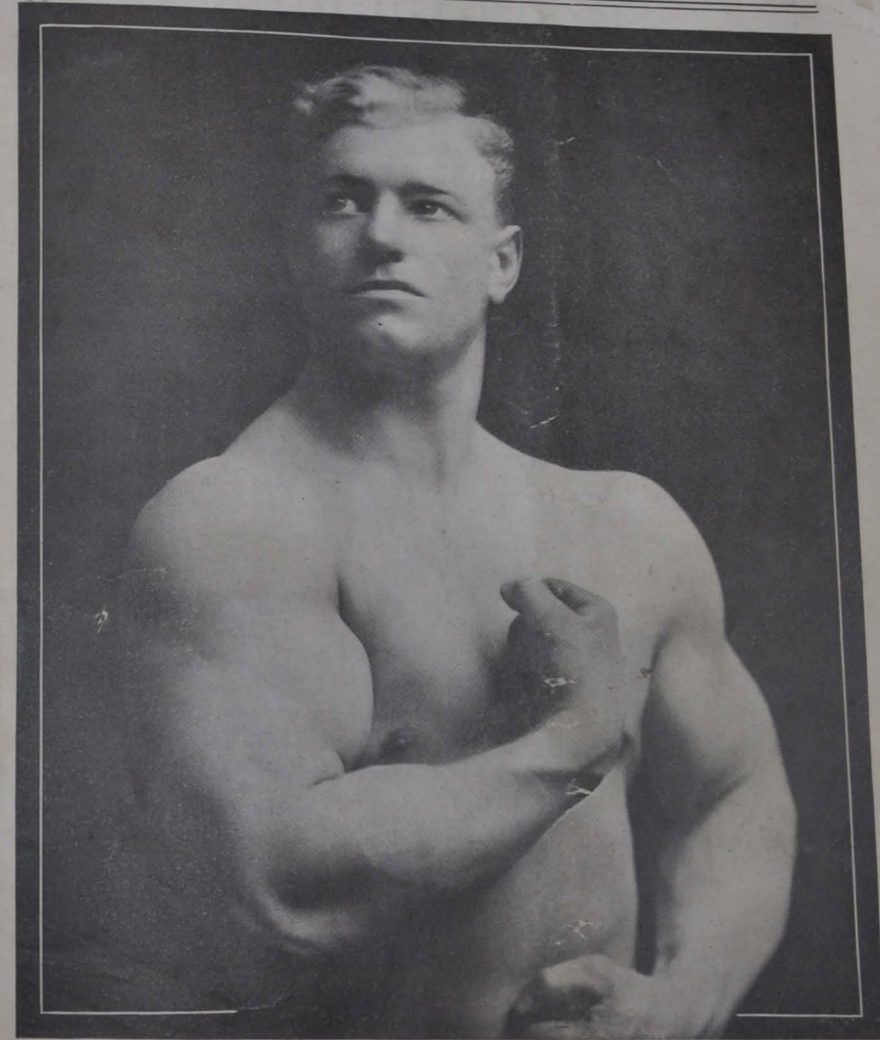


JOSEPH NORDQUEST
A novel pose showing his wonderful back muscles

Issued by
THE MILO BAR-BELL CO.
1116-1122 Olive Street
Philadelphia, Pa.

Rex J. McLean - Atty. General



JOSEPH NORDQUEST
Amateur Champion Lifter of the World
(See pages 8 to 12)

Issued by
THE MILO BAR-BELL CO.
1116-1122 Olive Street
Philadelphia, Pa.

"STRENGTH"

MAY, 1916

Body-Building

Showing that results come from the right kind of exercise not from the quantity of exercise

By ALAN CALVERT

Proprietor

THE MILO BAR-BELL COMPANY

Let us suppose, for example, that after deciding to take exercise you joined a gymnasium, and that on your first visit you went to the horizontal bar with the intention of "chinning" yourself; also suppose that the instructor rushed up to you and positively forbade such an attempt, stating that you must practice for months and months with wooden dumbbells and with pulley-weights before you would be allowed to even touch the horizontal bar. You would, in all probability, tell that instructor that he was a blanked idiot, and that you were perfectly capable of "chinning" yourself and had practiced it at intervals ever since you were a young boy. Even if the instructor pointed out the fact that when you "chin" a bar you lift the weight of the body (less the arms) that would not deter you, because experience has taught you that the arm and upper trunk muscles are fully capable of lifting or sustaining the weight of the body. (Of course, no instructor would think of acting in such a way, because "chinning the bar" is recognized as a valuable exercise for young and old—even grammar school children are made to practice it.)

BUT NOW—mark the difference: Suppose you found in a corner of the gymnasium a dumbbell weighted to 40 pounds, and started to lift it. Then you would hear a howl from the instructor. He would gasp with horror and tell you that you must not even think of handling a dumbbell heavier than 5 pounds. If you asked him why it wasn't safer to employ your muscles in handling 40 pounds of iron than to handle, say, 120 pounds of flesh and blood in the same way, he would not be able to answer you. He has never handled bar-bells and dumbbells, but has been taught to believe that they are bad, and, moreover, has been taught to tell you that they are bad.

Lure the same instructor into talking of strength, and he will probably show you how *he* can "chin" himself with *one* hand, or how he can do dangerous feats on the apparatus—feats where a slight miscalculation may cause a bad fall or a serious strain. Such work, according to the instructor, is the thing to do. Ask him what particular sets of muscles are developed by fancy apparatus work, and he may (or may not) be able to tell you, but he is quite convinced of two

"STRENGTH"

3

things: either that you must join a class and do "free-hand" drills, or, if you are ambitious, you must go in for fancy work on the flying rings, or the vaulting horse, etc.

Now class-work is futile piffle; possibly it is all right for the "earnest worker" who likes to come to the gymnasium, greet his friends hilariously, get in the drill, do some ten minutes' easy movements (that must not be too hard for the weakest member of the class), and then indulge in some horse-play in the showers and dressing rooms. Lots of fun, perhaps, and it may cheer a man up, but it has about as much connection with real serious body-building as a college student's "smoker" has to do with real brain work.

Let's take the other end—the apparatus work. The well-muscled fellows do the stunts easily; long practice has given them the strength to handle their own weight. But what about the beginner, or the weak, slender party? He can hardly haul himself up once on a bar, let alone doing any intricate evolutions. The weight of his body is too much for the strength of his slender arms and legs; he makes a poor stab at the feat, amid the kindly silence of the experts. But what is the man to do? The apparatus work would be fine for him if he could *do* it, but he cannot cut off one of his legs so as to reduce his weight, and so he has to forego the work.

Give such a man (no matter how weak and small he is) an adjustable bar-bell, and then see him work. Show him the movement to develop the biceps, and explain to him that if he cannot manage 50 pounds, it is the

work of only a few seconds to make the bar-bell weigh 45 pounds or 40 pounds or 35 pounds, or any other weight that he can handle; that while a fair amount of weight is absolutely necessary to furnish the resistance which develops muscle, it is better to repeat a motion half a dozen times correctly with 40 pounds than to repeat the motion once or twice incorrectly with 55 or 60 pounds. Show that man how bar-bells and dumbbells can be adjusted to suit his own particular degree of strength—how he can build up muscle and acquire strength and development by adopting a Progressive schedule, and, above all, show him how much time and trouble he can save—and you will never get *him* back to either apparatus work or "free-hand" drills.

I firmly believe that the building of a magnificent physique was, up to a few years ago, a matter of opportunity for the few, but since I have introduced the use of bar-bells and dumbbells of the adjustable variety, magnificently built men have been appearing in all parts of the country, for nowadays practically anyone who can spare two or three hours a week for training purposes can, by using a bar-bell, develop himself in his own bedroom. The pages of this number of STRENGTH will give you some idea of what America can do in the way of producing men of physical prowess.

There is no system of training as positive in its effects as progressive work with bar-bells. The art of getting results in body-building work is governed by just the same laws as any other branch of endeavor. Persistent high-grade work will always bring the

big rewards. It is not the amount of work you do, but the *kind* of work that counts.

It is only lately that people have begun to realize that training with bar-bells and dumbbells does not mean merely pushing a heavy weight to arms' length above the head. The highest use of the bar-bell is for body-building work. Record-breaking work is incidental. Big lifts cannot be made until after the muscle is made, the frame developed, and the strength created. Give a man a dozen body-building exercises to perform, and if the course is properly laid out he will lift the bell above the head in only two or three of these exercises. The important thing is harmonious all-round development, and this means that as much attention must be given to developing the muscles on the trunk and the legs, as is given to developing the muscles on the arms and shoulders. The tremendous muscle masses of the back and legs are capable of lifting hundreds upon hundreds of pounds. What folly it is to think that one can develop these tremendous muscles to their full capacity by toying with dumbbells weighing only 1 or 2 pounds apiece, or with pulley-weights or rubber strands that furnish only a few pounds resistance!

In view of the short time required for practice, the bar-bell enthusiast has plenty of time left to spend on other forms of athletics and games. My pupils write me and ask whether it is all right for them to attend a gymnasium on the days when they are not practicing with the bar-bell. If you are fond of gymnasium work, by

all means go to the gymnasium. It will not interfere with your bar-bell practice, while, on the other hand, you will find that after you have practiced for awhile with bar-bells you will be able to do stunts in the gymnasium that no other member can equal.

I have heard of men who live an hour's walk from their place of business and, feeling that they need exercise, will walk home from work. Such a practice will keep them in the open air it is true, but it will give them neither strength nor development in any noticeable degree. Walking does little except to harden the leg muscles and keep the legs slender. Any man in similar circumstances who is anxious to build up a powerful body had much better spend 20 minutes in riding home and the other 40 minutes in vigorous exercises which will call into play and build up *every part* of the body. He will thus become much bigger and stronger, and create much more energy than he can by the practice of daily walking three or four miles.

There are thousands upon thousands of men and boys in this country who have big frames, but who are carrying only about one-third as much muscle as Nature has intended they should. The sketch on page 5 is not so much an exaggeration as you might think. I have seen almost as wonderful changes as the result of a few months' training at Progressive Dumbbell Exercise, and, mark you, training that was conducted with the one idea of developing a symmetrical body, and without the least attempt being made to do any great lifting stunts.



THE
SAME
MAN
BUT
IMPROVED
SOMEWHAT

I have always claimed that if a man wants to get results he must get off in a corner by himself and work. Your own room is just as good a place to train as anywhere else. For a busy man the best time to train is just before he turns in for the night. You

have to undress anyhow. You can regulate the amount of fresh air by opening the windows just as far as is necessary, and no more. Don't fall into the mistake of making your room so cold in winter that it is uncomfortable, otherwise you will hurry through your exercises and will not get the full benefit of them. Eugene Sandow was the first one to say that if a man exercised in a room at a comfortable temperature, he was much more apt to exercise carefully, and to take the necessary rest between the different exercises; and that when exercise was performed under pleasurable conditions, it was not apt to be neglected.



ABOVE—Nordquest Posed as "Hercules in Chains"
BELOW—The Arm that Made Ashtabula Famous

JOE NORDQUEST

AND HIS

RECORD-BREAKING LIFT

A Young American who has eclipsed the best lifts of Sandow and Louis Cyr

Athletic history has been made at my factory since I published the last number of *STRENGTH* (January). On March 31, 1916, in a public exhibition before a number of athletic experts and Strong Men (both amateur and professional), Joseph Nordquest, of Ashtabula, Ohio, lifted a 270-pound bar-bell from ground to shoulder with two hands, and then using only his left arm pushed it slowly to arm's length above his head; and in another test on May 2nd, he created a World's Amateur Record by lifting 277½ pounds in the same way.

Regular readers of this *STRENGTH* magazine will remember that about a year ago (March 20, 1915) I took a trip to Ashtabula to see this young Hercules perform, and how on that occasion he pushed 255 pounds aloft with his left arm, thus establishing both the American and World's Amateur Record for a one-arm Press, and a World's Record for a left-arm Press (amateur or professional).

Since that time I had occasionally exchanged letters with Mr. Nordquest, and knew that in the autumn of 1915 he was pressing 268 pounds almost daily in practice, but that since the first of this year he had done no training at all. However, on learning that he contemplated a trip to New York, I persuaded him to stop off at Philadelphia and try for a new record. This arrangement was made about the middle of March, and gave Nordquest only 10 days or so for training.

After his first day's practice, he wrote to me in a discouraged way saying that he had put on 10 pounds or so of flesh during his lay off, and that on his first trial he was able to lift only 235 pounds. A day or two later I got another letter—jubilant this time—announcing that in three day's work he had equalled his best previous mark, and that "he would be there" in Philadelphia when the time came.

He arrived early on March 31st. Accustomed to working at night and sleeping by day, he had omitted his customary day's sleep on the 30th, expecting to sleep that night on the train, but having picked out the roughest possible road over the Allegheny Mountains he had been unable to sleep at all, and when he arrived in Philadelphia had not had any rest in 24 hours. He soon arranged for that, and three good hours' sleep in the middle of the day made a new man of him.

The invited guests kept dropping in, all anxious to meet the champion—and finally at about 3.30 the showroom was cleared for action. To "warm up," Nordquest pressed very cleanly a heavy bar-bell, which was immediately thereafter placed on the scales, and found to weigh 238½ pounds. Two more iron plates were put on the bar, and with no rest whatever, Nordquest essayed to put them up, but failed—much to my astonishment. He then reminded me that he was accustomed to lifting outdoors on the bare ground, so we took the bell to an open yard adjoining the factory, and there, on his second trial, Nordquest, tired but game, and using every ounce of his



Joe Nordquest

strength, lifted 270 pounds to his shoulder, and then pressed it up with his left arm.

On returning to the showroom, Nordquest pulled off his jersey, and gave the spectators a display of muscular posing, including his famous "spread" of the back muscles. The connoisseurs admired, and then insisted on measuring, and found that Nordquest's flexed forearm now measured $15\frac{3}{4}$ inches—a gain of $\frac{3}{4}$ inches since I last measured him. His biceps measures a clean 17 inches.

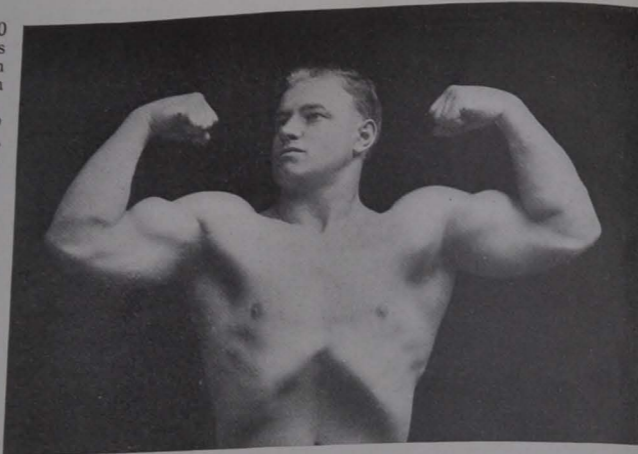
Nordquest then went on to New York, but I was so impressed with the showing he had made that I sent a big bar-bell over to him and begged him to keep up his practice while in the East. I soon heard that he was lifting in fine form, so we fixed May 2nd as the day for his attempt.

This time Joe arrived in fine fettle—bright-eyed and absolutely sure of himself. He was given a hearty welcome by the men who had seen him lift in March. Quite a representative lot of experts were present, some amateur and some professional—practically every one as strong as two ordinary men, and all of them lifters, active or retired, and several among them who had lifting records of more than 200 pounds in the one-arm press. So altogether it was an audience to put Joe upon his mettle.

His first trial was with $227\frac{1}{4}$ pounds; the second with $257\frac{1}{4}$ pounds. He rested only a couple of minutes between the lifts, both of which were accomplished with the utmost ease. He rested for a quarter of an hour and watched young Snyder press 180 pounds, and then with grim determination on his face went out to try and make history.

Twenty pounds was added to the weight of the bell, bringing the total up to $277\frac{1}{4}$ pounds. Joe requested the most absolute quiet, and walked about for a moment, visibly pulling himself together and nerving himself for a tremendous effort. You could see him concentrating every particle of power that was in him. He stood the bell upright, heaved it to the shoulder with one tremendous tug, and then grimly set himself to getting it aloft.

And then came the surprise. He steadily raised the bell to arm's length and then slowly and surely brought his body to the upright position shown in the picture on page 9. For five seconds he held it aloft, and then lowered it amid cheers and shouts of "He could have done 280 pounds"! "No! 285 pounds if he had had that much"! Perhaps that was so. Joe was primed for that particular trial. He says himself that his third lift is always his best. We would have willingly given him a 280-pound bell, but he had said to me in the morning: "Mr. Calvert, I am sure of 276 pounds, for I have been doing that daily, and I don't mind if you make it 277 pounds, or 278 pounds—but don't make it 280 pounds, for I might fail."



Showing the wonderful arms and shoulders and also showing Nordquest's power to control the diaphragm.

But think of it!—take it in if you can. Here is a young American amateur—22 years of age—who raised above his head with his LEFT hand a bar-bell.

$5\frac{1}{2}$ pounds heavier than Sandow's best and

4 pounds heavier than the best of Louis Cyr.

and Sandow was probably the best known Strong Man that ever lived; and the gigantic Louis Cyr has always been considered the strongest man ever produced on this side of the Atlantic Ocean.

And, moreover,

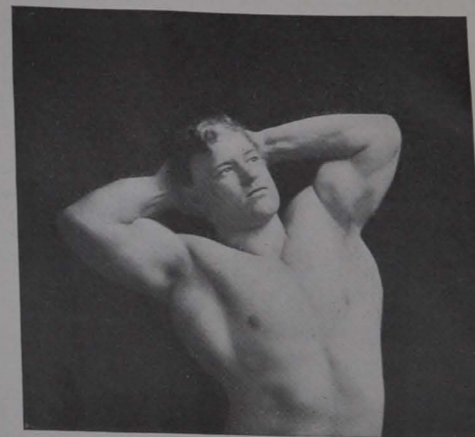
No Strong Man in history has ever lifted as heavy a dumbbell with his LEFT hand as Nordquest has.

He therefore holds:

The World's Amateur Record for a One-Arm Press ($277\frac{1}{4}$ pounds) and the World's Record (Amateur or Professional) for Left-Arm Press above the head ($277\frac{1}{4}$ pounds).

On page 11 is a photographic record of the affidavit. Everything was done in order: Scales tested with standard government weights, and a jury of experts taking oath to the genuineness of the performance before a Notary Public. Even if you do not save all this magazine, Mr. Reader, save page 11, and it will enable you to win many an argument as to whether Sandow and Louis Cyr were ever excelled by an American youth.

Nordquest, whose fame has been spreading since his lift in March, 1915, has received flattering offers from New



Showing Joe Nordquest great breadth of chest.



$277\frac{1}{4}$ pounds
World's Amateur Record

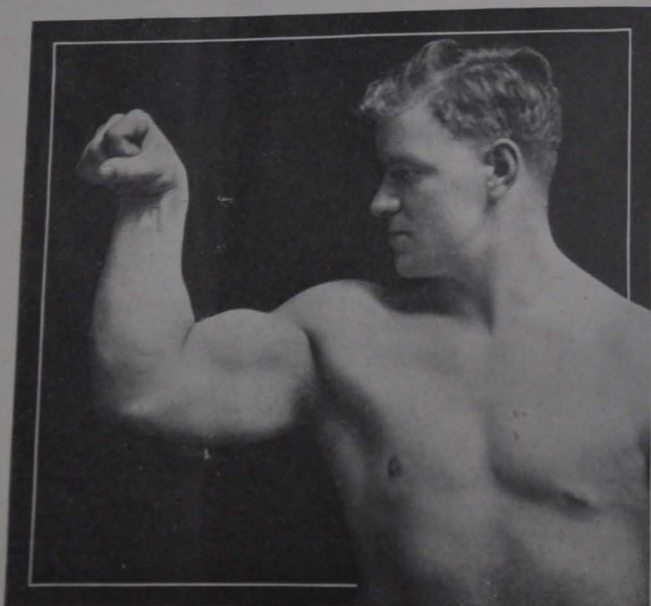
York managers. He would rather lift than eat, and will undoubtedly soon join the professional ranks. I am immensely proud that this great amateur record was made at my place. If Joe keeps on training he will unquestionably go close to 300 pounds, but I am glad that THE MILO BAR BELL COMPANY had the honor of staging this greatest of all amateur lifting records.

As Joe was wandering over the factory he found in a corner one of the old MILO shot-loading bells which I made when I first started in business. “Why,” he said, “there is one of the old MILOS. That bell is like the one you sold Arthur (his older brother). It is the first bell we ever had, and we all learned to lift with it. With that old bell I first learned to put on muscle and strength by lifting, but it certainly is crude and inconvenient alongside of the bells you put out nowadays.”

Nordquest never asks you to take his word for his records; if he tells you he can lift a certain weight, he instantly looks around for a dumbbell with which to prove his assertion. He always has his strength with him. Even if he is not in training he will press 255 or 260 pounds, while if he has been practicing you can count on 275 pounds at least, and he is the only man in America who can do that.

The day following his big lift, Nordquest gave an impromptu exhibition, which, in a spectacular way, outdid many a rehearsed act. Nordquest was sitting in my showroom chatting with Snyder, the light-weight champion, Coulter, the back lifter, and myself. In order to demonstrate a certain feat, Nordquest laid flat on his back and toyed with a 220-pound bar-bell. He first held it in his right hand, then in his left, then balanced it on the sole of his right foot, let it roll off, and caught it in his hands, and concluded by holding it steady at arm's length while the three of us sat on the handle.

Continued on page 12.



Nordquest displaying his Forearm

STATE OF PENNSYLVANIA : S.S.
COUNTY OF PHILADELPHIA :

JOSEPH NORDQUEST, being duly sworn according to law depose and say that on the second day of May, 1916, at the factory of the Milo Bar-Bell Company, located at No. 1116 Olive Street, Philadelphia County aforesaid, in the presence of the subscribing and attesting witnesses hereto, at or about five minutes past five o'clock in the afternoon, he did

Lift with two hands to shoulder and one hand (left hand) over head to erect standing position with weight at arm's length above head, by the side - or bent press method, TWO HUNDRED SEVENTY-SEVEN and ONE-HALF POUNDS (277 1/2 lbs.), full weight.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the second day of May, 1916.

Joseph Nordquest

Sworn to and subscribed before me

this second day of May, 1916.



Erwin Sturus

STATE OF PENNSYLVANIA : S.S.
COUNTY OF PHILADELPHIA :

WE THE UNDERSIGNED, and each of us, being duly sworn according to law, depose and say that we did see Joseph Nordquest, the foregoing affiant, lift the weight named in the foregoing affidavit in the manner therein set forth, on the date aforesaid.

<i>Chas. K. MacMahon</i>	<i>Linwood Bodine</i>
<i>Geo. J. Gorman</i>	<i>Anton M. Wepke</i>
<i>Ned. Burrows</i>	<i>Edw. J. Luchini</i>
<i>Robert E. Mack</i>	<i>R. L. Smith</i>
<i>O. R. Coulter</i>	<i>John Capelani</i>
<i>Alvin Calvert</i>	<i>John Lawbert</i>
	<i>A. A. Kline</i>
	<i>Robert A. Snyder Jr.</i>

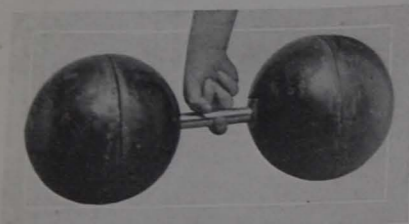
Personally appeared before me, Erwin Sturus, a Notary Public of the State of Pennsylvania, residing in the County of Philadelphia, each of the foregoing witnesses, who did in my presence subscribe hereto and swear to the truth of the matter contained in both of the foregoing affidavits.

Sworn to and subscribed before me
this second day of May, 1916.



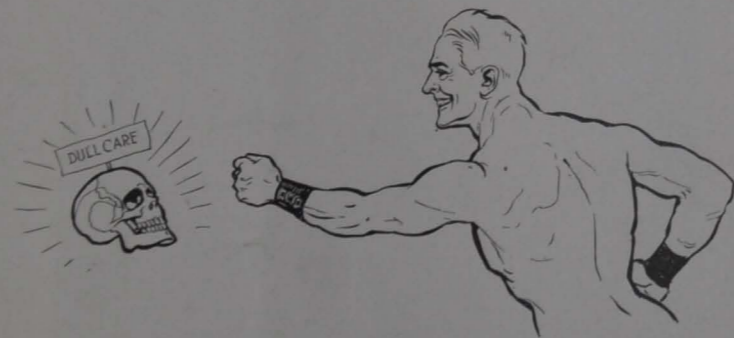
Erwin Sturus

Then I showed Nordquest how an athlete had hooked his middle finger around the handle of a 55-pound dumbbell, and slowly curled it from the ground to the shoulder. Joe thereupon curled it several times in succession in the same way. He then increased the weight of the bell to 70 pounds, with the middle finger curled it to the shoulder, pushed it aloft, and then slowly lowered his arm to the side and held the weight out for a couple of seconds. His sleeve was rolled up, exposing his arm. Never in my experience have I seen such a marvelous muscular display as when Nordquest slowly bent his arm and lifted the bell to his shoulder. If the weight had been a kettle-bell the feat would have not been so miraculous, but to hold a 70-pound dumbbell, as shown in accompanying illustration, and do stunts with it, requires almost superhuman strength.



This is the way Nordquest held the 70-pound dumb bell (not his arm)

The pictures in this article do not give you the slightest idea of how that forearm looked. It was like the arm of a giant cast in bronze. Coulter and I looked at each other in silent amazement; we are both collectors, and between us I believe that we have photographs of every Strong Man in history, but we had never seen anything like this—it was as though we had a vision of the arm of Vulcan, the armor maker of the Greek gods.



Shoulder Development The Deltoid Muscles

By Alan Calvert

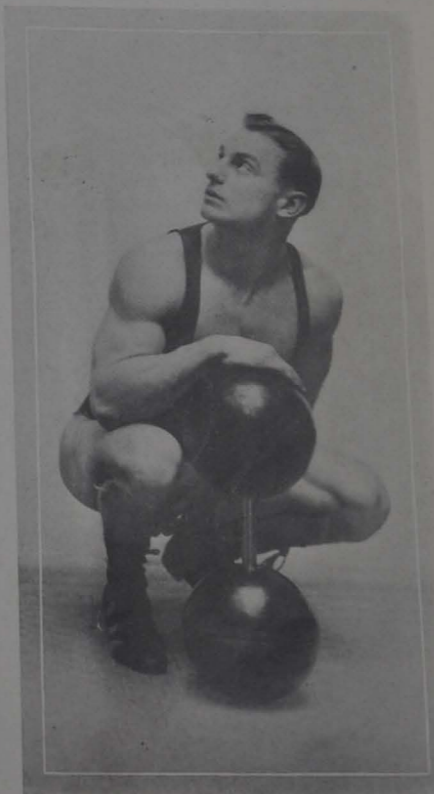
Now we come to the deltoid muscles on the points of the shoulders—those muscles which, when perfectly developed, add so much to the beauty of the arm and the breadth of the shoulders, and withal give an air of power to the whole upper body.

The deltoid muscle is named after the Greek letter delta (Δ). The duty of the deltoid muscle is to raise the arm. It is shaped like a triangle with the point down and the base upward; the base or flat side is attached to the collar-bone and shoulder-blade, while the point is fastened to the bone of the upper arm about half way between the shoulder and elbow.

Different movements of the arm bring into play different parts of the deltoid muscle. For instance, by raising your arm horizontally in front, you employ the anterior fibres of the deltoid; if you raise the arm to the side you work the lateral fibres, and if you draw the elbow to the rear you work the posterior fibres. In complicated movements like throwing and bowling and climbing, you use the whole muscle.

In the long run you will find the general public is right in many of its judgments. In a recent article, I showed how the popular test of arm strength is the ability to "muscle out" a weight; that is, to hold a weight at arm's length at the side. This feat quickly determines the strength of a man's deltoid muscle, and for a man that is shoveling, or climbing, or throwing a ball, deltoid strength is more important than biceps strength, because a principal function of the biceps is to pull the forearm closer to the upper arm; whereas the deltoid (working in conjunction with the muscles on the back and chest) controls the whole arm.

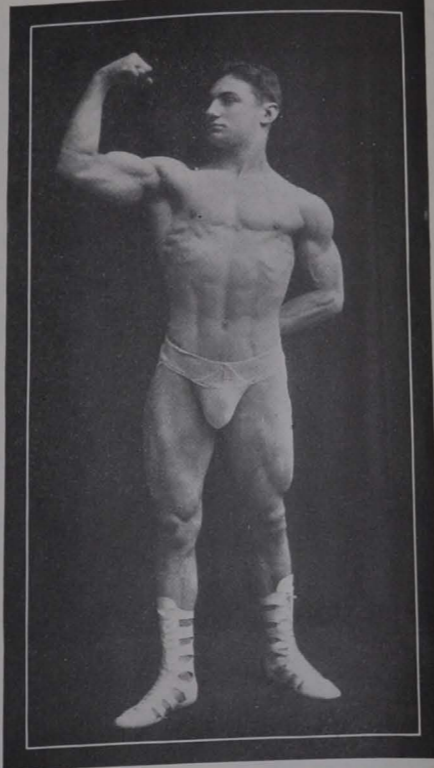
I have already quoted Arthur Saxon's statement that to a lifter deltoid strength was absolutely indispensable. As a general rule, the more a man can lift overhead, the bigger and stronger are his deltoid muscles. Shoulder strength is especially needed when a bar bell is slowly pushed aloft, as in the two-arm



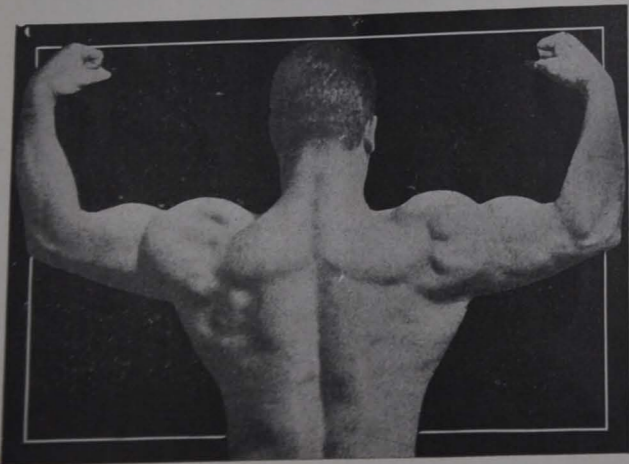
Charles MacMahon

press, or the one-arm Bent Press. Show me a man who can *press* a big weight, and I'll show you a man with big, strong deltoid muscles. Run them over in your mind: Saxon, Nordquest, Sandow, Aston, Carr—then look at their pictures and note the prominence of the deltoid muscles on the points of the shoulders.

Many physicians have advocated the theory that an individual with strong deltoid muscles always has good lungs. This, I believe, is due to the fact that the action of raising the arms aloft tends to lift the ribs and spread them apart; also it is an undeniable fact that any exercise that brings the deltoids into very active play will very quickly make you puff and blow. Personally, I am not at all sure that I agree with this theory. I believe that the muscle on the broad of the back (*latissimus*) has a much greater effect on chest and lung strength than the deltoid has—but then the shoulder and upper back muscles always work in opposition to each other, and if one is strong, the other is strong also, and a big chest almost invariably accompanies such development.



Charles MacMahon



Ewald Redam

We all know that the most common exercise for expanding the chest is that of raising the arms, and it is well known that such a famous physical culture pioneer as Dr. Felix Oswald *always* prescribed shoulder exercises for those with weak lungs.

Every physical culturist knows that a 16-inch biceps looks about three times as big as a 10-inch biceps. Similarly, a man with a broad upper back and big powerful deltoid

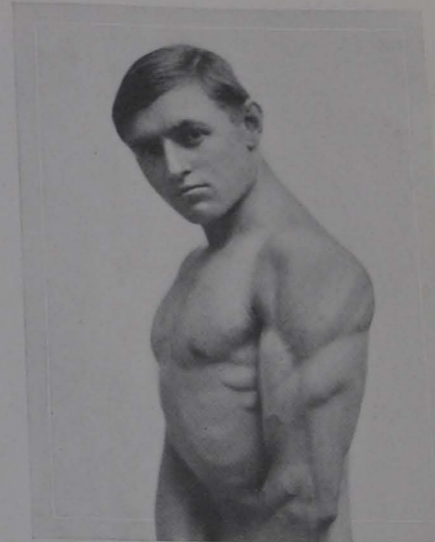
muscles on the *points* of his shoulders appears to be twice as broad as a man with a frame of equal size, but undeveloped shoulder muscles.

With this article you will find some pictures showing the remarkable shoulder development attained by noted lifters. On pages 13 and 14 there are two pictures of Charles MacMahon—one of my pupils who excels at "muscling-out" weights, and in pressing weights slowly above the head. In the pose where he is stooping down beside a dumbbell, notice the great size and evident power of the shoulder muscles. You could hardly get a better picture of the shape of the deltoid muscle than is shown on the left shoulder in the standing picture of Mr. MacMahon. Note how the swelling projection of the muscle adds to the breadth of the shoulders.

On page 14 you will find a picture of a lifter named Ewald Redam. This man won the lifting championship of Europe in the middle-weight class several times. Although of only moderate weight, himself, some of his records excel those made by the burly heavy weights, and Redam's success in lifting was due to his great muscular development. He is probably the finest artist's model of the present time. He is well developed from top to toe, but his deltoids are simply extraordinary.



Ottley Coulter



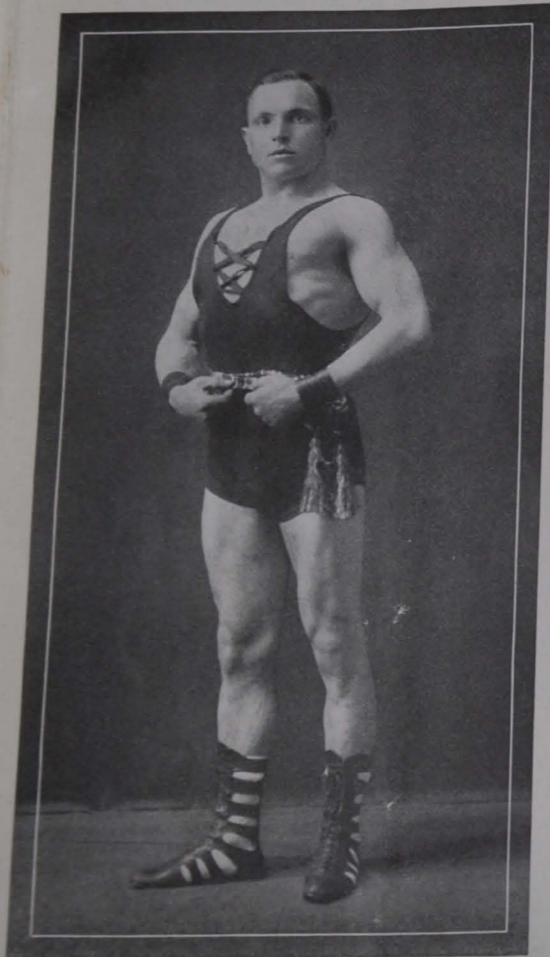
Ottley Coulter

OTTLEY COULTER

Mr. Ottley Coulter, who kindly posed for the two pictures on this page, is a professional back lifter of note. He weighs about 132 pounds stripped, and has lifted over a ton on his back. He is a tremendous enthusiast about everything connected with muscular development and weight lifting. His favorite sport is back lifting and harness lifting, but he has long experience as a lifter of bar-bells and dumbbells, as some of my old pupils may remember.

Mr. Coulter also goes in for muscle-posing, and has most remarkable control of the different muscle groups, as these pictures demonstrate. In the side view he is showing the deltoid muscle. The back view was posed to show his control of the upper back muscles, but it also clearly shows the shape and size of the deltoids.

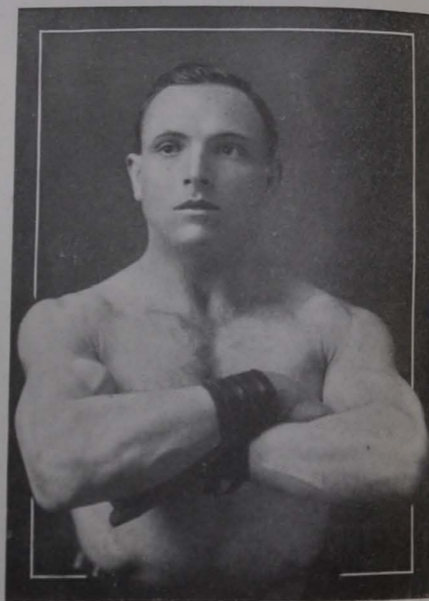
ALEX KARASICK



I am happy to be able to show my readers some recent pictures of my pupil, Alex Karasick, of San Francisco. Karasick's first pictures were shown in STRENGTH for October, 1914. Last summer, at my request, he entered in the lifting contest at the Panama Pacific Fair. He hurt himself early in the contest, but managed to win two events before he withdrew. He won very easily at holding weights at arm's length, as can be readily believed if we note the tremendous muscles on Mr. Karasick's shoulders. This great development enabled him to win at a feat which is properly supposed to be a specialty for a short-armed man, and Karasick's arms are long, as the pictures show, but his shoul-

der muscles enabled him to overcome that handicap.

I doubt whether anything finer in the way of muscular portraiture has ever been shown than the front view full-length picture on this page. I believe that the effect of combined strength and vigor comes from the tre-

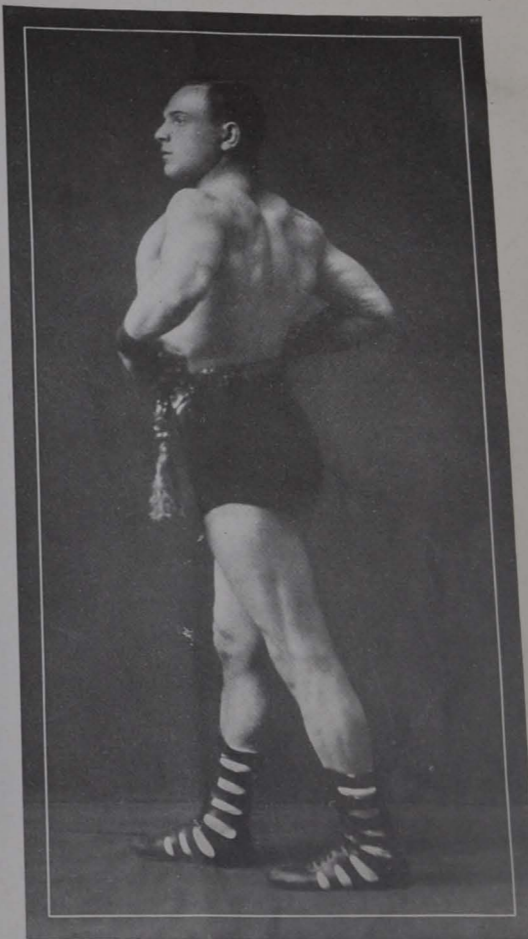


ALEX KARASICK

mendous chest and the powerful yet clean-cut lower limbs. This picture is positively inspiring. The more you look at it, the more you will find about it to admire. If there is a weak point about his figure I have yet to discover it.

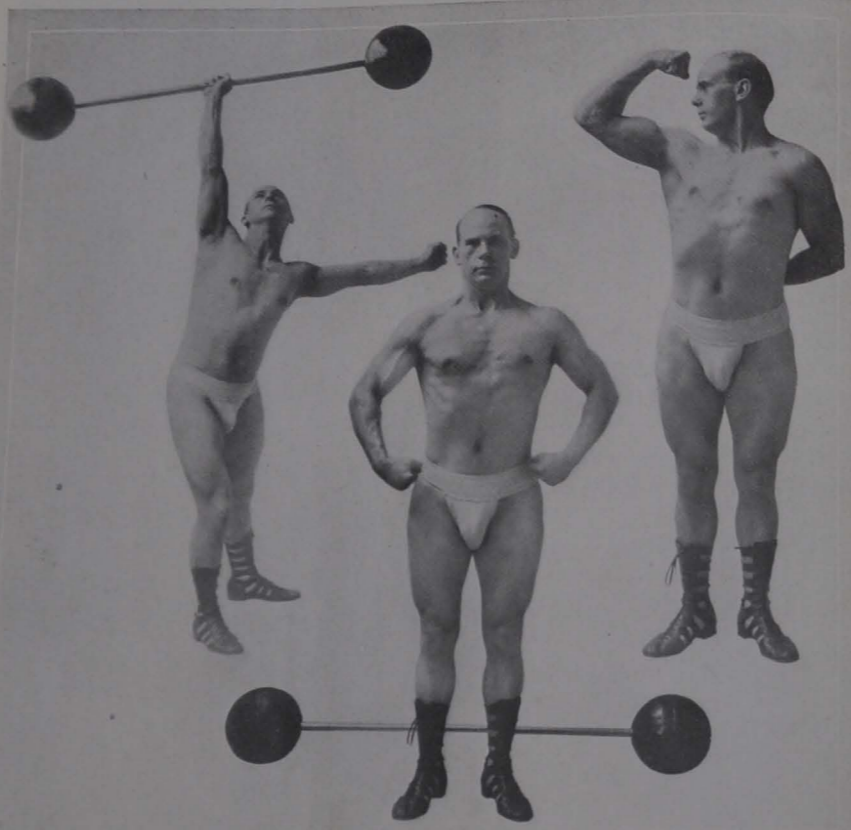
The side view full-length pose is almost as fine. What a wonderful chest the man has! On page 14 I state that any man with big deltoid muscles and big muscles on the upper back is sure to have a big, roomy chest. Karasick is about as good a proof of this statement as anyone could possibly ask.

In the small half-length picture, with arms extended, note the roundness of the arms and the great swelling muscles on the points of the shoulders; also observe that Karasick is not making any great effort to display his muscles. Apparently the ordinary athlete has to clench his teeth and make the cords stand out in his neck before he can



harden the muscles of his arms and shoulders; but a heavy dumbbell man has these muscles under such perfect control that he can flex them at will, and with little exertion. Strain is always reflected in the face, and Karasick's expression is perfectly placid.

WALTER EDDY



WALTER EDDY

Mr. Alan Calvert, Propr.,
The Milo Bar-Bell Co.,
Philadelphia, Pa.

April 16, 1916.

Dear Sir:

I am sending you some photographs to show the improvement that I have made in the eighteen months that I have been training with your bell. Previous to taking up your system I tried all kinds of methods—I had used light dumbbells, chest weights, indian clubs, and I had also practiced muscle-tensing and mental calisthenics. In 1915 I started in to train with the MILO TRIPLEX bell, and I think that I am in a position to say that there is only one method, and you teach that.

It is no exaggeration to say that I am twice as strong after training eighteen months with you, as I was after twelve years continuous practice of other indoor training methods, with plenty of football and weight-throwing in the bargain.

Some people think that they cannot improve after 25 years of age. I was nearly 28 years old when I began your course, and since then I have gained 2½ inches in chest measurement, nearly 3 inches in the girth of the thighs, and 20 pounds increased body weight—all solid muscle.

Below I give you my present measurements; and some of my lifting records. I don't claim to be a great lifter, as I have been training mostly for health and development, but my records show what regular practice of your system will do in the way of building up a man's strength.

Neck	15-½ inches
Biceps	14-½ "
Forearms	11-¾ "
Chest	40-¾ "
Waist	32 "
Thighs	23-¾ "
Calves	14-¾ "

Weight Stripped—172 pounds

Two-Arm Press	168 pounds
Two-Arm Snatch	170 "
Two-Arm Jerk	220 "
One-Arm Jerk	148 "

Yours truly,

(Signed)

WALTER EDDY,
181 Strathmore Ave.,
E. Cleveland, Ohio.

The first thing that impresses us on looking at Mr. Eddy's pictures is the great size and undoubted strength of the thighs. I have always said that wide hips are just as important to a Strong Man as wide shoulders are. Note what good records Mr. Eddy makes in the quick lifts. Few men can show a difference of 52 pounds between their Two-Arm Press record, and Two-Arm Jerk record. Mr. Eddy is evidently an adept at utilizing the full strength of those powerful legs and hips.

Mr. Eddy's case proves what I say in my editorial about the great improvement a man can make in his appearance by building up muscle and filling out the frame with which Nature has provided him. Mr. Eddy is not a particularly large-boned man, but see how he has developed his body, and he is not yet through, because unquestionably in the next few months he will increase his normal chest to 43 inches, and his upper arm to 15½ or 16 inches. Remember that when Mr. Eddy was 27 years old his normal chest measured only 37 inches, which is just about the average for a man of his height.

ALI KOTIER

As a general rule, I show in these pages pictures of home-grown products of bar-bell exercise, but you will find here some photographs of a man who did most of his training abroad. I always take delight in showing pictures of men who have developed their wonderful bodies by training with bar-bells and dumbbells, whether they happened to have been trained in Europe, or developed by my own system.

Ali Kotier, better known by the stage name of "Ali Samson," has a world-wide reputation as a Strong Man and wrestler. He was born in Tunis, Algeria. He started training with bar-bells when he was a young lad—and from early manhood he has been traveling all over the world giving exhibitions of strength and skill. He stands about five feet four inches, and when in hard training he weighs about 140 pounds. He is, therefore, in a class with Max Sick and Mogyrossy, both of whom weigh about the same as Kotier, and who have the same amazing strength.

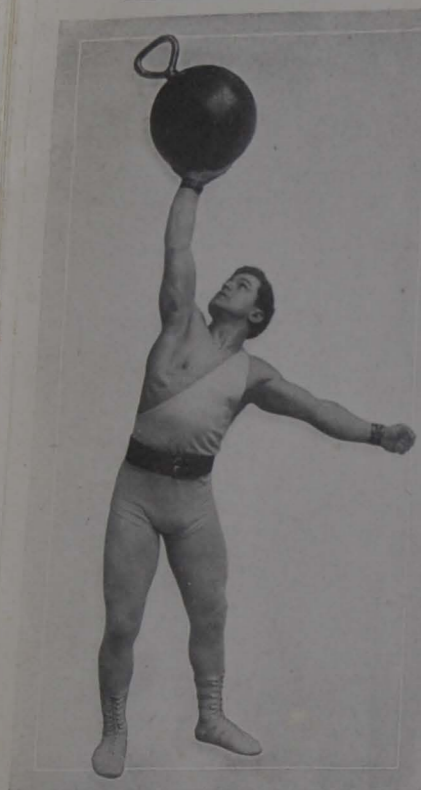


Figure 1

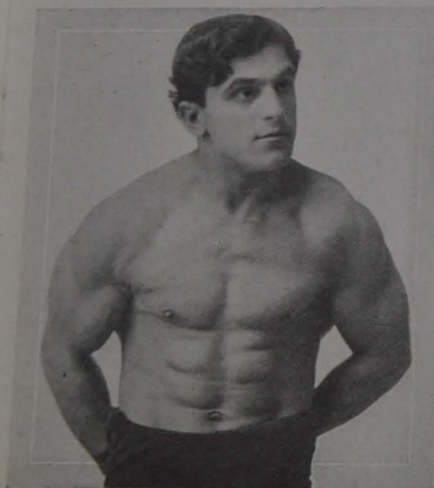


Figure 4

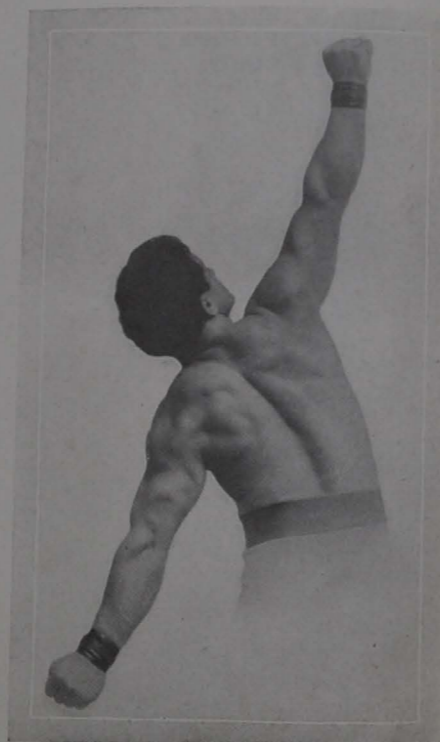


Figure 5

ALI KOTIER

Ali is an all-round lifter. He handles bar-bells, dumbbells, and kettle-bells, with equal facility. Slow lifts requiring power and strength, and quick lifts requiring agility, or juggling with weights, are all easy for him. In my showroom I have seen him lift to the shoulders with two hands, and then make a two-arm Jerk with a huge, thick-handled bar-bell weighing 230 pounds, and I believe that he has a record of 290 pounds in the same lift when using a bar-bell with a handle of the regulation size. I have seen him make an ordinary one-arm side press with 170 pounds; and he has a record of 235 pounds in the Bent Press—that is, nearly 100 pounds more than he weighs himself. As a juggler of heavy kettle-bells, he has few equals. He will throw a big kettle-bell in the air, making it turn over and over, and then catch it on the palm of his hand, as is shown in Figure No. 1. I was fortunate to get a good photograph of him in that position. After the picture had been taken he reached up with his left hand and started to lower the bell to the floor, and I was so impressed with the way his muscles stood out as he lowered the bell that I made him do it again; so that I could get the photograph, Figure No. 2.

Figure No. 3 shows Kotier in the act of curling a big dumbbell, at which he is very proficient. I have seen him sit cross-legged (tailor fashion) on the floor, and with his right hand curl to the shoulder and press slowly aloft a dumbbell weighing 100 pounds. If you think this is an easy job, try it yourself with 50 pounds.

Figures No. 4 and No. 5 will give you an idea of his muscular development, and after you read the article on the deltoid muscles, (pages No. 14 and No. 15) I want you to turn back to this article and look at Figures No. 4 and No. 5 again, to prove my statement that every fine lifter has wonderfully developed deltoid muscles.

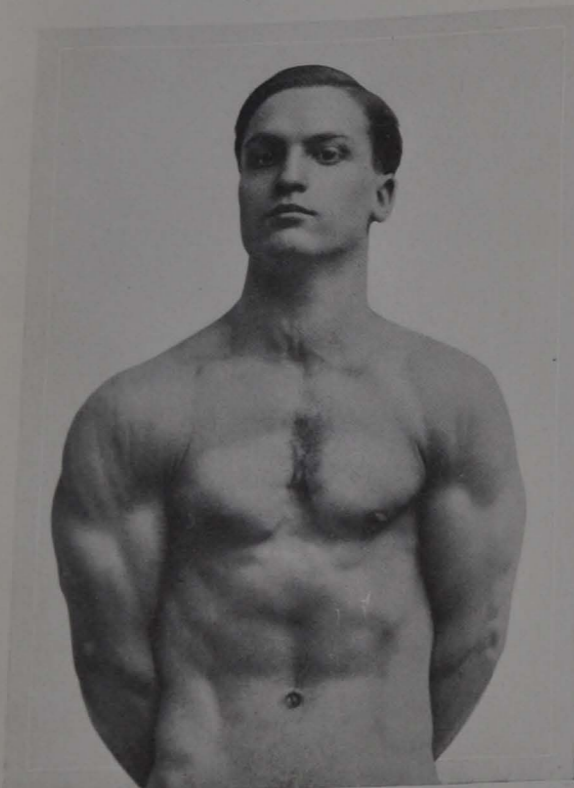


Figure 2



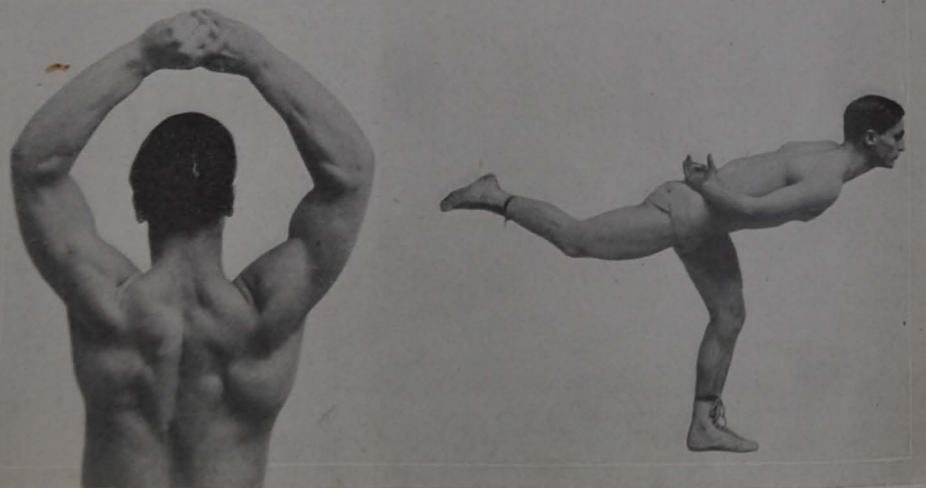
Figure 3

The Coming Champion Lifter in the Light-Weight Class



These three pictures show the remarkable development of Robert Snyder, Jr., of Hagerstown, Maryland. Although only 19 years old, and weighing but 127 pounds, young Mr. Snyder can probably out-lift any man of his weight in the country. The best record by a light man was the 183½-pound right arm Bent Press by Professor Titus of New York. Professor Titus' lift was made quite a number of years ago, and I understand that he weighed 125 pounds at the time. Snyder lifted 184 pounds in an exhibition at Hagerstown recently. A few weeks later I saw Mr. Snyder do 180 pounds easily. He has pressed as much as 195 pounds in practice, and announces that before long he will attempt to place the record for light-weights at 195 pounds or even more.

Snyder is tremendously strong for a youth of his weight. He practices all the different Standard Lifts, is good at the one-arm Snatch, and at the two-arm Press and two-arm Jerk; and as a demonstration of pure arm strength he has, while standing with unbent legs, pushed up with his right arm a bar-bell weighing 155 pounds.



The Two-Arm Press

One of the Eight Standard Lifts

By

ALAN CALVERT

In the first place, the word "Press" in lifting means that the bar-bell or dumbbell is raised in a slow and steady motion, and usually by the strength of the arms alone. When a bell is raised rapidly it is called either a "Jerk," or a "Snatch," or a "Swing," according to the style of the lift. A "push" may be half way between a quick lift and a slow lift, but a Press is always slow and steady.

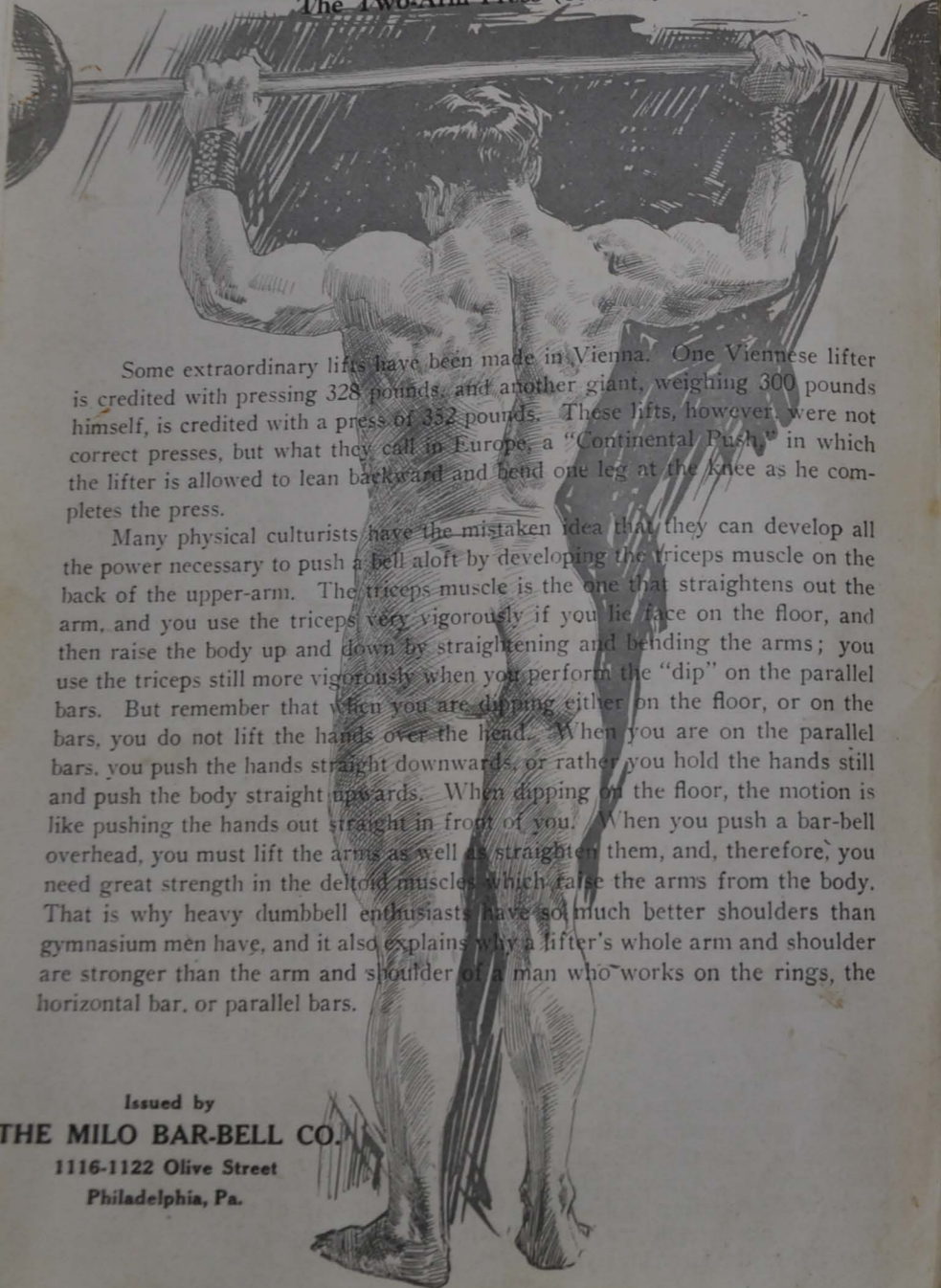
You cannot find a better test of pure strength than a Two-Arm Press with a bar-bell. Whenever a man starts to talk to me about "knack" in lifting, I give him a fairly heavy bar-bell and ask him to make a Two-Arm Press.

Here is the way a trained man makes the lift: After placing the bar-bell on the floor in front of him, he leans over, grasps the bell with both hands (knuckles front), and with a quick heave pulls the bell to his chest; then standing with legs straight, he slowly presses the bell to arm's length above his head. The novice, or inexperienced man, cannot lift a big bar-bell from the ground to his chest, because that requires skill as well as strength. Therefore, if I am testing the strength of a novice, I have him hold his hands (palms front) on a level with his shoulders, and then I place the bar-bell in his hands and tell him to go ahead and press it aloft. If the legs are held straight, nothing will send that bell up except strength, and you need the strength in the triceps of the arm, the small of the back, and particularly in the deltoid muscles on the points of the shoulders. No skill is required to press a bell aloft after you once have it at the chest, and that is why I consider the Two-Arm Press as the best strength test, especially for the beginner.

Note that in the previous description, I say *bar-bell*. That is because if a man uses a long-handled bar-bell, he can use 10 or 15 per cent. more weight than he can if he holds a heavy *dumbbell* in *each* hand. In pressing two dumbbells, the arms are apt to waver, and part of the lifter's strength is spent in keeping the bells moving together. If a bar-bell is used, the lifter wastes no strength, but uses it all in pushing the bar-bell aloft.

It is interesting to note the difference in lifting styles in different countries. In France, they make a man stand almost bolt upright while he makes a Two-Arm Press; he may lean his body back a little at the waist, but *only a little*. In Germany and Austria, they require the lifter to keep his legs straight, but they allow him to bend the body back as much as he wants at the waist. That explains why there is such a great difference between the French and German records. In France, a Two-Arm Press of 250 pounds is considered extraordinarily good, whereas, in Germany and Austria, 300 pounds is considered good. It is entirely a matter of method. If a German lifter were made to press in accordance with the French rules, he would probably do no better than the Frenchmen do. Arthur Saxon, for example, has pressed 260 pounds with two hands while standing on his heels, shoulders and back of the head touching a mirror. This literally *made* him lift in the French style. He could probably press 290 in the German style.

The Two-Arm Press (Continued)



Some extraordinary lifts have been made in Vienna. One Viennese lifter is credited with pressing 328 pounds, and another giant, weighing 300 pounds himself, is credited with a press of 352 pounds. These lifts, however, were not correct presses, but what they call in Europe, a "Continental Push," in which the lifter is allowed to lean backward and bend one leg at the knee as he completes the press.

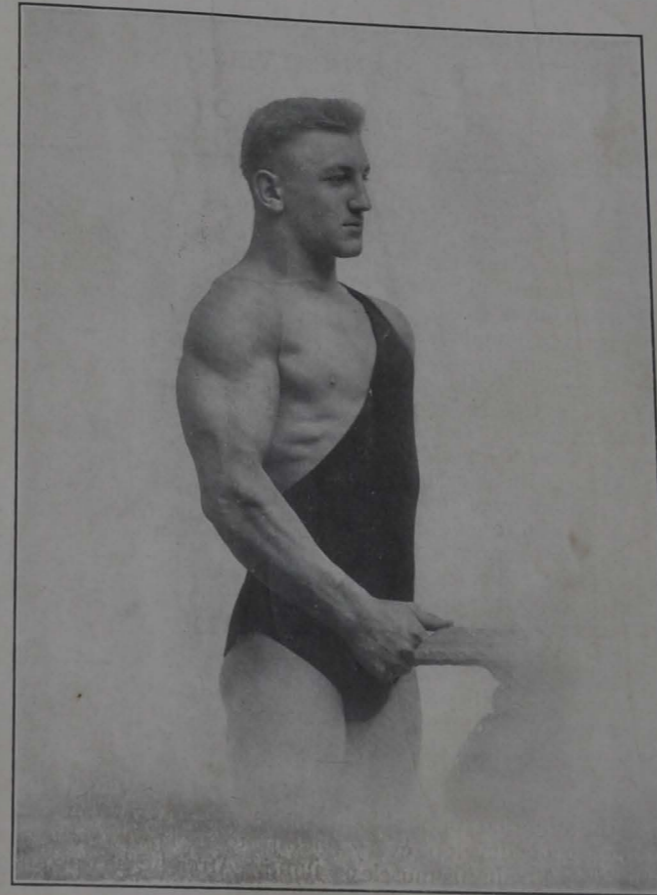
Many physical culturists have the mistaken idea that they can develop all the power necessary to push a bell aloft by developing the triceps muscle on the back of the upper-arm. The triceps muscle is the one that straightens out the arm, and you use the triceps very vigorously if you lie face on the floor, and then raise the body up and down by straightening and bending the arms; you use the triceps still more vigorously when you perform the "dip" on the parallel bars. But remember that when you are dipping either on the floor, or on the bars, you do not lift the hands over the head. When you are on the parallel bars, you push the hands straight downwards, or rather you hold the hands still and push the body straight upwards. When dipping on the floor, the motion is like pushing the hands out straight in front of you. When you push a bar-bell overhead, you must lift the arms as well as straighten them, and, therefore, you need great strength in the deltoid muscles which raise the arms from the body. That is why heavy dumbbell enthusiasts have so much better shoulders than gymnasium men have, and it also explains why a lifter's whole arm and shoulder are stronger than the arm and shoulder of a man who works on the rings, the horizontal bar, or parallel bars.

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"STRENGTH"

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HENRY SINCOSKY

(See article on pages 18 and 19)

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