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## Al Roy: Mythbreaker

For reasons which will be examined in a later article, the coaches and physical educators of the early part of this century in the United States were almost unanimous in their belief that heavy lifting would somehow “bind” the muscles of an athlete, making them stiff and slow to contract. Furthermore, narcissism, in both principle and practice, was far less acceptable in those naturalistic days than it is now. In football, for instance, it was thought almost unmanly to do too much preparation for fall practice. “Hell, fall practice was preparation,” was the way the late Bully Gilstrap, a former college player and coach, put it in an interview several years ago. “It was all we got and more than we wanted. What we wanted was to play.”<sup>1</sup>

Gilstrap died in 1989 but he was a football man nearly all his life. He came to The University of Texas as a freshman in 1920 and he was an outstanding athlete during his college career, lettering several times in basketball and track as well as in football. He returned to coach at U.T. in 1937 and remained on the staff for 20 years. In an interview at his home in Rosebud, Texas, he reported, “All we did to warm up and all [for football] was a few jumping jacks...then we’d run plays or scrimmage.” He added: “It was pretty much the same in basketball and track, too...The boys scrimmaged in basketball and they practiced their events in track. That was it. I don’t know what they done in baseball”<sup>2</sup>

As far as baseball is concerned, the words of Bibb Falk, now in his early 90’s, are instructive. Falk played at Texas for years, beginning in 1917, then went straight to the major leagues where he played for 12 seasons. He returned to Austin in 1932, served as assistant coach until 1940, then coached the Texas team until 1968.

“We did a little of what we called P.T. in the early days, but only when it rained. Other than that the boys ran and threw and played. We wanted long, loose muscles and the word back then was that lifting would tie you up. To be honest I never even heard of a ballplayer using weights. Not in college and not in the bigs. Now Hack Wilson and Babe and some of the others did a lot of lifting, all right, but it was done a glass of beer at a time. The key to baseball is power and power comes from speed and we were leery of anything that might slow us up. When I played and for most of my coaching career we always believed that if a man ran enough and threw enough he’d be strong enough.”<sup>3</sup> That this attitude prevailed in other sports as well, and at other schools than Texas, is made clear by a survey of mainstream sports and training books published during the first 60 years of this century. Almost every one either denigrated weight training

or ignored it altogether. Over two hundred such books were examined for this article, but the partial list provided should suffice to make the point.<sup>3</sup>

All too often, even well into the second half of this century, the attitude in such books concerning conditioning in sports like football was summed up by a line from a book written in 1958 by the coach of the Yale freshman squad. “The pros say that conditioning is just running, running, running.”<sup>5</sup>

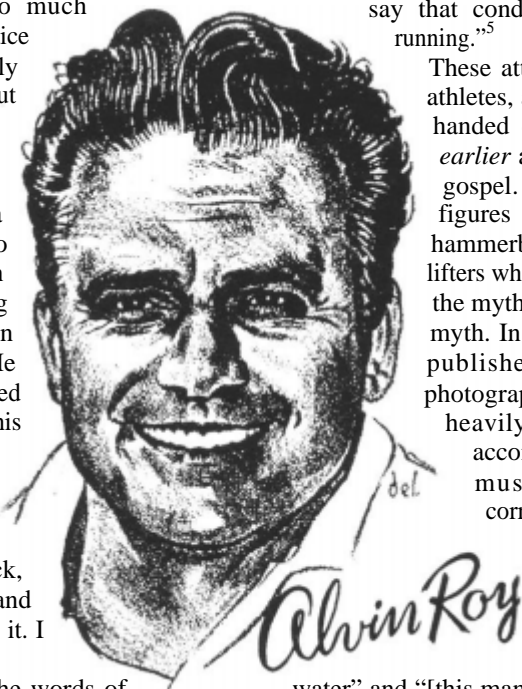
These attitudes among the leading coaches, athletes, and physical educators were simply handed down as “received wisdom” from earlier authorities, of course, and treated as gospel. Early books by such important figures as Dr. R. Tait McKenzie fell like hammerblows against the honest claims of lifters who knew from personal experience that the myth of musclebinding was only that—a myth. In 1907, for example, McKenzie first published a book which included the photograph of man who, for those days, was heavily muscled. The photograph was accompanied by this caption: “Extreme muscular development without a corresponding increase in heart and lung power. This man could not float in sea water and died prematurely.”<sup>6</sup>

This caption bears close examination, as the two statements, “This man could not float in sea water” and “[this man] died prematurely”, imply a causal relationship, though one may not have existed. Neither, for that matter, is the cause of death given.

Even Bernarr Macfadden, a champion of the muscular body, was held in the sway of the myth of muscle-binding, as evidenced by his 1912 statement that: “In taking up weight lifting, it would always be well to take some exercise for speed and flexibility to counteract the tendency to become slow...Weightlifting alone has a tendency to make the muscles slow.”<sup>7</sup>

Naturally, such early sentiments found their way into the belief system of well-respected college coaches—such as Dean Cromwell, the UCLA track coach, who wrote in 1941 that, “The athlete...should not be a glutton for muscular development...If one goes too far... he can defeat his purpose by becoming muscle-bound and consequently a tense, tied-up athlete in competition.” And again, late in the same book and speaking of shot putters, Cromwell said, “Weightlifting is not advisable. Although it develops sinew, it tends to destroy muscle elasticity.”<sup>8</sup>

Even the great Knute Rockne was not immune.



Referring to exercise apparatus for football, he wrote, "...nor do I believe in any other artificial apparatus."<sup>9</sup> It seems that all coaches feared the condition they referred to by the term "muscle-bound." But what exactly is it, this state of being "muscle-bound"?

That was the question John Capretta, a young physical education student at Ohio State, attempted to answer 60 years ago when he mailed a questionnaire to 45 leading physiologists, all of whom were asked to define the term, "muscle-bound". Capretta justified the question by pointing out that, "Physical educators today [1932] agree that we have very little, if any, scientific information upon the condition called muscle-bound...Authors of our text-books of physiology seem to have avoided the issue and have left the subject without discussion."<sup>10</sup>

Of the 45 questionnaires, 22 were returned, but only seven of those who responded ventured a definition and those seven were in considerable disagreement, coming together as a majority only through the rather obvious observation that: "The condition of muscle-bound is associated with hypertrophy." But, because the leading physiologists of the day were at odds over the definition of the term did not mean that they questioned either the reality or the harmfulness of the condition or wavered in their belief that being "muscle-bound" was primarily a product of resistance exercise, especially standard weight training. The author of the questionnaire, in fact, reports no challenges to his premise, only a general puzzlement. Nor did the next 20 years provide much in the way of clarification. As Edward Chui wrote in 1950, "Very frequently, in the classroom, on the gymnasium floor, and on the athletic field, the term 'weight training' is associated with 'muscle-boundness', a condition supposedly resulting in a general slowing down of the contraction speed of the muscular system. No scientific evidence, however, has been advanced to support these beliefs."<sup>11</sup>

Chui himself published an important study in 1950 in *The Research Quarterly* offering evidence that lifting did not cause muscleboundness.<sup>12</sup> And Chui was only the first of a number of sport scientists who began to specifically dispel the myth of musclebinding. Two others joined in a year later—Professors Peter Karpovich and William Zorbas—whose research, also published in *The Research Quarterly*, concluded that weightlifting seemed to *increase* rotary arm speed rather than decrease it.<sup>13</sup> Two other studies—one by B.M. Wilkins in 1952 and the other by J. W. Masley in 1953—supported and expanded the conclusions of Chui, Karpovich and Zorbas, arguing that weight training produced an increase in coordination, an increase in flexibility and an increase in speed of movement.<sup>14</sup> It should be stressed, however, that this ground-breaking research would have had far less effect had it not been for the continuous and constant battle waged by weightlifters themselves on behalf of the benefits to athletes of weight training. Those few hardy souls who championed weight training for athletes in the first half of this century were often laughed at and mocked for their beliefs, but they soldiered on and, in the end, they prevailed. Sometimes the victories they won were small and personal, but sometimes they were dramatic and far-reaching in their effects. One of the

most dramatic of these victories took place in Baton Rouge, Louisiana.

Alvin Roy was born in 1921 in Baton Rouge, and although he never grew very large in size, he was a man of large enthusiasms. He went through the public schools of Baton Rouge, graduating from Istrouma High in 1938. He then moved on to Louisiana State University and studied there until he joined the Army. He served in the European Theater and it was there, in 1946, that he had an experience that changed his life and, in the years that followed, the lives of many others.

What happened was that Roy was assigned by serendipity and the service to be the aide de camp for the United States weightlifting team during their stay in Paris for the first post-war world championships. Paris, of course, was still in a state of devastation after being liberated in 1945 and Bob Hoffman, the coach of the U.S. team, was worried about food and accommodations, a worry that led him to travel to the Pentagon and request help. Thus it was that when the team arrived in Paris, they were met by Captain Roy, with his jeep, his uncanny knack of procuring whatever was needed and his boundless energy. Writing the following year about this assistance, Bob Hoffman argued that "if [Captain Roy] had not devoted himself...absolutely, devotedly every minute, if we had not had his jeep, and he had not obtained cots from the hospital, rubdown oil, blankets and many other things, if he had not been with the team to help Stanczyk make weight, and help with other details, it could have represented the loss of the team championship."<sup>15</sup>

In return for all this help, which extended over the full five weeks the lifters and coaches stayed in Paris, Roy learned a secret. The secret was that the lifting of heavy weights not only did not cause a person to become slow and musclebound, it actually helped a person become faster and more flexible. Some of the Americans, primarily the perpetual public relations man, Bob Hoffman, shouted the secret at every opportune moment (and at many not so opportune moments), but most of the Americans taught by example--by the blinding speed of their leg movements as they lifted, by their ability to run and jump so well and by the tumbling and acrobatics with which they sometimes amused themselves. Roy, of course, was like most young men of that era; he believed an athlete could do nothing worse than lift weights, and he believed it for all the reasons outlined above. But one thing about Al Roy was that he always had his eyes open for the angle, for the main chance. He was no fool, and if he saw the 5'9", 210 pound John Davis do a back flip holding a 50 pound dumbbell in each hand and then do a standing broad jump of over eleven feet, or if he saw Stan Stanczyk and the other men on the team casually perform balances and stunts that were beyond all but the best gymnasts, he believed his eyes and not what he had been told growing up about the dangers of becoming muscle-bound. In short, and in the words of John Terpak, one of the Americans who won a world championship that year, Al Roy was "bitten by the barbell bug." And he never recovered.<sup>16</sup>

The infection led him, upon his return to the states, to visit his weightlifting friends, most of whom lived in York, Pennsylvania, home of Bob Hoffman's York Barbell Company.

And after Roy learned what he could from the York people and others in the gym business, he decided to return to his hometown of Baton Rouge, open a health club and make that his life's work. So he went back home to Louisiana and began to spread the gospel of weight training as the key to good health and success in sports, even though he could find few who would listen.

In 1951, after continued contact with Hoffman and Terpak and other top men in the iron game who advocated weight training for athletes, Roy made his first real effort to start a serious program of lifting in the local schools. He had already helped to train one of LSU's rare All-Americans, Piggy Barnes, who had to lie to his coaches and go off-campus to lift.<sup>17</sup> But Roy realized that he needed a whole team of some sort to really "prove" his point about weight training, and this realization finally led him to approach the two men who controlled the athletic program at his old high school alma mater, Istrouma High—Coach James and Principal Ellis Brown. The Browns were twins known to everyone, respectively, as "Big Fuzzy" and "Little Fuzzy", and they knew young Roy, and liked him. But they had deep roots in the traditions of coaching and they both subscribed so completely to the theory of musclebinding that they refused Roy's offer of help.<sup>18</sup>

That was 1951, however, three years before Istrouma suffered the embarrassment of a thrashing administered by their cross-town rival, Baton Rouge High, in the biggest game of the 1954 season. It is also important to note that by that time Roy had received a great deal of local publicity from having served as the official trainer to the U.S. weightlifting team at the Olympic Games in Helsinki.<sup>19</sup> In any case, three days after the bitter loss to Baton Rouge High, Roy sensed that the ideal time to once again approach Big Fuzzy and Little Fuzzy had come. At the meeting, he bolstered his case by telling stories of the small but growing number of top athletes in many sports who trained with weights, and stories of the test done at the Helsinki Olympics which revealed that the American lifter, Stan Stanczyk, moved with greater speed over a short distance than any athlete in any sport.<sup>20</sup> Finally, after Roy offered to personally set up and supervise the weight training program at no charge to the school, the Browns agreed to flout one of the most sacred traditions in their sport and train their boys with barbells. "Little Fuzzy" recalled that, "Al was such a salesman and he believed so much in what he was doing that we decided to take a chance. He was relentless. But let me tell you, we were worried. We knew what it could mean if we got a bunch of boys hurt or if we had a real bad season. It could mean our jobs. Some of our friends in the business told us we were crazy. But the way Al told it, it sounded good and once we decided to do it, we went all the way. We bought the weights and we told the team we believed in it and that they had to do it just like Al told them to."<sup>21</sup>

The way the team first learned of the new program, according to one who was there, was that, "one fine morning in February this big old truck pulled up alongside the gym and they started unloading all these crates filled with barbell plates, thousands of pounds of them. I mean that truck probably had

more weights on it than there were in the whole Southeast. And then Big Fuzz told us we were going to lift all Spring. And sure enough, Al Roy came out a few days later, and he kept on coming. And he really sold it hard. He made believers out of us. And course it didn't hurt that we were all so scared of the coach."<sup>22</sup>

The program Roy chose was a basic one, made up of power cleans, bench presses, rowing motions, deadlifts, dumbbell presses and squats—low repetitions and lots of sets, just like the competitive lifters trained—but it worked all the major muscle groups and he drove the boys to lift as much as they could and to always push for that extra repetition or that extra five pounds. And as boys that age in that sort of competitive weight training atmosphere are wont to do, even without steroids, they made great gains in both strength and lean body weight. And as they gained in power and size, they gained in confidence and the Browns began to breathe again.

But as this scene was being played out, a young man was watching who also played basketball and ran track and was thus exempt from the lifting, and he was watching with both concern and fascination. His name was Billy Cannon, and he had something no training program can produce—true sprinter's speed. Cannon was also unusually bright and he was aware that the prevailing wisdom of the day was that weights would slow a man down. And since he only weighed 168 pounds in the spring before his senior year, he knew his best chance for a ticket to a major college scholarship was his speed. He was to risk his future on an unproven program. But in the end he was won over by the gains his friends were making and by the salesmanship of Al Roy, who saw in Cannon a horse that could either make the program or break it.<sup>23</sup>

Cannon recalls, "Late that Spring, after the track season was over, me and about 20 of the boys on the team went over to Al's gym and I began to train. I think I ran a 9.8 that spring and years later, after we got to be good friends, Al told me he was scared to death when I walked in that door. He said he knew I could kill the program because if I came back at the end of the summer and ran a 10.2 or something, that would be it for the weights. But he brought us along at our own pace and he kept telling us that all this was going to do was make us stronger than the guy we'd be facing across the line next fall."<sup>24</sup>

What happened by the fall is that only one of the 40 boys who had trained during the spring, during the summer or both failed to gain at least nine pounds of body weight. Some gained as much as 30. Cannon, for instance, grew from 168 to 1%. And on the field they were literally unstoppable. Not only did they win all of their 13 games, but they scored 432 points in the process, more than had ever been scored in a season by a high school team in Louisiana, and four of their players made All-State. As for Cannon, he amassed a state record 229 points, averaged 10 yards per carry and was the most highly rated high school back in the United States. And in the spring of that year he ran a 9.7 100 yard dash and won the state meet in the 100, the 200 and, with virtually no training, the shot put.<sup>25</sup>

*The secret was that the lifting of heavy weights not only did not cause a person to become slow and musclebound, it actually helped a person become faster and more flexible.*

It was, as “Little Fuzzy” recalled, an “unbelievable season. We not only killed everybody we played, but we had fewer injuries than we’d ever had since I came to the school in 1935. Al made believers out of me and Big Fuzz and we not only kept the program for the football players, we added programs for our other sports and for all our junior high athletes.”<sup>26</sup>

The scene now shifts to the following Fall, and across town to the campus of Louisiana State University, the college where Cannon’s brother played, where his father worked and where Billy had always dreamed of playing.<sup>27</sup> He had, of course, been heavily recruited by Paul Dietzel, the new coach who had come to Baton Rouge in 1955. And bolstered by another summer in the gym under the proud, watchful eye of Al Roy, Cannon had an outstanding freshman year.<sup>28</sup> But there was no organized program of lifting at the college and only Cannon and the other Istrouma boys who had scholarships did much training. And in his sophomore year, even though Cannon had an excellent year individually, the team finished with a disappointing record of five and five. By then Istrouma had won another state title and Paul Dietzel was paid a visit by the same person who had visited the Big Fuzzy and Little Fuzzy two years before, when they were in a similar slough of despond—Alvin Roy.<sup>29</sup>

As Dietzel recalls, “Al came by after the season and told me he thought he could help us. He explained his ideas and how it had made such a difference at Istrouma and with Billy and all that. Of course you have to remember that Jimmy Taylor had been a senior for us that year and I knew he’d been going to Al’s Gym for a year or two, and he was as good a testimonial for the weights as you’d ever care to see. Not only was Taylor bullstrong and hard as a rock, but he had great hands, soft hands. He could catch anything. But even with all that, I have to be honest and say that I really feared the weights. Back when I was in school, we always laughed whenever we saw anyone with muscles because we’d been taught that big muscles made you slow, and what Jimmy and Billy were doing and what they were doing over at Istrouma was absolutely opposed to everything I’d always believed. Lifting was strictly verboten and we actually believed that anyone who lifted seriously couldn’t scratch the back of his head. All I can say is that after seeing what Taylor and Cannon could do and after listening to Al, I was sold.”<sup>30</sup>

Thus it was that once again a heavily laden truck rolled into Baton Rouge bearing thousands of pounds of weights, and thus it was that Al Roy came at least three days each week, during the spring semester, to the newly established weight room at LSU and put the college boys through their paces, once again placing them on a program patterned after the routines of competitive weightlifters.<sup>31</sup> Roy believed in going to the ultimate sources for his training philosophy. As he wrote some years later, “Every year in some country in the world a group of men gather for combat. They meet to determine the strongest men in the world at the...World Weightlifting Championships. I point this out for the simple reason that until football coaches from both high schools and universities in America start thinking along the line that these strength coaches do and until the football coaches start training their football players like these Weightlifters are trained, they will always be following a second-best program. These weightlifters are the strongest men in the world. It is our

belief that you must train your football players the same way.”<sup>32</sup>

In any case, Roy brought this simple concept to LSU and delivered it with his customary evangelical zeal and the players reacted in much the same way as had the players at Istrouma. They got bigger, faster and stronger. And armed with what amounted on the college level to a secret weapon, they stood *Sports Illustrated’s* prediction of a poor season on its head<sup>33</sup> and laid waste to all who faced them in the fall of 1958, winning every game, earning LSU its first national championship and boosting Paul Dietzel to Coach of the Year.<sup>34</sup>

Cannon by this time had reached a weight of 208 pounds and he was devastating on defense as well as offense. He was, of course, everyone’s All-American, winning every honor available, including the Heisman Trophy, and making several runs that are still among the ah-time replay favorites of football afficianadoes. And the following spring he ran a 9.4 hundred and won the SEC in the 100, 200 and, again, the shot put.<sup>35</sup> Blessed with great natural explosiveness and wielding like a bludgeon the strength he built with the weights, Cannon seemed at times to be a man playing with boys. He could press and snatch almost 300 pounds and deadlift 600, poundages which caused Al Roy to make the reasonable claim that Cannon was the strongest college player, regardless of size or position, in the country.<sup>36</sup>

As might be imagined, there was more than a little interest in the coaching and sportswriting communities as to how a team that was picked to finish ninth in the Southeastern Conference<sup>37</sup> managed to go undefeated. As for the sportswriters, the fact that they missed for so long what was a major story serves as an odd sort of testimony to the fact that they lacked any contextual understanding of what strength training was and what it could do. A feature story in *Sports Illustrated*, for instance, in late November of the championship season, said that “[Cannon] was unable to make the Istrouma Junior High team because he was so small...[but that]by the time [he] finished high school [he had] grown up to 195 pounds.”<sup>38</sup> Not a word was mentioned about how this size and what *Sports Illustrated* called his “rockhard...magnificent physique” had been developed.<sup>39</sup> The assumption, of course, was that he, like Topsy, “just grew”.

But among the coaches the word was out that it might be time to scrap the notion of the musclebinding effects of weight training, and everyone wanted to hear Paul Dietzel speak. “I was asked to go more places than I ever had before,” he recently recalled, “and I had to turn down lots of requests. But I went to dozens of clinics and I always explained how Al Roy sold me on the program and how I’d watched Billy Cannon get bigger and faster at the same time and that our whole team did heavy lifting. You see, at that time there were no such programs in the country on the college level but after we had that great year, lots of other schools began to change. Lots of schools did a little light lifting, but because of fear and plain old prejudice against the weights, no one was doing the heavy, major muscle group work that we did, and our success triggered what we’ve seen in the years since.”<sup>40</sup>

And although the story is too long for elaboration here, soon after the great year at LSU, Al Roy was asked by Sid Gillman, coach of the San Diego Chargers, to come out and install the first comprehensive, year round program for a pro football team.<sup>41</sup> So the little salesman went west and worked his

sweaty magic by convincing a group of untrained, natural giants to go against all they had ever been taught; and the following year, as had happened twice before, his team went all the way, and won the Super Bowl.<sup>42</sup>

<sup>1</sup>Interview with H.E. "Bully" Gilstrap, Rosebud, Texas, August 1983.

<sup>2</sup>Ibid.

<sup>3</sup>Interview with Bibb Falk, Austin Texas, August 1984.

<sup>4</sup>Following is a partial list of training guides examined for this article: Ethan Allen, *Winning Baseball* (New York: The Ronald Press Company, 1956.); George H. Allen, *Encyclopedia of Football Drills* (New York: Prentice Hall, Inc., 1954); Robert J. Antonacci and Jene Barr, *Baseball for Young Champions* (New York: McGraw Hill Book Company, Inc., 1956); Lloyd Budge, *Tennis Techniques Illustrated* (New York: The Ronald Press Company, 1945); Don Canham, *Field Techniques Illustrated* (New York: The Ronald Press Company, 1952); Maureen Connolly, *Power Tennis* (New York: A.S. Barnes and Co., 1954); Bobbie Dodd, *Bobbie Dodd on Football* (Englewood Cliffs: N.J., Prentice-Hall, Inc., 1954); Pancho Gonzalez, *Tennis* (New York: Fleet Press Corporation, 1962); Thomas J. Hamilton *Track and Field* (Annapolis: The U.S. Naval Institute, 1943); William T. "Buck" Lai, *Championship Baseball* (Englewood Cliffs, N.J.: Prentice Hall, Inc., 1954); Holger Christian Langmack, *Football Conditioning* (New York: A.S. Barnes and Co., 1926); Frank Leahy, *Notre Dame Football* (New York: Prentice-Hall, Inc., 1949); Connie Mack, *Connie Mack's Baseball Book* (New York: Alfred A. Knopf, 1950); Darrell Royal, *Darrell Royal Talks Football* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1963); William T. Tilden. *The Art of Lawn Tennis* (Garden City, New York: Garden City Publishing, 1921); William T. Tilden, *Match Play and the Spin of the Ball*, 2nd Edition (Port Washington, New York: Kennit Press, 1969); Charles (Bud) Wilkinson, *Oklahoma Split Football* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1952); and Helen Wills *Tennis* (New York: Charles Scribner's Sons, 1929).

<sup>5</sup>James "Gib" Holgate, *Fundamental Football* (New York: The Ronald Press Co., 1958). 7.

<sup>6</sup>R. Tait McKenzie, *Exercise in Education and Medicine* (Philadelphia: W.B. Saunders Co., 1924), 22.

<sup>7</sup>Bernarr MacFadden, *MacFadden's Encyclopedia of Physical Culture* (New York Physical Culture Publishing, 1912), 847.

<sup>8</sup>Dean B. Cromwell, *Championship Technique in Track and Field* (New York, McGraw-Hill Book Co., 1941), 236. Reference to shotputters is on page 260.

<sup>9</sup>Knute K. Rockne, *Couching* (NYC:Devin-Adair, 1931), 10-11.

<sup>10</sup>John Capretta, "The Condition Called Muscle-Bound." *The Journal of Health and Physical Education*, 3:2 (February, 1932): 43 and 54.

<sup>11</sup>Edward Chui, "The Effect of Systematic Weight Training on Athletic Power," *The Research Quarterly*, 21:3 (October 1950):

188.

<sup>12</sup>Ibid.

<sup>13</sup>Peter Karpovich and William Zorbas, "Rotary Arm Speed in Weight Trained Athletes," *The Research Quarterly*, (Fall, 1951): 228-230.

<sup>14</sup>B.M. Wilkins, "The Effect of Weight Training on Speed of Movement," *The Research Quarterly*, 23(October 1952): 361; and John Masley, "Weight Training in Relation to Strength, Speed and Co-ordination," *Research Quarterly*. 24(October 1953): 308

<sup>15</sup>Bob Hoffman, "Details of the World Championships," *Strength & Health* (January 1947). 11.

<sup>16</sup>Telephone interview with John Terpak, General Manager of the York Barbell Club and member of the US team at the 1946 World Championships in Weightlifting, 29 November 1984.

<sup>17</sup>Al Roy, "Weight Training for Football," *Strength & Health* (August 1947): 21-22.

<sup>18</sup>Interview with Dale Meridian, Shreveport, Louisiana, December 1985.

<sup>19</sup>John Terpak interview.

<sup>20</sup>Bob Hoffman, "Stan Stanczyk: Fastest Man in Sports," *Strength & Health* (September 1950): 47-49.

<sup>21</sup>Interview with Ellis "Fuzzy" Brown, Shreveport, Louisiana, 23 December 1984.

<sup>22</sup>Dale Meridian interview.

<sup>23</sup>Interview with Billy Cannon, Shreveport, Louisiana, December 1985. Other material on Cannon is contained in Bill William's "Barbells Build Winning Football Team," in the May, 1956 issue of *Strength & Health*, pp. 39-40

<sup>24</sup>Cannon interview.

<sup>25</sup>Williams, "Barbells," 39.

<sup>26</sup>Ellis Brown interview.

<sup>27</sup>Billy Cannon interview.

<sup>28</sup>Ibid.

<sup>29</sup>Ellis Brown interview.

<sup>30</sup>Interview with Paul Dietzel, May 1987.

<sup>31</sup>Ace Higgins, "Billy Cannon," *Strength & Health* (November 1959): 34-35.

<sup>32</sup>Alvin Roy, *Weight Training for Football*, (York, PA: York Barbell Company, 1959), 11.

<sup>33</sup>Mike Nettles, "Billy Cannon: LSU's All American," *Sports Illustrated*, 9( 17 October 1958): 67.

<sup>34</sup>Paul Dietzel interview; and Roy, "Billy Cannon: Weight Trained Footballer, 25.

<sup>35</sup>Nettles, "Billy Cannon: LSU's All-American," 66-69 and Billy Cannon interview.

<sup>36</sup>Roy, "Billy Cannon: Weight Trained Footballer," 24.

<sup>37</sup>Billy Cannon interview.

<sup>38</sup>Nettles, "Billy Cannon," 68.

<sup>39</sup>Ibid., 66-69.

<sup>40</sup>Paul Dietzel interview.

<sup>41</sup>Billy Cannon interview.

<sup>42</sup>Jim Thompson, "The Chargers Take to Weight Training," *Strength & Health* (February 1960): 34-37.