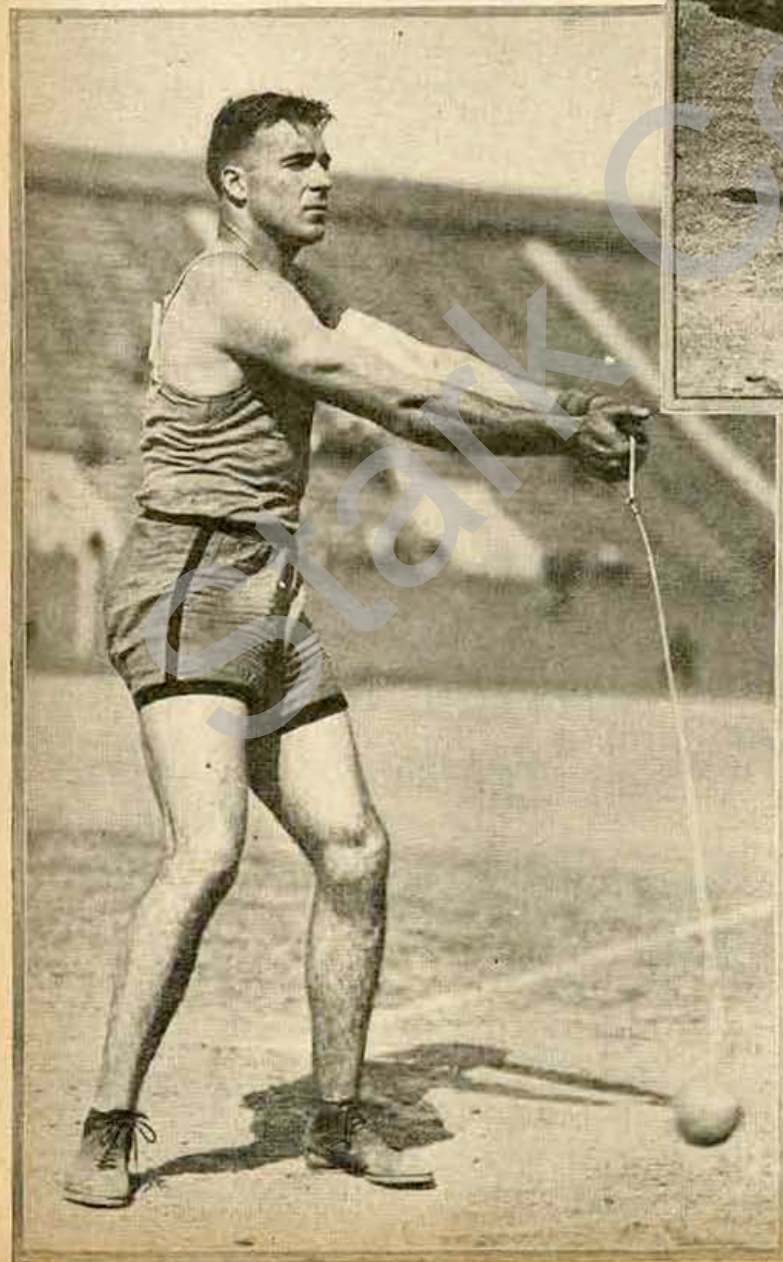
Such a spirit and such a history must certainly be maintained. It is a responsibility affecting American athletic honor. The countries of the world are leagued in friendly strife to overthrow American supremacy. When these nations which have been gathering power and strength through the years hurl their best achievements into the face of American athletes in Paris at the Olympics of '24 it appears as though the Red, White and Blue would have a far more



titanic struggle to win than at Antwerp. For the ranks of Olympian Conquerors of 1920 for America will be sadly depleted. Already many of the chief performers and point winners are no longer in the field of competition. They have been lost to amateur athletics in many ways.

Professionalism has taken a huge toll. At the games of '20 just one man was lost in that manner, and this was Robert I. Simpson of Missouri, who took up coaching duties. His absence lost points for America, and he was just one famous athlete. But now Kelly, the hero of the 1912 Olympics, who was still considered among the foremost hurdlers, has joined the coaching ranks. Frank Loomis, winner of the 400-meter hurdles at the last Olympics, where he broke the world record for the event, is now a coach and ineligible to compete in the games of '24. Some of the members of the '20 team and prospective point winners in the next games are held on charges of professionalism, which will probably bar them

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C. E. Davis, of Cambridge, winning the mile run at Wembley Stadium, England, helped Oxford and Cambridge defeat Harvard and Yale. Will Davis be able to take the measure of the fast Joie Ray whose compact and beautiful running physique is seen on the opposite page? At the left, a superb photographic study of Tootell, of Bowdoin, winner of the hammer throw, 181 ft. 6½ in., at the Intercollegiate Meet at Philadelphia in May.

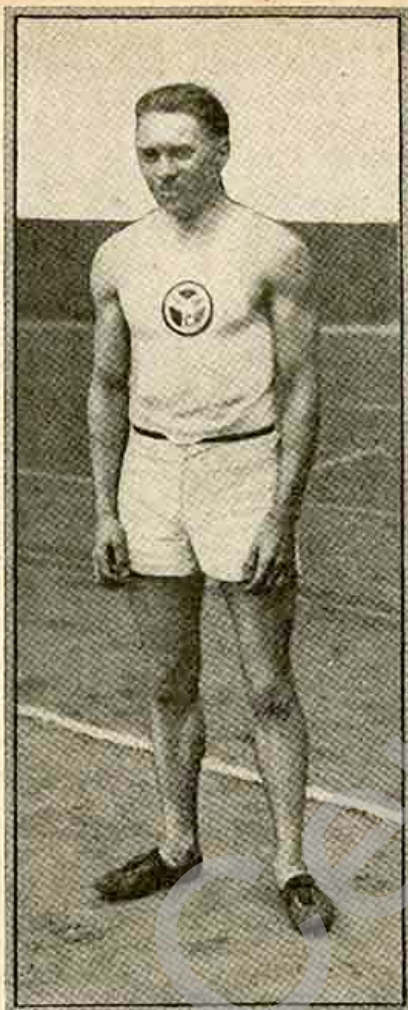
from the Olympics. For the rules which guard Olympic eligibility are very strict. The International Olympic Committee is ready to bar any man of whom there is the least question.

First he must be a citizen of the country for which he competes, and never have represented any other; he must have clear papers to his amateur standing, and in short his whole life must be flawless. These ideals have come down from the ancient Greek Olympics, where the competitors were all of noble blood and of the purest Greek families, so that no competitor could possibly feel that his honor or that of the province he represented could in any manner be hurt by competing with the other

representatives in these national games.

The ranks of American athletes will further be depleted by age when 1924 rolls around. There is many a star long since out of college who took his last victorious fling in '20 who stands small chance of coming back four years later. Such men as Feg Murray, former national hurdling champ; Fred Fallor and Jim Henegan of the Dorchester Club, two wonderful distance runners of the past; Scott, Eby, Campbell and Meredith, middle distance wonders of a few years back; Barron, Smith, Watt, Yount and Norton, hurdlers; Cutbill and Shield, milers; Johnson, Templeton, Butler and Gourdin, broad jumpers; Landon, Whalen and Erickson, high jumpers; Frank Foss, in the pole vault, and many, many others will not be able to answer to roll call next summer.

In speaking of the veterans, there are a few who must still be praised and admired for their valiant achievements in defiance of Father Time. Chief among these is, of course, Joie Ray, who furnishes one of the most interesting of personalities in all the annals of American athletics. Through his determination and his stamina he manages to run as well as ever. In September of this year he ran the fastest mile



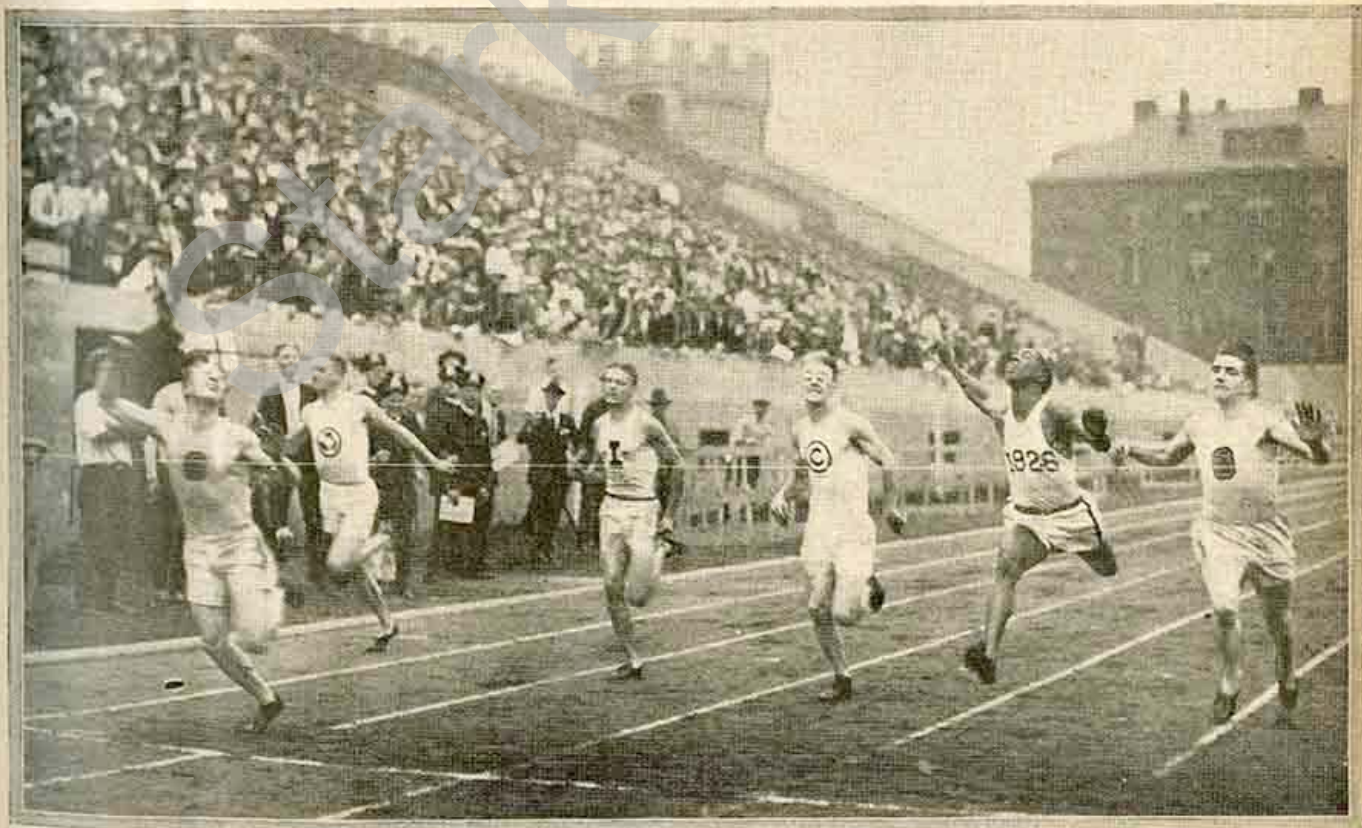
© Keystone View Co.

Joie Ray

he has turned in for five years. And this after many of his critics have said that he was through. Indeed Joie was given up after the Olympics of '20, but he has been staging one long continuous come-back ever since.

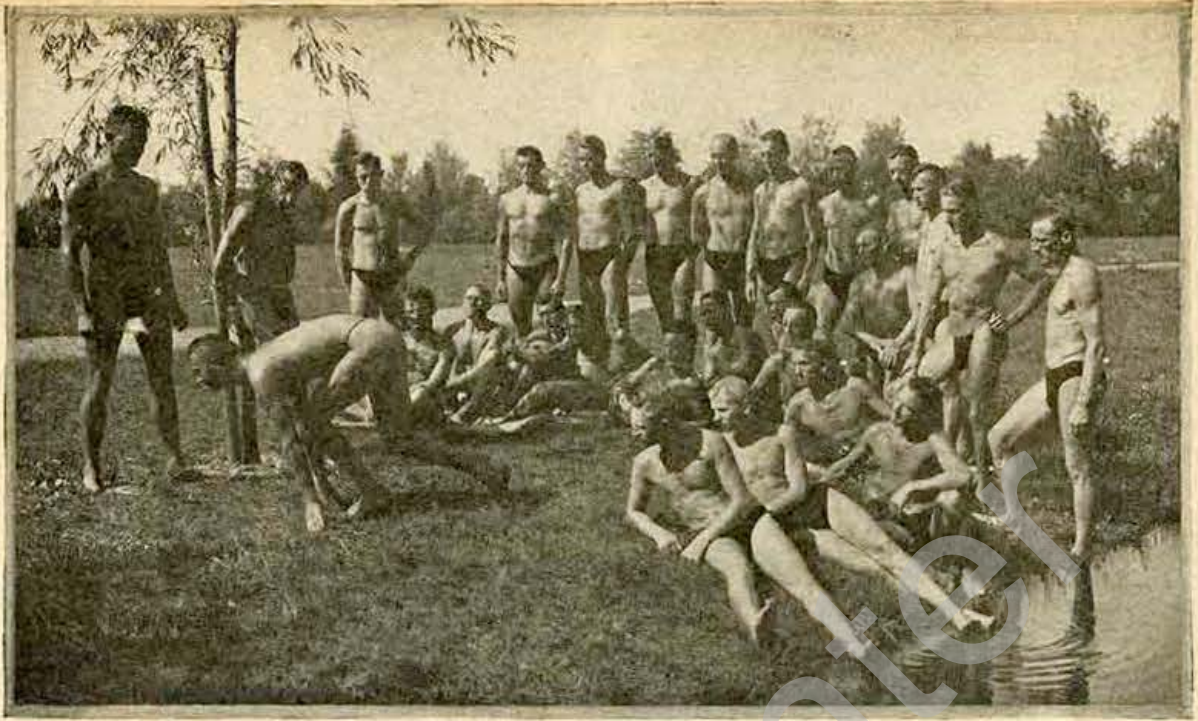
Ray says that he wants to run the 800 meters and the 1,500 meters at the Olympics next season. These are the events where Albert Hill of England shone so gallantly at Antwerp. Ray thinks he can do the same thing. But those authorities who are interested in his progress and in the winning of points for America are anxious to see Ray compete in the 5,000 meters. His running last winter indoors made many believe that he could run three miles with the best stars in the world. Ray's natural distance is, of course, between the 1,500 and 5,000 meters, and there is no mile event in the Olympics.

Morris Kirksey is another old-timer who still holds his place among the greatest of sprinters. Kirksey was said to be through, but he went to Australia and New Zealand less than a year ago and while there defeated W. E. Carr, the Australian youth who is reputed to be a nine-three man. Kirksey bested him in 9-4/5 seconds and in even time. He ran as well as ever he has. He came back to California



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Loren Murchison, winning the "hundred" A. A. U. Championship, Chicago.



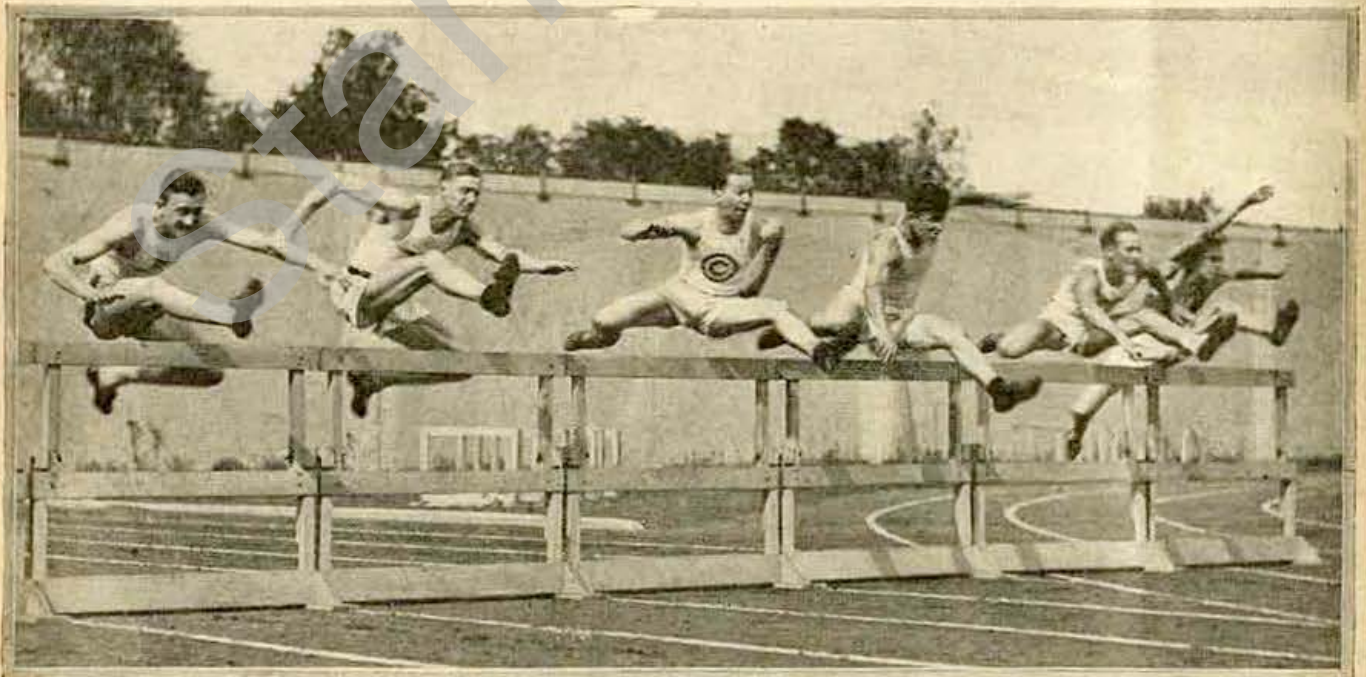
This photograph of German students shows that they have the raw material to excel in athletics, if ever they acquire the skill and competitive spirit of the Americans. What of the future?

and did some more spectacular running, which has proved beyond a question that it will be next to impossible to keep him off the Olympic team next season.

John Norton of San Francisco, who was considered to be dead and buried as far as active competition goes, ran just a few weeks ago in the Wilco A. C. games in New York City and there surprised himself and everyone on the field by almost winning the 400-meter hurdles in almost record time. It may be that Norton will be able to battle off age for another year, after the

manner of Joie Ray, and help out in the Olympics.

Then George Krogness, the Harvard University "come-through" man of a few seasons ago, is demonstrating that he is better than when he attended the college up Cambridge way. He ranks as one of the best hurdlers in the country. But it is undoubtedly his grim determination, his courage and his immense nervous energy which has contributed to his success. And so it is with all these veterans of the cinderpath. They keep holding on through (Continued on page 82)



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Action, speed, skill, and dash feature the spectacular "high hurdles." Scene in the A. A. U. Junior Championships at Chicago. Won by D. Kinsey, third from left.

How Strong Is a Man at Fifty?

An Impartial Analysis of an Extremely
Interesting and Important Personal Matter

By *Henry Smith Williams, M.D., LL.D.*

WHEN I was asked that question the other day, my immediate reply was: "That depends upon two things—who the man is and how old he is at fifty."

My interrogator knit his brows reflectively. "As to who the man is," he said presently, "of course it makes an obvious difference. But I do not get the point of your paradox. Time, at any rate, is the same for all of us; and the man of fifty is one who has lived fifty years. Explicitly, he is the man of today who chances to have been born in the year 1873."

"Technically, and for statistical purposes, you are right," I admitted. "But from the standpoint of our present inquiry you are wrong. Actual age, as measured by the systemic conditions that determine strength, absolute or relative, is not to be determined merely by the calendar. To assume that all men who were born in the year 1873 have today progressed equally far in the life journey would be to assume that all were born with the same hereditary potentialities, and that all have utilized and conserved their energies to precisely the same extent. Neither proposition would bear a moment's examination. No two men are born with precisely the same hereditary potentialities (with the sole exception of "identical" twins), and no two use their energies in precisely the same way. So according to the internal clock-works, men who have lived fifty years are by no means necessarily of the same age."

My friend conceded that, stated in this way, the

case scarcely admits of argument. Nevertheless we went on to discuss it at some length, and I am disposed to dwell on this aspect of the matter here, because I regard it as vitally important. Otherwise, as it seems to me, the question of strength at fifty cannot be considered intelligently.

First, then, as to hereditary potentialities, in their bearing on the age problem. It could not be proved, but may be plausibly conjectured, that every organism comes into the world endowed with certain hereditary limitations that fix a maximum term for its life-tenure, under ideal conditions. Seekers after the philosopher's stone, in all ages, would of course deny this, or at least fix the life-period as almost indefinitely long. But modern biology tends to support the conventional thesis that mortality is inevitably associated with life, at least in the case of higher organisms. Witness, for example, Dr. Jacques Loeb's demonstration that flies reared and maintained under abso-

lutely aseptic conditions live for a normal period only, and die like other flies.

It is true that other experiments, notably those of Dr. Carrel, show that individual tissues of higher animals may be preserved outside the body for an indefinite period, manifesting the phenomena of growth; but there is no present hint of any way in which laboratory conditions of food-supply and waste-removal can be even approximately duplicated in the enormously complicated living organism as a whole.



Henry Smith Williams, M.D., LL.D. Pencil portrait
by Edith M. Bates-Williams.

In any event, the patent fact remains that all the philosopher's stone quests have hitherto proved futile, and that every mortal who reaches fifty, whether estimated by the calendar or by internal evidence, must be admitted to have passed a certain stage toward an inevitable sequel in which the phenomena of life will no longer be associated with his particular aggregation of tissues. And equally certain is it that perfectly normal people differ as to the actual number of years that lie ahead of them, even if they are fated to live the full span of their natural lives.

Which, after all, is only a roundabout way of saying that certain individuals come of "long lived" families, while others come of families not blessed with the hereditary bias toward longevity. That is an elementary fact regarding heredity which no one who has given much attention to the subject is disposed to challenge.

But natural, or hereditary, endowment is only part of the story. There is question also of the extent to which habits of living have impaired that endowment. One man "takes care of himself," builds up his physique, avoids overstrain, overeating and bad hygiene in general; whereas another does just the reverse. Shall we suppose that this makes no difference in the relative aging of the organism! To make such an assumption would be to flout all the teaching of physiology.

Here again we may fortify opinion by appeal to the laboratory. And again I have in mind experiments of that master worker and reasoner, Dr. Jacques Loeb; experiments made with fruit flies under conditions of determinate artificial environments. Dr. Loeb found that he could modify greatly the term of life of the flies by modifying the temperature of the air in which they lived. At a given temperature the normal span of life was a given number of days, on the average. Increase the temperature and the insects seemed to live at a greater speed, so to speak, and to come earlier to their time of "natural" death. Conversely, in a lowered temperature the span of life was lengthened.

Of course nothing closely parallel to this could be predicated of our own race, because man, unlike the fly, is a warm-blooded creature, maintaining the same temperature of body under all livable conditions of the environment. If our life-processes are modified at all by mere changed temperature of the air in which we live, it is probable that speeding up would result from cold rather than heat, greater calorific activity being required in a body to maintain normal temperature when radiation is more rapid. But equilibrium is largely established by modification of cutaneous circulation, significantly aided by artificial clothing; so the ultimate effect of climatic conditions, as such, on the human age-span is probably negligible.

Why, then, do I cite the case of the fruit flies as having human analogies? Simply because I believe the experiment graphically demonstrates a very important physiological principle that we may logically suppose applicable to every living creature—the principle, namely, that environmental conditions, quite aside from those associated with disease and accident, may influence the aging of the organism. In case of the fruit fly—and probably in case of many or all cold-blooded creatures—mere alteration of environing temperature changes the rate of tissue metabolism so that the bodily machine runs faster or slower and wears out propor-

tionately. In case of man and other warm-blooded creatures, bodily metabolism may be modified by other factors, and we may well believe that there results similar change in the speed with which the machine wears out.

The known factors that modify the rate of metabolism in the human body are several. Food and exercise are chief factors. After eating, the chemical activities of the body increase, as can be demonstrated with the calorimeter—an instrument for testing the amount of oxygen-consumption, which gauges the degree of cellular activity. Similarly, the slightest muscular exertion increases metabolism. The patient being tested for normal, so-called "basal," metabolism—that is, the rate of chemical activity associated with the life-processes at their lowest level—is examined a good many hours after eating, and must lie relaxed, without so much as lifting a hand.

If the subject, during such a test, makes the slightest movement the record is modified. An added increment of oxygen is consumed in proof that the law of the conservation of energy applies to the muscular system no less than to machines made of wood or metal. We can even calculate, with the aid of other experiments, the amount of any kind of food that, burned in the system, will suffice for any given amount of physical exercise.

All this is elementary, yet vitally significant from the present standpoint. In the light of the fruit-fly experiments, we can hardly doubt that there is at least a theoretically perfect degree of metabolism that represents something like absolute normality for each individual—implying just the right kind and amount of food, and just the right kind and amount of exercise. Too much or too little of either, we must suppose, will result in disturbance of the normal balance of metabolism, with detrimental results.

In other words, if our reasoning is valid, the only individual who can hope to live the full normal span of his individual life, in fulfillment of his hereditary potentialities, will be one who has maintained throughout life the ideal balance of metabolic (or nutritional) conditions determined by correct eating and hygienic exercising.

Nor is that quite all. There are other factors that cannot be ignored; notably the question of invasion of the body by the germs of infectious diseases, which may violently modify the conditions of metabolism, even notably changing the bodily temperature, for shorter or longer periods, often leaving indelible changes in vital organs. Mental states also have a share in the work of speeding up or retarding metabolism. Normal sleep rests the tissues, and, conversely, prolonged wakefulness particularly if accompanied by anxiety, pain or worry, disturbs metabolism in a way correctly pictured in the time-honored metaphor, "burning the candle at both ends."

All these matters enter into consideration if we are to obtain, in any given case, a correct answer to the question, "How old is a man at fifty?"

It becomes rather obvious that the question can never be answered, except in general terms, with regard to any particular individual. No matter how carefully we may scrutinize charts of lineage, we can never be certain just what they conceal as to the normal life span of which they should constitute the augury and horoscope. As a rule, we can only say that the average chances for

longevity seem good or bad, as the case may be; although on occasion the record permits us to affirm with much confidence that a given individual should, barring disease and accident, live well beyond the traditional threescore-and-ten.

There is similar uncertainty as to the ideal of bodily activity contingent on food and exercise. Certain rules of thumb as to normal average temperature, pulse-rate and weight-for-age are here the chief available guides—for, of course, very few individuals are ever subjected to accurate tests with the calorimeter. High "normal" pulse-rate, persistent increase of temperature and a tendency to obesity are factors generally recognized as not prognostic of longevity. But there are numberless minor modifications of bodily metabolism that are equally significant but which can be detected only by resort to the apparatus of the chemical laboratory or to the microscope. The quip which pronounces a man "as old as his arteries" might be accepted as almost literally definitive if scrutiny of the arteries included their blood content, catalogued as to chemical conditions and corpuscular histology.

To the average reader, and in particular to anyone who, having chanced to be born back in the early seventies, would like to know how old he is to consider himself, such an analysis as that just attempted must seem highly confusing. Let me, then, attempt to clarify the situation by a few practical interpretations. Bearing in mind that elaborate lineage-charts are not usually available, how can the average man get an idea as to his probable "normal" span of life?

Simply by looking up the records, in the family Bible or elsewhere, of the dates of birth and death of such ancestors as can be traced, and of as many uncles, aunts and cousins as inquiry will reveal. Make an average of the recorded life-spans, and

you gain at once a rough general idea as to whether your family tends to longevity. If there are instances of extreme longevity, these are more significant than average life of many relatives. If one or both of your parents and two or more of your grandparents attained long life, you may reasonably regard your own chance to do likewise as inherently good.

Then as regards the matter of the care that you have taken of your individual bodily machine. Here you can make a common sense interpretation that will give you a general idea of the truth about yourself. You know at least in general terms what constitutes hygienic living, and what your own habits have been. But it is certainly desirable that you should gain some more specific information as to your status, and to that end you may advantageously go to your physician and ask him to look you over pretty thoroughly. As an alternative, apply for life insurance with a good company, and you will soon be informed as to whether official tests find you older or younger than your calendar age. Your heredity will also come in for scrutiny here; and if a policy is granted you unconditionally, you may safely assume that you are at least no older than the count of birthdays would imply.

Let us suppose that you have made such a test, and have received such an official guarantee of age. You were born in 1873, or thereabouts, and you are officially fifty years of age, or closely in that neighborhood. Personally, then, you are ready for the long-deferred answer to that question: How strong is a man at fifty? And, as bearing on your own case, you would doubtless like to have the answer take on rather specific form, not merely as regards your relative strength, which you can test for yourself, but as regards the line of action that you may best pursue in order to con-

(Continued on page 87)



©Photo Brown Bros.

Dr. Henry Smith Williams in his laboratory. The author of the "Encyclopaedia of Science" and countless other works representing the very highest medical and scientific authority, is a unique example of life-long athletic activity. Six-feet-five and built in proportion, mentally and physically, he took up wrestling at the age of forty, has wrestled with Dr. Roller, Zybyesco, and all the world champions, not competitively but as a recreation, and at sixty is still wrestling and playing handball. He is likewise a marvel in respect to mental and scientific work, sometimes dictating continuously for ten to twelve hours. There is no higher authority in the world on the subject of the chemistry and biological activity of the blood cells; he is one of the world's greatest authorities on radio, bird life and many other branches of science. He is a dynamo of energy. In this article he does not spin fairy tales about youth, but gives an honest presentation of his subject. Watch for his contributions in future numbers of STRENGTH.

Have You a Sense of Humor?

Presenting Some First Aid for Crêpe Hangers

By John Henry

CARTOONS BY LUCILE PATTERSON MARSH



SOMEbody ought to devise a correspondence course or a college course or something for teaching the human race on "How to Augment, Intensify, Quicken, and Train a Sense of Humor." If we all had a sense of humor there wouldn't be any more wars; wives and husbands could disagree and laugh instead of agreeing to seek the divorce court; parents could laugh at the pranks of their own offspring just as if the youngsters had used somebody else for a springboard when they decided to try life on this earth for a time; the

memories, strong wills, plenty of cash, the knowledge of what not to eat, and many other things that contribute to the happiness of living; but the gravest need they have is for the magic art which is capable of producing happiness even when these assets are wanting; the gravest need is for that lightness and levity of temper, that mixture of caution and of defiance which a man may show in his dealings with the mechanics of the universe, which we call a Sense of Humor.

Humor is the ability to realize in dealing with Life, in all its ups and downs, that one is having an adventure; and that the giants with which one tilts so seriously are, after all, nothing more than the windmills of Don Quixote over again. It is the ability to understand that at the utmost life contains only a half dozen things that are of sufficient value to deserve to have their loss or their possible loss mourned with anything other than a laugh. And in that fact lies the whole philosophy of Why Not to Worry.

Humor, mocking at death, mocking at sorrow, mocking at worldly misfortunes, mocking at the frustrations of purpose wrought by chance and circumstance, and setting its vision clearly on things that lie beyond them all—Humor, the secret of the man who is captain of his soul: how many of us really have it?

Oh yes—I know you have it; and you know I have it; but how many persons in the ranks of just ordinary courageous mortals have it?

So far as I have been able to observe, all mankind shares in common three universal convictions: First, everybody has a secret notion that he can or could sing, whether anybody else knows it or not; second, everybody has a secret notion that he can or could write, whether the world appreciates his latent talent or not; and, third, everybody sincerely and profoundly believes that he has a sense of humor.

That is why the deadliest insult you can offer to anybody is to tell him that he lacks a sense of humor. That jibe is the one thing he never can see any fun in. Give him a chance to answer back, and as soon as he has told you that you're another, he will point to the fact that he reads *Life* week after week, and obeys that impulse to laugh after the reading of each and every joke.

average man could slip on a banana peel and join in the pleasant tinkle of laughter which in the present state of human evolution is confined on such occasions entirely to the bystanders; politicians could see themselves as the cartoonists do, and thus learn to mend their ways; the intellectuals of Greenwich Village would stop wearing horn rimmed specs unless they needed them, and would discontinue their habit of taking themselves seriously—in short, people in general would stop making fools of themselves except when they wanted to do it for the fun of it—which is quite permissible.

Why somebody did not originate a course in Humor long ago is difficult to understand. It would seem, considering the need for such a thing, that the gentlemen who advertise memory courses and courses on how to cultivate the will, and courses on how to double your income, and courses on how to be fat, lean or medium, as you like it, have inadvertently overlooked the best bet of the lot.

People, it is true, are acutely in need of capacious



It would seem, considering the need of a course in humor—

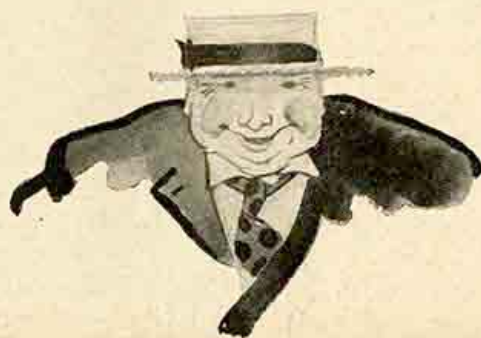
But of course the ability to laugh when somebody else makes a joke does not prove that you have a sense of humor. To demonstrate that you have a sense of humor, you must be capable of making your own jokes out of the raw, the very raw, material of life. I don't mean the kind of jokes so articulate and finished that they can be published. I mean the kind that consists in the ability to see the incongruities within you and about you, and to find amusement in them. It is the ability, as some understanding person has said of optimists, to make lemonade out of the lemons. In short, publish a private edition of *Life* for your own benefit; don't rely exclusively on the newsstands to furnish it, as a druggist sells you health, at so much a pill.

An excellent account of what I take to be humor is to be found in Chesterton's "Orthodoxy"—which is one of the pleasantest and wholesomest bits of philosophy ever written, by the way:

"If our life is ever really as beautiful as a fairy tale, we shall have to remember that all the beauty of a fairy tale lies in this; that the prince has wonder which just stops short of being fear. If he is afraid of the giant, there is an end of the fairy tale; but also if he is not astonished at the giant, there is an end of the fairy tale. The whole point depends on his being at once humble enough to wonder, and haughty enough to defy. So our attitude to the giant of the world must not merely be increasing deli-

cacy or increasing contempt: it must be one particular portion of the two—which is exactly right. We must have in us enough reverence for all things outside us to make us tread fearfully on the grass. We must also have enough disdain for all things outside us, to make us, on due occasion, spit at the stars. . . . The perfect happiness of men on the earth (if it ever comes) will not be a flat and solid thing, like the satisfaction of animals. It will be an exact and perilous balance; like that of desperate romance. Man must have just enough faith in himself to have adventures, and just enough doubt of himself to enjoy them."

Humor is the laughter of half gods; it is the guerdon of the man who is enough of a hero, and possessed of enough bravery to carry his life lightly, but not too lightly; it is the mark, not of the man without fear, but of the man who overcomes fear, it is the mark of the man who refuses to value as necessities the things which men of less wisdom will sweat blood and live in misery to have, the things to which ordinary men are slaves. Existence presents a bill; it says to Mankind, this and that thing which you find essential to happiness, will cost you so much. Pay, or I take it away. And the man who is not afraid of the Giant, waggles his fingers impudently in front of his nose, and in all probability, like Jack of the Bean Stalk, gets away with the giant's musical harp, and his gold egg laying hen, and others of his
(Continued on page 86)





Photographs by Keystone View Co.

Luther Burbank—

A Personal Glimpse of the Wizard of Plant Life
Almost Be Called "The

By Annie

WHEN I received the order for a story about Burbank from the editor of STRENGTH MAGAZINE I dispatched a request for an interview to his Santa Rosa home in Northern California, and was rewarded with the following prompt, kind and—for so busy a man—extended reply. Since this letter gives an illuminating picture of the present life of this remarkable man, I will reproduce it here in full:

"Dear Mrs. Hale:

"Your special letter of August 9 received, and I hardly know what to say to you. We have lately entertained 352 teachers from various parts of the United States, and sometimes we have been receiving as many as 2,000 letters per week, and I am called to attend practically all the celebrations in this part of the State. As Honorary President of the Boy Scouts, I have to leave in a few hours to help them plant a tree at Sebastopol at the Annual Apple Show. In the morning a Boston sculptor is coming to start work on my bust, the editor of the *Christian Science Monitor* also comes tomorrow, besides the few hundred who come every day to look at the gardens and shake hands with me. Wednesdays I am occupied in the forenoon; next Friday I have to be the principal figure at the Burbank celebration at Petaluma; Saturday and Sunday I am demanded at the Bohemian Club's celebration at Guerneville, of which I am an honorary member.

"Writers have been at my heels all this summer, and two magazine writers expected next week. My own great business responsibilities, and other matters which are not necessary to mention keep me on the 'qui vive' all the time. It is impossible for me to make appointments, but I am almost always at home Mondays, Tuesdays, Wednesday afternoons, Thursdays and Fridays.

"On no other days can I see anyone but those who come a great distance without announcement. Will see you one precious hour, and my helpers will probably do the rest.

(Signed)

Sincerely yours,
"LUTHER BURBANK."

Accordingly, the following afternoon—having traversed a distance of nearly six hundred miles—I was deposited by the Sausalito bus at the entrance to the Burbank Gardens in Santa Rosa.

The Burbank home is a square-two-story, stuccoed

building, set well back in a lot filled with shade trees of the kind one expects to see in California—palms, peppers and deodars. It was devoid of external ornament save the two substantial verandas—not airy pergolas so much affected by California houses, but solid, well-covered verandas—flanking the front and side entrances, and the English ivy which completely covered the walls. Two small iron gates opened on a well-kept walk bordered with roses, which led to the side entrance of the house.

I found Mr. Burbank a slight, rather frail man, with gray hair, delicately modeled features and mild blue eyes. His manner was neither cordial nor repellent, but rather one of gentle inquiry and non-committal patience; as of one who, having suffered many things at the hands of interviewers, was resigned to further imposition.

He was very affable in conversation, however, answering all my questions with courtesy and good



This is probably as perfect a characteristic photographic study of Mr. Burbank as one might find, showing the greatest of all naturalists in his garden.

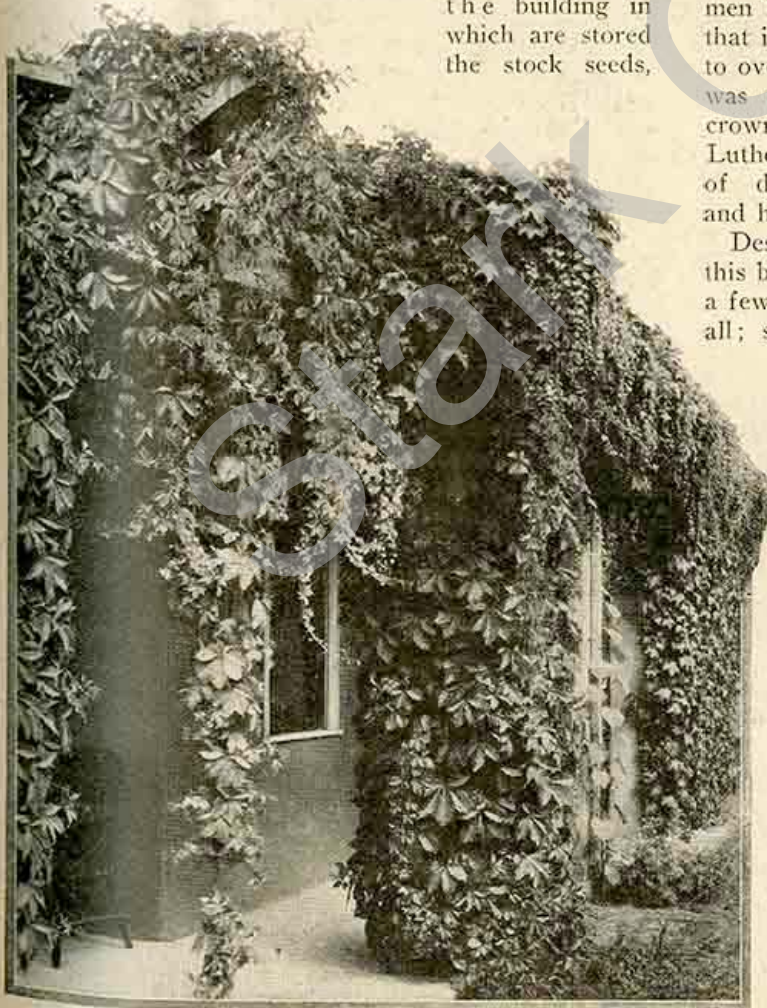
A Story of Achievement

Who, by Transforming Nature, Might
Man Who Played God"

Riley Hale

humor; and as our talk proceeded, the cautious, non-committal note slipped from his tone and manner, and was replaced by one of greater friendliness; so that at the end of our conference he volunteered to escort me across the street to his gardens and conservatories, and called one of his helpers—a very intelligent and alert horticulturist—to show me through the grounds. In one corner of the gardens nearest the street stands

the building in
which are stored
the stock seeds,



This is what your home would possibly look like if you were a Burbank. The luxuriance of flowers and plant life about his place.



A photograph taken on the occasion of Mr. Burbank's trip in an aeroplane. It is an interesting personality picture.

and in one room of this building we found the Boston sculptor, Roger Burnham, busily modeling a full-length figure of Mr. Burbank at a more vigorous period of his life.

Yet he will tell you, this rare genius in the world of plants and trees, that he is still quite supple at the age of 74, that until a recent illness he was an accomplished sprinter, and that he sometimes entertains movie-picture men by turning somersaults for them. He says also that it was through congenital weakness and the desire to overcome it that he first studied medicine, and later was drawn into the work which has so gloriously crowned his life. Luckily, indeed, for frail young Luther Burbank, that he turned from the study of drugs to plants in his search after health and happiness.

Despite my desire to depart from the beaten paths in this brief sketch of Burbank, I presume I must include a few biographical details which are the common lot of all; since no man, however exalted, can escape the humble first step of being born—so strikingly and essentially the same in every career. This initial event happened to Luther Burbank in the town of Lancaster, Mass., about thirty-five miles from Boston, in 1849. He comes of Scotch and English stock and displays hereditary leanings in his calling to the extent that his father was a small market gardener and nurseryman. As a boy, Burbank worked in his uncle's plow factory, also learned the carpenter's trade, at the same time acquiring a common school education in the public schools and local academy of his native town. He soon abandoned all other pursuits for market-gardening, and bent all his energies and naturally acute faculties to the acquisition of knowledge in the greatest of all universities—the storehouse of Nature.

Before leaving his Massachusetts home, in 1873, he developed the first "Burbank potato" by planting a few seeds found in a seed-boll of the "Early Rose." With the proceeds of that, about one hundred and twenty-five dollars, he came to Santa Rosa, California, where at first he worked as a (Continued on page 78)



What's the This "Cave

What Qualities Does a Woman Desire In Her Mate?

PAULA flung down her book with an emphatic slam.

"Can you tell me," she demanded, in complete exasperation, "why the novelists of today fail to perceive that the caveman idea is out of date? Can't they sense the fact that the modern woman is off that stuff forevermore?"

"Are you sure she is?"

I asked the question deliberately. I enjoy provoking Paula to discussion. However, I don't know, to this day, what she would have said in reply, for her evident increase of exasperation was denied utterance by the bursting open of the outer door through which Roberta and Janet stalked into the room.

My efforts to extend a cordial greeting as hostess were ignored, not from rudeness but from excess of emotion.

"Rotten! That's what I call it," announced Roberta.

"Perfectly inane!" seconded Janet.

"What's the row about?" queried Paula, sympathetically.

"This antediluvian caveman stuff. Ran across it in the movies just now. Thought we were going to see a perfectly good, up-to-date picture and found it packed full of this old idea that woman inevitably succumbs to the supposed-to-be charms of the man who browbeats and bulldozes her most completely. It's such ancient stuff! Aren't they ever going to get over the habit,—these scenario writers?"

"And novelists," supplemented Paula.

"Why can't they grasp the idea, when portraying modern life, that the modern woman is no longer influenced by those worn-out traditions?"

"Just what I was saying to Helena," announced Paula. "Now you see," turning to me triumphantly, "that I was right, don't you?"

"No, I'm not yet convinced that the modern woman has freed her system from that caveman stuff. I'm not sure that you three, advanced as you are, can claim to be entirely exempt."

"Well, Helena, for a leader in the woman movement to say such a thing like that! Can you picture any one of us turning to kiss the hand of the brute who had dragged us to his cave by the hair of our heads, either literally or metaphorically speaking? I suppose

there may still be a few weak, ignorant creatures who do that sort of thing, but not the modern woman."

"And yet the modern woman is seeking in her mate the same thing which this poor, ignorant creature thinks she has found."

"How can you say such a thing?"

"Because it's true."

"Prove it."

"Very well, I will, if you will all hold up your right hands and promise to tell 'the truth, the whole truth, and nothing but the truth.'"

"Sounds pretty serious, don't you think, girls?" asked Roberta.

"It's only a bit of psychological investigation. I want to prove the truth of my claims from your own words."

"Very well—for the sake of science—we solemnly promise—," and three right hands were formally raised in the air.

"So far so good. Now I want you to describe to me, one after the other, the first man your girlish day-dreams centered about as your 'hero.'"

Silence fell upon the group. Gradually a reminiscent smile stole about more than one pair of lips. But not a word was spoken. From one to another they looked. Who was to break the ice?

Suddenly Roberta's lips were opened as by inspiration.

"Helena must describe her's first; then the rest of us will follow."

"It is but just and right," decreed the other two.

"Agreed," was my immediate reply, having expected something of the kind.

"The first hero who haunted my youthful dreams was tall and powerfully built, dark, with a plume of raven hair that dropped over his forehead to be tossed back with a noble gesture, while in his dark eyes burned the fire of romance."

"Mine was just the opposite," broke in Janet, eagerly. "Fair and—"

"Small, I suppose," I interposed.

"Certainly not," with utter scorn. "He was patterned after our High School principal, tall as a Viking, with blond hair and blue eyes that pierced you like a keen swordblade. But they could dance with

Meaning of Man's Stuff?

By Mary Hope Smith

DECORATION BY FRANK McALEER



laughter, and, in my dreams, look most loving as well." "My hero," confided Roberta, "was modelled after the captain of a visiting football team. I never met him, but I worshipped him from afar. My! but he was a splendid-looking fellow—big, broad-shouldered, with a mop of curly brown hair and hazel eyes. Oh, I managed to pass close enough to him to discover that detail! I dreamed of him for years—but he never crossed my pathway again."

"And you, Paula? How about you?"

"I never saw my hero in the flesh. I took to fiction-reading very early, and patterned mine after Mr. Rochester in 'Jane Eyre.' I don't remember very much about him except that he was very stern and that Jane Eyre worshipped him in fear and trembling. Would you believe it—I thought I wanted a man like that—whose look was always dark and forbidding until lighted by a smile when I entered the room. He must be one whose feelings were never mirrored upon his face, but who controlled his every emotion with a grip of steel and so was the master of all about him. Isn't it a scream to look back at it now?"

Triumphant, I arose from my seat and made a sweeping obeisance.

"Fellow-countrywomen, I thank you! You have proven my first point."

"What do you mean?"

"That each one of us, modern of the moderns though we be, in the youthful picturizations of our heroes, sought exactly the same thing as the poor, deluded woman who kisses the hand which strikes her."

"Helena, how can you be so impossible!"

"In those youthful dreams," I went on, "will be found expressed the fundamental instinct that is characteristic of the mating period. Look them over, and you will perceive that there is one element to all four pictures—the very element which the cavewoman sought in her mate."

"And that is—?" asked Paula, for the three of them.

"Strength."

A storm of protests broke forth.

"I never said—"

"Nobody even spoke the word—"

"Yes, I know," I broke in. "but go back and consider what we did say. I told you mine was tall and

powerfully built. I tried to get Janet to say that her's was small, but she repulsed me with scorn and said he was 'like a Viking.' Roberta's was modelled after a football captain, and they are not usually selected for their lack of physical vigor, while Paula chose to idealize another kind of strength—that which enables a man to control his emotions with a grip of steel."

"I'm willing to admit that that may have been one of our youthful instincts," conceded Janet, generously, "but we have discarded instincts in these modern days and replaced them with the products of our reasoning faculties."

"Instincts are not so easily displaced, my dear. That is a truth which the novelists, with the insight of the artist, are calling to our attention, trying to get us to see that, down underneath all of the modern conditions of life today are the same fundamental instincts with which we must all inevitably reckon."

"Well, I never will admit," protested Paula, "that the woman of today enjoys browbeating, that she adores bulldozing and that she is so simple that she comes back and begs for more."

"Certainly not," I agreed. "That is not a true representation of the caveman idea."

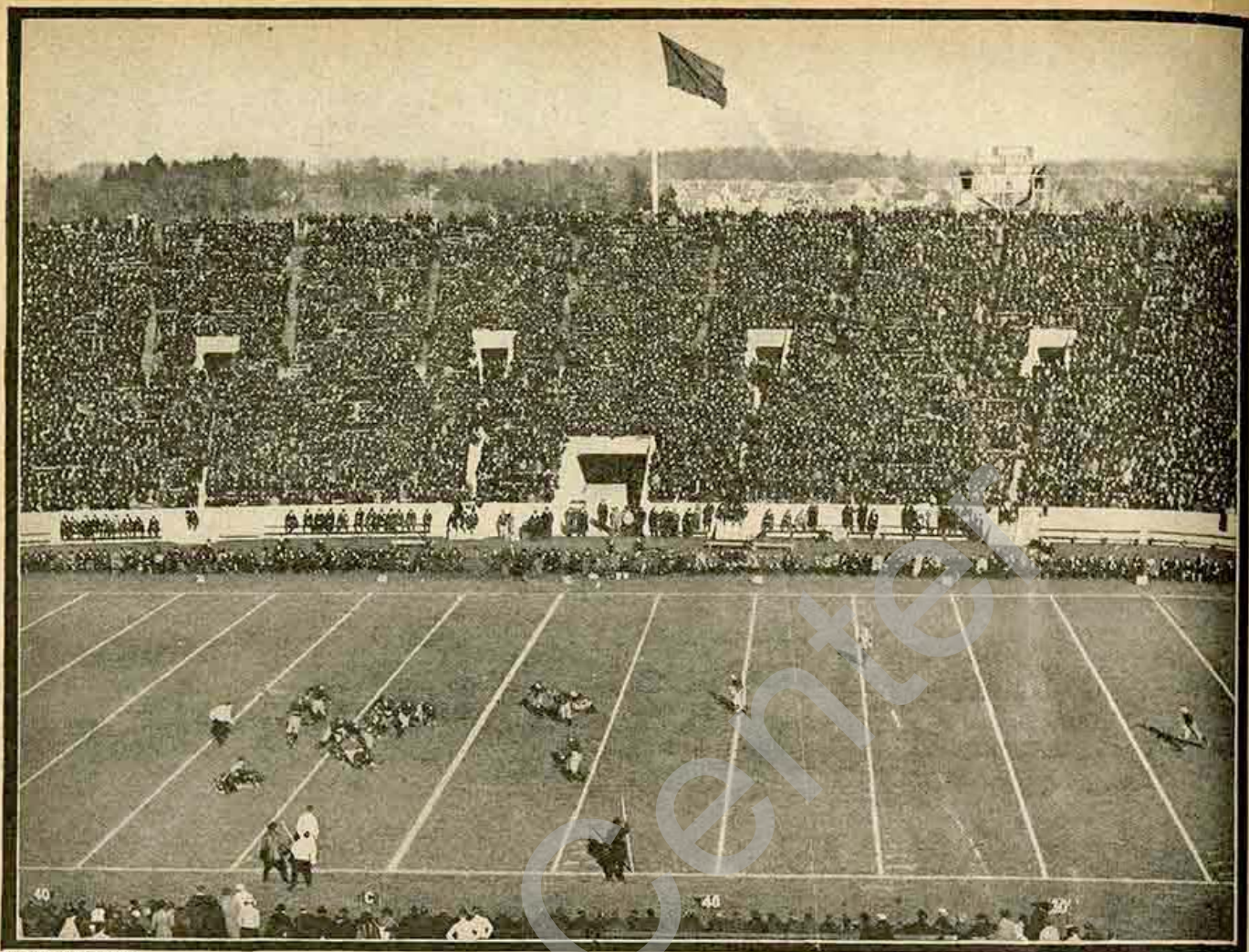
"That is what the writers have given us, until I, for one, am all fed up on it."

"Then I should say that the writers are doing one of two things. Either they are portraying for us some woman's misinterpretation of the caveman idea, or else they have not themselves penetrated to its true import."

"Now you sound interesting," ejaculated Roberta. "Go on and give us the true meaning of the caveman idea."

"The surest way to arrive at that is to study the cavewoman. She selects, quite naturally, the strongest caveman for her mate, because she must make sure that he will be able to protect her and her brood from the constant menace of enemies of all kinds. She has a surer chance than the modern woman to make the proper selection, because her mate must drive away all of his rivals before he can carry her off to his cave. That is the way in which he proves to her his prowess. And after he has gotten her, he doesn't waste his time knocking her around; he's too busy protecting her."

(Continued on page 90)



©Paul Thompson

The big thrill in Autumn sport. The dramatic moment in the kick-off of a big game. This was the Yale-Princeton game of last year.

Playing the Game

A Monthly Review of Sports and Outdoor Life

By T. von Ziekursch

WITH the gridiron chasing the diamond very much into the background at present this is the time for speculation as to which array of pigskin warriors will set the pace during the season of 1923 and lay claim to all the mythical championships.

However, there is another delicate little matter that the entire football following fraternity is interested in, although it might be considered very much an eastern question, in some respects.

It has to do with the possibility of the passing of Princeton, Yale and Harvard, the old guard of the grid. No more will the so-called Big Three endeavor to dominate the field. The new policy of cutting down the schedule, shortening the pre-season training period and tightening things all around is sure to have its effect. More and more the policy at Princeton, Yale and Harvard is to make their football season a tight little tri-

party affair. Long looked up to as the greatest of them all, year in and year out, they are willfully giving up some of that prestige.

With the present season the last for Tad Jones as head coach at Yale, with Roper facing the task of building a new team at Princeton, and Harvard an unknown quantity in many ways, a lot of things can happen.

Then, too, with Glen Warner merely topping off his final year at Pitt, with a new regime at Penn, and a popular one, it might be added, this gridiron season may see the swing of the pendulum away from Harvard, Yale and Princeton to place Penn, Penn State and Cornell up there as the Big-Three of Eastern football. About all that Penn has needed in a long time has been a popular, far-sighted football regime, Bezdek is always a sure-fire producer at Penn State, and it seems to make little difference whether they rip Gil Dobie's

teams to shreds or not; he gets results just the same.

And should it develop that this trio becomes the dominant figures in eastern football the golden era of the game will probably dawn soon afterwards, with inter-sectional contests given more and more prominence, since all three have comparatively wide open policies so far as arranging schedules are concerned.

* * * * *

As to Harvard, Yale and Princeton there is more than passing wonder as to how they actually will shape up when the smoke of battle lies heavy on the field, with some other crew of hearties slamming trick plays and tackle thrusts their way in rapid succession.

Both Harvard and Yale appear to be very powerful defensively. But then that is nothing new for either of them. In fact that very defensive strength has been Yale's weakness, paradoxical as it may sound, for the offense has played second fiddle to the defense where the bulldog battled over these past few seasons. And that is not sound, winning football.

Yale's magnificent lines have been traditional, but the Elis were like a real bulldog in that sense, not a sleek, fighting pit bull terrier, but one of the slow-moving, heavy-jawed bull dogs, symbolic of grim power and strength, but lacking in speed.

It may be that both the Crimson and the Blue will come forth with fast, hard attacks and sweep through to a victorious end, but there is room for doubt.

For Princeton the other side of the page holds. Defensively the Tiger is an unknown quantity and does not look so good. Offensively the Sons of Nassau should be the class of the East, if not of the entire country, with Captain "Whoops" Snively, who has been taken from the line to the backfield, rating as probably the greatest forward passer in moleskins, and also a great interference back; "Maud" Crum, whose amazing line crushing last year beat Chicago, and several other stellar veterans to carry the burden.

The Orange and Black will be a terrific attacking team, and that should get them somewhere if the very maxim upon which modern football is built can be believed. Glen Warner, Pitt's famous old fox, and the man who made the Carlisle Indians, expressed it about right in that respect when he said, "The best offense wins."

As for the strength of the rest in the East the famed Panther of Pitt is a green youngster this year instead of the fanged and clawed veteran machine that it has been so long. Cornell should be the same old machine that Gil Dobie always places on the gridiron. Army and Navy will give stirring battle to the best of them and the Nittany Lion of Penn State is one huge backfield problem.

That leaves Lafayette, and the Maroon Giants of Easton have a line of

veterans with a strong backfield that ought to be one of the country's greatest teams. So has Washington and Jefferson, with Heisman at the helm of a squad of seasoned warriors.

To take the long jump from the East out to the Pacific Coast the word is out again that California's Golden Bear will be dominant once more, and the East shows its usual woeful lack of appreciation for the really good football that is being played where the Pacific's waters wash low, gentle beaches.

The South is always a problem and the South always has some real football teams. Georgia Tech, Alabama, Auburn and a half dozen others will be on a par with the field in the North.

In the Middle West the paens of praise that are being sung in advance are for Michigan, Chicago and Minnesota, with two or three dark horses under new coaches.

"Watch Michigan," is the word. And that attitude comes as a result of the building that is being done around Kipke, the mighty back who is said to be another Willie Heston. Not enough consideration is being given Chicago, but any team that has a brace like the Thomas brothers and Captain Pyott in the backfield needs consideration. If Chicago is defeated this year it will be a surprise, since it does not meet either Michigan or Minnesota.

* * * * *

Speaking of personalities and champions and such, give ear a moment to the case of Bill Tilden, to many well-versed sportsmen the greatest champion in any line of athletics walking the realm of sportdom today.

Try to imagine an American champion playing his best in defense of American honor against a foreign invasion with an American audience looking on and that American audience pulling for the invader to beat its own champion.

Seems far fetched, doesn't it? Yet, that is just what happened at Forrest Hills during the recent Davis Cup matches when, if it had not been for Tilden, Australia would undoubtedly have won the famous international tennis trophy.

Those matches were not America against Australia in the last analysis. They were a personal struggle between Tilden and James O. Anderson, the Antipodean captain.

Anderson beat Little Bill Johnston and Anderson would have turned the tide to Australia in the doubles match but for the super play of Tilden in the last few sets. Furthermore Anderson would very probably have beaten any other player America could send against him. Tilden was the standard bearer and an American crowd was against him.

Why?—Personality.

The American crowd does not get Tilden's personality. It is pleased to think this six-foot-two giant of nerve



©Kadel & Herbert

All the world loves a horse. This is "Papyrus," winner of the famous English Derby at Epsom this year.

and sinew is effeminate. His "Oh, Pshaw!" when an opponent puts over a shot that no human being could possibly cope with, and his "Beauty, James," by way of congratulation to the other fellow gives that impression to the casual onlooker.

Tilden is temperamental. There is the answer.

Pushed by an opponent's brilliant play and he is magnificent, beyond doubt the most wonderful wielder of a racket that has ever stepped on the court. Up against mediocre play and the chances are that he will dally along, allowing the other fellow to win now and then just to make a game of it. For Tilden doesn't care much for the adulation that comes to a supreme conqueror. He is in the game for love of it and the sport he gets out of it.

He is unpopular with the powers that be in the net world because he will not bow to their every dictate. He was allowed to forfeit his world's championship this year because he could not afford to go to England in order to defend it. And he never complained.

Certainly he has done more for the game in this country than any other one factor—traveling around at his own expense giving exhibitions that meant nothing gained in any way to him, teaching promising youngsters the fine points of the game, giving them inspiration and encouragement.

As for the belief that he is effeminate or affected—that is all wrong. He is exceptionally sincere and serious—and self-conscious. And he is game.

It was back in 1918 that we saw his gameness tested in a way that certainly proved it to all who knew what happened. He was beaten, you will recall, for the national championship that year by R. Lindley Murray.

But the inside story of it was that Tilden developed a serious attack of boils along the Achilles tendon and the lower part of his leg. They had to be lanced a couple of times just before he went on the court to play for the championship and he fought like a bulldog despite the agony and the stiffly bandaged leg. And he was only beaten after a gruelling fight where ninety-nine out of a hundred men would have forfeited. It took a pretty game man to stand that punishment.

* * * * *

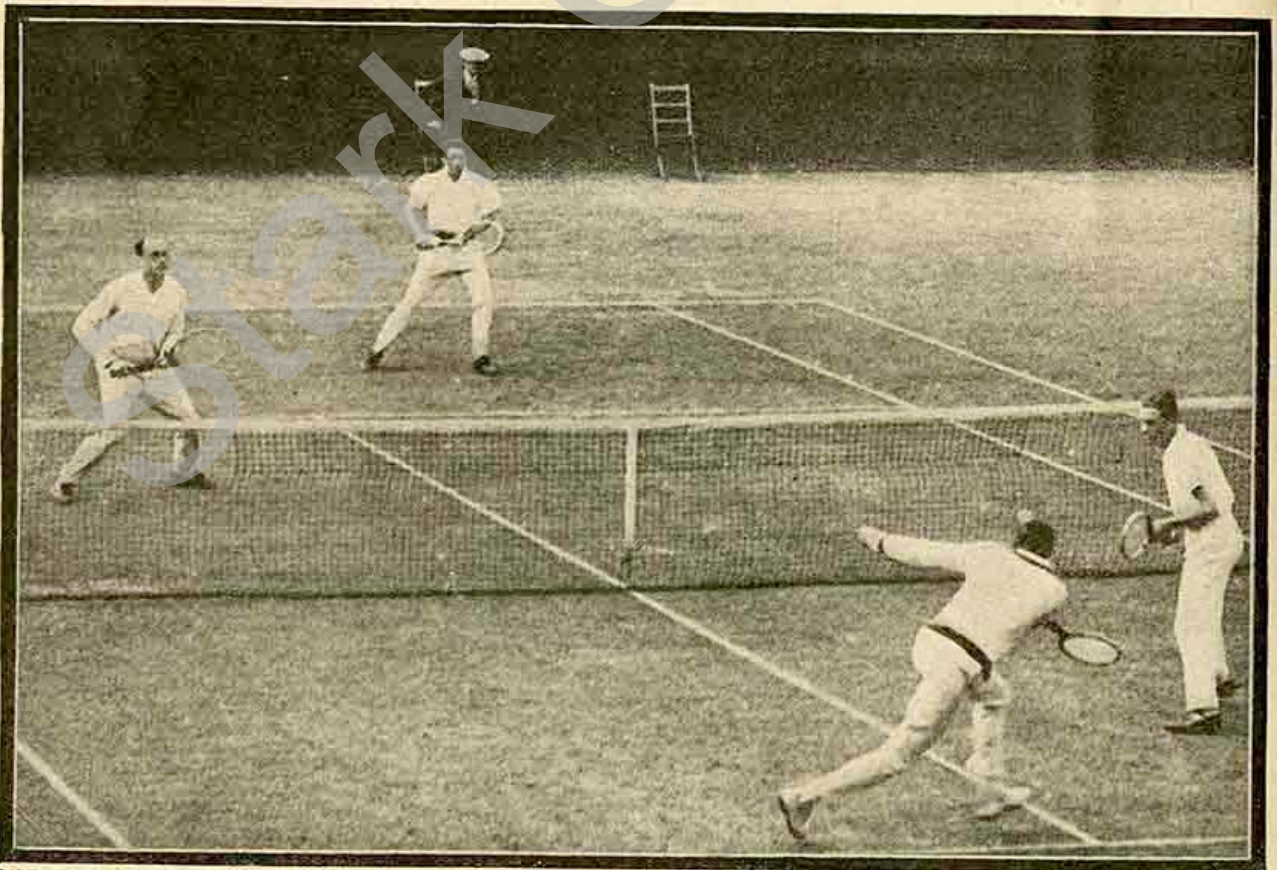
Is there one among us who does not thrill to the sight of a really magnificent horse? Man or woman, since the time of the Persians and even before, we have all known the glow that comes at sight of some beautifully built and spirited champion of speed.

Down through the centuries men have been striving for supremacy in the matter of the racing horse. America took up the contest from England and France, although the racing thoroughbred as we know him today is a comparatively modern development.

And the wonder of it is that there has been no recognized test by which the champions of all the countries in which the thoroughbred is a fixture could meet in an international event for the championship of the world. Men have established world's championships in almost everything else and have been mighty slow to come around to the horse.

But indications are that this will no longer be the case. Papyrus, the colt which won the famous English Derby at Epsom this year, is to meet Zev, acknowledged champion three year old of the American turf, at Belmont with a purse of a hundred thousand dollars as the incentive.

(Continued on page 82)



© "P. & A. Photos"

A real champion in action, showing the marvelous speed and accuracy with which Bill Tilden returns a fast ball. You can figure out where his left foot must have been an instant before. He moves like a flash.

Beauty Through Bending

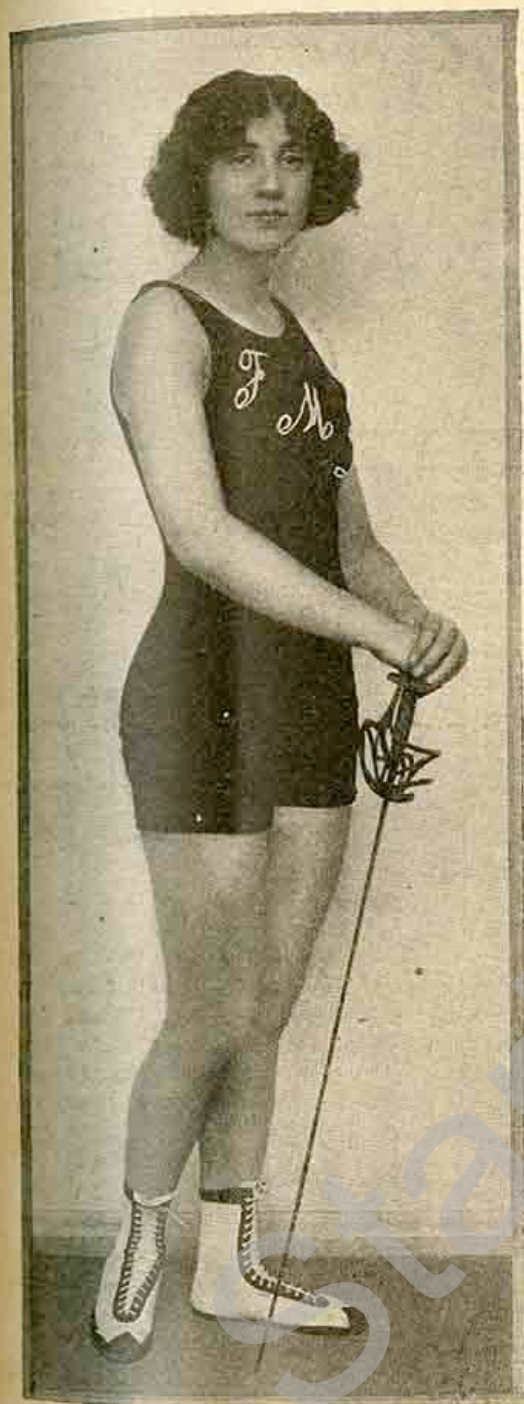
In Which Is Presented Not Merely Some Things to Do, But the Far More Important Philosophy of Beauty-Building—Perhaps Herein You Will Find the Secret You Have Been Looking For

By Edith Baker

IT is a great mistake to think that it is only the men who like to go to these "girl-shows." Which member of the family is the great theater-goer? Does father buy tickets because he is crazy to see the show, or because he knows it will be a real treat for mother? And when brother goes, does he go alone, or does he take some one else's sister in order to make a hit with her? No, ma'am! It is the *girls* who support the theaters; both the kind that give intellectual and artistic entertainment, and those that house nothing but musical shows and the "follies" type.

Without the millions of women readers, the publishers of novels would starve, or go to work. Who is it that supports most of the magazines? The women. Who is it that supports the most of the theaters? Again the women.

The theatrical producers cater to *us*, else why those gorgeous costumes, those marvelous head-dresses, those jewels, and those wonderful "creations"? Much the men care about costumes, and such things as head-dresses are utterly lost on them. And when the heroine comes on in her beautiful gown, the poor fish sitting alongside you doesn't even know whether it's last year's model, this year's, or what they are going to wear next season. But



Beautiful women of the stage do not just "happen" to be so. They have perfect symmetry, shapeliness and vitality because they build these qualities through forms of activity that all other women could emulate if they chose. Miss Zacky (above) and Miss McCarthy (right) typify the benefits and the beauty which any woman may secure if she will "do likewise."

we appreciate all those things and the very clever gentlemen who get up the shows know that we know. When it comes to the dancing and music, well! that is where we live. And there is no man who can appreciate the youth, the beauty, and the artistry of a woman as well as another woman can.

It goes without saying that many young women and girls model their mannerisms, method of speaking, and style of dressing after the examples set by their favorite theatrical or movie star. For these actresses always have to be dressed just a little bit in advance of the mode; but above all we go to the theater with the desire to find out the secret which enables these stage beauties to keep themselves so perennially young, graceful, supple, and well-groomed.

Show-girls are not picked for their looks alone, but for their looks *plus* their ability and their training. When you go

to a musical show, to the Follies, the Winter Garden, or a show of that kind, you can readily believe that all the leading characters are highly trained artists; but it is hard to realize that every woman on the stage be she dancer, show-girl, or just a member of the chorus, has won her position by months, and sometimes years, of the hardest kind of training. No show-

girl or dancer, however beautiful, could hold her job for one week, if she were either awkward, or stiff, or slow-footed. The purpose of the show-girl and the dancers is to create an atmosphere of youth, beauty, grace, and vigor. While it is the job of the producer and the stage manager to create illusions which charm the rest of us, these canny gentlemen long since learned that *no illusion can compete with the real thing*. So where a generation ago the *illusion* of youth and beauty was deliberately *created* with the aid of grease-paint, cosmetics, and cunningly arranged pads; *nowadays we see youth and beauty itself*. The theatrical booking-offices in New York are besieged with youthful and beautiful applicants for the minor stage positions, but only the trained applicants are taken. If it is surprising how many applicants there are for show-girl positions, it is amazing how many of them are fully qualified. I suppose the craze for outdoor games and aesthetic dancing is the explanation. When I walk



Fencing is one of the forms of exercise especially adapted to women, inasmuch as it calls for quickness, grace and activity and is as well suited to the feminine makeup as to masculine speed and energy. The poses by Miss Zacky are not intended to be instructive so much as to signify the poise, grace and action involved in this superb exercise.

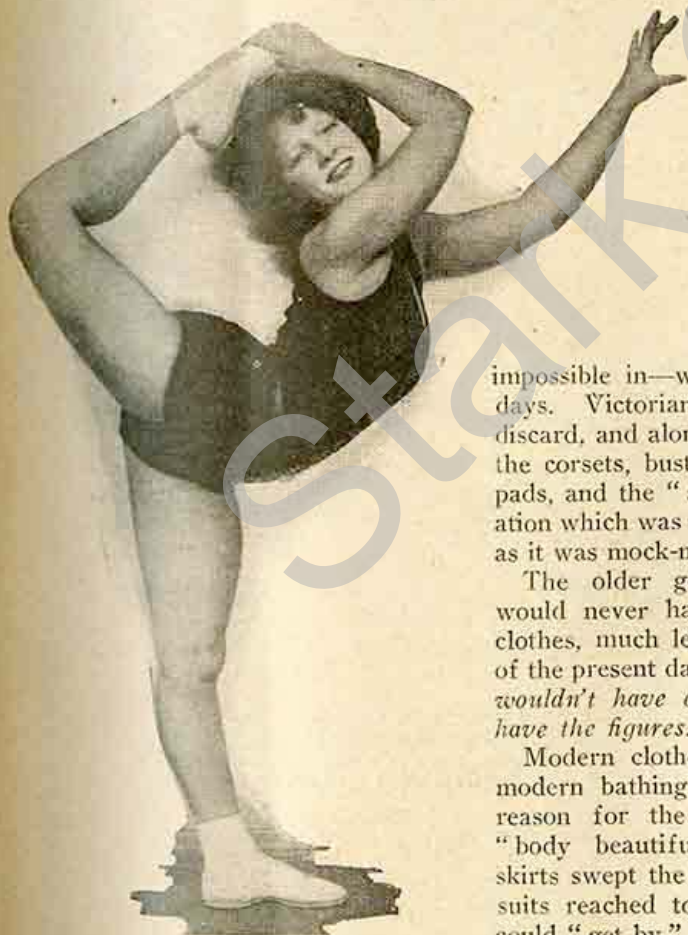
along any crowded city street I often think, "The human race is improving. Surely! never before have there been so many pretty girls as there are today." If I go to a popular bathing-beach I am astounded at the hundreds of young Dianas who are disporting themselves on the strand. And whenever I go to a "girly" show, I think that each new lot of show-girls I see is more beautiful than the last.

Gone forever, I hope, are the days when it was considered a mortal sin to display the beautiful outlines of the human figure. Blessings be on the head of Annette Kellerman, Mack Sennett, or whoever it was that invented one-piece suits.

We have no cause to regret the idyllic groves and the departed beauty of ancient Greece, when a quarter-million of our best citizens make a pilgrimage to Atlantic City to see which of seventy girls from seventy different cities shall be awarded the prize for the most perfect face and figure. Why! that would have been



Some poses by Miss McCarthy, illustrating both her exquisite bodily development and suggesting the means by which she "got that way." The arabesque pose above is something any woman can readily undertake. The pose at the left is something to aim at if not so easy to achieve.



The feat of executing a hand-stand is supposed to be a masculine specialty. It has, however, become a favorite among many athletic girls, and as you will see, presents a particularly attractive picture.

impossible in—well, in *my* younger days. Victorian prudery is in the discard, and along with it have gone the corsets, bust forms, bustles, hip pads, and the "shapes" of a generation which was not nearly as sincere as it was mock-modest.

The older generation say they would never have worn the street clothes, much less the bathing suits of the present day and fashion. *They wouldn't have dared. They didn't have the figures.*

Modern clothes, and particularly modern bathing suits, are the real reason for the cultivation of the "body beautiful." When street-skirts swept the ground and bathing suits reached to the ankle, anyone could "get by," as you flappers say, for knock-knees, bow-legs, piano-legs, spindle-shanks were covered up.

(Continued on page 91)



Your Strength Shows In Your Handwriting

If "The Proper Study of Mankind Is Man," Analyze Yourself, and Others, in Terms of Your Most Graphic Form of Self-Expression

By *William Leslie French*

IT is a natural tendency to judge our fellow-men by their appearance, manners and speech. In many instances we are deceived by genial and charming people. The "banker's eye," frank but curiously deceptive, will meet yours with almost a smile when you possibly desire to borrow money. And you are never sure from his first attitude. Consequently, there is one accurate and well-established method by which one can secure a clue to the real character of people. For the pen movements of every person, if they are carefully studied, reflect the vibrations of the subconscious and conscious mind through the nerves which affect the action of the hand in writing. Some friend or acquaintance whom you know well gives evidence of being successful. And one glance at his masterful positive style of handwriting will assure you that you are right. A weak and unstable pen-gait will match another's lack of definite achievement.

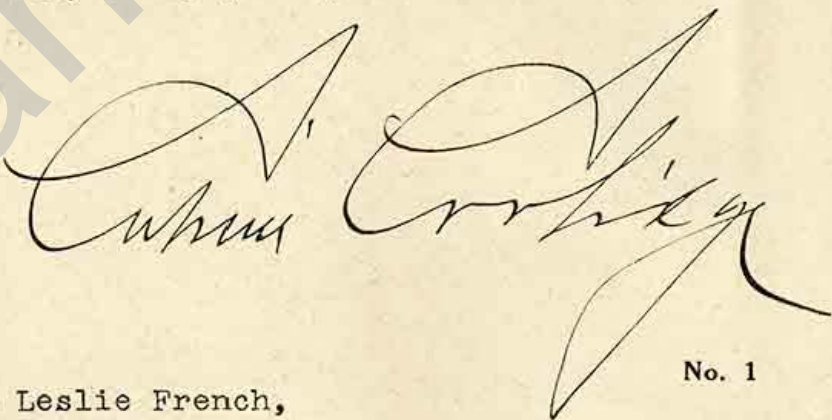
With this in view, it is interesting and valuable to regard the writing and signatures of both men and women who exhibit their marked capabilities and gifts

while the simple narrow-minded dwarf writes in a fashion utterly dissimilar. And the following observations will enable you to see clearly that in some of these pen portraits the elements of success are finely and brilliantly etched.

"Destiny is in you," a sharp and concise aphorism aptly made by President Calvin Coolidge, when he sums up the values of strength, ambition—and work. In like manner his own signature, No. 1, marked by an expansive and vigorously pointed style indicates that his every act is directed and fortified by large and wide vision. His personality reflects a positive force of character. He takes a scientific view of facts, and is calm, analytical but alert. Angular throughout, his gestures speak of steadiness and discretion. Cautious!

He thinks before he makes a decision, and then reservedly. His intellectual power appears in every stroke, in every connection. No hesitating pauses! The high curved capitals with their triangles means that he has that kind of nerve to meet all situations with confidence and cool grit. He has a clear sense of

Very truly yours,

A large, elegant handwritten signature in cursive script, identified as Calvin Coolidge's signature. The letters are well-spaced and have a distinct, angular quality, particularly in the capital letters.

Mr. William Leslie French,
89 City Island Ave.,
City Island, N. Y.

No. 1

"Destiny is in you," says the author, speaking of this vigorous, beautiful signature, and quoting, significantly, an apt aphorism expressed by the President himself.

in various planes of endeavor, and then compare the leading signs of their script forms with those written by people who are lacking in stamina, mentally uncertain in the process of thinking, or have failed for reasons too numerous to mention at this point. Still, some may say that any statement made about the writing of people well known would be obvious. But I will show that the intellectual giant inscribes one style of script,

justice and believes in fair play. His convictions are always convictions! But ever able to meet others on a common ground—and quietly. His finals are clipped short as are his words and general speech. Endowed with common sense and practical, he can be relied upon in every emergency. Finesse! The keystone of the arch of his personal stability is cemented with constancy of purpose and loyalty.

Here is human nature put down in black and white for those who can read. As Hamlet said, "Look first upon this picture, then on that," and contrast the two different kinds of men who wrote these two different hands in Figures 2 and 3. Without knowing anything about handwriting in a technical or expert sense, any one can see at a glance the relative qualities of success and failure denoted by the handwriting of these two men, the one expressing energy, poise, decision, strength, the other signifying uncertainty, hesitation and weakness. Which more clearly resembles your own script?

In viewing the pen features of C. W. Schwab, No. 2, one is impressed with his steady, firm, positive movement, energetic and strong. Poise, determination and balance appear. His keen mind is shown by partially sharpened letters at the top, while his well made connections reinforce his reasoning faculty. He thinks before he acts. The words and lines are well spaced, and the marginal alignment on the left discloses the ability

to make an accurate judgment. Every transaction sure! His decided t-crossings signify that he has the will to achieve, standing solidly on his feet. Note how he joins together his high capitals, the sure sign of self-assurance and confidence. No wavering. Under all circumstances there is physical elasticity and vigor. He brings his long strokes well below the lines as men of his type always write. Hence he possesses the qualities which make for success and he controls his destiny which he forges out with marked initiative. His brain and style make him what he is! Efficient!

How strongly by contrast the script of No. 3 hits the eyes! The writer's pen-gait crawls across the page

Women now vote in twenty-five
of the World's nations on equal
terms with men.

Carrie Chapman Catt

June 11, 1923.

If this matter is
trivial for you to

It is not money alone that draws
men on to great enterprise; it is
that glowing satisfaction that
comes from fine achievement.

C. W. Schwab

No. 2

Arctics you show writer,
and on inquiry of No. 3

No. 3

as if his hand could hardly respond to the command of his brain and mind. Slowly, infirmly and sluggishly he creeps along, the lines change in this way and that, vacillating up and down, barely able to make known his ideas. His connecting strokes indicate his original ability to think clearly, perhaps. True, it is legible, but his writing is modified by jerky dashes above the lines—the i-dottings—signify that his nerves and mind are not under much control. No one would call this a forceful, dominant type. Energy is in the discard. He might be industrious at times or try so to be, but he will never finish any piece of work effectively. Some kind of hook-worm, probably, is gnawing at his vitals, his mental faculties, his health!

Again, the handwriting of No. 4 exhibits a calm, cool, collected and uniform movement, where the lines and words are evenly spaced, her style being almost vertical. Here the writer does not hesitate to proclaim the dominance over her feelings and emotions. Not that she is cold, but merely poised. She moves straight along with letters of even height, the pressure firm. She would show by her

Here is another vivid contrast between a clear-thinking, well-poised and energetic woman and an example of instability clearly apparent in the handwriting of specimen No. 5.

No. 5

Here is the signature of a famous financier and executive, contrasted with the writing of one possessing little energy or concentration.

No. 6

No. 7

I was reading
article in September

words, if necessary, by her deeds especially, that she keeps before her a definite aim in life, a special goal to reach, and has sufficient force and will-power to accomplish her purpose. Her signature mirrors her stamina, and she believes loyally in the ideas and convictions she holds. As she punctuates her perfectly connected letters, pointed at the top but also curved, so she brings out her natural intelligent method of thinking. Keen, sharp and shrewd! The long strokes extending far below display her well-being, her healthy physique and endurance with the vitality to carry out to the end her strength of purpose. Her virile determination to win out at all odds. And she is one of many with whom you will come in contact today.

As a pen-portrait, No. 5, the words and other gestures are formed in a tense, hurried, breathless fashion, as though this individual's mind and will did not hold in check his impulses, not for one moment. He flies ahead, slovenly, heedlessly, while the pressure varies from heavy to light, smudged in occasional up and down strokes. It is almost needless to say that there is no sign of real stability, but vacillation! Of course, much nervous excitability is apparent. One can read his mind, his erratic ideas, as if they were shouted aloud. What will-power appears is as variable as his slashing t-bars. Many strokes cling close together and then sudden breaks occur between letters, semaphoring a wild mental attitude colored by illogical views. Would any writer such as he is be reliable under general or even any circumstances? Would he stand pat in emergencies? I am sorry to say that he would not and could not. Too emotional! His intensity and lack of common sense would grasp his personality in a tight grip. And he might only succeed if he restrained himself. Success knocks but once as a rule at his door.

Now of these five writers, judged from their handwriting only, which ones make the instant and strongest impression upon you? I leave it to your intelligence and judgment to make the decision.

Among the numerous types in the commercial field today, No. 6 is an excellent illustration. This gives striking evidence of an even hand movement. The pressure minutely exact and solid denotes a dominant will, while the connections are made with one stroke of the pen. One might almost say, written by the thought-flash behind it. There is no sign of weakness. Like an obelisk, his signature stands forth, balanced! His reasoning faculties are active, clear and

bright, significant of ability. Observe his legibly-formed words. As he constructs his letters, these being in proportion to the capitals, you would find that this writer has great power of concentration and application.

In all activities and transactions, he would show industry and enterprise. Courage and confidence are twin qualities which enable him to fight intelligently. His final stroke

sweeps upwards—a gesture of command for his subordinates to heed. Hence this type has all the hallmarks that indicate executive ability. Although this is a distinctive specimen, yet, there are many who show most of these signs where commercial success is evident. They can be readily verified.

To drive my point further, I shall ask you to give a brief inspection of No. 7 and see what kind of story the handwriting tells. This writer moves ahead with so little energy and vim as if he could not apply his mind to anything consecutively. A tremulous and shaking fashion of making every word appears, and he could not attempt to shoulder any responsibility, with any sort of result, commercial or otherwise. No one who saw this writing would think of employing him permanently except out of compassion. As for other abilities they can be passed by. The germ of success may have been there once! That is all.

In the instance of No. 8 what is particularly noticeable is the rapid powerful pen movement, strong, well connected, with heavily-shaded down strokes which end in a blunted formation. This writer has great enthusiasm, animation, and the brains to do things with resolution. The trend to the right denotes his ambition almost limitless. The pressure shows his will to make results count and count large. Further, his flourished and flamboyant capitals, light and heavy, original, reveal artistic and dramatic skill. The wavy

about one of your
friends,

No. 8

swing of the lines is found in all who follow this profession. And he illustrates this especially. When he made his "H" simple and plain, he emphasizes his clear gifts as the artist who is devoted to his art.

His personality may be considered as emotional as his colored gestures which are so plainly curved. He easily adapts himself to every phase of his work, no matter what its character. Within, his mind teems with fresh ideas that help him to achieve masterfully. Even though entirely different from those above, his signature stands erectly forcible—and dogmatic in its winning quality!

Practical idealism is characteristic of No. 9. Here one can see the well constructed style, words legible and clean-cut, of the same height, the lines straight and curvilinear, the spaces being even. This was inscribed by a woman whose honesty, loyalty, straightforward

was ever heard by me from her. She was always loving to me whether or not I deserved her love

No. 10

I know well how quickly money is an advantage, with certain returns, and how

No. 11

actions and reliability are the chief qualities of her life and her work. She slants to the right with the letters wide apart, revealing her generous spirit and high aspirations. Her standards are manifest in her actions. She is as active as her writing. She has poise and good judgment in all of her decisions.

Caution and wisdom appear in the dashes throughout. Being a physician well known, she recently remarked "I leave to God to balance my ledger." And her real success is practical because based upon actual truth. Not measured by hard metal alone.

Moral and spiritual attainment is generally found where the script is evenly and firmly made. The motion of the hand held under control. The gestures are clean-looking. The greater the slant to the right, the more highly developed the desire for spiritual things. When the vertical style is discovered it indicates a spiritual and intellectual ideality

result of your work - Always glad to hear from you - Keeps up the good work of getting over - Our best wishes go to you -

No. 9

Sincerely,

to a high degree. Thus, No. 10 holds his desires under strict restraint. He would be willing to sacrifice himself for his beliefs and ideas—and for human beings especially. He never tries to control others by sheer force. He draws others to him by his personal character and deeds. As you will observe, his writing is quiet and peaceful, ever gracious. They are curves instead of angles! The flow is constant. He is a revelation of good-will and kindness, of generosity. The

material things of this earth are secondary to him always. His success is more frequently found among the poor and lowly than on the avenues of great cities. His type or others who present such similarities are those who usually hide their light under a bushel. And the greater they are the more delicate the structure of the writing, be they deaconesses or even bishops.

In this day and generation it is important to bear in mind that in many sections of this country numerous types of people bend their energies to despoil everyone with whom they come in contact. They steal and are active in spread-

ing abroad the sale of narcotics, such as morphine, cocaine, heroin, not to omit the concoctions of death-dealing alcoholic beverages. Consequently, I wish to call your attention to a few signs which are easily recognized. The special hallmarks which would give one a clue to those whose script should be avoided as so much poison.

In this connection No. 11 will serve the purpose, being plainly inscribed (Continued on page 80)

people killed by the
 bout, 10 per cent of the
 see it on the newspaper
 we well soured the

No. 12

A Man Is as Strong as His Back

Presenting Some Advanced Exercises

By Prof. B. H. B. Lange

University of Notre Dame

EDITOR'S NOTE

THIS article is a sequel to Prof. Lange's instructive discussion of last month, in which he pointed out the relationship of the development of the back to general bodily strength and offered some exercises for gaining ordinary strength, to be followed by more advanced work for the student who wishes to develop a really powerful degree of bodily vigor.

It will be seen, therefore, that these exercises are not to be undertaken except by those already possessing a measurable standard of development. It should be said, however, that these exercises are not so formidable as they look, since an empty barbell weighing thirty to fifty pounds looks just the same as one filled with lead shot and weighing two hundred pounds.

The principle of physical training is that of building strength by the practice of overcoming resistance, starting preferably with a limited resistance and very gradually, during the course of weeks and months, increasing the amount of that resistance. Of course, that is very easily accomplished by adding a pound or a few pounds at a time. A moderate weight, by supplying such resistance, naturally makes an exercise more effective than a similar free movement executed with empty hands. In other words, such exercises may not be found too strenuous.

And now we will let the author continue.

* * *

Another exercise that the author has found very beneficial

The familiar exercise of body twisting, turning at the waist, at once becomes an advanced exercise if a moderate weight is carried upon the shoulders, to be swung back and forth in the manner described in more detail by the author.

for the lower back muscles is the common one of twisting or rotating the trunk of the body. This exercise is also very often prescribed as a waist line reducer. The particular muscles employed in this movement are very especially the rotator set—of which, as has already been said, there are eleven pairs. As the name implies, these muscles "rotate" or turn the trunk upon the hips. In performing this turning exercise, the athlete should stand with legs separated, the feet being at least a foot apart as this position serves to brace the performer. He should next extend his arms straight out

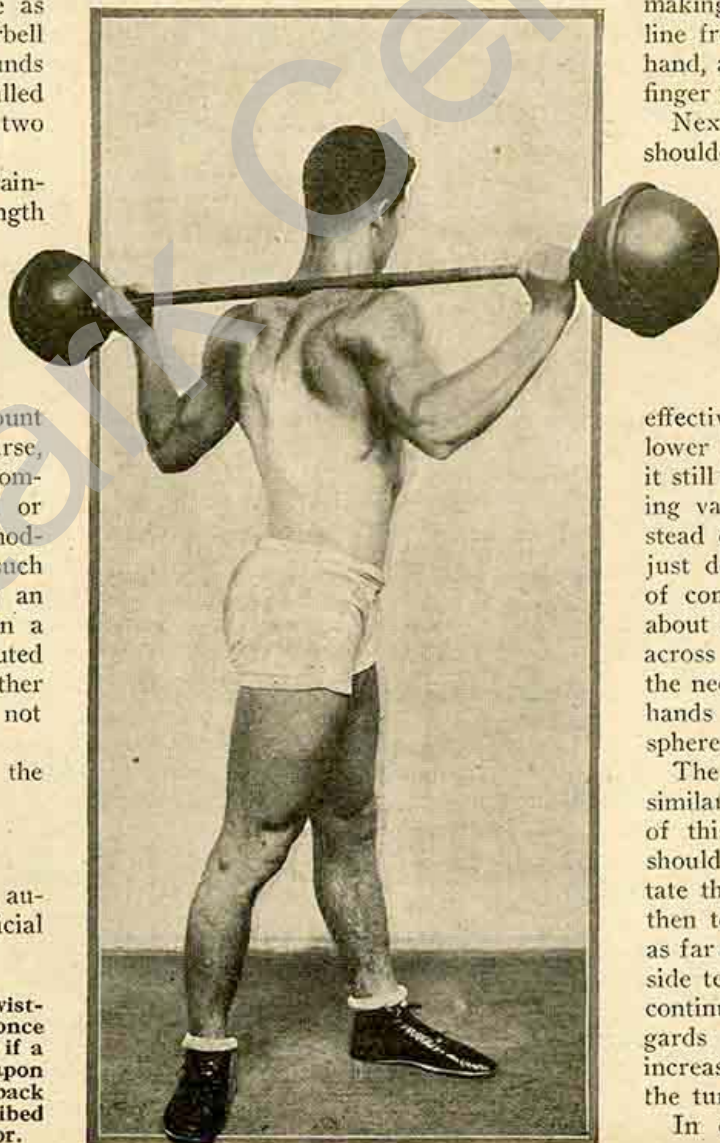
at the sides from the shoulders, making one continuous straight line from the finger tips of one hand, across the shoulders to the finger tips of the other hand.

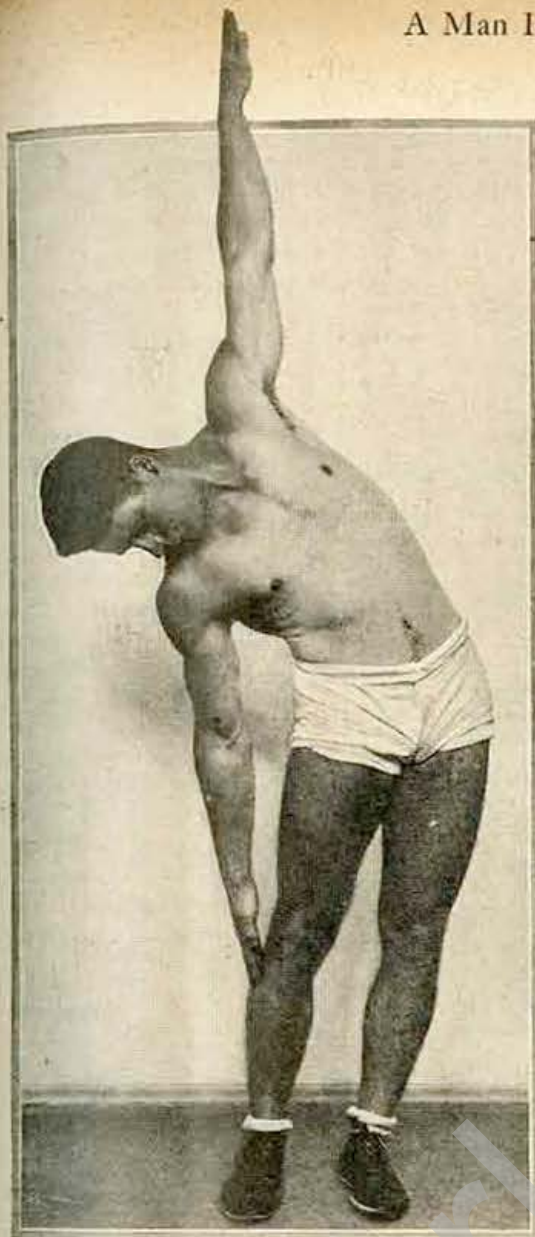
Next, keeping the arms and shoulders rigid, he turns or rotates the body as far to the right, then as far to the left as possible. This is repeated until the effects begin to be felt. The exercise is most simple but nevertheless is a very

effective developer of all the lower back muscles. To make it still more effective the following variation is excellent. Instead of extending the arms as just described, place a bar bell of comfortable weight—that is, about sixty or eighty pounds—across the back at the base of the neck and shoulders with the hands grasping it near the spheres or plates.

The rest of the technique is similar to the free arm version of this exercise. The athlete should rather slowly turn or rotate the body first to the right, then to the left, as in Figure 1, as far as possible. Turn to each side ten times as a starter, then continue the procedure as regards repetitions and weights, increasing until able to repeat the turns thirty times.

In order to give the lower





Side bending movements constitute an important factor in conjunction with the muscles of the lower back. These photographs show both the simple and the advanced forms of such exercise, though it is important to note that the author's instructions with reference to this work are very specific and should be carefully studied before undertaking them.

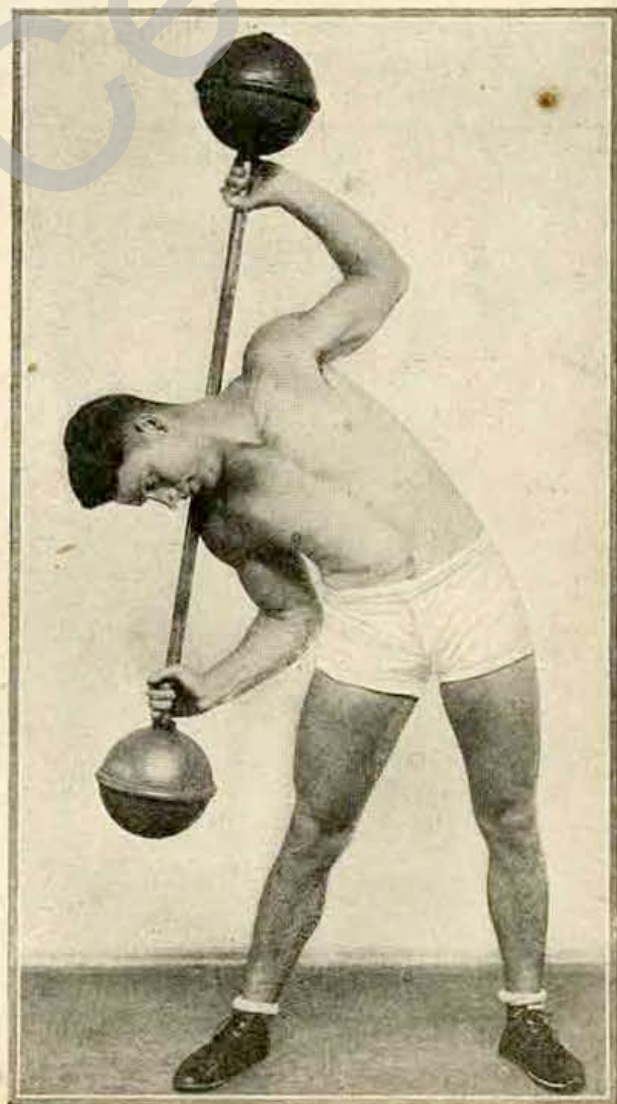
back muscles still more strength and development the following exercise is important. It is also often, in fact generally, given as a developer of the side muscles. It does develop these also but it acts very efficaciously on the longissimus dorsi, the spinalis dorsi, the semispinalis dorsi and the multifidus muscles. As all the muscles of the lower back—in fact, the entire back—are in pairs, their functions are doubly important and interesting.

One of the most important functions of the above-named group of muscles is the bending of the body to the right side and to the left. The individual who practices just that movement alone will enjoy more than average good health because of the massaging action this exercise has upon the kidneys, liver and intestines. The position of the legs, feet and arms in this exercise is the same as in the preceding exercise.

The difference lies in the direction in which the trunk is moved. Instead of turning or rotating the body the performer should drop over, or lean over first to the right side as far as possible and then to the left side as far as possible.

The author's method is to lean in such a way that the right hand touches the side of the right leg just below the side of the right knee, and when leaning toward the left, until the left hand touches the left leg just beside the left knee. In this exercise it might be found to be more comfortable if the feet are touching each other. When performed properly, the position of the hands will be the following: When the right hand touches the right lower leg, the left hand is in such a position above the head that if a line were dropped down, it would strike the ground about on a line with the right foot. (See Figure 2.) The position is reversed when the left hand touches the left leg, then the right hand is overhead. This exercise should be performed till its effects begin to be felt.

There is a variation of this exercise. It can be executed with weights, as for instance with a barbell across the shoulders, as in Figure 3. Any type of weight that can readily be held in the hand will suffice, although the best form of weight is the adjustable kettle bell. If that is not at hand then an adjustable dumbbell will do.



The technique of this variation of the "side lean" is as follows: The athlete stands erect, with feet touching. He holds a weight of about forty pounds in each hand. Then he bends to the right side as far as possible, then to the left. When beginning this exercise six repetitions are enough for four exercise days. Then increase by one repetition till able to do twenty or thirty repetitions before increasing the weight by ten pounds and continuing as described in a preceding paragraph. Or it can be done with a dumbbell, as in Figure 4.

That exercise commonly known as the "set up," while it, like the preceding exercises, is popularly prescribed as a reducer of the waist line, is also a good developer of the muscles of the lower back group. For the information of those not acquainted with

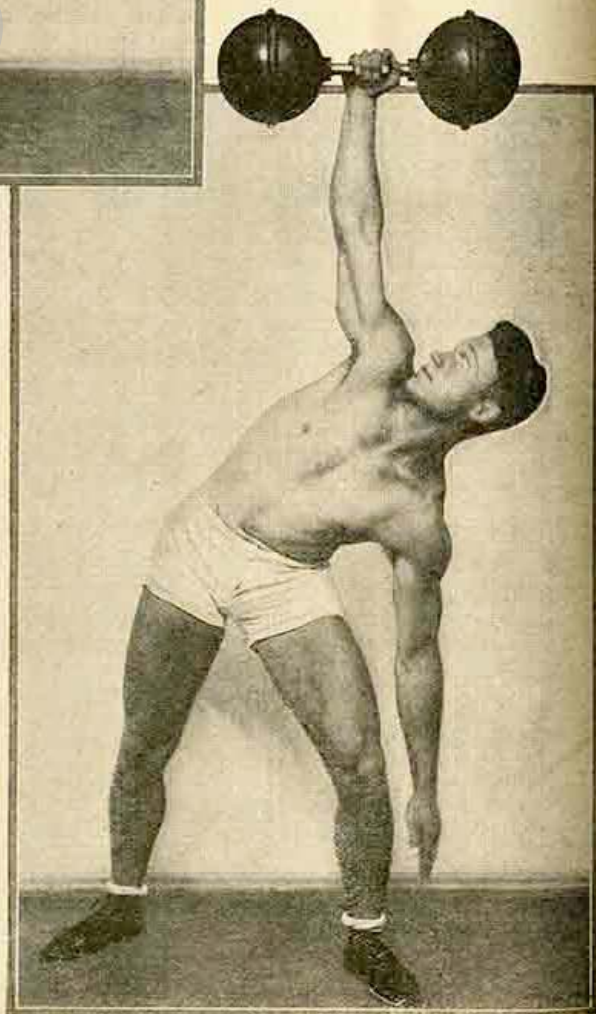
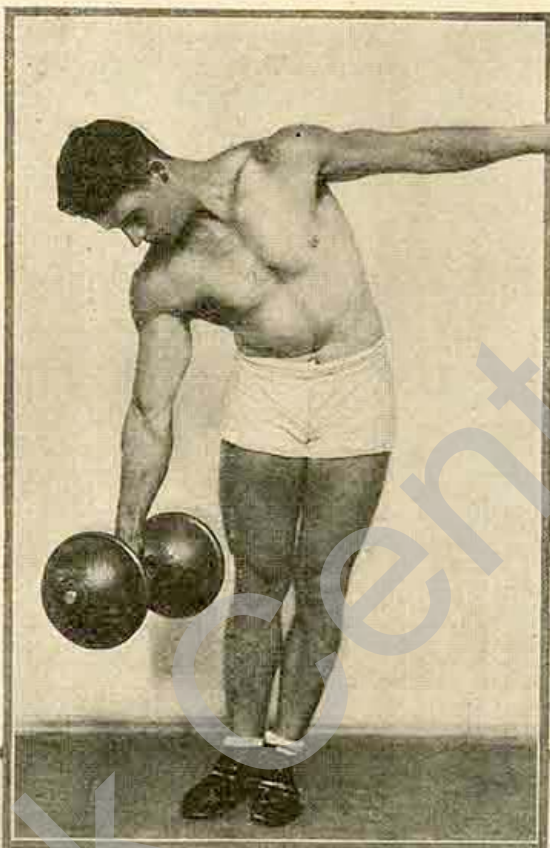
The author's instructions with reference to the exercises shown on this page are so specific, and it is of such importance that they be followed exactly, that an abbreviated description would fail to do them justice. You should read very carefully Prof. Lange's analysis of these movements and follow instructions explicitly.

its technique a brief description will not be out of place. This exercise helps to develop the psoas muscles especially. In order to perform this exercise properly and with greatest effect, it is necessary that the feet be hooked under some object such as a strap fastened to the floor, thereby holding the feet down; otherwise it is very difficult to raise the body from the floor to the "sitting up" position.

Having hooked the feet securely and lying flat on his back, the athlete, with his hands clasped back of his head, is ready for the exercise. He

should come to a sitting position rather slowly. Then still keeping his hands clasped behind his head he should slowly return to the supine position. The beginner will find from three to six repetitions sufficient for a few days until the muscles unused to this exercise have regained some of their natural strength. After two or three weeks an increase in the number of repetitions is permitted. This is a

(Continued on page 91)



Are American Athletes Stronger than British?

By Alan Calvert

If all depends where you are when you ask the question. If you happen to be in England you will be quietly, but not boastfully, assured that the average Englishman is physically stronger than the average man of any other country, America included; and also that the English hold most of the weight lifting records. (I will explain *that* later on.) The English sport-follower *always* thinks of weight-lifting as the test of strength.

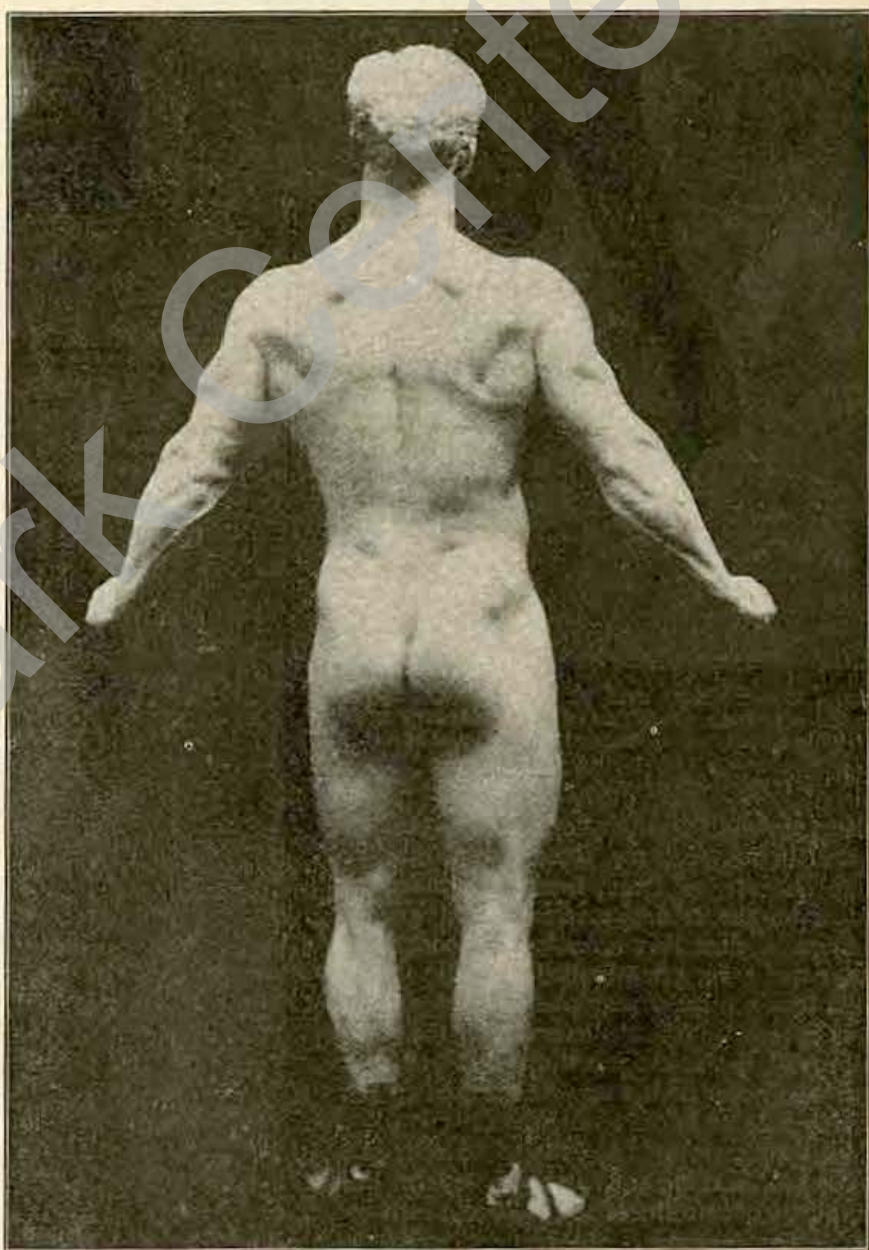
If you put the question to the average American you will be greeted with a look of blank surprise. "What!" he exclaims, "Why, I didn't know the English had any strong athletes! They haven't had a really good heavy-weight boxer for years and years. I never heard of any good heavyweight wrestlers coming from England, and when it comes to weight-throwing—tell me when an Englishman ever won the shot-put or the hammer-throw at the Olympic Games." You see, the American idea of strength is that kind of physical power that is best expressed by our champion boxers, wrestlers, and weight-throwers.

If you wish to be convinced, just ask any of your friends whom he considers to be the strongest American athlete, and the chances are that he will name either Jack Dempsey, Strangler Lewis, Matt McGrath or else some college weight-thrower or football player. Your friend will probably not be able to think of any American weight-lifter by name, and it is unlikely that he can recall who holds the record in the "strength test" of the college gymnasiums.

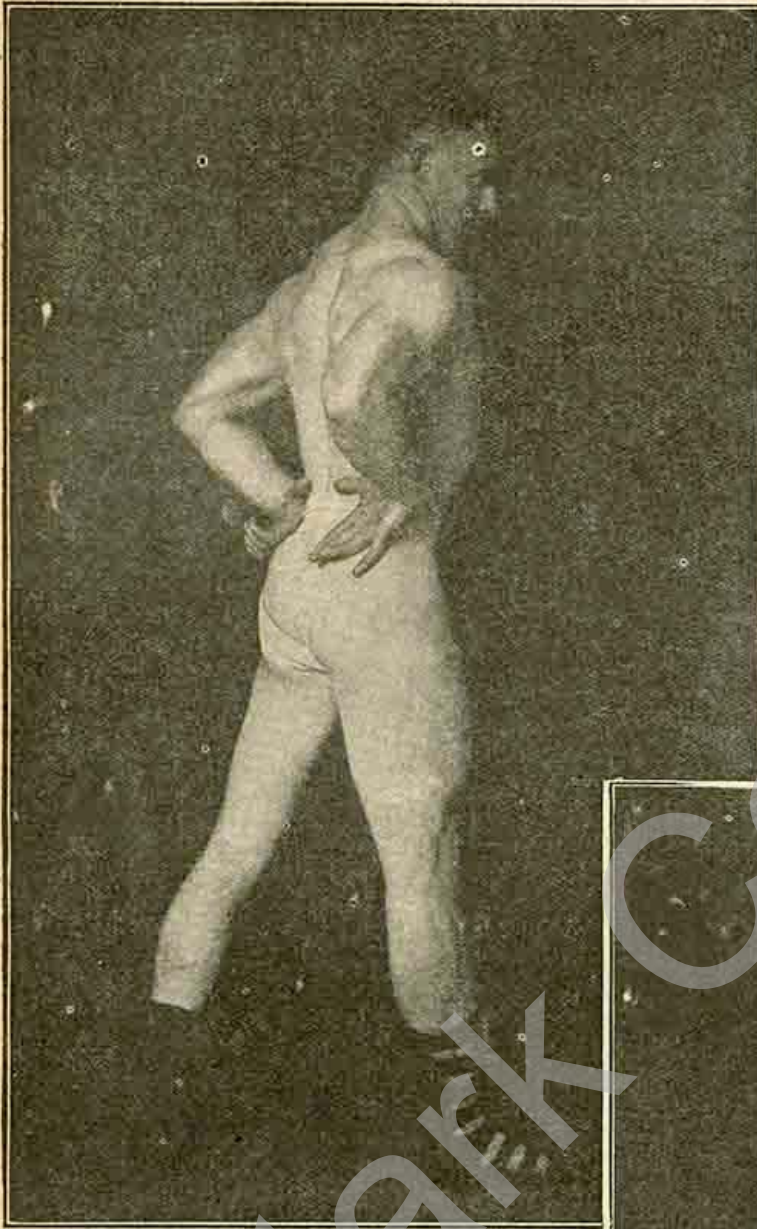
Now, boxing, wrestling, and weight-throwing are all strength tests in a way, but they each require a very large measure of skill, and then in boxing and wrestling (particularly boxing), generalship is just as much a factor as technical skill. It has long been recognized that if you want to get the true measure of a man's strength, you must give him a test in which skill is eliminated. That is proven by the fact that the Directors of Physical Training in our biggest universities, men who approach the subject with a scientific viewpoint, test the strength of students by mak-

ing them push, pull, and lift against the resistance of spring testing machines. Such tests are very like weight lifting, except that the athlete, instead of lifting heavy bar-bells and dumb-bells, exerts his strength against handles and straps which are attached to springs or to instruments which provide resistance and record the pressure necessary to overcome it.

In this connection I may say that the winner of a



Adolph Nordquest is an example of the most perfect symmetry combined with marvelous power and energy. He has sprinting speed as well as lifting strength, thus representing the ideal of athletic development.



Above, Owen Carr, and at the right, Joseph Nordquest, both examples of extraordinary athletic ability as discussed by the author.

college strength test may or may not be successful in the ordinary forms of athletics. Mike Dorizas, of Penn, made a tremendous record on the testing machines, and was in addition a champion wrestler, a good shot-putter and a very fine football player. More often than not the strength test in various colleges is won by a husky member of the football squad, but sometimes the test is won by a man who never makes any show when on the playing field or in the gymnasium.

All that, however, has little to do with this discussion, because such strength tests as are common to our colleges are unknown in England. Besides which we are not trying to find out whether our college men are stronger than English college men, but whether our strength athletes are superior to theirs.

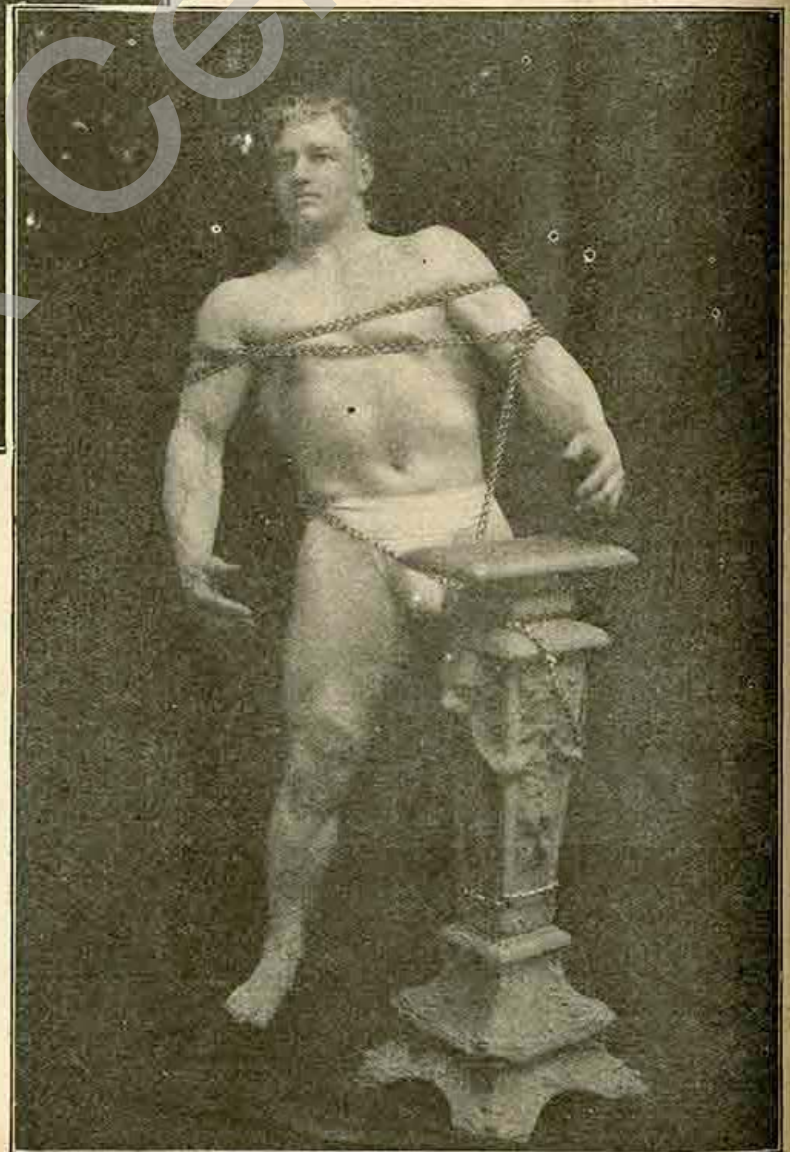
The only remaining test common to both

countries is weight lifting, and to adjudge our respective claims on that basis does not settle the matter, but only makes it worse. The average American lifter has never even heard of the English lifting champions, and reasons that if America provides most of the world's champions in boxing, wrestling, and track athletics, it must of necessity excel in weight lifting. The English lifting fraternity knows of our best lifters, but apparently regards our lifting records with great suspicion.

This article on English and American lifters and lifting methods is written not to foment discord but to try and make a fair comparison.

One thing to consider is the difference in styles.

I hope it will not offend any of our English readers when I say that an Englishman is prone to recognize no rules but his own. We frankly admit that in such universal sports as boxing, tennis, and golf the world has adopted the English rules. Although modern weight lifting did not originate in England, nevertheless, the British lifters consider that their rules should be recognized. Their record



books are full of performances marked "World's Record," but such records are of lifts made under English rules and conditions. A further complication is the unique system of classification by weight which prevails in that country. All of you are familiar with the fact that a "long ton" is 2,240 pounds, but perhaps, some of you do not know that a "long ton" is composed of twenty English hundred weights. And an English hundred weight is not 100 pounds, but 112 pounds. So a half hundred weight in England is 56 pounds, a "quarter" is 28 pounds, while one-eighth of a hundred weight is 14 pounds and is called a "stone." If you ask an Englishman how much he weighs, he will never give you the figure in pounds but in "stones" and pounds. If he happens to weigh 147 pounds he says that his weight is "ten stone seven."

They classify their wrestlers and lifters not as lightweights, middleweights, and heavyweights, but according to how many stones they weigh. Thus they have a 7-stone class, an 8-stone class, and so on up to 12 stone; but above that they do call the men heavyweights.

The British Amateur Weight Lifting Association lists forty-two different kinds of lifts, and sometimes one finds that a British "World's Record" is for a performance by a "nine-stone man" at a variety of lift that is never practiced outside of Great Britain, and since we in America do not practice many of those lifts and do not classify our lifters according to "stone," their records do not mean much to us.

And then why should we be bothered about classes at all? Why consider *any* except the biggest and best? If you go in a weight-throwing contest, all that counts is *performance*. You may covet the shot-putting or hammer-throwing championship, but if you weigh only 180 pounds you do not get any handicap because some of your competitors weigh over 225 pounds. Benny Leonard is a crack-a-jack lightweight boxer, but no one would consider him to be the champion fighter of the world so long as Mr. Dempsey is around.

What we are after is to find out whether we or the English have the strongest men, and as the big men outdo their smaller men we can eliminate all except the big fellows.

England has two very fine heavyweights in the professional ranks. Edward Aston is called "Britain's Strongest Man" because he beat Thomas Inch in a lifting match, but the program included several lifts which require great skill and speed, and my personal opinion is that Inch is the stronger man. I believe that at a program of pure strength lifts (such as the two-arm press, dead weight lift, etc.) Inch would win by a considerable margin. I may be doing Aston an injustice, but I think not. Both Inch and Aston have records of over 300 pounds in the "one-arm bent press" and there is where we have to hand it to England. We can't beat that. Our Joe Nordquest has done 300 pounds in practice, but not in an official test, but outside of Joe we have no one who can go 300 pounds in that lift. Nevertheless in pure strength lifts such as the two-arm press, Joe has done 245 pounds which is better than either Inch or Aston can do, and when it comes to "pressing" weights while lying on



Roy L. Smith is a business man of New York City who is an enthusiastic devotee of various feats of strength. He is especially good at harness lifting.

the back, Joe Nordquest can beat anyone in the world.

Adolph Nordquest holds the world's record in lifting a heavy weight from the ground hands alone and is terrifically strong, though not such a polished lifter as are his English rivals.

If it came to a pure strength test, such as lifting and carrying enormous weights, and making slow "presses" and "curls" with two arms I believe my friend George Zottman could outdo any man in England, despite the fact the George is fifty-seven years old and out of practice.

There are apparently no back-lifters and harness-lifters in England at present, and our Warren Travis would probably have a walk-over at that end of the game.

You may object that Zottman and Nordquest are foreign-sounding names, but both men were born in this country. One of the best English heavyweights is George Jowett, a man of marvelous strength and uncanny skill, but Jowett lived in Canada the last few years and has recently moved to this country, so he is outside of the discussion. Henry Steinborn came here from Europe a couple of years ago, so I leave him

out. Steinborn will not even attempt a "one-arm bent press" (it is barred in all competitions in Europe outside of England), but in every other lift with bar-bells and dumb-bells he simply outclasses anybody in England. He is at least thirty pounds better than Aston in a "one-arm snatch" and fifty pounds better than Inch in a "two-arm clean and jerk."

When it comes to the amateurs it is all *our* way. England has dozens of splendid lifters in the nine-stone and ten-stone classes, but few good men in the heavy-weight division. As I told you in the July issue of *STRENGTH*, Mr. Edwin S. Goodman (who weighs only 168 pounds) has exceeded, by a margin of ten to twenty per cent, a half dozen of the records of the champion British heavyweights in the amateur class, and if he were to get to work and practice *all* their lifts, I think he could make the records in *almost* all of them. Mr. Goodman does not even claim to be our best amateur heavyweight lifter. We have a number of big amateurs who, to my mind, outclass their British rivals. Such men as Owen Carr, Roy L. Smith, and Noah Young are stronger men and better lifters than most professionals. Smith is good at harness lifting as well as being a master of the bent press; Carr is a star at any kind of bar-bell and dumb-bell lifting, and is one of the finest built men in the world; while Young is probably physically stronger than any living Englishman, amateur or professional. He may not be an absolutely finished lifter but his physical force is prodigious.

WHY ENGLAND PRODUCES SO FEW BIG MEN

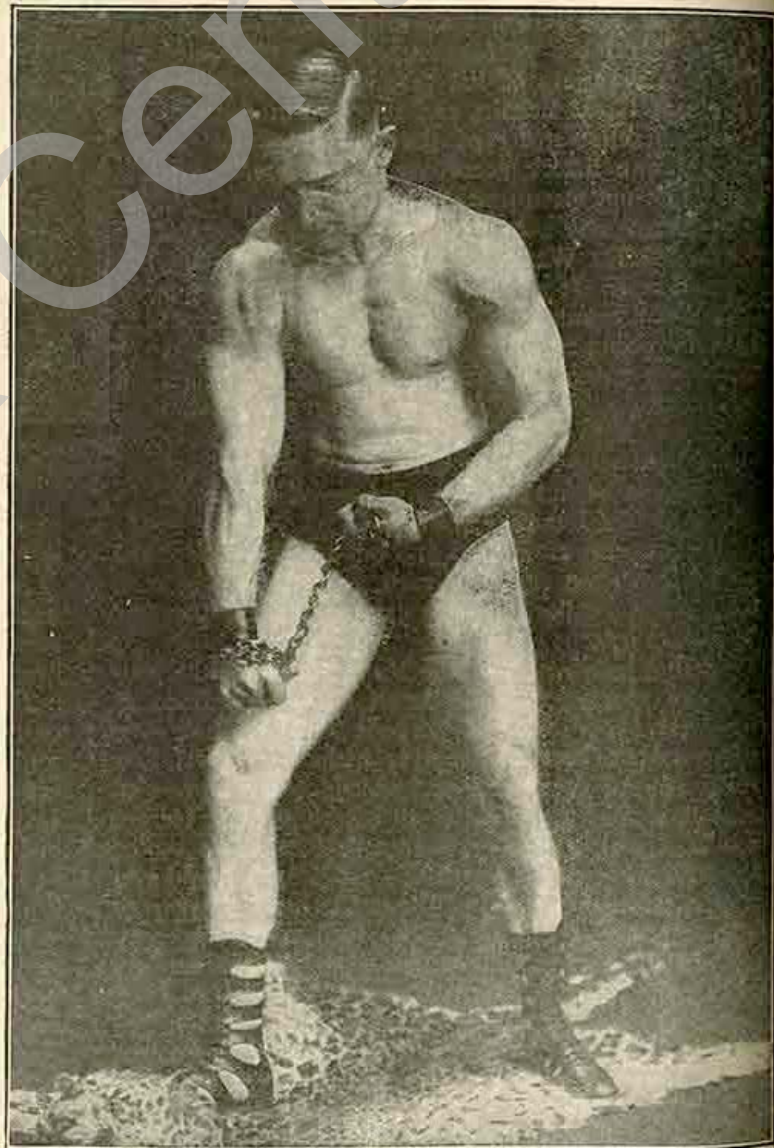
Judging from their sporting papers, the English are continually complaining about their dearth of good "heavyweights." They produce stars among their smaller and lighter men, but they would apparently give anything for a champion in the heavyweight division of either boxing, wrestling or lifting.

About the production or creation of boxing champions I know little or nothing, and it is with considerable hesitation that I venture to say that the English *seem* to fail in their appreciation of the value of bar-bell exercise in the *creation* of heavyweight athletes.

Let me say here that in many ways the English are the most scientific athletes in the world. They have always been an authority on the conditioning of athletes and they were the first to appreciate the value of "form" (that is skill and technique) in all varieties of sports. But when it comes to weight lifting the English athlete seems to be obsessed with a fear of growing out of his class. If he weighs 135 pounds his great ambition is to make records in his class, and to so train that increasing bodily weight will not force him into the next higher class, and thus make him to compete with heavier men. (Many of our smaller prize fighters do the same thing.)

It must be remembered that while in America lifting is practiced as a form of exercise, in England it is a recognized sport. A young Briton, possessed of more than average strength, and who becomes ambitious to shine as a lifter, puts himself under a good coach

and starts right in at actual lifting. His aim is to equal or surpass the other lifters in his class, and so he bends all his energies to mastering the *technique* of lifting; that is, to study the most favorable positions, how to use his body weight to advantage, and how to bring all his muscles into simultaneous action. At the technical side of lifting the English are marvels. They have the science of lifting down to a fine point, and I am inclined to believe that in proportion to their actual strength they can lift more than their foreign rivals can. They go so far as to have their bar-bells made in a way that facilitates the act of lifting through relieving the wrist and forearm of strain. *But* they do not seem to have our ambition to make themselves very much bigger and stronger. There *are* exceptions. Thomas Inch has a profound knowledge of body building methods, and Aston has made himself into a nearly perfect physical specimen. Some of their middleweights are finely made men, but the immense majority of English lifters are comparatively small men, and *seem content to stay so*. They devote their energy *first* to acquiring skill, and *secondarily* to getting the maximum muscular strength *for their weight*. One of their nine-stone lifters would apparently prefer to remain (Continued on page 80)



Edwin S. Goodman is a lawyer by profession, but strength is his hobby. He looks equally capable in both roles.

What's Your Personal Problem?

Every Problem Has a Solution, If You Analyze It

By Carl Easton Williams

WHAT is a young man to do with himself? What is he going to make of himself? Is he going to choose his profession and then spend any amount of time that may be necessary in preparing himself for it? Or is he just going to find a job, any job that may be available, because he wants to earn money, and in that way drift into one occupation or another, according to the offerings of chance?

Is he going to get all the education he can from the best obtainable sources, or is he devoted to the "self-made man" idea, on the theory that there is no training that compares with that of the school of hard knocks, and perhaps finding some virtue in taking the long way around to the desired goal instead of the straight and direct road?

The problem is a constantly recurring one. Here is a young man's inquiry:

I would like to get the low-down on the subject of a college education. My parents are very ambitious on my behalf and want me to go to college, though it means some sacrifice on their part. I would like to please my parents, but on the other hand I do not wish to impose upon them. I have a natural sense of independence and would like to go on my own. Besides that, I am very skeptical of the value of a college education. Does it produce snobs? I have been told that one can learn everything he needs to know through actual business experience, and I know many successful self-made men.

What is the answer?

T. W.

Our young man of this inquiry may be any young man facing the future. The problem is really that of preparation for life. And if one is serious it may be presumed to be a matter of preparation for a really big job.

One might as well begin by discounting the idea of the self-made man, from whichever way you may choose to look at it. From the one standpoint no one is a self-made man, since his development is more or less determined and at the same time largely limited by his inborn capacity. The born inventor is not likely to become a famous landscape artist if he lacks that talent, no matter how hard he tries to "make" himself a painter. But he can make himself an inventor, if it is in him. And so it goes. From the other standpoint, if you choose to look at it that way, every successful man is a self-made man, whether college trained or otherwise, because he has, through effort and training, developed some inborn capacity until he has reached high standards of achievement. In that sense we are all self-made men or self-made failures. The question of effort on the part of the individual has so much to do with it, and effort is primarily a matter of strength. Your failure usually lacks in this respect. Even if he

has bodily health he lacks mental strength or force of character.

On the matter of the self-made man, however, it may be further said that any man with marked ability will tend to rise to his proper level, irrespective of his early educational opportunities. Exceptional ability is a unique and distinctive thing which will always make itself

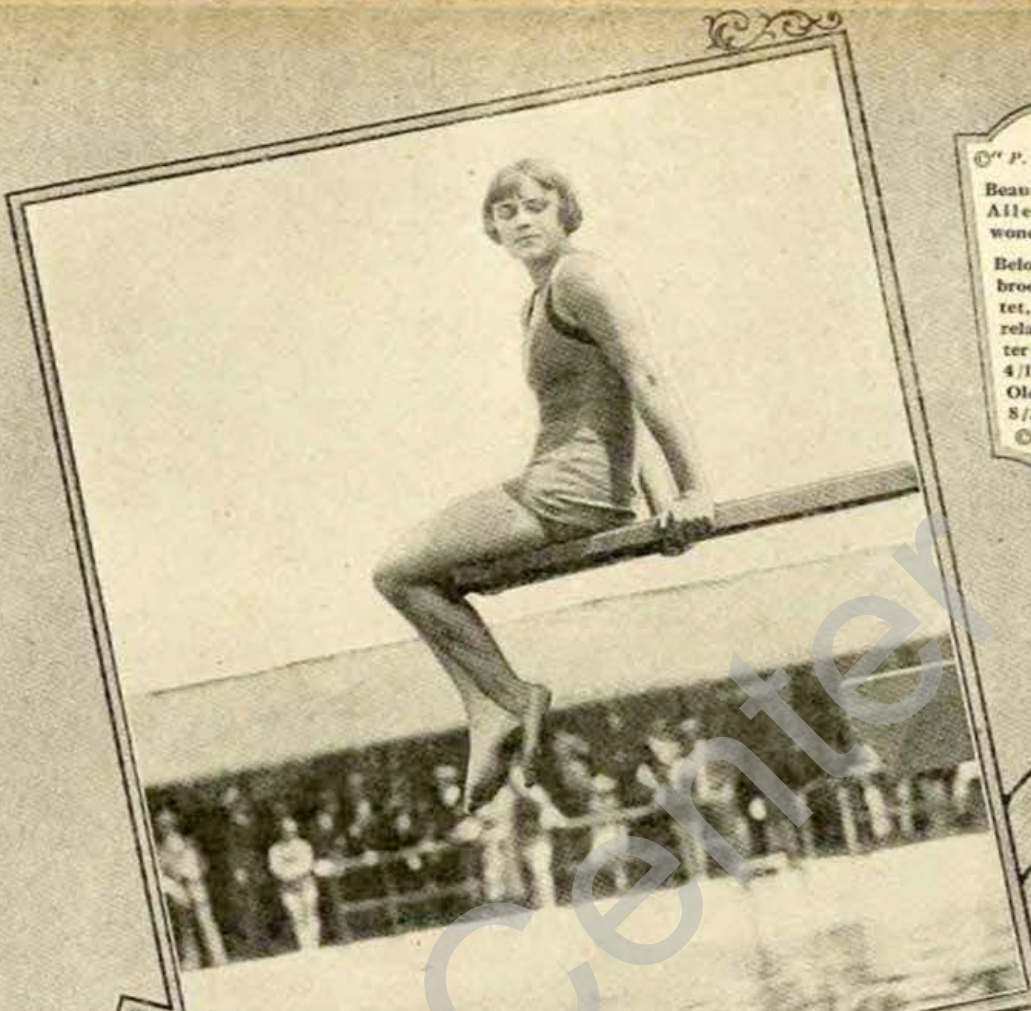
felt in the world of human beings, just as a man of over-towering strength will make his power felt in a football game or in any crowd. Some men are bound to do things because they just have the power of achievement, even though presumably handicapped by lack of school facilities. Of course, as a young man you cannot tell whether you have within you the power to be one of these extraordinary self-made men, or whether it will be highly desirable in your case to have some help in the matter of your "making."

So far as the question of our universities making snobs of our men is concerned, you can dismiss that at once with the mere recognition of certain abuses of social life which are not really a part of any college system but which may be found there as well as outside of college circles. A ribbon salesman may be a snob, but that doesn't mean that selling ribbons made him one. As a matter of fact our colleges offer some distinct social advantages in the way of good fellowship and the opportunity to meet the best young men in the country. If you should find a "fast" set in your college there is no more occasion for you to join or mix in than for you to associate with the frivolous or dissipated element that you are bound to meet in business life. The thing of real importance in this connection is that you will come in contact with the most ambitious of our young people and they are likely to be worth while.

It may be fortunate in one respect that only a limited percentage of our young people have the ambition to go to college. If every young man and every young woman wished to do so there would not and could not be universities enough. Even if we could get buildings enough for the purpose we could not secure enough good teachers.

While it is true that our colleges have their faults, it is also true that it is easier to find fault than to offer a constructive plan by way of a substitute. You might be able to find fault with the picture of the front cover of this magazine, for instance, but you would have an interesting time trying to produce a better one. After all, our colleges offer the best that we have in the way of educational opportunity. And, finally, so much depends upon the capacity of the student himself to get out of his school work

(Continued on page 83)

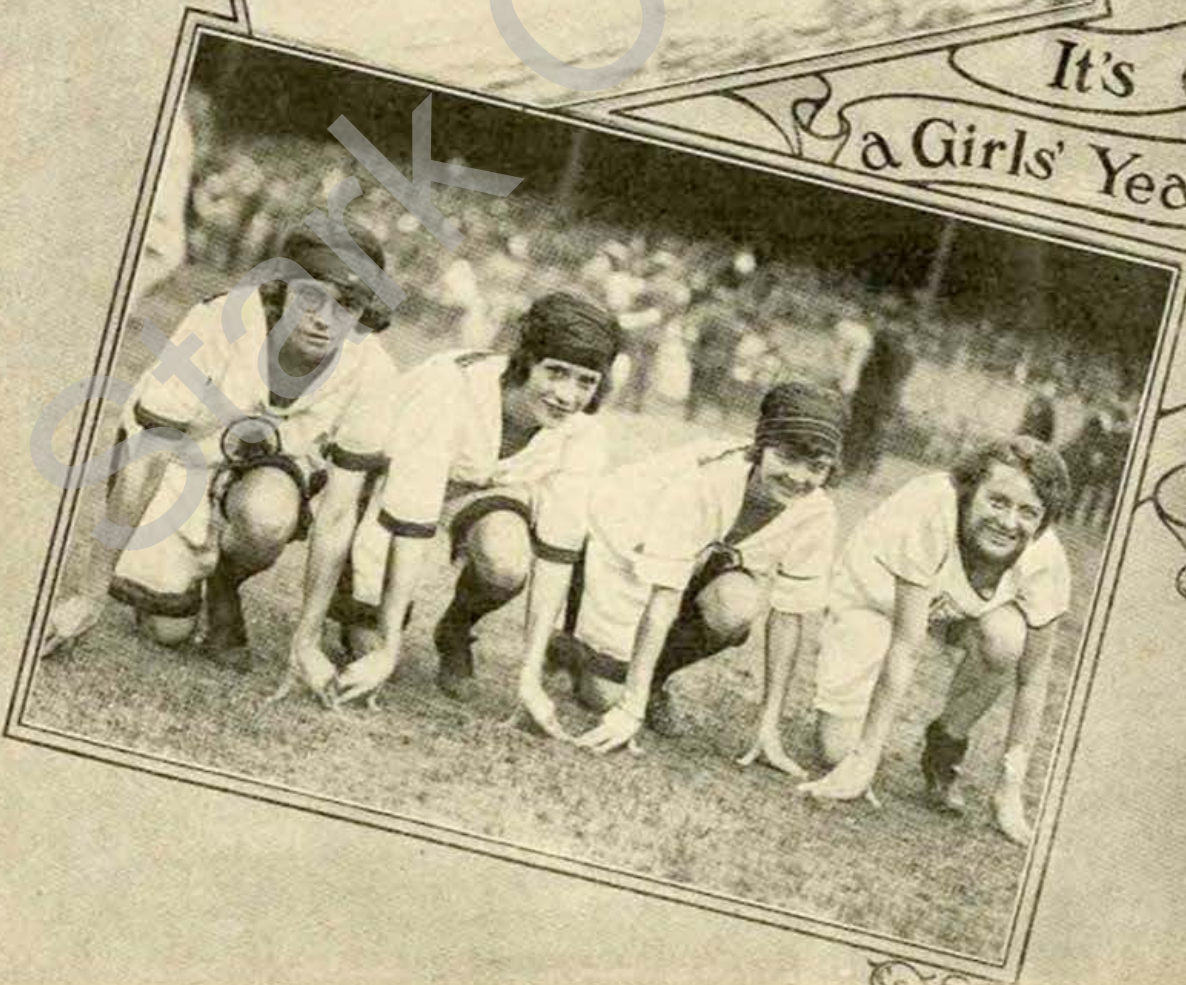


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Beauty and speed,
Alleen Riffin,
wonder swimmer

Below—Meadow-
brook A.C. quar-
tet, N.Y. They
relayed a quar-
ter mile in 52
4/10 seconds.
Old record 57
8/10 seconds.

© Keystone



It's
a Girls' Year

Underwood
& Underwood

Katherine Lee, Chicago, high jumped 4 feet, 10 $\frac{1}{2}$ inches. World's record.

Below—Babe M. Wolpert, winning 50 yd. dash 62.5 sec, Lewisohn Stadium, New York.

© F. & A. Photos



in
Athletics



Does "Backbone" Make a Champion?

An Eminent Osteopath Reports Upon the Flexibility and Perfect Articulation of the Spinal Columns of Messrs. Dempsey and Firpo, as Disclosed by Examination

By Ira Walton Drew, D.O., M.D.

WITHOUT wishing to be at all dramatic in a discussion of the recent sensational bout in which Jack Dempsey defended his world's heavyweight championship by knocking out the Argentine, Firpo, in less than four minutes, it can be pointed out that modern man in his highest physical development won.

In the last analysis, a summing up of all things, it was the present era of man against an era of the very dim past, back where the mists begin, the prehistoric.

From the past came Firpo. I do not mean that he is a prehistoric man mentally; but he certainly is nothing like as quick a thinker as Dempsey. However, I am going to refer to Firpo from both standpoints. And physically Firpo came out of the past. I had opportunity to examine him from a mental and physical standpoint prior to the fight, and he is a remarkable specimen.

Dempsey I hope to dismiss with a few words. There is little to say about his physical characteristics. He is superb. His muscles are magnificent, of course, highly developed but as supple as rubber. His nerves are splendid. I watched him at Saratoga Springs prior to the fight, and physically he is very close to being the ideal man. Mentally he is quick, alert. There is wonderful co-ordination in everything he does. That, I think, is the real success of his remarkable ability. Starting with a big boned, well muscled body, excellent health, ample exercise and a mentality that is almost childish in the way it refuses to accept things seriously, he has maintained health by a vigorous out-of-doors life.

He responds readily to suggestion. And that has made it possible for him to get the wonderful defense that he has built up in addition to his terrific offense. And right here the psycho-analysis of the champion can be discussed and perhaps dismissed without going into it too far, since Firpo affords by far the more interesting specimen for such a discussion.

It is my belief that a thorough investigation of the ancestry that has brought Dempsey into the world would show a family constantly facing forward in the march of modern civilization. That does not imply that scholars and students or great inventors have sprung from this root of Scotch-Irish blood with its cross of the American aborigine, but it does mean that they have been of the pioneer type that comes forward.

Let that suffice for Dempsey. He is a wonderful fighting man.

To revert to Firpo—he is a physical accident purely. He is not a modern man in the body. The vital point of the human body is the spine. To draw a parallel,

it is like a switchboard from which radiate a million wires controlling every function and activity of the body and mind. The free movement of each vertebra in the column permits the transmission of nerve impulses without interference so that co-ordination is complete and instantaneous. A spine that has even one segment which is only partially movable interferes with the area of the body which is controlled by the nerves coming from that particular segment. This produces in the case of a muscle a limited motion in that muscle. This, in the beginning, may not be noticeable but in time with continued abnormal nerve impulses produces a condition in the muscle which renders it unfit to do the work for which it was designed. Supposing Firpo developed a rigidity in one of the spinal segments which control the muscles which are responsible for his terrific right-hand blow. At first this would not be noticeable. But, neglected, those muscles would gradually lose their tone and the punching power would fade until it became as harmless to a trained opponent as the punch of a baby's fist on his mother's hand.

An examination of Firpo's spine showed me that every articulation was in perfect alignment and movable to a much greater degree than in the spine of any person I have ever examined. I might add here that I have examined thousands in my connection with research work during which I have come in close contact with a great number of prominent athletes.

A cat has nine lives. Firpo has the spine of a cat. It is truly a feline column and not that of a modern man. A spine, one that is so completely relaxed and so freely movable, is sometimes the result of disease. Not so in the case of this dark man from South America. Every muscle attached to the bones of his spinal column is perfect in form and alignment.

The tone of these muscles could not be improved. And that is why his punches are of such tremendous force, and if controlled by a perfectly functioning mind would make him supreme beyond doubt, a man before whom even a Dempsey would be helpless.

It may be that continual and incessant training from a physical and psychological standpoint will achieve the desired result, but there is a long, weary road ahead for both Firpo and his trainer to travel.

Beyond the essential region about the spine, he is also abnormal. His muscular construction is like that of a prehistoric man who lived in the era of the tree dwellers, forced to swing from tree to tree and defend himself by brute force.

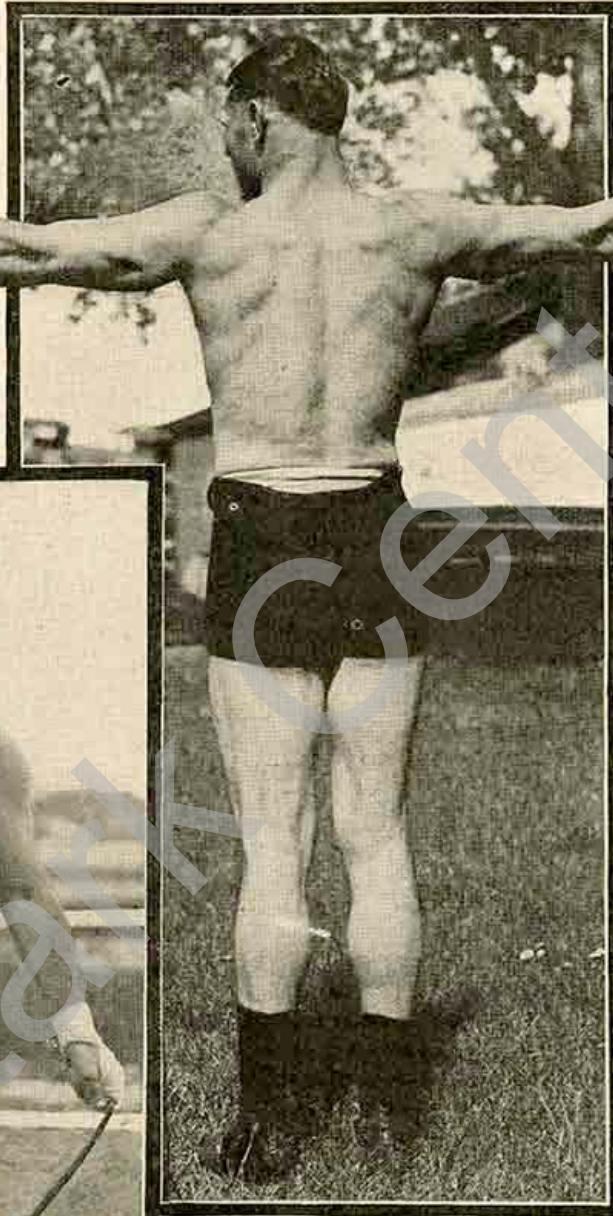
Despite his enormous bulk, he is exceptionally fast,

but that is the animal reaction that endows the great cats with their speed and agility. The muscles of the abdominal region are similar to a network of cordage yet this abdominal region is probably his most vulnerable spot, simply because his nervous system is exceptionally difficult to shock, more so than the organic regions.

It is my opinion that the punch that really enabled Dempsey to defeat him was a right-hand blow under the heart. Dempsey could and did punch him on the point of the jaw, terrific blows, yet the effect was evanescent, although these punches would have shattered the bone in the jaw of an ordinary human being.

A thoroughgoing psychological study of Firpo is difficult for many reasons. In many respects he has the mind of a child. My observation work with children has shown me that which many

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Here are two remarkable photographs showing the power that lies behind the terrific hitting force of both Jack Dempsey and Luis Firpo. Observe not only the perfect spine but also the magnificent back, shoulders and arms of Dempsey. Then, at the left, note the marvelous muscular formation of Firpo's upper chest muscles, and his prodigious shoulders. Here are the two most mighty fistic battlers in the world, for reasons which are more or less obvious as you see them here.

mothers have noted and very few understand. Stop and think for a moment how often you have noticed the thing you believed to be stubbornness in a child. It is merely that the child's mental processes are such that there is room for only one train of thought at a time.

That is why when Firpo is injured by a blow any thoughts of a campaign by which he has planned to fight are eradicated, forgotten; he knows only that he has been stung, as the sports writers call it, and he reverts to a mad passion to retaliate.

For that reason he will be difficult to train. Looking back over so much as we know of his family, it is evident that they lack the traditions that have made for progress in the world. In other words, he comes from elemental stock and he is elemental in almost everything. Another example of this was his eating during the period of his training for the Dempsey fight. He could go out and eat anything and everything — bananas, steaks, desserts, starchy foods such as spaghetti, anything — with no effect. Feed a man of the Dempsey type, the ordinary, highly developed athlete, these same foods and you would have an ex-champion instead of a champion.

Physically Firpo has all the attributes to win the championship and if the mental phase of his make-up can be coordinated with that remarkable body I do not see how even Dempsey can stand against him.

THE MAT

Analytical Comment on Physical Training and Feats of Strength

Conducted by Alan Calvert

EDITOR OF THE MAT,

Dear Sir:

I have been a subscriber to your magazine for the last two years, and I have often wondered why you publish so few articles about class-work and free-hand drills in gymnastic and health-giving exercises. Once or twice you have published an article about the Boy Scouts, but you rarely, if ever, mentioned the great work done in the Y. M. C. A., and college gymnasiums. From the tone of your articles and your editorial writings in the past, I have formed the opinion that you have little use for the class-work which has benefited so many thousands of our fellow citizens; and if you don't mind telling me, I would like to know the reason why.

R— E—

Ogden, Utah.

I think I have discussed this question more than once in the past, but I don't mind explaining my attitude again in case there are some others of you who share Mr. E's views.

I am and always have been a devout believer in *individual* training, both of the body and the mind. If I have a prejudice against class work for physical training, I have an equally strong prejudice against class work in mental training. In one of Jack London's books he describes a boy, who was intensely ambitious and anxious to learn, but had not the patience to attend class in school, because he had found that he never got individual attention, and that *his progress was held down to the level of the progress of the below-average scholar*. So he ran away from home, tramped the country for three years, and when he returned he hired tutors and in six months he covered the entire ground that his contemporaries had covered in four years of college work.

There is never any trouble in teaching an individual *who wants to learn*; but it is very rarely that you ever find a class in which *every* individual is ambitious to make progress. You have all had your own experience in school and college, and you know how many of your *classmates* actually tried to absorb everything your teacher could give you. Those of you who have attended gymnasium classes must have had the same experience. If forty men join a business men's class at the Y. M. C. A. it is a safe bet that not more than ten of them make any *sincere* attempt to do the exercises correctly, let alone trying to find out the purpose and effect of the exercises. In college "gyms" it is worse, for there attendance is compulsory and most of the students regard the exercise as unavoidable "galley-slave labor."

Did you ever watch a gymnasium instructor when he is leading a class in a free-hand drill and notice how pathetically enthusiastic he gets if three or four class members do the exercises accurately and enthusiastically. After the class is over, he will seek out the three or four enthusiasts, and give them special work and do anything in his power to help them, and if they are "stickers" he generally manages to convert them

into first-class physical specimens by the end of the term. The other thirty-six members of the class come back regularly and go through the exercises in a mechanical way, and at the end of the term they have gotten just about as much benefit as a parrot gets from learning a few "cuss" words.

Understand me, if I did not believe in exercise I would not be conducting this department or writing articles for the magazine, but I don't mind saying (just as any other teacher will tell you) that I would rather have two enthusiastic than two hundred indifferent students. Out of two enthusiasts I can make two stars, but out of two hundred of the indifferent I am lucky if I make one star. I have seen miracles performed through the medium of bodily exercise, but these miracles never happen in the case of the indifferent. I know that the ordinary way of getting a man to join a gymnasium class is to go up to a fellow and slap him on the back, and tell him he ought to go down to the "gym"—and how it will fill him with "pep"—and what a lot of nice fellows he will meet—and what a "bully" time he will have. I suppose that there is *some* benefit from going to a "gym" and going through the motions, getting up a sweat, and having a bath and a rub down; but I do not consider that that is any more reason for going to a gymnasium than getting your mental education at an institution because it has a successful football team.

This magazine has always been devoted to the benefit of the individual reader, and it has always published articles to help the individual. Goodness knows, there are enough public and private gymnasiums, and if class work is what you want, you will find that there is nothing easier than to join a "gym" class; but if you are one of those who wants to get *results* from his exercise, and who wants to change himself from a sickly, half-alive person into a model of symmetry and strength, don't join a "gym" except for the purpose of working individually.

If you were anxious to become a piano player, how would you like to join a class where you and eleven others sat down at twelve pianos, and all played the same music at the same time? In such a class, how would your teacher tell which one of you was actually playing correctly, and which of you were making all sorts of mistakes? You know perfectly that if you want to become a piano player you have to have the undivided attention of the teacher, and after the teacher is through with you, you would have to practice two or three hours a day. In a gymnasium class you exercise twelve or even forty at a time. You all do the same things, and even if you do them successively instead of simultaneously, you never get more than a few seconds of the teacher's attention. And have you ever heard of *one* man who went to a "free-hand class," and who ever spent any time *practicing at home* with the idea of perfecting himself in the exercises he had learned in the "gym"? (Continued on page 84)

Call the Undertaker!

WHAT'S the use of living when you're only half alive? You get up in the morning and you don't have the pep of a jelly fish. Your work is a burden and life has ceased to give you a thrill. You don't seem to get anywhere and nobody cares whether you do or not. What's the use, fellows? Call the Undertaker, for you're dead and you don't know it.

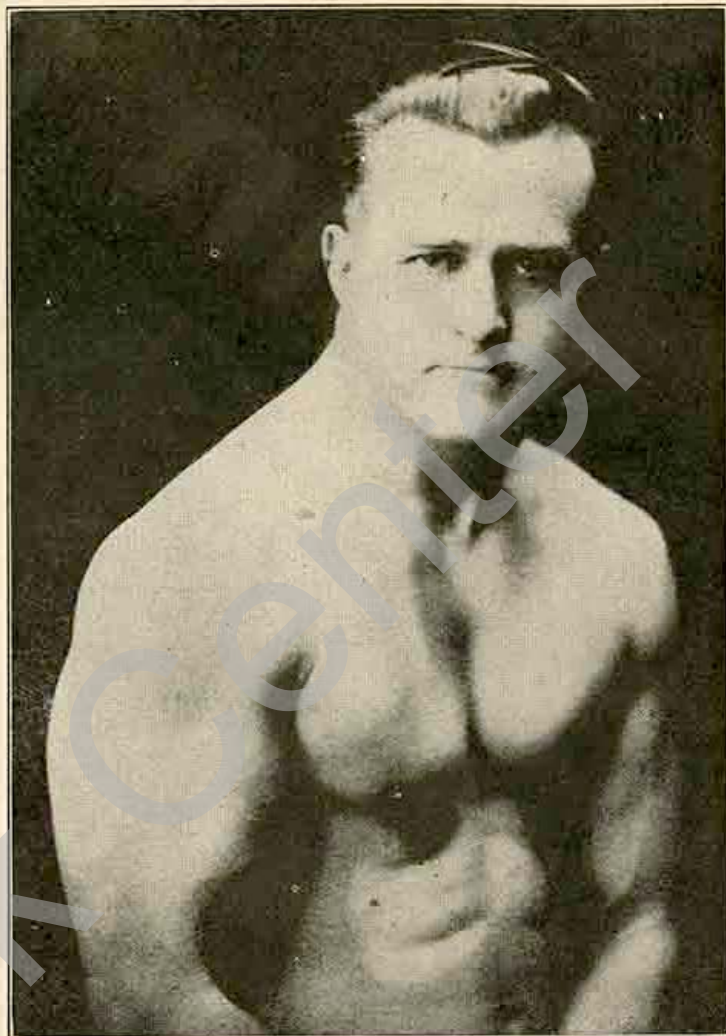
A New Life

Stop! It's all wrong. There is another life right here before you. A *new* and a *better* one. A life that is full of *thrills* and *sunshine*. Every day opens *new worlds to conquer, new joys, new friends and lasting ones*. Come with me and let me guide you to it.

I have a system that knocks those gloom bugs higher than a kite. I'll put pep in your old backbone that will make you feel like a jack rabbit. I'll put a spring to your step and a flash to your eye so that your own friends won't know you.

Health and Strength

That's what you need and that's what you get. Come on now, pull in your belt and throw out your chest. Take a good deep breath of that pure air that's all about you. Give your heart a treat with some rich blood. You will feel so good you will think it's your birthday. Drop me a line and I'll show you how to do it. I'm going to put a chest on you that will make your old ribs strain with the pressure. I'm going to change those skinny arms and legs of yours to a real man's size. You will have the strength and vitality to do things you never thought possible. Come on fellows! Get busy. I don't promise these things—I guarantee them. Are you with me?



Latest photograph of
EARLE E. LIEDERMAN

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“MUSCULAR DEVELOPMENT”

It contains forty-three full page photographs of myself and some of the many prize-winning pupils I have trained. Some of these came to me as pitiful weaklings, imploring me to help them. Look them over now and you will marvel at their present physiques. This book will prove an impetus and a real inspiration to you. It will thrill you through and through. All I ask is ten cents to cover the cost of wrapping and mailing and it is yours to keep. This will not obligate you at all, but for the sake of your future health and happiness do not put it off. Send today—right now, before you turn this page.

EARLE E. LIEDERMAN

Dept. 711, 305 Broadway, New York City

Dear Sir:—I enclose herewith 10 cents for which you are to send me, without any obligation on my part whatever, a copy of your latest book, “Muscular Development.” (Please write or print plainly.)

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YOU would be thrilled with their enthusiasm. Really, fellows, it's great to meet these chaps after they have once experienced the joys of health. They can hardly believe it themselves and never seem to tire talking about it.

In last month's issue of STRENGTH magazine I showed letters from various men who had tried the Liederman system of muscular development and are now shouting my praises. The men pictured herewith are pupils with similar experiences. If I attempted to print all the letters of praise I daily receive, I would need to publish a magazine of my own to contain them.

But what pleases me is the fact that my system *never fails*. Just imagine a record like that. Not one person who has actually followed my instructions has failed to acquire the strong body I promised him. That is why I guarantee results. I could easily back it up with any amount of money for it's a sure thing.

And these men are not only transformed into big robust specimens of manhood, but are made successes in their business careers as well. A strong, healthy body means an active,

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Lucky Ones



hear them talk

alert mind. No matter what your profession may be, I will help you. I will make you a better doctor, lawyer, merchant, mechanic or whatever line you have chosen for your business career.

Surely, I have proven to you by this time that I have something you need—something you must have, if life is to be worth while. With it you will possess what every red-blooded man prizes. Without it, your life will probably be a failure and you will end up in days of misery and despair.

Remember, I don't promise these things—I guarantee them. I take the chance. You have a positive guarantee of success. Come on and make me prove it. Join the lucky ones whose pictures you see in the horse shoe.

Opportunity is knocking at your door. Decide this minute to let him in. Sign the coupon. This does not obligate you, but it will bring you the story of how it is done, and show you what your first step should be into this bigger and broader life which you were meant to live.

EARLE E. LIEDERMAN

305 Broadway

DEPT. 711

New York City

EARLE E.
LIEDERMAN
Dept. 711
305 Broadway
New York City

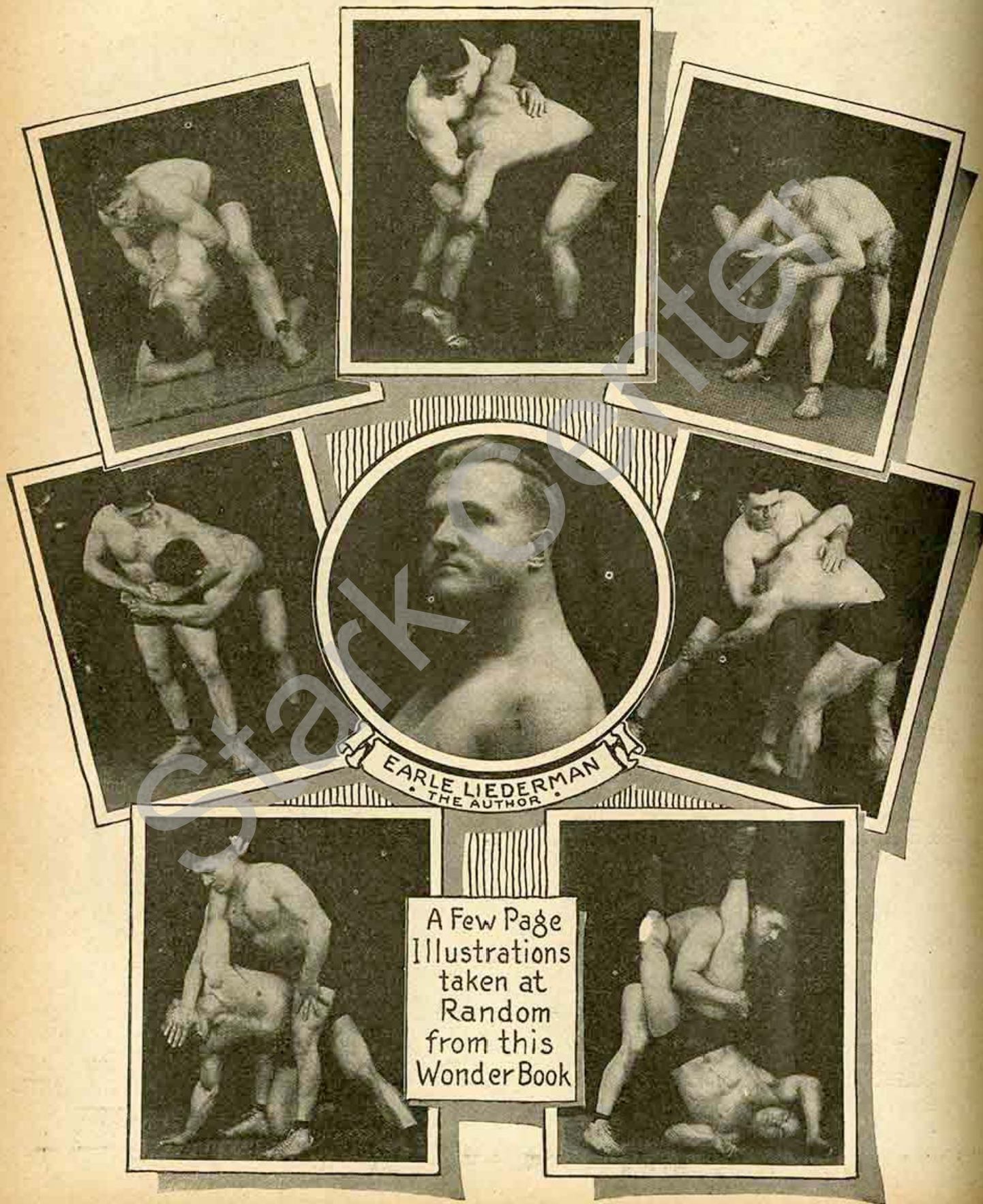
Dear Sir: I enclose herewith 10 cents for which you are to send me, without any obligation on my part whatever, a copy of your latest book, "Muscular Development."
(Please write or print plainly.)

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JUST OFF



EARLE LIEDERMAN
THE AUTHOR

A Few Page
Illustrations
taken at
Random
from this
Wonder Book

THE PRESS

The Science of Wrestling and The Art of Jiu Jitsu

THIS book is going to startle the athletic world. It is going to open your eyes. It will surprise you with its revelations. You will wonder at its contents. The most elaborate instructions in wrestling ever produced; highly illustrated from life together with a most detailed course in Jiu Jitsu—the most dangerous art of self-defense ever practiced by mankind. Each and every hold, if fully executed, means a broken bone or fatal results. This information is invaluable. With such knowledge in your possession you need never fear attack, whether your opponent be armed or unarmed. The Jiu Jitsu education is so complete and so simply described that this alone is worth far more than the price asked for the entire book.

The course in wrestling is complete to the minutest detail. It is also a startling revelation. I am exposing secrets heretofore known only by professionals. No doubt you have frequently wondered how a professional wrestler has thrown a man twice his size, or how some of our former lightweight champions have succeeded in throwing practically any man, no matter what his size or weight might be. There are numerous tricks and holds known only to the American professional wrestlers, and which they have held as their prize possessions. These trick holds are simple enough if you could only learn them, but few know them and the professionals do not care to disclose them to the public.

The Secret Told

I have been severely criticized by numerous wrestlers for revealing these secrets, but I ignore unjust criticism. I am determined to present the facts as I know them.

Possibly you have already had considerable experience in the science of wrestling; even so, I doubt very much if you have been intimate enough with the men higher up to learn these secret tricks of the game. Suppose this very night some thug should attack you? Suppose a man many pounds heavier than you and well armed should attempt to hold you up, what would you not give to know how to immediately place him at your mercy? You will find just such information as this in "The Science of Wrestling."

To My Pupils

Do not confuse or compare this volume with any other wrestling book or wrestling course now on the market, for it makes all previous works on wrestling look amateurish. It is a classic and I am most proud to be its author. The regular price of this book is \$5, but as a special introductory offer I am putting it before my pupils and prospective pupils at the special price of \$3. If you will send for your copy now and use the coupon below, you will save \$2. Remember, the edition is limited; first come, first served. Should the

demand for this book exceed the output, it will simply mean a delay until another edition is printed; so use the coupon below, save \$2—and get your book immediately. I prepay all packing and mailing expenses.

This book is not for sale at book stores or newsstands. It cannot be bought anywhere in the world except from me, for it is a private edition.

Positively no more than one to each person. The edition is limited, and I want as many pupils as possible to get a copy of this book. Do not send more than \$3, as I will be obliged to return any excess amount.

This book will prove a revelation to you. You will marvel at it. It contains nearly two hundred full-page photographs, the size of each page being 6 x 9 inches. It is handsomely bound in leatheroid cover, embossed in blue and gold, and is worthy of a prominent place in anyone's library collection.

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Address

How PRESIDENT COOLIDGE Keeps Fit

(Continued from page 18)

thrifty and abstemious son of Vermont he chose a thin sliver from the apple pie and could not be induced to experiment further. On being pressed by his hostess he explained: "I seldom eat pie, and then only on Thanksgiving."

He seemed to consume his tiny piece of apple pie as sort of a religious rite, a memorial of the day when Thanksgiving really meant what its name signifies.

All those who know Coolidge, and they are not many, when pressed to tell what peculiarities he has to distinguish him from his fellows are at a loss to respond until suddenly they seem to reflect. "Oh! Yes, he eats very little." The writer found this to be true on three separate occasions. The President is not a faddist in eating; not a vegetarian, or a pro or anti anything, except excess. One of his entourage told the writer that he believed that Coolidge never left the table with his appetite satisfied, and yet he himself had never said this was true.

As for his abstinence from horseback riding, golf, gymnasium training, yachting, motoring, or any other of the physical recreations which sometimes occupy the attention of public men, there is an excellent reason to be found in the fact that he could never afford any exercise that cost money. Outside of his various salaries as a public official he has never in his life earned above \$2,000 a year. And his salaries, until he became President, have always been meager when one considers the obligations attendant on the positions he has occupied.

In considering a man's physical condition it is fully as important to know what mental relaxations he has as it is to know what exercise he employs. Coolidge seldom goes to the theatre, and then apparently does not enjoy the play. He cares very little, if anything, for music. Art, in the form of exhibited pictures, has no appeal for him. His library is limited and he is not known as a reading man. He is devoted to his family, and his domestic life absorbs all the energies not devoted to his public work.

This, then, brings us, by a process of elimination, to a fair knowledge of what force the man has who now occupies the Presidency and what powers he can bring to bear to meet its Titan-like tasks, the tasks which are repeatedly said to be more than any man can shoulder.

We see Coolidge as a man of most abstemious habit, chary of speech as of all forms of self-indulgence, chary even of expending any energy in any form of exercise; reserved, poised, wiry, sure of himself, lean as a greyhound; and having reduced his mental processes by long years in public executive positions to as nearly as possible a machine-like precision.

He has, the writer is told by those close to him, that very rare faculty of

being able to sleep at any time and at any place, on a moment's notice. He was known often in the Executive chamber in Boston to lie down on a couch, while waiting for a bill to be prepared for his attention, and seize a twenty-minute nap, so that he could wake refreshed for its consideration. He revealed the same capacity in the



Drawn by Edith M. Bates-Williams

Vice-Presidency. On trains, in speaking tours, he could sleep soundly at odd hours and in cramped quarters. He has seemed always competent to so measure his strength that he always has some to spare.

The assassin who kills presidents is the same as the one who often assails most of us—Worry. But the President has many times as much to worry about as the average man. If he has any instinct of taking his troubles to bed with him he is as good as gone. It is

highly necessary that he have the faculty of decision cultivated to a high degree, and that when once he has decided any matter he shall be able to pass it out of his mind completely. Any other tendency is the beginning of a lethal obsession.

By all the evidences through which we may judge, Coolidge has the faculty of decision and of not worrying to a higher degree than any man of recent years in the White House. Harding, for instance, seldom finished at night the business on his desk; there was almost always something left over for the next day. This may have been the result of a mental habit unwilling to decide questions without giving another rehearsal to them, but it unquestionably resulted in magnifying a burden already monumental.

Coolidge, on the other hand, so the writer is told, has not left a single paper on his desk without a decision any night since he has been in the White House, and three times since he became Chief Executive he has come into the outer offices to ask his secretaries to find more work for him.

This is doubtless a part of his instinct for the conservation of energy. In conferences he does not encourage aimless talking. He wants the whole case put quickly and at once. He has no patience with postscripts or comebacks. He may and probably will make mistakes, but when he makes them that is an end of the matter. He forgets about it and does not worry, but passes on to the next thing.

One trifling fact about him which the writer observed in a recent contact seems illuminating. Coolidge smokes cigars, although none of his published pictures show this. In fact, one might well conclude from reading about him and seeing his photographs that he does not smoke. On the contrary, he has a cigar either in his hand, mouth or by him practically from morning to night.

The writer took some pains to find out how much he does actually smoke. It appears to be about three or four cigars a day. This is significant when we taken into account that he has a real attachment for tobacco and keeps it constantly at hand. It means that he is holding himself in constant check, that he does not puff steadily, and yet that he is not a "dry" smoker, denying himself the consuming while he enjoys the suggestive comfort of the weed.

This smoking habit, practically his only self-indulgence, reveals the character of the man as well as anything—the rigidity with which he holds a tendency in hand; the moderate and measured intelligence with which he controls himself.

That, with his abstemiousness, and his ability to "cut off the switch of the dynamo at will" are the secrets of how the President keeps fit.

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Confidentially, it is the ambition of the publisher and editor to make this magazine the greatest and most valuable in the world. You have already seen it grow. You have looked over this beautiful number in its enlarged size. You have read its charmingly written contributions, you have felt its invigorating tone, imparted by the very best authorities in the world. And so you may know what to expect next month and in future. STRENGTH will keep on growing. You will want to watch it. You must not miss a single number.

Writers of Great Personality, Power and Wisdom

There are certain writers who just naturally belong in the scheme of this book, and they will continue to co-operate with us in the great work this magazine aims to accomplish. *Alfred W. McCann*, thundering the truth about food, *Albert Edward Wiggam*, dedicating his mighty pen to the building of a better human race, *Alan Calvert*, who stands alone in his genius for writing the most interesting and helpful lessons on physical training and development, will continue to speak to you through the pages of this magazine. We are going to have a great serial story by Wilbur Hall, full of action and with a big underlying idea, "Life Feels Like a Fight." We hope you will find the December number an improvement over this one. See if you think so.

STRENGTH is a magazine with a kick. It will not only teach you but it will fill you full of enthusiasm each month. You need that monthly stimulant. There are two ways to make sure that you will get this magazine regularly. First, leave a standing order with your newsdealer. Second, subscribe, let the magazine reach you automatically every month and save any bother of buying it for a year. You save money by subscribing. And here's another reason.

SPECIAL THIRTY DAY OFFER

You have been wanting that set of beautiful pictures of "MUSCULAR MARVELS" so here's how to get it. Send in \$2.50 for your subscription for the new enlarged STRENGTH for one year—before December 1st—and we will send the "Muscular Marvels" free, as a premium. This is an opportunity. Act now.



These 25 Pictures of Muscular Marvels are regularly \$1.00

At the request of many of our old readers we are republishing a very famous set of 25 pictures of "Strong men," lifters, artists, models, etc.

These are not photographs, but very fine reproductions on heavy glazed paper. The pictures are 5 x 7 inches in size and are suitable for framing.

Among the athletes whose pictures appear in this set are Matysek, The Nordquests, Massimo, Snyder and others equally celebrated.

These pictures are just the thing for decorating your den or private "gym." They will draw admiring comment from all your athletic friends.

The set of 25 pictures if ordered alone is sent postpaid for \$1.00

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THE STRENGTH MAGAZINE

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What Makes a Family or a Nation Strong?

(Continued from page 27)

mental, moral and physical qualities of the ancestors for three or four generations back. Any records beyond that are not of much use, as by that time almost any virtue or defect has pretty well run out and lost its influence. These records should be a source of true family pride, because a man's heredity, his "blood," is really about the only thing he has to be proud of in this world.

Certainly no more instructive lesson in heredity was ever given the world than is furnished by the two preceding lists of names which I have prepared from the good and the bad period of the Spanish Royal Family. Had their names been John Smith or Mary Jones the effect of heredity would have been the same. Following Charles V the Bourbons came upon the throne of Spain. Let us contrast in these two lists of names the heredity of the Bourbons with that of the great sovereigns we have been studying, who belonged to the Castile-Leon-Aragon and Hapsburg families.

The list of Spain's noble kings is given at the right and the dull and stupid ones at the left. Both lists could be extended to more than a hundred names. I have merely chosen these names at random as samples of the heredity of the two families.

The list at the right are all actual sovereigns. Those at the left are either sovereigns or their brothers and sisters. I have attached to each person a few of the *adjectives* which Dr. Woods has collected from many historians as describing the rough outlines of their respective characters.

No one can read this list of adjectives without being profoundly impressed with the importance of heredity. The prime point is that the *environment of the people in both lists was practically the same*. The only difference was their heredity. On the side of environment they were all rich. They all had immense opportunities to distinguish themselves if they had any abilities. They all had the best education of the times, provided they had sense enough to profit by an education. The times were stirring. There was a call for every ounce of genius which any of them possessed. But these two lists of names illustrate powerfully what President Stanley Hall has said: "An ounce of heredity is worth a hundred pounds of education."

In order that the reader may survey some of the actual marriages of the degenerate days I have also given herewith the chart of part of the family pedigree of the Bourbons. It is not necessary to trace out every marriage. A mere inspection of the adjectives attached to each name gives an ample idea of his or her ability and character. One would think that they were breed-

ing deliberately for degenerates. The pedigree chart reads like the records of some asylum for the feeble-minded and insane combined. Out of several hundred members this Bourbon family has not produced a single great genius. We can not by any stretch of imagination lay this to environment because during this whole period of several centuries the other Royal Families in Prussia, Sweden, Denmark, Brunswick, and even in Russia were shining with genius like a galaxy of stars. Only twice did genius ever enter the Bourbon blood. One of these two outside strains was brought in by Maria Theresa, the famous Austrian Hapsburg queen who is described as "an able, brave and noble woman." She got her high abilities from the Brunswick-Palatine family in Germany which at that time was luminous with genius. She was also the grandmother of the second person who brought good blood into the Bourbons, the great Archduke Charles, the celebrated general who led southern Europe against Napoleon.

We might note that this Archduke Charles is one of the great-grandfathers of King Alfonso, the present sovereign of Spain. King Alfonso is not a bad sort, a man of many gallant qualities, and his marriage to Princess Victoria of England was a very good one. Some of the children are said to be suffering from disabilities, but a few more wise marriages could easily weed these out. My own belief is that these Royal Families will soon take advantage of the wonderful new knowledge of heredity, to do which is also the duty of every family everywhere. If they do I predict that many very able descendants will yet arise and under the dominance of new ideals and the influence of democracy these regenerated descendants will in some way or other prove of great service to their respective countries.

Surely no one can read this vast marriage drama, this story of a thousand years of heredity, without reflecting deeply upon the fortunes of his own family as well as the fortunes of his country. Had sovereigns such as Alfonso the Great, or Sancho the Great or Ferdinand and Isabella been upon the throne of Spain for the past three centuries, it is a practical certainty that either the Spanish-American War would never have occurred or if it had we should not now be in possession of the Philippines. It is altogether probable that wise and humane policies would have been the characteristic of Spanish rule throughout the world. What effect such kings and queens would have had upon the development of France, England and Germany one can only guess. But beyond question the influence of a truly great Spain under truly great leadership would have been profound.

But no one has profited by the recital of this mighty drama of blood unless it leads him to turn his mind from these far-away famous or infamous persons, who have moved upon a world stage, to thoughts of his own family. If he will with these two family histories before him look back into his own ancestry and look forward into the future course of his children and grandchildren he must surely see them with a new enlightenment. He will surely see that the fortunes of his own family have ebbed and flowed as the heredity, the quality of blood itself, has ebbed and flowed in the veins of his forbears.

Or let any man look at his neighbors with this idea in view. Here, for instance, is a man—I am relating an actual instance—who marries one woman and his children all turn out well. He later marries a second wife and the children are worthless ne'er do wells. They both had the same home. Indeed the second brood of children had the benefit of the good influence and example of the first brood. But they had different heredity. One group became leaders and the other group became village loafers.

The important thing to note is that wealth, luxury and intermarriages do not in themselves degenerate a family but that marriage into bad stock will do it and do it *instantly*. *Science knows of nothing else that will ruin good family blood, except mixing it with bad*. What about the marriages of your own children?

The final question then is the problem of national leadership. Fortunately we have no ruling family in America. We can draw from all the good blood of the nation. If a worthless baby is born in the White House the fortunes of the nation are not at stake, as has been true in monarchies. But if the leading families everywhere cease producing their share of the nation's children there is but one way ahead—the tragic way of Spain, her armies defeated and her ships at the bottom of the ocean. I have not sufficient space here to present tables of birth-rates among our better stocks in America as compared with those from our less successful strains of blood. But again the most impressive thing is to look about your own home town. Some of the really best families are still doing their duty, rearing goodly broods of children and sending them out to bless the nation. But many are not. For instance, our college graduates are in every town from the very soundest stocks, the good business men, lawyers, doctors, and skilled mechanics. College graduates furnish nine out of every ten of all our American leaders. But they are a dying race. They are not reproducing their kind.

You Wouldn't Wear Glasses If You Knew What I Know



Condemned to wear glasses for the rest of my natural life.

When I joined the company three years ago I was a confirmed eye-invalid. I had what the oculists called Astigmatism and had worn glasses from the time I was fourteen years old. Glasses were as much a part of my wearing apparel as my shoes, or my shirt. I put them on when I got up in the morning and never took them off until I went to bed at night.

Without them I was as helpless as a blind man.¹

The thought that I would ever be able to see perfectly again without glasses never entered my mind, not even in my dreams, for hadn't the leading oculists and optometrists advised me to the contrary, and didn't I have to go to them at stated intervals and have the lenses in my glasses changed to allow for the continual fluctuation in my range of vision?

Shortly after joining the Macfadden Company I learned that they published a course in eye training compiled by Bernarr Macfadden, the famous physical culturist, in collaboration with one of the world's leading eye specialists. But that didn't mean anything to me, for wasn't I a confirmed eye-invalid, condemned to wear glasses for the rest of my natural life? One day when I had been with the company about six months I happened to be in Mr. Macfadden's office on a matter of business. I was about to leave when he startled me by saying, "Jackson, why don't you take up the eye course and get rid of those glasses?" He might just as well have asked me, "Why don't you learn to live without food?" I wouldn't have considered the question any more ridiculous.

But he talked to me. He told me how he was in the same boat as myself when he was about forty, and how he had cured his eye troubles by just some simple eye exercises which he invented, and that how since he has published the exercises in course form with the aid of the eye specialist referred to, eye sufferers from all parts of the world had written him letters of gratitude for what the course had done for them—some of them much worse off than I was.

Well, to make a long story short, he finally persuaded me to try the exercises. I took the course home that night and read it through. And the next morning I began the exercises. That was more than two years and a half ago.¹

I haven't worn a pair of glasses for over a year—not even to read by. As I told you, I am in the correspondence department

EVERY time I see a man or a woman wearing glasses I always think: "If you only knew what I know, you would have those things off within three months' time, never to put them on again." I feel just like stopping them and telling them what I know about certain eye exercises that would, in an amazingly short time, put their eyes in such a condition they could forget that such a thing as eye glasses ever existed.

But you know how skeptical people are as a rule and I know I wouldn't be believed, or thanked for my trouble. But, there is nothing to prevent my telling the readers of STRENGTH my story. They can believe it or not, just as they see fit.

But those who believe it enough to interest themselves to the extent of further investigation I know will thank me all the rest of their lives, and that is reward enough for the effort.

So here goes:—

My name is Jackson, Laurence B. Jackson. I am employed by the Macfadden Publications, Inc., publishers of magazines and books. I am in the correspondence department.

ment where I read poorly written letters for eight hours of the day and the strain on my eyes is tremendous. But my sight is perfect and my eyes trouble me not at all.

Wonderful? Yes! Are you surprised that I would like to tell my story to every person I meet? And it's not just my story. It's the story of nine people out of every ten who take up the Macfadden System of Eye Exercises and stick to it.

It can be your story if you're one who wears glasses or one who soon will have to.

In order to make it possible for any eye-invalid to examine his course without risking a penny, Mr. Macfadden sends it out on a five-day approval basis.

The price has purposely been made very low so as to be within the reach of any person—\$5.00 complete, postpaid.

There is a coupon on the right hand corner of this page for your convenience in sending for the course if you feel you would like to try it after reading about my experience.

Last October, at the special request of Mr. Macfadden, I attended the great Physical Culture Show at Madison Square Garden so that those present could see, not an extraordinary but a typical example of what his wonderful eye course will do for eye-invalids.

I talked with hundreds of persons and if you were there, it is possible that you have already met me and heard my story from my own lips.

I can't add anything to what I've said above. I've told you my story. It's in your hands, whether you will profit from it or not.



I have not worn glasses for over a year—my eyes have never been so strong nor my vision so good.

Send No
Money
Now

MACFADDEN PUBLICATIONS, INC.,

Dept. S11, Macfadden Bldg., 1926 Broadway, N. Y. C.

Entirely at your risk you may send me your course of Eye Exercises. Upon receipt I will pay the postman \$5.00.

It is understood if after trying the course for five days I decide not to keep it you will immediately refund my \$5.00 upon return of the course.

Name.....

Street.....

City..... State.....

Macfadden Publications, Inc.

Macfadden Building

1926 Broadway, New York

Luther Burbank—A Story of Achievement

(Continued from page 43)

day laborer, maintaining a scanty existence under great hardships. It is related that in that first year in Santa Rosa, he was too poor to rent a room, and slept in a hot, steaming greenhouse until he fell ill with fever, from which he was mercifully rescued by a kindly neighbor woman who tended him. He worked from ten to fourteen hours a day, and finally reached the place where he could rent two and one-half acres of ground and start work on his own account.

He got his first real boost in Santa Rosa by filling an order for an impatient fruit grower who wanted twenty thousand young prune trees delivered ready for planting in ten months. All the other nurserymen said it could not be done, and refused to undertake it. Burbank started out to produce them by planting almond trees, the only kind that would yield a quick growth at that season; then when these had attained the right size, he sawed them off to the main stem, and budded them with prunes. In less time than the allotted ten months, he had the twenty thousand prune trees ready for delivery.

The idea set forth in Darwin's "Origin of Species," is the basis of Burbank's work—variation, selection, segregation, and behind all this the law of heredity, that "like produces like"—are the elements in animal life which Burbank has applied to plant life, and in this sense he became "a creator of species." When being examined as a witness in a court trial in Santa Rosa once, he was asked to give his occupation, and he answered quite simply and sincerely—"an originator of species." Dr. Jordan testifies: "He is the most skillful experimenter in the field of formation of new plant species by the process of crossing and selection"; and another biographer says of him, "he is the greatest plant breeder in America, and probably in the world."

Mr. Burbank has a natural eye for color, and through conscious and deliberate training, it can detect the minutest detail with startling clearness. He has produced millions of plants which he destroyed, keeping only the

seeds of the best ones. He told me he had created 240,000 varieties of plums, 200,000 kinds of cherries, and 10,000 kinds of peaches, from which last he had selected 200 best varieties, and so on through the whole category of fruits, vegetables, and flowers, sometimes producing and destroying 100,000 varieties in order to obtain one satisfactory one. One of his most interesting experiments has been with the cactus, which he has not only developed into a delicious fruit—the "prickly pear"—but has robbed the outer rind of its thorny prickles, to produce the "spineless cactus" which is of great value as food for stock in dry places.

A walk through the Burbank gardens will reveal constant surprises, such as "rain-bow corn"—evolved from wire-grass, snow-white cucumbers and mammoth tomatoes; giant rhubarb, sunflowers, and poppies beyond compare, gorgeous pansy beds, and rows of flaming amaranthus, which Mr. Burbank counts as his proudest achievement in flower production, since he says he grew it from "pig weed," and because of its marvelous shading of rich colors he has christened it "molten fire."

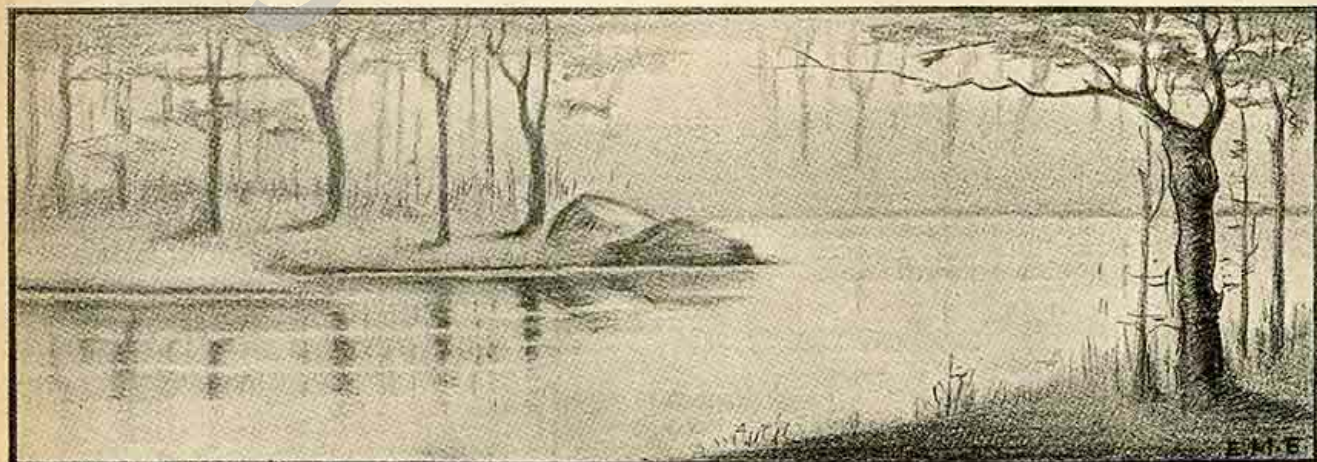
When asked his favorite flower, Mr. Burbank smiled resignedly as he answered: "Everybody asks me that, and I always say if I were limited to one, I should surely choose the rose, of which I have grown a hundred thousand varieties; and next, I think I would take carnations; but for sheer intoxication from beauty of tint and color, my wonderful "molten fire" surpasses them all."

When questioned as to what he had learned about the chemical properties of plant foods, Mr. Burbank said the cactus ("prickly pear") was richer in calcium, sodium, iron, and magnesium, than any other fruit, and he regarded the sugar-beet as supplying these elements in greatest abundance among vegetables. Mr. Burbank's views about diet, however, tended to stress quantity, rather than quality; and he attributed his own good health to his uniformly

light and simple menus, which he described to me as follows: For breakfast, two or three thin, crisp slices of bacon, a piece of hard tack, and milk; luncheon, sweet corn and tomatoes; and for supper, one soft egg with milk. Between breakfast—which is served always before seven—and luncheon, Mr. Burbank eats fruit, usually oranges. He rarely eats bread, and never potatoes, although he is very proud of the fact that California alone raises eight million bushels yearly of his favorite brand; and that enough of them have been raised in the past fifty years to pave a road two feet wide to encircle the moon and the earth in a continuous loop!

Mr. Burbank is highly esteemed in his adopted State of California, and one sees his picture hanging in hotels and other public buildings in Santa Rosa. He is especially fond of children, although he has never had any of his own, and he entertains them frequently in his gardens. He takes simple and honest pleasure in his pre-eminence, and likes to talk about the many distinguished visitors to his gardens in Santa Rosa and Sebastopol, among whom he mentions the King of the Belgians when on his incognito trip to America in 1906.

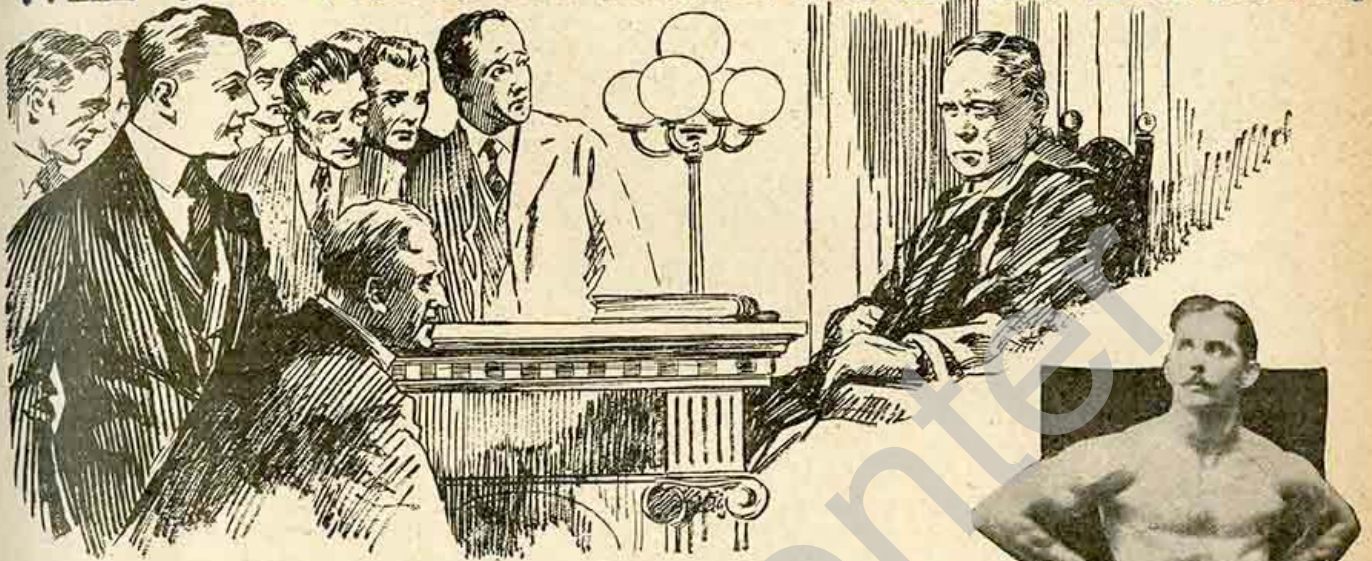
From his work in the plant world, he has evolved and formulated a very distinctive and optimistic human philosophy. "Most of us," he says, "surround ourselves with self-created limitations. Because a thing has not been done before, because nobody around us is doing it, we assume it is impossible. In every plant, and in every human being, there are forces and powers of a range so wide, a potentiality so great, that few people realize their extent. One can take a plant strain, and by breaking up its inherent habits, guide it into a new and higher development. Even the despised weeds have this inherent potentiality. They are weeds merely because at some time in their history they were starved, crowded, neglected, and had to adapt themselves to their surroundings in order to survive. So with human plants."



Drawn by Edith M. Bates-Williams

You Are On Trial!

Will the Verdict be Death or Torture?



EVERY day every one of us is on trial for some violation, no matter how slight, of the laws of Nature. The courtroom is always crowded, but cases are handled rapidly, for someone is sentenced every second. To most people Nature is a severe and inexorable Judge who accepts no excuses. Notice the culprits as they pass before this unrelenting Magistrate—thin, weak, pale, anemic, unfit-looking people, most of them. The punishments handed out to these offenders are sometimes pretty severe considering the trivial offense.

To one the sentence is "One week in bed!" to another, "Three months in the hospital!" to another, "Two years on toast and hot milk!" to another, "Ten years of torture!" to another, "A crippled leg for life!" Now and then as some poor wretch comes up for judgment, the Magistrate draws on his black cap and solemnly pronounces the sentence, "DEATH!"

But occasionally a different sort of offender steps up to the rail—a lithe, ruddy, clear-eyed chap whose smooth skin is plumply filled with sound, hard flesh which ripples under it in mus-

cular cords and knots. He has perhaps committed some error in diet or hygiene, but it is evident that the Judge is disposed to be lenient with him. He merely shakes his finger at him, trying to hide a smile as he does so, and says, "You've been a pretty healthy citizen in the past, so I'll let you off easy this time. Discharged!" and his eye follows the powerful figure with approval as he strides out of the court-room.

Whispers have gone about through the crowd—"Who is he?" "Aw, some fellow with a pull! Wish I could get into favor like that."

You CAN do it, my friend!

You Can Actually Have A "Pull" With Nature

All you need to do is to develop a strong, healthy well-balanced body. Nature favors the man with a sound and powerful physique. Things that would send other people to the hospital glide off him unnoticed. He is proof against many diseases, exposures and accidents that would put other people in the hospital and perhaps kill them.

What about you? Are you one of those who are always suffering from some little illness, such as indigestion, colds, headaches, lack of energy, etc.? Are you held back by this weakness so that you are failing to realize your ambitions? What is the use of throwing away life's pleasure and profits when you can make

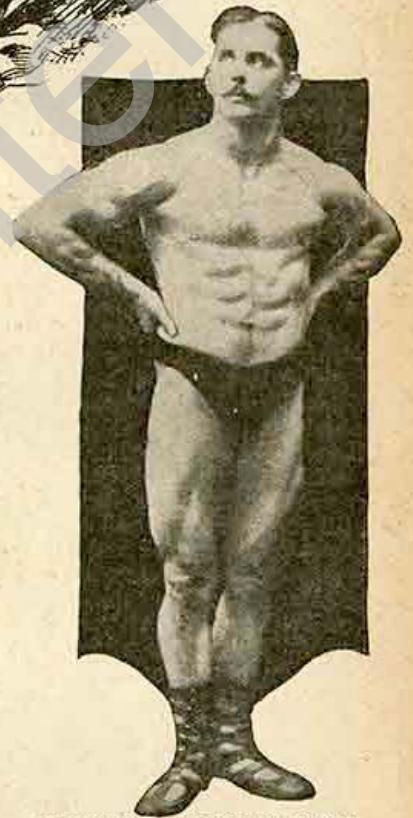
yourself MASTER of your Destiny and of all that you desire to achieve?

I have put thousands of Men and Women on the road to Efficiency, Happiness and Power. I have immense files packed full of their grateful and enthusiastic testimonials. I have developed some of the World's greatest strong men—I have testimonials from them, too, and you can read them in my book described below. I can make an Athlete out of YOU, if you will follow my advice. As evidence of my ability, let me tell you that I can add an INCH to the MEASUREMENT of your ARM in 30 days. Now will you take me up on this and challenge me to make good?

GET MY 57-PAGE BOOK "Building Better Bodies"

The clearest, soundest and most interesting treatise on Health and Strength ever written. It contains many photographs of famous athletes and strong men who have been MADE by my System. My own weight-lifting records are mentioned, as well as others who have trained by my System. These ought to inspire you. I give you this Book absolutely FREE. All I ask is that you send me 10c to help pay postage, wrapping, etc., and it will come to you by return mail. There will be no obligation on your part. Don't delay; you may forget it or misplace this advertisement and thereby miss a Life's opportunity. Fill out the coupon TODAY.

Prof. Henry W. Titus
107 E. 13th St. New York City



PROFESSOR HENRY W. TITUS
as he is today

Pronounced by the Medical Faculty as the strongest and most symmetrically developed athlete of his weight in America.

CAN YOU DO THIS?

Did you ever before see a strong man's picture posed in this easy attitude? NOT ONE! They all find it necessary to pose in some strained, artificial position, using great exertion to make their muscles swell and stand out prominently. Not one of them, when standing in this easy, relaxed attitude, can show the abdominal muscles as mine do and the great trapezius muscle back of the neck. CASH PRIZES will be given to pupils of mine who succeed in imitating most closely my muscular appearance when standing in this position. Now is the time to get busy and try for this distinction.

PROF. HENRY W. TITUS
Dept. 527, 107 East 13th Street, New York City

Dear Sir:—I enclose 10 cents, for which please send me at once your book, "Building Better Bodies." It is understood that there is no obligation on my part whatsoever.

Name.....

Street No.....

City..... State.....

Are American Athletes Stronger than British?

(Continued from page 62)

in that class and be a star, than to increase the size of his bodily frame and improve his muscular development to such an extent that he would grow into a powerful eleven-stone or twelve-stone man.

WHY AMERICA PRODUCES SO MANY GOOD HEAVY-WEIGHTS

I long ago demonstrated, to my own satisfaction at least, that *too quick a start* at heavy-weight lifting was apt to put a limit in one's ultimate development. If a young man is in fair condition and of average size, he can, and will, increase his *strength* very rapidly by practicing actual lifting, and nothing else. He may be able to "put up" with one hand only 50 pounds when he starts; but in three or four months he can, and frequently does, "put up" 125 pounds; perhaps more. The muscles of his arm, his shoulders, and his upper-back increase rapidly in size up to a certain point, and his legs and lower back show some improvement. If he has become thoroughly fascinated with the sport of lifting, he is apt to continue his training along the same lines, until some day he comes in contact with some big-chested, mighty-shouldered man, with powerful back and grand legs, as well as fine arms, and this Hercules by virtue of larger size and far more actual power "puts it all over" the man who has done nothing but lifting alone. If you go right after records from the very first day you lift a bar-bell, you are deliberately handicapping yourself and putting a limit on your future development. Time and again I have seen the chaps who say at the start "I am going to learn to 'put up' 150 pounds with one hand" defeated by other chaps who started by saying, "I am going to exercise with this bar-bell with the idea of making myself just as big, as healthy, and as strong as I possibly can."

In England they follow the first plan

almost exclusively, while in this country we have evolved a plan of *exercising* with bar-bells, adjusting them to moderate weights, performing enough different movements to develop every part of the body, and by gradually increasing the weights used have arrived at a point where we can be assured of a sure and steady gain in size, strength, and vigor if we have the patience to follow such a plan, and abandon the idea of becoming a record-maker overnight. And just so long as the two countries stick to their respective ideas, England will continue to produce a lot of superlatively skillful lifters of moderate size, and we will continue to produce a lot of *physical supermen*.

I once heard a story to the effect that an Englishman was escorting an American visitor through London. They passed a boot-black stand which bore a sign announcing that the boot-black had been established there for thirty years. The American laughed, and when the Englishman asked "Why?", he had to explain that in America no one would be willing to admit that he had been blacking boots that long a time. That state of mind is not peculiar to Englishmen only, nor, I suppose, to many of the English. There are a lot of people who are too apt to "stay put" in the first situation they land, and similarly there are a great number of people who have the unfortunate idea that they must be content with the *physical* condition to which they have either grown or gravitated. To such people the possibilities of modern training methods come as a great surprise. Many will admit that if you took a pair of twin brothers, separated them at the age of sixteen; sent one to work four years in a lumber camp, and the other to work equally long in a sweatshop, that the first brother would be likely to grow into a very rugged physical specimen, while the second would be apt to decline physically. Few know that if you would take the same pair of

twins and give one scientific graded exercise, and let the other exercise haphazard, the first could be literally made and moulded to ideally perfect proportions, while the second would remain "just average."

There was a very slender boy of eighteen who went to a seashore resort and was mildly mortified because in bathing costume he looked spindly, whereas his chum was beautifully made. About the middle of the summer he decided to take up bar-bell work to see if he could, as he expressed it, "make himself look like a human being." He went on a schedule which *called only for developing exercises*, studied hard and practiced hard, and between August 1st and September 1st increased his weight 24 pounds, and increased his chest measurement from 29 to 36 inches. (He had to buy an entire new outfit of clothes to go home in.) I happened to be spending my summers at that same resort, and one Sunday morning a year later I went down to the beach and in a few minutes I saw a face that looked familiar, but it was some time before I could identify it as belonging to the boy I had met a year before. I happened to notice him only because of the gasps of admiration from some girls nearby. Certainly they had cause. The painfully thin boy of a year before had become an athletically-built youth weighing nearly 180 pounds and with a 43-inch normal chest. He was not lumpy with muscles, but his grand chest and shoulders, his tapering waist, and his powerfully-molded arms and legs gave him proportions, and a *look of vigor* that anyone would envy. Of course, I renewed our acquaintance, and he told me that, although he gained seven inches around the chest in the first month, it took him another eleven months to add the second seven inches. "But," he said, "fourteen inches around the chest and from 125 to 175 pounds in weight is not so bad for one year's work."

Your Strength Shows In Your Handwriting

(Continued from page 55)

but in bad relief. The pen-traits were made by an intelligent, astute, wise and calculating crook, whose nature is unmoral and immoral.

His intellect is active as exhibited by the quick, lively flow, slight deviation of the words in their direction—steadiness in his manner of thinking—and his undulation of lines reinforces his tendency to lying and deceit. His finals are abrupt. Cautious and even crafty, some of his letters are close together. Selfishness and a grasping desire to get money and money is his characteristic. He would always be on the alert to fleece everyone. The uncertain shading of down and cross strokes displays a weak, dissipated nature. Not stable in his habits!

There is a breakage in the formation of some letters, especially indicated in the word "advertising." On the last line, his pen scratches in his letters. These signs if examined under the glass, point to the use of stimulants—narcotics. In this case, the individual coins money by boot-legging and selling anything that others crave. The casual observer would hardly believe that this writer was really bold or daring. But the method of crossing his t endsows him with the will-power to make his point, and he would not fail. Also, many of his ilk write heavily-marked gross letters and words, where the writing inclines very much to the left or is upright. Rigid and cold in their actions. However, we find that these

irregularities oftentimes show where the appearance makes a good impression. But it is the province of the expert to make an accurate and careful decision.

In passing, No. 12 represents what happens to a person who has gone the pace and crashed! His hand feebly forms his gestures with the greatest effort. No real control as his pen attempts to make his letters decidedly. There are indications of a will misdirected—his t-crossings! He is the craven type of gunman with the results which come from drugs!

Just stop and consider what might occur to some associate when you can see loose or erratic tendencies creep in, such as this one has disclosed. It gives you the shivers, doesn't it?

How I Saved My Hair!

The Tragedy of Baldness

By ALBERT WOODRUFF

WHEN the barber told me my hair was getting thin I merely smiled and let it go at that. When my wife said, "Bert, I do believe you are becoming bald," I gave a little laugh and passed it off with a jesting remark. I took the gibes of my friends in the same spirit—and I laughed when the comedian at the theatre made his "cracks" about candidates for the "bald-headed row."

But it wasn't until my business associates commenced to notice that I was rapidly becoming bald and gray that I worried. For while I was just as full of pep and vim as I had ever been—while my business judgment was just as keen as ever, yet I worried for fear my associates might think of me as heading toward the "has been" class. I decided to try to save my hair—if it could be saved.

Then I became a slave to hair tonics. If a tonic was new I bought it on sight. I tried every kind of shampoo that I heard of. I was a victim of the barber's wiles. The money I spent—and all to no purpose. My hair continued to come out just as fast as it ever did before I had tried to stop it. Every time I combed my hair it told the story.

How I Prevented Baldness

One day I read a very interesting advertisement by the celebrated Physical Culturist, Bernarr Macfadden. Now, it so happened that I had seen Mr. Macfadden several times and I knew that he himself had wonderful thick hair. Naturally I was interested—although it was news to me that Mr. Macfadden had made a study of the hair and had written a book on the subject, entitled, "Hair Culture."

In the advertisement Mr. Macfadden said he was amazed to learn how little

really authoritative information had been written about the proper care of the hair and scalp. He said that one need not let the hair grow thin and gray. He said that if the hair is falling out or getting gray a reasonable amount of proper care will restore it, unless one is completely bald. And this same care will keep the hair strong and healthy throughout life. He spoke of simple, natural and effective methods for treating the hair and scalp by following a few laws of nature. Then he casually mentioned that he was startled at the tremendous demand that existed for his comprehensive work. In fact, the first edition of his treatise was very quickly sold and a new edition had to be printed to take care of the orders that were flooding in on each mail.

I made up my mind right then that since Mr. Macfadden had written the book it was sure to be very practical—and the fact that so many had been sold clearly proved to me that the treatise must be filling a popular demand.

So I just jotted my name and address down on the coupon and returned it.



"Only a short while ago my hair was falling out by combfuls, yet today I have fine, thick hair, with not the slightest trace of baldness or dandruff."

which we discovered in Mr. Macfadden's treatise entitled "Hair Culture" and their hair is the admiration of all their friends. If you will examine the book I am quite sure that you will agree with me that it is one of the most valuable—if not the most valuable—and instructive books ever written on Hair Culture.

Albert Woodruff.

Send No Money

If you would like to take Mr. Woodruff's advice we will gladly let you examine "Hair Culture" for yourself, without obligation, and see how easily you can follow the methods that should bring new life, new lustre and luxuriance to your hair. Don't send one cent in advance—just fill in and return the coupon and the book will come to you by return mail. When the postman hands it to you, deposit only \$2.00 with him. Then after you have kept "Hair Culture" for 5 days—after you have tested the methods—if you are not absolutely satisfied return the book to us and your money will be promptly refunded. If, however, you decide to keep this remarkable book, as you surely will, there are no further payments of any kind to be made—the book becomes your property for the one sum of \$2.00 which you deposited with the postman.

MACFADDEN PUBLICATIONS, INC.

Dept. S-11, Macfadden Building
1926 Broadway, New York City

MACFADDEN PUBLICATIONS, INC.

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1926 Broadway, New York City

Without obligation on my part, please send me a copy of Bernarr Macfadden's Book giving me all of Nature's simple methods for preserving and beautifying the hair. I will pay the postman \$2.00 on arrival, but I also have the pleasure of returning the book if I desire and you will refund my deposit.

Name

Address

Women! Keep Your Hair Youthful

If your hair is graying prematurely you have every reason to hope that it can be stopped and that much can be done toward restoring it to its original youthful and becoming color.

If it is losing its luxuriant quality and glossy sheen the few simple rules taught by Bernarr Macfadden in his new book HAIR CULTURE will enable you to bring about an almost unbelievable improvement. Why spend time and money at the hair dresser's when you can give your hair a better home treatment in only a few minutes a day by this new method? You can easily have hair that is wonderfully silky in texture and your scalp can be cleansed of every trace of dandruff or scurf.

When I received the book on five days' free examination I immediately read it very carefully and that very same night I started to follow the few simple rules. I must confess that within a very short time I noticed a decided improvement in the growth of my hair—it became thicker and more glossy. Then dandruff disappeared. Today, after following the rules laid down in this new method, I have just as fine a head of thick hair as you would see on any man—even a young man of eighteen or twenty has no thicker or glossier hair than mine. In fact, many haven't anywhere near such fine hair. The grayness has all disappeared and my hair has the glowing color of youth. My wife and children also adopted the rules

Bernarr Macfadden's Secrets of Hair Culture

These chapter titles will give you an idea of the scope and value of this remarkable book:



Bernarr Macfadden. Note his thick luxuriant, healthy hair

Superfluous Hair. Hair Tonics.

Hair as an attribute to beauty.

Facts everyone should know about hair.

Care of healthy hair.

How to care for baby's scalp.

Facts about soaps and shampoos.

The cause of hair troubles.

Dandruff.

Dry Hair, Oily Hair, Split Hair

Falling Hair.

Baldness.

Gray Hair.

Hair Dressing.

Eyebrows and Eyelashes.

Will America Slip in the Next Olympics?

(Continued from page 36)

their courage and their love of the game. But this power cannot always sustain them and they may fail to come through at the most critical time.

America has always sat back and said, "Oh, there will be others present when the time comes!" But previously, there have been coming stars who could be pointed to as concrete evidences that America really did have the material. This time it is not so easily done. For there are hardly more than a dozen men in the country today who can fill the places of those names which were listed above. Now there are a few other men who have proven the backbone of several past Olympic Games, who can be put in the questionable list. Sportdom still has faith in Pat MacDonald, Paddy Ryan and Mat McGrath, the three New York giants who have always competed so nobly in the weight events for America. But it must be remembered that they were on the field in '08, again in '12, and finally in '20. They say that they will be as strong as ever in '24, but there is a question. Age and rheumatism and increased weight and a loss of speed and suppleness will all handicap them.

But there are a few coming champions, a handful to be sure, but nevertheless a valiant group who will fight hard and well. There is Alan Helffrick of the New York Athletic Club. This youth was not capable of placing in the first four for the Olympic Try-outs of '20, but he won the National Championship over the half-mile distance in the Senior Nationals of '21. He has all the possibilities of a Ted Meredith in the 800 meters.

A few months ago it appeared that America had a few new stars in the sprints who were destined to displace

the old ones in next season's Olympics. But these prospects have faded somewhat during the summer months. Chief among these new luminaries was Frank Hussey, a high school lad of New York City. Hussey performed brilliantly for three seasons in high school, running in his Junior year the hundred yards on two occasions in 9-4/5 seconds, and registering nine-three, which equals the world record, on one occasion. But instead of running some stars of note, Hussey was advised to stay out of competition, except in high school meets, until the Olympics. This will more than likely spoil his chances for making the team. For the one thing that a man needs more than anything else in a world's championship is experience, and the only way this can be gained is through running. Hussey has lost a great deal of his prestige and most of his following, through a refusal to compete against any open competition runner.

Harold Lever, the sprinter of Pennsylvania University who manages to retain his youth, has shown better form this season than ever before and might come through for a place on the team.

Another veteran, who has been in the game even longer than Lever is Loren Murchison of the Newark Athletic Club, who has been showing his fleet heels to the entire array of Eastern sprinters this season and who won the National Championships this last September.

In the hurdles several men stand out as promising. These are Chas. Daggs of Pomona, Otto Anderson of Southern California, Anderson of Chicago, Brookus of Iowa, and several other Middle Westerners. Fred Kelly, the former champion, believes that Otto

Anderson will some day run under 15 seconds in the high sticks.

The field events will be much stronger from an American standpoint than in 1920. Lieb, Pope, Houser, Hills, Anderson, Hartranft and several other giants will certainly be able to hold their own with the best in the world in the discus throw; De Hart Hubbard, the new Michigan ace, will no doubt sweep the field before him in the broad jump and place in the running hop, step and jump; LeRoy Brown is simply uncanny in his high jumping ability, while Laddie Myer of Chicago and Ed. Knourek of the same city are just about unbeatable in the pole vault.

There certainly should be a larger number of youngsters springing up throughout the country. But many of the high school coaches have gone to the extreme and have allowed their protégés to compete in too many events and have "burnt" them out, before ever they reached the time when they might really accomplish something big in athletics.

Now practically the same condition has been true in college. For a sprinter has often been asked to run not only the 100 and 220 during the afternoon but the 440 yards and sometimes a lap on the four-man relay team as well, and a hurdler has often been exposed to a lap in the relay after a hard day's work. A middle-distance man must run in the relay and perhaps in the mile as well. There was a star at a Western University who for years was expected to run the half, mile, and two mile, and a lap in the relay all the same afternoon, and if he didn't win them all for the 'varsity, people thought he was ill. Such things as these sadly cut down American Olympic chances.

Playing the Game

(Continued from page 48)

The winner will probably be crowned champion of the world but there may be several high sounding howls as a result. And they will be justifiable. In settling the world's championship the English and American turf has picked its heroes to do battle and left one that is probably greater than either entirely out of the picture. That one is the French colt Epinard.

Undoubtedly Papyrus and Zev are mighty colts, neither one of them a Man O' War by any means, but both are probably inferior by a length or so in a gruelling stretch drive to the gallant Epinard.

Any plans for a yearly international race to crown a world's champion that do not include a representation of the French turf will be hollow at best.

In England and America some of the biggest races are those for two year old colts—youngsters not yet matured. Our two year olds are racing in April and May which means that they have had a long period of train-

ing before that—when they were really mere babies. Not so in France. The French colts don't start their racing careers until they are nearly three years old. That is, in the latter part of the summer. The result might be expected. They outlast ours and are stronger by far, generally with a great deal more stamina.

And, in passing, it might be mentioned that the sire of Papyrus, the English champion, was Tracery, the great American bred stallion.

Also, there is more than passing interest in the fact that Man O' War, the greatest of them all, is not recognized in English turf circles as being a thoroughbred at all and his name is not included in the English stud records. Somewhere back in his family escutcheon there was a milk wagon nag or something that didn't rate blue blood.

Of course, it doesn't matter that he could have beaten anything that ever stood inside a horse's skin and broken every world's record if he had been

allowed to let out his speed. There was an outsider in the family so he and his sons and daughters must go unrecognized, just the same as a lot of other great American race horses have gone—in England.

* * *

Down through the history of modern swimming the test of the English Channel has loomed as the big trial of all. Two men, Burgess and Webb, conquered it and were heralded as super-men. This year alone more have crossed it than in all the years before. And one of them, Tirabocchi, cut many hours from the record. What is the answer?

Sullivan, the first to accomplish the feat this year, swam as the old-timers swam, a breast stroke. And the others who succeeded did so on modern methods. It may be that the answer is to be found in just that. No man swimming the breast stroke could hope to attain the speed necessary to bend the Channel's mad currents to his will.

Breathe an Extra Balloonful of Air

(Continued from page 23)

pends for its development on the intensity with which your conscious mind impresses the act on the sub-conscious. You must link the mind just as closely to the breathing muscles as possible. That is the object of the various schemes in exercise—such as counting so many times to each inhalation, taking so many steps, if walking, etc.—all to keep the mind on the work of breathing. Right here I should mention that you should never hold your breath in any exercise; doing so puts a dangerous strain on the heart. Counting in connection with respiratory gymnastics has that one objection, that it tends to cause suspension of respiration. Observing the caution against this, such exercises as the following will be of value in deepening your habitual breathing.

• Stand before an open window, or better still outdoors, palms of hands together in front of you on level with shoulders, arms straight. Now open the arms back as far as they will go, retaining the same level. Make the movement rather slowly, timing an inhalation so as to fill the lungs just as the arms refuse to go further back. It is the attention required to do this correctly, as regards timing, that keeps your mind on the work. Start with eight or ten times and work up to twenty. Persons have taken this exercise in a haphazard way for years without much benefit, but if you work at it *attentively* pronounced results will appear within three months, possibly much sooner.

Now, standing erect, with elbows straight, place your hands against the outside of your thighs. Now lift them

out at the sides and carry them well above the head, inhaling deeply as before. Count slowly (mentally); then try from day to day to add to the number counted *without counting faster*—which will mean a deepening of your inhalation. Exhale in the same time. Though not generally so regarded, exhalation is quite as important as inhalation, and it is well for everyone to empty his lungs as nearly as he can several times each day.

As you doubtless know, the diaphragm is the partition between the lungs and heart above and the stomach, liver, intestines, etc., below. This muscle has been called the "floor of the chest," and you will see on a moment's reflection that the chest cavity may be enlarged by lowering the "floor." I would have you remember that the breathing muscles act automatically—involuntarily, as we learned at school. The lungs do not suck in air, as most people believe; the breathing muscles expand the chest and air flows in to fill the vacuum. When this expansion is accomplished by lowering the floor we are breathing diaphragmatically (or abdominally, as some say); when the floor remains stationary and the walls (ribs) are lifted outward the breathing is by the chest method.

Both these methods are valuable. The trouble is that too many people, when they take up respiratory gymnastics, adopt some pet idea and shut their eyes to the rest of the proposition. It is true that diaphragmatic breathing is the natural method in *repose*—the way we breathe before tight clothing and incorrect carriage of the body have cramped and weak-

ened the diaphragm, but it alone is *not* the correct method when you run, box or in any other way exercise vigorously. When misinformed athletes try to confine their inspiration to the limit of their diaphragmatic capacity they injure themselves, because only about half as much air can be inhaled by a purely diaphragmatic effort as by a "mixed" inhalation. Get all the air you can when exerting yourself and breathe instinctively rather than consciously. At such times we use both the diaphragm and the ribs, all our respiratory resources, as we should.

But during repose, when reclining or sitting, the more entirely diaphragmatic your breathing the better, for vigorous action of the chest floor is an important requirement of health. Every time it descends it presses on the stomach, giving that organ, the liver, etc., a gentle massage that aids all the abdominal functions. Further, experiment has shown that the absorption of oxygen is greater from a given volume of air when breathed diaphragmatically than by the chest method. Still another advantage is the economy of effort; far less muscular energy is required, for to raise the ribs employs some of the largest muscles of the body.

As I have said, some persons are very weak in the diaphragm. I have seen cases where the person could not voluntarily move it at all. The best way to get this great breathing muscle under control of the will is to lie on your back while you practice. Spread the fingers of your hands on the front and sides of the chest and note whether the ribs rise. If they do not and the abdomen does, you are breathing with the diaphragm.

The Mat

(Continued from page 68)

The general idea seems to be that any kind of exercise done in "any old way" will produce health and strength. There is no greater mistake. If you want real results you have got to get off in a corner by yourself and *work*, and what is more, you have to use your brain as well as your body. Exercises done inaccurately and unsystematically are great time-wasters. I do not care what kind of exercise you take so long as you make yourself expert at it. An expert not only does things perfectly, but he knows *why* he does them.

* * *

EDITOR OF THE MAT.

Dear Sir:

To settle a dispute, will you kindly tell me which sport requires the greatest strength and endurance? I have a friend who says that football requires more strength than any other sport, but I believe that wrestling requires more strength than football. Which of us do you agree with?

CARL AUSTON,
Chicago, Illinois.

If you really want to know, I do

not agree with either of you. I think that rowing requires a greater combination of strength and endurance than any other sport. An oarsman has to be strong from top to toe. He cannot have a weak spot in his physical makeup. He needs strength beyond the average, tremendous endurance, and absolutely perfect organs. No weak man can stand the strain of competitive rowing.

There are a lot of of tremendously strong men who play football; and professional wrestlers are almost always very strong men, but neither wrestling nor football requires strength and endurance in the same degree that rowing does. In football the player exerts himself but for a few seconds at a time, and he always has a chance to rest up between plays; and then the chances are two out of three that his part in the play does not require any particular strength. In wrestling, skill counts for more than strength (providing the competitors are of even weight),

and there is a whole lot of "stalling" during wrestling matches. To wrestle one hour without stopping is not nearly as hard as it sounds.

When you are rowing in a race, however, you are working every second while the race lasts. Every strap and muscle of your body which is used (and most of them are) gets the hardest work of which it is capable, and these muscles get no chance to rest. The rower has to put out every atom of his strength from the start to the finish of the race; that is, for about seven to twenty minutes, depending on the distance.

If you have any doubts as to the severity of rowing as a strength exercise, just consider the way that oarsmen are trained for a four-mile race. No other kind of athlete has to go through such an arduous course of training as the man who rows. A college four-mile race is the very ultimate test of strength, endurance and soundness.

"I Want to Live the Other Half"

(Continued from page 22)

the dickens they should be bothering us about at our time of life. No, we're all right. We're good for thirty years yet! Or, say twenty. Or maybe ten. Ten years! Golly! That isn't long enough!

I want to live the other half of my life!
And so help me Arethusa, I'm going to!

* * *

Entering a bank the other day (to ask what time it was, of course!) I saw a chart which showed me that, if I saved fifty dollars a year for forty or fifty years and confided its care all that time to the said bank I would, at the end of the period, figuring the savings at compound interest and so on, be the possessor of \$1,456,239,765.28. More or less. I'm not much of a hand at large figures anyway.

The chart was convincing. Whatever the sum, it was plain to be seen that, if I saved, I would accumulate. And the interesting part of the showing was that my money would not only lie there, waiting for the needs of my old age to crop up, but it would accumulate and pile itself up and increase and swell and double itself and perform other and various and altogether miraculous feats of financial legerdemain, until, in a manner of speaking, my whole bank account would be afflicted with pecuniary elephantiasis, and I would be decently rich.

Nothing could be more salutary than saving money; nothing more commendable than charts encouraging that effort.

Unless it would be saving health; and charts, diagrams, pictures, graphs, figures and data illustrative of the equally interesting and equally true and equally astounding fact that if you husband your physical resources and bank your vital forces and put aside for a rainy day a little of your abounding bodily vigor when you are young you will be repaid at the end of any given period, not with what you put in, but with that amount doubled and increased and enlarged seven times seven!

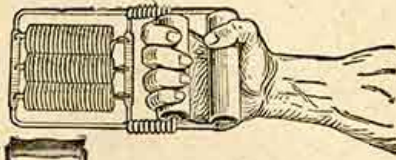
There's a chart for your whiskers! A chart that will show graphically, for example, that ten minutes a day of exercise compounded at cent per cent annually, will, at the end of twenty years, pay you a clear skin, a bright eye, an alert mind, a docile stomach and a straight front; that twenty minutes will add energy and vitality; that half an hour will give you a premium of youthfulness and zest for life and freedom from aches and pains; that an hour, if coupled with occasional deposits in the shape of abandoning worry and leaving your business in the office when you leave your desk there, will accumulate a storage reservoir full of strength from which you can draw at will after fifty and which will make you a boy of sixty instead of a memory chiselled on a marble headstone.

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Victor Body Developer

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The VICTOR MASTER GRIP is so constructed that you can use it with one, two or three springs—mild, medium and strong. Any one can use it with wonderful results. Lasts a lifetime.

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With these two perfect exercisers you can build up every muscle of your body in a remarkably short time, and increase chest expansion from two to three inches. The strength of each exercise can be regulated as you progress. Can be used by every member of the family.

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This system is endorsed by the world's strongest men as being the most perfect method of body building.

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Only the finest steel piano wire springs are used in the construction of these exercisers. This outfit alone is worth the price asked for all three.



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Are you weak and flat chested? Are your muscles flabby and soft? No matter how bad off you think you are, you can in a very short time develop muscles of steel and increase your chest expansion to amazing proportions with this progressive chest expander. The three springs allow you to increase resistance as you progress and as your muscles become more developed. Here is a chest expander that everyone needs. Made of the finest materials throughout—will last a lifetime. Take advantage of this remarkable offer before it is too late.

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For a limited time, I will include absolutely FREE with each order for the above combination my \$1 encyclopedia of Physical Culture written by Michael MacFadden, and my full instructions for increasing lung

and chest expansion from 2 to 3-inches in ONE WEEK. These instructions alone are worth \$5 to anyone interested in developing powerful lungs and chest. ORDER TODAY before the amazing bargain is withdrawn.

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Does away with the strain and pain of standing and walking; replaces and supports misplaced internal organs; reduces enlarged abdomen; straightens and strengthens the back; corrects stooping shoulders; develops lungs, chest and bust; relieves backache, curvatures, nervousness, ruptures, constipation, after effects of Flu. Comfortable and easy to wear.

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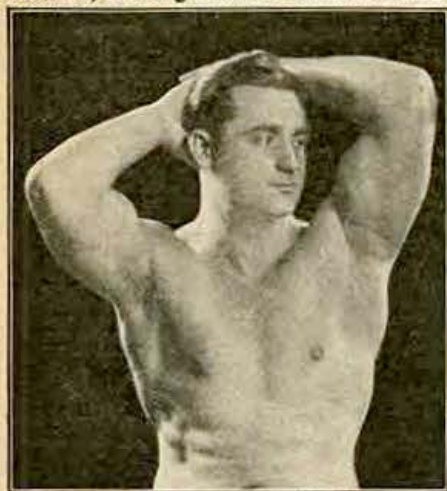
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Did you ever see a weakling leading a crowd? Of course not. The weak, timid man is afraid, he lacks the courage, the strength, the daring. He has no poise, no self-confidence. His nerves are unsteady and he cannot be relied upon. Everyone detects the weakling. There is no need for YOU to remain a human cypher when by a few weeks' scientific training under my expert guidance YOU can change your weakness for strength, your diseases for health, your timidity for dauntless courage and daring—so that you can qualify for Life's Greatest Prizes.

I CAN MAKE YOUNG MEN APOLLOS, GIVE OLD MEN YOUTHFUL VIGOR AND GLORIOUS NEW HEALTH—ADDING MANY YEARS TO THEIR LIVES. THERE IS NO EXCUSE FOR ANYONE TO REMAIN A WEAKLING.

Now's the time to get the vital information that will make you a MAN OF POWER—so that YOU will generate Human Energy. The secret of HOW TO DO IT is fully explained in my amazing book:

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It is the most wonderful book of its kind ever run through a printing press and is printed in beautiful COLORS. Scores upon scores of highly artistic photographs of myself in the most magnificent classic statuary masterpieces of the human form ever posed. It also contains dozens of pictures of my pupils in poses of unusual beauty, displaying remarkable physical development attained through faithfully following my PERSONALLY planned Home Course of Instructions. If you want to be thrilled and inspired—and want to increase your Health, Strength and Personal Power—send AT ONCE for the new edition of this great Wonder Book. It cost me many thousands of Dollars to produce and tell you about this de luxe edition in COLORS—it costs you nothing, except ten cents to help pay for postage and wrapping. DON'T BE SO UNFAIR TO YOURSELF AS TO MISS GETTING IT. It should be in your library for constant inspiration. Do yourself this good turn today. Enclose only a dime and this great big, beautiful COLORED Book will be sent to you immediately.

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(PLEASE WRITE OR PRINT PLAINLY)

Have You a Sense of Humor?

(Continued from page 41)

treasures besides. Of course, he takes care to do some fast running besides. It doesn't do to put one's sense of humor to too big strain.

Lincoln had a sense of humor; and Lincoln was an ally of God if there ever was one. God is on the side of the man who can laugh. That does not mean, you will note, the man who can merely smile. A smile may be equivocal, and it is always dumb.

We all know the jingle to the effect that the man that's worth while is the man who can smile when everything goes dead wrong. And we have all heard the song of the trenches,

"Pack up your troubles in your old kit bag,
And smile, smile, smile."

I don't deny the value of a smile; but a smile can be faked. It can hide an attitude of mind which does not smile at all. Humor, on the other hand, is a condition in the heart itself. It is the active principle of courage. It is real.

I have known too kinds of religious people, those who had a sense of humor, and those who didn't. Those who didn't were not religious. They passed as religious, of course; and they knew a lot about theology. But their religion compared with the real article as a night growing toadstool does with a morning glory. Religion with a long face, and with no leaven of laughter in it, is a poisonous thing. In fact, it isn't religion; and its possessors would be better off without it. Religion with a long face? It can't be done. If the day shall ever come when so-called religious teachers shall learn, with due dignity and reverence, to teach the Laughter of God rather than the Wrath of God, religion will sweep the world like a flood. In fact, religion is really the logical medium for imparting to the whole human race the gift of humor it needs so badly.

I am not a disciple of the elemental Billy Sunday. Nevertheless, Billy Sunday represents in some respects a conception of religion which, confined within the limits of dignity and good taste, may well become the corner stone of the religion of the future. That notion is the idea that Humor is a more acceptable sacrifice on the Altar of God than Tears, because Humor is braver than Tears.

Theologians have long pictured Christ as a solemn, majestic figure, clothed, so to speak, in Tragedy. Perhaps that has been the fault of those who wrote the record of his life. After all, they were men; and the pathos and tragedy of the thing they had experienced had overwhelmed them. But it is impossible to read that record without the feeling that no man wanting in humor, in laughter, in jollity, in quips, in jokes, in the lightness and warmth which people love, could ever have

drawn people to him as the Master did. He loved children; but who can love children if he lack a sense of humor? He loved the gay colors of the lilies of the field, but who can love such things save he touch life lightly; he chuckled the money changers and their furniture out of the temple, with an explosion of wrath which may well have been capable of turning to a roar of mighty laughter when he saw them go sprawling on the pavement in their meanness. Seeing as deeply into life as he did, he could not have failed to find in human life stuff that was rich in humor and deserving of laughter. To some this may seem an irreverent and heretical speculation. I can only say that the further my observation of religious teaching goes, the scunter do I find my patience becoming with its almost universal neglect of the gaiety which is at the very heart and core of true religion—the gaiety which the ancient Hebrews felt so deeply that they made dancing a part of their worship.

The sense of humor is, of course, vitally related to health. Laughter goes with the feeling of strength and well-being; gaiety is the gift of the man who is in some fundamental sense stronger than the world he lives in. Spiritually weak persons are never humorous. They lack the robustness necessary for such heavy exercise.

That laughter and lightness of the spirit have a pronounced and measurable physiological effect is already known. Any psychological laboratory can demonstrate the fact with ingenious precision instruments. To laugh at life is to send the blood coursing more freely through your veins; it is to present yourself with a good digestion; it is to be genial; it is to find within yourself resources of strength, energy, and vitality you never knew you possessed, and which no amount of exercise and right food would alone suffice to utilize. With these things must go a right attitude of mind—though it is of course true that physical exercise and right diet tend to make such an attitude of mind much easier to acquire than it would be otherwise. The two things go together, and react upon each other.

Your true humorist, in short, is a psychological strong man. He is a spiritual weight lifter. And if he can lift physical weights as well, he is the more likely to lift spiritual weights. A great humorist is like Hercules, taking from the shoulders of the weary giant Atlas the weight of the sky, so that the giant may stretch his great limbs, and relax, freed for a moment from the pressure of this impinging universe. Such is the man who can make humanity laugh. Such, in a lesser degree, is the man who merely has laughter within him, shining out like a cheerful torch to break the darkness in which his Neighbor lives.

How Strong Is a Man at Fifty?

(Continued from page 39)

serve your strength and most effectively to secure the full tenure of life that the insurance actuary has provisionally granted you.

First, as regards your relative strength. As a person of average heredity, who has taken average care of himself, you at fifty are just at the half-way station of adult life. About twenty-five years ago you came to full physical maturity; about twenty-five years ahead lies the final goal. You are half way along the road. But are you therefore at the summit; or are you half way down the decline? That is, from the present standpoint, the important question.

Let it be understood that we are speaking all along of physical strength. We are referring to the body as a physical machine, not as the abode of a mind. The distinction is all-important, for the physical climax and the mental climax do not of necessity come together. Many a man has been capable of his best mental effort long after he passed the mid-age period; but you never heard of a man winning a competitive physical championship after fifty. The seeming exceptions, or near-exceptions—such men as George Bothner and Stanley Zbysco, who retain championship form long after the usual retiring age—are really exemplars of the truth that age is not measured solely by the calendar. They are exceptional men, whose age must not be estimated by count of birthdays.

The average man whose case we are considering may disregard such exceptions, and may count it as certain that at fifty he has passed his physical prime. It is true that there are many men of average physique who are more athletic at fifty than they were at twenty-five. I personally know several such. But they are men who were absorbed in business during their earlier years, who came late in life to realize the value of athletics. One such man I meet frequently in the gymnasium, who is a well-trained athlete at fifty-five, and who until six or seven years ago was anything but athletic. But I make no doubt that the training of these recent years would have made him a still better athlete had it been undertaken thirty years ago.

Such an example, however, is stimulative, not to say inspiring. It goes far to show that it is never too late to mend our physical habits. To observe athletes who were born not merely in the '70s but in the early '60s engaged in strenuous competition at handball or on the wrestling mat, is to learn that calendar years may be discounted. Yet it is true that the average man who has neglected athletics all his life may not advantageously attempt to emulate such examples. At least he must make very sure, by test of a skilled diagnostician, that his heart and arterial system are still young; and then he must begin with less strenuous

exercises, and work up gradually to the competitive standard.

And even at best, the average man of fifty should put aside the thought of active competition with men half his age, in the field of strenuous athletics. Let him gracefully admit the handicap of years, just as athletes in their prime admit the handicap of size. George Bothner is considered by many experts to have been the greatest athlete of his time. Certainly no man ever knew the wrestling game better than he knows it. But he never thought of matching his 133 pounds, except in handicap contests, against the two-hundred-and-odd pounds of such heavy-weight champions as Jenkins and Hackenschmidt and Gotch. The man of fifty has limitations of another kind that are just as compelling.

Putting the matter baldly, the human machine at fifty is partly worn out. Its muscles have not the resiliency or the endurance of an earlier period. Bodily metabolism in general is normally less active. There are measurable alterations of body chemistry. The surface changes, which the least observant may note, extend inward to the very bones. The muscular system may be capable of putting forth a momentary effort at the full level of earlier efficiency, but can by no possibility maintain that efficiency for a term of hours.

Just what the difference would be, as between the aggregate work that the average muscular system could perform in, let us say, ten hours, at twenty-five and at fifty, can be but conjectural, for no tests adequate to establish the point have ever been made. Even if tests were recorded at an interval of half the adult life time, we could not be sure of the result, so many factors might enter to invalidate the record.

But my own guess would be—I record it only as a conjecture, though it is based on a good deal of thinking and long observation of athletes—that at fifty the average man is capable of just about half the aggregate muscular effort of the average man of twenty-five. In other words, I think that the machine that has been running down for half the adult life period has about half exhausted its primal store of energy.

And so, to come, here at the end, to a concise answer to the question with which we started, I am disposed to say: The man of fifty is half as strong as he was at the twenty-five-year prime of his physical life. I am constrained to add, however: But his strength is adequate for all reasonable needs, and if he will properly conserve it, the bodily machine that is running down may be made to serve its purpose with full efficiency for at least another twenty-five or thirty years—bar accident and life-shortening malady.

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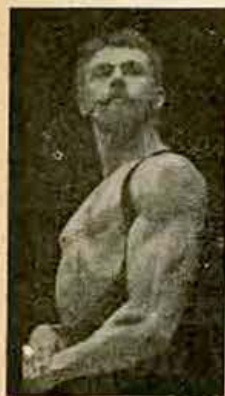
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Back	508 lbs.	1,352 lbs.	844 lbs.
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Neck	185 lbs.	375 lbs.	190 lbs.
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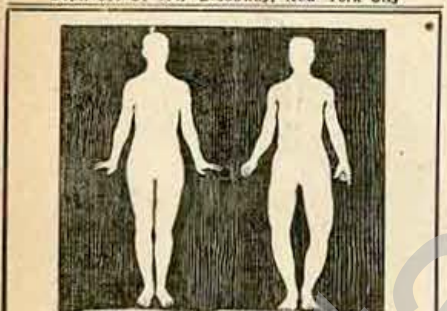
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Hiking with Jim Hocking

(Continued from page 31)

Mohawk trail from Albany to Greenfield, Massachusetts, by doing it in 20 hours, 30 minutes.

Feeling constrained to take another fall out of O'Leary, Hocking in 1922 strode over the 187 miles between Boston and Albany in 42 hours, 15 minutes, bettering Dan's time by 2¾ hours. O'Leary's record, which had stood unshaken for twenty years, was made when he was 60; Hocking was well along towards his 67th birthday. It is characteristic of the latter man, however, that he never fails to call attention to the fact that the roads are better now than when those earlier boys walked over them, and that perhaps his rubber heels give him more speed than their leather ones.

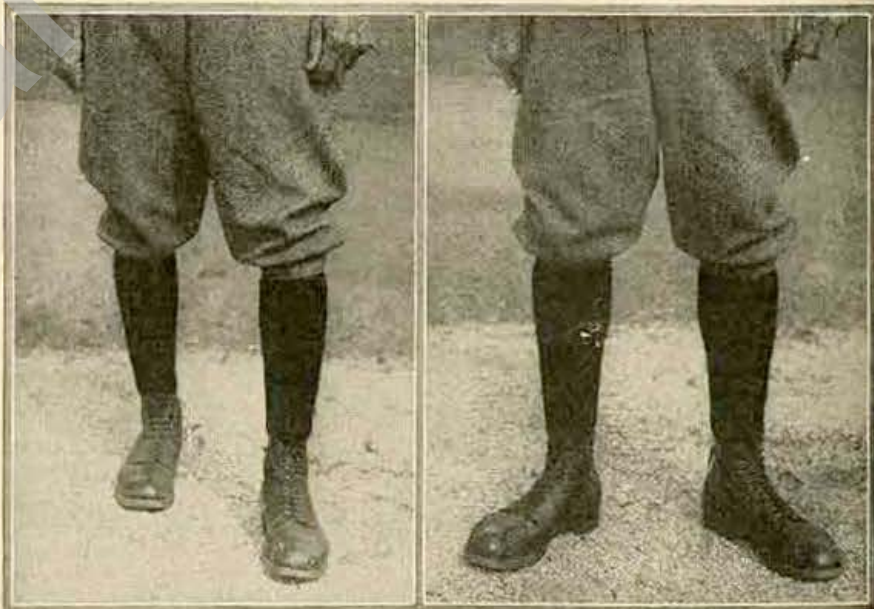
When his vacation time arrived in August of this year (1923), the old-timer's appetite for hard work had not slackened in the least. His yearly ramble extended from Albany right through the Adirondacks to Montreal, a distance of 271 miles, which was covered in 67 hours.

Every year the Walkers' Club sponsors a hike from the City Hall, Manhattan, to Coney Island, a distance of 10½ miles. Every year Jim Hocking is one of the entrants in a field of from 65 to 125. He doesn't expect to win, for the younger fellows are now better than he is at such short distances as ten miles; but he never finishes more than twenty or twenty-five minutes behind the winner. Jim goes in for the joy of playing the game, and to show all and sundry what so-called old age may do if it keeps itself in trim. Last

year he led the whole field for the first seven miles, and finished in 1 hour, 54 minutes, 36 seconds. Turning back as far as 1916 we find that he did it then in 1 hour, 56 minutes, 22 seconds—which looks as if he might be getting better instead of slowing up. If the course were 50 miles instead of 10, probably one-half of those who now beat him in the Coney classic would fall behind him, and if it were 100, I have little doubt that he would conquer them all, old and young.

If Hocking hears of a walking match to be staged anywhere around New York City, no matter whether it be by college boys, Y. M. C. A., or some other organization, he is always there to join in the sport and spread propaganda for pedestrianism. The shrewd old hiker knows that that mop of white hair of his breezing along in advance of many youthful contestants will do more to create a favorable interest in walking than any other spectacle of the day. These contests give him the distinction of being the oldest competing walker living, and probably the oldest one in history.

One of his favorite stunts is to enter a Marathon running race, and cover the distance in a walk instead of a run. He argues that at a twenty-five mile distance, a good walker is better than most runners. He proves this by invariably leaving more than half the field of runners behind him at the finish. Of course they all run away from him at the start, and one feels pretty sorry for the poor old white-haired chap toiling along at a walking pace—



You can see right away which of these is the correct and which the incorrect position of the feet, for either walking or standing. And now you know why Charlie Chaplin never broke any walking records. This toeing-forward will cure flatfoot, if you walk enough that way. Yes, the picture shows the kind of shoes Jim Hocking wears, cushioned inside with heavy woolen hose.

but before many miles are reeled off he begins to pass them, one by one, then in squads. In the Yonkers Marathon in 1916 he finished twelfth in a field of forty, and the following year was fourteenth in a field of thirty-six. He would have finished even higher in this latter case but for stopping to assist and to give his gloves to a runner who was suffering from cold.

There are half a dozen points which Hocking vigorously emphasizes as requisite for the man or woman who would gain health and strength by walking. Perhaps his most emphatic preachments are made against "toeing out." "If you are walking due north," he says, "why turn your toes outward and shove your body alternately north-east and northwest? The straight foot is the strongest position, either standing or walking. The long, swinging, straight-legged, heel-and-toe stride is the one that gets you over the ground surely and with least fatigue. This gait, with toes pointing straight ahead, has a spring to it; with toes turned out, there is none. The latter sort of walking breaks down more arches than all other causes combined.

"Walking on the straight foot enables one to keep one's weight more easily adjusted over the forward part of the foot, which is broad and flexible. The weight of the body must never be borne on the heels. In walking, the leg is thrown forward from the hip, the knee acting in harmony, heel touching the ground first; but the weight should be so quickly transferred to the ball of the foot that the heel makes almost no noise.

"Proper shoeing is another prime requisite. Shoes should be of leather with rubber heels, and should fit fairly well about the heel and under the instep, but in front they should be broad enough to let the toes spread out. Instead of their being jammed together until the little toe climbs up on top of the one next to it, as is the case with most people's feet in these days, every toe should get a firm grip on the ground. Woolen stockings are always preferable; heavy ones in winter, lighter in summer. Frequent washing and thorough drying of the feet, especially between the toes, is necessary to comfort and well-being of the feet. If the skin cracks and splits, wash with boric acid and soften with vaseline. Cut the nails straight across. Callouses should be rubbed down with number one-half sandpaper."

It will startle some folks to learn that when Mr. Hocking is on his long hikes of from 200 to 600 miles, he eats only about 20 ounces of solid food per day—but drinks quarts and gallons of water! "The body being 90 per cent water," he says, "and that water being used up rapidly on a strenuous hike—in my case, fully half a pint per mile in hot weather—the first, most important and easiest thing to do is to replace the water, rather than burden the stomach and bowels with the digestion of much food. On a certain day during my New York-Cleveland walk, my food and water were very carefully

weighed. I ate 19 ounces of food—bread of chicken, whole-wheat and raisin bread, tomatoes, celery and lettuce—and drank 19 pounds of water."

On his last record-breaking walk to Philadelphia, he left Times Square, New York, at 11 p. m., and paused at New Brunswick, N. J., at 6:30 a. m. for breakfast. There he ate the only solid food of the trip—one grape fruit, two eggs, two rolls and water. Reaching Trenton at noon, he drank two cups of hot tea; and took nothing more save plenty of water until he reached Philadelphia. He never eats more than two meals a day, whether on walks or at home.

"I do not consider meat necessary to the human body," says he, "and I think it would be better for most folks to leave it alone. I eat a little breast of fowl, sometimes soups or broths flavored with meat, or a few slices of breakfast bacon now and then. I don't count the latter as meat-eating, for there is so little of it that it is more like a relish than a food. The principal items of my diet, besides these, are whole wheat bread, eggs, potatoes, plenty of butter, rice, lettuce, tomatoes, celery, raisins, bananas, and other fresh fruits, cereals, ice cream and milk. I am a strong believer in ice cream as an article of diet. White bread, as it is now made, should never be touched by a human being."

This veteran of 68 doesn't know what it is to have a pain nor a day's illness, and he very reasonably attributes his health to walking. He declares that walking is a cure for nine-tenths of all human ailments, including baldness. Perhaps his long-standing practice of walking bareheaded has also in his case something to do with that fine shock of crisp, wavy hair which has been his oriflamme in many a lively contest. When you see his clean, healthy skin, sun-tanned to the color of old copper, showing up among those white hairs, you begin to realize what a curse to our civilization is the modern man's hat. Jim likes to walk in the rain; he just brushes it out of his eyes now and then and strides ahead until the roads get so heavy that they slow up his speed.

"Two miles of oxygen three times a day," is his prescription for the ordinary man to insure health. It is the one he uses himself when not in training for a long walk. Sometimes he varies it by starting a little early and striding the thirteen miles from his Yonkers home to his office near Times Square, New York City. When in training for a long hike against a record, he walks from 100 to 150 miles a week.

In spite of his white hair, you would never guess him to be 68—his wrinkles are so few, he is so lithe and active, like a creation of steel springs and rubber, his spirits are so boyish and effervescent, his interest in everything he sees and hears is so keen. He can talk interestingly on many other subjects than hiking. I can fancy him a charming companion for a walk—for though a devotee of the sport myself, I am of the dry-horse type, and too much of a dub ever to attempt keeping up with him.

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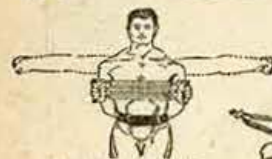
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The Meaning of this "Cave Man" Stuff

(Continued from page 45)

"That seems like a sound, sensible idea," commented Janet. "I can accept that. But how about the woman of today who gets all the hard knocks and still goes on loving—the kind the novelists seems to have chosen for their model?"

"I am inclined to think that her true psychology has escaped them. Her desire is the same as the cavewoman's. She thinks this is the strong man, her protector from the world because, fearing him herself, she judges that the whole world fears him. That's the real reason she continues to love him, and not at all because she enjoys being knocked about."

"But the modern man, unless he's a day laborer, doesn't need strength as did the caveman of old," protested Paula.

"Doesn't he?" was my response. "Just consider for a moment. It isn't enough for the man of today to be born with a good physical equipment. He must bring it under his control in every particular, so that it becomes his perfect tool, serving his every need at a moment's notice."

"The athlete of today is not simply getting ready to win a few silver cups and a little evanescent glory. He is preparing himself for conquest in the great world of business."

"Consider for a moment," I went on, determined to convince her of my point, "the mental and spiritual qualities essential to business success which are developed through training for athletic contests."

"First of all, there is self-control. The young athlete begins at the very foundation of his life by controlling his appetite for food. Most folks eat whatever they want whenever they want it, but the athlete, having a definite end in view, submits his appetite to the control of reason, eating only at stated intervals and limiting himself to the food which will contribute to the kind of power he is striving to develop."

"This self-control is not limited to the mastery of the physical being, however. Did you never hear the statement made that the victory was lost because the contestant failed to keep his emotions under his control? The fighter who loses his temper is in danger of failing to perceive his best chances for victory; the golf champion who lets his own failures or the comments of the crowd get under his skin finds himself unable to deliver his best strokes; the tennis player who is disheartened by threatening defeat, only makes its advent the more certain. Your hero, Paula, who controlled his emotions with a grip of steel must, I feel sure, have had a good training as an athlete in his younger years."

"Then there is the quality of concentration. For the time being, the athlete thinks of little else than his

great objective. He centers his whole mind upon it, learning all he can from every source and practicing incessantly to perfect himself in his chosen art.

"Persistency is another element of strength developed through long months of gruelling training to which our athletic boys willingly submit themselves.

"Back of all these qualities—and many others which I sha'n't take the time to name—is the developing will-power. The will has been defined as the being in action. However defined, we know that it grows with use, and it is only the man of masterful will-power who wins marked success in life today."

The girls continued to look interested, so I went on, for the subject was very dear to my heart.

"This is the sort of strength, it seems to me which the modern man most needs. If the whole being is in action but is spread out indeterminately over a large area, it has but a minimum of power in any direction, and no victorious achievement can be expected. But when the individual has learned to focus the power of his whole being in one direction, eliminating everything which does not contribute to the definite end in view, then we begin to see true strength, true power manifests itself in that life."

"This is what the young athlete does, and it is in reality his mastery over himself in these manifold ways which we admire when we acclaim him the victor, rather than merely the possession of certain physical powers. It is what he has made of himself that wins our admiration. Others might have accomplished what he has done, but they lacked the grit to go through with the grind to the end."

"We are told repeatedly that woman is both wife and mother to her husband, and we have thought it a true and beautiful picture. We have seen the wife making allowances for boyish traits in her husband's nature, strengthening him when he felt discouraged, soothing him when tired, nursing him devotedly in illness with the patience of a mother—men are more than willing to accept that picture, aren't they?"

"Then why isn't the corresponding picture equally true, that every man should be both husband and father to his wife? Don't you believe there are times when she would like to forget that she is grown-up, with a family of children to control and discipline, and crawl into arms that seem as protecting as the strong arms of her father in her childhood's days? Some one who'd understand how discouraged she gets and how it rests her to drop her burdens on shoulders that are broader than hers?"

"Don't you believe that we are all, whether we know it or not, looking for just what the cavewoman sought in her mate—strength? Only we of today want a more comprehensive strength—mental and spiritual, as well as physical."

A Man Is as Strong as His Back

(Continued from page 58)

very strenuous exercise even when done without weights—the record is said to be around one thousand repetitions. However, so many repetitions are to be advised against more or less, and for the simple but solid reason that nothing is gained thereby. From twenty to thirty repetitions daily without weights will produce most satisfactory results.

When using weights, the workouts should come only every other day, not daily. When using weights—a barbell is preferable—the athlete should begin with fifteen pounds. Instead of clasping his hands behind his head, he places the middle of the barbell handle against the back of the neck, his hands grasping the bell near the spheres or plates. He should "sit up" slowly and recline slowly. Two repetitions are enough at first for four exercise days followed by an added repetition till the athlete can perform twenty. Then increase the weight by five pounds.

The most effective exercise for developing the latissimus dorsi—accord-

ing to the author's experience—is a modified type of the "side press." That is, instead of using a heavy weight as in the side press lift proper, a rather light dumbbell is used. From twenty to thirty pounds will be sufficient for the beginner. The author's method for this exercise is as follows: when using the right arm to push or press the dumbbell over the head the right foot should be pointing in a straight ahead line, with the left foot at a slight angle to the rear and about from eight to fourteen inches separated from the right foot. (This position of the feet is reversed when the left arm is to press the dumbbell aloft.) While the lifting arm is occupied with the weight the free hand and arm should be extended out from the shoulder at the side, and when the lifting arm is straight over the head the free hand should be touching the leg about at the side of the knee. Figure 5 shows the athlete just after starting to bend, and Figure 6 shows lifting arm straightened and body bent far over.

Beauty Through Bending

(Continued from page 51)

In my last article I told how actresses kept their figures and the bloom of youth by dancing and by doing "stunts." They know they must have exercise, and their busy life permits them little time for outdoor sports. Actresses no longer have any monopoly of the secret. I know many society women who are just as proud of keeping themselves in the "pink of condition" as is any college football player or track athlete. Why? Because their position demands it. So they exercise. My, how they exercise! It is the only thing that keeps them fresh and fit.

I showed pictures for this article to a stout middle-aged friend. She picked up the one where Miss McCarthy is resting her foot on the crown of her head, and said, "If I could do that I would have no need to exercise. But then I have no desire to be a contortionist." I thought to myself "No! you'd rather be fat." But I didn't say it. What I said was, "But don't you see, my dear, if you could do a stunt like that, you would have a figure like that young lady's." "Well," she replied, "I wouldn't mind that, and anyway when I was a young girl, I could lean over and touch the floor without bending my knees!!!"

Odd, isn't it! how many women there are who think that if they can do that simple stunt, Pavlova and Ruth St. Denis have nothing on them.

Most "bending exercises" are kindergarten work anyhow. They are as mild as cream-puffs. They are so ineffective in producing results that it is no wonder women quit in disgust after trying them for a few weeks. Use your bending exercises just as a preparation, and as soon as you can, work

up to real stunts like the ones shown by Miss McCarthy in this number, and by Miss Langhorne in the last number.

Don't be afraid of a little stiffness. It will soon wear off and be replaced by a glorious feeling of lightness, suppleness, and springy power. Concentrate on learning "stunts" and I promise you you won't have to worry about your figure.

Vary your stunts with dancing, or if you prefer take up fencing. In most schools where they train for the stage, fencing is compulsory, and there must be some magic about the sport, for positively every woman-fencer I have met is lithesome, slender, graceful, and most beautifully made and poised. Miss Zacky, whose pictures adorn this article, is an excellent example of the type of figure which fencing creates. I have had the pleasure of taking pictures of many women of the stage, and even when I am getting "stunt" photographs like these, I am struck with the fact that it seems impossible for these girls to do anything ungracefully. Even when they are resting between stunts they unconsciously fall into beautiful attitudes, and the way they walk, sit and stand, is a treat to watch. There is no mystery or secret about it. They have trained bodies, that's all.

I hope you get the idea. I do not urge you to do these stunts because I wish to see you go on the stage, or to become athletes, or gymnasts, but because of the miraculous effect "stunt practice" will have in giving you the kind of figure that people rave about. It is even more than that. A good figure is a sign of good health, and to have good health your muscles must be active.

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In STRENGTH Next Month:
"Don't Drop Your Sports—
It's Dangerous"

By Henry Smith Williams
M.D., L.L.D.

Insulin *versus* Real Food and Strength

(Continued from page 19)

Banting reported that in the case of the dogs used in his experiments, an injection of insulin was promptly followed by a reduction of the quantity of sugar found in the blood.

Banting also found that when insulin was injected into a healthy dog in sufficient quantities to reduce the blood content of sugar below the normal, the animal was thrown into convulsions, which were relieved as soon as the normal quantity of sugar was allowed to get back into the circulation.

However, as pointed out by Dr. C. Legiardi-Laura, the results obtained by Banting, which have given rise to so much excitement, are practically the same as the results obtained by Minikowski, Lanceraux, Hedon, Zuelzer, Dohm and Marxer, who, as far back as 1898, and more particularly in 1908, began working with the pancreas and extracts of pancreas for the purpose of diminishing the quantity of sugar and acetone bodies found in the blood and urine of all diabetics.

Legiardi-Laura protests with emphasis that there is fundamentally no new fact arising from the Canadian experiments, and as pointed out by no less an authority than Joslin in the *Journal of the American Medical Association*, insulin not only does not cure diabetes, but the whole matter of diabetes treatment is still an open one.

All the commentators admit that even though the preparation of an alcoholic pancreatic extract called insulin, as produced by Banting and his co-workers, leaves the problem of diabetes precisely where it was brought when Dr. Banting was still a boy in knickers, the product itself is of great value in advanced and hopeless cases of diabetes, particularly in coma and approaching death, although great injury can be brought about by its use in mild cases, particularly where there is failure to hold the diet in absolute check.

One thing is certain. Experiments with insulin not only do not justify the ridiculous claims which have been made in the newspapers for it, but they have been conducted in the dark and against complications of so delicate and baffling a nature that only years of research and clinical experience can hope to justify even in part the hysteria of enthusiasm which has already gone over the dam. And much more will be required to atone for the evils that have followed the unwarranted indulgence in forbidden or restricted foods to which the insulin claims have tragically led.

All physiologists are now agreed that the endocrine system of glands, the adrenals, pituitary, thyroid, pancreas, etc., comprise a system that works as a unit, stimulating and antagonizing each other in the mysterious operations that maintain what is called physiological equilibrium.

When one gland backs up they don't know definitely how the others are affected. They do know, in a gross way,

that when adrenalin, an extract of the adrenal glands, is injected into the blood, the percentage of sugar is increased. When this injection is followed by an extract of the pancreas, which might be called pancreatin, interchangeably with insulin, the percentage of blood sugar is diminished. When more adrenalin is injected up again goes the sugar percentage.

But the thyroid and the pituitary glands also exert just as extraordinary an influence upon the sugar phenomenon, and there is much evidence to support the belief that they actually control the pancreas. The injection of a serum antagonistic to the pituitary gland, and seemingly having nothing at all to do with the pancreas, diminishes the quantity of sugar in the blood of diabetic patients.

So comes the theory that since the pancreas furnishes a substance which helps to make sugar ready for assimilation into the body cells, where it is burned as fuel in the production of heat and energy, and since an excess dose of this substance has been shown to be exceedingly dangerous, as proved by the shocks that follow its injection, and furthermore since this excess in health is prevented by the presence in the blood of antagonistic or compensatory substances provided by the thyroid and the pituitary, it follows that the thyroid and the pituitary are as much concerned in diabetes as the pancreas itself, and will have to be treated if a cure of the disease is ever to be hoped for.

There is evidence to support the conviction set forth by Legiardi-Laura that the thyroid controls the sugar intake during infancy, and the pituitary in adult life. Certainly the injection of an excess of pituitary extract sets up a glycosuria which is the beginning of diabetes. This phenomenon cannot be reconciled with any theory that focuses solely upon the pancreas.

Not until all the glands are understood far more clearly in their mysterious relations to each other than they are at present can any real diabetic cure be looked for. Overstress of the importance of the pancreas does not justify the kind of neglect, indifference and disinterest toward the other glands, which Banting himself received from his fellow-physicians at New Haven, Conn., in 1921.

Entirely apart from the sensational publicity given to the alleged curative properties of insulin, and entirely apart from the unquestionable value of the product when judiciously and skillfully used, in highly advanced and extreme cases of diabetes, the whole subject for those interested in food and strength is crammed with interest of tremendous significance.

In order to use starches the body has to convert them into sugars. In diabetes the body loses all control of its starches and sugars, which begin promptly to

act as poisons. Even in health the quantity of sugar which the body can utilize is limited, although the human family is urged to eat more sugar and still more sugar on the ground that it provides the animal organism with heat.

Foods in themselves are neither heating nor cooling. No food has the power of raising the temperature of the body to a point higher than the normal constant, 98.6 degrees Fahrenheit. No food is cooling in the sense that it can reduce the temperature of the body to a point lower than this same normal constant. No food is strengthening except insofar as the healthy body maintains its capacity to convert it into simpler substances and to use them in the repair work made necessary by the continuous breaking down of the used muscle.

Sugars become heat producers only when the body's mechanism of "heat control" begins to wear out. The result of such disturbance brought about in acute infections or wasting diseases is fever. In fever the body literally burns up. Not only are the sugars which it consumes burned, but its very tissues are burned. The warmth so necessary to life is produced by a slow form of oxidation supported by the good fuel in the circulation.

In breathing we take large quantities of oxygen from the air through the lungs, provided the hemoglobin or iron-containing substance of the blood is present in normal proportions. Hemoglobin carries oxygen to the tissues, where it is needed, and its associated chemicals carry the waste product, carbon dioxide, off. The slow evolution of heat which accompanies this process is described as the "body temperature."

In disease the oxidation or burning process frequently proceeds faster than in health. So delicately adjusted is this burning process that a slight variation of four or five degrees either way is often sufficient to cause death.

It has been conclusively established that the circulating blood in health cannot carry for the support of this burning process any sugar in excess of one-tenth of one per cent. of the total volume of blood. To get more than this limited quantity of sugar into the circulation the organs of control must first break down.

The pancreas has been regarded by the diabetes specialists as the offending organ, but as suggested above, the whole gland system interrelated in a circle, is involved. Certainly the body cannot utilize more sugar than the fixed maximum tolerated by nature, for which reason the excess sugars and starches which must be converted into sugars before they can be assimilated and which are now being consumed in America, constitute one of our biggest health and strength problems.

Yet always we are urged to consume more starchy white bread and more refined sugar, not as is quite apparent for the good of our health, but for the

benefit of the milling, baking and sugar industries.

Let us assume that it is indeed the pancreas which in health sets up a barrier against the invasion of the blood circulation by larger quantities of sugar than the one-tenth of one per cent. which the blood can take care of.

Cramming ourselves with sugar and refined starch in quantities never before consumed by any nation in the history of the world, we are literally overloading not only the pancreas, but the thyroid and their associated glands, as well as liver, kidneys, lungs and skin.

How long it takes for these glands and organs, taxed beyond their strength, to completely break down we do not know. Science has quite well proved that in diseased conditions in which the pancreas is involved, although they say little concerning the cause of the disease, all excess sugar is thrown off unchanged and unused.

Why, then, overemphasize the importance of a pancreatic extract useful to the victims of sugar and starch excess, after they have been smashed by ignorance or neglect, and why ignore even the necessity of warning those who are destined to be victims against what is very probably the first cause of a disease which continues to increase with extraordinary rapidity among all white bread and sugar eaters?

No living animal has ever been provided by nature with a food supply of refined, concentrated sugars, yet seeking strength and professing to be deeply interested in the foods underlying strength, we go on consuming millions of tons of candies, confections, syrups, and refined sweets.

The inevitable result must be a gradual breaking down of the body's ability to make use not only of refined and concentrated sugar, but of any kind of sugar, and it is not astonishing that under the terrific strain the organs of control are eventually broken down, or that in susceptible individuals many diseases originating in sugar and starch abuses are permitted to smash their way through the weakened defense to invade the body.

Prophylaxis is far more important than cure, and it seems to the writer to be even nobler to save ten thousand from diabetes than to be helpful to one advanced victim of the disease. The latter purpose is well worthy the life work of any scientist, but the former seems to be even more worthy of the life work of scores of scientists. Why, then, is nothing said or done on the ever-pressing subject of prevention?

When well, we don't think. When sick, we think, but we think too late. Insulin is designed for the last lap of discomfort and misery. The sensationist is not interested in the preceding laps. Gold medals are not pinned on calm endeavor or benevolent prophylaxis. The fate of the individual is up to himself, but while wondering what the future may or may not have in store for him, he continues to think of health and strength. It is high time to think of the subject of food and nutrition, which underlies both.



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Statement of the Ownership, Management, Circulation, etc., required by the Act of Congress of August 24, 1912, of Strength, published monthly at Philadelphia for October 1, 1923.

State of Pennsylvania, County of Philadelphia. Before me, a notary public in and for the State and county aforesaid, personally appeared D. G. Redmond, who, having been duly sworn according to law, deposes and says he is the owner of Strength and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication, for the date shown in the above caption required by the Act of August 24, 1912, embodied in section 143, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor and business manager are: Publisher, D. G. Redmond, 301 Diamond St., Philadelphia, Pa. Editor, Carl Easton Williams, 104 Fifth Ave., New York, N. Y.

2. That the owners are: (Give names and addresses of individual owners, or if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent. or more of the total amount of stock.) D. G. Redmond, 301 Diamond St.

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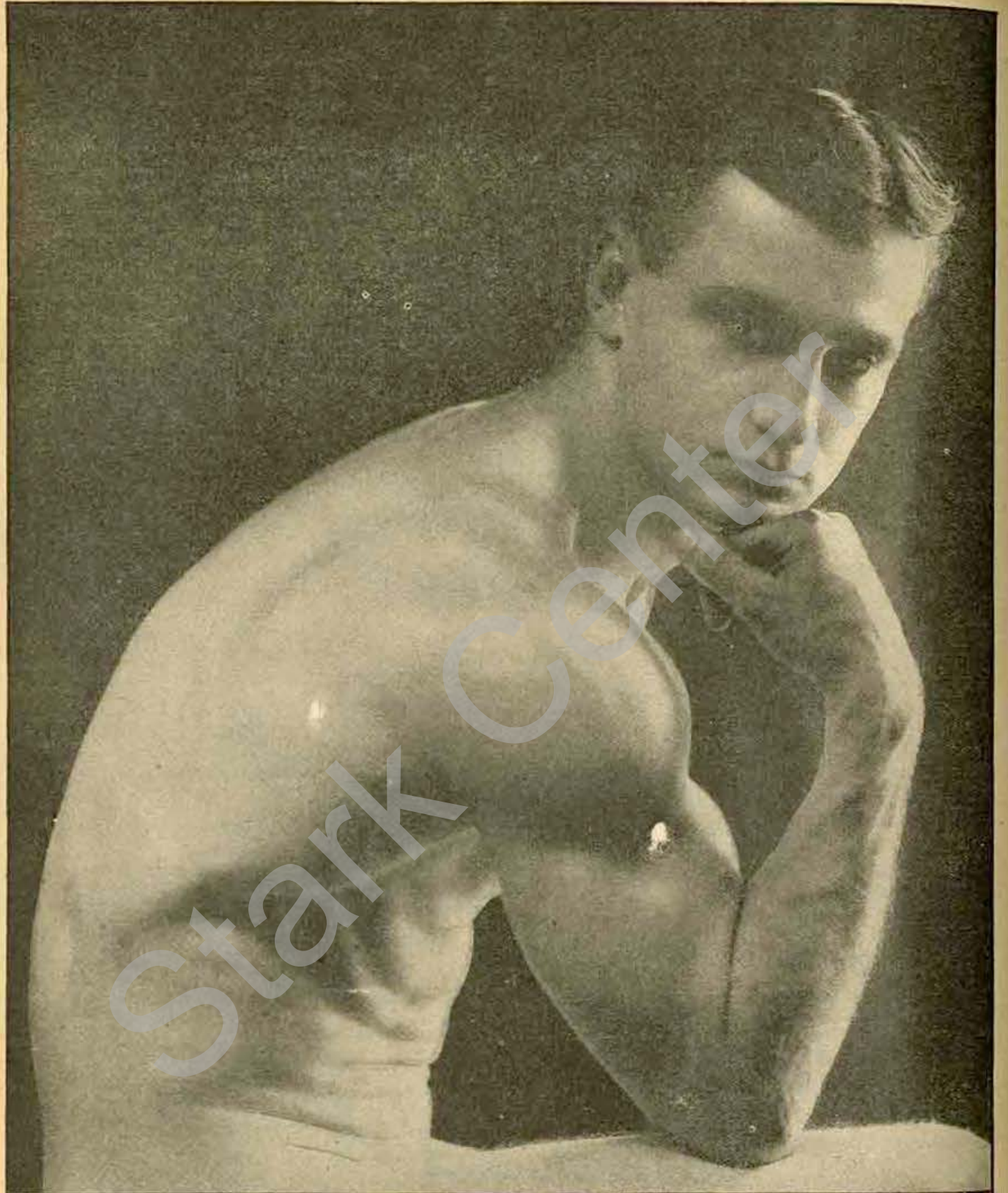
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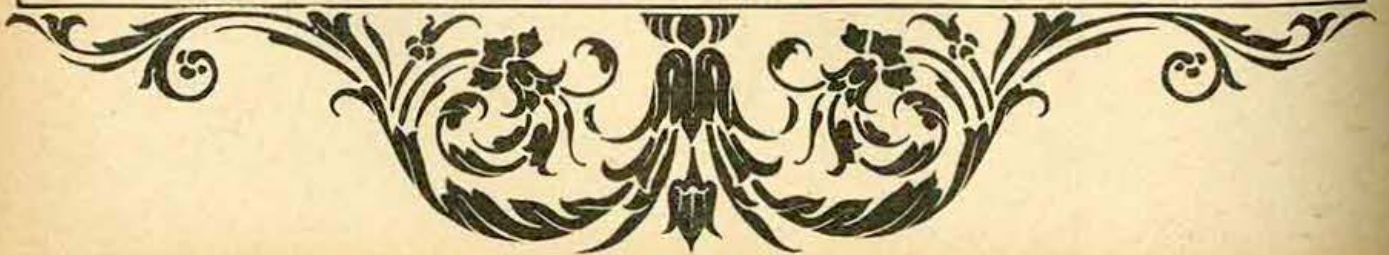
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This popularity would be brought about by the harvest you would now be reaping of *better health*; an overflow of *pep* and *endurance*; *strength* that would make you a leader even among real men; a *physique* that would make your friends *worship* you and your enemies *respect* you; *joints and muscles* that would be so supple your body would possess the greatest possible agility. And beside these you would have learned in those three short months more about your body and its needs; more about exercise and physical culture in general than you ever have in any past six months or will in the same length of time in the future.

MANY MEN HAVE ALREADY SEEN

that my methods get to the bottom of *your* case and then get you to the top of physical perfection. These men have enrolled with me *and they have not been disappointed*, either in their results, my course, or my personal interest in their physical welfare.

The number of my pupils is very rapidly increasing which shows that more are realizing the value of absolute personal help from their instructor. But still I have not yet seen *your name* among those who are inquiring into my methods. This is probably because you failed to know that where your instructor is heart and soul with his pupil, and *that* pupil eager to make big physical gains, there can be no failure.

YOU CAN'T MAKE ME BELIEVE

that you do not want the large, muscular calves and thighs that will possess the strength to carry you with ease for years. Did you ever stop to consider that, generally speaking, a person's legs give out first? And do you know that many Physical Culture courses either neglect the legs entirely, or give exercise for them which are only strenuous enough for the arms? The legs are powerful compared with the arms, and therefore should be dealt with accordingly. I do not specialize on the legs any more than I do on the back, waist, shoulders and arms, but I do see that they get the more strenuous exercises to perform.

HOW WOULD A 15-INCH UPPER ARM LOOK

in place of that frail one you now possess? How would it look as good solid muscle instead of flabby fat? You can imagine how it would look, with other measurements in proportion, because you surely know that a 15-inch upper-arm is *some arm*. Yes, you can *imagine* how it would look, but you can never put it on there with imagination. So satisfy yourself that you must "make a break," "take the step,"—anything for a start. That is it—get started. But just as important as starting—is the matter of starting *right*.

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and you end right when you finish my course. The title of my *Booklet* is, "*The Royal Road to Health and Strength*." It has sixty-four pages which are given to many poses of myself and my pupils. *It also gives a thorough explanation of my methods as well as of muscle control feats, tumbling, hand-balancing, and other valuable information.* You receive all this for 10c (stamps or coin) and never in the history of physical culture was there put out a Booklet worth to the eye and mind, so many times its cost as this one is. Get this Booklet. No other dime you ever spent brought you the great value this Booklet does. Don't address me as "Gentlemen" when requesting this Booklet for our correspondence is positively a personal matter between you and me only.

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STUDIO A-10

What Is the FIRST Question the Doctor Asks?

Doctors know that 90% of all human ills are due to constipation. The tragic thing is that few people know when they really are constipated!

LESS than 10% of the cases examined by Dr. H. T. Turner, eminent specialist, were found to be free from the insidious ravages of constipation. Like a thief in the dark it attacks its victims, robbing them of brain energy, physical strength, and the vitality of life, itself.

If you could only recognize this menace in time; if you could only see the terrible results of its neglect—but read this experience of Doctor Turner's. It is not at all an exceptional case, but, as he himself says, "Out of two hundred and eighty-four cases (representing nearly all the diseases known to our climate) two hundred and fifty-six were more or less as this one described."

A Typical Case

"I opened the Colon (in post-mortem examination) throughout the entire length of five feet and found it filled with faecal matter, encrusted on its walls and into the folds of the Colon, in many places as dry and hard as slate, and so completely obstructing the passage of the bowels as to throw the patient into violent colic (as his friends stated) sometimes as often as twice a month for years, and that powerful doses of physic were his only relief."

This condition, Doctor Turner further states was the cause of hemorrhoids or piles of years standing.

"—and still this man had no trouble in getting his life insured by one of the best companies in America, and was considered a strong and healthy man by his family and neighbors."

This man and many others, says Doctor Turner, had regular evacuations of the bowels each day. How could they know the deplorable condition of their intestines—the

condition that caused the doctor to say:

"As I stood there looking at the Colon, that reservoir of death, I expressed myself, as my patients do daily, in wonder that anyone can live a week, much less for years, with this cesspool of death and contagion always within him. The absorption of this deadly poison back into the circulation can but cause all the contagious diseases."

Laxatives Ineffective

It is useless to attempt to remove this encrusted matter with physics, says the doctor. Laxatives only empty the small intestines (see chart) giving temporary room to the overloaded stomach. *The Colon is left with its deadly accumulation.*

"Do you wonder, dear reader, that men and women die of premature old age, apoplexy, paralysis, dropsy, consumption, dyspepsia, so called liver complaint, or biliary derangement, Bright's disease, or any other kidney trouble? Catarrh, epilepsy, rectal disease, syphilis, rheumatism, female diseases of all kinds and names, spinal irritation, peritonitis, all kinds of skin diseases and impurity of the blood, old cancers, and lastly, all kinds of fevers of a malarial or contagious nature, all have their origin in the Colon."

There is no man or woman who can read these terrible facts without asking himself or herself, "What am I doing to protect myself?"

What answer can you give to the

question? You have seen that physics only aggravate the trouble. What then? Can you afford to let yourself slip knowingly into the conditions so graphically described by Doctor Turner?

Nature Can Help You

The prospect of a cureless disease would be disheartening indeed, but Nature is always ready to rescue her children, if properly approached. The Internal Bath is Nature's own way of cleansing the Colon as the external bath is her way of cleansing the skin.

It is the Internal Bath, properly ad-



Charles A. Tyrrell, M.D.

Co-Worker of Dr. H. T. Turner and exponent of the Internal Bath—
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