



IRON GAME HISTORY



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More On The Nature of Bodybuilding

Al Thomas' article in the December, 1994 issue of *Iron Game History* is a sad reflection of "Old Timer's" disease getting yet another of us. Things were different in the "old days"—and I too liked many things better "back then." But we have to remember that our "good old days" were times for an even older group who thought that their "old days" were better than ours. Our views of the old days were not driven by a pure love of muscle—read the article on George Jowett in the same issue. Joe Weider is surely not a worse person than D. G. Redmond in his successful drive to make a business of bodybuilding.

Thomas maintains "... the function of editors is to provide moral leadership, not merely to follow the dictates of the market analysis." That is a fine ideal, but without a magazine to edit the "moral leadership" provided doesn't go very far, so if the "market analysis" is not heeded we don't have the "moral leadership" of its editor.

Thomas maintains that muscular physiques must not, can not, be judged on "aesthetics," that our modern day bodybuilding contests are therefore doomed to failure since they are based on judges' decisions. And what about judged photography contests, and art competitions, and dance competitions? The judges' decisions based on "aesthetics" have not doomed these art forms.

Thomas contends that the modern bodybuilding fan has, in fact, "... been conditioned by culture and society." He has it backward—culture and society are caused by human nature; they are a reflection of what we think and do, not vice versa.

How many physique contests, or other such events, has Thomas ever promoted himself? If he believes that an audience of thirteen hundred fans in a city the size of New York is a "success" he has a very limited view of what constitutes a successful promotion.

Thomas believes that professional bodybuilding and professional bodybuilders somehow detract from the pure sport of amateur bodybuilding. Nonsense—do professional golfers making millions ruin golf for all of the amateurs playing on thousands of golf

courses all over the world every day? In Al's "good old days" Eugen Sandow was a very highly paid professional and he certainly did not detract from the sport for so being.

Does Thomas really believe that Bob Hoffman ran York Barbell Co. for the fun of it? Or that Joe Weider is not a bodybuilder and a devoted bodybuilding fan? Does he really believe that in the "good old days" it was all for pure fun and enjoyment and that now it is purely business? Why then after Lee Haney left his Weider contract for rival TwinLab and *Muscular Development* did he still win Weider's "Mr. Olympia?" Especially since Lee Haney is black and Thomas feels that hurts him in the "business."

Things change—and I do not like all of the changes—but the business of our sport has always been a very important part of how things "played out," from Calvert and Milo through York and Bob Hoffman and the Weiders. To believe otherwise is the result of "Old Timers" disease and it's just not true. Let's enjoy the past and let the present and future develop and change without losing sight of the fact that these will be the "good old days" pretty soon
Mike Graham, Austin, Texas



Al Thomas Responds:

What we have here is, clearly, a failure in communication. One: I make it clear, throughout, that the "old days" were far from "good" in several important moral and sociological dimensions, which were spelled out in detail. Two: I never suggest that the old days were driven by "pure love" of anything. "Purity" was in no less short supply in those days than it is today. Three: "Market analysis" kept black men off baseball diamonds (to name just one sport) and also off the covers of bodybuilding magazines until men like baseball's Branch Rickey and several right-minded muscle mag editors realized that they were, in truth, obligated to provide moral leadership. When this lesson was at last learned black baseball players became sports heroes second to none, and muscle magazines with

black bodybuilders on their covers sold as never before. This simple lesson was not learned, however, until many of the morally-confused arguments based upon “market analysis”—like similar governmental arguments based on “national security”—were seen for what they are: the last refuge of scoundrels who used such “analyses” to the furtherance of their own agendas and to the obviation of their need to act in principled fashion. Four: Mr. Graham has refrained from grappling with my arguments *per se*. He deals, instead, with a caricature of the complex arguments developed. For instance, in photo contests and art competitions (which, of course, many people find a perverse response to art), a work of art is judged, not a human being. The difference between competition of this sort and physique competition is subtle but important to those of us who love physique exhibition or display, without the competition. In physique contests, we judge, not just an artistic creation but a human being. We do, indeed, judge an artistic creation, but most importantly and devas-

tatingly, we subject to judgment a flesh and blood person, with all the potential psychological damage that attends this gradation process.

Five: The connection is not clear between the gist of Mr. Graham’s criticism of my article and his criticism here, of my proposition that man is conditioned by society and culture, a contention that seems as unavailable to sane debate as his own contention about man’s “human nature.” Even the most honest of folks have subscribed, on occasion, to both his and my proposition: sometimes (counfoundingly, but humanly) leaning to his in one situation; and to mine, in another. In such so-very-human dilemmas, it’s well to judge gently. Six: by the time I reached the sixth criticism, I realized that Mr. Graham was responding, not to my essay but to a simplified and simplistic version of it in his own mind and of his own construction. Of course and obviously, (further evidence that Mr. G. had missed totally the whole painstakingly developed point): An audience of thirteen hundred “fans” for a New York City “physique

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contest" publicized in all the traditional channels, would surely NOT be a success. But this, Mr. G. was NOT a "physique contest," and that it was *not* was the whole point! NOT a physique contest, it WAS the wholly unprecedented creation of one person: a physique EXHIBITION of a sort never before conceived, much less theatrically mounted. In addition, it was carried off with only a hint of publicity in the muscle mags or in any other traditional channels of promotion and publicity, despite the watershed character of this non-contest, non-competitive, wholly-theatrical and unprecedented example of what one writer called the "theater of beautiful physique."

After thirty-six years of school teaching, I relish and elicit criticism and the debate that attends it. My article may, indeed undoubtedly does need the sort of thoughtful criticism and debate that lead to a new and improved synthesis. My disappointment here is NOT a criticism of my closely-developed arguments, but at the fact that Mr. G. has ignored the complexity of the argument advanced, choosing to destroy air castles of his own construction, over-simplifying complex issues, and then indulges himself with a kindly-disposed homily, lest *IGH* readers succumb to the siren song of my "old timers disease" and its (supposed) bromides about the better-ness of old days. In reality, the "old game" was a creature of the Thirties and Forties, and like the eras that shaped it, it was rife with homophobia, anti-Semitism, sexism, and racism. How could it not be? All of us from those days can remember being horrified by examples of these elements in our game—or even more horrified today, that we weren't, back then. In the Thirties and Forties, these elements were manifest in ways that they no longer are, which has nothing to do with any improvements in the morality of our game or even in ourselves, and much to do with the greater sensitivity orchestrated in our lives and our game today by the socialization of our collective conscience. But lest we get too proud of ourselves, it is clear even in the Nineties, that one doesn't have to be gay to find examples of homophobia in today's game; or have to be Jewish to find lingering examples of anti-Semitism; or female to discover sexism (with the sports many "nuns," but still no priests, much less a bishop or two—or a Pope); nor does one have to be black to discover the vestiges of racism. Before implying that the vestiges of racism are no longer operative in Nineties bodybuilding, it would behoove Mr. G. to ask the game's current black champions (including the retired Lee Haney) whether they've experienced bias (in his word, "hurt") based upon their skin color. I think he will be surprised.

To demur about Sandow is hardly germane to the article's points. To be, as Sandow was, a professional "bodybuilder" in his era was totally different from the "profession" today with its thousands of devout aspirants. Indeed, it's difficult to think of the endeavor graced by Sandow as "bodybuilding" (a term he wouldn't have understood). It's even more difficult to compare the commercialism of Sandow's "endeavor" and era with that of the Nineties bodybuilder and his scene. In similar vein, Mr. G's golfing allusion clinches my observation that he missed one of the article's main points, and has taken off on another red herring. The professionalism of golf is less insidious than it is in bodybuilding. Why? The millionaire golfer makes his money for what he does (for hitting a golf ball, a sport). The bodybuilder's pathetic pittance comes to him not for what he does, not for a real sport as such, but for what his body is (in essence for what he is). There are profound moral and aesthetic differences

between the money earned in golf (the psychological vulnerability of the earner and the rationale of the sum "earned") and the money earned (such as it is) in "professional" bodybuilding (the vulnerability of the earner and the rationale of the sum "earned").

Mr. G's Hoffman question isn't. Neither is his Weider question. These are questions whose purpose is obfuscation, rather than the eliciting of information. The blessing-curse of capitalism is that every nexus is "business" [though not in every case, Mr. G's favorite modifier, "pure" (in this case) "business."] The (business) men who have been, not just OF our game, but IN our game (as business) have HAD to make a business of it, but Mr. G., there is business and then there is business.

I shall deal, now, NOT with subjective opinion, but with inarguable fact. There is a heart-breaking difference between the bodybuilding business in, let's say, the Forties and the bodybuilding business in the Nineties. Neither I nor my friends were ever turned down in a request for a photo or to have our photo taken with any of our "heroes." To have been told to pay for a photo—as kids are today—would have been unheard of, even though these men, our heroes, were mostly just plain working stiffs, like our own fathers, not men of financial substance.

As to the contests, Mr. G. may find it difficult to believe, but they were different, profoundly so, from their Nineties analogs. They were happy events for the contestants, as recalled by Grimek himself—no Pollyanna, he—at a recent Oldtimers banquet. They featured none of today's recriminations, or shameless verbal attacks of one's colleagues ("opponents"?), or blatant self promotion, or threats to "kick" one another's "butt," or forefingers thrust stupidly into the air proclaiming the possessor's first-ness (the ever-so-important Nineties "first-ness"), on and on, with seemingly no end to variations on a theme of narcissistic vulgarity. Today, kids call it "talking with their hero" when he says "hi" in response to their greeting. They call it getting advice to sit in an expensive seminar and have a shyly posed question answered in a hurried mumble.

If he still isn't convinced, I enjoin Mr. G. to take a young nephew, perhaps, to any of the big gyms, and to sit him next to one of the current "stars" resting there after a workout, and then to observe how many questions he has answered, or how much advice he is proffered, or how much smiling attention and friendly encouragement he received—in short, to observe just how much gruffly-gentle, never-to-be-forgotten Grimekian kindness he comes away with that fine afternoon. If it runs true to typical Nineties form, there will be precious little exchanged that will warm him when he hearkens back to this scene a half century later. Dozens of such kindnesses by the very best of the Forties strength and bodybuilding stars warm my heart and those of my boyhood training buddies.

Coming ultimately to terms with its embarrassing lapses, which were inheritances of its time, our dear old game has contributed to far gentler, more humane, sweeter, and more generous memories in its old men than its Nineties analog can ever hope to. And all this *despite* the old game's lack of commercial sophistication in matters muscular and *despite* its utter naivete in bodybuilding business. But, one wonders whether the warmth of its old boys nostalgia returns to them "despite" all these "innocences" or as the result of them, because as even cynical old guys must remind the defensive Mr. G.: There is business, sir, and then, there is business.

From Milo to Milo: A History of Barbells, Dumbbells, and Indian Clubs

by Jan Todd, Ph.D.

During my dissertation research on the history of women's exercise in the nineteenth century, I kept turning up references to dumbbells, barbells, and other early resistance apparatus in unexpected places. In some instances, the printed references were surprising because of the early date at which they were published. In other instances, the references surprised me because of the manner in which the implements were used. After searching unsuccessfully for an authoritative text which would allow me to place these references in proper historical perspective, I decided to attempt the following brief history of these hand-held weightlifting appliances. I do not doubt that I may be overlooking parts of this evolutionary tale, and I welcome your additions and corrections.

Halteres, Dumbbells, and Other Early Implements

Although the ancient Egyptians, the ancient Chinese, the ancient Indians, and many other early peoples practiced resistance exercise, credit has traditionally been given to the ancient Greeks for producing the forerunners of our modern weight training equipment.¹ According to Norman E. Gardiner's *Athletics of the Ancient World*, the land that produced calf-carrying Milo of Crotona—the so-called father of progressive resistance exercise—had three weighted implements by the fifth century B.C.² The diskos and javelin were thrown for distance while the hand-held alteres or halteres were used as a jumping aide and for purposive drill. “Indeed,” Gardiner wrote, “[the halteres exercises] were probably taught as a musical drill, for as we have seen, the time in these exercises was commonly given by a flute player. The jumping weights were. . . used much in the same way as dumbbells. . . for athletes are often seen swinging them in attitudes which can hardly have any connexion with jumping.”³ According to Gardiner, the writings of Antyllos described three different types of halteres exercises: “bending and straightening the arms, an exercise which strengthens the arms and shoulders;” a lunging exercise with the halteres held at arms-length in front of the torso; and

an exercise in which the trunk is alternately bent and straightened.⁴

Halteres varied greatly in appearance and composition during the era modern historians refer to as Ancient Greece. According to John Blundell's *The Muscles and Their Story*, published in 1864, the author, Pausanias, “described the halteres as of roundish or oblong figure, not perfectly round and that in using them the fingers were placed as if in the handle of a shield.” Another ancient writer, Blundell explained, “mentions the use of wax in this respect. . . . In the palaestra these were called halteres, and to make them heavier they were sprinkled with particles of lead.” Some ancient texts, Blundell reported, even applied the term *halteres* to the weapon used by David to slay the Biblical giant Goliath, which would suggest that the reference is to the object cast or thrown by the sling.⁵

In the second century A.D., the Greek physician Galen published his thoughts on the therapeutic benefits of exercise in *De Sanitate Tuenda*, a medical text which remained influential into the nineteenth century. Galen discussed using *halteres* for a variety of jumping exercises—broad jumps, high jumps, jumping from low to high places, etc.—and also described exercises which involved bearing weighted implements upon the shoulders, head and feet. According to Blundell, these “body” weights—seen in the accompanying illustrations—were called plummets and were used in exercises to systematically strengthen the body.⁶ Galen also recommended training with wooden implements; a piece of wood “with a piece of lead enclosed” should be used by gout patients, Galen wrote, until they were strong enough to use heavier implements.⁷

As they did with most aspects of Greek culture, the Romans copied the Greek methods and implements of physical training. More warlike in nature than the Greeks, Roman males trained for military fitness rather than for athletic prowess or physical beauty. Interestingly, a fourth century A.D. mosaic from the Piazza Armerina in Sicily suggests that some Roman women may have used halteres in their physical training. Although historians are not sure whether



DETAIL FROM THE “BIKINI GIRLS” MOSAIC FROM THE PIAZZA ARMERINA, VILLA ROMANA DEL CASALE. THIS MOSAIC DATES TO THE SECOND CENTURY, A.D.



THESE ILLUSTRATIONS FROM HIERONYMUS MERCURIALIS' SIXTEENTH CENTURY WORK, *DE ARTE GYMNASICA*, SHOW DUMBBELLS, HEAVY PLATES, AND PLUMMETS BEING USED FOR TRAINING IN AN ANCIENT GREEK GYMNASIUM. NOTE THE HEAVY MUSCULATURE OF THE MEN.

the mosaic commemorates a dance troupe or a group of women athletes, there can be little doubt that the bikini-clad woman in the accompanying illustration is holding a pair of dumbbells in her hands.⁸

Although systematic exercise sharply declined with the fall of the Roman empire, Galen's writings endured, and managed to keep alive the idea of resistance implements. In 1531, Sir Thomas Elyot published the *The Boke Named the Governour*, and urged his Renaissance contemporaries to look to Galen's *De Sanitate Tuenda* for exercise advice. For exercise at home, Elyot wrote, men should try walking, "labouring with poises [weights] made of lead or other metal called in latin *alteres*, lifting and throwing the heavy stone or bar, playing at tennis, and divers semblable exercises."⁹ Other Renaissance authors also made mention of resistance training. The French philosopher Rabelais [1484-1553], for instance, described fantastic feats of strength which were supposedly performed as art of the physical training of his fictional character Gargantua.¹⁰ German educator Joachim Camerarius' *Dialogues des Gymnastica*, published in 1544, also contained references to weight training.¹¹ In the time of the first Queen Elizabeth, John Northbroke wrote a treatise against

gambling and dancing that advised young men to "labor with poises of lead or other metal."¹²

In the sixteenth century, Michel Montaigne, the famous French essayist, described his father as a man of great vigor, "of an upright and well proportioned stature," who actively pursued fitness and strength through regular training. According to Montaigne, his father trained "with hollow staves. . . filled with lead which he was wont to use and exercise his arms withall, the better to enable himselfe to pitch the barre, to throw the sledge, to cast the pole, and to play at fence." Montaigne reported that his father also did exercises wearing "shoes with leaden soles," which he believed helped him leap, vault, and run more effectively.¹³

By far the most important Renaissance text related to exercise was Hieronymus Mercurialis' *De Arte Gymnastica Aput Ancientes*, which was first published in 1569 in Venice, Italy.¹⁴ Primarily a compilation of ancient ideas on medicine and exercise, this heavily illustrated text remained in print for more than a century with subsequent editions appearing in 1573, 1587, 1600, 1614 and 1672.¹⁵ *De Arte Gymnastica's* author was one of the most famous

physicians of the Renaissance. Educated at Padua, Mercurialis served as personal physician to Emperor Maximilian II and was knighted by him in 1573 following a successful cure.¹⁶ *De Arte Gymnastica* introduced to Western thought many of the training principles that continue to influence contemporary approaches to physical training. The book revived an interest in Galen and the training methods of the ancient Greeks: and its numerous illustrations—though primitively drawn by modern standards—suggest a bodily ideal which could only be possible through systematic, resistance training.¹⁷ The medical historian L. H. Joseph noted of *Gymnastica*, “In reality, all the books on gymnastics [physical training] of the next centuries are based on this standard work of Mercurialis.”¹⁸ Mercurialis advocated a variety of exercise methods and exercise devices. He discussed the advantages of walking, throwing the discus, rope climbing, and ball games. For purposive training Mercurialis recommended heavy balls filled with sand—forerunners of modern medicine balls—and halteres or dumbbells.¹⁹ One of the most important aspects of Mercurialis’ text was the shape of the handweights. No longer curved like the ancient halteres, the dumbbells pictured in Mercurialis’ text resemble two conical pyramids stuck together by their heads. Mercurialis also described the use of the “*tabula plumb*” [plummets], the heavy sheets of rock or lead described by Galen hundreds of years earlier.²⁰

By the beginning of the eighteenth century, Mercurialis’ efforts to revive the physical training methods of the ancient Greeks had begun to pay dividends. Dumbbell training was once again becoming an accepted form of physical training. The British poet and essayist, Joseph Addison, [1672-1719] wrote in his magazine, *The Spectator*, that he learned of dumbbell exercises from “a Latin treatise . . . written with great erudition,” a statement suggesting his indebtedness to the Mercurialis text. On 12 July 1711, Addison explained, “When I was some years younger than I am at present, I used to employ myself in a more laborious diversion . . . it is there called . . . the fighting with a man’s own shadow; and consists in the brandishing of two short sticks, grasped in each hand, and loaded with plugs of lead at either end. This opens the chest, exercises the limbs and gives a man all the pleasure of boxing, without the blows.”²¹ Although Addison’s description of these hand-held implements coincides with our modern understanding of what is meant by the term “dumbbell,” he does not use the word to refer to these wood and iron implements.

Instead, in the same issue of *The Spectator*, Addison described what sounds like an entirely different type of “dumbbell” training. “For my own part, when I am in town,” he wrote, “I exercise myself an hour every morning upon a dumb bell that is placed in a corner of my room, and [it] pleases me the more because it does everything I require of it in most profound silence. My landlady and

her daughters are so well acquainted with my hours of exercise, that they never come into my room to disturb me whilst I am ringing.”²² Unfortunately, exactly what Addison meant by this quotations is no longer clear. Does he refer to the swinging or “ringing” of an implement similar in appearance and function to our modern dumbbell or does he refer to an implement that more closely resembled a hand-held bell? Were early “dumbbells” actually what the word implies—bell-shaped forms cast from the molds used to make hand bells but either poured solid or made without a clapper or tongue so that they were “dumb?” Although every sport historian to whom I posed this question felt that this explanation for the term was the most likely, I have not found any historical discussion, or renderings, of people doing any sort of physical training with bell-shaped implements prior to 1830, and by that time the word “dumbbell” was in common usage. In fact, the only discussion of using bell-shaped implements for purposive training that I found appeared in an anonymously published 1831 text on women’s exercise entitled *A Course of Calisthenics for Young Ladies in Schools and Families With Some Remarks on Physical Education*. In that book, the author described using small bells to perform a rhythmic calisthenics movement called

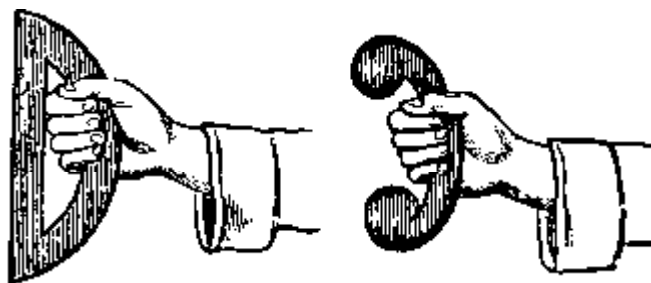
The Spanish Step in which. “bells are sometimes used, not *dumb* but *tongueless*. They are made with a wooden handle and a bell weighing about a pound. They are brought together and hit accurately so as to sound.”²³

Addison’s use of “dumb” in the second passage most likely referred to a now archaic use of the word “dumb-bell,” which *The Oxford English Dictionary* defined as “an apparatus, like that for swinging a church-bell, but

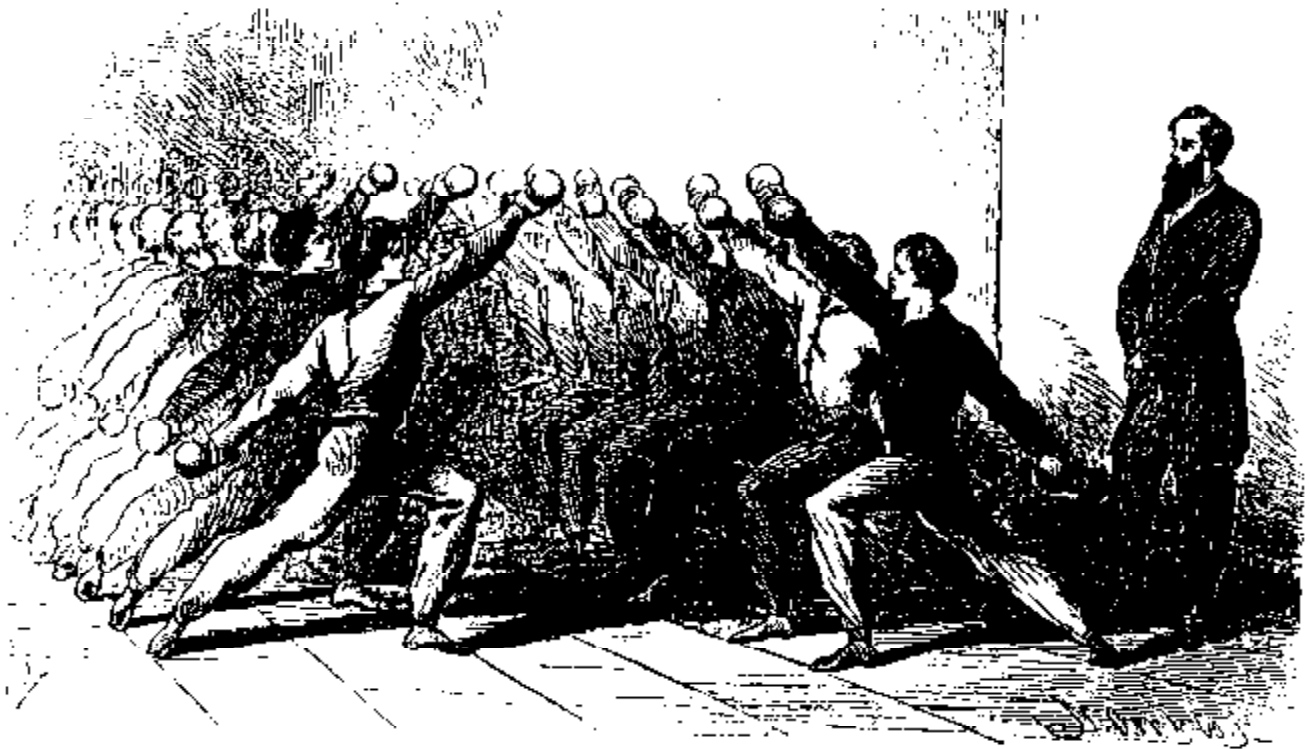
without the bell itself, and thus making

no noise, in the ‘ringing’ of which bodily exercise was taken.”²⁴ According to David Webster’s *The Iron Game*, an apparatus of this sort was used at one time at Lord Sackville’s estate at Knowle, England. “The pulley-like apparatus had four iron arms each with a leaden ball at the end, like an ordinary hand dumbbell. Although the pulley apparatus was like a church-bell and the hand weights were like hand bells, neither rang or clanged so were termed dumb bells.” Continuing, Webster added, “Pulleys were also used by those first learning bell ringing, on these occasions the clapper was tied back to produce dumb-bells.”²⁵ How common these dumbbell machines were is unknown.

These two uses of the term make it difficult to evaluate eighteenth century references to “dumbbells.” Even so, Benjamin Franklin’s surviving letters suggest that what we would recognize as dumbbell training played a significant role in his day-today life.²⁶ In a letter to his son dated 19 August 1772, Franklin explained that he favored strenuous exercises which could be done in short periods of time. The “quantum of each” type of exercise, Franklin wrote, could be judged by the amount of warmth it produced in the body. “There is



EARLY HALTERES, PRECURSORS OF
MODERN DUMBBELLS.



THROUGHOUT THE NINETEENTH CENTURY, LIGHT DUMBBELLS WERE USED FOR GROUP EXERCISE CLASSES. THIS ILLUSTRATION, FROM J. MADISON WATSON'S *HANDBOOK OF CALISTHENICS AND GYMNASTICS*, PUBLISHED IN 1864, SHOWS A GROUP OF YOUNG MEN PERFORMING A "GYMNASTIC CHARGE" UNDER THE WATCHFUL EYE OF THEIR INSTRUCTOR.

more exercise in one mile's riding on horseback than in five in a coach and more in one mile's walking on foot than in five on horseback," he explained. Dumbbell training, he told his son, was an excellent way to produce bodily warmth. "By the use of it, I have in forty swings, quickened my pulse from sixty to one hundred beats in a minute, counted by a second watch, and I suppose the warmth generally increases with quickness of pulse."²⁷ In another letter, written in 1786 when he was eighty years old, Franklin answered a friend's query about his longevity with the statement that "I live temperately, drink no wine, and use daily the exercise of the dumb-bell."²⁸ While the "forty swings" suggests a hand-held implement, there is no evidence to conclusively prove that it was so. However, John Paugh's *A Physiological, Theoretical and Practical Treatise on the Utility of Muscular Exercise for Restoring the Power of the Limbs*, published in 1728, offered more satisfying proof of the use of handweights; it described dumbbell exercises similar to our modern uses.²⁹ So does Joseph Strutt's *Sports and Pastimes of the People of England*, first published in 1802. Strutt quoted both Northbroke and the part of Addison's essay describing the hand weights in a section in *Sports and Pastimes* on dumbbell training. Strutt concluded that these types of exercises "are sometimes practiced in the present day and are called 'ringing of the dumbbells.'"³⁰

In the early nineteenth century, resistance training began to be incorporated into school physical education programs. J. C. F. GutsMuths' 1802 *Gymnastics for Youth* contained an interesting description of an implement similar to the "Weaver-stick," a device twentieth-century lifters have used to test wrist and forearm strength. GutsMuths' implement consisted of a pair of wooden staffs six-feet in length and notched at regular intervals.³¹ Each had six inch han-

dles. One to two pound weights were then suspended from the notches and moved further out the staff as wrist and shoulder strength increased. Where the Weaver-stick test required that the arm be kept straight down at the side so that the weight would be raised by flexing the wrist upward GutsMuths' devices were used in the manner of a deltoid raise. "The person lifting is to stand upright, with his breast projecting forward; hold one of the instruments in each hand, with a straight arm; raise them slowly, both together, a little above the horizontal line; and let them down again in same manner. In the repetition of this exercise, the weight is to be moved further and further [away from the body] as long as the strength of the arms will admit."³² To further increase upper body strength GutsMuths advised holding sandbags either at arms-length in front of the shoulders, with the arms out to the sides in a crucifix position, or with the arms down at the sides.³³

By 1828, Charles Beck, the German physical educator who helped introduce German gymnastics to the United States, could begin a section of dumbbell exercises in his classic *A Treatise on Gymnastics* with the confident statement, "these [hand-held dumbbells] are too well known to require a particular description."³⁴ The "gymnasticks" system Beck helped introduce to America grew from the efforts of a young German schoolteacher named Frederick Ludwig Jahn. Using GutsMuths' book and Greek athletic training as his models, Jahn began holding voluntary outdoor exercise classes in approximately 1809 near his school in Halle. From his early efforts came German gymnastics or *Turnen*, an exercise system which, from its outset, incorporated forms of resistance training. Beck's book, which was largely responsible for introducing the German system to America included directions for seventeen dumbbell exercises, a descrip-

tion of the same notched stick with weights and sand-bag exercises suggested by GutsMuths, and two new innovations—an adjustable weight “dynamometron” and the lifting of a “beam” loaded with weights. Beck described the latter apparatus as a heavy beam, like a balance-beam, to which was attached a ring-handle. The beam was then placed on a stand approximately three feet high, the ring held in one hand, “the arm being stretched, and held, whilst the beam is removed from its point of gravity or loaded with weights.”³⁵ It is not clear from this description whether Beck intended the lifter to hold the beam “stretched” overhead as in a press, or, more likely, in front of the body as in a deadlift.

The “dynamometron” described by Beck consisted of a heavily built wooden box, three inches high and approximately fifteen inches square. Inside the box were partitions creating 144 one-inch squares into which identical plugs of lead could be placed to vary the weight. The four squares in the center of the box were removed to admit an eight inch handle, which was then firmly attached to the bottom of the box. Beck does not explain how to use this implement, other than to say that two dynamometrons should be used simultaneously to keep the body in balance.³⁶ Whether these implements were widely used is not known. They do appear, however, to be the first resistance appliances specially designed to incorporate the idea of variable weight.³⁷

Indian Clubs

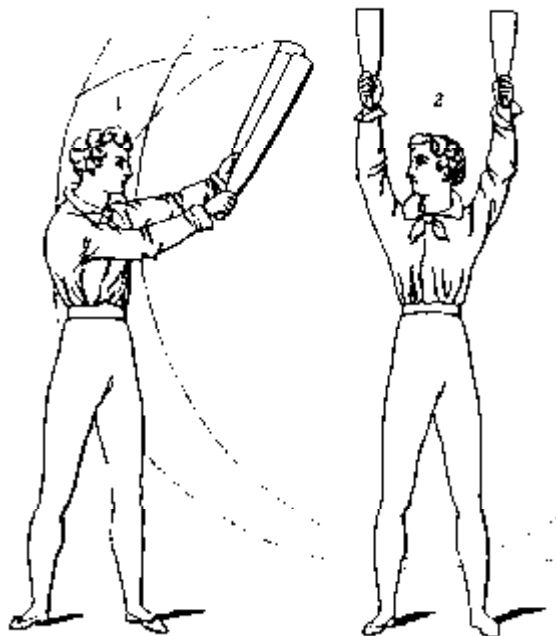
In the early nineteenth century a “new” resistance appliance, the Indian club, appeared in England America, and the Continent. In the latter part of the eighteenth century, British military officers stationed in India were struck by the fitness and muscularity of many of the Indian soldiers and policemen. Further inquiry led to the discovery that the excellent physical condition of the Indians resulted from systematic training with a variety of wooden clubs. A contemporary account by one British officer observed, “The wonderful Club exercise is one of the most effectual kinds of athletic training known anywhere. . . [It is] in common use throughout India. . . The exercise is in great repute among the native soldiery, police, and others whose caste renders them liable to emergencies where great strength of muscle is desirable.”³⁸

Naturally, many primitive cultures placed value on being able to lift and swing big clubs. In India and Persia, however, what began as a survival tactic evolved into a system of physical training which passed down through the generations and continues to be used in the late twentieth century.³⁹ Anthropologist Joseph Alter’s 1992 *The Wrestlers Body: Identity and Ideology in North India* examined this centuries-old form of physical conditioning in some detail. Alter writes, “Jon [Indian club] swinging is an art akin to wrestling. Some akharas [clubs] are devoted exclusively to jori swinging . . . In wrestling akharas, joris are swung for exercise as part of the larger regime. In jori akharas, swinging is an art in itself. From start to finish a swing is carefully choreographed.”⁴⁰ During his field work for the book, Alter witnessed a modern wrestler give a club-swinging demonstration using an eighty kilo [176 pound] jori.⁴¹ The other weighted implement Alter saw used during his time in North India is the “gada,” a “heavy round stone, weighing anywhere from ten to sixty kilograms, affixed to the end of a meter-long bamboo staff.”

The gada “is swung in the same way as the jori,” wrote Alter, “except that only one gada is swung at a time” and it is permissible to use two hands.⁴² According to Alter, “Those who swing joris and gadas on a regular basis place a higher premium on the amount of weight lifted than on the sheer number of. . . [repetitions] swung.”⁴³

When the British army decided to adopt Indian club training as part of their physical conditioning program in the early nineteenth century, they did not follow the Indians and incorporate both light-weight clubs for flexibility and quickness and heavyweight clubs for strength and muscle building. Instead, as Sim D. Kehoe observed in 1866, the British military adopted “a Calisthenic exercise with light clubs . . . combining a few of the old Swedish Cure extension movements, more calculated to open the chest, supple the figure, and give freedom to the muscles, [rather] than to develop strength or impart practical benefit greater than might be attained by numerous other light Gymnastics then extant.”⁴⁴

The person responsible for introducing Indian club exercises to Europe and America was Donald Walker, author of *British Manly Exercises* which was published in 1834. *British Manly Exercises* was perhaps the most influential book on purposive exercise published in English during the nineteenth century.⁴⁵ A compilation of information on various forms of gentlemanly exercise, Walker’s book contained both the sedate set of light-weight club exercises performed by the British army as well as instructions for more complicated and vigorous club routines. In 1835, Walker made a second contribution to the history of club training by introducing the “Indian sceptre” in his women’s exercise book, *Exercises for Ladies Calculated to Preserve and Improve Beauty*. Sceptres were merely smaller and more ornamental versions of the Indian club and weighed approximately two pounds each. Walker hyperbolically



INDIAN CLUB EXERCISES FROM DONALD WALKER’S *BRITISH MANLY EXERCISES*.

called sceptre exercises “the most useful and beautiful exercises ever introduced into physical education,” maintaining that they had “vast advantages over the dumbbells” for women.⁴⁶

Although Indian clubs were primarily used for the sorts of light-weight calisthenics movements first popularized in Walker’s two books, a “Professor Harrison” of London championed the use of heavy clubs, which he called “Mugdah’s,” in the 1850s.⁴⁷ The *Illustrated London News* for 14 August 1852 reported:

We learn that Mr. Harrison first began to use the clubs three years ago, at which time his muscular development was [not] regarded as being very great, his measurements being then:

Round the chest, 37 1/2

inches, round the upper arm 13 7/8 inches,

and round the forearm 13 1/4

inches. The

clubs with

which Mr. Harrison

commenced weighed

about seven pounds each; he has

advanced progressively, until he can now

wield with perfect ease two clubs, each weigh-

ing 37 pounds, and his heaviest weighs 47 pounds. The

effect of this exercise on the wielder’s measurements is

as follows: Round the chest 42 1/2 inches, the upper arm

15 inches and the forearm 14 inches. At the same time

his shoulders have increased immensely, and the muscles

of his loins, which were weak when he first used the clubs,

are now largely developed and powerful. In short, all the

muscles of the trunk have been much improved by this

exercise.⁴⁸

Harrison was well-known as a gymnastics teacher in London and was honored by Queen Victoria for his physical prowess.⁴⁹ He authored a small training guide called *Indian Clubs, Dumb-bells and Sword Exercises*, and in approximately 1861 he met Sim D. Kehoe, a New York equipment manufacturer who became so enraptured by seeing Harrison “use the mammoth war clubs,” that he vowed to return to the United States and introduce heavy club training to America.

In 1862, Kehoe opened a shop and began manufacturing clubs in New York City. To spread the word, Kehoe—like many an enterprising businessman—sent free samples of his clubs to prominent individuals in the hope of securing positive endorsements. John C. Heenan, for instance, the most famous boxer of the Civil War era, wrote Kehoe, “As an assistant for training purposes, and imparting strength to the muscles of the arms, wrists, and hands, together in fact with the whole muscular system, I do not know of their equal. . . they will become one of the institutions of America.” Ulysses S. Grant wrote from Washington to thank Kehoe for a set of rosewood dumbbells and Indian clubs, “Please accept my thanks for your thus remem-

bering me, and particularly my boys, who I know will take great delight as well as receive benefit in using them.”⁵⁰

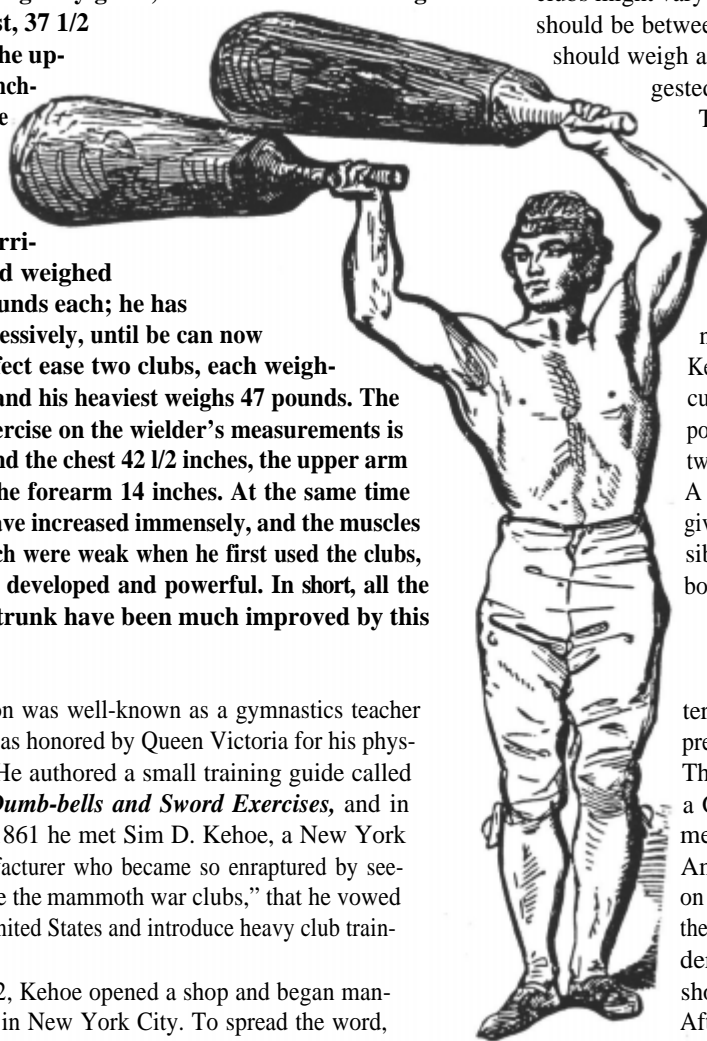
In 1866, Kehoe published *The Indian Club Exercise*, a beautifully illustrated book which contained, in addition to an easy-to-follow system of exercise for both men and women, a series of physique studies showing the benefits of heavy club training.⁵¹ Two aspects of Kehoe’s book are particularly significant. The first is his differentiation between the short, light-weight “bat”—a one to four pound club used in calisthenics drills such as those popularized by Donald Walker and American exercise proponent Dio Lewis—and what Kehoe called the “long Club, or Indian Club proper.” Long clubs might vary in appearance, Kehoe explained, but their length should be between twenty-four and twenty-eight inches and they should weigh at least four pounds. Most beginners, Kehoe suggested, could start with a club of around ten pounds.⁵²

The other aspect of Kehoe’s book which bears mentioning is his discussion of Indian club competitions and exhibitions. On 1 May 1866, a solid gold medal cast by the Tiffany Company was presented to J. Edward Russell of New York. According to Kehoe, a panel of judges found Russell to be the best club swinger at a gymnastics competition at Irving Hall. In another event, Kehoe reported, Charles Bennett, the “California Hercules,” gave an exhibition in which he used twenty pound clubs “in a variety of movements and held fifty two pounds in each hand at arms length, with ease.”⁵³ A drawing of Bennett, “copied from a photograph,” gives some indication of how such feats might be possible. The heavy, defined musculature of his upper body is unusual for the mid-nineteenth century.⁵⁴

The Evolution of the Barbell

In 1861, Thomas Wentworth Higginson, minister and exercise advocate, penned an article for the prestigious *Atlantic Monthly* entitled “Gymnastics.” The heart of Higginson’s article was a word tour of a German-style gymnasium—the sort of establishment Higginson believed was needed throughout America. Higginson allowed his readers to peek in on the free-hand calisthenics class: toured them past the gymnastics area where he explained the use of ladders, pommel horses, and parallel bars; and then showed them the “row of Indian clubs or sceptres.” After explaining their benefits, he took his readers to the “masses of iron, laid regularly in order of size,” a rack of dumbbells weighing from four to one hundred pounds. The dumbbell, Higginson wrote enthusiastically, was “a whole athletic apparatus packed up in the smallest space; it is gymnastic pemmican.”⁵⁵ With one fifty pound dumbbell, or a pair that size, Higginson argued, a man could exercise nearly every muscle in his body in half an hour.⁵⁶

Higginson completed his gymnasium tour with a discussion of the health lift recently popularized by Dr. George Barker Windship, the Harvard-trained physician/lecturer/gym owner/profession-



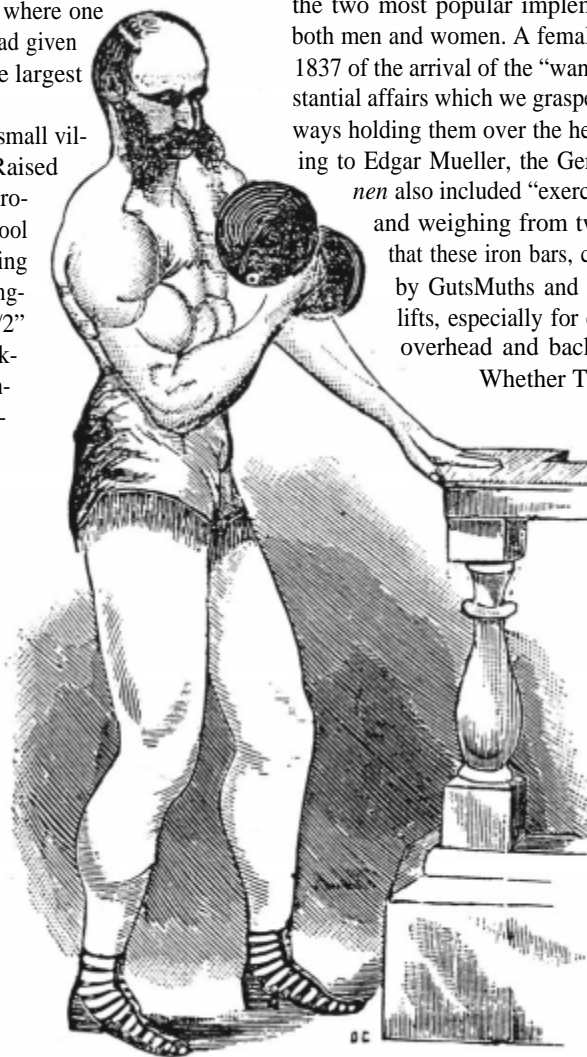
PROFESSOR HARRISON

al strongman. Higginson had only praise for the principles of heavy lifting and this praise, coupled with Windship's growing popularity, helped launch a lifting and bodybuilding boom in the early 1860s which saw a number of men besides Windship become intrigued with the amount of weight they could "put up."⁵⁷ [See "Strength is Health," *IGH* 3(September 1993)].

But what is missing from this obviously well-appointed gym? Barbells. There is not a single mention of this apparatus in Higginson's article nor in any other English-language book prior to 1860 examined by this author. Although the practice of heavy lifting was well established by this time, and iron dumbbells could be easily purchased in many hardware stores, the barbell was still unknown on this side of the Atlantic. To find its origins, we must look to Europe, where professional strongmen had been dazzling the public with their feats of strength at least since the beginning of the nineteenth century, and, especially to France, where one of these professionals—Hippolyte Triat—had given up the sawdust and footlights to open the largest gym in the world.

Hippolyte Triat was born in the small village of Saint-Chaptes, France in 1813. Raised by gypsies, Triat worked as a travelling acrobat up to the age of fifteen, then went to school for approximately six years before deciding to return to the stage as a professional strongman. By age twenty-two, he stood 5'10 1/2" tall and weighed two hundred pounds, making him a large man by early nineteenth-century standards. In 1840, after carefully saving his theatrical earnings, Triat opened a gym in Brussels which he managed until 1849. He then moved to Paris and constructed an enormous gymnasium unlike any other in the world at the time. It had approximately ninety-five hundred square feet of space on the first floor with two tiers of balconies above for spectators. Many of Paris' most distinguished citizens signed up for classes.⁵⁸

Although he did not "invent" them, the first spherical-ended barbells seen by this author appear in the 1854 illustration of Triat's gym included in French historian Edmund Desbonnet's *Les Rois de la Force*.⁵⁹ As can be seen in the accompanying enlargement of this drawing, the wall of Triat's gym was covered with barbells, all of which appear to be of the same size. In an advertising brochure, Triat described these implements as "*Barres A Spheres De 6 Kilos*," (bars with spheres of six kilos), although he also included in his equipment list "*Gros*



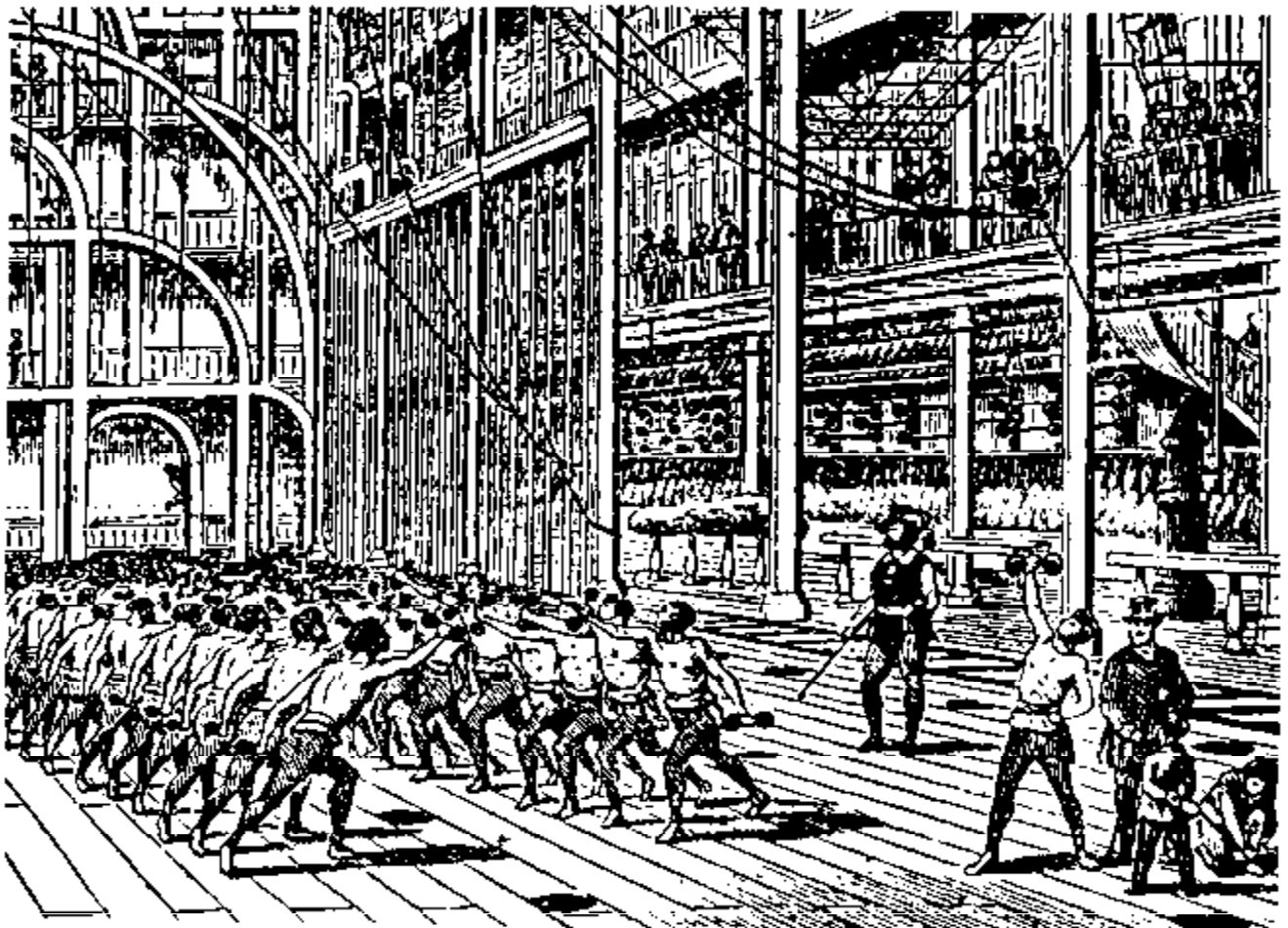
CHARLES BENNETT, THE CLUB SWINGING CHAMPION OF SAN FRANCISCO, HAD AN UNUSUALLY MUSCULAR PHYSIQUE FOR HIS DAY. ILLUSTRATION FROM ED JAMES' *HOW TO ACQUIRE HEALTH, STRENGTH AND MUSCLE*, 1878.

Halteres et Barres A Deux Main," (Large dumbbells and bars for two hands). How heavy these large barbells might have been and how they were loaded is unknown although Triat reportedly had a dumbbell at his gym weighing over two hundred pounds. As the logo for his new enterprise, Triat adopted the emblem of a spherical barbell draped with a medallion and ribbon, a fact which suggests the importance of the barbell concept to his new gymnasium and training system. His motto was, "For the Regeneration of Man."⁶⁰

The bars with spheres of six kilos were used for group exercise classes. From the time of Montaigne, wands or light-weight bars of various sorts had been used for purposive drill by both men and women. Nicholas Andry, for instance, in his 1743 handbook on exercise called *Orthopaedia* showed a young woman training with a wooden wand.⁶¹ As calisthenics exercises spread in popularity in the early nineteenth century, lightweight wands and dumbbells became the two most popular implements for group exercise classes for both men and women. A female student at Mount Holyoke wrote in 1837 of the arrival of the "wands . . . not fairy wands, but quite substantial affairs which we grasped at either end, and carried in various ways holding them over the head, in front and back, etc."⁶² According to Edgar Mueller, the German system of exercises called *Turnen* also included "exercises with iron bars," a meter in length and weighing from two to three kilos.⁶³ Mueller claimed that these iron bars, called *Eisenstäbe*, were first introduced by GutsMuths and were "used for different two handed lifts, especially for exercises with straight arms (in front, overhead and back)."⁶⁴

Whether Triat got the idea for his fixed-weight barbells from these wooden and iron wands remains unknown, but Triat undoubtedly influenced the shape of wooden wands in the last half of the nineteenth century. After 1860 or so, wands were frequently depicted with small wooden globes on their ends. In Professor Harrison's training guide, for instance, the invention of the "French dumbbell" is credited to "Trelar," who, Harrison claimed, introduced the wooden implement to the French army. From there, Harrison reported, the "French dumbbell" was adopted by many upper-class French schools.⁶⁵ *Dewitt's Athletic Exercises for Health and Strength*, a popular training guide from the 1870s also referred to wooden wands with globular ends as "French Dumbbells."⁶⁶

The earliest use of the term "barbell" seen by the author appeared in a little-known, 1870

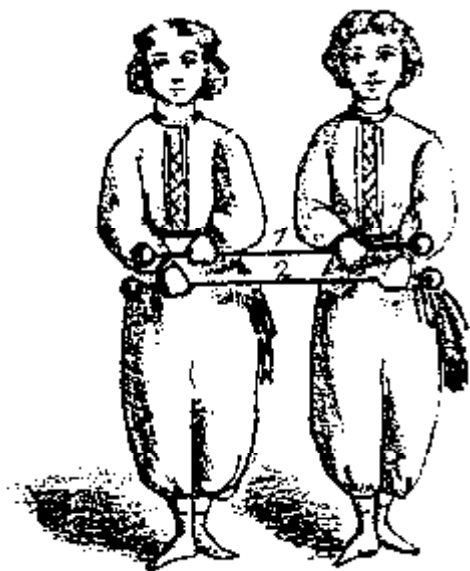


THIS ENLARGEMENT OF A CONTEMPORARY ENGRAVING OF HIPPOLYTE TRIAT'S ENORMOUS GYMNASIUM AT 55 AND 57 RUE DE MONTAIGNE SHOWS AN EXERCISE CLASS LED BY TRIAT, WHO FREQUENTLY DRESSED AS A FRENCH CAVALIER. ON THE WALL BEHIND TRIAT ARE THE "BARS WITH SPHERES OF SIX KILOS" WHICH HE USED FOR GROUP EXERCISE.

British text called *Madame Brennar's Gymnastics for Ladies, A Treatise on the Science and Art of Calisthenics and Gymnastic Exercises*. According to Madame Brennar, who ran a gymnasium in London at which women wore pantaloons for their training sessions, a "Bar-Bell" was an "appliance [that] partakes partly of the 'Wand,' and partly of the 'Dumb-bell.'" Brennar described the implements as being four to six feet in length, thicker than an ordinary wooden wand and with wooden balls on either end.⁶⁷ There is no appreciable difference between Brennar's "barbell" and Harrison's "French Dumbbells." Several other late-nineteenth century exercise manuals also referred to these wooden appliances as "barbells."⁶⁸

Although Triat used light, fixed-weight barbells for his group classes in the 1850s, the implement does not appear to have enjoyed any great popularity until near the end of the nineteenth century. Weightlifting experts Edgar Mueller and Edmund Desbonnet both contend that the Austrian Karl Rappo was the first professional strongman to use globe-ended barbells in his stage act. Little is recorded of Rappo's life except that he was born in Innsbruck in 1800 and died in Moscow in 1854.⁶⁹ A further examination of Desbonnet's *Les Rois de la Force*, our best source on the history of

nineteenth-century strongmen, revealed that dumbbells, cannons, chains, and block weights were commonly depicted in Desbonnet's section on the early nineteenth century. Barbells, however, do not appear in the illustrations until Desbonnet began describing the lives of the strongmen who worked in the 1880s.⁷⁰ The absence of iron barbells was probably more a lack of supply or difficulties in casting than a lack of interest in heavy training. As Desbonnet's book attests, a number of European men pursued careers as professional strongmen and countless others embraced the principle of heavy training for their personal workouts. According to Mueller, the Turner clubs helped spread the idea of resistance training throughout Germany in the nineteenth century, and in a few isolated pockets the lifting of heavy weights became a major focus of the Turner program. "Carl Schöbig told me," Mueller wrote, "that in Leipzig's oldest *Turnverein* [gymnastics club] . . . weightlifting with heavy globe *barbells* was practiced by the gymnasts (*Turners*) since 1865."⁷¹ Mueller explained that Schöbig's claim was based not on Schöbig's personal experience but on what he had been told by older members of the *Turnverein*.⁷² Although we do not know what sorts of implements they used, a weightlifting club had formed in Munich by 1878, and



MADAME BRENNAR'S GYMNASTICS FOR LADIES, PUBLISHED IN 1870, WAS UNUSUAL BOTH FOR ITS USE OF THE WORD "BAR-BELL" AND FOR THE PANTALOONS WORN BY THE WOMEN IN THE ILLUSTRATIONS. BRENNAR'S IMPLEMENTS WERE MADE ENTIRELY OF WOOD AND WERE OFTEN USED WITH A PARTNER, AS SHOWN HERE.

the next year a second club formed at Wandsbeck, near Hamburg.⁷³

According to Mueller, the first iron barbells used in Germany were massive, heavy implements made with solid globes. These gave way in the 1870s to "hollow globical bars, filled with sand or lead." By the 1880s Mueller wrote, "hollow globe bars, filled with discs," were available for purchase in Germany. These were sold, according to Mueller, in Köln (Cologne) by the firm of Heyden, a company he believed was one of the oldest equipment manufacturers in Germany. Disc barbells were also sold in this decade by the Meyer company, located in Hagen.⁷⁴

Some historians have credited the German strongman, Professor Attila [Louis Durlacher]—who assisted Sandow in the early stages of his career and then opened a gym in New York City in 1893—with the idea of using sand or lead shot inside hollow spheres to vary the weight of barbells, dumbbells and kettlebells.⁷⁵ Although Attila's stage performances undoubtedly helped to popularize this type of implement, Boston strongman George Barker Windship is a much more deserving candidate for the honor of having "invented" shot-loading weights.⁷⁶ In 1859, well in advance of Attila, Windship decided to try to see if he could "put up" the greatest weight on record. He procured two sixty-eight pound "shells" and screwed them on a wrought-iron handle, creating an empty dumbbell of 141 pounds, which was "capable of being increased to 180 pounds by the simple process of pouring shot into the cavities of the shells, after having first separated them from the handle."⁷⁷ Windship also appears to have the best claim of being the "inventor" of plate-loading equipment. In his quest for size and strength, Windship used his considerable creativity to develop and patent several exercise devices. One of these was a plate-loading dumbbell which he began marketing in 1865. Windship's dumbbell could be adjusted from eight to 101 pounds in half pound increments; it sold for \$16.00.⁷⁸

Although Windship patented his plate-loading design in 1865, his sudden death in 1876 diminished America's interest in lifting as a form of regular exercise. What is more, many Americans blamed Windship's death by stroke at age forty-two on his heavy lifting, a fact which caused a decline in interest in strength training for several decades. During the 1880s and 1890s heavy dumbbells and barbells were nearly impossible to find in America Peck and Snyder's *Price List of Out & Indoor Sport and Pastimes* for 1886, for example, offered a good assortment of rowing machines, pulleys, cable exercisers, and wooden clubs and dumbbells; but their iron dumbbells only went up to fifty pounds in weight. No iron barbells of any sort appeared in the catalog.⁷⁹ Even at the turn of the century, heavy equipment was not readily available in the United States. The 1902 *Sears and Roebucks Catalog*, for instance, only offered dumbbells up to twenty-five pounds in weight. Again, no barbells were available for purchase.⁸⁰

Although professional strongmen apparently found individual metal workers who created spherical dumbbells and barbells for their shows, the average man who wanted to emulate these showmen had difficulty finding weight training equipment. In America, that problem was finally solved by Alan Calvert of Philadelphia, Pennsylvania, who founded the Milo Barbell Company in 1902. Strength historian David P. Willoughby considered the advent of the Milo Company as "the greatest single impetus ever given to weightlifting in this country."⁸¹

The first devices sold by Milo were shot-loading barbells with canister-shaped "bells" on each end. To change the weight a wing-nut, shown in the accompanying advertisement from the April 1902 issue of *Physical Culture*, was un-screwed and the lid removed.⁸² How many of these \$7.50 sets sold is not known. However, customers apparently complained about the amount of time it took to change the weight by this method. In 1908, Calvert introduced a new model which he called the Milo Triplex.⁸³ In an advertising brochure from 1909, the four and a half foot Triplex appeared to be a simple globe barbell when it was fully loaded and ready to lift. However, removing the outer shells revealed Calvert's new innovation. The eight and one-half-inch spheres were divided into two sections. On one side, up to thirty pounds of shot could be loaded in the end of the globe. On the other side of the divider, iron plates from twenty-five to two and a half pounds could be added or subtracted to vary the weight. Fully loaded, the bar weighed 105 pounds; additional handles allowed the Triplex spheres to be used for kettlebells or dumbbells.⁸⁴



WINDSHIP'S PLATE-LOADING DUMBELL WHICH HE PATENTED ON 14 FEBRUARY 1865. THE BAR COULD BE LOADED FROM EIGHT TO 101 POUNDS IN HALF POUND INCREMENTS.

One of Calvert's main rivals in the exercise equipment industry was British strongman Thomas Inch, a man historian David Webster called "the first to introduce plate barbells and dumbbells."⁸⁵ Inch was an enthusiastic advocate of plate-loading barbells but, as previously noted, he did not invent them. Born in 1881, Inch was active in the British physical culture community by 1910. He ran a gym, sold equipment and wrote at least twenty short books.⁸⁶ However, he rarely included copyright dates in his texts, making it difficult to trace his career. Nonetheless, Inch was an early, and important contributor to the development of the barbell. In *Scientific Weightlifting*, one of his earliest texts, Inch advertised a variety of barbells which he sold through the mail. Like Calvert, he offered a combination globe/plate-loading barbell, although Inch's bar had the plates on the outside of the globes. He also offered a variety of plate loading sets, claiming, "I am the only person supplying these bells."⁸⁷ Inch strongly favored plate-loading barbells and claimed that "The advantages of having a set of plates with a bar to fit, and collars, etc., are not generally understood. . . One bell may cover a great number of lifts and thus a great saving is effected in both space and money."⁸⁸ Calvert, who also sold plate-loading bells by 1909, did not agree. "The principal defect of bells that load only with plates," Calvert wrote, "is that they cannot be increased in weight except in jumps of 5 lbs or more. In order to practice weightlifting safely and successfully you *must* have a bell that can be increased one ounce at a time if necessary—and this alone makes it unwise to use a bell which loads only with iron plates."⁸⁹ Despite his personal preference for spherical weights, Calvert was astute enough to sense the change in training methods which plate loading barbells represented. By 1910 his catalogue also included four different plate-loading sets which were modern in appearance and lacked the spherical shells at each end.⁹⁰

In Germany, exposed-plate barbells and dumbbells were first introduced by Josef Markl, a former member of the Rasso Trio, who "constructed so-called ring-bars . . . with huge thick discs" in 1889.⁹¹ According to

Mueller, at least three German companies quickly stole Markl's idea and began manufacturing disc-loading barbells. Heinrich Meyer's equipment company in Hagen, Westfalen, sold a set in which all the plates were of the same height. Hermann Fechner of Dresden-Trachau and Hermann Stein of Magdeburg also manufactured plate-loading barbell sets in the 1890s.⁹² Another early reference to plate-loading barbells can be found in *The Official Gazette of the U.S. Patent Office* for 1889. Patent number 405,128 described an "Exercising Bar," invented by Samuel B. Stockburger of Canton, Ohio. Stockburger's barbell consisted of a bar made of "spring material of such length to be grasped by two hands, the removable weights. . . and means for attaching said weights." Stockburger appears to be the first person to suggest using a flexible bar for weightlifting. The illustration accompanying his patent application shows five plates on each end of the bar. All are of the same height but their thickness varied considerably.⁹³

Conclusion

Throughout the twentieth century, a host of exercise entrepreneurs have contributed to the evolution of the plate-loading barbell. Theodore Siebert of Germany began marketing his *Siebert's Universal-Scheibenstange* (Universal disc loading bar) in 1901. In 1905, Franz Veltum of Fechenheim, Germany, introduced the Veltum-Barbell, which, according to Mueller, was the "first revolving-type barbell."⁹⁴ In 1910, Veltum's revolving barbell began to be manufactured by the Nürnberg-based equipment company of Kaspar Berg. The Veltum-Barbell was soon known as the Berg-Barbell or *Berg-Hantel* and its sales helped the Berg company become the most successful barbell manufacturer in Germany in the early twentieth century. In 1928, Kaspar Berg introduced a new model, the first "modern" Olympic barbell. These bars, used for the first time at the Olympic Games in Amsterdam in 1928, were then copied by the York Barbell Company, the Jackson Barbell Company, and nearly all other twentieth-century manufacturers. The York "Olympic Bar" was actually copied from a set Henry "Mile" Steinborn was given in the late 1920s by Dr. William Edward Campbell, Jr., an Atlanta ophthalmologist.⁹⁵ In the early 1930s Bob

Progressive Weight-Lifting
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And it is the ONLY SYSTEM of exercise which produces GREAT MUSCULAR DEVELOPMENT and at the same time teaches athletes to apply their strength.

In the MILO ADJUSTABLE BAR-BELL we offer an exercising device which will enable all AMBITIOUS YOUNG ATHLETES to build up physiques equal to those of professional strong men. : : : :

THE MILO
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(Patent Allowed).

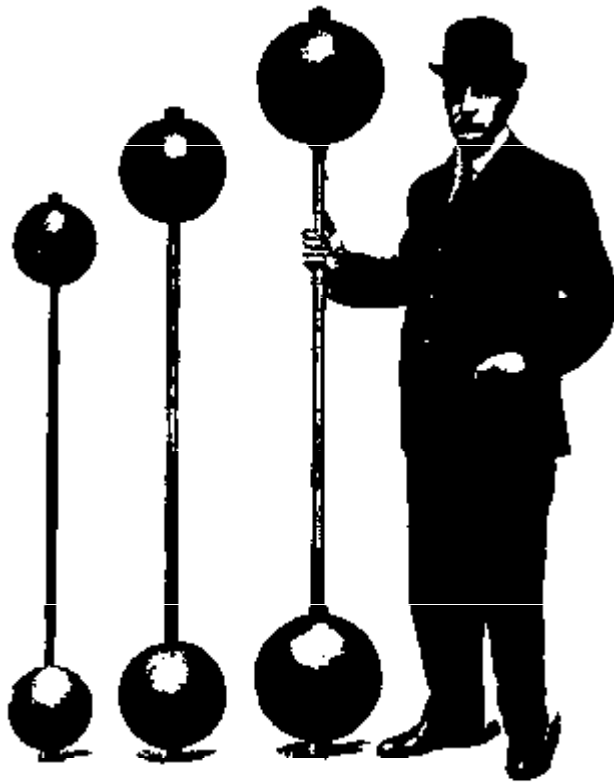
PRICE
\$7.50

Send 2c. stamp for Descriptive Booklet to the : : : : : :

Milo Bar-Bell Co.
218 Arch St.
PHILADELPHIA, PA.



THIS 1902 ADVERTISEMENT FOR THE MILO ADJUSTABLE BAR-BELL APPEARED IN *PHYSICAL CULTURE* MAGAZINE. DALE FRIESZ DONATED A MILO DUMBBELL, MADE ON THIS MODEL, TO OUR COLLECTION.



ALAN CALVERT, FOUNDER OF THE MILO BARBELL COMPANY, ARGUED THAT SHOT-LOADING BARBELLS, AS SEEN HERE FROM A COMPANY CATALOGUE, WERE SUPERIOR TO PLATE-LOADING BELLS BECAUSE SHOT-WADING ALLOWED THE WEIGHT TO BE INCREASED BY A FEW OUNCES AT A TIME.

Hoffman asked Steinborn to loan the set to York so that it could be copied.

In the twentieth century, plate-loading barbells quickly passed the kettlebell and Indian club in popularity and joined the dumbbell as the favored tool of serious trainers. Although the late-twentieth century has seen the invention of a number of high-tech, expensive machines which claim to be superior to all other forms of training, the simple dumbbell and barbell still reign supreme. Almost all sport scientists consider them superior to machines for building athletic power. Whether the dumbbell and barbell ever become obsolete—as the Indian club and kettlebell have—remains to be seen; however, the almost infinite adaptability and effectiveness of these simple tools suggests that they will be at the heart of the iron game for some years to come.

Notes

The author would like to thank David Chapman for his assistance in translating Edmund Desbonnet's, *The Kings of Strength*; Henry Steinborn for material on the Berg Barbell Company; Joe Roark for sending the piece by Edgar Mueller; and George H. Miller, Jr. for sending information on Calvert's patents.

¹Terry Todd, "The History of Resistance Exercise and Its Role in United

States Education" (PhD. diss., University of Texas, 1966), 26.

²The wrestler Milo of Crotona is often referred to as the Father of Progressive Resistance Exercise. According to legend, Milo built his strength by shouldering and walking with a calf every day until it was fully grown. Milo lived in the fifth century B.C. and won the championship six times at Olympia and seven times at Pythia. David P. Willoughby, *The Super Athletes* (New York: A.S. Barnes, 1970), 29-30.

³Norman E. Gardiner, *Athletics of the Ancient World* (Oxford: Clarendon Press, 1955), 6.

⁴Ibid, 153.

⁵Ibid, 169-170.

⁶John W. F. Blundell, M.D., *The Muscles and Their Story, From the Earliest Times; Including the Whole Text Of Mercurialis, and the Opinions of Other Writers Ancient and Modern, on Mental and Bodily Development* (London: Chapman & Hall, 1864), 165-166.

⁷Ibid, 171.

⁸See Allen Guttmann, *Women's Sports: A History* (New York: Columbia University, 1991): 38, for an analysis of the meaning of this mosaic.

⁹Sir Thomas Elyot, *The Boke Named the Governor*, S. E. Lehmborg, ed. (London: J. M. Dent & Sons, 1962), 59-60, quoted in Todd, "History of Resistance Exercise," 34.

¹⁰Ellen Gerber, *Innovators and Institutions in Physical Education* (Philadelphia: Lea and Febiger, 1971). 109-110.

¹¹David P. Webster, *The Iron Game* (Irvine, Scotland: by the author, 1976), 7. Edgar Mueller, German strongman and author of *Goerner the Mighty*, claimed that Camerarius was the first to describe true dumbbell exercises. See: Edgar Mueller, "The History of the Two Hands Jerk; Clean; and Snatch-Lifting and Apparatus Used For It In Germany, Austria and France," Unpublished manuscript, Todd-McLean Collection, The University of Texas at Austin.

¹²Quoted in: Joseph Strutt, *The Sports and Pastimes of the People of England, Including the Rural and Domestic Recreations, May Games, Mummers, Shows, Processions, Pageants, and Pompous Spectacles, From the Earliest Period to the Present Time* (London: 1845), 77.

¹³*The Living Thoughts of Montaigne*, pres. Andre Gide, ed. Alfred O. Mendel, and trans. John Florio (New York: Green & Co., 1939), 58.

¹⁴Information on the life and legacy of Mercurialis is available in L. H. Joseph, "Medical Gymnastics in the Sixteenth and Seventeenth Centuries," *Ciba* 10(March-April 1949):1041-1045 and in Jack Berryman, "The Tradition of the Six Things Non-Natural: Exercise and Medicine from Hippocrates Through Ante-Bellum America," *Exercise and Sport Sciences Reviews* 17(1989): 526.

526; Gerber, *Innovators*, 22-26.

¹⁵Hieronymus Mercurialis, *De Arte Gymnastica* (Amsterdam: 1672). Reprint edition, The Scholars Press, Ilkey England.

¹⁶Joseph, "Medical Gymnastics," 1041-42.

¹⁷Mercurialis classified exercise into two main types—preventive and therapeutic—and believed that the quantity and duration of exercise should be individualized according to a person's constitution and level of fitness.

¹⁸Joseph, "Medical Gymnastics," 1045. See also: Blundell, *The Muscles*, iv. Blundell spent seven years translating Mercurialis' work into English only to decide that a simple translation rendered a product "too diffuse and verbose to suit the modern reader." So, he organized Mercurialis' ideas into subject chapters, divested them "of obsolete argument without impairing their sense," and tried to "make them subservient to the knowledge of the

present day.” Blundell noted in his preface that “for two centuries at least,” *De Arte Gymnastica* was the major source of information about exercise in the classical period and for the proper uses of exercise in therapy and prevention.

¹⁹Gerber, *Innovators*, 22-23.

²⁰Mercurialis, *De Arte Gymnastica* 162-164.

²¹Joseph Addison, *The Spectator* 2(115) 12 July 1711 (London: Longman, Green & Co. 1898). 163.

²²Addison, *Spectator*, paragraph 7 & 8. Quoted in *The Oxford English Dictionary* vol. 4, 2nd ed. (London: Clarendon Press, 1989), 1115.

²³*A Course of Calisthenics for Young Ladies in Schools and Families With Some Remarks on Physical Education* (Hartford H.&F. J. Huntington, 1831). 45-54.

²⁴*Oxford English Dictionary*, 115.

²⁵Webster, *Iron Game*, 7. Webster found the description of this early dumbbell machine in: “Chancellor Ferguson’s paper to the Archaeological Institute in 1895.”

²⁶Upon Franklin’s death, his physician testified to the importance of hygienic living to Franklin’s longevity. William Temple Franklin ed. *Memoirs of the Life and Writings of Benjamin Franklin, L.L.D. F.B.S. &c. ...Written by Himself a Late Period and Continued to the Time of His Death, By his Grandson; William Temple Franklin* vol. 1 (London: printed for Henry Colburn, 1818), 408.

²⁷Benjamin Franklin to his son, 19 August 1772, quoted in Albert Henry Smyth, ed, *The Writings of Benjamin Franklin* vol. 5 (New York: 1905-07), 411-412; and in Todd, “History of Resistance Exercise,” 38-39.

²⁸Franklin to Le Veillard, 22 April 1786. Quoted in Carl Van Doren, *Benjamin Franklin* (New York The Viking Press, 1938), 743; “and in Todd, “History of Resistance Exercise,” 39.

²⁹*Ibid.*

³⁰Strutt, *Sports and Pastimes of the People of England*, 77.

³¹J. C. F. GutsMuths, *Gymnastics for Youth: Or a Practical Guide to Delightful and Amusing Exercises for the Use of Schools* (Philadelphia: William Duane, 1802) 316.

³²*Ibid.*

³³*Ibid.*, 317.

³⁴Charles Beck *A Treatise on Gymnastiks, Taken Chiefly from the German of F. L. Jahn* (Northhampton, Massachusetts: Simeon Butler, 1828), 123.

³⁵*Ibid.*, 121.

³⁶*Ibid.*

³⁷The ancient Greeks’ use of wax and lead particles should perhaps, also be considered a form of variable resistance training.

³⁸Quoted in: Sim D. Kehoe, *The Indian Club Exercise* (New York: American News Company, 1866). 7.

³⁹See David P. Webster, *Bodybuilding: An Illustrated History* (New York: ArcoPublishing, 1982), 123-124, for other information on club training.

⁴⁰Joseph S. Alter, *The Wrestler’s Body: Identity and Ideology in North India* (Berkeley: University of California Press, 1992), 64.

⁴¹*Ibid.*, 64-65.

⁴²*Ibid.*, 109-110.

⁴³*Ibid.*

⁴⁴Kehoe, *Indian Club Exercise*, 7.

⁴⁵Craven [Donald Walker], *British Manly Exercises; In Which Rowing*

and Sailing are Now First Discussed (London: 1834). An eleventh edition was entitled: *Walker’s Manly Exercises: Containing Rowing, Sailing, Riding, Driving, Racing, Hunting, Shooting and Other Manly Sports* (London: George Bell & Sons, 1888).

⁴⁶Donald Walker, *Exercises for Ladies Calculated to Preserve & Improve Beauty and to Prevent and Correct Personal Defects* (London: Thomas Hurst, 1835) xx.

⁴⁷Professor Harrison, *Indian Clubs, Dumb-bells and Sword Exercises* 2nd ed. (London: Dean and Son, n.d.), 9. The term “Mugdaugh” is used in *Dewitt’s Athletic Exercises for Health and Strength* (New York: Dewitt, circa 1870), 23.

⁴⁸Quoted in Russell Trall’s *The Illustrated Family Gymnasium* (New York: Fowler & Wells, 1857), 58.

⁴⁹Harrison, *Indian Clubs*, preface.

⁵⁰Kehoe, *Indian Club Exercise*, 7-9.

⁵¹*Ibid.*, 24, 27-28.

⁵²*Ibid.*, 30.

⁵³*Ibid.*, 22-25.

⁵⁴Ed James, *How to Acquire Health Strength and Muscle* 12th ed. (New York: by the author, 1878), frontpiece.

⁵⁵Pemmican was a form of concentrated food, developed by Native Americans. It was made by mixing together rendered animal fat cured, powdered meat; and, occasionally, berries. Because of its high nutritive values, a small amount of pemmican went a long way, and allowed its user to go a long way too.

⁵⁶Thomas Wentworth Higginson, “Gymnastics,” *The Atlantic Monthly* 7(March 1861): 289.

⁵⁷*Ibid.*, 288-289. See also the chapter entitled “Remarkable Feats of Muscular Strength,” in James, *Health, Strength and Muscle*, 60-63.

⁵⁸Edmund Desbonnet, *Les Rois de la Force* (Paris: Librairie Berger-Levrault, 1911),60.

⁵⁹According to Edgar Mueller, the German system of exercises called *Turnen* included exercises using globe-ended dumbbells up to five kilos in weight and iron bars up to three kilos in weight. Globe-ended barbells were not added to the system in Germany until the 1890s, when “One hand and Two hands Repetition-Pressing (from the hang” to overhead) with medium heavy massive short globe barbells weighing 25 kilos for one-handed Pressing and 37.5 kilos for two handed pressing. Short globe or spherical Barbells (not dumbbells) mostly used by gymnastics (Turnen) were named in Germany *Turner-Kugelstange* or *Turner-Kugelhantel* or *Turner-Kugelstab*.” From: Mueller, “History of the Two Hands Jerk,” 7.

⁶⁰Desbonnet, *Les Rois de la Force*, 59.

⁶¹Nicolas Andry, *Orthopaedia: Or the Art of Correcting and Preventing Deformities in Children* (London: A. Miller, 1743), 55-74.

⁶²Quoted in Persis McCurdy, “The History of Physical Training at Mount Holyoke College,” *American Physical Education Review* 14(1909): 144.

⁶³Mueller, “History of the Two Hands Jerk,” 7.

⁶⁴*Ibid.*

⁶⁵No information on “Trelar” could be found. Harrison, *Indian Clubs, Dumb Bells and Sword Exercises*, 34.

⁶⁶*Dewitt’s Athletic Exercises*, 17.

⁶⁷Madame Brennar, *Gymnastics for Ladies, A Treatise on the Science and Art of Calisthenics and Gymnastic Exercises* (London: by Madame Brennar at her Gymnasium, 1870), 33.

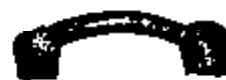
⁶⁸See, for instance, R. H. McCartney, *Gill’s Bar-bell and Wand Exercis-*

Vorteile der BERG-Hantel



Olympia-Trainierhanteln

Beliebig verstellbar, von 6 – 100 kg.



THE 1936 CATALOG OF THE BERG BARBELL COMPANY CONTAINED SEVERAL REVOLVING-SLEEVE BARBELLS, AND THREE STYLES OF DUMBELLS. THE BERG HANTEL WAS COPIED BY THE YORK BARBELL COMPANY. CATALOG COURTESY HENRY STEINBORN

es for Use in Schools with Musical Accompaniments (London, George Gill and Sons, n.d); and R. Tait McKenzie, *Barnjum Bar Bell Drill* (New York: American Sports Publishing Company, 1906).

⁶⁹Desbonnet, *Les Rois de la Force*, 32; and Mueller, History of the Two Hands Jerk," 8.

⁷⁰The first barbell photograph appears on page 148 with the story of Andre Prandeli. It was taken in 1888. The second and third are on page 167 and were also taken in the 1880s. Desbonnet, *Les Rois de la Force*.

⁷¹Mueller, "History of the Two Hands Snatch" 9.

⁷²"I have known Schöbig (1867-1947) as a precise and truth loving fellow," wrote Mueller. "Schöbig said to me many names of these Old-Timers but I've forgotten their names, I remember only one name: Faber, who was owner and founder of a factory of gymnastic-equipments at Leipzig." Ibid

⁷³Ibid.

⁷⁴Ibid.

⁷⁵Webster, *Iron Game*, 57.

⁷⁶It is not known who first used shot-loading or plate-loading weights in Germany. Mueller's article, which has no footnotes, contains only the general statements regarding the origin of these implements noted in the article. "James, *Health, Strength and Muscle*, 56. The 1873 edition of Russell Trall's *Illustrated Family Gymnasium* described a similar, wooden dumbbell, whose ends consisted of two interlocking hemispheres. See page 189.

⁷⁸"The Patent Graduating Dumb-Bell" [Advertising broadside] George Barker Windship Collection, Massachusetts Historical Society, Boston, Massachusetts.

⁷⁹Peck and Snyder, *Price List of Out & Indoor Sport and Pastimes* (New York: 1886).

⁸⁰*The 1902 Edition of the Sears and Roebuck Catalogue* Reprinted (Avenal, NJ: Gramercy Press, 1993). 338.

⁸¹David P. Willoughby, "History of American Weightlifting : Alan Calvert and the Milo Bar-bell Company," *Your Physique* 11(August 1949): 8.

⁸²Milo Barbell Company advertisement *Physical Culture* 7(April 1902): 3.

⁸³Calvert applied for a patent for the Milo Triplex on 29 December 1908.

⁸⁴Alan Calvert] *The Milo System of Progressive Weightlifting* [adver-

tising brochure] (Philadelphia, Milo Company, 1909).

⁸⁵Webster, *Iron Game*, 57-58.

⁸⁶See Todd, "History of Resistance Exercise," 321-333, for an annotated bibliography of these books.

⁸⁷Thomas Inch, *Scientific Weightlifting* (London: by the author, n.d), 26.

⁸⁸Ibid.

⁸⁹[Alan Calvert] *The Milo System of Heavy Weightlifting* (Philadelphia: Milo Barbell Company, n.d), 13.

⁹⁰[Alan Calvert] *1910 Catalogue of Adjustable Dumb-Bells, Bar-Bells, Kettle-Bells, etc.* (Philadelphia: Milo Barbell Company, n.d.), 13.

⁹¹Such a bar was used by Hans Beck of Munich in 1893, according to Mueller's History of the Two Hands Jerk" 10.

⁹²Ibid., 9-10.

⁹³Patent Number 405,128: "Exercising Bar," *The Official Gazette of the U.S. Patent Office* 47(June 1889).

⁹⁴Inch also advertised a bar with an "oil sleeve" which mimicked the effect of these revolving bars.

⁹⁵Telephone interview with Mrs. India Campbell, Atlanta Georgia, April 1995. William Campbell [1888-1975] graduated with his MD. degree from Columbia University in 1919 and shortly thereafter settled in Atlanta, Georgia. In the early Twenties, Williams met and became friends with Milo Steinborn who was at that time working as a professional wrestler. Campbell was a life-long weight trainer and physical culturist and he imported what was probably the first Berg-Hantel set in the United States for his personal use. On a visit to Dr. Campbell's home, Steinborn saw the set, admired it, and then received it as a gift from the doctor. According to his wife, India, Dr. Campbell introduced many young men in the Atlanta area to the benefits of weight training and often paid out of his own pocket for gym memberships and weight training equipment for his protégés. One of his disciples was Karo Whitfield who for many years ran a gym in Atlanta, where he influenced such men as Bill Curry, Paul Anderson and Harry Johnson. For information on Whitfield and Curry see: Al Thomas, "Bill Curry and the Gospel of Physical Fitness," *Iron Game History* 2(May 1993): 16-19.

⁹⁶Taped interview with Milo Steinborn, 22 December 1983; and telephone interview with Henry Steinborn, Orlando, Florida, April 1995.

Terry Todd, Ph. D.

Mac and Jan



n December and January of 1977, following her world record deadlift of 451 1/4 pounds, Jan Todd, my wife, received quite a bit of media coverage throughout Canada, where we then lived, and in the U.S., culminating in an invitation to appear on Johnny Carson's *Tonight Show*. So, although it wasn't easy to get away because we had a farm, Jan felt that the Carson invitation was an offer she couldn't refuse since the show was seen by an average audience of close to twenty million people. Twenty million people. Think about that.

And it wasn't just the numbers; it was also the fact that as far as we could determine, it had been at least ten years since a weightlifter, power or Olympic, had been on a show with such an enormous viewing audience. Coverage of that sort simply can't be bought; you just have to sort of stumble into it and then try to take the best advantage of it you can so that your sport is presented to the public in the best light possible.

Sports grow in strange, often dramatic ways, as the surge of bodybuilding's popularity over the past two decades demonstrates. And although the question is admittedly a complicated one, involving such varied factors as the state of the economy, increased leisure time, a widespread pursuit of youthfulness, greater general awareness of the effect of exercise on health, and the growing use of weights in schools and colleges, it seems clear that bodybuilding began to really grow soon after the terrific shot in the arm it received from the publication of Charles Gaines' book *Pumping Iron* and the release of George Butler's film of the same name. These two things, coupled with the wit and easy charm of the star of both the book and film—Arnold Schwarzenegger—did a very great deal to spread the gospel.

In short, knowing to some extent how all these things work, Jan felt definite obligations to lifting in general, to powerlifting in particular, and to the right of all women to develop and proudly use their strength, and so we found ourselves one morning leaving the snowy bluster of Halifax, Nova Scotia, headed toward the balmy smog of beautiful downtown Burbank.

Some weeks before we left, in a conversation with John Grimek, he told me that on his last trip to California he had visited one of our mutual friends, Mac Batchelor, and so one of the things I decided we'd have to fit into our tight schedule was a trip to see big Mac. I felt this way for many reasons. For one thing, Mac had been one of my heroes for over twenty years—from the very beginning of my interest in strength sports. For another, I knew that Mac was retired now and so didn't get to see as many fans as he did during the many years that he tended bar. And for yet another, I knew he was

interested in meeting Jan (as she was in meeting him), because he had been told that she was able to do some of the feats of hand strength for which he was so justly famous. And finally, I wanted to talk to Mac in connection with some research I was doing on arm and wrist wrestling.

The reason I wanted to talk to Mac about this, for those unfamiliar with his background, is that for a period of approximately twenty-five years (1931-1956), Mac met all comers in the hand game (arm wrestling, wrist wrestling, hand wrestling, call it what you will) and was never beaten. *Never beaten in twenty-five years*. Who else in any sport can claim to have been at the top of the heap for a quarter of a century? Champions come and champions go but when a man or a woman comes to a sport and stands astride it year after year after year, he or she becomes a legend. Babe Ruth. Pele. John Grimek. Al Oerter. Muhammed Ali. Babe Didrickson Zaharias. Wilt Chamberlain. Gordie Howe. Martina Navratilova. John Unitas. Bill Pearl. And Ian "Mac" Batchelor, who retired at the age of fifty after having taken on all comers night after night and decade after decade at his bar, playing right hand or left seated or standing, open hand or thumb-block, sick or well, tired or fresh, drunk or sober, and straightening the arm of every man he met.

Sometime, in a future issue of *IGH*, I'd like to tell the story about how Mac locked hands with challengers from all over the world and about how he trained to develop the ability to remain unbeaten for so long, but for now I want to take the space I have to describe one of Mac's feats of finger strength and to explain how that feat created a bond between him and Jan.

Let me describe the feat. To begin, you need only the top or cap from a beer or pop bottle, preferably a top which wasn't crimped in or bent very much as it was being removed from the bottle. Be sure to use a bottle cap which is one of the older types, made of heavier metal. Many of the newer caps (such as the twist-off variety) are made of a very lightweight aluminum and are really not much of a challenge, though they might do to train with if the heavier ones proved to be too tough. Ideally, though less romantically and practically, a good type of cap to use is the sort you can buy at wine and beer making shops—the sort which are used for capping beer. They're almost always of heavier gauge metal and, naturally, they're perfectly flat across the top,

Mac was able to hold one of these caps between his thumb and his extended (straightened) forefinger and then squeeze it until it was bent double or flattened completely together. He could do this, according to many people who saw him, almost effortlessly. Many of you have no doubt bent one between your thumb and your *bent* forefinger, bracing the bottlecap against the first joint of the forefin-

ger, but Mac could bend them the hard way, using an *extended* forefinger and holding the cap very near the ends of his finger and thumb. When Mac bent them the “easy” way, David Willoughby, the strength historian who knew Mac well, said that it looked like an ordinary man breaking the shell of a peanut. In fact, Willoughby reported that Mac once bent sixty-three beer caps the “easy” way and put them in a beer bottle in two minutes.

Often, to amuse his customers, he would gather a bunch of caps in a pile and then have someone time him as he bent them together. He kept records in this and from time to time would attempt to better them. One of my favorite stories about Mac centers around just such a scene. What happened was that a couple of his buddies, as a practical joke, took the flat piece of cork (which all beer bottles used to have) from inside a cap, glued a dime inside, then glued the cork over the dime. This done, they then encouraged Mac to try to break one of his speed records in cap bending. When he agreed to try to break one of his records using the thumb and extended forefinger, they waited for their chance and then secretly switched the “special” cap for one of the normal ones. And then they waited.

Finally, Mac began, picking up the caps and quickly snapping them shut, until he came to the dime-strengthened cap. As he picked it up his buddies leaned closer and watched as the big man squeezed once on the cap, then turned it slightly in his hand and squeezed again, much harder this time, but again the cap (and the dime) refused to bend. Then, obviously angry, Mac put the cap down against his bent forefinger and turned the full might of the great, iron-hard thumb against it, and he bent it, dime and all. But seeing what Mac could do when he was aroused had so shaken his buddies that they waited a few days before telling him what they had done.

In any case, I remember being awed by such stories as this in my early days of training and I remember how proud I was when I bent my first bottle cap the easy way and how despairing I was of ever being able to bend one with my forefinger extended. But I was young then and quite unaware of how one’s strength would increase as a result of hard training. It was at about this time that my interest in competitive lifting began to grow and my interest in feats of hand strength began to fade a bit, but even so as I gained in overall size and strength, my hands grew stronger too, especially since I often included a set or two of high rep wrist curls to finish off my workouts. And thus it was that one day at a tavern, fooling around with some bottle caps, I found that I was able, with effort, to bend a cap the hard way. It was a small thing now that I think back on it, but it made me proud. After that day, though I never trained on it or practiced it, I was always able to bend a cap the hard way whenever I tried it. And herein lies the second part of the story.

It happened that one night, many years later, Jan and I were sitting out on the deck of our home in Georgia, sipping on a couple of cold beers and relaxing after a workout, when I picked up one of the bottle caps I’d just removed and casually bent it, the easy way, at which point Jan who’d then been training for about a year or so, decided that she’d like to try it. So, humoring her, I handed her a cap

which she doubled up with really surprising ease and then turned to me and said with a smile, “What’s so hard about that?”

Well. What was I to do but go back inside, get a couple more bottles, bring them out, open them, take one of the caps, place it between my thumb and extended forefinger, bend it shut, then give the other cap to Jan and say, “Let’s see you do *that*.” Imagine my surprise—my *shock*—when she proceeded to do just exactly that. Unbelievable. Literally. Here she was, in heavy training for less than a year (though she’d broken the forty-eight year old women’s world’s record in the deadlift with 394 1/2 a few weeks earlier), and she was able to do something I’d been unable to do until I’d been training hard for at least *four* years. What was worse was that she bent it more quickly than I did. Not to mention the fact that she weighed 175 pounds whereas I was probably around three hundred when I first did it.

The long and short of the story is that it wasn’t a fluke because from then on whenever she tried it she could do it, unless the cap was badly crimped. So, though I couldn’t believe it then and can scarcely believe it now, I have to accept the fact that as the result of a strange anatomical gift, she could easily (and still can) bend caps that stop many big, strong men. (For example, in 1979, after the last day of competition of that year’s World’s Strongest Men contest in Los Angeles, we were with a group of the competitors in the bar talking shop when one of the people at the table said he had heard Jan could bend a cap the hard way and asked her to show how she did it. So after a batch of caps were procured from the bartender, she bent a couple of them. The man who had asked her to show him then tried to bend one but was unable to do so. One of the other people at the table was Jon Kolb, a starting offensive tackle for the Pittsburgh Steelers who had taken pan in the Worlds Strongest Men contest. As it happened, Kolb had won the only real test of hand strength in the event—a variation on the old wrist roller—and it was easy to see why as he had huge and muscular hands. Someone then suggested that Kolb try it, whereupon he confidently picked one up, placed it at the end of his extended forefinger and thumb as Jan had done and began to apply pressure. But nothing happened. Amazed, Kolb slightly changed his grip and cranked down on it again but again it wouldn’t budge. And then he tried once more with the same result. And remember, these were not the lightweight twist-off caps but heavy caps from imported beers. He then handed it to Jan, who bent it with no apparent effort, to the delight and amazement of the whole table. Later, we heard from Jon’s wife that he got a bunch of caps from the bar before he left that night and took them up to his room and continued to try to bend one. Overall, of course, Jon’s hands were stronger than Jan’s, but in this one narrow area, she could easily do a feat of strength that was beyond him.

Even before we visited California and Mac, I had told Jan a lot about him since I realized the extent of her natural hand strength, and so we were both excited when I called Mac from our hotel in Universal City and he said he’d love to see us. Accordingly, after Jan did five reps with 415 in the deadlift on the *Tonight Show*, we turned in early so we’d be fresh for our visit with Mac and our trip back east.

The next morning we found Mac living in the same neat, modest house in Gardenia in which he had lived for many years, and we were touched by the spread of fried chicken he provided and by the warm and witty way he made us feel at home. But we were saddened by Mac's physical condition. Some years before, he suffered a rather serious stroke which left him with a weakness in one of his legs and an arthritic condition in one of his hips, and these problems were compounded by an almost total loss of sight. But even with physical difficulties which would break the spirit of a lesser man, Mac was pushing on with his life, and he retained an active interest in the iron game. Even then, in his hands and forearms, you could see evidence of the matchless strength he once possessed.

As we talked, sitting close together so that he could touch us if he wanted to make a particular point, he took my right hand as he was explaining a certain technique of arm wrestling and, as he held me with that big hand I could feel the power that he *still* had in his grip. He was showing me how to "paralyze" an opponent's hand and, in showing me, he almost paralyzed mine.

After we discussed arm wrestling a bit more and talked over old times for awhile, he told us that he had heard about Jan's hand strength, and he wanted to hear and know more. He then took her hand in his two thick paws and felt the palm, the thumb and fingers, the wrist and the forearm, nodding to himself and smiling as he did so. Finally, he produced from his pocket a heavy bottlecap and asked her if she would mind bending it for him. Thinking back on it now, I suspect that although Mac had known me for years, he was skeptical about what he had heard from other sources concerning Jan's ability to bend caps. Who wouldn't have been? As a matter of fact, when he had asked me about it on the phone a year or so before our visit, I downplayed it as I didn't want him to think she was crowding in on his territory, even though he was long since retired. In any event, it was a fascinating scene as he cupped one of his hands around her



AT HIS BAR IN LOS ANGELES, MAC BATCHELOR PREPARES TO DEMONSTRATE HIS HAND STRENGTH BY TEARING A DECK OF CARDS.

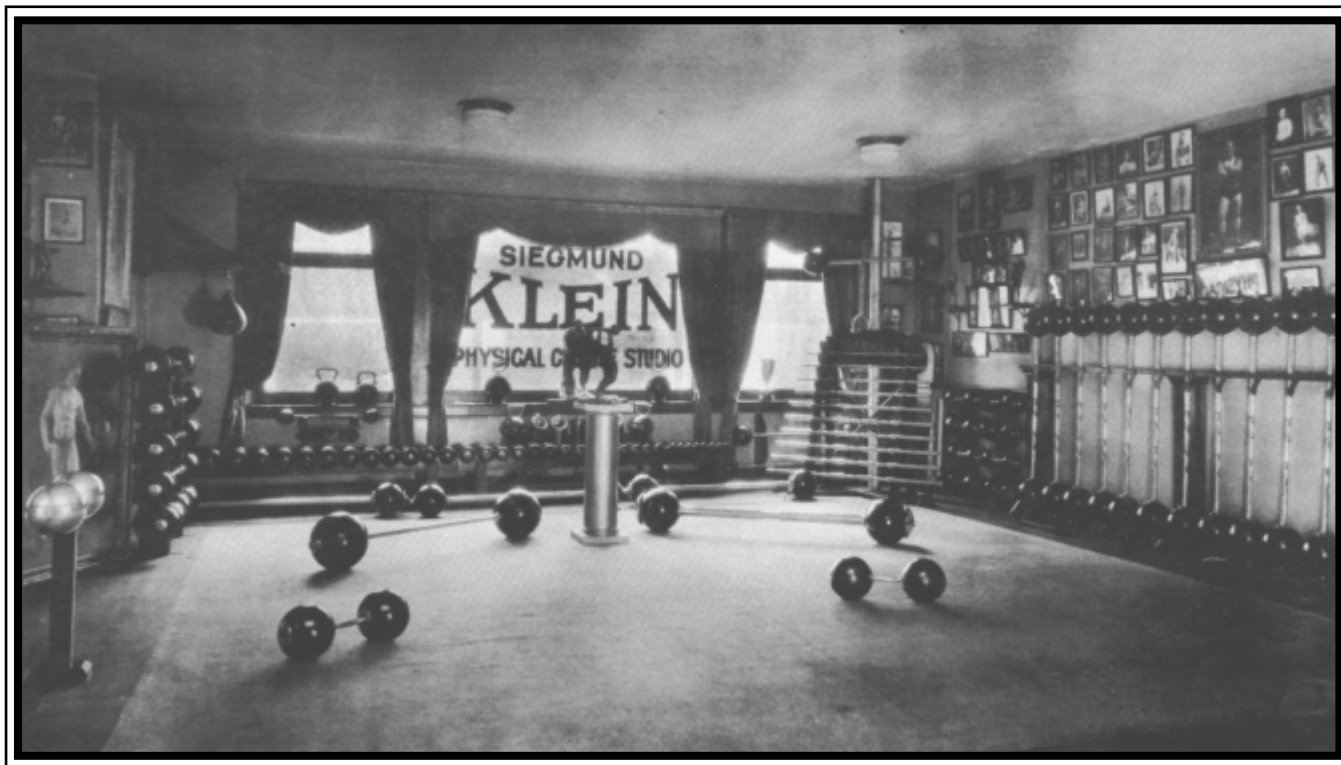
—TODD-MCLEAN COLLECTION

hand and put the other one around her forearm and asked her to bend the cap. But she bent it so quickly that he asked her to do it again and to do it a bit more slowly if she could. So she bent the next cap slowly between her thumb and forefinger, and he smiled and said quietly, "Wonderful, wonderful. She's got it. Tendon strength and tenacity. That was what I had."

As we talked and ate Mac kept coming back to Jan's hand and to her extraordinary natural ability, which seemed to please him so greatly. It was clear that whatever jealousy he might have had as a younger man was gone with the winds of age and wisdom. In a lull in our conversation, he asked Jan how old she was, and she told him she was twenty-five.

He looked at her sharply then but asked softly, "When were you born?" to which she replied, "I was born on May 22nd 1952." He looked at her again his clouded eyes fixed on her face, and he said nothing for perhaps a minute. Then he began to cry, quietly at first and then in great, racking sobs and I found that Jan and I were crying with him, tears running down our cheeks as we sat there in the home of that fine old man, crying about time and age and youth and strength and all the things worth crying for.

Later, when Mac could talk again, and we could listen, he told us that the birthday of his only daughter was the same exact day as Jan's, and that he was the same age as Jan—twenty-five years—when he realized that he might be the best armwrestler in the world. He told us that he broke down when he learned that Jan could have been his daughter in the flesh as she obviously was in spirit. Mac's wife had been dead by then for some time, and he only had his daughter to care for him as his sight failed. But we learned with sadness that instead of helping him his only daughter had preyed on him for years, mistreating him and regularly taking money that he didn't have to spare. We thought the story couldn't get much more sorrowful, but then he looked at us again and asked, almost in a whisper, "Did you know my daughter's name is Jan?"



SIG KLEIN'S PHYSICAL CULTURE STUDIO, AS IT APPEARED IN APPROXIMATELY 1960. NO OTHER GYM IN AMERICA COULD BOAST SUCH A DISTINGUISHED HISTORY.
--TODD-McLEAN COLLECTION

A Tale of Two Trainers— John Fritshe and Sig Klein

Jim Murray

When my copies of *Iron Game History* arrive they rekindle memories and inspire me to write about the old-timers I knew. Al Thomas writes of “recreating that world so fondly recalled by the old-timers” and Leo Rosa writes about remembering “when we were forever young, yesterday.” It’s a bittersweet task to sit at the keyboard and remember those days, especially when those remembered are no longer with us.

Two of my favorites among the departed old-timers were gym owners—John Fritshe, who instructed bodybuilders at his gym on Germantown Avenue in Philadelphia, and Siegmund Klein who trained both bodybuilders and celebrities in his famous gym at 717 Seventh Avenue in New York City. Mr. America winners trained at both instructors’ gyms: Frank Leight at Klein’s, for example, and Jules Bacon, George Eiferman and John Farbomik at Fritshe’s.

I first met John Fritshe when I was only fifteen, at a large swimming pool and recreation center called Somerton Springs, near Philadelphia. John and several members of his gym—two I remember were Jack and Ed Ritter—gave an informal demonstration of barbell exercises, especially squats, which John insisted all

his pupils do—all the way down and usually for twenty repetitions. John himself was a little guy—he’d been a national weightlifting champion in the 112-pound class in 1936—but he was a stickler for correct form and really cracked the whip. His word was law to the big guys who trained under his guidance.

John and his gang were at Somerton Springs several times; once when Bob Hoffman, Tony Terlazzo, and a couple others of the York team were there to give an exhibition. On that occasion, back in 1941, Tony didn’t want to try a clean and jerk because they were lifting on grass and he was afraid he might slip. Bob asked Frank Orant, the powerful Philadelphia light-heavyweight, if he would show the audience a three hundred pound clean and jerk. Frank—who was one of the first, and lightest at the time, to jerk four hundred pounds—agreed to try. As he prepared for the lift—which he made, despite the uncertain footing—Jim Lorimer and I heard him mutter under his breath, “Sure, it’s okay if I slip.”

What I remember especially about John Fritshe was how friendly and helpful he was to young, novice weight trainers. On several occasions a few of us would drive the thirty miles to Philadel-

phia and visit his gym. He always permitted us to try the weights, gave us pointers on correct exercise form, and was invariably friendly and hospitable. During one visit, Bob Neeld, a halfback who was the fastest man in the backfield of our high school team, hung back while the rest of us tried a few lifts. "Go ahead," John urged Bob, "Give it a try." Bob couldn't because he'd incurred a mild hernia playing football. So John showed us an exercise he said would correct the hernia; he had Bob do leg raises in a declined position on a sit-up board. When we returned home Bob did decline leg raises, using my mother's ironing board, for several days and, sure enough, the hernia disappeared and Bob played a major role in our 9-1 senior football season.

On that same occasion, Ed Ritter was grinding out what seemed to be an endless set of squats with a respectable poundage on the bar (to us teenagers it was a massive poundage). Noticing that John was working with another pupil across the room, Ed put the barbell back on the squat rack and said, "Don't tell John. I only did fifteen." We thought we were really part of the "in crowd" to be asked to keep his secret.

The first time I visited Sig Klein's gym I was still in my teens and I was awestruck at the decor. One wall had a rack of barbells with shiny chrome handles and glistening black globes, all standing neatly on end and looking exactly alike. The only way you could tell what one of the barbells weighed was by its location on the rack. Even more intriguing were the steins displayed around the room on a narrow shelf above the weights and other equipment. All Sig's steins had a strongman theme, one even being closed by a small kettlebell instead of the usual hinged lid. I wonder where all those barbells and steins are today.

Sig's place was not large and there were a number of paying customers using the equipment. Sig, ever an efficient businessman, allowed us to look around for a while, then came over and shook our hands, thanked us for dropping in, and suggested we come back another time.

Obviously the visit was over, so we made our way back down the stairs and out onto Seventh Avenue—a much

nicer place than it is today!

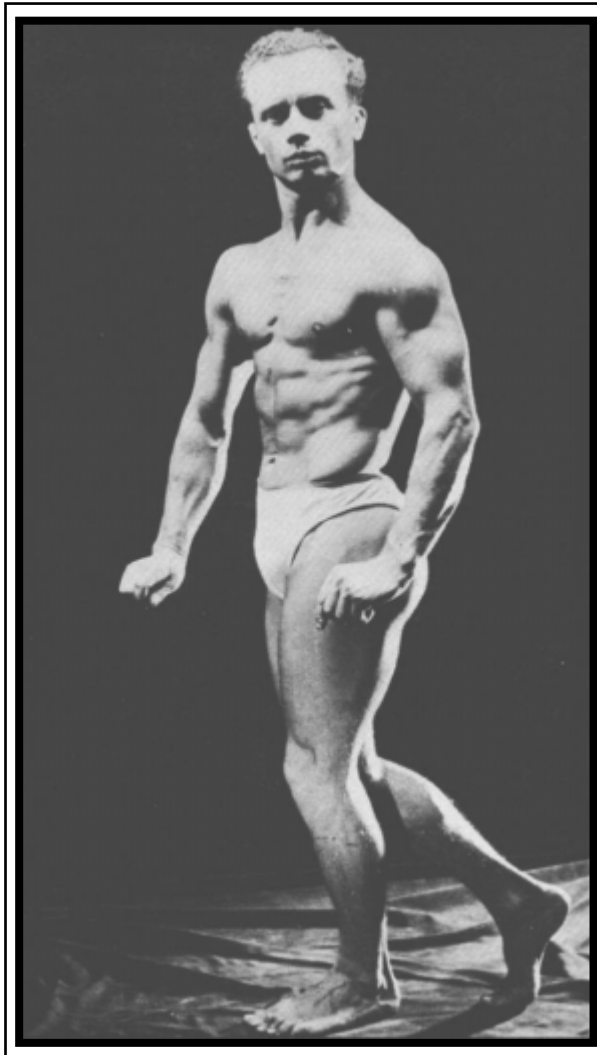
Later, when I was editing *Strength & Health*, I often dropped in to see Sig and was allowed to stay as long as I liked. On one of those visits, he called me over to meet one of his members, who was exercising while smoking a cigar! (Secondhand smoke was not a concern in those days.) "You should meet this fellow," Sig said, "you have almost the same name." It was Jan Murray, then a popular comedian of stage, screen, and television.

Sig had a pair of hundred-pound dumbbells that were unmatched and difficult to clean. There was a story that Josef Manger, the 1936 Olympic heavyweight champion, had been unable to clean them (though he easily pressed them several times when they were handed to him at the shoulders). I was only a third-rate weightlifter, but I could clean a pair of overweight hundreds we had at the old York gym and I wanted to try Sig's dumbbells. I'm sure he would have preferred that I just look at them, but he reluctantly allowed me to try.

The dumbbells were definitely mismatched. One was a beautiful hundred-pounder with a short bar connecting the globes. It had a standard diameter handle. The other was longer, with smaller globes and a much thicker handle. I had accidentally severed tendons on the third and fourth fingers of my right hand some years earlier so I decided to try the thicker-handled bell with my left. The weights came up easily enough, but when I tried to turn them over, the long, thick-handled one wobbled off to the left. Sig had anticipated this and was on the spot to catch it, preserving his floor. I tried again. Same result..

Sig asked, "Aren't you right-handed?" I said I was and he suggested I try the awkward dumbbell with my right hand. I did, and it worked. I had cleaned the dumbbells that Manger couldn't clean! A fond recollection from those wonderful days "when we were forever young, yesterday."

Are there any gym owners like John Fritsche and Sig Klein today, or do they all want to sign you up to "lifetime memberships" at special rates?



JOHN FRITSCHÉ



Dear *IGH*,

In the August 1994 issue you had Bernd Wedemeyer's German bodybuilding article which was translated into English by Anthony Hayward. I think it should be made into a book or have *The Handbook of Physical Education* translated. Are there any books by the doctor in German which are available? Thank you for your time and trouble.

Frederick W. Bodlak
Chicago, IL

Dr. Wedemeyer is presently working on a book-length history of the German physical culture movement. Although it will be published in German, we will try to get sections of it translated for *IGH* after it is completed. Dr. Wedemeyer has an excellent article, entitled "Bodybuilding or Man in the Making: Aspects of the German Bodybuilding Movement in the Kaiserreich and Weimar Republic," in the current issue of the *International Journal of the History of Sport*. For a reprint, call 1-800-944-6190.



Dear *IGH*,

I certainly want to thank you for your recent issue of *IGH* containing the great article by Jim Murray on the fabulous Paul Anderson. They say a picture paints a thousand words, and we should all keep [in mind] the picture of Paul squatting all the way down with record poundage.

In your fine article on the incredible George Hackenschmidt, you mentioned the influence of philosopher John Dewey on his thinking. Dewey influenced me, too, not only as a former student of philosophy but as a lifter as well with his and George Herbert Mead's "Theory of the Reflex Arc." It maintains that all phases of an act are part of the same unit, not different mental and physical "stuff" and should be thought of as one. The mind is part of the body and the body part of the mind, so this business of "mind control" in a lift is not relevant unless all components are thought of as one process, with mind not some phantasm that floats over one's head. This concept is very close to what Doug Hepburn called a "contractual drive," where one does not cogitate about making a lift before attempting it, but just going ahead and doing it as almost a reflex action.

Al Thomas' article was wonderful and scholarly. I couldn't have agreed more about the fun being gone from our sport. Competition seems to have become the *sine qua non* of lifting and bodybuilding, with winning the only thing that matters. I remember when Bob Samuels returned to see his first powerlifting contest in many years. What disturbed him was the lack of fun, and particularly the heckling and insults exchanged between athletes. "They would

have tom up someone's AAU card years ago for that!" he moaned.

While I couldn't agree more with Laurie Fierstein's observations, I do not believe that the strength sports should be singled out for over-emphasis on winning. They merely reflect the very pathetic road *society* in general is taking. I really wish Ms. Fierstein the best and hope that she can turn something around in the strength game. Let things start here! I particularly enjoyed the picture of Doughdee Marie lifting a big man over her head. I particularly appreciate the big smile on her face, and the fact that she has gone back to a feat of raw strength that cannot be faked and is understandable to non-lifters because while they cannot appreciate the weight of the barbell they *can* relate to the weight of a person. She is obviously having fun, and that should be the bottom line on sports.

Allen Smith
New Orleans, Louisiana

As for Bob Samuel's reaction to the meanness he saw at a powerlifting meet, we have to say that we have not seen such things at the collegiate level of the American Drug Free Powerlifting Association.



Dear *IGH*,

This letter serves a dual purpose. I wish to renew my subscription to *IGH* which I read and enjoy immensely. My only regret is that it does not come out more frequently but I realize it is not a commercial venture and there are limitations implied in that concept. Nevertheless quantity should never be confused with quality and *IGH* possesses the latter without doubt.

I read with great interest the letter written by Norman Komich in the August 1994 issue. Although we have never met I feel I know him based on the numerous other letters he has written to *IGH* which I enjoyed. However I strongly disagree with his reasoning in which he cites heavy training (as in the case of Chuck Sipes and Joe Abbenda) as a cause for arthritic-like ailments in later years.

There are probably hundreds of thousands of people in the United States who are afflicted with arthritis and other forms of joint disease and who can't run due to knee pain or "wake up stiff" in the morning. It's safe to bet that the vast majority of them never lifted a weight or exercised in any meaningful way in their lives. For every lifter who develops pains in later years there are probably a thousand non-lifters who develop similar pains, and lifting is not to blame in their cases. In addition there are numerous older weight trainers who do not have crippling maladies, despite years of training. Exercise is considered medically therapeutic for joint disease and medical studies have proven the benefits of resistance exercise even in eighty year old invalids. Lifting is being unfairly blamed by Mr. Komich in my opinion.

Heavy training and sensible training are not mutually exclusive terms. In years past athletes in baseball were considered "old" at age thirty. Similar notions prevailed in other sports. Today these barriers have fallen and careers have been extended by years. Masters lifting and bodybuilding competitions have shown that such bar-

riers have fallen in the weight world as well. One can, in my opinion, continue to train and make progress, avoiding injury and inducing health in the process. This is not to say a man can be as strong at sixty as he was at thirty but that even at sixty he can look healthy, feel well, and be stronger than thirty year old non-lifters.

I am presently forty-two and train on a mixture of Olympic and power lifts. I have lifted since age sixteen but my best gains have occurred in the past four years, utilizing sensible, drug-free training but not shying away from "heavy" weights by any means. A six hundred-plus pound deadlift and five hundred-pound Olympic full squat are not world records but I am proud of them and look to improve on them while staying injury free.

Weight training for me is a lifelong commitment and has become more important as the years pass because of its healthful benefits. It complements a person's physical and emotional health, at any age. It should be welcomed as the trusted companion it is and not relegated to the fringes because of misconceptions.

Enclosed is my renewal but for a patron subscription in honor of the fine job you have done with *IGH*.

Robert Conciatori, MD.
Flushing, NY



Dear *IGH*,

Thought I'd drop you a line to tell you that I enjoy *IGH* very much. It seems to get better with each issue. I especially liked the articles on Grimek and Hoffman. If possible I would like to see articles in the future issues about the training and lifts of Bob Peoples, Harold Anson, William Boone, Jack Walsh, Claude Samson Champain, The Good Brothers, The Saxons, Steve Stanko, Apollon, and Herman Goerner. I would also like to see articles on the history of lifting and bodybuilding courses (Atlas, Leiderman, Good, Calvert, Berry, Siebert, Anson, Hepburn, Paschall, Jowett, Hoffman Weider, etc.) with example routines. It would also be very interesting to see articles on the history of exercise equipment, training methods and the lifters and authors who popularized them and the development of food supplements and steroids from the beginning to the present.

Charles Davidson
Camby, IN

Little by little, we hope to cover these areas. See Jan Todd's "History of Barbells, Dumbbells, and Indian Clubs" on page four.



Dear *IGH*,

It was lovely to speak with you on the telephone and thank you for the honor in allowing me to include your names as Patrons of the Oscar Heidenstam Foundation. As I explained, we are about to change the letterheads etc. from Trust to Foundation and enclosed is a photocopy of next year's advertisement for the Hall of Fame Dinner and Awards. Thank you also for offering to include me on your

mailing list for *IGH* which I shall publicize at every opportunity. I feel very strongly that your *excellent* publication should be seen in the UK & Europe. I plan to publish a similar style brochure under the heading of the *Health & Strength* magazine as public relations 'news' on behalf of the Foundation. I purchased *H&S* in November 1992 having been involved with this together with Oscar from the mid 1950s. I haven't yet decided exactly when, but this should be during 1995.

In this day and age, it seems that virtually all publications cover 'pure' bodybuilding when *physical culture* (which started it all) takes second place. Maybe we and all like minded enthusiasts can continue serving the cause encouraging younger minds to research their heritage!

Malcolm Whyatt
Hereford, England



Dear *IGH*,

I am sorry to report to you the death of Albert Tauscher. He was just a little over one hundred years old. Al was one of the legendary lifters prior to World War One. From 1913 to 1917 he lifted with Owen Carr most every day. Thinking that the more they lifted the stronger they grew, they lifted til failure three times a day, usually in two or three lifts. Later we learned that a day or two of rest between supreme efforts gave an athlete a rest, more muscles, and higher records. If they had followed this system I think they would have lifted more in each individual lift.

Tauscher was the second American to get three hundred pounds overhead—the first being Noah Young, a 240 pound pro boxer. In my memory I do not believe Al ever got double body weight overhead but he came close. He made 310 pounds at 160 pounds bodyweight—pretty good. He could one-arm jerk 210 pounds as well as two-arm snatch it. On several occasions he snatched his body weight—his best being 160 pounds at 157 pounds bodyweight. I think at that time that only Otto Arco & Maxick had done this and they were pros. In the world of strength athletes, Al Tauscher was a little giant truly a legend to go down in weightlifting history.

On another subject: Without ever saying one word about a new set of weight limits for lifters—we now have a new set. What is behind this? The old set of weight classes was not broken, not even bent, and they had stood the test of time since before 1920. Now we have two sets of records—no way to compare them—except by body weight. A scourge on the group who changed it. I can't see that the new limit serves any useful purpose.

Collister Wheeler
Portland, OR

The International Weightlifting Federation changed the classes two years ago for two basic reasons. First, they wanted to make it easier for world records to be broken, as the media like world records. Second, they wanted to call attention to what they said was an improved drug testing program. The change of classes was a tacit admission that drugs had inflated the records.