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BUILDING STRENGTH:
ALAN CALVERT, THE MILO BAR-BELL COMPANY, AND THE MODERNIZATION OF AMERICAN WEIGHT TRAINING

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by

KIMBERLY AYN BECKWITH, B.A., M.ED.

DISSERTATION

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

DOCTOR OF PHILOSOPHY

THE UNIVERSITY OF TEXAS AT AUSTIN

AUGUST 2006

DEDICATION

To my mother, Joan Ratliff;

To the memory of my father, Clois Ray Beckwith;

and

To the rest of my family who kept encouraging me to “Just get it done!”

ACKNOWLEDGEMENTS

As is the case with most projects of this scale, my dissertation was not completed in a vacuum. First, I want to thank Dr. Jan Todd of the Kinesiology and Health Education Department at The University of Texas at Austin. Dr. Todd taught me to trust in my strengths, both physically and intellectually. This dissertation would not have been started, much less finished, without her constant encouragement and support. Dr. Todd chaired my dissertation committee and provided the ongoing analysis that helped me to narrow and complete the manuscript.

I would also like to acknowledge my other committee members. Special thanks go to Dr. Terry Todd, also of the Department of Kinesiology and Health Education at The University of Texas, who began the Todd-McLean Physical Culture Collection and, in so doing, provided me with the means to complete this dissertation. What's more, his constant support and reminder that, "It's a good life if you don't weaken," meant more to me than he probably realized. To Dr. Carla A. Costa of the Department of Kinesiology and Health Education at The University of Texas, to Dr. Janet M. Davis of the Department of History at The University of Texas, and to Dr. Charles D. Kupfer of the American Studies Department at Penn State University at Harrisburg, I am grateful for your willingness to be on my committee and for your insightful feedback.

Not forgetting the always helpful, but under-recognized, staffs at The University of Texas at Austin libraries, the Philadelphia Free Library, and the Philadelphia City Archives, thank you for your patient assistance. Ryan Richards of the *Suburban and Wayne Times* office also deserves a thank you for digging through his newspaper's

archives for the information that allowed me to finally make contact with a descendant of Alan Calvert—Howard Wiig. Having found Mr. Wiig, I now want to thank him, and his cousin—Linda Laurence, for their eagerness to gather information for me concerning the Calvert family. George D. Devine also deserves recognition for his willingness to share information on Edwin Checkley. A big thank you also goes out to Reuben Weaver and Michael Murphy for their readiness to share the Calvert materials found in their collections. David Webster, Mike BonDurant, and Joe Roark each earned a thank you for answering questions and contributing information about the Iron Game.

I am also grateful to the North American Society for Sport History for making me, and other graduate students, feel welcome at their annual meeting. NASSH has a tradition of supporting graduate students that is truly commendable.

It goes without saying that I depended on my family--especially my mother, Joan Ratliff—for their patient support, love, and encouragement during this process. The whole bunch stayed right behind me, urging me on with their constant reminders to hang in there. Finally, a word to my fellow graduate student friends Nick Bourne, Sylvia Trendafilova, Tommy Hunt, and Jules Woolf—thanks for making the experience one to remember. Y'all will be close on my heels!

BUILDING STRENGTH:
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Publication No._____

Kimberly Ayn Beckwith, Ph.D.

The University of Texas at Austin, 2006

Supervisor: Janice S. Todd

Men looking to reshape and strengthen their body in *fin de siècle* America (particularly after Eugen Sandow's 1893 appearances at the Chicago Worlds Fair) discovered two major problems: the limited exercise literature available in this era almost universally espoused the use of light weight training methods which did not build the kind of muscles owned by Sandow, and those who wanted to lift heavier weights—*ala* Sandow and other professional strongmen—could not buy such implements from any sporting goods company in America. Enter Alan Calvert, who solved both problems for American men by opening the Milo Bar-bell Company in 1902. His promotion of progressive resistance exercise using the adjustable barbells and dumbbells he manufactured launched a new era of strength and muscularity for America.

Using historians Allen Guttmann's and Melvin Adelman's theories on sport and modernity, this dissertation argues that Alan Calvert was the pivotal figure in the modernization of American weight training. His first book, *The Truth about Weight Lifting*, did more than expose the professional strongman's tricks. It also urged Americans to create an association for the sport that would regulate competitions, create rules and standards for equipment, decide on a definitive set of lifts, and keep official records. Calvert's suggestions resulted in the formation of the American Continental Weight-Lifters' Association, the first national governing body for weightlifting in the United States.

Modern sports according to Adelman must have a specialized literature, and Calvert also provided this for weight training by beginning *Strength* magazine in 1914. In his articles and editorials, Calvert introduced his readers to scientific training methods, emphasized the importance of training with heavy weights, and counseled thousands of men on the best methods to build an impressive physique. Known for his honesty and integrity, many of Calvert's followers viewed him as a messianic character as he converted thousands of men to weight training during the first two decades of the twentieth century. Although Calvert turned from lifting in his later life, his followers did not stray from the path he'd set them on—the path that led to the creation of the modern sports of bodybuilding and weightlifting.

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INTRODUCTION

In the spring of 1982, I lived in O'Donnell, a small town in the Panhandle of Texas. I was on the track team that spring and, to my surprise, my ninth-grade coach required us to participate in weight-training drills on an old Universal circuit machine at least twice a week. It was the first time I'd ever lifted weights. That spring my legs grew visibly larger and more muscular, and I discovered that I could run faster than I had ever run before. That summer, when we moved back to my former hometown of Austin, Texas, my childhood friends were surprised to see the difference weight training had made in my legs. They became, for a time, a popular topic of conversation. I was pleased that my legs had caught the attention of my friends. I'd grown during the six months I was in O'Donnell, of course, but the weight training—coupled with a variety of weighted drills and the running itself—had had a truly dramatic effect on my appearance, and the effect of my altered appearance on my friends did a lot for my teen-aged self-image. As a fourteen-year old, I discovered that I liked looking—and being—strong. Although he was in the small-town of O'Donnell, Coach Jackie Bullion was on the cutting edge of the introduction of a new paradigm for athletic training in North America. Overseas, weight training had been used since the Fifties in the preparation of track and field athletes, especially in parts of the Soviet Bloc. In the United States, however, it was just catching on in the 1970s, and to recommend weight training for women athletes—as Coach Bullion did—was still rare in the early Eighties. I finished out my high school career in Vernon, Texas, where I participated in cross-country, basketball, and track. Not

a single coach at Vernon ever suggested that I should use weights to make myself a better athlete.

Following high school I attended Vernon Regional Junior College where I enrolled in a weight training class one summer. In that class I was introduced to the world of free-weight training, which is weight training relying primarily on barbells and dumbbells rather than machines. The female instructor was primarily interested in the "toning" aspects of training, but I was interested from the first in testing myself with "heavy" weights. One day, giving in to my requests, she let me work up and bench press one hundred pounds during class. She was surprised, but I was ecstatic. I felt great having conquered that weight and I promised myself, then and there, that I'd find time to get serious about weight training when my schoolwork permitted.

I arrived at The University of Texas at Austin in 1987 to complete my bachelor's degree in biology. I was still fascinated with the weights, but my schoolwork was more important to me so I didn't touch a weight that first year. The following fall, however, I enrolled in a weight-training class and discovered that the instructors, Jan and Terry Todd, were both former champions in powerlifting who had a different philosophy about strength than my junior college instructor. They wanted everyone to lift more weight and to work on building real strength. I loved the way my strength grew under their direction, and I was excited when they invited me to work out with the powerlifting team they coached at UT. With them as my guides, I went on to win the National Collegiate Powerlifting Championships three years in a row, set four American collegiate records, and won the "Best Lifter" award at the Collegiate Nationals three times as well. Following the completion of my undergraduate degree, I've continued to be involved

with powerlifting as a competitor (competing in the Women's National Championships on several occasions), as a National Referee, and by serving as both the coach of the Longhorn Powerlifting Team at The University of Texas and the Texas State Powerlifting Chairperson.

Through my association with the Todds I was introduced to the Todd-McLean Physical Culture Collection, which they started at UT in 1984. The Collection is regarded as the largest and best compilations of archival materials related to strength, bodybuilding, weightlifting, physical culture, and alternative medicine in the world. Whenever I would visit the Todds, I found myself fascinated by the artifacts, books, and magazines which filled their offices. Not until I was working on a sport history paper for my master's degree, however, did I begin to appreciate what a wealth of archival materials the Collection contained. It didn't just have books and magazines; it had old photographs, posters, and personal papers, and as I used some of these for an article on a Texas strongman named Stout Jackson, I discovered how much I enjoyed pulling together the pieces of a person's life from the artifacts they left behind. I was hooked. I wanted to chronicle the history of strength and exercise.

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As I began a more systematic study of the history of strength training, I came to realize that there was a relatively small amount of academic research literature in this area. Unlike baseball, football, soccer, and other more major sports—which have been well-documented by sport historians since the birth of the sport history movement in the latter half of the twentieth century—only a handful of academic sport historians have

studied the "strength sports."[1] There are several reasons for this, but by far the most important is the low esteem in which weight training was held by most coaches and academics during the first half of the twentieth century. Unlike now, when the use of weight training is ubiquitous in sports training, most coaches in the first half of the twentieth century believed that weight training was harmful—that it would make an athlete muscle-bound, and might even shorten a person's life. Men who practiced bodybuilding and trained for muscularity were often considered narcissistic and possibly homosexual. They existed on the fringes of American culture. What is more, neither competitive weightlifters nor bodybuilders were regarded as athletes in the same way that other sportsmen were, and because of these attitudes the general public failed to realize the benefits that weight training could bring to a person's life. Although there were a number of magazines published in the field broadly defined as "physical culture," these magazines were rarely purchased by city or university libraries. Because these were not included in most research libraries, the field was academically marginalized. Historians interested in the "Iron Game" have generally found research on weight training and exercise difficult because of the scarcity of sources.

This dissertation thus fits into a relatively small body of literature which would include Harvey Green's *Fit for America*, Jan Todd's *Physical Culture and the Body Beautiful*, Bruce Haley's *The Healthy Body in Victorian Culture*, Patricia Vertinsky's *The Eternally Wounded Woman*, and Kathryn Grover's *Fitness in American Culture: Images*

[1] The North American Society for Sport History held its first annual meeting in 1973. Much research has been done on the "modern sports" as described by Allen Guttmann and Melvin Adelman. See: Allen Guttmann, *From Ritual to Record: The Nature of Modern Sports* (New York: Columbia University Press, 1978); Melvin L. Adelman, *A Sporting Time: New York City and the Rise of Modern Athletics, 1820-70*, Illini Books ed., *Sport and Society* (Urbana: University of Illinois Press, 1990).

of Health, Sport, and the Body, 1830-1940.[2] These exemplary works document the importance of exercise and physical culture activities to the lives of Americans and Western Europeans and are regarded as the seminal monographs in this field. In the sub-discipline of weightlifting and bodybuilding, scholars can now access several excellent books, including John Fair's *Muscletown USA*, a history of the York Barbell Company and its founder, Bob Hoffman, and David Chapman's in-depth biography, *Sandow the Magnificent: Eugen Sandow and the Beginnings of Bodybuilding*.[3] As Chapman's title indicates, Sandow was enormously influential in the development of bodybuilding and in the promotion of exercise for all members of society. Sandow's life has also been central to Caroline Daley's *Leisure & Pleasure: Reshaping & Revealing the New Zealand Body, 1900-1960*; Michael Anton Budd's *The Sculpture Machine: Physical Culture and Body Politics in the Age of Empire*; and John F. Kasson's *Houdini, Tarzan, and the Perfect Man: the White Male Body and the Challenge of Modernity in America*.[4] Sandow's performance at the 1893 Columbian World's Exhibition (also known as the Chicago World's Fair) affected many men, including Alan Calvert—the subject of this

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[2] Harvey Green, *Fit for America: Health, Fitness, Sport, and American Society*, 1st ed. (New York: Pantheon Books, 1986); Kathryn Grover and Margaret Woodbury Strong Museum., *Fitness in American Culture: Images of Health, Sport, and the Body, 1830-1940* (Amherst: University of Massachusetts Press and Margaret Woodbury Strong Museum, 1989); Bruce Haley, *The Healthy Body and Victorian Culture* (Cambridge: Harvard University Press, 1978); Jan Todd, *Physical Culture and the Body Beautiful: Purposive Exercise in the Lives of American Women, 1800-1870* (Macon: Mercer University Press, 1998); Patricia Anne Vertinsky, *The Eternally Wounded Woman: Women, Doctors, and Exercise in the Late Nineteenth Century*, Illini Books ed. (Urbana: University of Illinois Press, 1994).

[3] David L. Chapman, *Sandow the Magnificent: Eugen Sandow and the Beginnings of Bodybuilding*, revised softcover ed., *Sport and Society* (Urbana: University of Illinois Press, 2006); John D. Fair, *Muscletown USA: Bob Hoffman and the Manly Culture of York Barbell* (University Park: Pennsylvania State University Press, 1999).

[4] Michael Anton Budd, *The Sculpture Machine: Physical Culture and Body Politics in the Age of Empire* (New York: New York University Press, 1997); Caroline Daley, *Leisure & Pleasure: Reshaping & Revealing the New Zealand Body 1900-1960* (Auckland: Auckland University Press, 2003); John F.

dissertation. It also affected *Physical Culture* magazine publisher Bernarr Macfadden, whose eccentric life has also been the basis for several well-regarded books and dissertations, such as Robert Ernst's *Weakness is a Crime: The Life of Bernarr Macfadden*, and Lisa Robin Grunberger's "Bernarr Madfadden's 'Physical Culture': Muscles, Morals and the Millenium."[5] Other scholarly work in this area includes Terry Todd's early dissertation on the history of American Weightlifting, Kenneth Dutton's *The Perfectible Body, The Western Ideal of Male Physical Development*, Carolyn Thomas de la Pena's *The Body Electric, How Strange Machines Built the Modern American*, Alice Shukalo's recent dissertation, "Communing with the Gods: Bodybuilding, Masculinity, and U.S. Imperialism," David Norwood's thesis "The Sport Hero Concept and Louis Cyr," and Joshua Buck's thesis on the performances of professional strongman from the 1880s to the decline of the vaudeville stage in the 1930s.[6] Another important

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Kasson, *Houdini, Tarzan, and the Perfect Man: The White Male Body and the Challenge of Modernity in America*, 1st ed. (New York: Hill and Wang, 2001).

[5] Robert Ernst, *Weakness Is a Crime: The Life of Bernarr Macfadden*, 1st ed. (Syracuse, NY: Syracuse University Press, 1990); Lisa Robin Grunberger, "Bernarr Macfadden's "Physical Culture": Muscles, Morals and the Millennium" (Ph.D. diss., The University of Chicago, 1997); Jacqueline Anne Hatton, "True Stories: Working-Class Mythology, American Confessional Culture, and "True Story Magazine", 1919-1929" (Ph.D. diss., Cornell University, 1997); William R. Hunt, *Body Love: The Amazing Career of Bernarr Macfadden* (Bowling Green: Bowling Green State University Popular Press, 1989); Bernarr Adolphus Macfadden, "Bernarr Macfadden's Joyous Life," (New York: Bernarr Macfadden Foundations); Fulton Oursler, *The True Story of Bernarr Macfadden* (New York: Lewis Copeland Company, 1929); Jan Todd, "Bernarr Macfadden: Reformer of Feminine Form," *Journal of Sport History* 14 (Spring 1987); Clifford Jerome Waugh, "Bernarr Macfadden: The Muscular Prophet" (Ph.D. diss., State University of New York at Buffalo, 1979); Clement Wood, *Bernarr Macfadden: A Study in Success* (New York: Beekman Publishers, 1974).

[6] Joshua Michael Buck, "The Development of the Performances of Strongmen in American Vaudeville between 1881 and 1932" (master's thesis, University of Maryland at College Park, 1999); Kenneth R. Dutton, *The Perfectible Body: The Western Ideal of Male Physical Development* (New York: Continuum, 1995); David R Norwood, "The Sport Hero Concept and Louis Cyr" (master's thesis, University of Windsor, 1982); Carolyn Thomas de la Pena, *The Body Electric, How Strange Machines Built the Modern American* (New York: New York University Press, 2003); Alice Shukalo, "Communing with the Gods: Bodybuilding, Masculinity, and U.S. Imperialism, 1875-1905" (Ph.D. diss., University of Texas at Austin, 2005); Terence Colquitt Todd, "The History of Resistance Exercise: And Its Role in United States Education" (Ph.D. diss., University of Texas at Austin, 1966).

contribution is Ellen Roney Hughes' dissertation: "Machines for Better Bodies: a Cultural History of Exercise Machines in America, 1830-1950."[7] Through an examination of U.S. patents, Hughes categorizes machines according to their general use and time period—for rehabilitation (1830-1950), for competitive sports training (1844-1950), and for shaping the body (1865-1950)—paying particular attention to the growth of the exercise industry in the early twentieth century. Although dumbbells and barbells were very much part of this industry, Hughes does not include them in her study, arguing that they were not machines with moving parts.[8] In addition to these major monographs on the history of weight training and bodybuilding, a number of important articles have been published—particularly in *Iron Game History: The Journal of Physical Culture*—by historians such as David P. Webster, John Fair, Jan Todd, Terry Todd, and myself.[9]

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[7] Ellen Roney Hughes, "Machines for Better Bodies: A Cultural History of Exercise Machines in America, 1830-1950" (Ph.D. diss., University of Maryland at College Park, 2001).

[8] Ibid. Hughes limited her research to U.S. patents which fell under the category of exercise machines. She did not include exercise weights which were not machines. See footnote 51, page 39.

[9] David P. Webster's articles include: David Webster, "European Corner - a Chronology of Significant Events in the Life of Eugen Sandow," *Iron Game History* 2 (November 1992): 17-8; David Webster, "European Corner: Giovanni Belzoni: Strongman Archaeologist," *Iron Game History* 1 (April 1990): 10-11; David Webster, "Monte Saldo," *Iron Game History* 2 (January 1992): 17-9; David P. Webster, "The European Corner William Pagel: Circus Strongman," *Iron Game History* 4 (July 1995): 11. John Fair's articles include: John D. Fair, "Father-Figure or Phony? George Jowett, the ACWLA and the Milo Barbell Company, 1924-1927," *Iron Game History* 3 (December 1994): 13-25; John D. Fair, "From Philadelphia to York: George Jowett, Mark Berry, Bob Hoffman, and the Rebirth of American Weightlifting, 1927-1936," *Iron Game History* 4 (April 1996): 3-17; John D. Fair, "George Jowett, Ottley Coulter, David Willoughby and the Organization of American Weightlifting, 1911-1924," *Iron Game History* 2 (May 1993): 3-15; John D. Fair, "Strongmen of the Crescent City: Weightlifting at the New Orleans Athletic Club, 1872-1972," *Louisiana History* 45 (Fall 2004): 407-44. A few examples of Jan and Terry Todd's contributions are as follows: Jan Todd, "'As Men Do Walk a Mile, Women Should Talk an Hour…Tis Their Exercise' & Other Pre-Enlightenment Thought on Women and Purposive Training," *Iron Game History* 7 (July 2002): 56-70; Jan Todd, "'Chaos Can Have Gentle Beginnings'" the Early History of the Quest for Drug Testing in American Powerlifting: 1964-1984," *Iron Game History* 8 (May/June 2004): 3-22; Jan Todd, "The Classical Ideal and Its Impact on the Search for Suitable Exercise: 1774-1830," *Iron Game History* 2 (November 1992): 6-16; Jan Todd, "The Origins of Weight Training for Female Athletes in North America," *Iron Game History* 2 (April 1992): 4-14; Jan Todd, "The Strength Builders: A History of Barbells, Dumbbells and Indian Clubs," *International Journal of the History of Sport* 20 (2003): 65-90; Jan Todd, "'Strength Is Health': George Barker Windship and the First American Weight Training Boom," *Iron Game History* 3 (September 1993): 3-14; Terry Todd, "The Expansion of Resistance Training in U.S.

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This dissertation examines the life and contributions of Alan Calvert, one of the most important figures in the history of American weightlifting who, until now, was a man whose history had not been systematically documented. It was Calvert who founded the first barbell company in North America; it was Calvert who published the first true "muscle magazine" in the United States; it was Calvert who introduced many of the training methodologies still used to build strength and muscularity; and it was Calvert who promoted the idea that weightlifting needed to become a "real" sport with records, an association, and some form of organizational governance. Partly because of Calvert, weightlifting became a modern sport in America. Partly because of Calvert, Bob Hoffman would go on to start the York Barbell Company and promote competitive weightlifting in his magazines—*Strength & Health* and *Muscular Development*. Partly because of Calvert, Joe and Ben Weider would build an empire of magazines and weightlifting equipment by promoting the sport of competitive bodybuilding so successfully that muscularity found broad public acceptance in the late twentieth century

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Higher Education through the Mid-1960's," *Iron Game History* 3 (August 1994): 11-6; Terry Todd, "The History of Strength Training for Athletes at the University of Texas," *Iron Game History* 2 (January 1993): 6-13; Terry Todd, "The Myth of the Muscle-Bound Lifter," *National Strength and Conditioning Association Journal* 7 (1985): 37-41; Jan Todd and Terry Todd, "Peter V. Karpovich: Transforming the Strength Paradigm," *Journal of Strength and Conditioning Research* 17 (May 2003): 213-20. My own articles include: Kim Beckwith and Jan Todd, "Requiem for a Strongman: Reassessing the Career of Professor Louis Attila," *Iron Game History* 7 (July 2002): 42-55; Kim Beckwith and Jan Todd, "*Strength*, America's First Muscle Magazine: 1914-1935," *Iron Game History* 9 (August 2005): 11-28; Kimberly Ayn Beckwith, "Thomas Jefferson "Stout" Jackson: Texas Strongman," *Iron Game History* 3 (January 1994): 8-15.

and even served as the springboard for California governor Arnold Schwarzenegger's political ambitions.[10]

When Calvert began his Milo Bar-bell Company in 1902 he found a receptive audience for his product. According to historian Mark Dyreson, the bourgeois culture of the Progressive Era used sport and its athletic bodies to reaffirm their culture's place in society and to encourage republican ideals.[11] Historian Michael Kimmel argues that America was suffering a crisis in masculinity in the early twentieth century.[12] However, by joining gyms, working on their physiques, and exploring their own physical strength, weight trainers sought new meanings for masculinity in an urban America. The Muscular Christianity movement of the late-nineteenth century also helped to foster this enthusiasm for sports and training—an enthusiasm that resulted, according to historian Anthony Rotundo, in a shift in manhood from an emphasis on "moral, social, and political meanings" to an image highly dependent upon physical strength as being the "foundation of male character."[13] By the early twentieth century, emphasis had changed from invisible, internal strength to visible and measurable external strength. Calvert, therefore,

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[10] Joe Weider, Ben Weider, and Mike Steere, *Brothers of Iron: Building the Weider Empire* (Sports Publishing, 2006). This book is scheduled to be released 1 September 2006.

[11] Mark Dyreson, "Regulating the Body and the Body Politic - American Sport, Bourgeois Culture, and the Language of Progress, 1880-1920," in *The New American Sport History*, ed. S. W. Pope (Chicago: University of Illinois Press, 1997), 121.

[12] Michael S. Kimmel, "Consuming Manhood: The Feminization of American Culture and the Recreation of the Male Body, 1832-1920," *Michigan Quarterly Review* 33 (Winter 1994): 7-36; Michael S. Kimmel, *Manhood in America : A Cultural History* (New York: Free Press, 1996). For other descriptions of masculinity crises see also: Melissa Dabakis, "Douglas Tilden's Mechanics Fountain: Labor and the `Crisis of Masculinity' in the 1890s," *American Quarterly* 47 (June 1995): 204-35; Mark Dyreson, "Nature by Design: Modern American Ideas About Sport, Energy, Evolution, and Republics, 1865-1920," *Journal of Sport History* 26 (Fall 1999): 447-69; Michael Hatt, "Muscles, Morals, Mind: The Male Body in Thomas Eakins' *Salutat*," in *The Body Imaged - the Human Form and Visual Culture since the Renaissance*, ed. Kathleen Adler and Marcia Pointon (Cambridge: Cambridge University Press, 1993): 57-69.

was perfectly positioned when he began publishing *Strength* in 1914. Combined with the pressures on men to live a "strenuous life" and help avoid "racial suicide" Calvert found that many men were eager to build their bodies in a conscious effort to enhance their masculinity.

Like most biographies, this dissertation essentially traces Calvert's life and accomplishments chronologically from his birth in 1875 until 1934, when all his connections with the fitness industry disappear. Chapter One describes Calvert's family history and introduces the reader to the professional strongman Eugen Sandow, Calvert's inspiration. Calvert first saw Sandow perform at the Chicago World's Fair in 1893 and, following that experience, young Calvert went home and searched for training courses, literature explaining progressive exercise, and heavy barbells in an attempt to build his body into the same state of perfection exhibited by Sandow. Calvert never equaled Sandow in terms of physique or strength, but his search for the best training methods made him into an expert in the field of resistance exercise and professional strongmen.

Although Calvert's Milo Bar-bell Company was the first to manufacture barbells in America, he was not the first American to hold a patent for weight-lifting equipment or the first American to think about training for and exhibiting strength. Chapter Two of this dissertation traces Calvert's predecessors in the field. It examines physician George Barker Windship, who patented one of the earliest adjustable dumbbells in 1865 and who, like Calvert, was an advocate of heavy lifting. In exploring the history of weight training in America before Calvert, the chapter discusses the late-nineteenth-century strongmen William B. Curtis, Oscar Matthes, and Richard Pennell—who gave occasional

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[13] E. Anthony Rotundo, *American Manhood: Transformations in Masculinity from the Revolution to the Modern Era* (New York: BasicBooks, 1993), especially Chapter Ten: "Passionate Manhood – A Changing Standard of Masculinity."

strength performances—and it discusses the touring professionals like Louis Cyr who worked in the circuses and, later, in vaudeville. Calvert was concerned by the lack of organization and standardization in weightlifting, and particularly by the exaggerated claims made by many of the professionals.

Chapter Three introduces the Milo Bar-bell Company, which Calvert opened in 1902. Calvert quickly learned that the American public did not know how to use his adjustable barbells, so he began using detailed advertisements and then printing brochures and training courses in an attempt to educate the public about the benefits and best methods of training with barbells and dumbbells. Although selling barbells was his primary concern, Calvert found men responded to his advice and began writing to him for more information. Within a decade, Calvert's promotion of progressive exercise had put his barbell company in the black and garnered Calvert a loyal group of followers who referred to themselves as his students.

In 1911, Calvert published his first book, *The Truth About Weight-Lifting*. Although many books on exercise had been published in America prior to Calvert's *Truth*, it was the first book that focused solely on heavy lifting. In the book, Calvert exposed the professional strongmen's tricks of the trade, and examined the various "World's Strongest Man" titles. He also described exercises which he believed should become part of a standard list of competitive lifts. Every lifter should know and practice these lifts, Calvert argued, so that future competitions could fairly evaluate the strengths of each man. Calvert also made a plea for a governing body for strength competitions and argued that contests should all use the same equipment, the same rules, and a standardized set of lifts. By debunking some of the claims and exaggerations of the professional showmen, Calvert was able to convince many men that lifting was an activity for everyone, not just the exceptionally strong. *The Truth About Weight-Lifting*

was both an exposé of the seamier sides of professional weightlifting and a plea to beginners to not be afraid of lifting weights. Its message for amateur lifters was that with a little hard work you, too, could be lifting weights similar to those of professional lifters.

Chapter Five analyzes America's first true muscle magazine—*Strength*. Calvert began this publication in 1914 to highlight the results of progressive resistance training with his bells. Knowing that the advancing technology of photography allowed new possibilities for motivation, Calvert filled his magazine with large, sharp pictures of his students, professional strength stars, and physique artists. Accompanying nearly every picture was an honest analysis of the subject's physique. Calvert believed that the careful study of the photographs was important to the weight training process. He filled the rest of *Strength* magazine with instructional articles on developing proportionate, yet strong, muscle groups; articles on the benefits of heavy weight-lifting versus light lifting; and, articles on how to pose for best effect as his readers were especially interested in physique development.

After Calvert sold the company and the magazine in 1919, he continued to submit articles for *Strength* magazine and he began writing his second book, *Super-Strength*. In Chapter Six, I examine this book, published in 1924, and Calvert's relationship with the new management of the Milo Bar-bell Company. Most experts consider *Super-Strength* to be Calvert's best work. In it he educated his readers on anatomy and physiology and gave advice on how to develop the muscles in each area of the body. The book also contained one of the first descriptions of the "competitive lifts" adopted by the newly formed American Continental Weight-lifters' Association (ACWLA). *Super-Strength* represented twenty years' worth of Calvert talking with seasoned strongmen, training hundreds of students, making observations on the physiques of living subjects and photographs, and reading all he could get his hands on to improve his own knowledge

about weight-lifting. It was the sort of book that solidified Calvert's reputation as the undisputed Dean of American Weightlifting, and it came as a total shock to his fans and loyal students when less than a year after its publication he renounced heavy training in favor of Edwin Checkley's apparatus-free training system.

Chapter Seven explores Calvert's conversion and its impact on *Strength* magazine and the world of physical culture and weight training. I speculate in this dissertation that Calvert's change in philosophy came about because of a falling out between Calvert; Daniel G. Redmond, the new owner of Milo Bar-bell Company; and George F. Jowett, *Strength's* in-coming editor in 1924. Exactly why Calvert became interested in Checkley's ideas remains a mystery, but he republished *Checkley's System of Physical Training*, originally published in 1890, which argued that proper posture and special breathing exercises were the secret to health, a shapely body, and vigor. To promote his new interest, Calvert published a series of small magazines called *Body Molding* in which he argued that Checkley's methods were as effective in producing muscle size as was weight training. Whether Calvert would have been successful promoting the Checkley system will never be known, as the Great Depression negatively impacted the entire fitness industry in the 1930s. The Milo Bar-bell Company, having severed all connection with Calvert, filed for bankruptcy in 1935. Although Milo Bar-bell, and *Strength* magazine were later purchased by Bob Hoffman, he simply wrapped the remaining assets of the two companies into his own operations in York.

Although the self-supporting Bob Hoffman would later claim that he was the, "Father of American Weightlifting," and even "The Father of World Weightlifting," the true "Father of American Weightlifting" was Alan Calvert—the subject of this dissertation. When one considers the many ways in which Calvert set in motion the journey taken by both weightlifting and bodybuilding during the twentieth century, his

importance is beyond argument. Although he later became interested in Checkley's methods, Calvert's magazine and books—and their well-presented message that using weight-lifting would let a man build a stronger and more aesthetically-pleasing physique—influenced the lives of thousands of men in America during the twentieth century.

CHAPTER ONE

ALAN CALVERT AND EUGEN SANDOW: BARBELL ENTREPRENEUR AND HIS INSPIRATION

The crowd buzzed with impatient excitement. It was August 1893 in downtown Chicago and the audience, most of whom were in town for the World's Columbian Exposition, packed the Trocadero Theatre. The educational attractions of the Exposition's seemingly magical White City were far from everyone's minds; the crowd was ready for more titillating enjoyment. Posters, flyers, and broadsides found throughout the newly-anointed "Windy City" promised a "powerful giant, whose hobby it seems is to toy with a thousand pound ball, and lift a double team of draft horses;" but it was the picture on the posters which drew everyone—men and women alike.[1] Illustrations depicted "The Modern Hercules" with a highly exaggerated, muscular physique much like those of the Hellenistic-style Greek statues found throughout the White City. Florence Ziegfeld, Jr., the new star's manager, had intentionally used comparisons to those wonderful ancient heroes as a marketing ploy to sell more tickets to the evening's main attraction—Eugen Sandow—the man whose body everyone was there to see.

A veritable unknown in the United States in 1893, Sandow was famous in London as the man who'd bested Sampson, the French strongman of the late 1880s who billed himself as the "World's Strongest Man." Other parts of Europe had witnessed Sandow's earlier acts and seen him develop as an up-and-coming strongman. In hindsight, historians recognize that other men were stronger than Sandow, but his physique and his

[1] David L. Chapman, *Sandow the Magnificent: Eugen Sandow and the Beginnings of Bodybuilding*, *Sport and Society* (Urbana: University of Illinois Press, 1994), 60.

sense of presentation is acknowledged as setting off a ripple-like effect throughout the world of physical culture and health reform—the waves of which are still being felt, and seen, today.[2]

The audience at the Trocadero attended for different reasons. Some were there because Sandow's blonde hair and fair complexion symbolized Anglo-Saxon strength in an era obsessed with eugenics and growing fears of "racial suicide" for white Americans.[3] Others thought Sandow's muscular appearance equated with good health, a fact which appealed to those worried about the declining health and loss of manhood in American society being predicted by health reformers throughout the late nineteenth century.[4] Some, of course, came simply to be entertained and see him perform his

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[2] David Webster, *Barbells & Beefcake: An Illustrated History of Bodybuilding* (Irvine: by the author, 1979), 33; David P. Willoughby, *The Super-Athletes* (South Brunswick: A. S. Barnes, 1970), 60. Sandow affected many young and enterprising entrepreneurs through his performances at the 1893 World's Columbian Exposition; the topic of this dissertation notwithstanding, among the more famous are Bernarr Macfadden, Earle Liederman, and Albert Treloar. For more information on Sandow see Josh Buck, "Sandow: No Folly with Ziegfeld's First Glorification," *Iron Game History* 5 (May 1998): 29-33; Chapman, *Sandow;* David Webster, "European Corner - a Chronology of Significant Events in the Life of Eugen Sandow," *Iron Game History* 2 (November 1992): 17-8. Information on Bernarr Macfadden can be found at Robert Ernst, *Weakness Is a Crime: The Life of Bernarr Macfadden* (Syracuse: Syracuse University Press, 1990); William R. Hunt, *Body Love: The Amazing Career of Bernarr Macfadden* (Bowling Green: Bowling Green State University Popular Press, 1989); Mary Williamson Macfadden and Emile Henry Gauvreau, *Dumbbells and Carrot Strips; the Story of Bernarr Macfadden* (New York: Holt, 1953); Fulton Oursler, *The True Story of Bernarr Macfadden* (New York: Lewis Copeland Company, 1929); Jan Todd, "Bernarr Macfadden: Reformer of Feminine Form," *Journal of Sport History* 14 (Spring 1987): 61-75; Clifford Jerome Waugh, "Bernarr Macfadden: The Muscular Prophet" (Ph.D. diss., State University of New York at Buffalo, 1979). Information on Earle Liederman is found in Leo Gaudreau, *Anvils, Horseshoes and Cannons, the History of Strongmen*, 2 vols., vol. 2 (East Kingston, N.H.: by the author, 1975), 72-82. Information on Albert Treloar can be found in Siegmund Klein, "Albert Treloar - Creator of Champions," *Klein's Bell* 1 (April 1932): 8; David P. Willoughby, "Al Treloar," (n.p., n.d.), Willoughby Collection, TMPCC; David P. Willoughby, "Al Treloar - a Great Bodybuilder Passes On," *Iron Man* (June 1960), 22-3. Ernst, *Weakness*, 17, mentions Alexander Whitely at the 1893 Fair selling his new exerciser equipment using Bernarr Macfadden as the demonstrator.

[3] Harvey Green, *Fit for America: Health, Fitness, Sport, and American Society* (New York: Pantheon Books, 1986), 224-25, mentions the appearance of racial suicide concepts in John Ellis, *Deterioration of the Puritan Stock and Its Causes* (New York: J. Ellis, 1884). More eugenics information read during the 1890s includes: Benjamin Grant Jefferis and J. L. Nichols, *Light on Dark Corners; a Complete Sexual Science and Guide to Purity and Physical Manhood; Containing Advice to Maiden, Wife, and Mother; How to Love, How to Court, and How to Marry* (Naperville, Ill.: Grove Press, Inc., 1967), 121-36. This is a reprint of an 1894 version titled *Search Lights on Health: Light on Dark Corners* and it mentions the renewed interest of Sir Francis Galton's studies pertaining to heredity and racial improvement.

[4] Harvey Green, *Fit for America*; James C. Whorton, *Crusaders for Fitness: The History of American Health Reformers* (Princeton: Princeton University Press, 1982).

wonderful feats of strength. Many in the audience, however, particularly the many women there that night, were drawn by Ziegfeld's marketing of Sandow as an erotic, scantily-clad attraction.[5] Whatever their motivations for coming to see Sandow, the audience had to sit through several opening acts including Astarte's "Aerial Evolutions;" Gustav Marschner, the "Champion Trick Bicyclist of the World;" Iwanoff's Imperial Troupe's Russian dances; and Marko and Dunham's gymnastic feats until at last it was time for the headliner. The moment the audience had been waiting for was upon them. The master of ceremonies announced Sandow's name and the orchestra played specially prepared music. Electric lights, one of the century's technological achievements and one of the Exposition's crowning glories, lined the stage and focused on the curtain…it was slowly rising.

In August 1893 the World's Columbian Exposition, or the Columbian World's Fair, was just starting to attract the immense crowds hoped for by its organizers. After three months of disappointing attendance, a series of strategic marketing schemes combined with a reduction of train ticket prices, allowed more of the general public, particularly the lower middle class, a chance to visit the most memorable event of the decade. The World's Fair consisted of two major components: The White City and the Midway Plaisance. The White City, named for the sparkling white, staff-coated walls of

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[5] Florenz Ziegfeld, Jr. first observed Sandow under Henry S. Abbey's management at the Casino Theater in New York City, NY. Apparently, not many people came to see Sandow in these inaugural performances, but Ziegfeld witnessed the reactions of women in the audience and used his budding sense of marketing and performance to successfully promote Sandow in Chicago. See Chapman, *Sandow*, 59. Kenneth Dutton discusses the eroticism of the male body in Kenneth R. Dutton, *The Perfectible Body: The Western Ideal of Male Physical Development* (New York: Continuum, 1995). Allen Guttmann also analyzes sports and eroticism in Allen Guttmann, *The Erotic in Sports* (New York: Columbia University Press, 1996). Other articles which discuss the exhibition of the male nude or semi-nude body include Patricia G. Berman, "Body and Body Politic in Edvard Munch's *Bathing Men*," in *The Body Imaged - the Human Form and Visual Culture since the Renaissance*, ed. Kathleen Adler and Marcia Pointon (Cambridge: Cambridge University Press, 1993), 71-83; Michael Hatt, "Muscles, Morals, Mind: The Male Body in Thomas Eakins' *Salutat*," in *The Body Imaged - the Human Form and Visual Culture since the Renaissance*, ed. Kathleen Adler and Marcia Pointon (Cambridge: Cambridge University Press, 1993), 57-69.

Figure 1. Eugen Sandow with some of his early show bells.
Photograph from The Todd-McLean Collection.

the Fair's classical Greek-themed architecture, was America's calling card to the rest of the world.[6] It celebrated four hundred years of American "progress through time and space."[7] Modes of physical transportation from Elisha Graves Otis's elevator, to the bicycle, to the railroad locomotive, and even to a naval battleship were displayed along with various forms of communication including the telegraph, Alexander Graham Bell's telephone, and Thomas Edison's kinetograph—an early version of the movie projector. The Fair was an inventor's paradise. The nation's spirit of freedom and its lack of limitations on the creative mind were the central theme of the Fair.

Although only a short walk physically separated the two, the Midway Plaisance was a world away from the White City intellectually. Relying on knowledge gained from the last World's Fair in Paris (1889), Chicago's organizers hoped that ethnological booths would draw crowds and sell tickets. The fair's administrators were desperate for money, so they charged Professor Frederic Ward Putnam, head of Harvard University's Peabody Museum of American Archaeology and Ethnology, with the development of ethnological exhibits. Putnam tried to extend the educational aspects of the White City by having these exhibits line the mile-long strip of land called the Plaisance. Worried that such tame demonstrations might not bring the financial relief they needed, the organizers also hired Sol Bloom, a San Francisco entrepreneur, to introduce more entertaining diversions on the Midway. Bloom conceived of the Midway as an exciting place where the tired and education-laden brains leaving the White City could go to have fun. He hired variety shows and animal exhibits and he opened restaurants and shops to lighten the "heavy

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[6] Erik Larson described "staff" as "a resilient mixture of plaster and jute that could be molded into columns and statuary and spread over wood frames to provide the illusion of stone," in Erik Larson, *The Devil in the White City: Murder, Magic, and Madness at the Fair That Changed America* (New York: Crown Publishers, 2003), 120.

[7] Robert W. Rydell, *All the World's a Fair: Visions of Empire at American International Expositions, 1876-1916* (Chicago: University of Chicago Press, 1984), 46-47.

messages" featured in the White City.[8] The Midway Plaisance was an escape from the depressing realities of life in 1893, chief among which was a national financial panic. Along with sampling exotic food and viewing the supposedly "natural" lifestyles of foreign cultures, one could witness Little Egypt dancing the hoochy-koochy, view the *danse du ventre* (bellydance) sensation, hear the now-familiar Snake-Charmer Song ("There's a place in France…"), see animals perform, and ride the engineering marvel called "Ferris' Wheel."[9]

The abundance of the seemingly hierarchical, anthropological exhibits, the omission of African-Americans from administrative involvement in the Fair's planning, and the lack of exhibits featuring African-American progress caused fair historian, Robert W. Rydell, to claim that the White City represented "a utopian construct built upon racist assumptions."[10] Most of the people who walked through its gates, however, viewed it as a symbol of America's greatness and eminent position in the international community. Attending the Fair allowed a person to forget family financial concerns, to see technological wonders from around the nation, to feel a sense of pride in being American, and to be a part of something that seemed to become more grand and important as each day passed. Historically, the White City and its seemingly never-ending displays of American progress acted as inspiration for the future careers of dozens of famous and significant persons and it provided the incentive for national developments such as city planning, city beautification projects, and architecture.[11]

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[8] Reid Badger, *The Great American Fair: The World's Columbian Exposition & American Culture* (Chicago: N. Hall, 1979), 107-09.
[9] For a list of Midway Plaisance attractions see Ibid; Larson, *Devil*, 248,267, 279-81.
[10] Rydell, *All the World's a Fair*, 40, 48, 52-3. For more information about the decisions made for the Afro-Americans, or black Americans, at the fair see also Badger, *The Great American Fair*, 105-6.
[11] For an interesting list of persons influenced by the 1893 Columbian World's Fair see Larson, *Devil*, 373-83.

A short walk from the Midway Plaisance brought one to the popular "Buffalo Bill's Wild West and Congress of Rough Riders of the World." Although technically not part of the Columbian Exposition, the show was nonetheless entertaining and hugely profitable. Visitors to the western extravaganza witnessed Annie Oakley's skill with a gun, saw live "Indians," and sat through mock battles which showed how "civilized" Americans conquered uncivilized natives. Buffalo Bill Cody put on a great show and made a million dollars from the Exposition attendees.[12] Several miles away on the corner of Michigan and Monroe Avenues sat the Trocadero Theatre with its music hall and vaudevillian acts. Under the guidance of its owner, Florenz Ziegfeld, Sr., the theatre featured high quality musical performances. Because Ziegfeld, Sr. was busy with his work on the Exposition's board of commissioners for the International Congress of Musicians, he turned the Trocadero over to his son, Florenz Ziegfeld, Jr. who favored less staid entertainment. Under the young Ziegfeld's directorship the hall took on a decidedly vaudevillian atmosphere with Sandow being the headline act.[13] If the White City represented the weighted responsibility of a utopian ideal, the Midway and other nearby sources of entertainment represented pure, if at times slightly scandalous, fun.

An unassuming, eighteen-year-old Philadelphian attended the Fair that summer. His name was Alan Calvert. In 1893 Calvert roamed the 686-acre fairground in a virtual daze, stunned by the grandeur and beauty of the Fair and bearing witness to the vision of American greatness and the promise of a new technological future. Calvert probably traveled to Chicago with family members using discounted train tickets, but once on site he walked at will and experienced a sense of freedom, independence, and exhilaration.

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[12] Robert A. Carter, *Buffalo Bill Cody: The Man Behind the Legend* (New York: Wiley, 2000), 376. Among other things, Buffalo Bill Cody used part of his earnings to found the eponymous town of Cody, Wyoming. Larson, *Devil*, 222-23, 381.

[13] Richard E. Ziegfeld and Paulette Ziegfeld, *The Ziegfeld Touch: The Life and Times of Florenz Ziegfeld, Jr.* (New York: Harry N. Abrams, Inc., 1993), 20-3.

Figure 2. A rare photo of Alan Calvert.

He toured numerous buildings, including the Manufactures and Liberal Arts Building, the Administration Building, the Mines and Mining Building, the Machinery Hall, the U.S. Government Building, and the Agricultural Building. He saw alternating-current electricity in action via the Westinghouse engine inside the Electricity Building and throughout the fairgrounds. He witnessed bicycles, railcars, and steamships in the Transportation Building. He enjoyed the products and pride of each state in the U.S. showcased in every state's individual building and examined the exhibits provided by foreign countries in their respective buildings. Although he lived in Philadelphia, Pennsylvania, the third largest city in the United States in 1893, the crowds and amazing structures of the White City were breath-taking and eye-opening. Yet however enthralled he became with the sights and vast amounts of knowledge dedicated to American accomplishment found inside the formal halls of the White City—and however much he enjoyed the thrilling rides and exhibits on the Midway Plaisance—he absolutely reveled in the show at the Trocadero Theatre. In this vaudeville theater Calvert had an epiphany, found his true calling, and became one of Sandow's ripples.

Along with thousands of other visitors throughout Eugen Sandow's three-month stay in Chicago, young Alan Calvert paid fifty cents admission before finding a seat in front of the stage at the Trocadero. Like others in the audience he wondered if the show would live up to what he'd heard about it. Could the advertisements be for real? Could a man truly resemble the ancient statues? Was he really as strong as they said? Then, all of a sudden the atmosphere in the theater changed. The emcee came out, the music began, and the curtain rose to reveal Sandow-the nonpareil. The crowd let out an audible gasp. Sandow was clad only in a pair of tight silk shorts and the lighting threw his muscles into shadowed relief—big and bold, massively rounded and impressive. Few Americans had ever seen such mass and muscularity on a living man. Sandow was a

marvel to behold. He assumed the poses of several famous statues including the runner, the discus thrower, the wrestler, and the thinker.[14] As Sandow flexed his rock-hard muscles and the crowd murmured its amazement and admiration, a desire arose in Alan (as it did in almost every other male in the theater) to attain the same striking figure – to build himself into the epitome of manhood. As the esteemed Philadelphia Presbyterian pastor, Charles Wadsworth, Jr. noted in 1891, "the root of manhood is strength, and the flower of strength is manhood."[15] Wadsworth also observed that the national multitude, himself included, idolized muscle and "worships a great biceps."[16] If Wadsworth was correct, Alan joined the masses the night he beheld the supreme being of Eugen Sandow.

Concerns about the status of one's manhood were a common, if guarded, societal woe of the decade. If one believed the articles and advertisements found in contemporary periodicals, diseases of the modern, civilized man seemed to be ubiquitous and they created an uneasy feeling in American men that they somehow had lost their virility, their manhood. Companies such as the Erie Medical Company of Buffalo, New York tried to attract business by using slogans such as "Vigor of Men" and "Weakness of Men, Quickly, Thoroughly, Forever Cured." Their treatment supposedly cured "Weakness, nervousness, debility, and all the train of evils from early errors or later excesses, the results of overwork, sickness, worry, etc." They promised that men could "Reclaim your manhood!" and "Regain your vigor!" via their treatment.[17] The underlying culprit, it seemed, was urbanization. Neurasthenia and various maladies of the body were the price

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[14] For more information on Sandow's performance see Chapman, *Sandow*, 60-62; Charles Higham, *Ziegfeld* (Chicago: Henry Regnery Company, 1972), 13-5; Ziegfeld and Ziegfeld, *Ziegfeld Touch*, 23-4.

[15] Charles Wadsworth, Jr., *How to Get Muscular. Five Addresses on Higher Athletics* (New York: Anson D. F. Randolph & Company, 1891), 8. Wadsworth was listed as the pastor for the North Broad Street Presbyterian Church in Moses King, *Philadelphia and Notable Philadelphians* (New York: Moses King, 1902), 19.

[16] Wadsworth, *How to Get Muscular*, 3.

[17] Advertisements for the Erie Medical Company are found almost monthly in *Spirit of the Times* in 1894-96. These particular titles and quotes were found in *Spirit of the Times*, September 1894, 128(7) p. 249 and April 1895, 129(115) p.539.

paid for living and working in the modern city. Neurasthenia, in a nutshell, was "American nervousness." To its definer, George M. Beard, the disease was an ironic symbol of American superiority over other societies. It affected the intellectual brain-workers of the middle class and occurred with the advancement of urbanized civilization.[18] But, this wasn't the only affliction troubling men.

It seemed that the nation's notion of masculinity was in a state of crisis to which several names could be applied. Some historians believe that a "cult of manhood," which evolved with the continued industrialization of society, drove American men to participate in sporting events.[19] Through sports and strenuous outdoor living, men believed they could regain the energy and vitality lost in the workplace. Proponents of "the strenuous life" believed that exercise and nature provided the necessary revitalizing agents for lost manhood, and that men needed to get out of doors and go hiking, camping,

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[18]For information about neurasthenia see Chapter Six "The New 'American Nervousness'" in Green, *Fit for America*, 137-66; and Whorton, *Crusaders*, 148-51. The first text to define America's "nervous debility," "exhaustion of the brain and nervous system," and "all diseases [that] have exhausted nervous influence as their cause" was George Miller Beard, *American Nervousness; Its Causes and Consequences, a Supplement to Nervous Exhaustion (Neurasthenia)* (New York: G. P. Putnam's Sons, 1881).

[19] For issues concerning a masculinity crisis in *fin de siècle* America see Gail Bederman, *Manliness & Civilization: A Cultural History of Gender and Race in the United States, 1880-1917*, *Women in Culture and Society* (Chicago: University of Chicago Press, 1995); Mark Dyreson, "Regulating the Body and the Body Politic - American Sport, Bourgeois Culture, and the Language of Progress, 1880-1920," in *The New American Sport History*, ed. S. W. Pope (Chicago: University of Illinois Press, 1997), 121-44; John F. Kasson, *Houdini, Tarzan, and the Perfect Man: The White Male Body and the Challenge of Modernity in America* (New York: Hill and Wang, 2001); J. A. Mangan and James Walvin, *Manliness and Morality: Middle-Class Masculinity in Britain and America, 1800-1940* (New York: St. Martin's Press, 1987); Donald J. Mrozek, *Sport and American Mentality, 1880-1910* (Knoxville: University of Tennessee, 1983), 3-27; Roberta J. Park, "'Cells or Soaring?': Historical Reflections on "Visions" of the Body, Athletics, and Modern Olympism," *Olympika: the International Journal of Olympic Studies* 9 (2000): 1-24; Steven A. Riess, *Sport in Industrial America, 1850-1920*, ed. John Hope Franklin and A.S. Eisenstadt, *American History Series* (Wheeling, Ill.: Harlan Davidson, Inc., 1995); E. Anthony Rotundo, *American Manhood: Transformations in Masculinity from the Revolution to the Modern Era* (New York: Basic Books, 1993). Books that consider the same arguments but which concern British masculinity include Michael Anton Budd, *The Sculpture Machine: Physical Culture and Body Politics in the Age of Empire* (New York: New York University Press, 1997); Bruce Haley, *The Healthy Body and Victorian Culture* (Cambridge: Harvard University Press, 1978). Caroline Daley examines the same topic in New Zealand in Caroline Daley, *Leisure & Pleasure: Reshaping & Revealing the New Zealand Body 1900-1960* (Auckland: Auckland University Press, 2003).

and hunting.[20] Reformers preaching the philosophy of Muscular Christianity sent the modern man to the gymnasium and the playing field to regain vigor and health through strenuous exercise and fresh air. Physically building the body included a moral obligation as well as a method to regain one's health, energy, vitality, virility and, ultimately, manhood.[21] Still others believed that the critical goal was to make healthier, more productive members of American society since the health of the nation was calculated by the health and fitness of its citizens.[22] Many forces worked to shape Alan Calvert's opinion of manhood in the last decade of the century. All he knew after he went to the Trocadero Theatre was that he wanted to emulate the strength and muscles of his new-found idol.

After Sandow demonstrated his posing, he performed his strongman routine using a set of specially-made barbells. All the while, he explained that he was in perfect health

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[20] Mark Dyreson, "Nature by Design: Modern American Ideas About Sport, Energy, Evolution, and Republics, 1865-1920," *Journal of Sport History* 26 (Fall 1999): 447-69; Green, *Fit for America*, 219-58; Gerald F. Roberts, "The Strenuous Life: The Cult of Manliness in the Era of Theodore Roosevelt" (Ph.D. diss., Michigan State University, 1970).

[21] One of the earliest proponents for Muscular Christianity is Thomas Wentworth Higginson. A reprint of an early 1858 article is found in Thomas Wentworth Higginson, "Saints and Their Bodies," in *The American Sporting Experience: A Historical Anthology of Sport in America*, ed. Steven A. Riess (Champaign: Leisure Press, 1984), 80-90. Although not specifically labeled a Muscular Christianity reformer, Charles Wadsworth, Jr.'s text, *How to Get Muscular*, would be a prime example of the importance of physical and moral/spiritual aspects of exercise and bodily training. Wadsworth writes five addresses which closely resemble sermons often referring to Biblical passages and even includes "Religion" as one of his addresses. Luther Gulick and his new triangle logo demonstrating the connections between the body, mind, and spirit for the Young Men's Christian Association spurred growth of the Muscular Christianity movement in the United States. For more information on Muscular Christianity see Donald E. Hall, *Muscular Christianity: Embodying the Victorian Age*, *Cambridge Studies in Nineteenth-Century Literature and Culture; 2* (Cambridge: Cambridge University Press, 1994); Robert J. Higgs, *God in the Stadium: Sports and Religion in America* (Lexington: University Press of Kentucky, 1995); Mrozek, *Sport and American Mentality,* 189-225; Clifford Putney, *Muscular Christianity: Manhood and Sports in Protestant America, 1880-1920* (Cambridge: Harvard University Press, 2001); Whorton, *Crusaders*, 270-303.

[22] For information on manhood and national preparedness see Budd, *Sculpture Machine;* S. W. Pope, *Patriotic Games: Sporting Traditions in the American Imagination, 1876-1926*, *Sports and History* (New York: Oxford University Press, 1997), especially section four "War Games and National Vitality," 121-155; Alice Shukalo, "Communing with the Gods: Bodybuilding, Masculinity, and U.S. Imperialism, 1875-1905" (Ph.D. diss., University of Texas at Austin, 2005).

and that he had built his muscles while increasing his strength using barbells and his special system of training. Medical authority Dr. Dudley A. Sargent had previously given endorsements to Sandow's health and perfect proportions, calling him "the most wonderful specimen of man I have ever seen."[23] Following Sandow's inaugural act, Ziegfeld, incorporating yet another successful marketing ploy, invited two socialites—Mrs. Potter Palmer and Mrs. George Pullman—to buy a $300 "backstage pass" to meet Sandow and personally feel the star's muscles. The $300 was to go to charity, of course. Once these ladies described their experience to their friends and for the newspapers, Sandow performed to packed houses and received similarly wealthy visitors to his dressing room on a nightly basis.[24] Calvert most assuredly did not receive one of these back-stage invitations. It didn't matter. In a moment of insight, Calvert decided as he watched Sandow's act that increased levels of strength occurred with physique development and that such enhancements were only possible after many hours of practice lifting progressively heavier weights.

Historian John F. Kasson believes that Sandow "struck chords about masculine strength and self-determination that have been played by many exemplars of American manhood…Making his body became a sign of a man's ability to make his way in the world against all adversaries, strictly on his own merits. A strong, muscular body was an emblem of strong character and command."[25] Sandow took art out of the museums and put it in the homes of the American public. People became convinced of the perfectibility of their own bodies. Whether they would augment their physique for reasons of power, shape, or pleasure, they had a say in their appearance.[26] Calvert would

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[23] Sargent is quoted in Mrozek, *Sport and American Mentality*, 222.
[24] Ziegfeld and Ziegfeld, *The Ziegfeld Touch*, 23-4.
[25] Kasson, *Houdini*, 30.
[26] Dutton, *The Perfectible Body*, 119-24.

later comment about Sandow's performances, "People did not go to see Sandow because he was healthy; I believe they went to see him because they considered that he was the strongest and most beautifully built man of his time…His development was so symmetrical, his sense of balance was so fine, and withal he was so graceful, that every attitude he struck was beautiful from an artistic standpoint."[27] Whether the Alan Calvert who walked into the Trocadero in 1893 saw himself as a young teenager with limited physical potential is not clear, but when he walked out he was on his way to becoming a confident young man of "strong character and command" with the world waiting at his doorstep.

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Alan Calvert was a second generation American. His grandfather, Thomas Calvert, arrived in America in 1816 at the age of eight years with his maternal uncle, John Graham from Marylebone Parish, London, England. Graham and his nephew were part of an early wave of European immigrants who traveled to the U.S. after the Napoleonic Wars ended in 1815. They probably traveled from Liverpool, England to Philadelphia since two major sailing ship routes existed between the two cities and Liverpool was the "main center for Irish as well as English immigration." The transportation was not cheap, though. A steerage ticket cost between five and seven pounds during a time (1820s) when good factory work paid one pound per week.[28]

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[27] Alan Calvert, "One Arm Press - Who Holds the Records?," *Strength* (January 1916): 15.

[28] Fredric M. Miller, *Philadelphia: Immigrant City* ([viewed December 30 2004]); available from http://www.balchinstitute.org/resources/phila_ellis_island.html. I could not find any concrete evidence that John Graham and Thomas Calvert arrived at the Philadelphia port in 1816, or any port for that matter, and the family records do not indicate where they arrived. I am taking some liberties in assuming their port of entrance since Philadelphia has such a reputation for receiving an immense number of English and Irish immigrants from 1815-1830.

Although not much is known about these earliest ancestors, John Graham may have been a cabinet-maker since Thomas Calvert was listed as such in the 1870 census. (A trade such as this was often handed down from father to son or, in this case, from uncle to nephew.)[29] Highly skilled and experienced woodworkers would have found fairly easy employment in early Philadelphia. This would have been an important factor for newly arrived immigrants since their introduction to America was often a hard one. Many, especially the Irish with their largely agrarian backgrounds, could only find jobs in unskilled positions. Advancement into skilled positions, if it ever came, happened only with difficulty and sacrifice.[30] The next generation of Calverts, however, demonstrated a fairly high degree of education and money, so John Graham must have provided reasonably well for young Thomas and started the family on solid footing in America with his knowledge and skills.

On September 15, 1834 Thomas Calvert married a local Pennsylvania woman by the name of Eliza Lay, settled down in Philadelphia, and began a cabinet-making business. The couple had four children between the years of 1835 and 1846—Graham, Joseph Ashbrook, Ann McDowell, and Pehrson Butler. Alan Calvert's father, Pehrson Butler Calvert, was born on 7 March 1846. Not much is known about Pehrson's youth, but he grew up in Philadelphia during the years leading to the Civil War. During these years Philadelphia encountered growing pains; tensions between working class immigrants and native Philadelphians were high. The city was on the verge of becoming

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[29] Philip Scranton and Walter Licht, *Work Sights: Industrial Philadelphia, 1890-1950* (Philadelphia: Temple University Press, 1986), 6.

[30] Dennis Clark, *The Irish in Philadelphia; Ten Generations of Urban Experience* (Philadelphia: Temple University Press, 1973). See also Bruce Laurie, Theodore Hershberg, and George Alter, "Immigrants and Industry: The Philadelphia Experience, 1850-1880" in Richard L. Ehrlich, ed., *Immigrants in Industrial America, 1850-1920* (Charlottesville: Published for the Eleutherian Mills-Hagley Foundation and the Balch Institute by University Press of Virginia, 1977), 123-50; Daniel T. Rodgers, *The Work Ethic in Industrial America, 1850-1920* (Chicago: University of Chicago Press, 1978), 170-73; Scranton and Licht, *Work Sights*, 19-30.

a thoroughly modern city. City planners and administrators fought to consolidate the many small villages, or cultural communities, into one massive metropolis and thus enhance its reputation as a national leader and as a potential rival of New York City—the place to which all modern cities compared themselves. Many of the suburban communities feared consolidation; they wanted to keep their independence, uniqueness, and cultural identities, but they also wanted the civil services, such as law enforcement and fire-fighting protection, of the larger city. Eventually, government officials and county constituents agreed to consolidation and all land and communities found within Philadelphia County were incorporated into the city proper in 1854.[31]

Shortly after his eighteenth birthday on 12 July 1864, Pehrson Calvert enlisted in the Union Army in Hastings' Independent Light Artillery Battery—Pennsylvania Regiment #2425. Due to the divided political stance of many influential social figures in Philadelphia and the public's distrust of the government's ability to lead and fund a large volunteer fighting force, many short-lived volunteer units were commissioned as the need arose.[32] Pehrson's regiment may have been one of these quickly formed units as rumors circulated in July 1864 that the Confederate Army was marching to overthrow Washington, D.C. In any case, the Union Army managed to turn the advancing army away only five miles from Washington, D.C. the day before Pehrson enlisted. Although Pehrson's stint as a corporal in the Union Army was relatively brief, he mustered out with "Distinguished Service" on 25 October 1864, shortly after Commander Sheridan broke the back of the Confederate Army in the Shenandoah Valley at Cedar Creek.[33] Similar to

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[31] Howard Gillette, Jr., "The Emergence of the Modern Metropolis: Philadelphia in the Age of Its Consolidation," in *The Divided Metropolis: Social and Spatial Dimensions of Philadelphia, 1800-1975*, ed. III Cutler, William W. and Gillette, Jr., Howard (Westport: Greenwood Press, 1980), 3-25.

[32] William Dusinberre, *Civil War Issues in Phildalphia* (Philadelphia: University of Pennsylvania Press, 1965), 143-50.

[33] Civil War Military Service found in United States National Archives, Civil War Compiled Military Service Records (Provo, UT: Ancestry.com). When first viewed on 20 September 2004 Pehrson Calvert was enlisted as a private in the Pennsylvania Heavy Artillery, but when viewed on 9 December 2004 he

other families, Pehrson and his relations felt the conflict of the divided nation at home. Although Pehrson fought for the Union, his maternal uncle, Lieutenant-Colonel Louis Lay, commanded in the Sixth Regiment of the infamous Confederate "Louisiana Tigers."[34]

On 23 November 1870 Pehrson married Clara Thomson, daughter of William Wilson Thomson, son of William Thomson, the noted War of 1812 colonel, and Eliza Bayne.[35] Pehrson and Clara set up housekeeping in Philadelphia and over the next eight years Clara delivered five children in their home on 3262 Sansom Street. Louis Lay, named in honor of their exiled Confederate uncle, was born on 4 September 1871; Helen Thomson was delivered on 3 July 1873; Alan (no middle name) appeared on 20 April 1875; Pierce Gray was born on 28 October 1876; and Frank Sparks arrived on 9 December 1878.[36]

To give some context to the times in which Alan Calvert was born, Americans still feared the presence of "the natives," especially west of the Mississippi River. The

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was enlisted as a corporal in Hastings' Independent Light Artillery Battery. Many sources exist for Civil War battle information and timelines; I viewed http://americancivilwar.com and linked to its timeline for the sequence of battles.

[34] The Sixth Regiment of the Louisiana Infantry was often called the Irish Brigade since it had more soldiers of foreign birth than any other unit, especially from Ireland. Apparently, Lieutenant-Colonel Lay resigned from the Confederate Army on 13 February 1862 for unknown reasons. For more information about the Louisiana Infantry, in particular the Sixth Regiment see the following: Arthur W. Bergeron, *Guide to Louisiana Confederate Military Units, 1861-1865* (Baton Rouge: Louisiana State University Press, 1989), 84-87; Terry L. Jones, *Lee's Tigers: The Louisiana Infantry in the Army of Northern Virginia* (Baton Rouge: Louisiana State University Press, 1987), 238-9.

At some point in time Colonel Louis Lay had to escape to Cuba. It is unclear whether his exile resulted as a scandal associated with his Civil War service, or if he was involved in a non-war related scandal in Philadelphia. He did occasionally return to the United States to visit family, most likely, as his name is included on the steamship Newport's incoming passenger list from Havana, Cuba, "Passengers Arrived," *New York Times*: 26 March 1883, p. 8. While in Cuba, though, he apparently became involved in some revolutionary activities and was imprisoned, "Cuban Rebels Repulsed," *New York Times*: 11 November 1896, p. 5. Because of his unusual actions Louis Lay's family occupies a place of interest in the Joseph Handy family genealogical files since the family stayed in Cuba until at least the early 1900s.

[35] Marriage license on file at Philadelphia City Archives, viewed on 30 June 2004. Joseph B. Handy family records.

[36] With the exception of Pierce Gray, who died an infant, all the Calvert children lived to at least young adulthood; Frank died next at the age of twenty-one, only two weeks after his birthday.

Battle of the Little Bighorn and Lieutenant-Colonel George Armstrong Custer's last stand was still a year away from happening—25 June 1876. It would not be until the Massacre at Wounded Knee, South Dakota in 1890—only three years before the Columbian World's Fair—that the Indian Wars finally ended and fears subsided. Notable occurrences in the sporting world in 1875 placed Alan in esteemed company: James J. Jeffries, future superheavyweight boxing champion and "Great White Hope," was born five days prior to Calvert; Aristides won the inaugural running of the Kentucky Derby only one month later.[37] However, the year after Alan was born an event happened which was much more crucial to his future career path—George Barker Windship, inventor of the "Health Lift" and an early proponent for heavy lifting, died on 12 September 1876.[38]

The years surrounding 1875 included times of societal unrest as well as celebration. Alan was born at the end of the period of time commonly referred to as "Reconstruction." Efforts at physically reconstructing the South after the ravages of the Civil War while providing civil and political equality between black and white Americans were faltering, and opportunities for violence were ripe in the southern states.[39] Aside from the political and societal woes accompanying Reconstruction, Philadelphia was also reeling from a severe financial depression in 1873 precipitated by

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[37] For information on James J. Jeffries see Kelly Richard Nicholson, *A Man among Men: The Life and Major Battles of Jim Jeffries, Heavyweight Champion of the World* (Draper, Utah: Homeward Bound Publishing, 2002). Information on Aristides and the Kentucky Derby can be found in Peter Chew, *The Kentucky Derby, the First 100 Years* (Boston: Houghton Mifflin, 1974); John Lawrence O'Connor, *History of the Kentucky Derby, 1875-1921* (New York: Rider Press, 1921).

[38] Information on George Barker Windship is found in Jan Todd, "'Strength Is Health': George Barker Windship and the First American Weight Training Boom," *Iron Game History* 3 (September 1993): 3-14.

[39] For examples of racial inequality stretching into the 1900s read Neil Foley, *The White Scourge: Mexicans, Blacks, and Poor Whites in Texas Cotton Culture*, *American Crossroads* (Berkeley: University of California Press, 1997); Christopher Waldrep, "Ida B. Wells, Higher Law, and Community Justice," in *The Human Tradition in the Gilded Age and Progressive Era*, ed. Ballard C. Campbell (Wilmington: Scholarly Resources, 2000), 37-52; Christopher Waldrep, *Vicksburg's Long Shadow: The Civil War Legacy of Race and Remembrance*, *The American Crisis Series* (Lanham, Md: Rowman & Littlefield, 2005).

the failure of its leading bank—Jay Cooke & Company, head financiers of the Northern Pacific Railroad.[40]

By 1875, however, Philadelphia had recovered enough to prepare to host the 1876 Centennial World's Fair in honor of America's one hundred year anniversary. Due to its recognition as the nation's birthplace, Philadelphia was the obvious location for the centurial celebration. It would become the first successful hosting of a World's Fair in the United States. In honor of their independence, people flocked to Philadelphia to marvel at American innovation and material advancements. The Corliss steam engine was the main attraction, with machines such as the internal combustion engine, Bell's telephone, and the Remington typewriter close behind. The lager of a small brewery—Anheuser Busch—won the first of many awards at the Centennial Exposition.[41] The financial depression was still in evidence, but times were looking better.

In 1875, the year that Alan Calvert was born, his father, Pehrson Butler Calvert, and partner, Jerome Keeley, operated a tinplating business, Calvert & Keeley Tinplating, at 432 Market Street.[42] Although the business seemed to be optimally located on

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[40] Information about Reconstruction is found in Hans Louis Trefousse, *Reconstruction: America's First Effort at Racial Democracy*, Updated ed. (Malabar, Fl.: Krieger Publishing, 1999); Waldrep, *Vicksburg's Long Shadow;* C. Vann Woodward, *The Strange Career of Jim Crow*, Commemorative ed. (Oxford: Oxford University Press, 2002). The information about Jay Cooke & Company is found under the heading "The Financial Panic of 1873" on the internet website: http://www.publicbookshelf.com/public%5Fhtml/The%5FGreat%5FRepublic%5FBy-%5Fthe%5FMaster%5FHistorians%5FVol%5FIII/ last viewed on 28 September 2005. This website information is taken from Hubert H. Bancroft, ed., *The Great Republic by the Master Historians, Volume III* (n.p.,1902).

[41] Information concerning the 1876 World Fair can be found in Kenneth W. Luckhurst, *The Story of Exhibitions* (London, New York: Studio Publications, 1951); Rydell, *All the World's a Fair*, 9-37; Honeric William Waters, *History of Fairs and Expositions; Their Classification, Functions and Values* (London, Canada: Reid Bros., 1939).

[42] Much of Pehrson Calvert's early life was pieced together through United States Census images found at www.ancestry.com and Philadelphia City Directories, both business and residence editions. These were found in the Philadelphia City Archives and the Free Library of Philadelphia. Pehrson Calvert may have been in the metals business as early as 1870 since the 1870 U.S. Census lists a "John B. Calvert" as an "importer of metals." This name was alongside his father, Thomas Calvert, his brother, Joseph A. Calvert, and his sister, Annie Calvert, so it is highly probably that it was simply a recording error.

"America's most historic highway," it does not appear to have prospered.[43] Calvert & Keeley eventually succumbed to the hardships of the age as did many other small businesses during the decade.[44] According to the 1880 city directory, Pehrson Calvert was working as a clerk on Arch Street.[45] Whether this was a move up the financial ladder for the Calverts is difficult to say; however, through the end of his life, Pehrson's family seemed to live in good circumstances and even employed servants.

In an age of industrialization and poor living conditions, the elder Calvert may have judged his life by his ability to own property—a home and business, primarily.[46] All Pehrson's children were born at 3262 Sansom Street in West Philadelphia; although probable, it is unknown if the Calverts actually owned this house. According to Philadelphia historian, Edward Digby Baltzell, the West Philadelphia area is known for its connections with "elite," but not necessarily "Proper," Philadelphia society.[47] In the 1850s many "wealthy barons of business" moved into this suburban area to get away

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[43] For information on Market Street see Joseph Jackson, *Market Street, Philadelphia; the Most Historic Highway in America, Its Merchants and Its Story* (Philadelphia: Joseph Jackson, 1918). See also Joseph Jackson, *America's Most Historic Highway, Market Street, Philadelphia*, New ed. (Philadelphia: J. Wanamaker, 1926), especially page viii for a list of notable occurrences which the author believed made Market Street the "most historic highway." Viewed online 18 July 2005 at http://www.libraries.psu.edu/do/digitalbookshelf/28780861/28780861_part_01.pdf#page=2. Jerome Keeley apparently became quite successful. By 1902 he was listed in King, *Philadelphia and Notable Philadelphians*, 50, as having his own business, Jerome Keeley & Company Steel Merchants. He also was the president of the Durham Iron Company and directed the Tradesmen National Bank.

[44] Alan Trachtenberg mentions the hardships of small businesses in urban centers during the 1870s and 80s in his discussion of capital and labor in Alan Trachtenberg, *The Incorporation of America, Culture & Society in the Gilded Age*, ed. Eric Foner, paperback ed., *American Century Series* (New York: Hill and Wang, 1982), 70-100. See also Richard M. Ohmann, *Selling Culture: Magazines, Markets, and Class at the Turn of the Century* (New York: Verso, 1996), 54.

[45] 1880 Philadelphia City Directory.

[46] Trachtenberg, *Incorporation*, 75. Trachtenberg discusses Eric Foner's free labor ideology which resulted in a successful laborer who "achieved self-employment, and owned his own capital—a business, farm, or shop."

[47] E. Digby Baltzell, *Philadelphia Gentlemen, the Making of a National Upper Class* (Glencoe, Ill: Free Press, 1958), 8-10, 177, 193-95. Baltzell distinguishes between "Proper," or upper class, Philadelphians, and the "local elite." (p.9) Proper Philadelphians were listed in the *Social Register*, "a listing of families of high social class position." Elite Philadelphians were included in *Who's Who in America*, "a listing of brief biographies of leading individuals in contemporary American life." (p.8) Baltzell traces the westward, and eventually, northward, movement of the Philadelphia elite and upper class neighborhoods.

from the stresses and lower-classes of downtown. However, the advent of electrified streetcars into the West Philadelphia area during the 1880s allowed more middle-class families to afford the neighborhood.[48]

By 1880 when Alan was five years old, the Calvert household on Sansom Street also lodged Alan's maternal aunts, Mary Freestone Thomson (until she married in 1882) and Rebecca Jane Thomson (until her death in 1883), as well as a Pennsylvania-born, Irish-American servant named Mary Lynch.[49] However, the relocation of the University of Pennsylvania in the 1870s into West Philadelphia and its eventual expansion into surrounding neighborhoods eventually incorporated their address and forced the Calverts to move in the late 1880s. Less than a mile from the Sansom Street address, but still in West Philadelphia, they bought a house at 3311 Baring Street built circa 1865 and featuring an "Italian villa" architectural style.[50] Pehrson and his family remained here until his death in 1913. Although not of Baltzell's "Proper" level of wealth, nor even of the "local elite" status—since the family never appeared in *Who's Who in America*— the Calverts were able to live a fairly comfortable life at a time when eleven million of the nation's twelve million families "earned less than $1200 dollars per year; of this group, the average annual income was $380, well below the poverty line."[51]

By 1889 Pehrson Calvert had achieved success in his business life as the sole proprietor of a tinplating and metals exporting business called P.B. Calvert and

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[48] Information on West Philadelphia and Powelton Village, the area the Calverts moved into was found online at http://www.ucityphila.org/things_to_do/powelton_village.cfm. See also Ibid.

[49] US Census Records for 1880 lists Mary Lynch as a servant in the Calvert household. A Lynch family also lived next door so, Mary may have been and probably was a relative of the neighbors. Betsy Lynch (seventy-two years) lived with her grown children – Augustin (thirty-seven years) and Stella (forty-two years). Mary may be related to this family, but her age is listed as seventeen years so she would probably be Stella's daughter, or perhaps Augustin's daughter but that would make him a pretty young father for the age.

[50] This description of the house was given by the internet website Philadelphia Architects and Buildings: http://www.philadelphiabuildings.org/pab/app/phmc_display.cfm?KeyNo=052855. This house still stands as of 1 July 2004.

[51] http://www.pbs.org/wgbh/amex/carnegie/gildedage.html viewed on 18 September 2004.

Company, at 68 North Second Street. A long stone's-throw from the Delaware River and just a block away from the busy Market Street, Pehrson Calvert's business was well situated for easy access to foot and trolley traffic, ships coming up the river, and the nearby railways. Abner Holloway and banker George W. Kendrick, Jr. comprised the "and Company" portion of the business into the mid 1890s.[52] Sometime around 1900 Kendrick left the company and it was renamed Calvert & Holloway Tinplating, the name it kept until Pehrson's death in 1913.

Little is known about the Calvert family during the decades surrounding the century mark, but it appears to have been a period of fluctuating financial status. Although P.B. Calvert & Company could afford to have its name in bold print in the city directories, creating better visibility among the scores of other tinplaters, the company was not large enough to warrant the full-page ads in these same directories or in several ad-laden theatre programs of the age the author examined. The idea that Calvert & Holloway was a small, metal-working business tends to indicate that the family led a middle-class to upper-middle-class lifestyle. The employment and housing of family servants, the placement of the house in West Philadelphia, the fact that Pehrson Calvert is listed as "pres[ident] 328 Chestnut Street"—the address for the Brown Brothers and Company Bankers Building—in the 1894-1896 city directories, and the further fact that there was enough discretionary income for a family trip to the Chicago World's Fair, supports the notion that the Calverts were at least moderately well off.[53]

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[52] Raymond Van Cleef, "Builder of Men," *Your Physique* (December 1944): 12. Van Cleef, a writer for several bodybuilding magazines in the early to mid 1900s, states that the business dealt in roofing supplies along with the usual tinplating and metal supplies.

[53] Nearly all information about buildings in Philadelphia was obtained from the website: http://www.philadelphiabuildings.org, "The Philadelphia Architects and Buildings Project (PAB)," (Philadelphia: 2003). It is possible that the bankers building had a smaller business residing inside its walls and that Pehrson Calvert was president of that business, but the banking ties would make family associations later in Alan Calvert's life more plausible and explainable, especially the relationship with the Githens family, his in-laws, and the Lamsons, assignor to one Milo patent. Also interesting to note is George W. Kendrick, Jr. one of the partners in P.B. Calvert & Company. He was also a banker and lived

During the time that Pehrson Calvert is listed as a possible bank president in the city directories, he also continued his tinplating business with partner Abner Holloway. The disappearance of Calvert's name in city directories as "president" coincides with the death of his wife (and Alan's mother), Clara Thomson Calvert, in late October 1897, of what was described as an "embolus and fatty degeneration of the heart."[54] She was only fifty-two years of age; Alan was twenty-two. Three years later Pehrson remarried, choosing the widow Cora Goodearl Murray for his second wife. Cora was beloved by the Calvert family in the generations to come.[55] However well-off the family at times appeared, at his death in 1913, Pehrson's estate was calculated to be worth only $393.25.[56] The house represented $100 of this figure with the rest consisting of 1,500 valueless shares of stock in the Mohave Minerals Company and a house full of furniture. No mention was made in the estate administration of the tinplating business he had worked so hard to build and maintain.

Alan's childhood and youth coincided with that period of time Mark Twain labeled as the Gilded Age, 1870-1915. An "outwardly showy, but inwardly corrupt nature" seemed to permeate American society.[57] The Progressive Era, 1890-1920, overlapped with the Gilded Age. Therefore, depending on one's disposition during this period, America's cup was either half empty or half full.[58] The Industrial Revolution during the first half of the century created jobs for thousands of immigrants who landed on American soil, but living conditions for their families were often stark, or inhumane.

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just a couple of blocks away from the Calverts on Baring Street. George W. Kendrick, Jr. information found in Philadelphia city directories, 1894-6 and from online website: http://www.pagrandlodge.org /gmaster /history/1906kendrick066.html viewed on 15 July 2005.

[54] Death certificate for Clara Thomson Calvert at Philadelphia City Archives.

[55] Joseph B. Handy Family Genealogical Records.

[56] Pehrson B. Calvert Estate Administration documents—1914 No. 2, #16 page 242, Inventory Book #63 page 178, Account Book #316 page 500, Philadelphia City Archives.

[57] http://www.oswego.org/staff/tcaswell/wq/gildedage/student.htm viewed on 15 September 2004.

[58] John Higham, "The Reorientation of American Culture in the 1890's," in *Writing American History; Essays on Modern Scholarship* (Bloomington: Indiana University Press, 1970), 73-102.

Immigrant families often found themselves in a complicated situation: they desired to fit in and "be American" while trying to hold on to the culture of their homeland.[59] This process of assimilation into American society is often associated with supervisory actions which were often synonymous with the Gilded Age—long work-days, unsafe working conditions, no minimum wage, and putting children to work. All these led to an unhealthy family environment. Immigrants looked for skilled work, but usually only found unskilled jobs in domestic service or industrial factories, including those in Philadelphia. Indeed, Calvert's family, although themselves not far removed from immigrant status, employed Irish-American servants in the household.[60] What is more, Pehrson's tin-smithing business more than likely employed immigrants as foundry workers, although these workers may have been family friends or relatives who needed a place of employment and some form of income.

The Calverts—along with most of their fellow Americans—held education in high regard; they understood its value and the promises it could fulfill. Literacy in the U.S. was high during the mid-to-late 1800s, especially in urban areas of the North—as high as 98% according to educational historian, Sheldon Richman.[61] Pehrson's oldest brother, Graham Calvert, became an attorney-at-law and Joseph Ashbrook became a button-maker.[62] The Calvert children invariably followed their fathers' example by acquiring educations and pursuing respectable professions.[63]

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[59] For example: John F. McClymer, "Carroll D. Wright, L'abbe Jean-Baptiste Primeau, and French-Canadian Families," in *The Human Tradition in the Gilded Age and Progressive Era*, ed. Ballard C. Campbell (Wilmington: Scholarly Resources Inc., 2000), 1-18; *Natives and Aliens 1891-1903*, ed. Wayne Moquin, vol. 5, *Makers of America* (Encyclopaedia Britannica Educational Corporation, 1971); Robert A. Orsi, *The Madonna of 115th Street: Faith and Community in Italian Harlem, 1880-1950* (New Haven: Yale University Press, 1985); George J. Sanchez, *Becoming Mexican American: Ethnicity, Culture, and Identity in Chicano Los Angeles, 1900-1945* (New York: Oxford University Press, 1993).

[60] United States Census, 1880.

[61] Sheldon L. Richman and Future of Freedom Foundation., *Separating School & State: How to Liberate America's Families* (Fairfax, Va.: Future of Freedom Foundation, 1995).

[62] Maybe not as esteemed as a lawyer, but the tinsmith was an important occupation in the 1800s since cast iron stoves were in high demand and the tinning of pots and pants was essential. People also desired tin-

Alan learned the Progressive Era values of hard work and honest business ethics from his father starting at an early age. Pehrson, apparently, worked hard to support his family, but no matter how hard he and the middle class worked, the lower socio-economic classes generally worked physically harder at less popular jobs, for longer periods of time and for less pay. Labor strikes became common as Americans fought for eight-hour work days and better work site safety during the last decades of the nineteenth century. One of the things they strove for was leisure time so they could enjoy time with their families and life in general.[64]

Living in a middle or upper-middle class family, Alan grew up in a household which could afford a number of leisure activities. The family had the funds for subscriptions to periodicals such as *Munsey's Magazine*, *Harper's Weekly*, *The Atlantic Monthly*, *The Century Illustrated Monthly Magazine*, *The Cosmopolitan*, *Ladies Home Journal*, and *Outing and the Wheelman*. According to cultural historian, Richard Ohmann, the Calverts would have been active participants in a movement which led to a "mass culture."[65] People like the Calverts began to see brand label advertisements in

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coated shingles and "high grade roofing plates" for their homes. See Scranton and Licht, *Work Sights*, 31-33, 93-94. Philadelphian historian Edwin Freedley noted in his book, *Philadelphia and Its Manufacturers, A Hand-Book of the Great Manufactories and Representative Mercantile Houses of Philadelphia in 1867* (Philadelphia: E. Young, 1867) that tin workers were a common site in the mid 1800s with more than 200 listed in the business directories of that period. Depending on the equipment found in the shop, tinsmiths might also make "tinned hollow-ware" or "planished-ware" (p. 573-74). Philadelphia City Directories in 1875 list Pehrson B. Calvert in the tinplating business as part of Calvert & Keeley; and P.B. Calvert & Company operated from at least 1889 until Pehrson's death in 1913.

[63] Two of Graham Calvert's sons followed his footsteps and became lawyers while the third son became a college professor. Alan Calvert became a respected writer and business owner while his older brother, Louis Lay Calvert became an architect and served in the Quartermaster Department for the U.S. Army during World War I and retired as a colonel. At least two of Alan's children graduated from institutions of higher learning: Jean Calvert from Wellesley College and Alan Breck Calvert from Harvard University where he won the Philip Washburn Prize for best senior honors thesis on a historical subject in 1937. Joseph B. Handy Family Genealogy Papers and 1900 U.S. Census.

[64] Roy Rosenzweig, *Eight Hours for What We Will: Workers and Leisure in an Industrial City, 1870-1920*, *Interdisciplinary Perspectives on Modern History* (Cambridge: Cambridge University Press, 1983).

[65] Ohmann, *Selling Culture*, 13-16; Trachtenberg, *Incorporation*, 122-23. While Trachtenberg doesn't call it a "mass culture" movement, he does refer to the period as a time of "great proliferation of newspapers and journals," the "first age of modern mass-spectator sports," and discusses the take-over of mass entertainment by the spectacular. See also Vanessa R. Schwartz, *Spectacular Realities: Early Mass*

their newspapers and magazines, they attended sporting matches and followed the results and box scores in the newspaper, they played music on their gramophone, and they visited amusement parks and vaudeville houses.[66] Like many boys of that era the younger Calverts grew up playing the "national pastime" of baseball, attending the circus when it came to town, and possibly reading Spalding "how-to" sports guides.

Some of Alan Calvert's earliest recollections pertaining to bodily proportions and physical awareness occurred when he looked at the pictures in his Bible and speculated on the possibility of having the large forearms of the Roman Legionaries.[67] Struck with a fascination for the physical dimensions of the body, Calvert obtained a copy of William Blaikie's *How to Get Strong and How to Stay So* when he was only ten years of age. An early treatise on gaining health and bodily vigor through exercise, Blaikie's book recommended a high number of repetitions using primarily pulley weights and light dumbbells (from one pound to no more than one-tenth of one's bodyweight.)[68] Calvert followed Blaikie's teachings into his teenage years. He also invested in Professor David L. Dowd's instructional booklet on how to use the "Original Health Exerciser."[69] Calvert's interest had been piqued by these early physical culture texts and he tried to get his hands on similar teachings whenever possible. He began collecting clippings of strongmen at the age of fourteen, which motivated him to join the West Philadelphia

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Culture in Fin-De-Siecle Paris (Berkeley: University of California Press, 1998), for her depiction of the cinema as a form of mass culture, or mass spectacle.

[66] Ohmann, *Selling Culture*, 13-6, 20-30.

[67] Alan Calvert's religious affiliation was probably Episcopal as his marriage certificate indicates the service was held in the Episcopal faith. Marriage license "sworn and subscribed" on 15 October 1906 to Clerk of Orphans Court, Philadelphia, Pa.; married on 18 October 1906. License viewed on microfilm in Philadelphia City Archives 30 June 2004. Alan Calvert, "Arm Development—the Forearm," *Strength* (November 1915): 6.

[68] Descriptions of Blaikie's recommended exercises and training programs are found in William Blaikie, *How to Get Strong and How to Stay So* (New York: Harper & Brothers, 1879), 199-283.

[69] Alan Calvert, "Light Dumbbell Exercise—Has It Any Real Value in Developing Muscle and Creating Strength?," *Strength* (September 1916): 4.

YMCA in order to train in their gymnasium.[70] He greatly admired the pioneering instructors of weight training, but eventually found that the available courses would only develop his body to a point. As many other budding muscle men discovered, the promises of these early courses did not correlate with the results of the courses. These young men wanted greater physical development and, ultimately, the impressive strength that went with it. But, they were often told that there were dangers involved with more serious weight lifting.

Through Blaikie's writings Calvert would have been introduced to one of the oldest and most common weight lifting myths—that lifting heavy weights made a man "muscle-bound." The use of heavy weights, according to Blaikie and others, supposedly made a person slow and inflexible. Blaikie used an argument which was very effective in the days of literal horsepower, explaining that the slow and ponderous gait of a work horse was the result of its lifelong pulling of heavy loads.[71] Dioclesian Lewis, an earlier exercise entrepreneur, compared the use of heavy resistance with the work of a plodding draft horse and the use of light weights with the work of an agile carriage horse.[72] Athletic coaches were convinced by these arguments, and they disavowed weights, refusing to allow their athletes to use them well past the first half of the twentieth century.[73] As Calvert matured and gained more knowledge, he decided that this belief in

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[70] Alan Calvert, "Oscar Matthes," *Strength* (January 1917): 6; Robert L. Jones, "Wm. J. Herrmann, Health Builder," *Strength & Health* (May 1947): 31. In the article on William Herrmann, Jones wrote that Alan Calvert joined the West Philadelphia YMCA when it was first opened, but http://www.westymca.org/home_history.asp, an internet website for the West Philadelphia YMCA, claims that it is "has been an important part of the Philadelphia community for over 75 years" (as of October 2005) and its parent association, the YMCA of Philadelphia & Vicinity, opened in 1854 – much too early for Calvert. The most likely answer is that there was another YMCA near his home in West Philadelphia which he joined around 1890.

[71] Blaikie, *How to Get Strong*, 12, 18, 100.

[72] Cited in Jan Todd, *Physical Culture and the Body Beautiful: Purposive Exercise in the Lives of American Women, 1800-1870* (Macon: Mercer University Press, 1998), 252.

[73] Al Thomas, "Reflections on Musclebinding," *Iron Game History* 2 (April 1992): 1-3; Terry Todd, "Al Roy: Mythbreaker," *Iron Game History* 2 (January 1992): 12-16; Terry Todd, "The Myth of the Muscle-Bound Lifter," *National Strength and Conditioning Association Journal* 7 (3): 37-41(1985); Jan Todd and

"muscle-binding" was unfounded and became one of the earliest promoters of weight training for athletes.

Participating in activities such as gymnastics and dumbbell exercises may have given Alan his first taste of resistance exercise, but the circus, along with his Bible, may have been Alan's first introduction to the many shapes that the human body may possess. As exercise historian Jan Todd explained, "the circus in antebellum America was an important, and influential, transmitter of ideals and images about the body and human potential."[74] The circus employed a variety of performers; each had a body suited for his/her primary act, and the body image was also used as a marketing tool.[75] Alan assuredly saw the petite and graceful physiques of ballet dancers as well as the muscular arms and shoulders of aerial artists. He would have been fascinated with the genetic representatives of dwarfism and gigantism, but from what we know of him, the act that most caught his attention would almost certainly have been that of the resident circus strongman. These weight lifting personalities could have been almost any shape—from the lean, average size of 150 pounds to the massive and corpulent 300 pounders. The only requirement for a late nineteenth century strongman would probably have been a high level of strength and a sense of showmanship. Through the circus Alan learned that strength, not just body shapes, came in many different packages.

If nothing else, the circus taught young Alan to not always believe everything he read. He learned the hard way that the circus came to town to make money and the only way to do that was to get people under the canvas tent flap. Later in life he recalled that the circus was in the "theatre business;" it often exaggerated the description of various

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Terry Todd, "Peter V. Karpovich: Transforming the Strength Paradigm," *Journal of Strength and Conditioning Research* 17 (May 2003): 213-20.

[74] Todd, "'Strength Is Health'," 5.

[75] For an in depth look at the circus and its cultural significance see Janet M. Davis, *The Circus Age: Culture & Society under the American Big Top* (Chapel Hill: University of North Carolina Press, 2002).

acts to make them sound grander than they really were. After seeing posters advertising "a horse airily walking along a very thin tight rope," Calvert bitterly remembered discovering, "a 10-inch square timber *wrapped in rope*, and along this timber they slowly coaxed the poor blindfolded beast."[76] Such embellishment did not sit well with Calvert who would later expose similar trickery by strongmen in *The Truth About Weightlifting*.

Many influences from his youth and adolescent years converged when Calvert traveled to Chicago to the Columbian World's Exposition. His visit to the Trocadero Theatre on that fateful evening determined his path; his future goals became clear. He wanted to emulate Sandow's body and he soon realized that he needed heavy barbells and dumbbells to do it. When he went home to 3311 Baring Street, Philadelphia he began collecting every photograph and cabinet card he could find of Sandow—his new obsession. Sandow's "system" of training, Calvert eventually learned, was not new *per se*, but it involved long-handled or short-handled implements called barbells and dumbbells. He became convinced that he needed to obtain similar equipment so that he too could sculpt his body into a state of perfection. The only problem with that idea, as Calvert soon found, was that in *fin-de-siècle* America a person could not just go to the local sporting goods store and walk out with a heavy barbell or dumbbell even if that store was in the third largest city in the country. The lack of access to an array of heavy weights continued to plague Calvert into the new century.

When Calvert saw Sandow in Chicago in 1893 there was not enough demand in America for heavy dumbbells or barbells to drive a commercial market, much less a specific industry. Most people in America in the eighteenth and nineteenth centuries did not have the time or the inclination to participate in "exercise"; many, especially those employed in manual labor occupations, received more than enough activity in their daily

[76] Calvert, "One Arm Press," 7.

tasks. Furthermore, the concept of resistance training as a form of healthful exercise was not embedded in their consciousness. Although reformers stressed the importance of exercise as a way to be healthier, most people considered strenuous activities such as weight training to be dangerous and unseemly. Although the rise of sports led to an increase in the number of competitive athletes, the use of strength training as an integral aspect of conditioning was many decades away because of the misguided concept of muscle-binding. Thus it was that training with barbells of any substantial weight was reserved for the traveling strongmen and women, who themselves were usually viewed as being on the fringes of society. Because of all this, training with heavy weights during the years of Calvert's youth and adolescence, while not unheard of, was rare. Living and growing up in Philadelphia, however, allowed Calvert to see many touring strongmen and he was greatly influenced by them. Growing up during the initial stages of the Progressive Era within a family that placed value on education and entrepreneurship, Calvert was in a perfect position to influence the way Americans viewed heavy lifting and eventually to help modernize the fledgling sport of weightlifting.

CHAPTER 2

AMERICAN WEIGHT TRAINING BEFORE ALAN CALVERT

Eugen Sandow's appearances at the Chicago World Fair in 1893 occurred during a time in America that might be called the "Golden Age of Strength."[1] Following the Civil War, as variety theater, the circus, and, later, vaudeville evolved as significant forms of mass entertainment, dozens of professional strongmen and a few strongwomen left Europe, sailed across the Atlantic Ocean, and marketed themselves to the burgeoning population of the United States. Some of these early performers wrestled, challenging the audience in each city to send forth their local champion to "try the strongman." Other entertainers limited their performances to the lifting of heavy implements and objects whose weight the audience could relate to—horses, cannons, and even automobiles.[2] Some of these performers included physique posing in their routines. According to

[1] As expected, the age is not defined by an exact range of years, however many physical culture authors refer to the period between 1880-1920 as the Golden Age (or Era) of Strength. Some examples include David Gentle, "Hermann Goerner: Amazing All-Rounder," *Milo, A Journal for Serious Strength Athletes* 9 (March 2002): 34; David Webster, "Monte Saldo," *Iron Game History* 2 (January 1992): 17; David Pirie Webster and International Weightlifting Federation, *The Iron Game: An Illustrated History of Weight-Lifting* (Irvine, Scotland: by the author, 1976), 39-41. Bill Pearl's *Beyond the Universe: the Bill Pearl Story* (n.c., Bill Pearl Enterprises, 2003) contains an appendix titled "The Golden Age of Strength Training" which begins with Father Jahn and traces strength from the 1880s to the bodybuilders of the 1980s. Terry Todd believes that the "era of the professional stage strongman" could be extended to the early 1930s when vaudeville died. See: Terence Colquitt Todd, "The History of Resistance Exercise: And Its Role in United States Education" (Ph.D. diss., University of Texas at Austin, 1966), 53. Several internet websites reference the time period from a nostalgic point of view when lifting and its related equipment was perceived as simple, but serious, and drug free. The advertised workouts generally require the use of kettlebells, heavy dumbbells, or similar "hard-core" training techniques. See Dinosaur Training advertisement at www.brookskubik.com/, and kettlebell advertisements at www.balanced-body.com/Product.asp?PRODUCT_GUID=2245BB79FA1442DD874349 A39682D4FF. See also references in Sean Toohey's "Training with a Living Legend: Maximum Bob Whelan" at www.naturalstrength.com/features /detail2.asp?AuthorID=130&ArticleID=503 and "Steroids, Supplements, and the Decline of Physical Culture" by the same author at www.naturalstrength.com/steroids/detail.asp?SecID=8&ArticleID=248, viewed on 25 February 2005.

[2] For example, see Roussel, "The Canon[sic] Man" in Edmond Desbonnet, *The Kings of Strength: History of All Strong Men from Ancient Times to Our Day*, trans. David Chapman (unpublished), 44-45. Roussel would maneuver a canon[sic] onto his shoulders and then have an assistant light the fuse…"despite the recoil caused by the exploding firearm, Roussel did not move an inch."

French weightlifting historian Edmond Desbonnet, Felice Napoli (who trained Professor Attila, who then trained Sandow) was exceptionally gifted at what the French referred to as *poses plastiques*, in which a stage actor or professional strongman would dress in costumes replicating national heroes, classical statuary, or theatrical characters, and assume positions on stage mimicking those of the original.[3] By the time Alan Calvert saw Sandow in Chicago however, Sandow was not just pretending to be classical statuary; he was displaying *himself* as a work of art—the product of willed work. Sandow's body embodied strength, and his large muscles and heroic proportions were as important a part of his "message" as the barbells he lifted and the feats of strength he performed. This embodiment—this display of muscular beauty—moved Alan Calvert deeply as he watched the hypertrophied German do his show in the summer of 1893. What is more, Calvert wasn't alone.

Ziegfeld's prodigy enjoyed sold out performances throughout his time in Chicago earning "far in excess of the $600" he made with his original theater contract.[4] Following the close of the Fair, Sandow and Ziegfeld set off on a cross-country tour which made Sandow into a household name and filled the minds of many young Americans with dreams of what they, too, might look like if they trained like Sandow.[5] Sandow's appearances in the United States between 1893 and 1896 set off a physical culture revolution. By the end of the decade, Bernarr Macfadden would launch *Physical Culture* magazine, Professor Attila's gym in New York City would become a mecca for athletes

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[3] Ibid., 70. The original phrase "*poses plastiques*" is found in Edmond Desbonnet, *Kings*, trans. David Chapman (Paris: Librairie Berger-Levrault/Librairie Athletique, 1911), 87.

[4] David Chapman, *Sandow the Magnificent: Eugen Sandow and the Beginnings of Bodybuilding, Sport and Society* (Urbana: University of Illinois Press), 59. Chapman wrote that Ziegfeld and Sandow agreed upon ten percent of the door receipts which ended up with far more than $600. Charles Higham, *Ziegfeld* (Chicago: Henry Regnery, 1972), 13, claimed Sandow made over $1000 per week. Higham and Richard Ziegfeld, *The Ziegfeld Touch: the Life and Times of Florenz Ziegfeld, Jr.* (New York: Harry N. Abrams, 1993), 23-24, also claim that over $32,000 in door receipts was made the first week of Sandow's show.

[5] Sandow's American Tour is discussed in Chapman, *Sandow*, 70-99; Higham, *Ziegfeld*, 15-8; Ziegfeld and Ziegfeld, *The Ziegfeld Touch*, 26-8.

of all kinds, and nearly every circus and vaudeville revue in the U.S. would boast a strength act of some sort. Sandow's physical training revolution was also felt in cities and villages across the United States on a local level. Boys who saw Sandow in person or read about him in the *National Police Gazette*, or who saw some other strongman who played in their hometown, wanted to emulate their new-found heroes in both appearance and strength.[6] The problem, however, was that until Alan Calvert entered the scene these boys and young men didn't have the necessary tools, or reliable information, to help them reach their goals.

WEIGHT TRAINING IN NINETEENTH CENTURY AMERICA

Purposive weight training in America is in its infancy when one realizes that the ancient Egyptians practiced lifting heavy bags over four thousand years ago, that the Ancient Greeks trained with weighted implements as far back as the fifth century B.C.E., and that surviving Roman mosaics depict dumbbell-toting women from the third century A.D.[7] Weightlifting historians Terry Todd and David Webster have noted many other

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[6] Ottley Coulter decided to become a professional strongman upon meeting August Totzke, "the strongman and iron jaw marvel" at a show in Cleveland. See: Jan Todd and Michael Murphy, "Portrait of a Strongman, the Circus Career of Ottley Coulter: 1912-1916," *Iron Game History* 7 (June 2001): 8-9.

[7] For information on ancient Egyptian training, see: T. Todd, "History of Resistance Exercise," 26. Greek training is discussed in T. Todd, "History of Resistance Exercise," 27-31; and Webster and Federation, *The Iron Game*, 5-6. The Roman mosaics are discussed in Jan Todd, "'As Men Do Walk a Mile, Women Should Talk an Hour…Tis Their Exercise' & Other Pre-Enlightenment Thought on Women and Purposive Training," *Iron Game History* 7(July 2002): 61. There are numerous texts which outline the importance of strength and purposive training. A few of them which also give some ancient history regarding resistance training of one sort or another include Jan Todd, "The Strength Builders: A History of Barbells, Dumbbells and Indian Clubs," *International Journal of the History of Sport* 20 (2003): 65-90; T. Todd, "History of Resistance Exercise". One of the earliest books pertaining to exercise and health is Hieronymis Mercurialis, *De Arte Gymnastica Libri Sex*, 2. ed. (Venetiis: apud Ivntas, 1573). It is translated in John Wilton Frankland Blundell and Girolamo Mercuriale, *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).

There have been many texts which recount the evolution of the closely related topics of exercise, weight lifting (both as a sport and a leisure activity), and bodybuilding. See for example popular weight lifting texts: Gherardo Bonini, "London: The Cradle of Modern Weightlifting," *The Sports Historian* 21 (May 2001): 56-70; Chapman, *Sandow;* John D. Fair, *Muscletown USA: Bob Hoffman and the Manly*

examples of ancient resistance training involving the use of rocks, large stone tablets, rounded stones, clubs, and "halteres"—hand-held devices which were precursors to the modern dumbbell.[8] After the decline of Rome, however, references to resistance training are uncommon, at least until one enters the eighteenth century. The exception to this observation are the many historical reports of tests of strength comprising various "manhood rituals," such as stone lifting contests and the occasional appearance of wrestlers and strength acts at local fairs and celebrations.[9]

Anthony Serafini's insightful remark that "the history of a nation's sports mirrors the history of the nation" is certainly true with regard to the sport of weightlifting in America.[10] In the first two centuries following the founding of the Massachusetts Bay Colony, the development of leisure-time activities was not a high priority as most settlers focused on carving out a new life in the American wilderness. Historian Nancy Struna argues that although survival in colonial times was hard, the colonists were a "people of

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Culture of York Barbell (University Park: Pennsylvania State University Press, 1999); Gaudreau, *Anvils, Horseshoes and Cannons, the History of Strongmen, Volume 1* (East Kingston, NH: by the author, 1975); Gottfried Schèodl, *The Lost Past* (Budapest, Hungary: International Weightlifting Federation, 1992); Jan Todd, "From Milo to Milo: A History of Barbells, Dumbbells, and Indian Clubs," *Iron Game History* 3 (April 1995): 4-16; Jan Todd, "The Origins of Weight Training for Female Athletes in North America," *Iron Game History* 2 (April 1992): 4-14; J. Todd, "Strength Builders": 65-90; J. Todd, "'Strength Is Health': George Barker Windship and the First American Weight Training Boom," Iron Game History 3 (September 1993): 3-14; T. Todd, "History of Resistance Exercise"; Terry Todd, "The Expansion of Resistance Training in U.S. Higher Education through the Mid-1960's," *Iron Game History* 3 (August 1994): 11-6; Terry Todd, "The History of Strength Training for Athletes at the University of Texas," *Iron Game History* 2 (January 1993): 6-13; Webster and Federation, *The Iron Game*; David P. Willoughby, *The Super-Athletes* (South Brunswick: A.S. Barnes, 1970).

Bodybuilding texts which include similar information: Kenneth R. Dutton, *The Perfectible Body: The Western Ideal of Male Physical Development* (New York: Continuum, 1995); Alan Radley and William Joyce, *The Illustrated History of Physical Culture* (United Kingdom: by the author, 2001); Webster, *Barbells & Beefcake: An Illustrated History of Bodybuilding* (Irvine, Scotland: by the author, 1979); David Pirie Webster, *Bodybuilding: An Illustrated History*, 1st Arco ed. (New York: Arco Publishing, 1982).

[8] T. Todd, "History of Resistance Training", 26-32; Webster and Federation, *The Iron Game*, 5-9.

[9] Scotland's history is rich with stories of "manhood stones." Young clansmen had to demonstrate their strength and passage into manhood by lifting these stones. David Pirie Webster, *Scottish Highland Games* (Edinburgh: Reprographia, 1973), 127-32. Edmund Desbonnet also touches on the fact that many leaders were chosen because of their physical abilities, "From man's earliest days, strength has, in fact, taken precedence over intelligence." Desbonnet, *Kings*, 1.

[10] Anthony Serafini, *The Muscle Book* (New York: Arco Pub., 1981), 7.

prowess."[11] They found ways to incorporate leisure into their lives, many times by exhibiting some aspect of physical ability or life-preserving skill, e.g. hunting, fishing, marksmanship, and wrestling. During the mid-eighteenth century, as the westward migration began, many settlers stopped at local taverns to refresh themselves and sometimes to participate in the impromptu sporting events held on the premises. Often a local strongman or wrestler (often the same person) would test the physical prowess of those traveling through the area.[12] The wrestling matches generally occurred outside the taverns and probably resembled a "rough-and-tumble" style of fighting with a "no-holds-barred" policy.[13] If hand and grip strength were the strongman's talent then he might challenge newcomers to a bout of thumb, finger, or wrist wrestling; whereas if overall size and physical power were his gifts, then the tests of strength involved the lifting of heavy items found at hand—large rocks or boulders, anvils, horse- or ox-pulled wagons, or possibly even the animals themselves. Strength was such a valuable commodity in the early years of our nation that communities proudly cheered for their favorite strong man at the local drinking establishment.

In the nineteenth century, inhabitants of the developing cities did not have to rely on physical strength to the same degree as their rural counterparts. Indeed, historians have documented that the urbanization of America resulted in a loss of strength and vigor due to bad air, poor living conditions, and the lack of physical labor and activity.[14]

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[11] Nancy L. Struna, *People of Prowess: Sport, Leisure, and Labor in Early Anglo-America*, *Sport and Society* (Urbana: University of Illinois Press, 1996), 5-6, 112-13.

[12] Ibid., 143-4. See also Benjamin G. Rader, *American Sports: From the Age of Folk Games to the Age of Spectators* (Englewood Cliffs: Prentice-Hall, Inc., 1983), 9.

[13] Elliott J. Gorn, ""Gouge and Bite, Pull Hair and Scratch": The Social Significance of Fighting in the Southern Backcountry," *American Historical Review* 90 (February 1985): 18-43.

[14] Harvey Green, *Fit for America: Health, Fitness, Sport, and American Society* (New York: Pantheon Books, 1986), 77-100, 82-84. Although the rise of the factory and its many positions requiring a fair amount of physical labor occurred during this same time period, most of these workers would have been lower class citizens and immigrants. These classes of persons did not have the money (or leisure time) to spend on recreational pursuits. The rising middle class who pursued less vigorous careers in offices was the group generally associated with a loss of strength and vigor during the urbanization of America.

However, while their own strength was reportedly waning, nineteenth-century urbanites remained interested in displays of strength and frequently attended the performances of professional strongmen and strongwomen who toured the country. At least as early as the 1750s acts such as the Dugees, a husband and wife team traveling through New York City, performed physical exhibitions. Anthony Joseph Dugee performed a balancing act on the slack wire and his wife, the "Female Sampson," completed "wonderful Feats of Strength and Activity."[15] She purportedly "lies with her body extended between two chairs and bears an anvil of 300 lb. on her breast" and allows "six men to stand on her breast lying in the same position." She could also pick up the same anvil using only "the hair of her head," but, most astonishingly, she "will suffer a stone of 700 lb. to lye[sic] on her breast and throw it off six feet from her."[16] This stunt sounds somewhat like the modern bench press in which the weight, in the form of a barbell instead of the described stone, is pressed from the chest to arms' length. The heaviest female bench press in today's strength sport of powerlifting—incorporating both the use of performance-enhancing drugs and specialized lifting attire—is only 531 pounds so it is highly doubtful that Mrs. Dugee threw a 700-pound rock six feet off her chest.[17] Exaggerated claims have a long history in the world of professional strongmen, and strongwomen.

Although it examines the English physique, see also Michael Anton Budd, *The Sculpture Machine: Physical Culture and Body Politics in the Age of Empire* (New York: New York University Press, 1997), especially, Chapter One. See also: Dutton, *The Perfectible Body*, 99-105; Steven A. Riess, *Sport in Industrial America, 1850-1920* (Wheeling, Ill.: Harlan Davidson, 1995), 69-71.

[15] *New-York Mercury*, 13 August 1753 and 17 September 1753 as quoted in Struna's *People of Prowess*, 174.

[16] Esther Singleton, *Social New York under the Georges 1714-1776: Houses, Streets and Country Homes with Chapters on Fashions, Furniture, China, Plate and Manners* (New York: Appleton, 1902), 317.

[17] Michael Soong, "All Time Historical Women's Powerlifting World Records," *Monster Muscle Magazine*. Viewed online at http://www.powermagonline.com/latest-news/records-women.asp on June 8, 2006. Jan Todd suggests that Mrs. Dugee may have rolled the rock off of her chest and that the language used to describe the event created more exaggeration than just the event itself.

One reason Americans were undoubtedly intrigued by strength was because the new nation was still so tightly linked to Europe.[18] Historian, Jan Todd, outlined texts and exercise programs which evolved from the European roots of Greek Revivalism and resulted in a "physical training explosion" in the early decades of the nineteenth century in Europe and the United States. Scholars and physical trainers either read the literature of Johann Friedrich GutsMuths of Germany or trained under the tutelage of Pehr Henrik Ling of Sweden and became converts to the concept of the "classical ideal" in the process.[19] Todd argues that these ideas traveled to America and became the basis for new exercise systems and rationales for thinking about the body and strength in general.

Scottish immigrants brought Caledonian Societies and a cultural tradition rich in strength when they arrived in America in the mid-eighteenth century. These clubs hosted seasonal athletic games—the Scottish Highland Games—in which the "Heavy Events" involved putting the sixteen-pound stone, throwing the twenty-seven pound shafted hammer, throwing a fifty-six pound weight, and tossing a caber of over one-hundred-twenty pounds.[20] William Buckingham Curtis was active in such games. The founder of the Amateur Athletic Union and sports editor for *Spirit of the Times,* Curtis was one of the first Americans to understand the relationship between weight training and athletic

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[18] William J. Baker, *Sports in the Western World*, Rev. ed., *Sport and Society* (Urbana: University of Illinois Press, 1988), 99-103, 114; John R. Betts, "Mind and Body in Early American Thought," in *The American Sporting Experience: A Historical Anthology of Sport in America*, ed. Steven A. Riess (Champaign: Leisure Press, 1984), 61-79; Green, *Fit for America*, 85; John A. Lucas and Ronald A. Smith, *Saga of American Sport* (Philadelphia: Lea & Febiger, 1978), 137-46; Donald J. Mrozek, *Sport and American Mentality, 1880-1910* (Knoxville: University of Tennessee Press, 1983), 162-64.

[19] Jan Todd, "The Classical Ideal and Its Impact on the Search for Suitable Exercise: 1774-1830," *Iron Game History* 2 (November 1992): 6. GutsMuths wrote a book about training, *Gymnastics for Youth: Or a Practical Guide to Healthful and Amusing Exercises for the Use of Schools*. Ling did not write a full-length monograph, *per se*, but Leonard mentions pamphlets and a collection of his notes published posthumously, therefore most of his influence occurred in the actual training room. See Fred Eugene Leonard, *Pioneers of Modern Physical Training*, 2d ed. (New York: Association Press, 1915), 19-21, 27-32; Jan Todd, *Physical Culture and the Body Beautiful: Purposive Exercise in the Lives of American Women, 1800-1870* (Macon: Mercer University Press, 1998), 36-7.

[20] Webster, *Scottish Highland Games*, 25, 61-79.

performance. He was one of America's first amateur strongmen, and he competed publicly in a strength contest against John Babcock during the Chicago Caledonian Club Games in 1853, winning nine events (the total number of events is unknown).[21] The Scottish Highland Games have lasted until the present day and have even helped encourage the growth, or rather the revival, of another strength sport during the late twentieth and early twenty-first centuries—strongman competitions.

One of the most significant influences on American lifting was the German Turnverein—the gymnastic society founded by Father Friedrich Ludwig Jahn in the early nineteenth century. While Jahn did not advocate "heavy athletics"—a term used in several European and Russian nations to describe training with limit weights—his followers incorporated resistance training into their intense gymnastic routines so that by mid-century, resistance training was an established part of most *Turnvereins*.[22] Eventually, the individuals that particularly enjoyed "heavy athletics" separated themselves from the more gymnastics-related exercise associations and gathered in what were to become famous "gym schools" full of "craftsmen of weights."[23] European nations, especially Germany, France, and Austria, utilized these "specialised clubs and

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[21] Caspar Whitney, "The Sportsman's View-Point," *Outing* 36(August 1900): 557. Although Whitney stated that this competition was held in 1853 this is the only reference to this event that I was able to find. All other information conflicts. For instance, an online *Scottish-American History Club Newsletter* (January 2003, p. 2) found at www.chicago-scots.org/clubs/History/Newsletters/2003/Jan03-2.htm viewed 11 November 2005 states that a Chicago Caledonian Club was formed in 1865, therefore making the 1853 date impossible. Betty Mary Spears, Richard A. Swanson, and Elaine T. Smith, *History of Sport and Physical Education in the United States*, 3rd ed. (Dubuque, Iowa: Wm. C. Brown Publishers, 1988), 119, maintain that the Boston Caledonian Club founded in the spring of 1853 was the first such club in America. R.G. Wettan and J.D. Willis, "William Buckingham Curtis: The Founding Father of American Amateur Athletics, 1837-1900," *Quest* 27 (Winter 1977): 30, contended that Curtis joined a Chicago gymnasium and *Turnverein* in 1854 as his starting point for athletic achievement, eventually becoming known as the "Yankee turner." Curtis would have been only sixteen years old in 1853 making it even more unlikely that he won nine events at such a young age.

[22] Jurgen Giessing and Jan Todd, "The Origins of German Bodybuilding: 1790-1970," *Iron Game History* 9 (December 2005): 8-20.

[23] Bonini, "London: The Cradle," 67.

dedicated masters" in the pursuit of what they believed to be their "cultural tradition."[24] Hundreds, and probably thousands, of men congregated to pursue heavy lifting routines at these various clubs and schools during the nineteenth century and, over time, the countries became known for their many able-bodied, strong men.[25] The earliest organized contests involving barbells and dumbbells are generally recognized as being hosted by these countries.[26] Father Jahn's political views in Germany created trouble for him as well as for his *Turners*, forcing many to flee the country in the mid-1800s. As these émigrés traveled abroad, they held on to their ideals of fitness and strength by creating *Turner* societies once they settled in America, Canada, and other countries. These fitness societies became known for putting on mass exercise demonstrations and became a tool for German immigrants to preserve some of their cultural traditions, much like the Scots did with their Caledonian Games.[27]

Another European who had a significant influence on strength training in America was the French strongman, Hippolyte Triat. Triat ran a prestigious gym in Paris in the mid-1850s favored by the nobles and upper classes. Large and imposing, Triat used dumbbells, barbells, and heavy implements as part of his training regimen. Paul Féval described Triat's gym in Edmond Desbonnet's, *Kings of Strength* as being filled with

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[24] Ibid.

[25] Desbonnet, *Kings*. Desbonnet's entire book is devoted to biographical sketches of professional strongmen from around the world, but especially those found in Europe. He includes information on over 225 strongmen, strongwomen, and strength acts (duos, families, etc.) from antiquity to the time of publication in 1911.

[26] Schèodl, *The Lost Past*.

[27] For information on German immigrants and *Turner* societies see Stephen Engle, "Franz Sigel: Immigrated Turner from Baden," in *Sudwestdeutsche Turner in Der Emigration*, ed. Annette R. Hofmann and Michael Kruger (Schorndorf: Verlag Karl Hofmann, 2004), 101-11; Giessing and Todd, "Origins"; Annette Hofmann, "The Turners´ Loyalty for Their New Home Country: Their Engagement in the American Civil War," *The International Journal of the History of Sport* 12 (1995): 153-68; Henry Christian Anton Metzner, *History of the American Turners*, 3d rev. ed. (Rochester: National Council of the American Turners, 1974); Carl Frederick Wittke, *Refugees of Revolution; the German Forty-Eighters in America* (Westport: Greenwood Press, 1970); Klaus Wust and Heinz Moos, *Three Hundred Years of German Immigrants in North America, 1683-1983: Their Contributions to the Evolution of the New World: A Pictorial History with 510 Illustrations* (Baltimore: Heinz Moos Publishing, 1983).

"dumbbells, rowing weights in all shapes and sizes, and iron bars with globes of carefully graduated size attached to the ends," explaining that it was Triat's "well stocked arsenal of peaceful weapons."[28] Triat credited himself (in his gymnasium advertisements) with the invention of the two-handed barbell and Desbonnet supported the claim.[29] Although it is impossible to substantiate Triat's claim, an engraving of his gym provides the first graphic evidence of them being used. At his gym, customers trained with heavy and light dumbbells and barbells with spheres of six kilograms. Triat also displayed a specially-made barbell that only he could lift—appropriately named "Mr. Triat's weight."[30] These

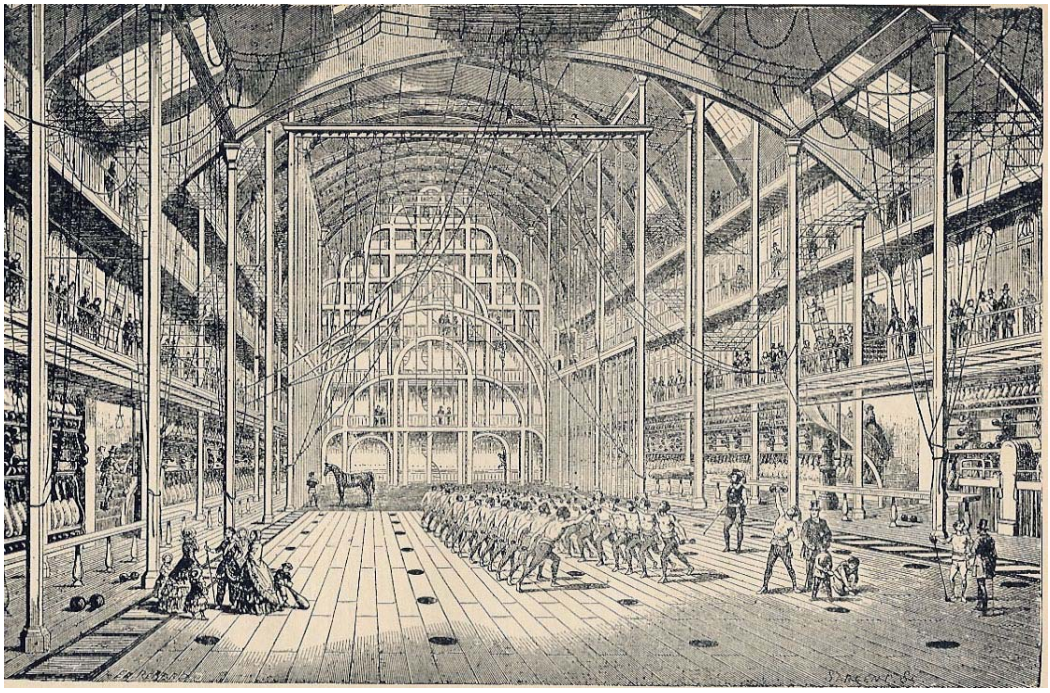

Figure 3. Perhaps the first graphic representation of barbells appears in this engraving of Hippolyte Triat's Gym in Paris, France. Note the barbells on the wall on the right. This image is from Edmund Desbonnet's *Les Rois de la Force* (1911) page 71.

[28] Desbonnet, *Kings*, 51.
[29] Ibid., 55, 62.
[30] Ibid., 51. Jan Todd reports that this weight may have exceeded two hundred pounds. See J. Todd, "Strength Builders," 79.

early barbells, however, appear to be solidly made of only one piece of material; no adjustment to the weight of the barbell would have been possible.

Triat's influence may have reached American shores via the efforts of Dr. Dioclesian Lewis. Lewis toured Paris during the formative years of his New Gymnastics system—one of the most successful early exercise programs in America. He visited two movement cure establishments and several Parisian gyms in 1856.[31] The Movement Cure, based on the concept of specific exercises, or movements, for specific ailments, relied on subjects such as anatomy and physiology, thereby linking the medical field and exercise.[32] The person most associated with the beginning of the movement cure is Pehr Henrik Ling. He first began making his "physiological prescriptions" in Sweden in the early 1800s based on the medical diagnosis of the patient.[33] Smithsonian archivist Ellen Roney Hughes found that the movement cure "provided a theoretical foundation to unite science-based medical treatment and exercise machines for remediation of serious illnesses."[34] Although Lewis doesn't name Triat's gymnasium as one of those visited, he most likely saw Triat's business because of its prominence. While in Paris Lewis would almost surely have seen Triat's class drills and dumbbell and barbell work, and undoubtedly borrowed ideas from Triat to include in his new exercise system.

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[31] J. Todd, *Physical Culture and the Body Beautiful*, 218.

[32] The most significant and interesting documents to combine exercise and the medical field include Jack W. Berryman and Roberta J. Park, *Sport and Exercise Science: Essays in the History of Sports Medicine*, *Sport and Society* (Urbana: University of Illinois Press, 1992); Ellen Roney Hughes, "Machines for Better Bodies: A Cultural History of Exercise Machines in America, 1830-1950" (Ph.D. diss., University of Maryland at College Park, 2001), 40-119; Carolyn Thomas de la Pena, *The Body Electric: How Strange Machines Built the Modern American* (New York: New York University Press, 2003), 89-136; J. Todd, *Physical Culture and the Body Beautiful*, 55-9, 137-48.

[33] J. Todd, *Physical Culture and the Body Beautiful*, 36, 145-48. For more information on Pehr Ling see Ellen W. Gerber, *Innovators and Institutions in Physical Education* (Philadelphia: Lea & Febiger, 1971), 155-73. For more information about the Movement Cure in America see Green, *Fit for America*, 94-8; Roberta J. Park, "Healthy, Moral, and Strong: Educational Views of Exercise and Athletics in Nineteenth-Century America," in *Fitness in American Culture, Images of Health, Sport, and the Body, 1830-1940*, ed. Kathryn Grover (Amherst: University of Massachusetts Press, 1989), 123-68.

[34] Hughes, "Machines for Better Bodies", 51.

Upon Lewis' return to the United States he began to criticize his contemporary, Dr. George Barker Windship, by arguing that Windship's exercise programs emphasized the use of too much weight, or resistance. Lewis advocated the use of light, easy-to-lift implements, as well as the use of music. Even so, his New Gymnastics system included some "extraordinarily difficult" feats on an early exercise device called the Pangymnastikon involving the use of rings and ropes and requiring considerable upper body strength.[35] Lewis opened a gym in Boston and taught his methodology to men, women, and children in class-like settings, much like Triat did in Paris. A combination of several types of exercise programs—light-weight dumbbells, Indian clubs, wooden rings, and wands—Lewis' New Gymnastics soon became America's most popular system of exercise and even gained the endorsement of the American Institute of Instruction, the nation's largest professional society for educators in 1860.[36] Thomas Wentworth Higginson, one of the earliest promoters of the Muscular Christianity movement, stated in the March 1861 *Atlantic Monthly*, "It would be unpardonable…not to speak a good word for the favorite hobby of the day, Dr. Lewis and his system of gymnastics…Dr. Windship had done all that was needed in apostleship of severe exercises, and there was wanting some man with a milder hobby."[37] Undoubtedly, Lewis's system filled a niche in the history of exercise, but it was Dr. Windship and his "severe exercise" who spoke to the same portion of society that Calvert would target several decades later.

In the early 1850s the young George Barker Windship inauspiciously entered Harvard University. This act contributed to "America's First Weight Training Boom"

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[35] J. Todd, *Physical Culture and the Body Beautiful*, 218, 244-47.
[36] Ibid., 240-45, 222-23.
[37] This quote was reprinted in Mary F. Eastman, *The Biography of Dio Lewis* (New York: Fowler & Wells, 1891), 78-9. It was originally published in Thomas Wentworth Higginson, "Gymnastics," *The Atlantic Monthly* 7 (March 1861): 283-302.

only a few years later.[38] Typical of many exercise entrepreneurs Windship claimed to be a skinny, undersized sixteen-year old when he began taking classes, and to keep the school bullies at bay he began a daily gymnastics routine which incorporated the use of the gymnastics horse, parallel bars, rings, pulley weights, inclined ladders, and other apparatus. His body began to change shape and his strength grew: "my shoulders had broadened, and my muscles [had] been developed, so as to present to the critical and interested observer a somewhat threatening appearance."[39] He found that as his strength developed his "ability to resist and overcome all fleshly ailments, pains, and infirmities" increased. He summed up the benefits of his exercise by coining the phrase, "Strength is Health."[40]

Following graduation and while trying to find his purpose in life, Windship discovered a group of people surrounding a lifting machine. Curiosity won out; he lifted 420 pounds, but Windship couldn't fathom why—after training for four years in the Harvard gymnasium—his strength gave such a dismal showing. When he compared himself to the famous eighteenth century Englishman Thomas Topham who had lifted over eighteen hundred pounds, albeit using a shoulder harness, Windship determined that he didn't have "main strength…the strength of the truckman and the porter." He realized, somewhat reluctantly, that such strength couldn't be "acquired in the ordinary exercises of the gymnasium."[41] Windship became captivated by the idea of lifting heavy weight and beating Topham's record. He fashioned his own lifting device which allowed him to do a partial deadlift in which he only moved the weight enough to clear the ground (this

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[38] J. Todd, "'Strength Is Health'."
[39] George Barker Windship, "Autobiographical Sketches of a Strength-Seeker," *Atlantic Monthly* 9 (January 1862): 104. For more information on George Barker Windship see Joan Paul, "The Health Reformers: George Barker Windship and Boston's Strength Seekers," *Journal of Sport History* 10 (Winter 1983): 41-57; J. Todd, "'Strength Is Health'."
[40] Windship, "Autobiographical Sketches," 105.
[41] Ibid., 106.

is unlike the present day deadlift in which the bar is gripped at mid-shin height and lifted so that the body assumes an erect position with the bar in front of the thighs.) Windship named his exercise the "Health Lift" and, eventually, he could lift over two thousand pounds in this manner. He opened what may have been the first sports medicine facility (part medical office, part gymnasium) and began a highly popular lecture series in which he espoused the health benefits of his lift and demonstrated his hard-earned strength.[42] His eloquent speeches, his motto—"Strength is Health," and his Health Lift combined to produce a "lifting mania" in America. Health lift devices began appearing "like mushrooms after rain" in people's houses and work-places as well as in schools.[43] It is impossible to say for sure how successful the Health Lifts were, but physical education texts always mention Windship's name and motto in connection with the time period, indicating his substantial influence. Although no Health-Lift-labeled patent is connected to Windship's name, several patents were granted to other men for devices identified as "health-lift-type" exercise machines in the 1870s and 1880s.[44]

More central to Alan Calvert's subsequent efforts was the graduated dumbbell Windship patented in 1865. It was not the first, however, as Daniel F. Savage's 1860 patent for "Dumb-bells" incorporated "spheroidal enlargements" for a graduating dumbbell "so that the weight…may be increased or diminished at pleasure to almost any extent" according to the muscular strength of the person using them.[45] The enlargements,

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[42] J. Todd, "'Strength Is Health'," 8; George Windship, "Windship Practice Advertisement," *Merry's Museum for Boys and Girls (1868-1871)* 60(December 1871), 310.
[43] Dudley Allen Sargent and Ledyard W. Sargent, *Dudley Allen Sargent, an Autobiography* (Philadelphia: Lea & Febiger, 1927), 98.
[44] Hughes, "Machines for Better Bodies," 66-82.
[45] Patent #28505, Dumb-Bells, 29 May 1860, Daniel F. Savage, Boston, Mass. United States Patent and Trademark Office (USPTO) online website: http://www.uspto.gov/patft/index.html.

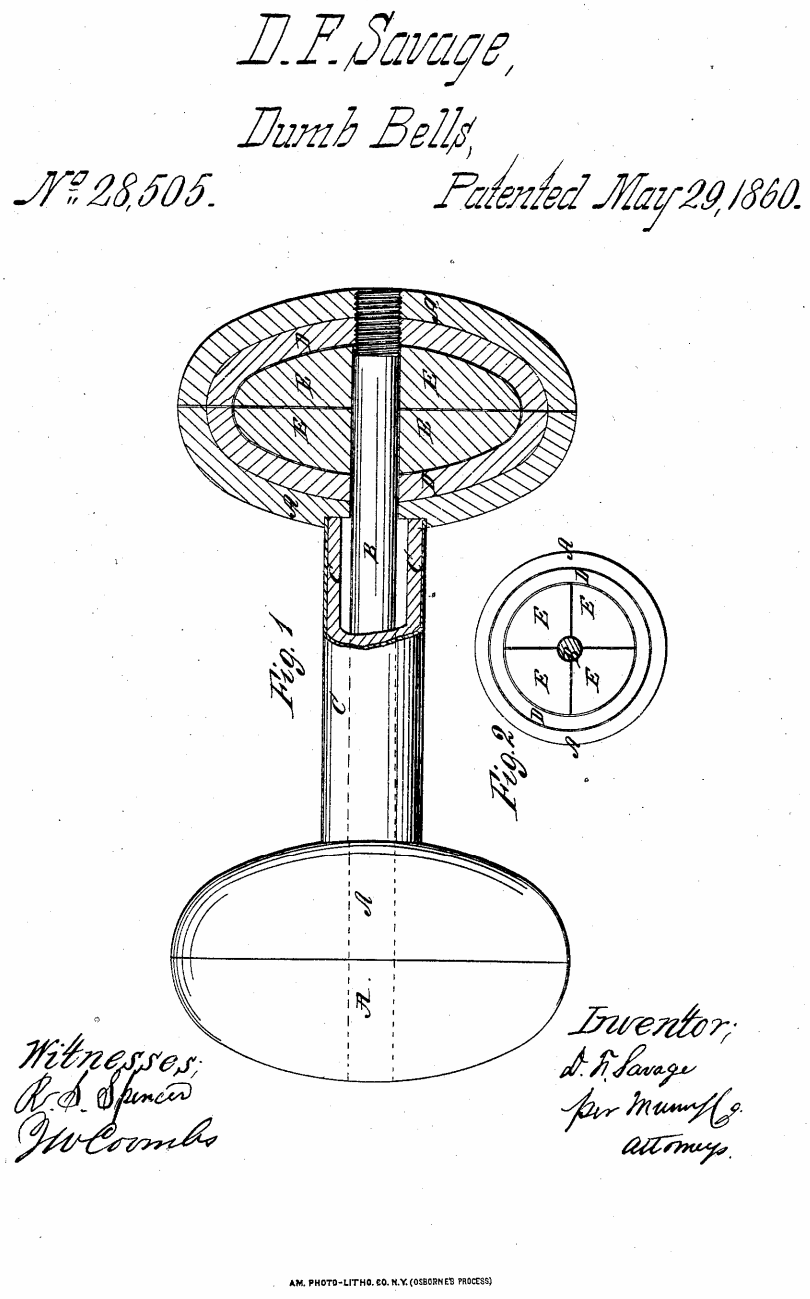

Figure 4. Daniel Savage's graduating dumbbell patent of 1860. Image from USPTO online website: http://www.uspto.gov/patft/index.html.

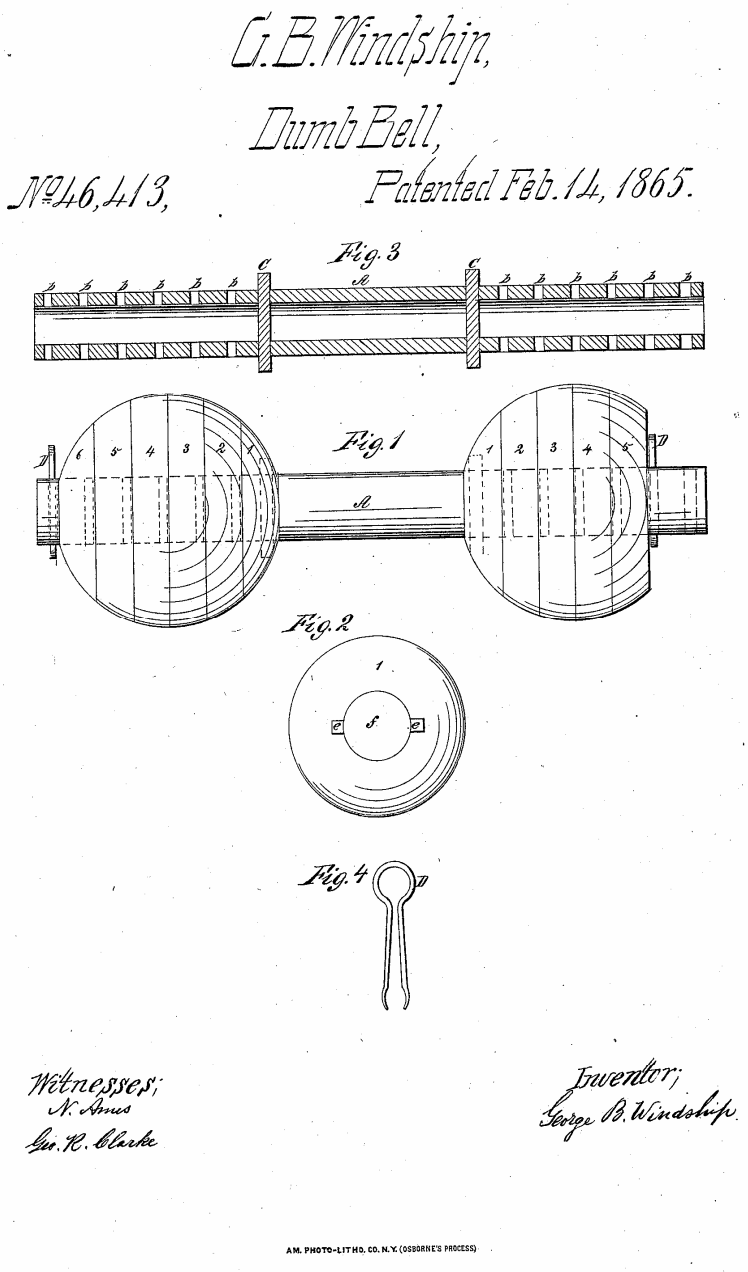

Figure 5. Windship's 1865 "ever-growing" dumbbell patent. Image from USPTO online website: http://www.uspto.gov/patft/index.html.

which appeared to be in the shape of various concave cups and sections were, according to Windship, "comparatively expensive, inconvenient, and difficult to adjust."[46]

Windship's 1865 "Improvement in Graduated Dumb-bells" patent involved the use of "flat metallic disks…so shaped that when arranged together…they will form a regular, scalloped, or otherwise irregular sphere, spheroid, oval, cylinder, cylindroid, or any other geometrical solid required."[47] This resulted in a dumbbell "simple in construction, cheap, strong, and quickly adjusted." His dumbbell "may be made lighter or heavier, as required, by taking off or putting on the different sections of which they are composed; and its nature consists in certain improvements in the construction of the same, whereby they are rendered cheaper and more readily adjusted than any known or used before."[48] Savage's earlier dumbbell was also adjustable, but the adjustments required the use of wedges within and layers of material around the spheroid end-pieces of the bell, making quick changes problematic. Windship's "ever-growing" dumbbell was clearly easier to use.[49] It incorporated a central shaft which would function as its handle and used flat plates of differing weights. Every disc had the same centrally-located hole that was very slightly larger than the shaft. Capable of handling from eight to 101 pounds, the requisite plates were added to both ends of the handle by simply sliding the plates onto the shaft. Pins through the handle held everything in place. Although Windship mentions in the patent that a bar of any length could be used to connect the two ends, he illustrated in his ad an adjustable short-handled dumbbell.[50] His

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[46] Patent #46413, Improvement in Graduated Dumb-Bells, 14 February 1865, George B. Windship, Boston, Mass. USPTO online website: http://www.uspto.gov/patft/index.html.
[47] Ibid.
[48] Ibid. Although Windship does not name Savage in his patent application Daniel F. Savage's patent is the only one earlier than his and corresponds to the description given by Windship. See: 1860 Patent, Savage.
[49] Calvert writes that Colonel Thomas Higginson referred to Windship's dumbbell as "ever-growing" in Alan Calvert, "Muscular Development and How It Is Influenced by the Kind of Exercise You Take," *Strength* 3(July 1917): 5.
[50] Advertisement including picture and description found in May-Windship Papers in Massachusetts Historical Society, Boston as found by Paul, "Health Reformers," 51, n.53; 1865 Patent, Windship.

plate-loading concept closely resembles the system of barbells in use today, thus proving its general design to be efficient. Targeting the upper class, Windship advertised his new dumbbell for a pricey sixteen dollars ($180 by today's standards), but none seem to have survived to the current day.[51] Unfortunately, America's first heavy weight-lifting boom suffered a serious blow in 1876 with Windship's fatal stroke at the young age of forty-two. His critics blamed his lifting for his untimely death and while heavy lifting did not vanish from the American scene, it suffered a severe setback.

Both Dio Lewis and George Barker Windship worked during a period of time often associated with the birth of Muscular Christianity, a "form of social gospel that affirmed the compatibility of the robust physical life with a life of Christian morality and service and indeed contended that bodily strength built character and righteousness and usefulness for God's (and the nation's) work."[52] This movement encouraged the concept of "body as temple."[53] Contrasting images of strong bodies with goodness and weak bodies with evil, muscular Christians exercised their bodies for the sake of their moral, as well as physical, fitness.[54] Recreational athletic clubs such as the New York Athletic Club (NYAC) and the New Orleans Athletic Club (NOAC) opened their doors alongside the establishments of exercise entrepreneurs. Initially founded as a rowing club in 1868 by William Buckingham Curtis, Henry Buermeyer, and John Babcock, the NYAC quickly grew to include amateur sports such as track and field, boxing, wrestling, fencing, and weight-lifting. Their ultimate mission was "to promote manly sports,

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[51] S. Morgan Friedman, *Inflation Calculator* (December 11, 2000 [viewed 8 July 2005]); available from www.westegg.com/inflation/.

[52] James Whorton, *Crusaders for Fitness: The History of American Health Reformers* (Princeton: Princeton University Press, 1982), 271. For more information about the Muscular Christianity movement and its pervasiveness in society see Green, *Fit for America*, 181-215; Donald E. Hall, *Muscular Christianity: Embodying the Victorian Age* (Cambridge: Cambridge University Press, 1994); Clifford Putney, *Muscular Christianity: Manhood and Sports in Protestant America, 1880-1920* (Cambridge: Harvard University Press, 2001).

[53] Putney, *Muscular Christianity*, 56.

[54] Ibid.

exercises and amateur athletics of every kind and encourage physical culture."[55] These pioneers' early practice of weight training to supplement their other sporting endeavors and their founding of the Amateur Athletic Union, no doubt helped turn the NYAC into a mecca of elite athleticism which exists to the current day.[56] Curtis, the most famous of the trio, practiced lifting heavy dumbbells as part of his own training routine and reportedly backlifted a record 3,239 pounds in 1868.[57] He excelled "not only at feats of strength, endurance and dumbell(sic) lifting and very heavy weight lifting with harness, but on feats which required great flexibility and agility, performing both on the floor and with suspended apparatus."[58] Robert "Bob" Hoffman, America's most successful weightlifting coach of the twentieth century, believed that Curtis should be known as the "Father of American Lifting" due to his early lifting exploits and training philosophies.[59] Actually, Curtis promoted all amateur sports and is, therefore, remembered more often as the "Father of Amateur Athletics."[60] The New Orleans Athletic Club opened its doors in 1872 as the Independent Gymnastics Club. With the help of the local German *turnverein*,

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[55] New York Athletic Club website found at http://www.nyac.org/history.html Viewed 19 October 2005.

[56] The prestigious NYAC boasts of having more Olympic-medal-winning members on its vaunted membership lists than most Western European countries have won medals. See the New York Athletic Club's internet website for a list of their medal winners: www.nyac.org/athletics.html. Members have won 120 gold medals, 41 silver medals, and 52 bronze medals since the 1896 Olympics.

[57] Curtis's lift is discussed in Referee, "Schaefer's Wonderful Play," *The National Police Gazette*, December 16 1893; Wettan and Willis, "Curtis," 30. Bob Hoffman, "Father of American Lifting, 3rd Installment," *Strength & Health* (June 1940), 42; T. Todd, "History of Resistance Exercise", 168-69; Webster and Federation, *The Iron Game*, 28, 30.

[58] Hoffman, "Father, 3rd Installment," 51.

[59] Hoffman had the title, "Father of World Weightlifting," put on his tombstone and the Pennsylvania Historical and Museum Commission erected a marker at York Barbell declaring the same in 1998. See Fair, *Muscletown*, 375, 84. Hoffman, "Father, 3rd Installment," 52.

[60] For more detailed information on William B. Curtis see Wettan and Willis, "Curtis." The online website "Running Network Message Board" had a listing from Lowell M. Seida on 1 April 2002 indicating that his biography for "William Buckingham 'Father Bill' Curtis: Father of American Amateur Athletics," was "the world's only biography" of Curtis. See http://www.running network.com/messageboard/messages/456.html viewed 19 October 2005. Paul de Loca comments, however, that Seida's work is "huge and detailed, but chronologically cumbersome and unreadable. It is useful for anyone who wants to dig further and confirm small chrono-facts" but he "does not provide citations for much of his material which I have confirmed from different sources," (personal communication, 8 November 2005).

its members developed their bodies through gymnastics, fencing, and boxing, as well as by using an assortment of "weights and pulleys, dumbbells, Indian clubs, and other apparatus."[61] Although not as prominent as the NYAC, the NOAC also had its assortment of Olympic weightlifting medal winners and bodybuilder title holders in the era following World War II. Like the NYAC, it still operates today.[62]

One of the main offspring of America's Muscular Christianity movement was the formation of Young Men's Christian Associations (YMCA), beginning in 1851. As athletic sport and exercise gained a positive reputation through the efforts of men like Lewis and Windship, the YMCA saw that sport could be an avenue for enhancing Christian values. Envisioning physical training not only as a method for building character, but as a means of gathering young men together for the ultimate purpose of religious education and fraternization, the YMCA began building gymnasiums for their members in 1869.[63]

Lifting practitioner Robert Jeffries Roberts had been exposed to the leading exercise philosophies, i.e. Windship and Lewis, in the late 1860s and 1870s. After partaking of each, he began devising his own "platform" of exercise in 1875 as the Boston YMCA director.[64]

> I noticed when I taught slow, heavy, fancy, and more advanced work in acrobatics, gymnastics, athletics, etc. that I would have a very large membership at the first of the year, but that they would soon drop out because they could not do the work, and…the weak members would not renew the next season….I give most of my attention to those who need it most, the beginners and those who cannot for various reasons do the more advanced work. By…pushing simple work I can get more men to go into it, and find it easier to find leaders to teach it,

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[61] John D. Fair, "Strongmen of the Crescent City: Weightlifting at the New Orleans Athletic Club, 1872-1972," *Louisiana History* 45 (Fall 2004): 409-10.
[62] Ibid.
[63] Putney, *Muscular Christianity*, 64-72.
[64] Leonard, *Pioneers*, 119-26. See also Benjamin Deane Brink, *The Body Builder, Robert J. Roberts; Being a Collection of Drills and Health Hints, and Appreciations of the Man Who Blazed the Trail for Physical Education in the Young Men's Christian Association* (New York: Association Press, 1916).

> and also can run more classes in a day….In competitive work and the harder kind of safe exercises…the men leave the classes and become spectators, but when I teach easier work the crowd do the work and the few look on.[65]

Roberts coined the term "bodybuilding" in 1881 and programmed exercise classes "that anticipated today's fitness workouts."[66] By the late 1880s his coursework became known for "safe, short, easy, beneficial, and pleasing" exercises.[67]

Luther Halsey Gulick, revered in the annals of YMCA history, created the YMCA logo in 1895, a red triangle inscribed with the words: spirit, body, and mind.[68] Together, Roberts and Gulick began the first courses for gymnasium instructors striving to combine physical education preparation, Christian values, and sound teaching skills.[69] Although gymnasiums were not common during the first half of the nineteenth century, the YMCA facilitated the popularity of weight training during the last third of the century as the number of their gyms increased dramatically. Springfield College student, Frederick Bugbee, traced this growth and reported the existence of only two YMCA gyms in 1876, one hundred one gyms in 1886, four hundred ninety-five gyms in 1896, and five hundred seven gyms in 1900. [70] Historian Clifford Putney states that by 1880 fifty-one YMCAs maintained gyms; by 1900 four hundred fifty-five did; and the YMCAs that did not develop a gym "gradually disappeared."[71] The growing abundance of gymnasiums, when added to the increased motivation created by the touring strongmen, encouraged young

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[65] Leonard, *Pioneers*, 123-24.
[66] See website "YMCA Pioneers of Health and Fitness" at http://www.ymca.net/pdf/0102milestone8.pdf viewed on 19 October 2005.
[67] Leonard, *Pioneers*, 124. For more information about Roberts see T. Todd, "History of Resistance Exercise", 169-70.
[68] For information on Luther Halsey Gulick see: Ethel Josephine Dorgan, "Luther Halsey Gulick, 1865-1918" (Ph. D. diss., Teachers College, Columbia University, 1934); Leonard, *Pioneers*, 127-36. T. Winter, (2004) 'Luther Halsey Gulick', *the encyclopedia of informal education*, www.infed.org/thinkers /gulick.htm. Last updated: January 30, 2005. Viewed 19 October 2005.
[69] Winter, 'Gulick'.
[70] Frederick Fay Bugbee, "Physical Training in the Correspondence Schools" (thesis, International Young Men's Christian Association Training School, 1903), 44.
[71] Putney, *Muscular Christianity*, 67.

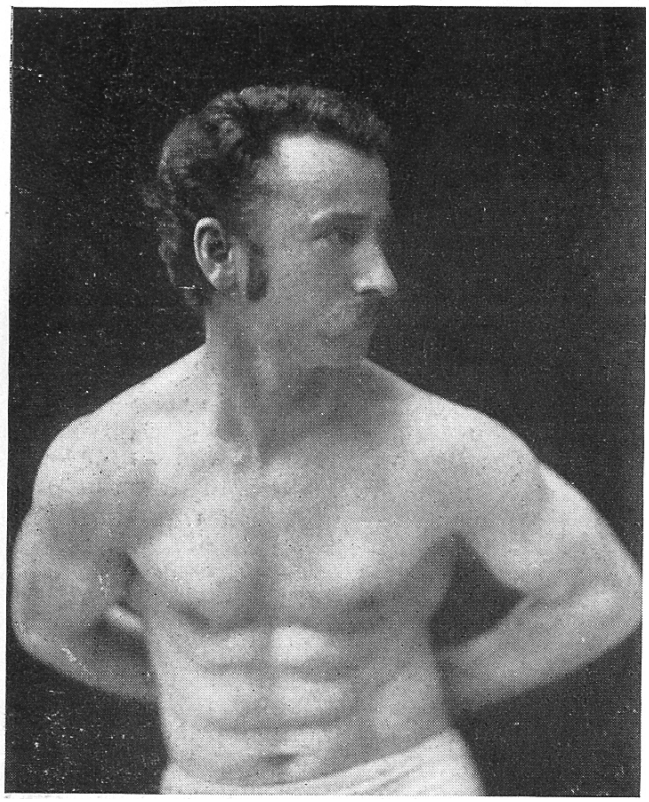

Figure 6. This picture of Oscar Matthes inspired fourteen-year old Calvert who published it in *Strength* magazine in January 1917 (page 6).

men to "hit the weights" even though the weights were primarily of the short-handled variety.

Talented strongmen earned a living putting on shows and demonstrations across Europe and, eventually, America. As the Dugees did in the mid-1700s, an increasing number of strongmen began plying their talents across the United States in the mid-to-late 1800s. Richard Pennell, for example, was described by Bob Hoffman as the originator of "the strongman movement in America." Pennell put on demonstrations of one-armed weight-lifting in and around New York City in 1870 and repeatedly pressed over two hundred pounds from shoulder to arm's length using only one hand.[72] The phenomenal Oscar Matthes, weighing only 110 pounds at four feet, eleven inches tall, impressed an audience in 1895 with his ability to "bent press" 156 pounds with his right hand and 140 pounds with his left.[73] Alan Calvert cited Matthes as being one of his earliest strength heroes and at the age of fourteen he saved a newspaper clipping of Matthes that included a line-art drawing of Matthes' upper body.[74] Small, lean men with the stature of Matthes or Pennell were not the only strongmen who gave exhibitions. Larger men, such as William B. Curtis, performed stunts like "curling and putting up from the shoulder to full arms' length above the shoulder two dumbbells at the same time, one in each hand, each weighing 100 lbs," as early as 1859.[75] Curtis even challenged George Barker Windship on occasion.[76] And then there were the behemoths…large men such as Louis Cyr, the "Mightiest of all rough and tumble

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[72] The exact date of this lift varies with the author. Webster and Willoughby credit it as being in 1874 in Webster and Federation, *The Iron Game*, 28; David P. Willoughby, "A History of American Weight-Lifting," *Your Physique* 10(March 1949): 41. Hoffman gives it as 1870 in Bob Hoffman, "Father of American Lifting, 2nd Installment," *Strength & Health* (May 1940): 43.

[73] Alan Calvert, "Oscar Matthes," *Strength* (January 1917): 7; Bob Hoffman, "The Father of American Weightlifting, 1st Installment," *Strength & Health* (April 1940): 42.

[74] Calvert, "Matthes," 6.

[75] Quoted "from *Spalding's Official Athletic Almanac*, issue of 1923, page 67" in Willoughby, "History," (March 1949), 41.

[76] "Gymnastic Tournament in Chicago," *Clipper* (19 January 1861), 315.

lifters…the mountain of muscles and supreme strength." Cyr stood five feet eight and one-half inches tall and weighed between 280 and 315 pounds.[77] He toured the United States in the 1890s in an act that included the use of large, globe-ended barbells, dumbbells, block weights, ring-weights, kettlebells, and other specialized equipment.[78]

The early strongmen, such as Curtis, Pennell, and Matthes, put on personal exhibitions of strength along with occasional challenge matches, but they were not generally thought of as professional strongmen who lifted for a living. In contrast, Louis Cyr and men such as Sandow, Apollon, Warren Lincoln Travis, Edward Aston, Maxick, and the Saxon Trio toured to make money from their genetic talents. The earliest exhibitions primarily featured heavy kettlebells, block-weights, and dumbbells; but as the turn of the century came closer and strongmen began to lift for profit, the use of custom-made barbells became more common. Specially crafted, and often somewhat deceptive, such equipment was important if one's livelihood depended on the ability to out-lift the audience's best challenger. To get equipment weighing hundreds of pounds from town to town and show to show, a reliable method of transportation became important to the strongman, thus the circus with its necessary wagons and/or railcars was a smart choice for employment. Later strongmen also began exhibiting in dime museums and vaudeville theatres where they could stay for extended periods of time before moving on to the next engagement.[79]

Upon returning from Chicago and the Columbian World's Fair, Alan Calvert attended the performances of visiting strongmen at the local vaudeville theatres whenever possible and spent "hours in studying the male physique as revealed in the most

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[77] David P. Willoughby, "A History of American Weight-Lifting: the Era of Louis Cyr and Other 'Super-Heavyweights'," *Your Physique* 11(May 1949): 18.
[78] Ibid.
[79] Joshua Michael Buck, "The Development of the Performances of Strongmen in American Vaudeville between 1881 and 1932" (Master's thesis, University of Maryland at College Park, 1999), 21-2.

celebrated statues, and in the paintings and drawings of the best artists, both ancient and modern."[80] There was something about the muscular body which kept him coming back for more. He began collecting images and articles pertaining to Sandow with something of an obsession, "I couldn't get enough of them, and I think that was because Sandow's figure appeared to be perfect no matter from what angle the picture was taken."[81] Calvert studied Sandow's "methods, and those of every other man who either lifted himself, or who had written on the subject."[82] Mentally associating Sandow's body—as well as those of other "very well built" lifters—with lifting, Calvert drew a "natural inference that lifting was the one and only thing which would develop the particular kind of figure and development which I most admired."[83]

CALVERT'S SEARCH FOR BARBELLS

Little information survives about Calvert's life between 1893 and 1900 other than his own account of his fascination with the physique and the fact that this was a time when he "tried out most of the ordinary exercise 'systems'."[84] Immediately after the Fair, Calvert probably searched, with limited success, for barbells and training information. It is unknown whether Calvert attended one of the many Philadelphia institutions of higher learning or if he traveled out of state to attend school. It also isn't known with certainty if he graduated from high school, but judging from his writing ability and his seeming intelligence it seems fairly safe to assume he surpassed at least this educational milestone. In any case, as the years went by and he continued to train, his interest in heavy lifting

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[80] Alan Calvert, *An Article on Natural Strength Versus "Made" Strength Preceded by an Explanation of Why I Abandoned the Field of Heavy Exercise*, 3rd ed. (Philadelphia: by the author, n.d.), 4.
[81] Alan Calvert, "Am I Fully Developed?—How to Find Out," *Strength* 9(May 1924): 66; Alan Calvert, "Waldon R. Adams," *Strength* (July 1916): 12.
[82] Calvert, *Natural Strength*, 4.
[83] Ibid.
[84] Ibid., 3.

gained steam. Calvert later claimed to have been re-inspired by George Elliot Flint's 1902 *Outing* article about progressive weight training; but no such article was published in 1902.[85] More likely, it was Flint's 1899 article titled "Some Hints on the Use of Weights for Health," in which Flint proclaimed the benefits of progressive weight work. This article's training philosophy and its requirement that one must gradually accustom the muscles "to bear strain by progressive physical training" and that "the strain be proportionate to the strength of the muscle which is being used" in order to gain "extraordinary health and extraordinary strength," stoked Calvert's desire for barbells once again.[86] The fact that the article was published in December 1899 suggests that Calvert probably spent the next two years, until 2 January 1902—the date of his first patent application—searching for, thinking about, and ultimately designing his own barbells.

Alan Calvert's first appearance in Philadelphia city directories comes in 1901, at the age of twenty-six. He was still living at the family residence on Baring Street and working for Calvert & Holloway. Being mechanically inclined, he entered into business with his father and Abner Holloway, probably as a young man in the mid-to-late 1890s, although he had been around the family business throughout his youth.[87] William J. Herrmann, one of Calvert's life-long friends, remembers meeting Calvert at the foundry as a boy when his own father or uncle, both of whom were also in the metals business—a maker of surgical instruments and a brass works owner, respectively—sent him to obtain metal from P.B. Calvert & Company.[88] It probably wouldn't be a stretch to think that Calvert's father had hoped young Alan would take the business over when the time came.

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[85] Ibid.
[86] George Elliot Flint, "Some Hints on the Use of Weights for Health," *Outing* 35(December 1899): 27.
[87] "Obituary - Alan Calvert," *The Suburban and Wayne (Pennsylvania) Times*, 30 June 1944, p.5.
[88] Robert Jones, "Wm. J. Herrmann, Health Builder, Part 2," *Strength & Health* (May 1947): 31.

Calvert may have learned the family metals business by toiling at the various metal-working machines, establishing foundry contacts, and keeping the administrative books. His father may have been content with the routine nature of the tinplating and metals business—an "honorable tradition"—but young Alan wanted to do more.[89] He dreamt of an ideal job which would combine his love of weight-lifting with his need for a livelihood.

Although his search to purchase a set of the long-handled barbells intensified after the article by Flint, it was probably short-lived, as there weren't many places to make such a purchase. He would have known from his business contacts that a few foundries made barbells upon request, but not as a part of their regular business. The problem with these custom-made barbells, Calvert later wrote, was that they were "lacking in…design and range of adjustability."[90] According to Calvert, less than one hundred barbells were made annually in the United States at the turn of the twentieth century. He included "all the foundries and sporting goods dealers who made them" prior to his arrival in the business.[91]

In his younger days, Calvert spent time with his friends, played some baseball, and, probably, pored over the equipment catalogs from the likes of Wright & Ditson Sporting Goods, the A.J. Reach Company, and the Spalding Company. He and his friends may have even argued the pros and cons of the equipment illustrated in the guidebooks.[92] These catalogs primarily targeted the baseball or football player, but they

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[89] Philip Scranton and Walter Licht, *Work Sights: Industrial Philadelphia, 1890-1950* (Philadelphia: Temple University Press, 1986), 31-32.
[90] Calvert, *Natural Strength*, 3.
[91] Ibid.
[92] In Peter Levine, *A.G. Spalding and the Rise of Baseball: The Promise of American Sport* (New York: Oxford University Press, 1985), 77, 80-2. Levine discussed the tactics of sporting goods entrepreneur, A.G. Spalding, attempting to keep a grasp of the market by advertising an array of slightly different products, i.e. baseballs—Spalding Professional, Spalding Boys' League, Spalding Junior League, Lively Bounder, Junior Professional, King of the Diamond, Boys' Favorite Ball, Boys' Amateur Ball, and Rocket Ball (see advertisement on page facing page 71).

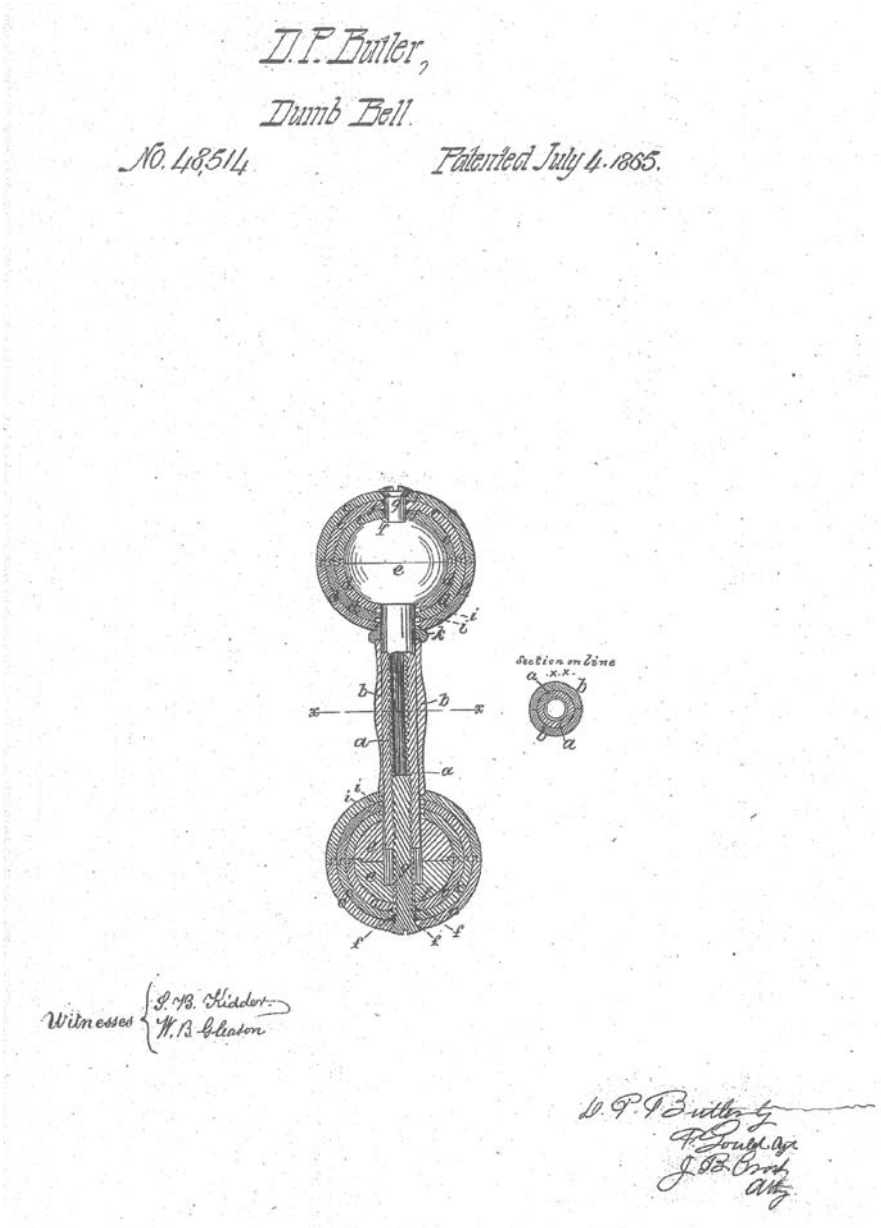

Figure 7. David P. Butler's 1865 patented dumbbell. Note the nested shells and the joint between the handle and globe. Image from USPTO online website: http://www.uspto.gov/patft/index.html.

also advertised boxing and wrestling paraphernalia, and occasionally light dumbbells. Not much had changed in these catalogs over the years. Calvert found a few sporting goods companies which offered to make the two-handed implements as a special order, but if the act of special-ordering the equipment was not enough to guarantee an "absurdly high" price, the cost of transporting the heavy items to one's home certainly did.[93] Either way, the uniqueness of this specialized equipment—as well as its heaviness—resulted in a final price tag which was prohibitive for most *fin de siècle* Americans.

At this point in the search process, it is quite plausible that with his family in the metals business, Calvert may have begun to wonder just how hard it would be to make his own bar-bells. It is unknown if he actually searched for patented designs at a local Philadelphia library, but if he had he would have found that just months after Windship's 1865 dumbbell patent was issued, David P. Butler received a patent for his own graduated dumbbell. However, Butler's innovations were simply improvements on Daniel F. Savage's 1860 design in that the graduations were nested shells which were supposedly easier to use and adjust, and a ring at the intersection of the handle and the shells which allowed the handle to be lengthened or shortened depending on "circumstances or fancy."[94] Although Butler and Windship both touted the ability to lengthen the device's handle, their patents, along with Savage's patent, depicted the apparatus with short handles, in the current style of a dumbbell.

Using a different approach, Samuel B. Stockburger, of Canton, Ohio, illustrated his exercising bar as having a very long handle and being held by two hands. His four-to-eight-foot handle, though, was to be made of springy material, "preferably of hickory or

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[93] Calvert, *Natural Strength*, 3.
[94] Patent #48514, Improvement in Dumb-Bells, 4 July 1865, David P. Butler, Boston, Mass. USPTO online website: http://www.uspto.gov/patft/index.html.

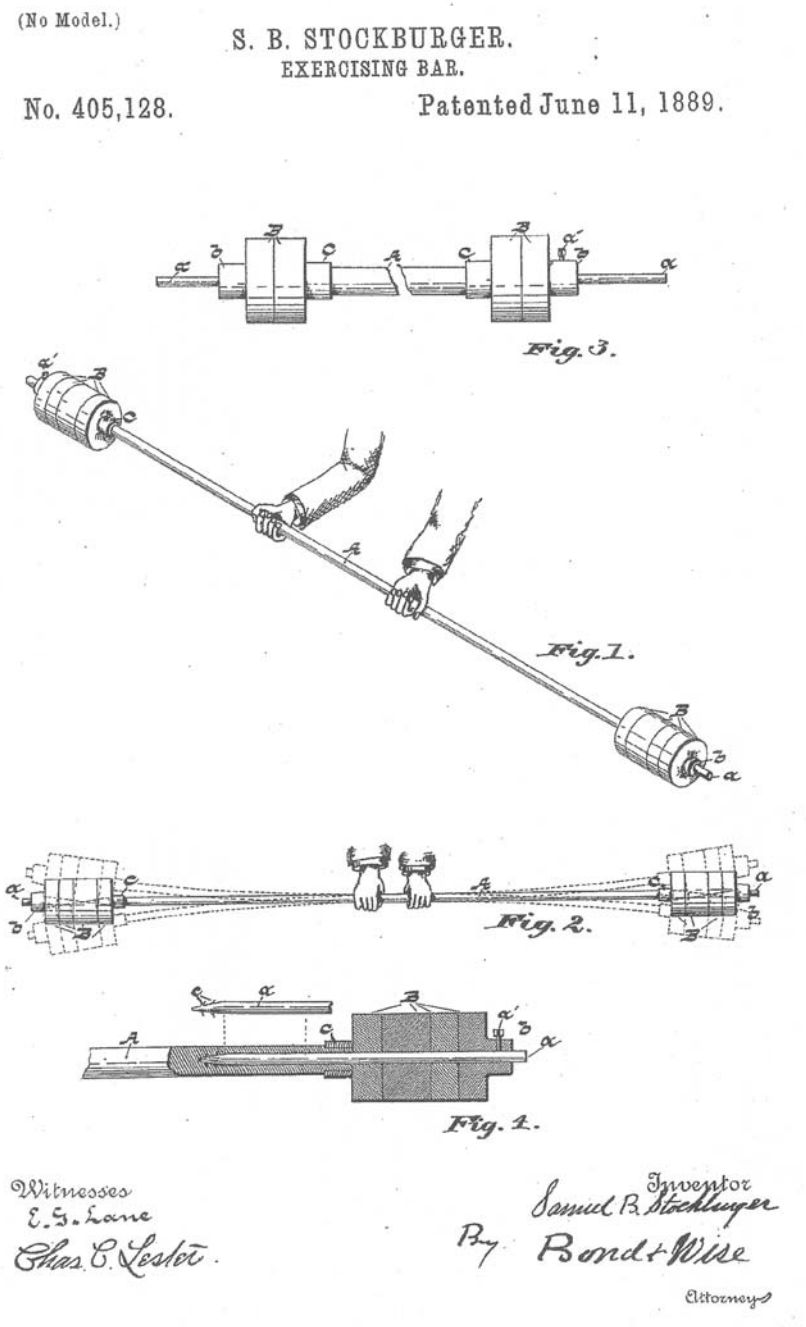

Figure 8. Samuel Stockburger's 1889 barbell incorporating a long, springy handle made of wood. Image from USPTO online website: http://www.uspto.gov/patft/index.html.

ash wood."[95] Although the idea of a flexible bar would prove to be an advantageous element of future barbells, the low-tensile strength of the wood recommended by Stockburger when compared with the high-tensile strength of metal, limited the amount of weight which could be added to the ends of his bar.

Charles W. Ayton, Lucius W. Wooster, and Ludwig Metzger also patented small, adjustable dumbbells in the 1890s. Charles W. Ayton's "Dumb Bell" used interchangeable wooden and iron discs in order to vary the weight of the bell from two to twenty pounds.[96] Lucius W. Wooster tried to combine a dumbbell, Indian club, and general exercising device in his unusual 1893 patent.[97] Ludwig Metzger used a hinged set of hollow concentric rings to create a simple dumbbell which could convert to a kettlebell style if needed.[98] Although all of these patented creations were adjustable, none of them could be loaded with enough weight to promote serious strength gains or to truly provide muscle building stimulation.

In his article on "Natural Strength versus 'Made' Strength preceded by An Explanation of Why I Abandoned the Field of Heavy Exercise," Calvert talked about his start in the barbell business and how he gravitated toward heavy lifting after trying out a number of mail order courses.[99] That he found these courses and subscribed suggests that he was also looking at the few physical culture and sport magazines being published in the late 1890s and early twentieth century. Images seen while perusing these magazines

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[95] Patent #405128, Exercising-Bar, 11 June 1889, Samuel B. Stockburger, Canton, Ohio. USPTO online website: http://www.uspto.gov/patft/index.html.
[96] Patent #484352, Dumb-Bell, 11 October 1892, Charles William Ayton, New York City, N.Y. USPTO online website: http://www.uspto.gov/patft/index.html.
[97] Patent #506894, Combined Dumb-Bell, Club, and Exercising Device, 17 October 1893, Lucius W. Wooster, Gibbsborough, N.J. USPTO online website: http://www.uspto.gov/patft/index.html.
[98] Patent #560517, Dumb-Bell, 19 May 1896, Lucius Metzger, Munich, Germany. USPTO online website: http://www.uspto.gov/patft/index.html.
[99] Calvert, *Natural Strength*, 3.

may have given him ideas about barbell designs, as well as introduced him to successful marketing mechanisms, such as the use of brand names.

During the "mass culture" movement in the late 1890s advertisers strove to establish respectable product brands by locating ads for them in popular magazines.[100] The novelty and constant reinforcement of brand names in the magazines may have even started young Calvert to begin thinking of a name for his own company. Since his own name was not famous Calvert decided that he would name his company Milo—after the Greek athlete, Milo of Crotona, who was credited with the concept of progressive training by carrying a young calf everyday until it matured.[101] As the calf grew in size and weight, so did Milo's strength. Simple, yet emblematic of the philosophy which would provide the basis for his future business, Calvert liked the name. It conveyed all the exercise concepts that Calvert believed to be true from his study of the body.

Calvert most likely examined *Outing* in the years leading up to his personal business venture. The magazine devoted considerable space to outdoor exercise—camping, cycling, equestrian events, fishing, hunting, yachting—but ran only an occasional article on physical culture or collegiate sports like football and track and field. Typical advertisements of the type Calvert would have seen in *Outing* pertaining to weight training began in 1895. Professor John Richard Judd's *Key to Health and Strength*, which targeted business men and women, illustrated one of each exercising with small dumbbells. Another man, centrally located on the page, was also getting

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[100] Richard Ohmann, *Selling Culture: Magazines, Markets, and Class at the Turn of the Century* (New York: Verso, 1996), 13-4; Alan Trachtenberg, *The Incorporation of America, Culture & Society in the Gilded Age* (New York: Hill and Wang, 1982), 122-23.

[101] Although the exact time of this decision is unknown, Calvert named his company after Milo of Crotona. He discussed the ancient Greek's influence at least as early as April 1904 in an ad in *Physical Culture* as well as in his early advertising pamphlets, see: Alan Calvert, *Progressive Weight Lifting* (Philadelphia: by the author, 1902); Alan Calvert, *The System that Made All 'Strong' Men Strong"* (Philadelphia: by the author, 1902)

ready to pick up an obviously large, but short-handled dumbbell with two hands.[102] However, the ad was for a book; the equipment was to be bought elsewhere. The next ad for any kind of muscular gain appeared in early 1902, and proclaimed that one could "be erect, strong, well developed and muscular, afraid of nothing, full of life—energy—strength—endurance" if one invested in The Stone Method of exercising at home with no apparatus.[103] Ads such as these—advocating no apparatus or light-weight dumbbells—were typical for the times in which Calvert searched for heavy barbells.

The publication that Calvert really liked to read featured pink tabloid-sized pages—*The National Police Gazette*.[104] Along with sensationalized stories of mischief, murder, and mayhem, Richard K. Fox's publication was a popular source for sporting news. Fox especially delighted in communing with the strength world—a world that Calvert kept close tabs on, especially after seeing Sandow in 1893. It was in these pages that Alan Calvert, and the rest of America, followed the challenges sent back and forth by professional and amateur strongmen. Fox used the *Gazette* not only for posting sporting challenges, but also for advertising his own events. According to historian David Willoughby, Fox sponsored the first public competition between American strongmen in 1890.[105] The "patron of professional athletes" had a special 1030-pound block weight cast with two handles and invited worthy strongman-contestants from Canada and the United States, including Milo (Luigi Borro), "Ajax" Selig Whitman, Duncan C. Ross, Charles G. Jefferson, and Sebastian Miller.[106] The winner, James Walter Kennedy of

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[102] Professor J. R. Judd, "Advertisement—Key to Health and Strength," *Outing* 26(August 1895): xxx.
[103] Frederick W. Stone, "Advertisement—The Stone Method," *Outing* 39(January 1902).
[104] Harry B. Paschall, "Behind the Scenes..." *Strength & Health* (December 1952): 46. Siegmund Klein mentions that Calvert especially enjoyed reading the articles by Professor Attila in Siegmund Klein, "Strength Magazine as I Knew It in It's(Sic) Glamerous(Sic) Past of Years Ago," *Strength & Health* 3(July 1935): 65.
[105] David P. Willoughby, "History of American Weight-Lifting: The First Open Weight-Lifting Competition in America," *Your Physique* 11(April 1949): 8.
[106] Ibid.

Housatonic, Massachusetts, lifted the weight two inches from the ground by straddling it while gripping one handle in front and the other handle behind his body.[107] For this contest, as well as future competitions, Fox commissioned special championship belts as prizes. Challenges in the *Gazette's* pink pages increased dramatically following this competition, and led Fox to eventually champion one man as the "strongest man in the world"—the Canadian, Louis Cyr. Calvert's interest in strength training and muscular development kept him looking for the tools to advance his own training, hence his early experimentation with William Blaikie, David. L. Dowd, and other "ordinary exercise systems." The *Gazette's* pages supplied occasional pieces of training information written by famous dignitaries in the field of heavy lifting since Fox encouraged strength athletes to visit his offices and to submit articles for publication. One such strongman, the famous Professor Attila in New York City, took Fox up on his offer and wrote several *Gazette* articles in the late 1890s and early 1900s. These articles as well as articles found in *The New York Illustrated News* may have ultimately inspired Calvert to learn more about lifting, anatomy, and physiology.[108]

Inadvertently, Fox may have also set the wheels in motion to help get Calvert's business off the ground. In January 1902, just three months after the completion of "Sandow's Great Competition"—the first successful, large-scale physique contest in London—Fox began filling pages of the *Police Gazette* with advertising for his own physical culture physique contest.[109] Men "in the prime of early manhood" were encouraged to mail a photograph to the Gazette's offices. Each picture would be given to judges to "make a critical comparison" in which the contestant is given "credit for his

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[107] Ibid.

[108] Klein, "Strength Magazine," 65. Professor Louis Attila's *Personal Scrapbook* found in TMPCC contains many undated, and sometimes unidentified, articles that appeared in various newspapers and magazines from the late 1890s and several decades into the 1900s.

[109] For information about Sandow's contest see Chapman, *Sandow*, 130-33.

physical perfection, development, etc."[110] Fox spared no expense for his contest. Following Sandow's example, Fox claimed to have obtained the services of esteemed judges from various sporting venues. He invited champion pugilists James J. Corbett, Terry McGovern, Young Corbett, Tom Sharkey, and Charles "Parson" Davies; prestigious strongmen Gottfried "Rolandow" Wuthrich and Professor Attila (Sandow's mentor and trainer); champion Indian club swinger Gus Hill; and *National Police Gazette's* sporting editor, Sam C. Austin. Fox tried to anticipate any potential criticisms about a "fixed" contest by guaranteeing "a fair and impartial verdict" based on "the reputation for integrity" of the judges. He had a special diamond-imbedded medal valued at $100 made for the overall winner and offered $50, $25, and $10 in gold pieces to the second, third, and fourth place winners, respectively.[111]

The array of photographs submitted and the state of American muscle as they appeared in these pictures would have surely assuaged any of Calvert's early trepidations about starting a new business in man-made muscle. American men it appeared were definitely interested in developing muscle. Newspaper sports writers exclaimed that America was making an effort "to develop another Sandow" from its ranks of amateur athletes.[112] But how was the muscle being built? Fox's publication, similar to the other magazines of the day, didn't carry ads for heavy barbell manufacturers.

Perhaps the Calvert family subscribed to *Health Culture—A Journal of Practical Hygiene*. A new magazine begun in 1894, it covered matters associated with health and hygiene, including copious amounts of information on cycling and general physical culture. Although it, also, contained no weight training information, Alan Calvert would

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[110] "Physical Culture Physique Contest," *National Police Gazette*, 15 February 1902, p.7. This is just one representative advertisement.
[111] Ibid.
[112] Ibid.

have seen ads for light-weight, and easily-mailed, physical culture apparatus. The Wilhide Exhaler supposedly "widen[ed] and strengthen[ed] everyone[sic] of the six million air cells in the lungs…and [gave] 'staying power' for the Oarsman, Cycler, or Gymnast."[113] *Health Culture* also included an ad for Bernard McFadden's new book, *McFadden's System of Physical Training*. Those responding to the ad got a copy of the book along with the McFadden Universal Exerciser—a simple pulley system that Macfadden copied from the "Whitely Exerciser."[114] Fred Medart also used the pages of *Health Culture* to advertise his ability to fully stock a gymnasium by manufacturing all the requisite apparatus. His ad incorporated a picture of a muscular man holding a kettlebell overhead. It is possible that Medart may have been able to produce some heavy barbells for Calvert, but the business appears to have been primarily interested in the provision of larger gymnastic equipment—parallel bars, rings, and pommel horses—a role it continued to play into the 1920s.[115]

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[113] Advertisement, "The Wilhide Exhaler," *Health-Culture, A Journal of Practical Hygiene* 2(October-December 1895): 95.

[114] I am using Bernarr Macfadden's name as it appeared in these 1895 advertisements. Although Robert Ernst in *Weakness Is a Crime: The Life of Bernarr Macfadden* (Syracuse: Syracuse University Press, 1990), 18, 227n.4, mentions the unknown timing of Macfadden's name change, these ads would seem to indicate that Bernard McFadden changed his name to Bernarr Macfadden after 1895. Advertisement, "McFadden's System of Physical Training," *Health Culture* 2(Oct-Dec 1895): 90. Although not the first pulley exercise apparatus, Whitely advertised that his exerciser was the first to use elastic cords. Whitely asked young Macfadden to demonstrate his exerciser at the 1893 World's Columbian Fair leading scholars to believe that Macfadden copied the Whitley apparatus for his own gains, even though pulley exercise machines were found in nearly every gym in the country. For information about the history of pulley exercise machines see Hughes, "Machines for Better Bodies", 247-88.

[115] Advertisement, "Fred Medart—Gymnasium Apparatus Manufacturer," *Health Culture* 3(June, July, August 1897): 431. The TMPCC has a Medart equipment catalog from the 1920s.

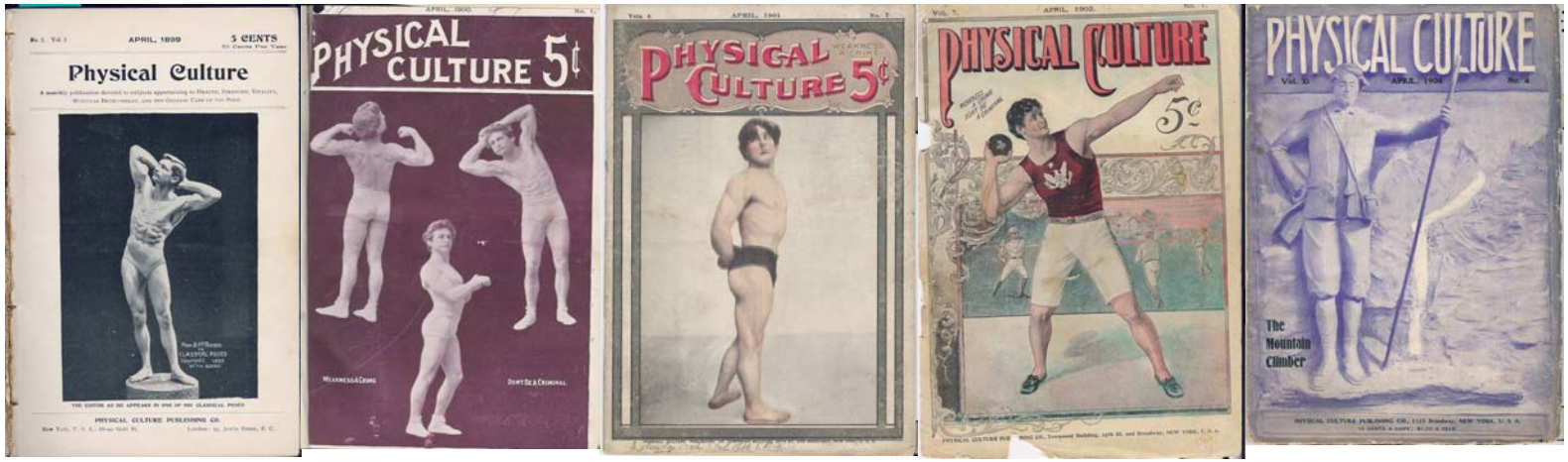

Figure 9. These issues represent the April covers of *Physical Culture* for 1899, 1900, 1901, 1902, and 1904 (left to right.)

Once Bernarr Macfadden began *Physical Culture* in 1899, however, Calvert had the best possible resource to examine for weight lifting information.[116] Macfadden used some pictures of muscular men on early covers of his publication, but his magazine was not really aimed at those who wanted to be strongmen, or weight-lifters. *Physical Culture* covered many aspects of healthful living—nutrition, vegetarianism, sexuality, fasting, alternative medicine, dance, and natural healing. In an era when playing sports and being active was associated with health and living a physical culture lifestyle, Macfadden's magazine created a new market for physical culture entrepreneurs. Macfadden's earliest advertising consisted primarily of his own products and those of companies he supported—the Macfadden Company, the Physical Culture Publishing Company, Alex Whitely's Chest Expanders and Wrist Machines, and the Hygienic Company's Massage Rollers. One characteristic common to all of the advertised apparatus, however, was its lightness and therefore, its relatively low cost of manufacturing, handling, and shipping.

Calvert may have also had access to European publications highlighting weight training around the turn of the century. William John Herrmann, a native Philadelphian "of pure German stock" and a boyhood friend of Alan Calvert, maintained a gymnasium in Philadelphia from 1896 to 1947 which he then turned over to his son, "Young Bill," who continued the family tradition.[117] Herrmann, a member of the Southwark Turners, probably stayed in touch with German athletic events via subscriptions to German

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[116] For more information about Bernarr Macfadden and *Physical Culture* see Ernst, *Weakness Is a Crime*; Mary Williamson Macfadden and Emile Henry Gauvreau, *Dumbbells and Carrot Strips; the Story of Bernarr Macfadden* (New York: Holt, 1953); Jan Todd, "Bernarr Macfadden: Reformer of Feminine Form," Journal of Sport History 14 (Spring 1987): 61-75; Lisa Robin Grunberger, "Bernarr Macfadden's 'Physical Culture': Muscles, Morals and the Millennium." (Ph.D. diss., University of Chicago, 1997); William R. Hunt, *Body Love: The Amazing Career of Bernarr Macfadden* (Bowling Green: Bowling Green University Popular Press, 1989); Fulton Oursler, *The True Story of Bernarr Macfadden* (New York: Lewis Copeland, 1929); Clifford Jerome Waugh, "Bernarr Macfadden: The Muscular Prophet," (Ph.D. diss., State University of New York at Buffalo, 1979).

[117] Jones, "Herrmann, Part 1."; Jones, "Herrmann, Part 2."

sporting papers such as *Internationale Illustrierte Athleten-Zeitung* and *Kraft und Gewandtheit.*[118] Since Calvert and Herrmann grew up together, since their families were both in the metals business, and since they were both interested in health and exercise, it is logical to think that Calvert could have seen some of these periodicals while associating with Herrmann.[119] Not only would these newsletters have allowed Calvert to see the results of lifting performances overseas, but their ads also contained innovations in lifting equipment. English magazines such as *Health & Strength* also provided information on rising strength stars and burgeoning lifting programs. As early as 1900 the Health & Strength Company advertised "Bar-bells for Strong Men and Weight-lifters." They were hollow-globed barbells ranging from seven to fifteen inches in diameter with a loaded capacity of one-hundred-ten to six-hundred pounds. Before shipping, the smallest and lightest bell cost one pound and ten shillings (£1/10/-), equivalent to US $7.30; the largest and heaviest barbell cost five British pounds (£5), or US $24.35.[120] The cost of shipping such equipment across the Atlantic Ocean would have been prohibitive.

Beginning around 1900 Alan Calvert would have begun to see an increase in mail-order advertisements in which strongmen sold their personal secrets of strength and muscular development via the postal system. These systems were around earlier in the nineteenth century, but the techniques used to sell them differed. Prior to Sandow's performance the sight of a bare body in public was unthinkable among respectable Americans. Only in museums and institutions of art could one look upon the unclothed

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118 Jones, "Herrmann, Part 1": 16.

119 Jones, "Herrmann, Part 2": 31-2

120 Advertisement, "Bar-Bells for Strong Men and Weight-Lifters," *Health & Strength* 2(November 1900): 30. Conversions of the British pound into US dollars based on then current inflation were done with the help of online information found at John J. McCusker, *What Was the Inflation Rate Then?* (Economic History Services, 2003 [viewed 25 July 2005]); available from http://www.eh.net/hmit/inflation/. Taking inflation into account these same items would cost $161.74 and $539.49 in today's market. These figures found at Friedman, *Inflation Calculator* [viewed 16 July 2006].

body without censure. How could an exercise entrepreneur sell his program of exercises if the end results were not visible? Developments in photography helped solve this problem. In 1881 David L. Dowd pioneered the highly successful tactic of using "before" and "after" physique photos to sell his "Health Exerciser."[121] Due to Dowd's success and Sandow's appearance making "the perfect man" a common phrase in American households, more entrepreneurs began to rely on similar strategies—using photos of their own advanced physiques to demonstrate the effectiveness and value of the program they supported. Lifters began to imitate Dowd by going to the local photographer and having pictures taken to track their physical changes. The photos of the instructors—as well as the testimony and pictures of their students published in advertising brochures—supplied the impetus for many a customer to subscribe to exercise courses.

The earliest known mail-order exercise program in America was sold by Tony Barker. Later known as Professor Anthony Barker, he began advertising Barker's School of Physical Culture in 1889. Originally half of the Levy (or Leavy) & Barker comedy strongman act that introduced "novelties in the most daring and wonderful feats of strength" Barker eventually decided to go it alone mid-way through 1896 as "Europe and America's Youngest and Greatest Athlete—The Herculean Comedian."[122] Barker, who often used pictures of his bare chest in his advertisements, was a well-respected writer and instructor of physical culture who remained active until his death in 1973.[123] Other

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[121] W. A. Pullum, "Professor Dowd's Original Health Exerciser," *Health & Strength* (6 September 1962): 6-8.

[122] Letterhead and newspaper clippings found in Anthony Barker scrapbook found in TMPCC. Examples include "Harry Williams's Academy," *Pittsburgh Chronicle Telegraph*, 7 April 1896; "Lyceum Theatre Advertisement," *Philadelphia*, 31 March 1896.

[123] Webster, *Barbells & Beefcake*, 62. Also David Webster, *Sons of Samson - Volume 1 Pro-Files* (Irvine, Scotland: by the author, 1993), 16.

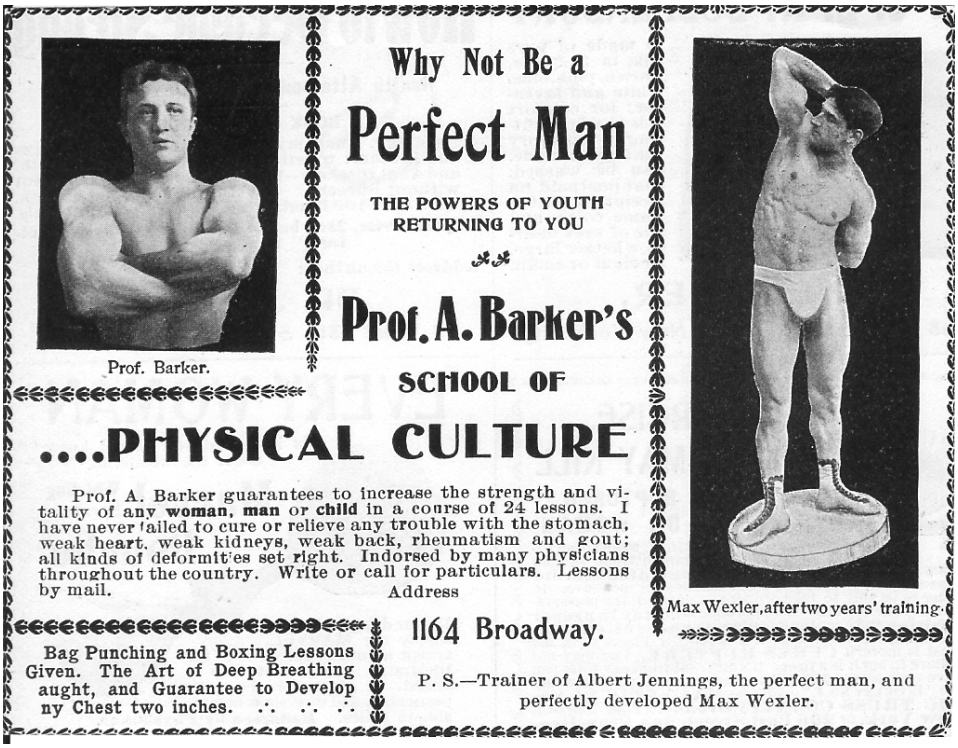

Figure 10. Professor Anthony Barker often used his own body (upper left) in his advertisements. This undated image found in "Schmidt" folder in Ottley Coulter Collection, TMPCC.

than Dowd's pre- and post-physique photographs, Barker's naked torso would have been one of the earliest seen by Calvert.

Professor Adrian P. Schmidt also found ways to portray his body while selling his training courses in the early decades of the twentieth century. A small, "lean as a whippet" man with amazing grip strength, Schmidt used his body to its fullest photographic potential.[124] Although he admitted to having "given much of his time to the practice of various feats in weight lifting," Schmidt did not advocate the activity.[125] His 1901 training course *Illustrated Hints for Health and Strength for Busy People* recommended simple stretches and bodyweight exercises.[126] His book, *"Great Strength,"* published in 1904 discussed flexibility exercises, strength exercises performed without apparatus, and static contractions. It also warned against heavy weight-lifting. Schmidt does, however, include a section on graded weight training in which he stated that from a scientific point of view, "dumbbells, barbells or other weight-appliances should be utilized as a means of assistance in developing considerable and many-sided strength, as well as quickness and great accuracy of movement in all conceivable directions and attitudes."[127] Schmidt displayed an impressively lean, bared torso and arm in most of his advertisements. Calvert, however, believed that such advertising was misleading. Calvert appreciated the beauty and perfection of a well-developed and proportionate male body, but he had come to understand that heavy resistance was essential to the building of muscle tissue. These early entrepreneurs had used heavy weights earlier in their careers, but down-played their use later on to suit their purposes.

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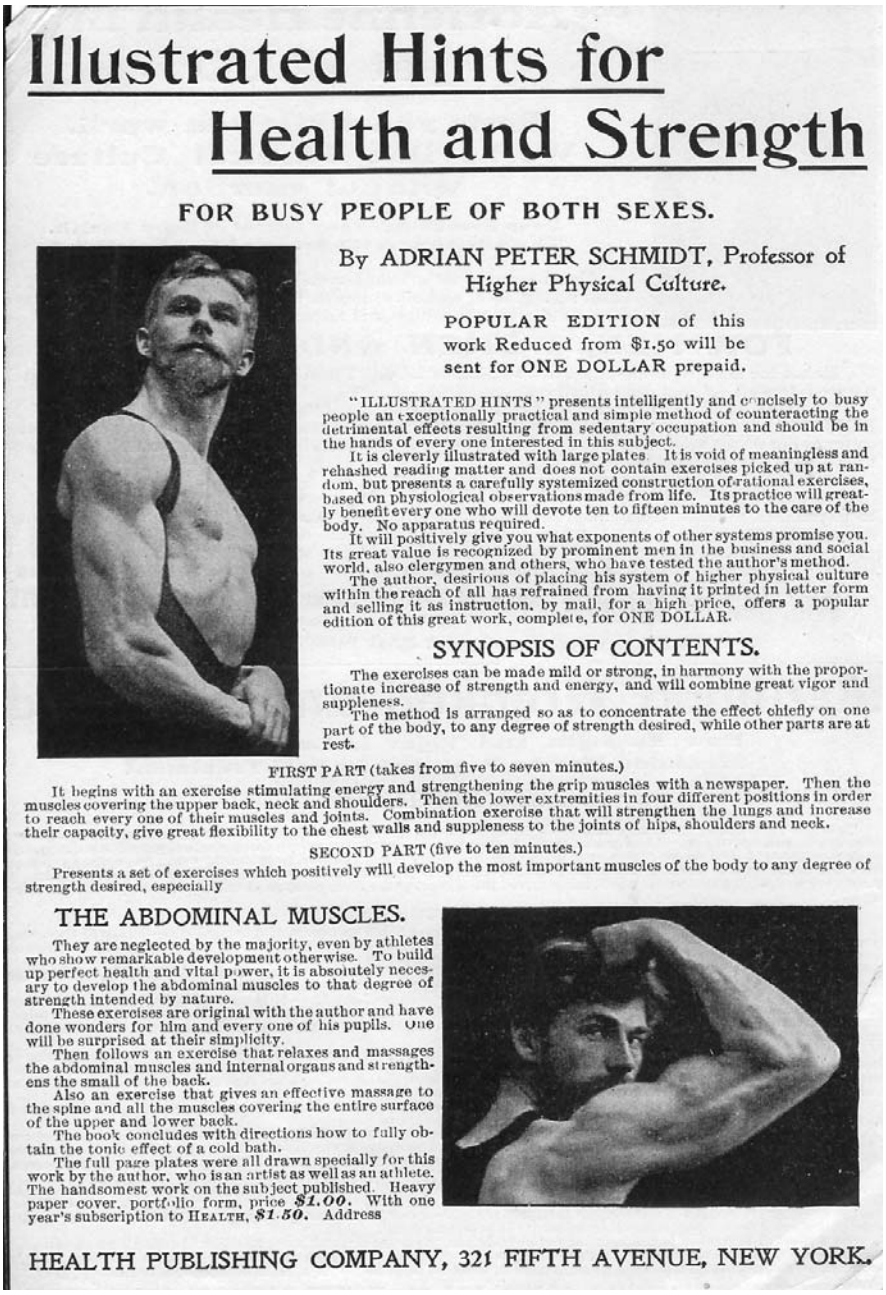
[124] Webster, *Barbells & Beefcake*, 62. See also "Adrian Schmidt" file in Ottley Coulter Collection in TMPCC for samples of his many advertisements.
[125] Adrian P. Schmidt, *Great Strength* (New York: Ben Franklin Printing Co., 1904), 10.
[126] Adrian P. Schmidt, "Illustrated Hints for Health and Strength Advertisement," *Health,* 31 (December 1901).
[127] Schmidt, *Great Strength*, 40.



Illustrated Hints for Health and Strength

FOR BUSY PEOPLE OF BOTH SEXES.

By ADRIAN PETER SCHMIDT, Professor of Higher Physical Culture.

POPULAR EDITION of this work Reduced from $1.50 will be sent for ONE DOLLAR prepaid.

"ILLUSTRATED HINTS" presents intelligently and concisely to busy people an exceptionally practical and simple method of counteracting the detrimental effects resulting from sedentary occupation and should be in the hands of every one interested in this subject.

It is cleverly illustrated with large plates. It is void of meaningless and rehashed reading matter and does not contain exercises picked up at random, but presents a carefully systemized construction of rational exercises, based on physiological observations made from life. Its practice will greatly benefit every one who will devote ten to fifteen minutes to the care of the body. No apparatus required.

It will positively give you what exponents of other systems promise you. Its great value is recognized by prominent men in the business and social world, also clergymen and others, who have tested the author's method.

The author, desirious of placing his system of higher physical culture within the reach of all has refrained from having it printed in letter form and selling it as instruction, by mail, for a high price, offers a popular edition of this great work, complete, for ONE DOLLAR.

SYNOPSIS OF CONTENTS.

The exercises can be made mild or strong, in harmony with the proportionate increase of strength and energy, and will combine great vigor and suppleness.

The method is arranged so as to concentrate the effect chiefly on one part of the body, to any degree of strength desired, while other parts are at rest.

FIRST PART (takes from five to seven minutes.)

It begins with an exercise stimulating energy and strengthening the grip muscles with a newspaper. Then the muscles covering the upper back, neck and shoulders. Then the lower extremities in four different positions in order to reach every one of their muscles and joints. Combination exercise that will strengthen the lungs and increase their capacity, give great flexibility to the chest walls and suppleness to the joints of hips, shoulders and neck.

SECOND PART (five to ten minutes.)

Presents a set of exercises which positively will develop the most important muscles of the body to any degree of strength desired, especially

THE ABDOMINAL MUSCLES.

They are neglected by the majority, even by athletes who show remarkable development otherwise. To build up perfect health and vital power, it is absolutely necessary to develop the abdominal muscles to that degree of strength intended by nature.

These exercises are original with the author and have done wonders for him and every one of his pupils. One will be surprised at their simplicity.

Then follows an exercise that relaxes and massages the abdominal muscles and internal organs and strengthens the small of the back.

Also an exercise that gives an effective massage to the spine and all the muscles covering the entire surface of the upper and lower back.

The book concludes with directions how to fully obtain the tonic effect of a cold bath.

The full page plates were all drawn specially for this work by the author, who is an artist as well as an athlete. The handsomest work on the subject published. Heavy paper cover, portfolio form, price ***$1.00.*** With one year's subscription to HEALTH, ***$1.50.*** Address

HEALTH PUBLISHING COMPANY, 321 FIFTH AVENUE, NEW YORK.

Figure 11. Adrian P. Schmidt used these images of himself in many of his ads. This undated advertisement is found in the "Schmidt" folder in Ottley Coulter Collection, TMPCC.

Conveniently, the mail-order strongmen didn't tell their potential customers of the importance of the heavy work. Why tell the public when they had no access to the necessary tools? Calvert recognized the reasoning behind this tactic, but thought it was dishonest. He wasn't alone in his thinking.

Springfield College student, Frederick Fay Bugbee, decided to investigate the new mail order training industry during 1903 and 1904. The mail-order muscle campaigns offered by many self-proclaimed authorities, "are doing good," Bugbee wrote in his thesis, "reaching men who take no exercise."[128] However, Bugbee warned, these men have chosen the "the poorest kind of exercise. The kind that fatigues most without a corresponding increase in vitality."[129] Not surprisingly, given Springfield College's YMCA affiliation, Bugbee found the YMCA gymnasium the best choice for men wanting to exercise because "work in the association gymnasium is much more enjoyable, owing to the satisfaction of social instinct…The association gives personal examinations and prescriptions," while "the correspondence schools are a scheme for making money."[130] Although the YMCAs and most professional physical educators opposed the influx of such private fitness entrepreneurs, Sandow's influence and the general climate of the late nineteenth century fostered a new-found interest among middle-class Americans in creating "perfect men."

As the new millennium approached, challenges between strongmen and/or their protégés created more and more opportunities for weight-lifting competitions. Calvert, with his interest in strength and muscular development, undoubtedly witnessed some of these at the various gymnasiums in Philadelphia. When William B. Curtis began the Amateur Athletic Union in 1888, part of the rationale for the new association was to

[128] Bugbee, "Physical Training", 65.
[129] Ibid.
[130] Ibid.

maintain amateurism and set competitive standards.[131] Calvert applied this same line of thought to his beloved strength challenges and realized that fairly-evaluated competitions between amateur and professional lifters alike was impossible. Before standardization, each competitor picked several events, each stressing his own personal strength abilities, of course; but then had to also perform the events picked by the other competitor(s).[132] Each lifter prepared for a multitude of possible strength feats, realizing that he might be asked to do something he had never seen, much less practiced. Calvert later wrote, "It is no fair test of strength to set a man to perform a feat with which he is entirely unfamiliar."[133] Further, the equipment used in these early competitions was not standardized as it was common for each strongman to bring his own weights to the contest. Weightlifting historian, Gottfried Schèodl, cited the story of Viennese lifter Wilhelm Türk, who won a championship in Duisberg, Germany when he brought his own barbell to the contest, a bar that particularly fit his hand. Schèodl wrote,

> It is interesting to note that at that time the diameter of the bar at the grip measured 32 to 35 mm. Some professional athletes used tools with a grip diameter of 50 mm or more. The German brothers Arthur, Kurt and Hermann Hennig, who traveled the world under the name "Saxon Trio" around the turn of the century, used a piece of equipment in their programme that measured 70 mm at the grip. For many more years the right to apply instruments brought with—even in world and European championships—continued to exist.[134]

In Alan Calvert's mind this was not how a respected sporting competition should be held. He believed that all lifters should use the same kind of equipment. But judging from his unsuccessful search, no one made standardized, easily-accessible barbells on his

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[131] For information about the Amateur Athletic Union see Robert Korsgaard, "A History of the Amateur Athletic Union of the United States" (Ph.D. diss., Columbia University, 1953).

[132] For an interesting look on how competitions were decided, see Professor Attila's scrapbook at the Todd-McLean Physical Culture Collection. Several undated (but they seem to fall into the 1894 time range) articles appear which were published in *The Sporting Life* in which Attila attempted to organize a strength competition with Louis Cyr and one of his students. See especially "The Heavy Weight Lifting Championship—Gathering of Strong Men at the "Sporting Life"."

[133] Alan Calvert, *The Truth About Weight Lifting* (Philadelphia: by the author, 1911), 80.

[134] Schèodl, *The Lost Past*, 64-5.

side of the Atlantic Ocean. Therefore, Calvert made a momentous decision; he would manufacture and sell heavy barbells for the general public. In one stroke he could improve the appearance of the American male body and enhance the standard and respectability of weight-lifting in America. Obviously, the venture had a good chance at being successful since no one else in America was making barbells as their sole business.

The presence of such entrepreneurial thinking is symbolic of the Progressive Age. The ability to see a path or innovation which escapes the vision of others, and the willingness to pursue the unfamiliar route into the business world, describes the men and women of this era. The realm of manufacturing sporting equipment, not including that needed for hunting and fishing, was a fairly young, but rapidly growing arena for aspiring businessmen.[135] As is often the case, the first businesses were begun by athletes in the sport. They are the ones who first see the need for better equipment and they are generally the ones to make equipment improvements as their curiosity and ability increases.[136]

William B. Curtis introduced the spiked running shoe to America by borrowing a pair from an English friend in his desire to win sprinting competitions and this changed the way America ran for speed.[137] Mid-to-late-nineteenth century baseball players such as Harry Wright, George Wright, Alfred J. Reach, and Albert G. Spalding opened successful baseball equipment companies; and Spalding's company eventually grew into a sporting goods empire.[138] Although not a cyclist himself, Colonel Albert Pope built the bicycle industry. He saw the original velocipede's introduction from Britain at the 1876

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[135] Stephen Hardy, ""Adopted by All the Leading Clubs": Sporting Goods and the Shaping of Leisure, 1800-1900," in *For Fun and Profit: The Transformation of Leisure into Consumption*, ed. Richard Butsch (Philadelphia: Temple University Press, 1990), 71-101.
[136] Sonali Shah, *Sources and Patterns of Innovation in a Consumer Products Field: Innovations in Sporting Equipment* (Massachusetts Institute of Technology, 2000 [viewed 19 June 2005]); available from http://opensource.mit.edu/papers/shahsportspaper.pdf.
[137] Wettan and Willis, "Curtis," 30.
[138] Levine, *Spalding*.

World's Fair in Philadelphia and immediately invested in the newest form of transportation. In doing so, he began an American infatuation with self-propelled vehicles. His famous "Columbia" brand bicycle would "trigger grandfathers' memories of childhood for generations."[139] Dudley Allen Sargent needed exercise equipment for his physical education classes at Harvard University, so in the 1880s he refined the earlier, and more crude, cable and pulley resistance systems. Other entrepreneurs quickly began advertising these training devices and they soon took over the fitness industry. No gym was complete by 1900 without some form of pulley equipment, and many people bought small "expanders" made with springs or rubber cables to use at home.[140] These home models were easy to set up, easy to use, and, most important to these early exercise entrepreneurs, easy and cheap to mail. In order to stay at the top of the evolving sporting goods world, equipment entrepreneurs constantly invented, improved, and/or marketed their equipment as necessary to the sport and, therefore, to the consumer.[141]

The manufacturing of weight-lifting equipment was particularly attractive to Calvert; it appeared to him to have all the earmarks of an ideal job. Since he and his father were already in the metals business and he had dealt with the necessary foundries and suppliers, it would be easy to start his own business. He would sell to the scores of

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[139] Stephen B. Goddard, *Colonel Albert Pope and His American Dream Machines: The Life and Times of a Bicycle Tycoon Turned Automotive Pioneer* (Jefferson, NC: McFarland & Company, Inc., 2000), 70. For more information about the bicycle craze see Richard Harmond, "Progress and Flight: An Interpretation of the American Cycle Craze of the 1890s," in *The American Sporting Experience: A Historical Anthology of Sport in America*, ed. Steven A. Riess (Champaign: Leisure Press, 1984), 190-208; Gary Allan Tobin, "The Bicycle Boom of the 1890s: The Development of Private Transportation and the Birth of the Modern Tourist," *Journal of Popular Culture* 7 (Spring 1974): 838-49.

[140] Edmond Desbonnet mentions Hippolyte Triat introducing "pulley apparatuses with every sort of combination" in Desbonnet, *Kings*, 62. For information about Sargent see Leonard, *Pioneers*, 98-100. For a summary of the evolution of pulley systems and their affects on American culture see Hughes, "Machines for Better Bodies," 247-87.

[141] For examples of sporting equipment entrepreneurs making constant changes or innovations to their equipment see Goddard, *Col. Pope;* Levine, *Spalding;* Paul Rosen, *Framing Production: Technology, Culture, and Change in the British Bicycle Industry*, *Inside Technology* (Cambridge: MIT Press, 2002); Shah, *Sources and Patterns*.

young men who wanted to train at home for muscular development and strength. Even if they had the money to procure a set, they and their workout partners probably didn't have the room to store a full rack of the fixed-weight barbells which were so prominent in the local gymnasiums.[142] The fixed-weight barbells were nice in that one could easily pick up the appropriately weighted bar, but when space and funds were at a premium, an adjustable bar made far more sense. All he needed was a sound design.

Calvert almost surely would have been aware of the advances made in the lifting equipment featured in the European lifting publications. German and Austrian companies had produced several varieties of barbells by the turn of the century, although these barbells were mostly geared toward the performing strongman. Early performance bells generally ended in large, hollow globes which the lifter filled with some form of weight, such as lead shot or sand. These bars were showy and gave a good impression of the performer's strength. Alan Calvert knew that a professional's stage appearance was important, and he realized that his design needed to keep aesthetics in mind.

Although they were not used in many performance situations, simple plate-loading bars made their way into the training rooms of Europe during this period because of their ease in loading and unloading. Jan Todd credits Josef Markl with introducing "exposed-plate barbells and dumbbells" by constructing "so-called ring-bars…with huge thick discs" in 1889.[143] German companies then stole Markl's design and began selling similar items prior to the turn of the century. W. Hartung of Sulzbach-Saar also advertised a plate-loading bar using plates of varying heights. What is more, the companies of Heinrich Meyer of Hagen, Westfalen, Hermann Fechner of Dresden-

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[142] Although no specific reference to Alan Calvert's lack of room could be found, references exist in which young weight trainers kept their equipment in closets, under beds, or out in a shed. For example Harry B. Paschall, "Behind the Scenes," *Strength & Health* (September 1952): 19; David P. Willoughby, "Alan Calvert's Teachings vs Modern Methods," *Iron Man* (May 1955): 47.

[143] Todd, "Milo to Milo," 13.

Figure 12. Barbell ads such as these were found in foreign periodicals at the turn of the century. Source: Gottfried Schèodl's *The Lost Past*, facing page 72.

Trachau, and Wilhelm Heyden of Koln-Lindenthal sold barbell units in which the plate discs were all the same height, and a few models had the plates hidden inside of a globe. Hermann Stein of Magdeburg also sold plate-loading barbells in the 1890s.[144] The exposed-plate concept did not appeal to Alan Calvert. Although he conceded its ease of use, he believed it "present[ed] a very poor appearance," had limited use as a dumbbell or kettlebell, and prevented weight increases of less than five pounds. Beginners, he believed, would need much smaller weight jumps in their training or injury could result.[145] He liked the idea of hollow ends not only because they were more pleasing to look at, but because they could be filled to match the ability of the lifter and thus be much safer. Although we will never fully know where he got his ideas, we do know that by 1901 Calvert had begun experimenting in his father's foundry. He devised several barbell prototypes and he and his friends used them in training. It didn't take long before he began receiving suggestions and comments on the designs from these friends. In fact, Calvert's friends begged him to make them a copy of their favorite model.[146] Thus it was that when the U.S. Patent Office opened on 2 January 1902, Calvert applied for a patent on the most promising design.[147]

Philadelphia is a city proud of its many "firsts." The First Continental Congress met in Philadelphia on 5 September 1774 and the first proclamation of the Declaration of Independence was heard there in 1776. The nation's first public bank opened in that city in 1780 and the first United States Mint opened its doors there in 1792. Civic-minded

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144 Advertisements for barbell companies can be found in Schèodl, *The Lost Past*, on page following 72. Jan Todd also discusses the European evolution of the barbell in Todd, "Milo to Milo," 13.

145 Alan Calvert, *The Milo System of Progressive Weight Lifting* (Philadelphia: Milo Bar-bell Company, n.d.), 13. No date accompanies this pamphlet, but it is an advertising pamphlet for the company's new Milo Triplex which was patented in December 1908.

146 Calvert, *Natural Strength*, 3; Raymond Van Cleef, "Builder of Men," *Your Physique* (December 1944): 11.

147 Patent #702356, Bar-Bell, 2 January 1902, Alan Calvert, Philadelphia, Pa. USPTO online website: http://www.uspto.gov/patft/index.html.

Philadelphian, Benjamin Franklin, founded the nation's first volunteer fire department in 1736, the first fire insurance company in 1752, the first subscription library (the predecessor to the public library) in 1731, and the first public hospital in 1751. Philadelphia also claims the first successfully propelled steamboat in 1786 and the first steam-operated automobile in 1804. Experimental railroad tracks laid in Philadelphia in 1809 began an empire that changed the way America transported its business, and Charles Goodyear produced the nation's first vulcanized rubber goods there in 1839. The Philadelphia Chamber of Commerce took great pride in their city's place in the manufacturing industries and nicknamed it "The World's Greatest Workshop."[148] It is, therefore, only fitting that the country's first manufacturer of commercially available barbells was also Philadelphian. In April 1902 the Milo Bar-Bell Company opened its doors at 218 Arch Street—just around the corner from the Calvert family's tinsmith business.

[148] Philadelphia Chamber of Commerce, *Philadelphia, Its Location, Commerce Industries, History and Points of Interest* (Philadelphia: 1917), 3.

CHAPTER THREE

"AMERICAN BARBELLISM" AND THE MILO BAR-BELL COMPANY: 1902-1911

> "I paid $24 for my first 300 lb. plate barbell back in 1914…I wouldn't part with this old barbell for a solid chrome and silver set. No other investment I have ever made has paid me anything like the dividends from the original $24 outfit. I cannot conceive of anything less than a direct Atomic hit destroying the life and usefulness of this barbell, which has accompanied me from place to place for 36 long years….I regard my barbell as a tried and true old friend…My wife, poor wretch, is actually a little jealous of this rust gatherer, and maintains that no woman would waste so much sentiment even on her grandmother's wedding gown."[1]

Harry Paschall, the famous weightlifting author and cartoonist, wrote these lines in early 1950. His barbell came from Alan Calvert's Milo Bar-bell Company. Clearly, Paschall did not realize at the time of the venture that the bell would still be a faithful companion over three decades later or that he would have received more benefits from it than just merely fulfilling his teenage desire for muscularity and strength. Barbells and strength training proved central to Paschall's athletic and professional life. A competitive weightlifter in the 1920s, Paschall also possessed considerable artistic talent and became a noted cartoonist. Paschall's most famous cartoon character, a German strongman named Bosco, the "world's strongest man," began appearing in the pages of *Strength & Health* in 1936. For many years, Paschall also authored training articles and a monthly magazine column in the same publication. Beginning in 1950 he, through Bosco, taught young men how to train for strength and muscular shape in a series of richly illustrated

[1] Harry B. Paschall, "Behind the Scenes," *Strength & Health* (April 1950): 13, 28.

booklets known as the *Bosco Books*.[2] He died unexpectedly in 1957 at the age of fifty-nine.

Paschall's reference in this passage to the atomic bomb dropped on Japan helped his 1950 readers understand the great power this barbell had had in his life. The emotional connection Paschall had to his barbell was not unique; other men felt the same way. Why did Paschall feel so strongly? What was it about strength training in this early era that drew him so? Paschall associated deep-rooted, pleasant, and meaningful memories with his Milo barbell. To him the barbell represented a vital thread in the tapestry of his life. It was a symbol of his youth and a symbol of his connection to a special group of men—men who were pioneers in the sport of lifting and members of a special fraternity. The men to whom he felt so connected were the so-called "students" of Alan Calvert. They didn't all train with Calvert in Philadelphia, but they were indisputably his converts and disciples. They were not just physical culturists. They were barbell men. The first America had ever produced. And in their enthusiasm for the changes they saw in their physiques and their increasing physical strength they became part of a new cult which a few authors called "barbellism."[3]

If broken down into its grammatical parts, "barbellism" may be defined, according to *Webster's Dictionary*, as "an act, practice, or process" of using barbells.[4] However, "barbellism" also stands for the "doctrine, theory, or cult" of the barbell that

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[2] Some of Paschall's books include: Harry B. Paschall, *The Bosco System of Progressive Physical Training* (n.p., 1954); Harry B. Paschall, *Bosco's Strength Notebook*, vol. 1 (Alliance: Iron Man Publishing, n.d.); Harry B. Paschall, *Development of Strength: a Bosco Book* (London: Vigour Press, n.d.); Harry B. Paschall, *Muscle Moulding: a Bosco Book for Advanced Body-Builders* (London: Vigour Press, 1950). For more information on Harry Paschall see: Siegmund Klein, "Harry Paschall - This Month's Self Improvement Contest Winner," *Strength & Health* 4(April 1936): 16-7, 44-5; Siegmund Klein, "I've Lost a Friend," *Strength & Health* (January 1958): 27, 54, 59.

[3] For references to the word see: Robert L. Jones, "Ottley Coulter," *Strength & Health* (November 1940): 25; Joe Miller, "Joe Miller's Rise to Fame," *Strength & Health* 1(December 1932): 9; Raymond Van Cleef, "Builder of Men," *Your Physique* (December 1944): 11.

[4] *Webster's Ninth New Collegiate Dictionary*, 9th ed., s.v. "-ism."

developed because of Calvert's efforts to promote strength training.[5] The lifting of heavy weights via barbells, originally practiced only by touring strength acts, evolved in the early twentieth century into a respectable, modern sport and into an accepted training method to enhance one's general fitness and appearance. That transformation occurred because of the advent of the Milo Bar-bell Company, because of Calvert's enthusiasm and advocacy for the activity, and because of his new magazine—a magazine he appropriately named *Strength*.

Calvert didn't coin the term "barbellism." The first time it appears, in fact, is in volume one, number one of *Strength & Health* in December 1932. Joe Miller, in an autobiographical article about his rise to weightlifting fame, stated that he attended a strongman show in Philadelphia in 1928 and "became acquainted with many athletes of barbellism."[6] The term appears again in 1940 when Robert L. Jones, a former employee of the Milo Bar-bell Company (long after Calvert's departure), credited the Milo Bar-bell Company with pioneering barbellism as a movement.[7] George Jowett also used the term in 1944 to describe Calvert's fundamental influence on the iron game: "The Monumental Contribution of Alan Calvert to American Barbellism will ever be an enduring corner stone in its solid foundation. Intelligently he taught men how to be strong and healthy, defeating prejudices and ignorance."[8] Both Jones and Jowett, respected men of the iron game, were paying tribute to Calvert's efforts: manufacturing and selling weight lifting equipment and educating the public in regards to the use of barbells and dumbbells. Most importantly, during the first quarter of the twentieth century Calvert convinced many

[5] Ibid.
[6] Miller, "Joe Miller," 9.
[7] Jones, "Ottley Coulter," 25.
[8] Van Cleef, "Builder of Men," 11.

Americans to try lifting. As a movement, American Barbellism began in 1902 when Calvert opened the doors at the Milo Bar-bell Company.

THE MILO BAR-BELL COMPANY

Calvert's enterprise began in a narrow, four-story building on Arch Street just a few blocks north of Market Street—an area now called "Old City."[9] By July Calvert had moved his business one block south of Market Street to 29 South Water Street.[10] By the end of the year he had found a more permanent home in the Mariner & Merchant Building on the corner of Third and Chestnut Street.[11] Calvert knew he should locate his business for the best exposure to the higher socio-economic classes. The United States' banking industry has its origins in Philadelphia, and at the turn of the century Chestnut Street between Second and Fifth Streets was known as the city's financial district, or "Bankers' Row."[12] Placing his business in a section of town which catered to those with money, an area known to be filled with office workers and businessmen, proved beneficial to Calvert's future success. Calvert remained in this building until at least October of 1905 according to ads he ran in *Physical Culture*. However, tracing the company's location over the next few years is difficult for two reasons: 1) Calvert began

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[9] The "Old City" section is bound by the Delaware River, Spring Garden Street, 4th Street, and Walnut Street. The building at 218 Arch Street is no longer standing. It is now a small parking lot in the Old City area.

[10] Current maps show 29 South Water Street as much further south and not intersecting with Market Street, but old Philadelphia photographs portray Market Street intersecting with Water Street in 1900. See Robert F. Looney and Free Library of Philadelphia, *Old Philadelphia in Early Photographs 1839-1914: 215 Prints from the Collection of the Free Library of Philadelphia* (New York: Dover Publications in cooperation with the Free Library of Philadelphia, 1976), 31. Since Market Street is the dividing line between streets being designated as "North" or "South" Calvert's 1902 business would had to have been in the first block south of Market Street.

[11] This building was demolished in the 1950s for the construction of Independence National Historic Park. See Philadelphia Architects and Buildings website.

[12] Looney and Philadelphia, *Old Philadelphia*, 124. E. Digby Baltzell also comments on the banking industry in *Philadelphia Gentlemen, the Making of a National Upper Class* (Glencoe, Ill.: Free Press), 181-82.

using a post office box and, 2) in 1906 he quit advertising in *Physical Culture* magazine.[13] Why Calvert quit advertising is unclear. One possible reason is that 1906 was also the year he married. The first of his four children arrived in 1907 and so his funds may simply have been stretched thin by the expense of setting up his own home and the financial burdens of fatherhood. Another possibility, of course, is that Calvert's grass roots efforts to advertise his barbells were succeeding so well that he didn't need to advertise during these years. No evidence exists to substantiate either position.

By 1911, however, with new quarters in what is currently considered "Center City," the Milo Bar-bell Company was firmly in place at 1011 Chestnut Street within the confines of the New York Mutual Life Insurance Building. "One of the nation's finest examples of Second Empire architecture," the building drew "thousands of gawking tourists during the Centennial Exposition in 1876."[14] The ornate building undoubtedly represented a step up on the respectability ladder for the Milo Bar-bell Company. Its location also provided Calvert with much-needed exposure. Photographs of the street viewed by the author document the vital commercial life of the street. Shops of all kinds lined the busy thoroughfare making walk-in customers highly likely for Calvert.[15] The area one block north of Calvert's address on Chestnut between Eleventh and Twelfth

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[13] Because many book-binders in the first half of the twentieth century failed to include covers and advertising sections of magazines, tracing a company such as the Milo Bar-bell Company through these avenues can prove to be challenging to an historian. The last seven months and February of *Physical Culture* in 1906 have been verified to have no Milo ads. For 1907 eight of the twelve months have been verified to have no ads. In 1908 and 1909, only two and three months, respectively, have been verified to have no ads. No other information is available—ads or no ads. From 1902 through 1918, however, one could always contact Calvert through his post office box: P.O. Box 330, Philadelphia.

[14] Linda K. Harris, "Symbol of Decay Enjoys Rebirth in Center City," *Philadelphia Inquirer*, 23 June 2004, sec. A, p. 1,10. 1009-1011 Chestnut Street was a separate building in the late 1890s. It was later expanded into the 1013 address and then merged with the New York Mutual Life Insurance Building at 1001-1007 Chestnut (expansion seems to have occurred in 1901.) The two buildings are now considered the Victory Building. It still stands, but as the article above indicates, it has been revitalized and become the home of the Jefferson Medical and Health Science Bookstore and apartments.

[15] Pictures on file at Philadelphia City Archives - Folder 375, #PW-16, #7455, #7456, #7458, and #6033 all depict businesses lining Chestnut Street circa 1913.

Streets (Calvert was located between Tenth and Eleventh Streets) was often referred to as "Piano Row" because of its numerous piano manufacturers.[16]

Although the author assumes Calvert used the family foundry in the very beginning, by 1904 he advertised the Milo Bar-bell Factory at 10 North Second Street—very close to all three of his earliest addresses—Arch Street, South Water Street, and the Mariner and Merchant building. It is doubtful that the factory and foundry were the same thing. Calvert most likely hired a foundry to cast the molten steel into the shapes of globes, plates, and bars, leaving the rough product to be finished at the Milo factory. Calvert and his workers then sanded the castings' rough edges, cut handles to length, tapped any threads necessary, applied black enamel to the globes and nickel-plate to the handles, made the various wrenches and collars needed, and assembled the barbells for either display or shipping.[17] Calvert's response to Ottley Coulter that he was too busy producing regular barbells to fill a special order also supports this idea.[18] Calvert also described the nickel-plating process when explaining options that were available to customers who wanted to purchase barbells for strongman exhibition work.[19] To further suggest that the factory and foundry were separate entities at least during the Teens, Sig Klein wrote in a letter to *The Iron Master* editor, Osmo Kiiha, that the Fairmount Foundry in Philadelphia made the weights for the Milo Bar-bell Company.[20] Andy Jackson, of Jackson Barbells, also bought the last patented Milo patterns, the Duplex,

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[16] John James Macfarlane, *Manufacturing in Philadelphia, 1683-1912, with Photographs of Some of the Leading Industrial Establishments* (Philadelphia: Philadelphia Commercial Museum, 1912), 86.

[17] Personal communication with Reuben Weaver, 8 February 2006. Reuben Weaver is a collector of Milo Bar-bell equipment and is probably the most knowledgeable person on the intricacies of the revisions made to the Milo barbells over the years.

[18] Alan Calvert, Personal letter to Ottley Coulter, 22 June 1912, Coulter's Milo Scrapbook, TMPCC.

[19] Alan Calvert, *Catalog of Stage and Exhibition Bar-Bells, Dumbbells, and Kettle-Bells* (Philadelphia: by the author, 1915), 9.

[20] Siegmund Klein, "Letters from Siegmund Klein: To Osmo Kiiha," *The Iron Master—The History of the Iron Game* (August 1993). Advertisements for the Fairmount Foundry at Fifteenth Street & Indiana Avenue, start to show up in *Strength* in April 1922. They sold small, solid dumbbells.

from Fairmont Foundry in Hamburg, Pennsylvania in the 1960s.[21] Most likely, Klein and Jackson were referring to the same foundry, but it had moved over the years.

When he moved onto Chestnut Street, Calvert advertised his factory's address as 124 South American Street.[22] Although approximately a mile separated the two 1911 addresses, the division of his office, showroom, and factory may have caused him problems as the bulkiness and weight of his barbells would have made getting them from the factory production room to the Milo showroom troublesome. In the November 1915 issue of *Strength* magazine Calvert advertised his business's final pre-WWI home as 1116-1122 Olive Street in the Fairmount neighborhood, just northwest of Old City. To help customers find him, he printed directions as though they would come from the nearby Reading Railroad Terminal or the Broad Street Station of the Pennsylvania Railroad.[23] Neither of the stations was more than a twelve to fifteen minute trolley-car ride and a short walk from Calvert's front door. This address allowed Calvert to combine his "factory, offices, and showroom under one roof."[24] Judging from the relief felt in Calvert's writing, he believed this to be a great accomplishment.

Although the business moved from place to place over the years, Calvert's approach to the sale of barbells precisely fits historian Steve Hardy's description of how early sporting entrepreneurs managed to build their business. Hardy argues that successful sporting goods entrepreneurs in the early 1900s became "face-to-face instructors, teaching not only the use of equipment but the value of physical activity."[25]

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[21] Reuben Weaver, "The Jackson Mother Load!" *Muscle Museum Forum* 2(January 2003): 3.
[22] The address was also found to be 120 South American Street, so the factory very likely spanned the space of several numerical addresses on the same street.
[23] Alan Calvert, "Special Announcement," *Strength* (November 1915): 2.
[24] Ibid.
[25] Stephen Hardy, "'Adopted by All the Leading Clubs': Sporting Goods and the Shaping of Leisure, 1800-1900," *For Fun and Profit: The Transformation of Leisure into Consumption* (Philadelphia: Temple University Press, 1990), 88.

Third Street Chas. H. Bess & Co., Bankers James H. Windrim, Arch't

MARINER AND MERCHANT BUILDING, Chestnut Street, S. W. cor. 3d

Conspicuous amid its old-fashioned neighbors, a grand substantial brick and granite office building, erected 1901 by the Stephen Girard Estate on site once known as Newspaper Row. Cost $400,000

MUTUAL LIFE INSURANCE CO., OF NEW YORK, Chestnut, N. W. Cor. 10th St.

Largest financial corporation in the world. Assets over $300,000,000; policies in force exceed $1,000,000,000. The double building forms one of the largest and most valuable local office structures

Figure 13. In the early years, the Milo Bar-bell Company moved several times. The business was located for a while in the Mariner & Merchant Building and the Mutual Life Insurance of New York Building. Both of these photos are from Moses King, *Philadelphia and Notable Philadelphians* (1902), pages 8A and 23, respectively.

According to Hardy, these retailers intuitively knew they had to become promoters as well as merchants. Most sold equipment, provided space where men could gather, helped with the "dissemination of information and instruction," and they sponsored leagues and contests.[26] Calvert did all these things. He manufactured and sold barbells, but he also educated people in their use. He opened the doors of his various stores to customers and published fliers, booklets, and eventually a magazine to educate prospective customers. Calvert promoted heavy weight training by hosting strength competitions at the Milo buildings and by being involved in weightlifting competitions elsewhere. He even made the first plea for a centralized group to organize and coordinate the future of American lifting competition. During his time at the helm of the Milo Bar-bell Company he was undoubtedly the most respected man in America with regards to strength training and muscular development, and it was his force of will that attracted converts to barbellism.

THE MILO BARBELLS AND EARLY PUBLICITY CAMPAIGNS

On 10 June 1902 the U.S. Patent Office granted a patent for an adjustable barbell to assignors Alan Calvert and Azro Darby Lamson, who were trading as the Milo Bar-bell Company at 218 Arch Street. Assignors generally receive benefits and/or profits from the patented invention so Lamson may have been interested in Calvert's weight lifting ideas. At the age of eighty-two, however, Lamson may have simply been a friend of the family, who provided some moral and/or financial support. In any case, Lamson

[26] Ibid.

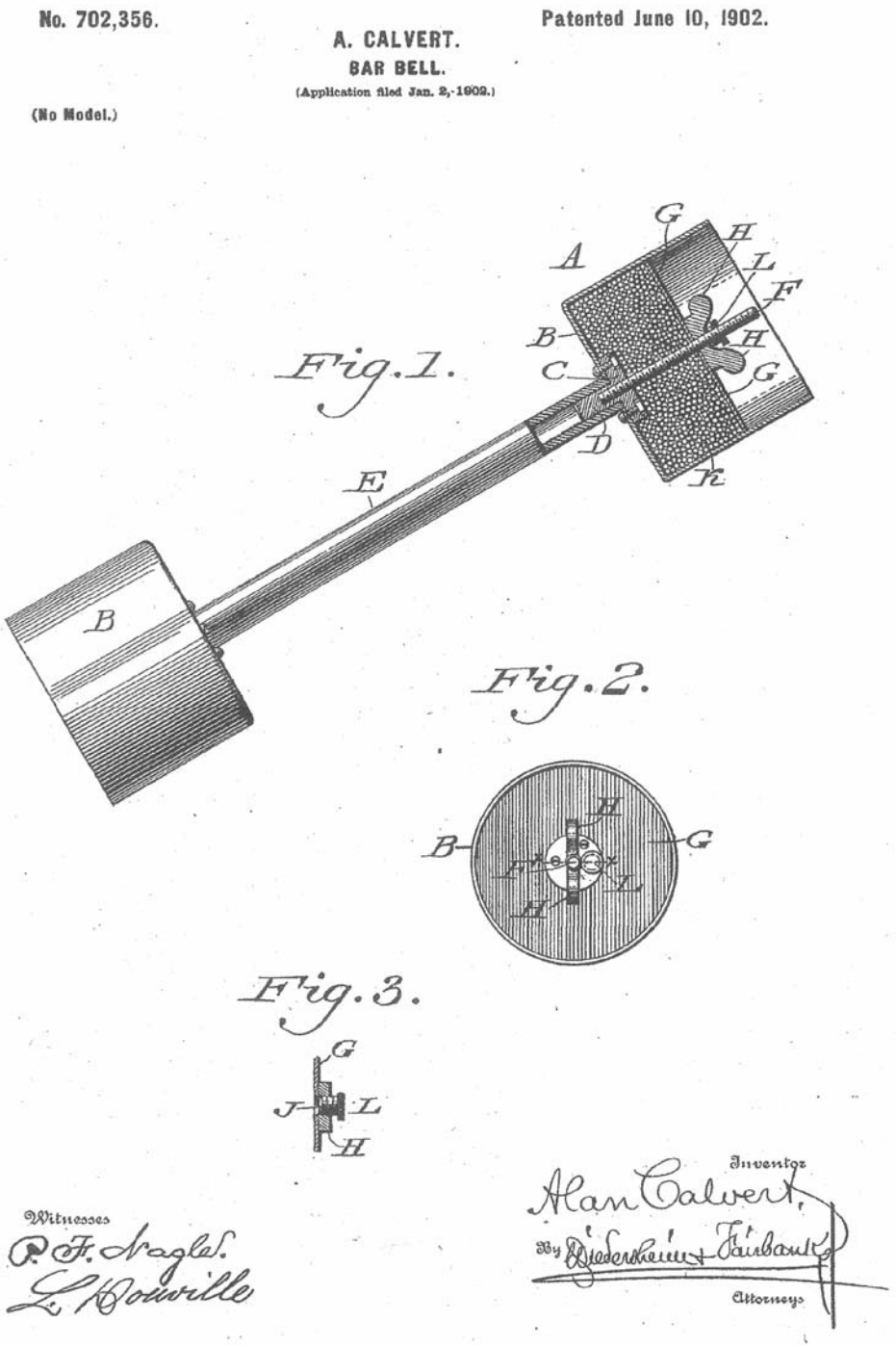

Figure 14. Alan Calvert submitted his first barbell patent in January of 1902. Image from USPTO online website: http://www.uspto.gov/patft/index.html.

continued to hold a position as one of the Milo Bar-bell Company's two "Patentees and Manufacturers" until 1904, when Calvert's name appeared on company letterhead as the sole proprietor.[27] Ellis Oberholtzer describes Lamson in his history of Philadelphia as an astute businessman with a "keen business ability and insight that enabled him readily to discriminate between the essential and non-essential in commercial transactions."[28] Lamson successfully operated a Boston brokerage business for a quarter-century and then married into the J. W. Gaskill & Sons lumber empire shortly before moving to Philadelphia in 1871.[29] If Calvert's father, Pehrson, had really been a bank president in the mid 1890s, then it is likely that he would have known men such as Lamson and other well-to-do Philadelphians.

Calvert's first patent was for an adjustable, "shot-loading" barbell. It could be used as a short-handled dumbbell for one-armed work or as a long-handled barbell for two-handed work. The original Milo design had a six and one-half inch long, hollow cylinder (like a large coffee can) screwed on to each end of a steel pipe handle—the length of which could be either long or short, according to the exercises to be performed. Originating at the handle insertion point, a long, threaded bolt emerged from the center of the cylinder on which a metal plate, called the "follower" or "retaining" plate, could be screwed.[30] Because this plate, or lid, had roughly the same dimension as the inside diameter of the cylinder (eight and one-half inches) it could be screwed into the hollow space thus compacting the contents. Using "a mass of pellets, particles, or small pieces

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[27] See Alan Calvert, letter to Roger R. Platt, 3 June 1903, for the inclusion of Lamson's name on letterhead. See Alan Calvert, letter to Roger R. Platt, 29 June 1904, for the change in letterhead indicating Calvert's sole proprietorship. These letters are from the Reuben Weaver Collection.

[28] Ellis Paxson Oberholtzer, *Philadelphia, a History of the City and Its People: A Record of 225 Years*, vol. 4 (Philadelphia: S.H. Clark, 1912), 79.

[29] Ibid.

[30] In his 1902 patent description Calvert, referred to the plate as a follower plate, but in his 1904 training course he called it a retaining plate. Alan Calvert, *Instructions in the "Milo" System of Progressive Weight Lifting*, (Philadelphia: Milo Bar-bell Co., 1904B), 3, Harold Weiss Collection, TMPCC.

of weighting material, such as shot," the weight in each cylinder could "be increased by fractions of a pennyweight or by several pounds," the patent description argued, so that the increase in weight was so gradual it was "almost imperceptible to the user, avoiding the possibility of any strain due to abrupt increase in the weight."[31] The loading of shot took place, optimally, through a small screw-plug near the center of each cylinder's retaining plate and then the plate was screwed down to pack the lead shot to prevent it from shifting, shaking, or rattling. The first Milo barbell was advertised as adjustable from twenty to two hundred pounds.[32] The fact that the weight, as well as the handle, could be varied was innovative, as it made progressive resistance training possible in a way that had never been available before.

Before the U.S. Patent Office had granted his official patent, Calvert began promoting his new product. The first notice appeared as a full-page ad in the April 1902 issue of *Physical Culture*. Prominently placed on the second page of the magazine and opposite the ad for H.D. Crippen's "Professional New Punching Bag," it could not have been missed. The full-page ad, although simple in design, got the important messages to the customer—the brand name, the product image, the potential benefits, and the price.[33] The Milo name was positioned in prominent type about one-third of the way down the page where the readers' eyes would first travel. A drawing of the barbell ran diagonally across the bottom half of the page, while the benefits—"produces great muscular development," "teaches athletes to apply their strength," and "enables all ambitious

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[31] 1902 Patent, Calvert.

[32] Alan Calvert, "Milo Bar-bell Advertisement," *Physical Culture* (April 1902): 2.

[33] Modern marketing theory describes four controllable factors with regards to the marketing mix: price, product, place, promotion. These are normally considered the Four Ps of marketing and are within the control of the marketer. Uncontrollable variables would include unemployment rates, consumer confidence, new technological threats, competitors, government regulation, and changing consumer preference. This information can be found almost anywhere marketing is explained. I found this information, among other places, at www.family-business-experts.com/4-Ps-of-marketing/html.

Figure 15. The Milo Bar-bell Company's first advertisement appeared in *Physical Culture* in April of 1902.

young athletes to build up physiques equal to those of professional strong men"—filled the white space in the top half of the ad.[34]

The next month, May 1902, Calvert also wisely advertised in the *National Police Gazette* during Richard K. Fox's physique contest promotion. Although it was a small ad nestled between the "Gray Hair Restored 'Walnutta' Hair Stain" advertisement and the Novelty Book Company's male erotica ad, it represented Calvert's initial effort at building a mailing list. He encouraged all those who entered Fox's contest "to send for our booklet on *Progressive Weight Lifting*."[35] It doesn't appear that he was blatantly trying to sell them anything; he just wanted to grab their attention by offering training information. Only in the small print at the bottom of the ad does Calvert mention that the Milo Adjustable Bar-bell was "the greatest muscle building device ever invented."[36] Calvert no doubt reasoned that the limited availability of training information and the scarcity of heavy-lifting equipment would be hook enough to get people to write for a free pamphlet.

The twenty-four page booklet he sent to those who wrote him in 1902 was called *Progressive Weight Lifting* and in it Calvert introduced the Ancient Greek athlete, Milo of Crotona, and analyzed why his training technique was so successful. Milo, heralded in Ancient Greece for winning the wrestling contests in six Olympian, seven Pythian, nine Nemean, and ten Isthmian Games, reputedly built his strength by lifting and carrying a young heifer calf a set distance every day.[37] According to the ancients, as the calf got larger, Milo got stronger—and the notion of "progressive resistance" was born. Calvert stressed the important aspects to Milo's methods: Milo started with "a weight well

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[34] Calvert, "Milo Bar-bell Advertisement—April 1902."
[35] Alan Calvert, "Milo Bar-bell Advertisement," *The National Police Gazette* 80, (1291) (17 May 1902). No other ads were found from April through June 1902 in *The National Police Gazette*.
[36] Ibid.
[37] David P. Willoughby, *The Super-Athletes* (South Brunswick: A.S. Barnes, 1970), 29-30.

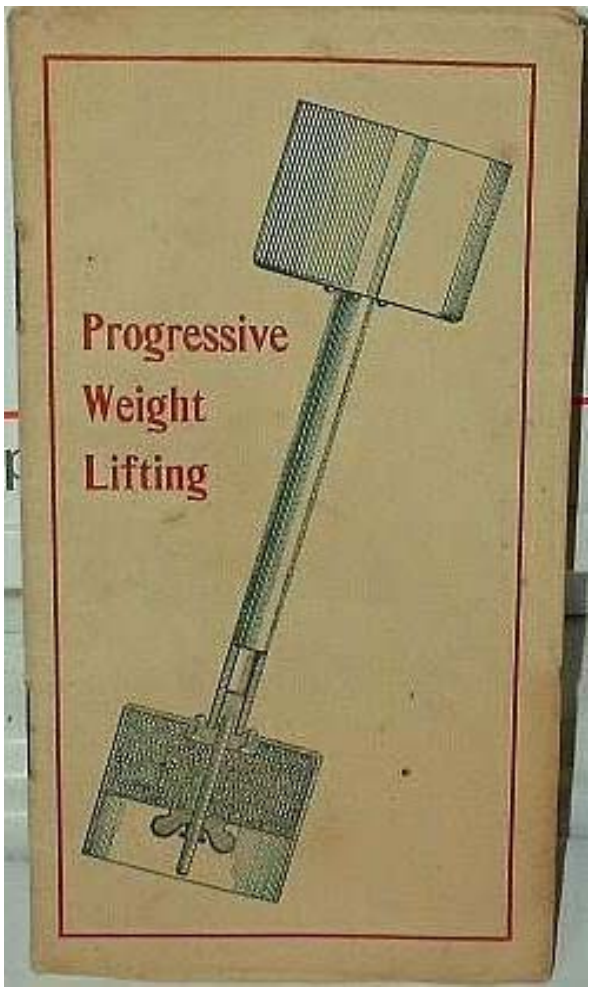

Figure 16. Calvert sent this small pamphlet, *Progressive Weight Lifting*, to those who answered his 1902 advertisements' invitation to write for more information. *Photograph courtesy of Reuben Weaver.*

within his strength," the calf's weight increased so slowly it was "almost imperceptible," and Milo was "content to go slowly."[38] These concepts were the basis of Calvert's training program. He stressed the difference between light-weight and heavy-weight training programs and the advantages of having adjustable equipment. Naturally, the booklet also described the attributes of the Milo Adjustable Bar-bell. In this first informative pamphlet Calvert claimed to be targeting "that large and rapidly growing class of youths who are striving to attain physical perfection, and who American-like, want to reach that goal in the shortest time compatible with safety."[39] He supplied quotes from well known physical culture experts like Bernarr Macfadden, medical doctors such as Randolph Faries and Fernand LaGrange, and muscular development authorities like George Eliot Flint. These experts all supported the use of heavy weights used "judiciously" and contradicted the prevalent information concerning muscle-binding and athlete's heart. Since training with heavy weight was a new activity, Calvert also advised his readers in *Progressive Weight Lifting* on what would be considered basic information in today's exercise industry: get a doctor's exam prior to beginning weight work, don't stop workouts, never work to exhaustion or hold the breath while exercising, start with light weights first, and don't use more weight than you can handle.[40]

In the beginning, Calvert based his advertising campaign on man's need for greater physical strength. His original *Physical Culture* ad attested to the popularity of the professional strongman: "Progressive Weight-Lifting has Developed all the Famous Modern Samsons now Exhibiting Before the Public."[41] Because of the public's fascination with strength Calvert cleverly targeted the perceived mystery surrounding the

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[38] Alan Calvert, *Progressive Weight Lifting and a Description of the "Milo" Adjustable Bar-Bell* (Philadelphia: George H. Buchanan and Company at the Sign of the Ivy Leaf, 1902), 3-4, Reuben Weaver Collection.
[39] Ibid., 10-11.
[40] Ibid., 11-13.
[41] Calvert, "Milo Bar-bell Advertisement—April 1902."

strongman's professional talents in the text of his ads, as if training for strength was a secret and he had found the answer. In reality, he *had* found the answer—the basic principle of progressive overload—but he wasn't the first to apply it to exercise.

Professional strongmen and strongwomen had been applying the principle for over one hundred years. Also, heavy weight training enthusiasts George Barker Windship and David P. Butler advocated making progressively heavier attempts on their health-lift machines in the 1860s.[42] William Blaikie's popular *How to Get Strong and How to Stay So* recommended progressive numbers of repetitions as well as weight, but his exercises only called for dumbbells ranging in weight from one pound for the beginning child to one-tenth of one's bodyweight for the advanced lifter—hardly heavy lifting.[43] George Elliot Flint had written an inspirational article in *Outing* about progressive exercise in 1899[44]—the same year that Bernarr Macfadden published an article pertaining to muscular vigor that also described the basic tenets of heavy training:

> But in order to acquire this great muscular vigor, remember that considerable time must be spent at these exercises almost daily; that more weight must be added to the dumb-bells every few weeks; that the muscles must not only be *urged*, but *forced* forward to do more work in the lifting of more weight and in the performing of greater tasks day after day, week after week. The weight that once seemed heavy will soon become light. In a short time the prospective athlete will find himself handling with one hand, in every way, a fifty-pound dumb-bell and, after several months' or a year's work, a hundred-pound bell may be attempted.[45]

Calvert's awareness that American perceptions regarding strength and muscular development were changing was critical to his success. Society, or at least parts of it, increasingly accepted and envied the strong and hypertrophied human form. Earlier

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[42] Jan Todd, *Physical Culture and the Body Beautiful, Purposive Exercise in the Lives of American Women, 1800-1870* (Macon: Mercer University Press, 1998), 190-93.
[43] William Blaikie, *How to Get Strong and How to Stay So* (New York: Harper & Brothers, 1879). See in particular Chapter 13 "What Exercise to Take Daily," p. 252-289.
[44] George Elliot Flint, "Some Hints on the Use of Weights for Health," *Outing* 35(December 1899): 26-30
[45] Bernarr A. Macfadden, "The Development of Great Muscular Vigor," *Physical Culture* 1(May 1899): 48-53.

exercise equipment and training routines couldn't supply the amount of muscle (due to the lack of sufficient muscular stimulus) and strength which men now desired. Calvert and his heavy barbells could. He advertised his equipment as essential to creating great amounts of strength and muscle. For the first two years, *Physical Culture* readers who saw his ads were encouraged to buy Milo equipment so they could train and become like the supermen on stage: "We Make Samsons of Men," "You Can Do 'Stunts' Like This," and the most popular, "The System that Made all 'Strong Men' Strong."[46]

Figure 17. This Milo Bar-bell advertisement appeared in the April 1903 issue of *Physical Culture* magazine.

[46] These headlines appeared in Milo Bar-bell Company advertisements in *Physical Culture* magazine from 1902 to 1904.

The attraction of slogans such as these arose not only from the evolving ideals of the body—and the physical strength relished—during this "Golden Era of Strength," but also from a nation which was becoming stronger in world affairs. The health of its citizens was intuitively associated with the health of a nation, thus an improvement in the strength of its individuals would have implied a nation's increasing strength.[47] In its search for global identity and power, the United States had tasted recent successes in the Spanish-American War and the Philippine-American War. Combining President Theodore Roosevelt's doctrine of the strenuous life and the "New Imperialism" foreign policy campaign, U.S. colonialism reached new highs.[48] During the first decade of the new century the United States flexed its new-found muscles—politically as well as physically.

Although Bernarr Macfadden's *Physical Culture* was reportedly bought by over 40,000 physical culturists and prospective weight training enthusiasts, Calvert also advertised in other health-related periodicals. Professor Charles A. Tyrell's *Health: a Home Magazine devoted to Physical Culture and Hygiene*, Paul von Boeckmann's American magazine, *Vim*, and Jonathan Nickolson's English publication, *Vitality &*

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[47] Mark Dyreson, "Regulating the Body and the Body Politic—American Sport, Bourgeois Culture, and the Language of Progress, 1880-1920," in *The New American Sport History*, ed. S. W. Pope (Chicago: University of Illinois Press, 1997), 121-44; Alice Shukalo, "Communing with the Gods: Bodybuilding, Masculinity, and U.S. Imperialism, 1875-1905" (Ph.D. diss., University of Texas at Austin, 2005). For similar concepts in foreign cultures see: Tamar Garb, *Bodies of Modernity: Figure and Flesh in Fin-De-Siecle France* (New York: Thames and Hudson, 1998); Michael Hau, *The Cult of Health and Beauty in Germany: A Social History, 1890-1930* (Chicago: The University of Chicago Press, 2003).

[48] Theodore Roosevelt, *The Strenuous Life; Essays and Addresses* (New York: Century, 1900). For more information of US foreign relations and cultural expansion see Richard H. Collin, *Theodore Roosevelt, Culture, Diplomacy, and Expansion: A New View of American Imperialism* (Baton Rouge: Louisiana State University Press, 1985); Michael J. Hogan, *Paths to Power: The Historiography of American Foreign Relations to 1941* (Cambridge: Cambridge University Press, 2000); Amy Kaplan and Donald E. Pease, *Cultures of United States Imperialism*, *New Americanists* (Durham: Duke University Press, 1993); Emily S. Rosenberg, *Spreading the American Dream: American Economic and Cultural Expansion, 1890-1945*, (New York: Hill and Wang, 1982).

Health Culture all contained ads for the Milo Bar-bell Company.[49] Although Calvert knew that magazines which emphasized health and exercise were logical places in which to advertise, he wanted and needed a broader customer base to succeed financially. As the historian Stephen Hardy points out, early twentieth century sporting goods entrepreneurs did not wait for customer demands; they created customers.[50] Calvert knew that if he wanted to become a successful businessman he had to increase his market; selling barbells to your friends would only get you so far before you ran out of customers. In an effort at expansion Calvert bought ads in 1903 and 1904 in several "general magazines, spending thousands of dollars" trying to sell "to the general public."[51] These magazines included, among others, *Cosmopolitan* and *Scientific American*.[52] However, the rigors of starting a new business combined with limited funds and, most definitely, the lack of response from these popular magazines caused Calvert to discontinue advertising in these kinds of publications. As he wrote, "Never once did I get back from any advertisement even a half of the cost of the advertisement itself,—let alone the cost of the few bar-bells I sold."[53]

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[49] I found Milo Bar-bell advertisements in *Vim: Physi-culture, Health Philosophy, Mental Force* 1(April 1903), 2(September 1903), 3(February 1904), 3(June 1904), 4(November 1904), and (January 1905); *Health* 54, (12) (1 December 1904); *Vitality & Health Culture* 4(September 1904) and 5(October 1904). Two more ads were found in *Health* during 1904, which issues is unknown as the advertising sections were separated. I had a limited collection of these magazines to examine so there could have been ads during the later years, however magazines of this type were typically short-lived and consequently, fairly rare.

[50] Hardy, "'Adopted'," 88.

[51] Alan Calvert, *An Article on Natural Strength versus Made Strength* (Philadelphia: by the author, n.d.), 1.

[52] See examples of ads in *The Cosmopolitan; a Monthly Illustrated Magazine* 34(April 1903): 776; *Scientific American)* 88 (12 December 1903): 450. At the University of Texas library I searched for Calvert ads in popular magazines which existed during the first five years or so of the Milo Bar-bell Company's existence. I looked through issues of *Century*, *Collier's*, *Everybody's Magazine*, *Ladies Home Journal*, *McClure's Magazine*, *Outing*, *Outlook*, *Life*, *Lippincott's Illustrated*, *Scribner's Magazine*, and *Vanity Fair.* I had very little luck finding advertisements for the Milo Bar-bell Company. Many of these magazines were bound and/or incomplete, however, and did not include the advertising sections so it is impossible to definitively say that Calvert had not advertised there.

[53] Calvert, *Natural Strength*, 3.

As great an idea as it was, Calvert found that his main competition was ignorance; his fellow Americans simply did not know how to train with his equipment. Unlike baseball, which had been played in America for over three-quarters of a century, exercising using heavy adjustable barbells was a novel idea in the U.S. The public did not comprehend the principle of progressive overload and its application to lifting heavy weights. William Blaikie's popular workout involved high repetitions with bodyweight or light-weight dumbbells:

> Stand erect, brace his chest firmly out, and, breathing deeply, curl dumb-bells (each of about one-fifteenth of his own weight) fifty times without stopping….Then, placing the bells on the floor at his feet, and bending his knees a little, and his arms none at all, rise to an upright position with them fifty times….after another minute's rest, standing erect, let him lift the bells fifty times as far up and out behind him as he can, keeping elbows straight, and taking care, when the bells reach the highest point behind, to hold them still there a moment….Next, starting with the bells at the shoulders, push them up high over the head, and lower fifty times continuously….after another minute's rest, start with the bells high over the head, and lower slowly until the arms are in about the position they would be on a cross, the elbows being always kept unbent. Raise the bells to height again, then lower and so continue until you have done ten…rest half a minute…then do ten more, and so on till you have accomplished fifty.[54]

Macfadden's 1895 exercise program, *McFadden's System of Physical Training,* illustrated twelve exercises to be done with an elastic exerciser. Each exercise was to be continued until the muscles were "thoroughly tired."[55] There was no way to make the resistance any heavier. Macfadden's popular exercise magazine, *Physical Culture,* didn't publish systematic training information, either, and contained almost nothing on heavy barbell training. Macfadden used his publication to attack doctors, drugs, and the medical field; to discuss his ideas on fasting, nutrition, and prudery; to discuss why outdoor exercise, bicycling, boxing, and wrestling benefited the body and soul; and to

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[54] Blaikie, *How to Get Strong*, 273-74.
[55] Bernarr Macfadden, *McFadden's System of Physical Training* (New York: The McFadden Company, 1895), 42.

draw attention to those who followed his advice on living a physical culture life, even though the advice appeared to be fairly vague. Although Macfadden made liberal use of muscular men in his magazine, he never outlined exactly how they achieved their look. He ran exercise articles such as "Physical Culture Without Apparatus," "Exercise for Obesity," and "Physical Culture with a Chair"—which described exercises using items at hand, such as one's bodyweight, a five-gallon keg, or the afore-mentioned chair.[56] The only article in the first five years of *Physical Culture* that outlined a dumbbell workout described twelve exercises. A new exerciser was to limit his/her workout to five or ten minutes a day, adding two or three minutes daily, until he/she was doing a half-hour routine. This way, Macfadden warned, one did not get so sore that "you may wish that dumb-bells had never been heard of, as the soreness that results from intemperate exercise is far from pleasant."[57] Each movement was to be continued "until the muscle or muscles used begin to tire."[58] Once the exerciser had trained a while and "the muscles begin to harden each exercise can be continued to extreme fatigue."[59] This appeared to be the extent of systematic training with "heavy weight" in *fin de siècle* America.

Thus, Calvert began an educational campaign stressing the usefulness of his product and the importance of a physical activity like weight-lifting. Using advertisements found primarily in *Physical Culture* and numerous small informative pamphlets, all of which served to market his equipment as well as promote the benefits of barbell work, Calvert whittled away at the nation's barbell illiteracy. Along with the previously discussed, "interesting, instructive, and scientific booklet," *Progressive*

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[56] Bernarr A. Macfadden, "Physical Culture with a Chair," *Physical Culture* 2(February 1900): 211-15; Bernarr A. Macfadden, "Physical Culture without Apparatus," *Physical Culture* 2(January 1900): 159-61; Ira L. Wood, "Exercise for Obesity," *Physical Culture* 5(July 1901): 153-57.
[57] Bernarr A. Macfadden, "Physical Culture with Dumb-Bells," *Physical Culture* 3(September 1900): 247.
[58] Ibid.
[59] Ibid.

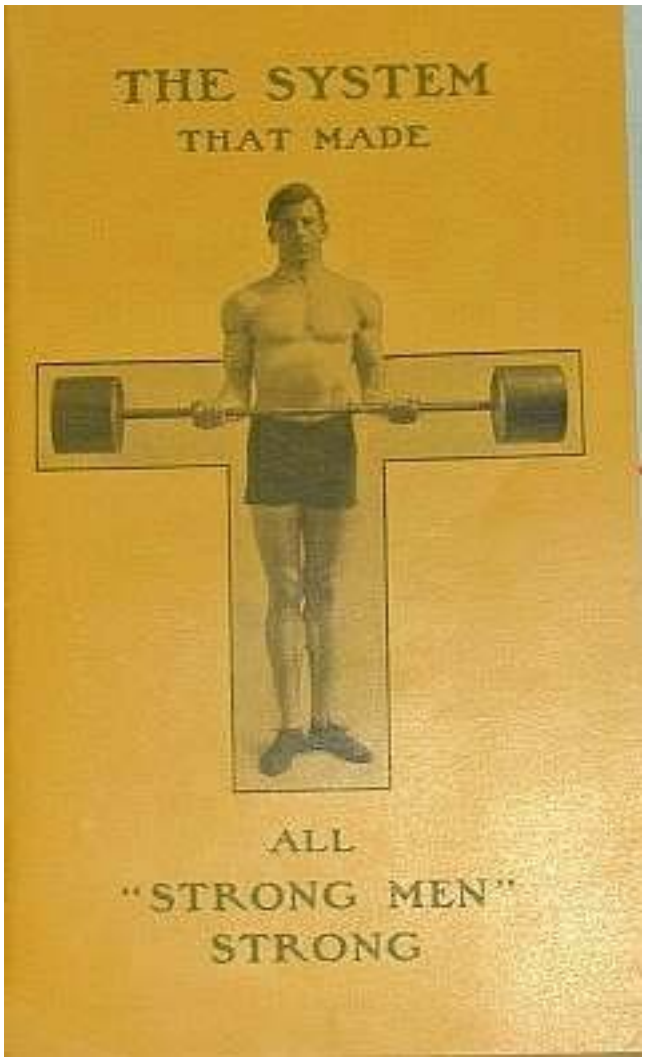

Figure 18. This 1902 pamphlet introduced soon-to-be students to the world of progressive weight-lifting and the Milo Bar-bell Company. *Photograph courtesy of Reuben Weaver.*

Weight Lifting, Calvert published *The System That Made All "Strong Men" Strong* in 1902.[60] This twenty-four page pamphlet relayed all of the same information as his *Progressive Weight Lifting* pamphlet only in a slightly different, easier to read orientation using many more sub-head titles. Significantly, in this pamphlet Calvert expanded his customer base to include "any woman who wants to develop her powers to the limit" and become "fashionably athletic."[61] Early in 1902 Calvert also began a long-practiced strategy of printing up and distributing testimonials from well-known strongmen of the day who supported the use of Milo barbells. George Zottman, a professional strongman Calvert considered "one of the most magnificent specimens of physical manhood in the world, and one of the shining lights of Philadelphia," declared,

> "I have carefully examined your "Milo Bell" and have no hesitation in pronouncing it the best adjustable bell I have ever seen. I have used many styles of heavy weight bells, including several of my own design, but the "Milo" excells(sic) them all. I am a firm believer in the use of heavy weights for the development of muscular strength and I would earnestly recommend your bell, and weight lifting system, to all those seeking after great physical development."[62]

The testimonial included a photo of Zottman sitting among his personal bells—none of which appear to be adjustable—conveying the message that Calvert's adjustable bell could do what Zottman's many weights did, but take up far less space. In 1904 Calvert also began issuing a pamphlet titled *The Modern Milo,* in which testimonials from actual

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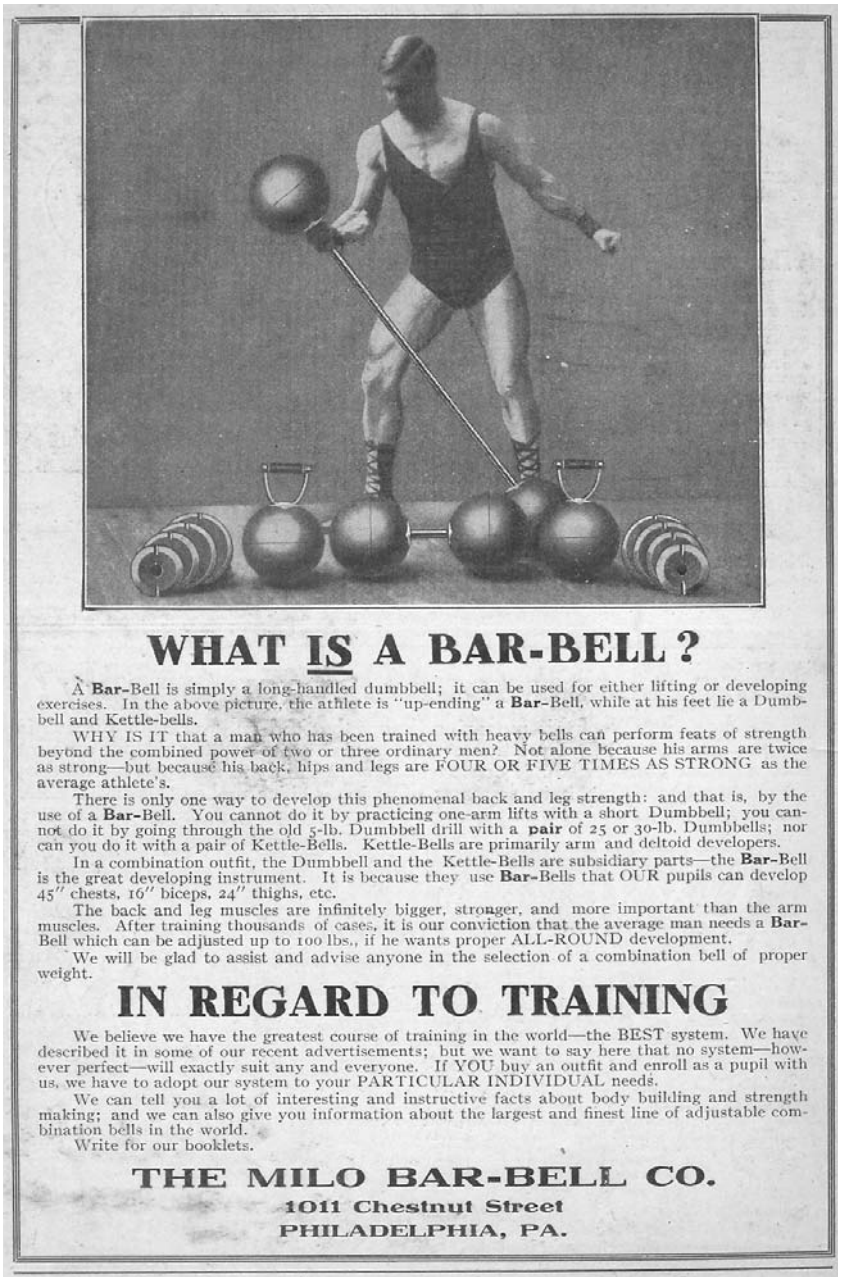
[60] This descriptive phrase was often used in Calvert's advertisements, see: Calvert, "Milo Bar-bell Advertisement—August 1902."; Calvert, "Milo Bar-bell Advertisement—April 1902." Alan Calvert, *The System That Made All 'Strong Men' Strong* (Philadelphia: by the author, 1902). Reuben Weaver Collection. Calvert's advertisements don't name this booklet, *The System That…*, until May 1904, but page 23 of the booklet contains the South Water Street address which was used only in 1902. Another version of this booklet was published around 1908 when the Milo Triplex bell was sold. The contents were the same, only the new model barbell was advertised instead of the original Milo bell. Harold Weiss Collection, TMPCC.

[61] Calvert, *The System*, 22-23.

[62] George Zottman and Alan Calvert, "Zottman Testimonial—Proof That Cannot Be Upset," (Philadelphia: Milo Bar-bell Co., 1902). Reuben Weaver Collection.



WHAT IS A BAR-BELL?

A **Bar-**Bell is simply a long-handled dumbbell; it can be used for either lifting or developing exercises. In the above picture, the athlete is "up-ending" a **Bar-**Bell, while at his feet lie a Dumbbell and Kettle-bells.

WHY IS IT that a man who has been trained with heavy bells can perform feats of strength beyond the combined power of two or three ordinary men? Not alone because his arms are twice as strong—but because his back, hips and legs are FOUR OR FIVE TIMES AS STRONG as the average athlete's.

There is only one way to develop this phenomenal back and leg strength: and that is, by the use of a **Bar-**Bell. You cannot do it by practicing one-arm lifts with a short Dumbbell; you cannot do it by going through the old 5-lb. Dumbbell drill with a **pair** of 25 or 30-lb. Dumbbells; nor can you do it with a pair of Kettle-Bells. Kettle-Bells are primarily arm and deltoid developers.

In a combination outfit, the Dumbbell and the Kettle-Bells are subsidiary parts—the **Bar-**Bell is the great developing instrument. It is because they use **Bar-**Bells that OUR pupils can develop 45″ chests, 16″ biceps, 24″ thighs, etc.

The back and leg muscles are infinitely bigger, stronger, and more important than the arm muscles. After training thousands of cases, it is our conviction that the average man needs a **Bar-**Bell which can be adjusted up to 100 lbs., if he wants proper ALL-ROUND development.

We will be glad to assist and advise anyone in the selection of a combination bell of proper weight.

IN REGARD TO TRAINING

We believe we have the greatest course of training in the world—the BEST system. We have described it in some of our recent advertisements; but we want to say here that no system—however perfect—will exactly suit any and everyone. If YOU buy an outfit and enroll as a pupil with us, we have to adopt our system to your PARTICULAR INDIVIDUAL needs.

We can tell you a lot of interesting and instructive facts about body building and strength making; and we can also give you information about the largest and finest line of adjustable combination bells in the world.

Write for our booklets.

THE MILO BAR-BELL CO.

1011 Chestnut Street

PHILADELPHIA, PA.

Figure 19. This December 1913 advertisement from *Physical Culture* is an obvious attempt to educate the American public about the benefits of Milo Bar-bell Company equipment. Ottley Coulter appears as the model in this advertisement and is an indication of his close relationship with Calvert at this time.

customers were used along with a condensed version of the benefits of the adjustable Milo barbell.[63]

One advertisement used in Calvert's never-ending educational campaign carried the banner headline, "What is a Barbell?"[64] In this ad Calvert described a barbell as, "simply a long-handled dumbbell; it can be used for either lifting or developing exercises."[65] He also explained its importance:

> Why is it that a man who has been trained with heavy bells can perform feats of strength beyond the combined power of two or three ordinary men? Not alone because his arms are twice as strong—but because his back, hips and legs are *four or five times as strong* as the average athlete's.
>
> There is only one way to develop this phenomenal back and leg strength: and that is, by the use of a *Bar*-Bell. You cannot do it by practicing one-arm lifts with a short Dumbbell; you cannot do it by going through the old 5-lb. Dumbbell drill with a *pair* of 25 or 30-lb. Dumbbells; nor can you do it with a pair of Kettle-Bells. Kettle-Bells are primarily arm and deltoid developers.
>
> In a combination outfit, the Dumbbell and the Kettle-Bells are subsidiary parts—the *Bar*-Bell is the great developing instrument. It is because they use Bar-Bells that *our* pupils can develop 45" chests, 16" biceps, 24" thighs, etc.[66]

Although Calvert later lamented about the "paltry number" of barbells he sold within the first sixty days of opening his doors, his bar soon made an impact on the budding weight-lifting community.[67] By educating the public on the benefits of his equipment, not only was Calvert selling barbells—he was also gaining "students." Many of the mail-order training programs which struggled to be successful during this time boasted about the progress of their "students." It was a strategy for getting more

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[63] Alan Calvert, *The Modern Milo, Being a Further Treatise on Progressive Weightlifting* (Philadelphia: by the author, 1904), Reuben Weaver Collection.
[64] "Milo Bar-bell Advertisement," *Physical Culture* (December 1913).
[65] Ibid.
[66] Ibid.
[67] Calvert, *Natural Strength*, 3.

customers. Students mailed in photographs and testimonials declaring what "so-and-so's" program did for them. Calvert was not any different. Although he didn't operate in the same way as other mail-order muscle entrepreneurs, he can, in fact, be placed in the same group. However, most other entrepreneurs sold courses; Calvert sold equipment. Because he supplied a course with the purchase of equipment, Calvert, whether intentionally or not, began to gather a following, especially when his students began to have great results. People "from every class of physical culturist" began to write him asking for advice: "[from] enthusiasts who wished to become Samsons overnight, to the health-seekers who wanted to know whether weight-lifting would cure fits,—or straighten a pair of bow-legs; positively everybody from would-be world's-champion-lifters, —to elderly men who were looking for some new fountain of eternal youth."[68] The potential converts to American barbellism came from every social class.

Calvert considered anyone who bought a Milo barbell and developed his strength and physique using Milo methods to be one of his students. He also began publishing some of their early testimonials in the small pamphlet, *The Modern Milo, Being a Further Treatise on Progressive Weightlifting* released in 1904.[69] Judging from some of the students' remarks, Calvert actually wrote them asking about their progress and requested a few words of praise for the Milo bell if they were so inclined:

> Gentleman: In reply to your inquiry as to how I regard the merits of your bell, I wish to state that I cannot praise it too highly. One year ago I purchased a Milo Bell; at that time I was pressing seventy-five pounds, but by conscientious and systematic work with the Milo Bell, I now am about to press 146 pounds. I might also state that during the one year I have been using the Milo, I have increased my chest measurement from 43 to 46 inches, and I am a firm believer in the use of heavy weights for all those seeking after great physical development and muscular strength. Yours very truly, Jos. I. Dimond.[70]

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[68] Ibid., 4.
[69] Calvert, *Modern Milo*.
[70] Ibid., 9.

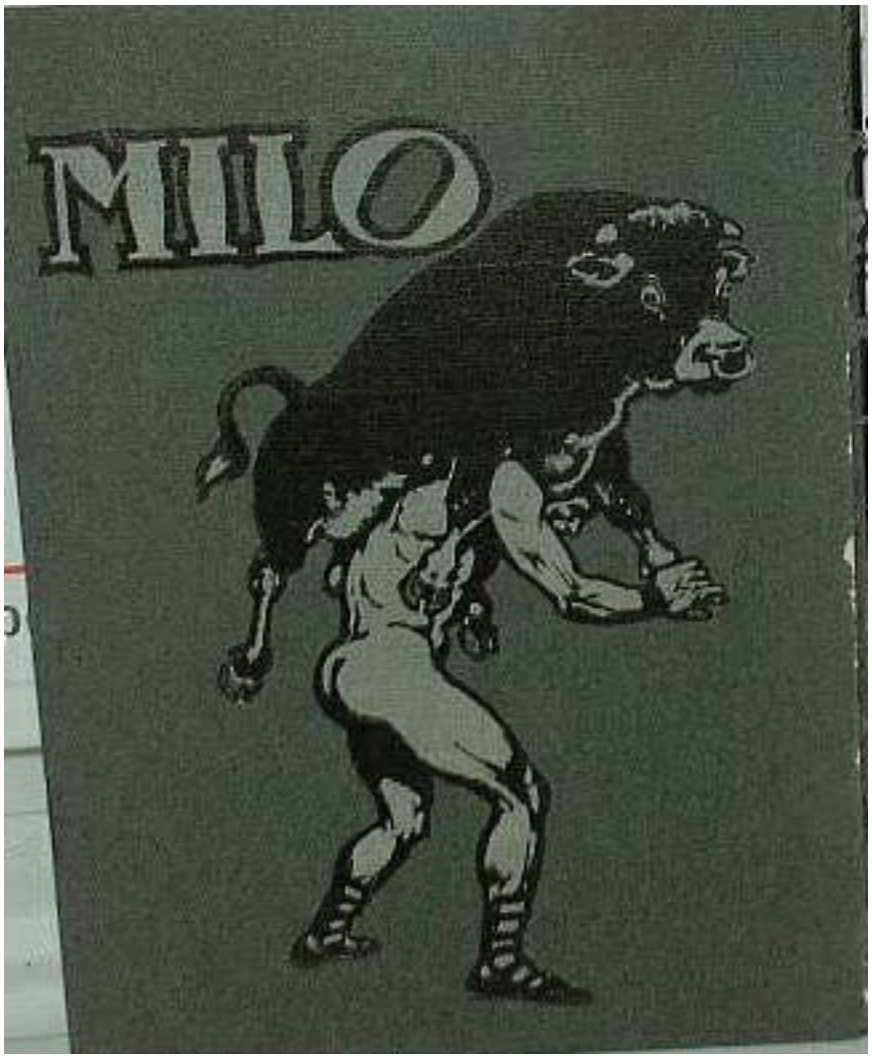

Figure 20 *The Modern Milo*, a booklet mailed out in 1904 and 1905, was filled with testimonials from students already using Milo barbells and dumbbells. Calvert used the image of ancient Greek wrestler Milo of Crotona on the cover. Milo is considered the father of progressive resistance exercise because he reportedly built his strength by lifting and carrying a young heifer everyday. *Picture courtesy of Reuben Weaver.*

Calvert encouraged amateur athletes, businessmen, and even women to try the Milo bell for fifteen days, after which he would "cheerfully refund" the purchase price if the customer was not satisfied.[71] However, true Milo students were invariably men and amateurs, since Calvert stated in 1917 that he "never train[ed] women or girls" and anyone who was already a professional strongman had received training elsewhere.[72] For instance, Ottley Coulter ordered a barbell from Calvert in 1910. By the time he made the purchase he had already informed Calvert of his status as a professional strongman and that he had previously trained under Warren Lincoln Travis' supervision. Calvert communicated with Coulter for years and even sent him a customized workout routine, but never truly considered him a "Milo student." His personal sense of ethics would not allow it. In 1911 Coulter offered to submit a testimonial for the Milo system of training. Calvert accepted it, but altered it to emphasize that Coulter's feats of strength were made as a professional, not as a Milo student.[73] Needless to say, this ethical stance was rare in the field, and may in the long run have helped to establish Calvert's reputation as an honorable man.

Calvert's 1904 *Modern Milo* pamphlet proclaimed that "professional wrestlers, gymnasium instructors and teachers of physical culture" all purchased Milo equipment because they knew its value as a bodybuilder.[74] These customers may have bought the adjustable barbell and even sent in testimonials on its effectiveness, but they would not have been considered true Milo students; only those customers who had developed their body and strength by using the Milo System had that distinction. Calvert claimed to do

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[71] For the amateur athletes and business men see: Ibid., 6-8. For women see Calvert, *The System*, 22-23.
[72] Alan Calvert, "The Average Man, How Much Strength Has He, and How Much Can He Acquire?" *Strength* (March 1917): 3.
[73] Alan Calvert, letter to Ottley Coulter, 1 April 1911, from Ottley Coulter's Milo Scrapbook, TMPCC.
[74] Calvert, *Modern Milo*, 6.

most of his training and coaching of students via the mail.[75] Most likely he set up training courses and physically observed those who lived in or near Philadelphia, but since there is no record that he had his own gym or a true training facility it makes sense that most of his work would have been done by mail.

However, at least one customer-cum-student actually traveled to Philadelphia to train under Calvert's watchful eye. An overweight University of Texas graduate, H.J. Lutcher Stark, drove his car to Pennsylvania in 1913 and stayed there for two months of training with Calvert using the Milo system. When he returned to Texas, forty pounds lighter and much stronger, Stark brought back one of the first barbell sets seen on the University campus, and became "an ardent champion of the merits of progressive resistance exercise."[76] Stark and U.T.'s first athletic director, L. Theo Bellmont—also a weight trainer—went on to introduce barbells and Calvert's method of training to student Roy J. "Mac" McLean, the University's eventual Professor of Physical Training. McLean subsequently began weight training classes for students in 1920 and encouraged the varsity athletes he coached to train with weights—something unheard of in the 1920s.[77]

Whether Calvert coached his students by mail or in-person, the student always came first. A prolific writer, Calvert spent hours every day responding to student and customer letters. In these letters Calvert inspired and motivated his students to train hard, and he apparently didn't pull any punches. He told you what he thought, but he also managed to give hope to the students who needed it most. Years later, students of

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[75] As one example of his coaching students be mail see: Alan Calvert, "It Is a Poor Rule That Don't Work Both Ways," *General Strength* (June 1914): 11.

[76] Terry Todd, "Strength Training for Athletes at the University of Texas," *Iron Game History* 2(January 1993): 7.

[77] Ibid., 7-8; Terence Todd, "The History of Resistance Exercise: and Its Role in United States Education," (Ph.D. diss., University of Texas at Austin, 1966), 221. In his dissertation, Todd references Roy J. McLean and Karl K. Klein, "Barbells on Campus – The University of Texas," *Strength & Health* (January, 1960), 34-35, as claiming the program at U.T. began in 1920, but in Mark Berry, "Growing by Pounds and Inches," *Correct Eating & Strength* 16(June 1932): 26, McLean states that the weight training classes began in 1924.

Figure 21. A proud Roy J. McLean poses with the Milo dumbbell he bought in 1918. *The McLean Scrapbook, Todd-McLean Collection.*

Calvert remembered his honesty as being one of the things they most admired.[78] If Calvert said you looked great, you did. If someone was willing to put forth the effort, Calvert worked with him. "I want pupils who are in earnest," he wrote, "who desire to be healthy and strong—and who are willing to practice and study."[79] He knew just what to say and, most of all, he appealed to the "normal" and "average" American. Calvert even stated in his magazine, *Strength*, in 1916, "My real business is taking the average man, or boy, and, by a few months' training, turning him into a perfect physical specimen."[80] The use of students' images in his advertising, and eventually his magazine, undoubtedly helped endear Calvert to his growing number of followers.

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[78] Paschall, *Notebook #3*, 28-29.
[79] Calvert, "It Is a Poor Rule," 11.
[80] Alan Calvert, "My Most Important Work Is Body-Building for Amateurs," *Strength* (July 1916): 2.

Figure 22. This rare photograph of Alan Calvert appeared in the December 1966 issue of *Muscle Builder*, page 49.

Although other training entrepreneurs used images of their personal physiques to market their programs Calvert decided, from the first, to focus on his local protégés. The reason for this focus, of course, was that Calvert never gained the heart-stopping physique possessed by his idol, Sandow. An early picture of Calvert standing beside a rack of his barbells reveals not a scantily-clad, massively hypertrophied athlete, but a fit-looking businessman whose muscular forearms, neck, and shoulders suggest, even through his shirt and tie, that he was no stranger to serious exercise. Sport historian John Fair remarked upon seeing Figure 22 that "contrary to the staid professorial look that he exudes in facial depictions, he has some muscles in this one!"[81] Ottley Coulter, one of Calvert's strongman correspondents during the Teens (when Calvert would have been around the age of forty), described him as around five feet nine inches tall with "enough flesh, which was near enough evenly distributed over his body to give him a good appearance in clothes. He had a well proportioned forearm in appearance but was not what I would call a muscular man."[82] Siegmund Klein, "Calvert's last star pupil" of the early Twenties, wrote, "He [Calvert] probably did bodybuilding but did not "look" like a body builder."[83] Therefore, a mail-order training course or advertisement which relied on his personal physique to sell it wouldn't work, and Calvert would have realized this.. Apparently, he was capable of good lifts in the strict one-arm military press and was known for his dipping abilities on the parallel bars, but Calvert didn't have awe-inspiring

[81] E-mail correspondence between John Fair, Terry Todd, and the author 29 August 2005 in response to the publishing of Kim Beckwith and Jan Todd, "*Strength*, America's First Muscle Magazine: 1914-1935," *Iron Game History* 9 (August 2005): 11-28.

[82] Ottley Coulter, letter to David P. Willoughby, undated, Willoughby Collection, TMPCC.

[83] The "last star" quote is from Siegmund Klein, "Purely Personal Piffle," *Klein's Bell* 1(August 1931): 5. The description of Calvert is found in Siegmund Klein, "Letters," 28. Klein didn't meet Calvert until the early 1920s when Calvert was nearing 50 years of age.

strength or the kind of defined physique needed to find converts to barbellism.[84] He had, he admitted in 1909, basically a quiet, reserved nature and didn't want "to get in the limelight as an athlete."[85] His position in Philadelphia society may also have influenced his unwillingness to display his own physique. Nonetheless Calvert showed the different ways in which Milo bells could be used and the kinds of physiques which were possible with their use through his students. He hoped, of course, that just as Sandow had once motivated him to train, the developing physiques and strength of his hard-working students would serve the same purpose for others.

An examination of the ads Calvert placed in various magazines reveals the growth of his new company, his philosophy of lifting, and a good deal about the growth of weight-lifting in the early twentieth century. The versatility and strength of the Milo products, both human and metallic, were highlighted in Calvert's advertising. His advertisements in *Physical Culture* nearly always took up at least half a page and he occasionally ran one as a full page. The photographic images he elected to use depicted students holding the "Milo Adjustable Bar-Bell" in a variety of stances. Sometimes the model used the short-handled dumbbell version of "the Milo" to portray one-armed, overhead lifting and in other ads the model lifted the long-handled version to demonstrate two-handed exercises. Calvert also used a variety of physiques to advertise his equipment. Frank P. Jones, the "champion weight-lifter of Philadelphia" appeared as a model for many of Calvert's early ads.[86] Jones was lean and muscular, but did not have a particularly massive build. On the other hand, Calvert also used pictures of H.T. Ewing, a Milo barbell user a bit on the portly side, who displayed his strength by holding

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[84] Coulter to Willoughby, undated; Van Cleef, "Builder of Men," 11. Coulter claims he could perform a strict seventy-five pound press at a moment's notice, weighing approximately 180 pounds. Van Cleef credits him with a sixty-five pound press as a youth of 135 pounds.
[85] Alan Calvert, letter to J.V. Prada, Jr., 23 June 1909, from Ottley Coulter's Milo Scrapbook, TMPCC.
[86] For example see "Milo Bar-bell Advertisement," *Physical Culture* (September 1903).

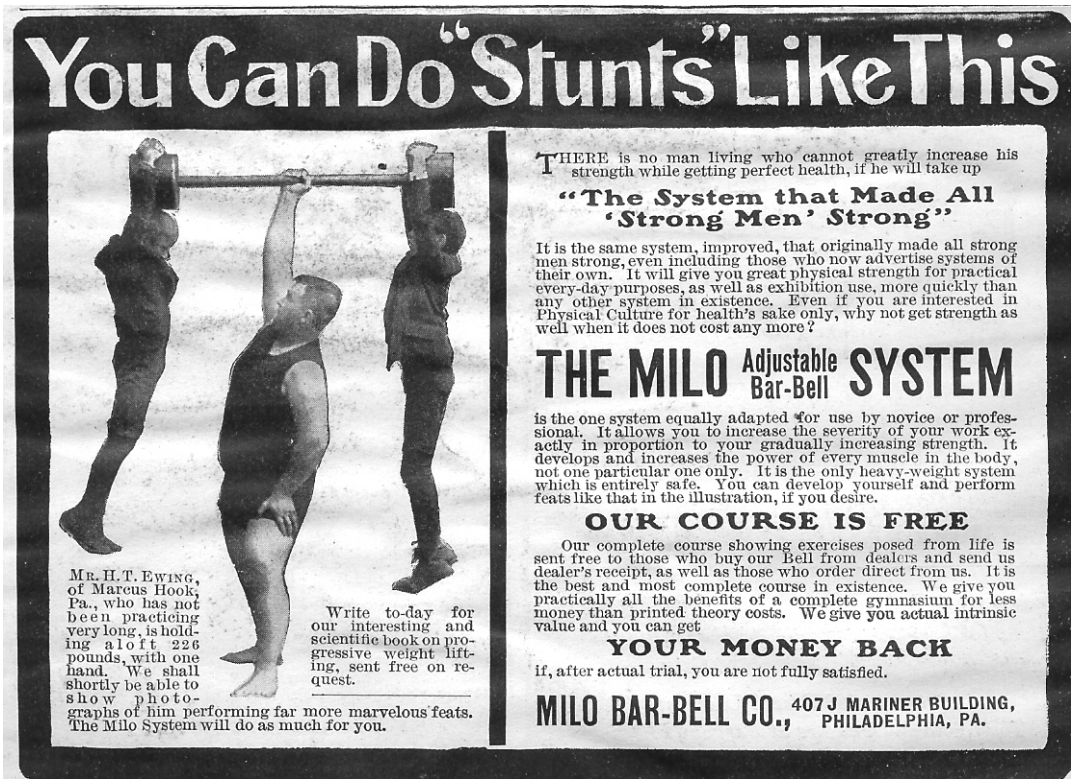

Figure 23. H.T. Ewing appeared in this September 1903 advertisement in *Physical Culture* magazine.

Figure 24. Ms. Maud Elliott appeared in Calvert's August 1902 ad in *Physical Culture* demonstrating that Milo barbells could be used by man and woman alike.

overhead—using only one hand—a Milo barbell with a young boy hanging from either end for a total of 226 pounds.[87] In August 1902 Calvert used a woman model, Maud Elliott of New York City, in an advertisement and showed her holding her forty-six pound Milo dumbbell overhead.[88] Readers who saw all the ads could only conclude that Milo weights could be used by everyone.

Like most advertisers of the day, Calvert provided an abundance of reading material in his ads. This was an important aspect of his educational campaign. He began presenting his future customers with reasons why Milo barbells were the best, even though they were the only barbells sold in the U.S. for several years. The April 1904 ad contained a drawing of a muscular man holding a bull on his shoulders.[89] Obviously meant to represent Milo of Crotona, "The Strength of Milo" was carefully explained for all:

> The strong man of a primitive age who acquired his great strength by primitive methods, the principles of which have to this day been the foundation of strength of every famous man of muscle…many applications of the principle have since been made, but the only one of absolute success and positive freedom from harm is the system that takes its name from this early disciple. The Milo Adjustable Bar-Bell System is the embodiment of every true principle of muscular development with every element of danger of strain or injury removed. The Milo Bell is the only apparatus by which increase in weight can be made in almost imperceptible degrees—not by pounds but by ounces—by dropping shot into each cylinder. You can see yourself grow in strength daily. Our course of exercise is interesting and a promoter of health as well as of strength. We can practically guarantee permanent results in the acquirement of perfect health, statuesque physique and great strength.[90]

In this ad Calvert assured readers that everyone could participate in progressive weight-lifting since the weight could be added an ounce at a time. During a time when health

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[87] Ibid.
[88] Calvert, "Milo Bar-bell Advertisement," *Physical Culture* (August 1902): 287.
[89] Interestingly, Bob Hoffman used this same picture in Bob Hoffman, "Milo of Crotona, Did He Originate Progressive Exercise?" *Strength & Health* 4 (10) (September 1936). Hoffman's image, however, contains a background representing an ancient Greek stadium.
[90] "Milo Bar-bell Advertisement," *Physical Culture* (April 1904).

reformers, and even a few medical physiologists, associated vigorous movement with health, Calvert promoted his company as the provider of such an activity for "the acquirement of perfect health." With the rise of anthropometry and national interest in neo-classicism, who wouldn't want to work to attain a "statuesque physique"?[91] While Sandow and other strongmen had created a desire for the muscular body and the attainment of perfection, Milo Bar-bell products and principles ensured not only the enhanced physique and a practical way of achieving it, but also the associated strength gained with its acquisition.

When the 1902 reader finally decided that the Milo bell might be worth trying, all he had to do was come up with $7.50. As previously explained, most mail-order exercise entrepreneurs prior to Calvert sold only their training programs to customers. If the program called for a piece of equipment, it was either something lightweight and included in the price or the customer was responsible for obtaining it on his own. For obvious reasons, Calvert operated differently; a Milo customer bought the equipment and the training course was then sent for free. Even so, setting the price at $7.50 (comparable to a cost of $166.17 in 2005), not including the shipping fees, ensured that his target audience was primarily the middle and upper socio-economic classes.[92] The average person would have had to work forty-eight hours at fifteen cents an hour, the 1902 national average, to be able to buy one of Calvert's bells—probably not realistic for anyone except those comfortably ensconced in the middle class or higher.[93] For this

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[91] For information on anthropometry and exercise see Donald J. Mrozek, *Sport and American Mentality, 1880-1910* (Knoxville: University of Tennessee Press, 1983), 67-73, 189-225. For a information on the closely related field of phrenology and exercise see J. Todd, *Physical Culture and the Body Beautiful*, 173-85.

[92] Friedman, *Inflation Calculator*, available from www.westegg.com/inflation/.

[93] Scott Derks, *Working Americans, 1880-1999, Volume 1: The Working Class*, 6 vols., (Lakeville, Conn: Grey House Publishing, 2000), 67, and *Volume 2: The Middle Class*, 62, lists the national annual average income for standard jobs as being $489. I derived fifteen cents by dividing this number by fifty-two weeks in a year and then divided this number by sixty hour per week as this seemed to be the average work load.

rather lofty price, the customer received only two cylindrical steel ends, devoid of any identifying marks, and a long pipe handle, or "connecting bar," which was three feet, six inches in length; the customer had to supply his own filler material, i.e. lead shot or sand. For an additional quarter the Milo Bar-bell Company would include a short handle. The price changed to $10.00 shortly after the company moved to its South Water Street address in the second half of 1902. The new price included both the short and long handles and "freight prepaid to any point in the U.S., east of the Mississippi and north of the Carolinas when cash accompanies the order."[94]

With the railroads getting their start in Philadelphia, it became one of the first metropolitan centers to have a complex railway system for the entire city, and it acted as a central hub for the surrounding territory.[95] Calvert was aware of this advantage and used the railroad to ship his barbells around the country. Although slower than express rail, the Philadelphia system allowed Calvert to advise his students that shipping by freight was one-quarter as expensive.[96] Even so, by 1912 a New Yorker paid an extra forty to seventy-five cents, a Chicagoan $1.25, and a West Coast customer an extra $2.50 to ship the largest and heaviest set of Milo barbells.[97] Without question the railroads played an integral part in the Milo Bar-bell Company's success, and even though the business changed its address several times under Calvert's proprietorship, it was always close to a major train station.

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[94] Calvert, *Progressive*, 24. This booklet actually had a page glued to the last page which indicated a change of address for the company and the price changes.
[95] See Jeffrey P. Roberts, "Railroads and the Downtown: Philadelphia, 1830-1900" in *The Divided Metropolis: Social and Spatial Dimensions of Philadelphia, 1800-1975*, eds. William W. Cutler, III and Howard Gillette, Jr., (Westport: Greenwood Press, 1980): 27-55.
[96] Alan Calvert, *Concerning the 1912 Pattern Milo Triplex Bells* (Philadelphia: by the author, 1912), 30.
[97] Ibid.

The Milo Bar-bell Company tried to maintain some semblance of control over its market by continuing to make improvements to the bells. Shortly after introducing his original barbell design Calvert supplied a handle which allowed one cylinder to be converted to a ring-weight or kettlebell.[98] Kettlebells or ring-weights were used for one-handed lifting and were common in the days before plate-loading dumbbells. By 1905 Calvert needed to publish a catalog of equipment since he had made a few adjustments to the handle attachment mechanism of his Milo barbell (the original screw-into-socket type caused too many problems), had beveled the canister edges, and had begun to offer a hollow-globed, shot-filled "professional barbell" and some inexpensive, plate-loading barbells.[99] Calvert didn't think much of plate-loading barbells and, consequently, did not take the same amount of care in their production as he did with his favorites—shot-loading barbells. The plate-loading plates, for example, were "roughly cast with simple flat plate design and sharp edges."[100]

Although business records are not available for his inaugural efforts, his shot-loading Milo bell seemed to have had one major flaw—it took too long to change the weight. In 1912 Calvert said that changing the weight of the bar involved "the nuisance of weighing out the required quantity of shot and pouring it into the ends of the bell."[101]

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[98] Some equipment experts refer to this as a ring-weight handle and some as a kettle-bell handle. Reuben Weaver and Mike BonDurant, "Muscle Museum Handy-Dandy Reference Card No. 1—Evolution of the Milo Barbell," *Muscle Museum Forum* 3(August 2004): 3. Calvert mentions adding the "kettle-bell feature" in 1903 in Calvert, *Concerning the 1912 Pattern*, 1. He advertises the ring-weight feature for the first time in his October 1905 ad in *Physical Culture*.

[99] Calvert mentions in *Concerning the 1912 Pattern*, 9, that the company had quit making the screw-in handle mechanism in 1905. Judging by Calvert's comments the threads were difficult to manufacture and/or hard to keep operable by the lifter. Information about the beveled edges is found in Alan Calvert, *Weighty Testimony* (Philadelphia: by the author, 1905), Reuben Weaver Collection. As for the plate-loading barbells see: Weaver and BonDurant, "Milo Reference Card," 3. The August 1905 *Physical Culture* advertisement indicates that four styles of plate-loading barbells and dumbbells were available, as was the "professional barbell." Jan Todd mentions the availability of plate-loading barbell sets by 1909 in "From Milo to Milo: a History of Barbells, Dumbbells, and Indian Clubs," *Iron Game History* 3(April 1995): 13.

[100] Weaver and BonDurant, "Milo Reference Card," 3.

[101] Calvert, *Concerning the 1912 Pattern*, 5.

One had to make sure that the same amount of shot went into each end; otherwise the balance of the bar would be affected. Although Calvert had designed a hole through which the filler material could be added, the recommended lead shot was expensive and so some men used cheaper, but larger substances. The addition of these alternative materials required unscrewing the retainer plate the entire length of the long bolt. The same procedure was followed when the threads of the screw-plug occasionally became inoperable. At some point someone came up with the novel idea to pre-package the lead into small canvas sacks of a known weight, thereby quickening the rate of weight changes; but, if the lifter had to unscrew the retaining plate from several inches of bolt, it still took time.[102] Apparently Calvert heard back from his students about the problems with the bell, but he didn't make any major adjustments right away.

Shortly after Calvert began the Milo Bar-bell Company other weight-lifting equipment manufacturers began to appear. "Professor" Adrian P. Schmidt, based in New York City, advertised that "physical strength is the backbone of life," but he did not particularly recommend the activity of weight-lifting, especially when "indulged in to excess." He even warned of muscle-binding.[103] He did, however, apply for his own adjustable dumbbell/barbell patent in January 1905—a patent that was granted in June of the same year.[104] Advertisements for his "Monarch" line of barbells competed head to head with Milo bells for consumer attention in *Physical Culture* starting in mid 1905.[105]

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[102] Calvert mentions and advises against the pre-packaging of shot in *Concerning the 1912 Pattern*, 5. These comments were in response to a 1911 patented barbell which had large openings in the end of each sphere. See Patent #990791, Bar-Bell, 25 April 1911, Jesse Stuart Whitley and Amos F. Gaylord, Chicago, found at United States Patent and Trademark Office (USPTO) online website: http://www.uspto.gov/patft/index.html.

[103] Adrian P. Schmidt, *Great Strength* (New York: Ben Franklin Printing, 1904), 14, 11.

[104] Patent #793101, Dumb Bell, 27 June 1905, Adrian P. Schmidt, New York City, NY, found at USPTO online website: http://www.uspto.gov/patft/index.html.

[105] The first advertisement the author found was September 1905, but they could have emerged earlier since the collection of *Physical Culture* magazines available to the author often had the advertising sections cut out.

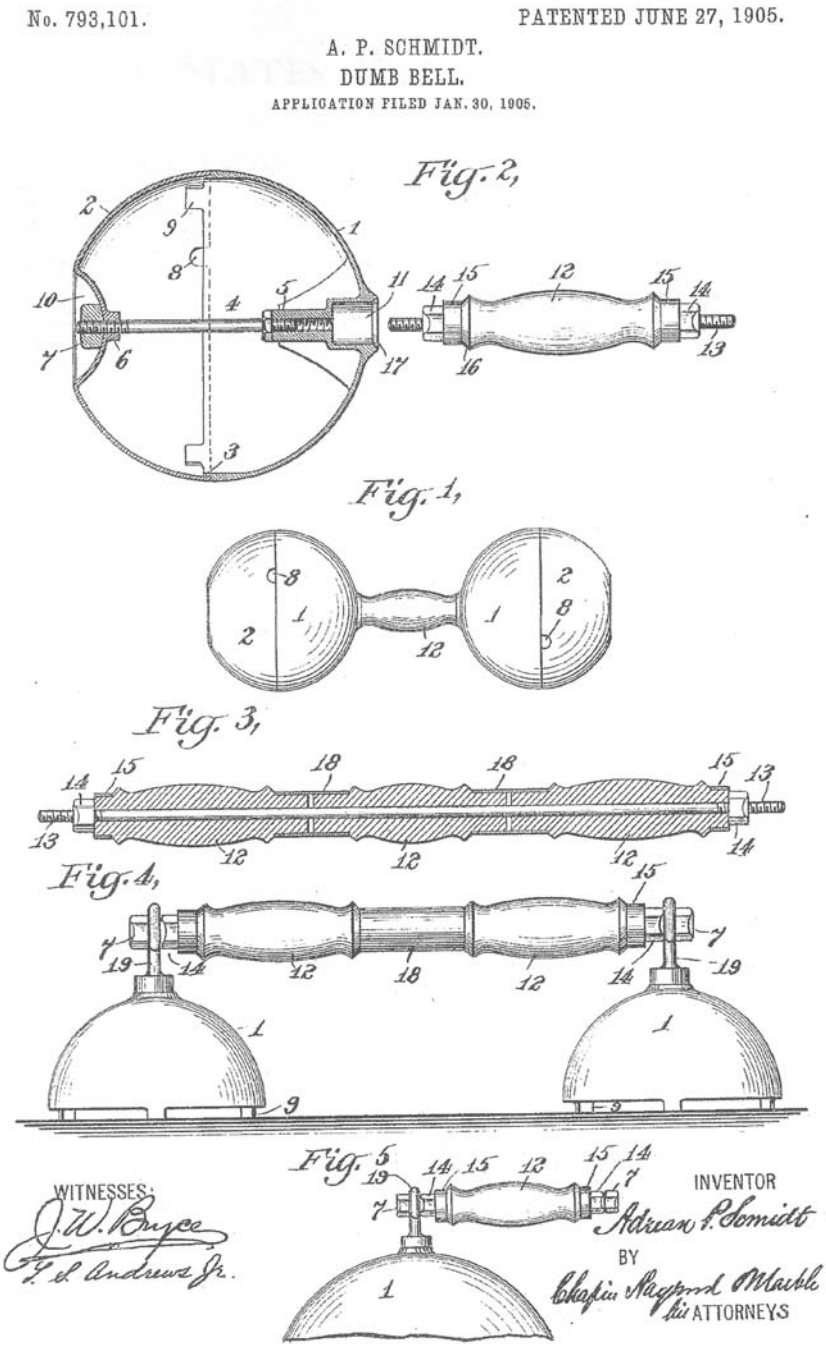

Figure 25. Professor Adrian P. Schmidt submitted this drawing as part of his patent application in 1905. The patent is found on USPTO online website: http://www.uspto.gov/patft/index.html.

To a large extent, Schmidt's patents and ads copied Calvert's wording. He used the same quotes by Flint and Macfadden advocating progressive exercise as Calvert did. Schmidt even imitated Calvert's descriptive language and bell dimensions, "a large handle substituted for a short handle makes an ideal two-handed dumb-bell, which may easily be weighted [with lead shot] to any desired extent. For instance, with the heads or bells of eight inches diameter the dumb-bell as a whole may easily be weighted up to about two hundred pounds."[106] In an effort to win customers from Calvert, Schmidt also attacked the shape of Milo bells. Without explicitly naming the Milo bell he negatively referred to the "cutting edges and protrusions" of its cylinder shape by pointing out that the Monarch equipment was round and therefore didn't "bruise and abrade" the flesh or cause damage to the floor when the lifter lost control and dropped it.[107] Experienced lifters, according to Schmidt, did not use cylinder-shaped, shot-loading bells—a direct attack on Calvert and the Milo Bar-bell Company.

Schmidt also tried to improve upon Calvert's idea of adjustability and advertised his dumbbell as even more adaptable than Calvert's bell. Schmidt's globes could be totally removed from the handle and used as "a heavy spherical weight" such as in "playing 'medicine-ball'" or for "kneading the abdomen to reduce adipose tissue." If left attached to the handle, the globular ends of Schmidt's design could be divided into hemispherical shapes and rotated so that the flat plane could sit on the floor resulting in a "low horizontal bar" useful for gymnastic handstands and "floor dips." A "wrist-exercising device" was also possible if only the handle and one end of the dumbbell was used.[108]

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[106] 1905 Patent, Schmidt.
[107] Adrian Peter Schmidt, *Mighty Muscle and Robust Health* (New York: by the author, n.d.), 15.
[108] 1905 Patent, Schmidt. See also various ads in "Schmidt" folder, Willoughby Collection, TMPCC.

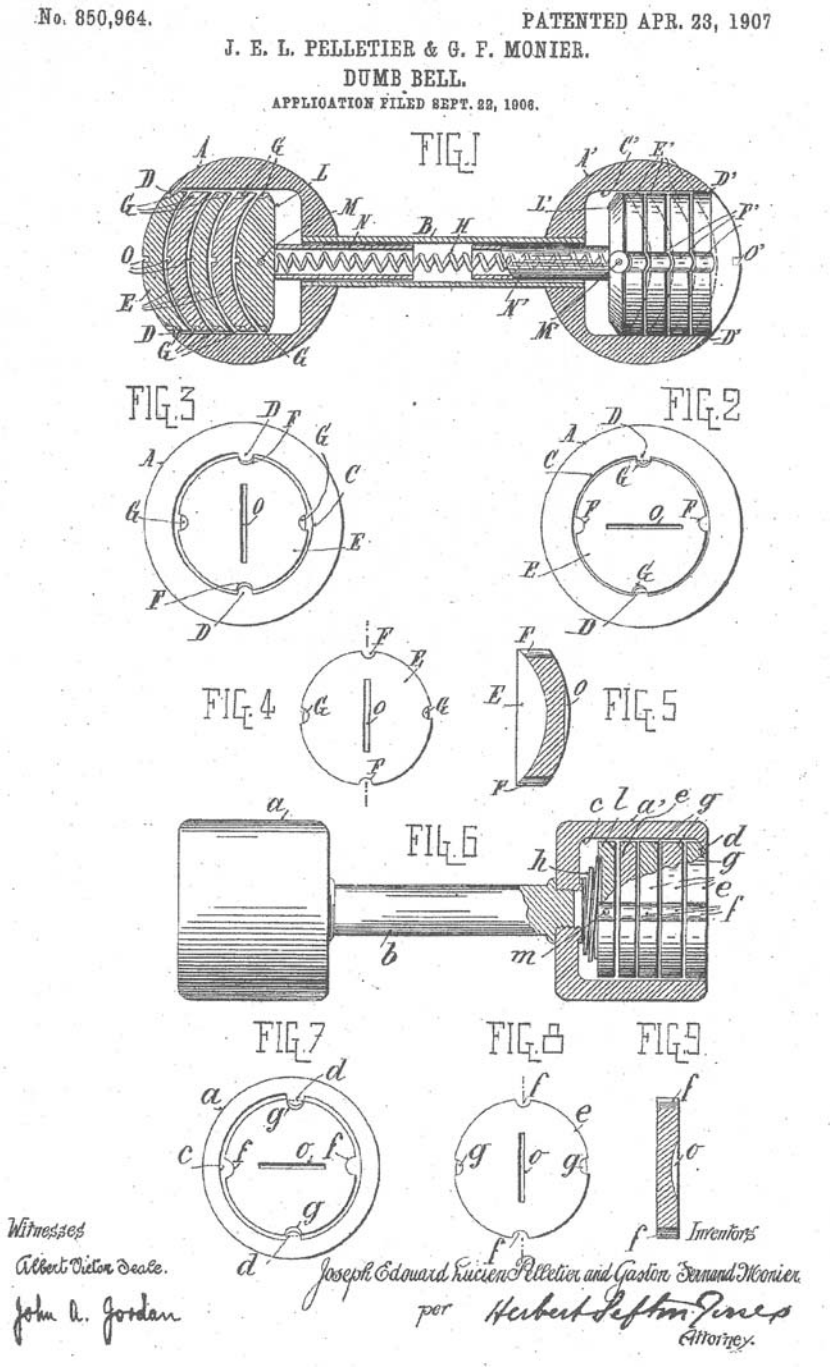

Figure 26. Pelletier and Monier submitted their adjustable dumbbell patent application in 1907. They incorporated an internal spring loading mechanism to keep the plates still during exercise. The patent is found on USPTO online website: http://www.uspto.gov/patft/index.html.

There were others. Frenchmen Joseph Edouard Lucien Pelletier and Gaston Fernand Monier, for example, were granted a U.S. patent for an adjustable dumbbell in April 1907. Although the dumbbell was not a threat to Calvert's heavy barbell business, it introduced a design concept—plates hidden within an external shell—which may have already appeared in Europe—along with an interesting spring-loaded locking mechanism. The spring, depressed during the loading of the plates, expanded once everything was in place thus keeping the internal weights immobile while the dumbbell was in use.[109] Henry W. Titus of New York City also received patents for two small, adjustable dumbbells in late 1910 and early 1911.[110] Titus didn't try to compete with Calvert's large barbells, but aimed instead at the market for traveling businessmen. His dumbbell patents emphasized that the small size and lightness of the dumbbells made them perfect for "packing while traveling."[111]

Samuel Johnson's February 1911 patented barbell seems to be the first to try to enlarge the opening for loading shot in such barbells.[112] His barbell had an oval opening of several inches in the middle of the hollow globe which incorporated the use of a depressed screw-nut to keep the cover in place. No doubt this screw caused problems in the daily use of the bell. Since it was in an exposed position on the surface of the sphere it would have been susceptible to damage if it hit the ground. Jesse Stuart Whitley and Amos F. Gaylord of Chicago received a patent for a bar-bell in April 1911 which seemed to solve the loading problems.[113] Their product was called the "Peerless Bar-bell," and the lifter unscrewed a large cap on the end of each sphere and inserted five to ten pound

[109] Patent #850964, Dumb-Bell, 23 April 1907, Joseph Edouard Lucien Pelletier and Gaston Gernand Monier, Paris, France, found at USPTO online website: http://www.uspto.gov/patft/index.html. No ads were ever seen for this dumbbell.
[110] Patent #980025, Dumb-Bell, 27 December 1910, Henry W. Titus, New York, NY; Patent # 984721, Adjustable Dumb-Bell, 21 February 1911, Henry W. Titus, New York, NY.
[111] 1910 Patent, Titus.
[112] Patent #983372, Adjustable Bar-Bell, 7 February 1911, Samuel Johnson, Battle Creek, MI.
[113] 1911 Patent, Whitley and Gaylord.

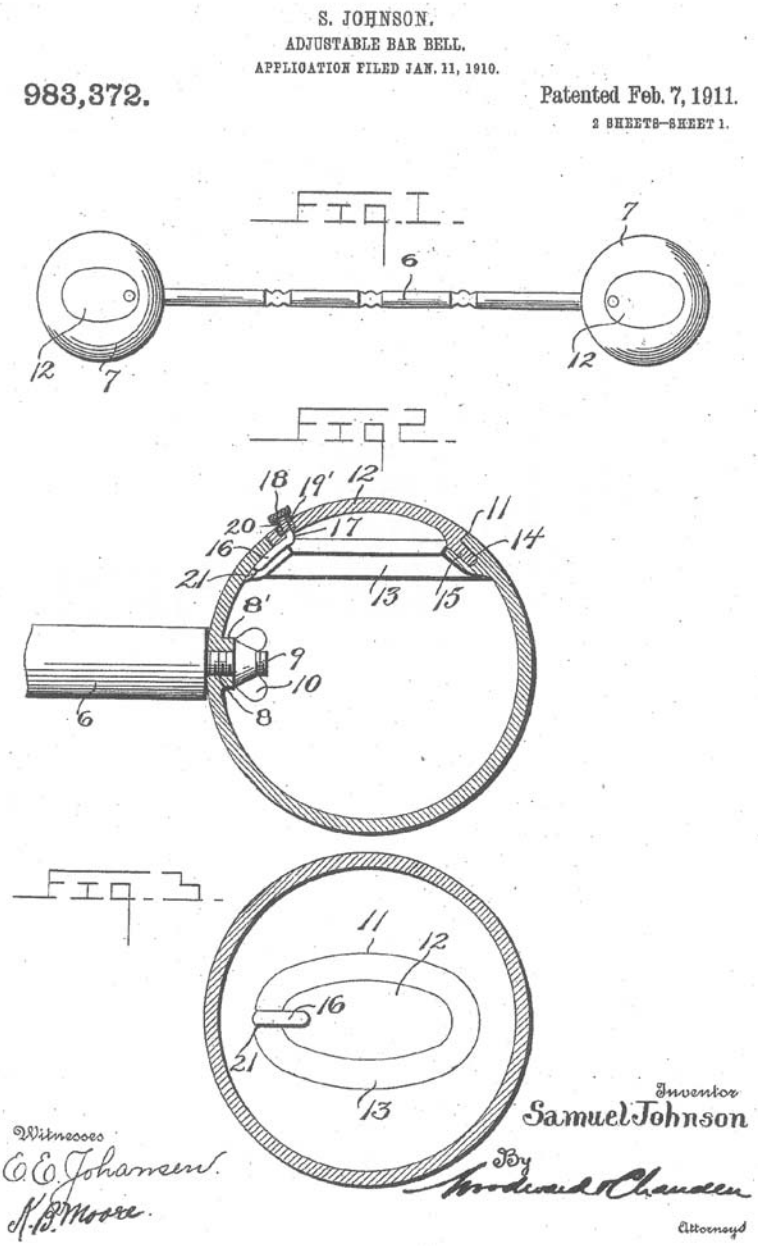

Figure 27. Samuel Johnson's 1911 patent was considered an innovation because of the large holes he provided for loading lead shot to the spheres. Image from USPTO online website: http://www.uspto.gov/patft/index.html.

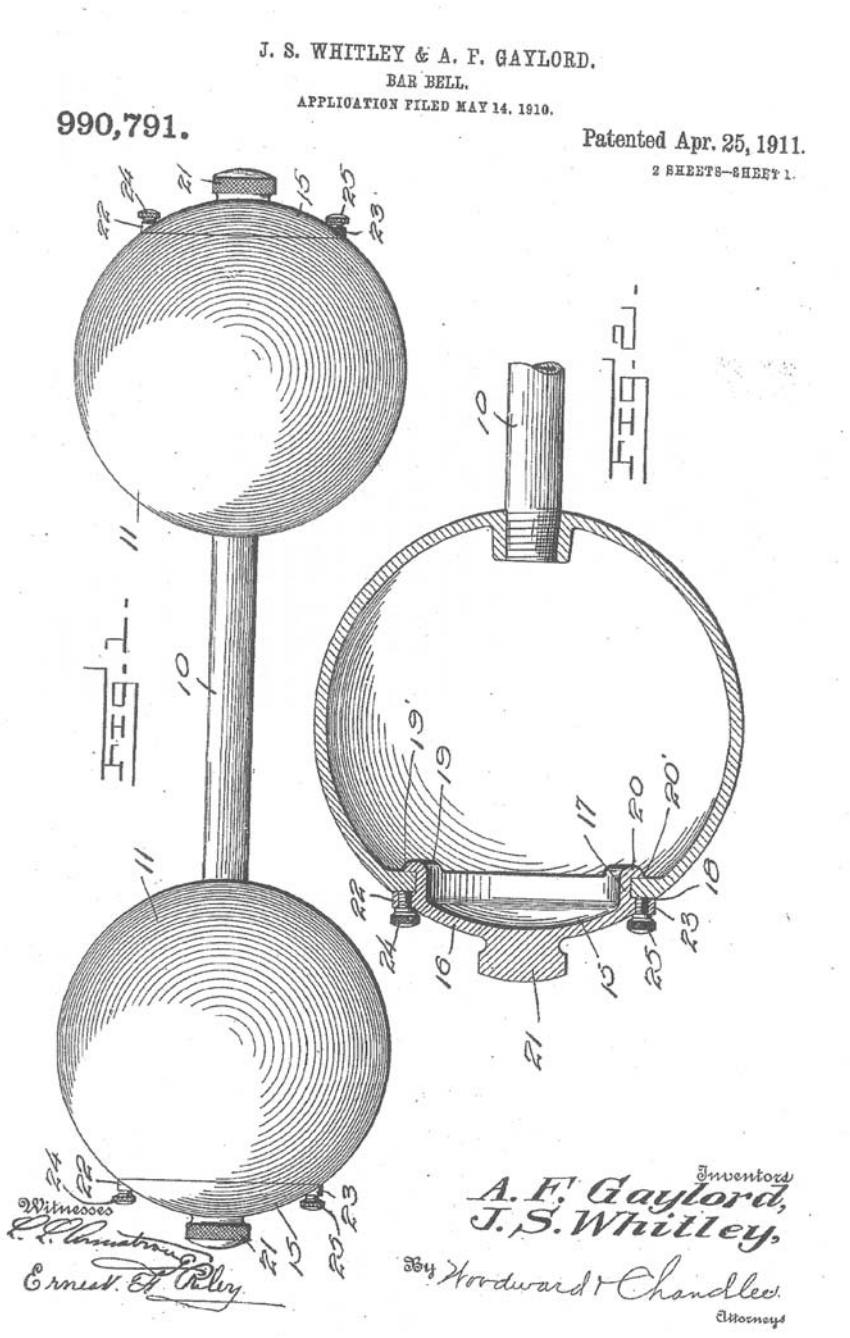

Figure 28. Jesse Stuart Whitley and Amos F. Gaylord's "Peerless" barbell design included a cap on the end of the globe which opened to reveal a large hole for the loading of packets of shot. The patent is found on the USPTO online website: http://www.uspto.gov/patft/index.html.

packets of shot.[114] Similar to Schmidt's attacks on the Milo bell, Calvert referred negatively to the Peerless barbell in his later writings—which suggests he was worried by Gaylord and Whitley's innovation.[115] By 1911 Professor Anthony Barker had become the sole supplier of Schmidt's Monarch line of barbells and began advertising a new line of bells which he called "The Strength-Maker." Barker's bell was based on a shot-loading design patented in early 1912 by Clyde C. Balston with Barker named as the assignor.[116]

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Although competitors were beginning to cut in on his market Calvert, now had more than the Milo Bar-bell Company on his mind. When he opened his company in 1902, Calvert was already twenty-seven years old. With Milo Bar-bell housed in the Mariner & Merchant Building on Bankers' Row, the Corn Exchange National Bank was nearby and its president, Benjamin Githens, was busy "trebling [the bank's] resources."[117] Since only one block separated the two buildings, it is possible that Githens' daughter, Mary Uhle Githens attracted Calvert simply by walking past his doors. Although it is unknown how he met his bride-to-be, and it can't be ruled out that the families knew each other socially, Alan Calvert and Mary Githens married on 18 October 1906 in an Episcopal ceremony—quite likely at Saint Peter's Protestant Episcopal

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[114] Clifford E. Van Slyke, Testimonial letter to Drs. Gaylord & Whitley, 25 June 1910, unknown magazine, unknown date. See also an advertising pamphlet Gaylord & Whitley, *Price List and Description of the Peerless (Combination) Bar-Bell* (Oakland, CA: by the authors, n.d.). Both items are found in the Ottley Coulter Collection, TMPCC.

[115] Calvert, *Concerning the 1912 Pattern*, 5.

[116] The note that Barker was sole supplier of Monarch equipment is found on the last page of Schmidt, *Mighty Muscle*. Patent #1019584, Dumb-Bell and the Like, 5 March 1912, Clyde C. Balston, New York City, NY, found on the USPTO online website: http://www.uspto.gov/patft/index.html.

[117] "Banking and Financial Notes," *Bankers' Magazine* 79(September 1909): 476.

Church.[118] City directories indicate the Calverts stayed with her parents at 327 South Sixteenth Street immediately after their marriage, but they were living at 4242 Chestnut Street by the time their first child, Benjamin Githens Calvert, was born a year later.

Being the only daughter of Benjamin and Mary Jane Prettyman Githens of Philadelphia, Mary was undoubtedly used to having certain comforts. Mary's father served as bank president between 1900 and 1910, had a successful grocery business from the 1860s until 1910, and had "interests in several canneries on the Peninsula."[119] Surviving family papers also indicate a financial tie with the Pennsylvania Railroad Company, although the exact relationship is unknown.[120] Benjamin Githens also invested in a steamboat venture on the Delaware Peninsula—the Lebanon Steam Navigation Company. In 1887, this company renamed their newly acquired and newly expanded 106-foot steamer, the Mary U. Githens, in honor of Benjamin's ten-year old daughter.[121] Philadelphia city directories indicate that Githens' successful grocery store—Githens, Rexsamer & Company—was located at 40 South Front Street and was famous for selling fresh produce, as well as canned fruits and vegetables.[122] Githens even made Moses King's 1902 list of notable Philadelphians for his banking and grocery business, and a magazine of the times described Githens as a successful Philadelphia businessman.[123]

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[118] Marriage certificate, Philadelphia City Archives. The church is assumed to be Saint Peter's due to the Reverend Jesse Y. Burk's 325 Lombard Street address on the marriage certificate—the same block as Saint Peter's Church and Rectory. See http://www.philadelphiabuildings.org/pab/app/pj_display.cfm/20378 for more information.

[119] Delaware Department of Transportation, *Archaeology—Lebanon and Forest Landing: Steamboating* (viewed 17 May 2006); available from http://www.deldot.gov/static/projects/archaeology/lebanon /steamboating.shtml.

[120] Joseph B. Handy Family Genealogical Files.

[121] Apparently this steamboat had a colorful history; it is recognized as the most memorable steamer of the Lebanon line of ships. See Delaware DoT, *Archaeology—Steamboating*.

[122] A search on the internet for "Rexamer" found several canning labels, a list of canned fruits, and a poster advertising fresh "Ripe Red Tomatoes" for the company.

[123] Moses King, *Philadelphia and Notable Philadelphians* (New York: Moses King, 1902), 30. Philadelphia City Directories, 1900-1910. Various banking magazines also indicate that Benjamin Githens

Figure 29. This poster for Githens & Rexsamer Grocers with the handwritten date of 1869 on the edge is housed in the Library of Congress. *Courtesy of Library of Congress, Prints and Photographs Division, [LC-USZC4-3606]*.

was a successful Philadelphia merchant. See "Philadelphia Banks, Bankers and Trust Companies," *Bankers' Magazine* 63(September 1901): 476.

When Benjamin Githens died suddenly on 6 October 1910 while on vacation in Atlantic City, New Jersey, he "was possessed of personal property to the value of $100,000 (and upwards) of real estate." In his will he absolved his son, Augustus, of $35,000 in loans and bequeathed his daughter, Mary Githens Calvert, $35,000 cash along with $1000 per annum.[124] Although the South Sixteenth Street property is not listed as one of the several owned by Benjamin Githens as part of his estate, Alan and Mary Calvert began residing at the address at about this time. This suggests that the elder Githens either gifted or sold the property to the Calverts shortly before his death. The Calverts needed a larger home as they had both a son and a daughter by 1910—Benjamin born 8 October 1907 and Jean born 29 July 1909.[125]

Although the relationship between Alan and his wife is, for the most part, unknown, it appears that Mary had trouble understanding Alan's passion for weight-lifting. Ottley Coulter, who knew Calvert during the Teens, wrote to Norm Thompson in 1974 reminiscing about their beloved iron game and comparing their respective collections of memorabilia. In the letter Coulter mentioned that Mary Calvert, "apparently of a tony nature, was ashamed of his [Alan's] line of work."[126] She, according to Coulter, always introduced Alan to her friends as a broker since his business "was not, in her opinion, an intellectual pursuit and not dignified and important enough to suit her."[127] In another letter to Frank J. Thompson, Coulter said Mary was "ashamed that he [Calvert] would make his living with such an uncultured thing as muscles."[128]

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[124] Benjamin Githens Will, 1910, No. 2185. Viewed at Philadelphia City Archives, 3 July 2004.
[125] Birth records on file at Philadelphia City Archives, viewed 30 June 2004.
[126] Ottley Coulter, letter to Norm Thompson, 20 July 1974, from Ottley Coulter Collection, TMPCC.
[127] Ibid.
[128] Ottley Coulter, letter to Frank J. Thompson, 13 August 1974, from Ottley Coulter Collection, TMPCC. Where Coulter received his information is unknown, but Bob Hoffman wrote similar information in one of his articles when trying to explain the reasons for his success by pointing out a lack of sincerity as the reason for the Milo Bar-bell Company's demise. See: Bob Hoffman, "Sincerity Necessary for Success," *Strength & Health* 3(August 1935): 62-3, 84-5.

This attitude is corroborated by Alan Calvert's grandson, Howard Calvert Wiig, who—even though he had never met his grandfather and had only met his grandmother, Mary Calvert, a few times before she died in the late 1950s—had always been led to believe that his grandfather had been involved with banking or finances of some sort.[129] Apparently, Calvert's efforts at convincing others of the usefulness of his products and the beauty of the human physique were not welcomed or accepted in his own home.

Whatever his family life was like, and before his wife's inheritance materialized, Alan Calvert still had to provide for his family and that meant tending to his business. Feedback from students asking him to perfect the Milo product along with the rise of competitors such as Adrian Schmidt and his "Monarch" barbells undoubtedly began to exert pressure on Calvert. In any case, he patented a second, much more efficient barbell in 1908.[130] With this new design Calvert addressed the flawed weight-change feature of his initial efforts at barbell manufacturing. His new "Triplex" model looked vastly different than the original Milo; it abandoned the sharp edges of a cylinder in favor of spherical ends. Named because it could be used in three different configurations—as a barbell, as a dumbbell, and as a kettlebell—his new bell now closely imitated the impressive exhibition barbells and dumbbells used by professional strongmen. But inside the globes there were surprises. One-half of each globe encompassed the increasingly popular quick-changing, flat plates. The other half of the globe stayed true to Calvert's teaching philosophy by consisting of a hollow chamber to be filled "to a delicate extent" with lead shot, or its like.[131] Tom Lincir, president and founder of the Ivanko Barbell

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[129] Personal communication, Howard Calvert Wiig, 28 June 2005.

[130] Patent #907965, Dumb Bell and the Like, 29 December 1908, Alan Calvert, Philadelphia, PA. Found on the USPTO online website: http://www.uspto.gov/patft/index.html.

[131] Ibid. For more information on the Triplex model see also Weaver and BonDurant, "Milo Reference Card." The patent drawings illustrate that Calvert had three different designs for the plates in mind: scalloped plates which would form the outer half of the globe, flat beveled plates which would sit inside of a shell, and flat plates with beveled outer edges which corresponded to the globe shape but without the shell. Aesthetics apparently won out as the shell became standard.

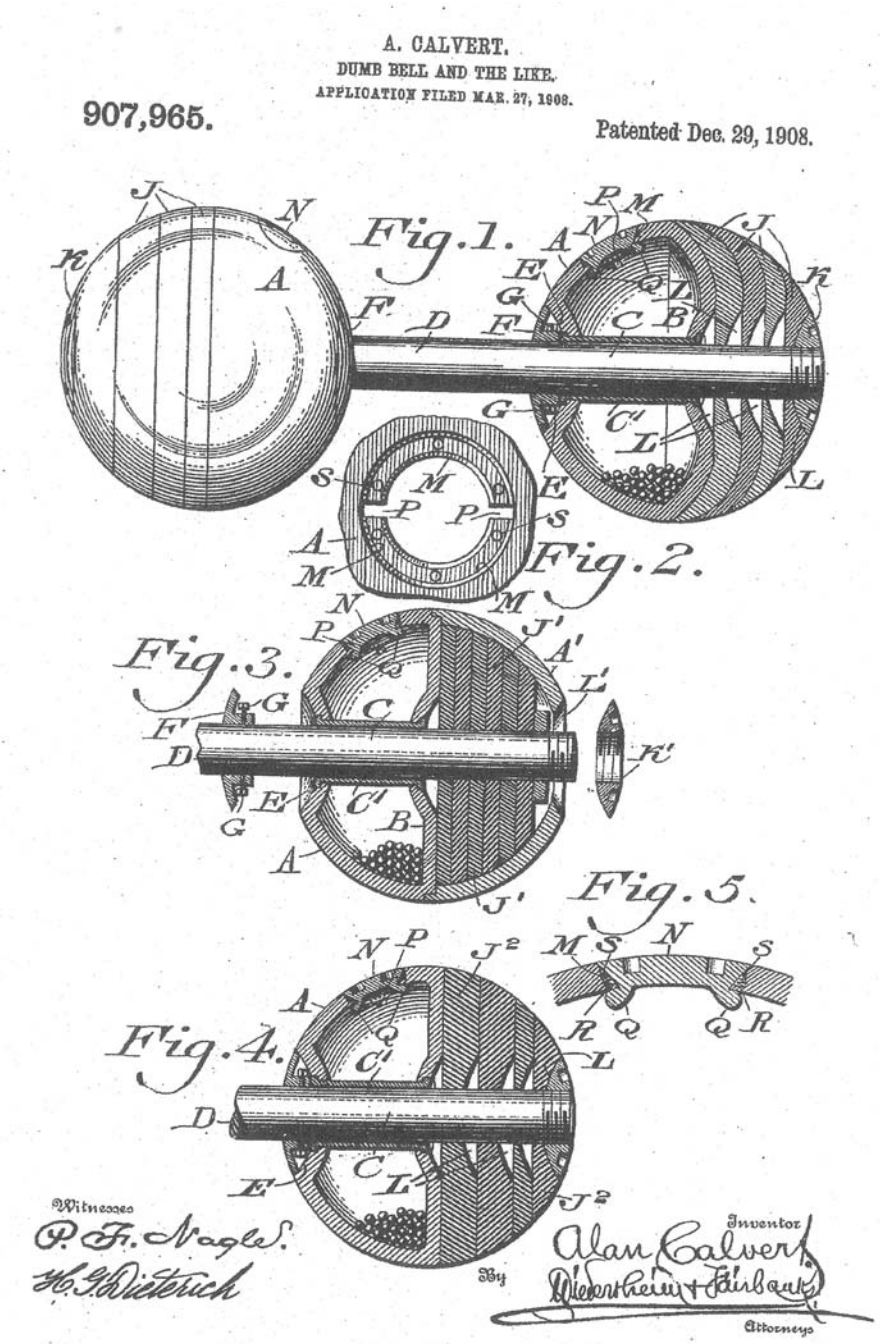

Figure 30. Calvert's Triplex patent (1908) allowed both plates and lead shot to be used simultaneously. Image from USPTO online website: http://www.uspto.gov/patft/index.html.

Company and a collector of antique barbells, calls these early models of half globular and half plate-loading qualities a "transition barbell."[132] It bridged the gap between the aesthetically-pleasing globes of the performing strongman and the more time-efficient plate-loading barbells of the future. The new design also addressed handle strength and stability issues by having the handle pass through the entire bell instead of just screwing into the base of the cylindrical end as it did on the original Milo. This feature created greater strength and reduced the likelihood that the bar would warp with heavy weights. It also made changing out the handles much easier since no shot could escape the shot-loading compartment.

Calvert is normally given credit for the advances in his barbell designs, but he may have had help from his employees. Although no company records exist, hints concerning his employees can be gathered from Calvert's writings and letters. For example, Calvert repeatedly mentioned R.E. "Teddy" Mack, as being one of his "lieutenants."[133] Calvert described Mack as "one of the most celebrated lifters in his class in the North of England, and what he doesn't know about lifting and training is hardly worth mentioning."[134] Mack claimed to have worked backstage for Sandow and briefly helped train the strongman John Marx.[135] As an English strongman Mack would have been a great help to Calvert as someone who had "been there, done that." According to Siegmund Klein, Mack was also a very good mechanic and may have helped Calvert in the design process for his bells.[136] Regardless of who designed the new

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[132] Tom Lincir, "Strength Archaeology," *National Fitness Trade Journal* (Fall 2003): 30-3.
[133] Alan Calvert, "The Lifting Contest at Baltimore, April 14," *Strength* (July 1915): 13.
[134] Ibid.
[135] Ibid., 17.
[136] Siegmund Klein, letter to David P. Willoughby, 1 January 1981, from "Sig Klein" Folder, Willoughby Collection, TMPCC.

Triplex product, it was a great success. It represented the best of both barbell worlds—half shot-loading for fine adjustments and half plate-loading for quick changes of weight.

For twenty dollars, the new "Triplex Combination Bell" arrived at one's doorstep with handles for a barbell, a dumbbell, and two ring weights; two small collars to hold the plates in place; two end caps to "form an unbroken continuity" with the curvature of the bell; two wrenches; and two eight-and-one-half inch globes consisting of the hollow, shot-loading chamber and a pair of plates for each of the following weights: ten-, seven-and-one-half-, five-, and two-and-one-half-pounds.[137] Advertised as a tool to give the customer "big broad shoulders, a deep full chest, tapering to a powerful square built waist, arms that are masses of muscle and powerful shapely legs," who could resist the new Triplex?[138] In case the customer needed more evidence as to its usefulness, Calvert once again referred to an expert in the fields of physical culture and medicine—Dr. Fernand LaGrange.

Dr. LaGrange, one of the pioneers of exercise physiology, wrote *Physiologie des exercices du corps* (*The Physiology of Bodily Exercise)* in 1889 and seemed to be one of the resources Calvert used for the scientific foundation of his training philosophy. According to Calvert, LaGrange's "knowledge of Physiology, Anatomy and medical subjects, especially in connection with physical culture was unlimited."[139] LaGrange assured Calvert's would-be customers that hypertrophy of the heart (or "athlete's heart" as it was commonly and negatively called) due to "the influence of muscular work" was actually beneficial to the human system.[140] Wanting his customers to get the full effect of

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[137] 1908 Patent, Calvert; Alan Calvert, *The Royal Road to Strength* (Philadelphia: The Milo Bar-bell Co., n.d.), Harold Weiss Collection, TMPCC; Weaver and BonDurant, "Milo Reference Card."
[138] Calvert, *Royal Road*, 3.
[139] Ibid., 7.
[140] Ibid.

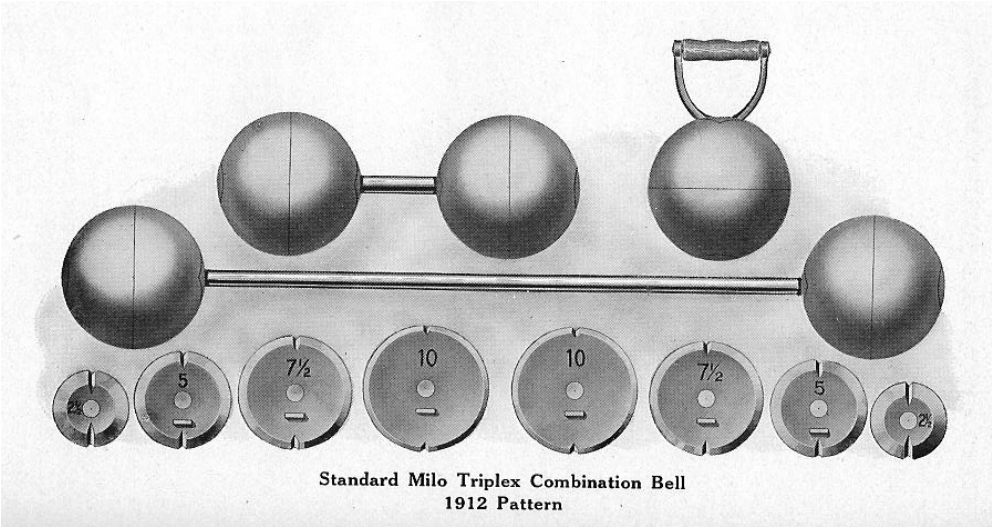

Figure 31. This drawing of the new "Standard Milo Triplex Combination Bell" appeared in Calvert's 1912 publication, *Concerning the 1912 Pattern Milo Triplex Bells*.

LaGrange's knowledge, Calvert quoted an extensive passage from the English translation published in 1890:

> …while injudicious exercise might have a bad effect on the heart, yet the heart is a muscle and should therefore hypertrophy under the influence of muscular work, for the reason that exercises cause increased action of the heart muscle. Usually, in fact, this organ does become hypertrophied in the true sense of the word: that is to say, it becomes thicker, heavier, with stronger walls, and able to propel the blood more vigorously. True or concentric hypertrophy of the heart has been observed in most athletes and gymnasts.[141]

Whether due to its improved design or Calvert's use of scientific principles in its advertisements, the Triplex model was a hit. Calvert boasted in 1912 that "the Milo Triplex Bell commands the highest price of any adjustable combination dumb-bell made in America."[142] He went on to state that "99 out of 100 men who inspect our stock select the Milo Triplex, although it is much higher in price than the bells of the ordinary

[141] Ibid. The original quote (with some minor changes in wording of the above first sentence, but overall the same sense) is found in Fernand LaGrange, *Physiology of Bodily Exercise*, 67 vols., vol. 66, *The International Scientific Series* (New York: D. Appleton and Company, 1890), 158.
[142] Calvert, *Concerning the 1912 Pattern*, 16.

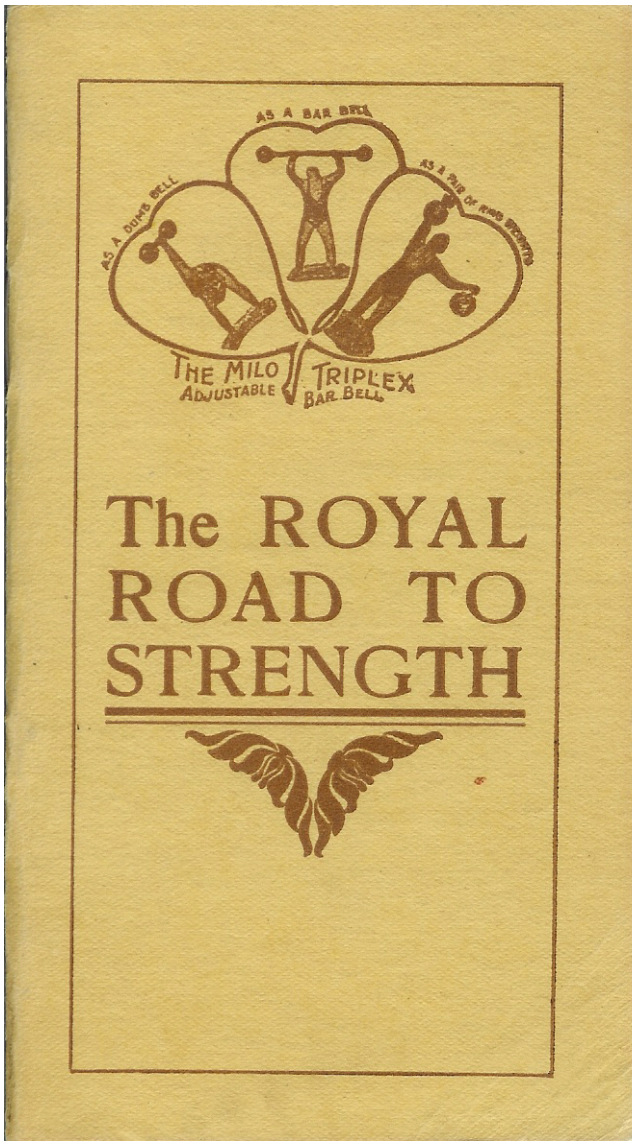

Figure 32. *The Royal Road to Strength* became one of the Milo Bar-bell Company's advertising brochures around 1909 which proclaimed the benefits of progressive weight-lifting and the merits of Milo Triplex barbells, while identifying the limitations of plate-loading-only barbells. *Image from The Harold Weiss Collection, TMPCC.*

adjustable variety."[143] Intending to play upon the popularity of this bell Calvert decided to re-enter the international marketplace. The advertising in *Vitality & Health Culture* in 1904 may have been his initial attempt to enter the international marketplace, but it didn't last long—due most likely to shipping concerns and to the fact that Thomas Inch, one of the foremost physical culture and lifting proponents in England, had begun to advertise his own barbells.[144] Even so, when the opportunity presented itself in 1909, Calvert decided to expand into other North American markets.

One of the triggers of this decision was a 1909 letter from Jose V. Prada, Jr., of Celaya, Mexico, about the Milo training program and the availability of foreign strength publications.[145] After several communications it appears that Prada offered to translate into Spanish *The Royal Road to Strength*, a small advertising pamphlet published by the Milo Bar-bell Company which announced the Triplex model barbell and explained "The 'Milo' System of Progressive Weight Lifting."[146] During their exchanges Calvert used Prada as a source of information about potential Mexican markets. For example, Calvert asked Prada for the advertising rates and publication schedule of the *Mexican Herald*. Soon, Calvert decided to "try a certain amount of circularizing in Mexico" and asked Prada to mail a list of "'well-to-do' young business men."[147] Always the consummate marketer, Calvert even asked Prada how he and his countrymen liked to be addressed—"Latin-Americans, Spanish-Americans, or simply Mexicans."[148] Although it is unknown if Prada followed through with this translation, he did tell Calvert that the small number

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[143] Ibid., 17.
[144] For more information about Thomas Inch, see Jan Todd, "The Strength Builders: A History of Barbells, Dumbbells, and Indian Clubs," *International Journal of History of Sport* 20 no.1 (2003): 84.
[145] Calvert to Prada, 23 June 1909.
[146] Calvert, *Royal Road*.
[147] Alan Calvert, letter to J. V. Prada, Jr., 27 September 1911, from Ottley Coulter's Milo Scrapbook, TMPCC.
[148] Ibid.

of "well-to-do" people in Mexico and the threat of revolution made expansion there risky.[149] Calvert lost his tenuous connection to the Mexican market when Prada traveled to the States, possibly because of the Mexican Revolution which began in 1910, and joined Ottley Coulter in a circus strength act during late 1911 and 1912.[150] This was, apparently, Calvert's last effort at international business.

Customers could purchase Milo products a number of ways. One could visit the Milo Bar-bell Company, order a bell from a dealer or a Milo student working on commission, or mail in an order form from an ad in a magazine like *Physical Culture* or in one of the small advertising pamphlets Calvert printed.[151] If a person visited Milo headquarters, he was quickly immersed in strength lore. The walls were covered with photographs of professional and amateur strongmen, as well as images of Calvert's numerous "students." The pictures were displayed as inspiration as well as proof of Calvert's results. Various publications from around the globe dealing with strength or the world of strongmen could also be found lying on tables and desks.[152] Visitors would also have seen the various Milo products on display. They could have handled the different sizes of globes available from the more standardized sizes of seven-and-one-half to nine-and-one-half inches in diameter to those designed to give a spectacular impression in show business—a monstrous sixteen inches in diameter. They could also choose the

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[149] Alan Calvert, letter to J. V. Prada, Jr., 27 October 1911, from Ottley Coulter's Milo Scrapbook, TMPCC

[150] For a brief biography of Prada see Jan Todd and Michael Murphy, "Portrait of a Strongman, the Circus Career of Ottley Coulter," *Iron Game History* 7(June 2001): 9-11.

[151] For information about Calvert's selling barbells through his students using commission see: Alan Calvert, letter to R.B. Platt, 24 May 1904, Reuben Weaver Collection; Alan Calvert, letter to Ottley Coulter, 26 January 1911; Ottley Coulter's Milo Scrapbook, TMPCC.

[152] Calvert subscribed to European publications at least as early as 1906. See: Alan Calvert, *Confidential Information on Lifting and Lifters* (Philadelphia: by the author, 1926), 20. Calvert occasionally referred to magazines read or seen at the Milo building when communicating with lifters, especially Ottley Coulter. See Alan Calvert, letter to Ottley Coulter, n.d.; Ottley Coulter's Milo Scrapbook, TMPCC. This letter is found between an October 1912 and April 1913 letter and for the most part Coulter kept his scrapbook in chronological order.

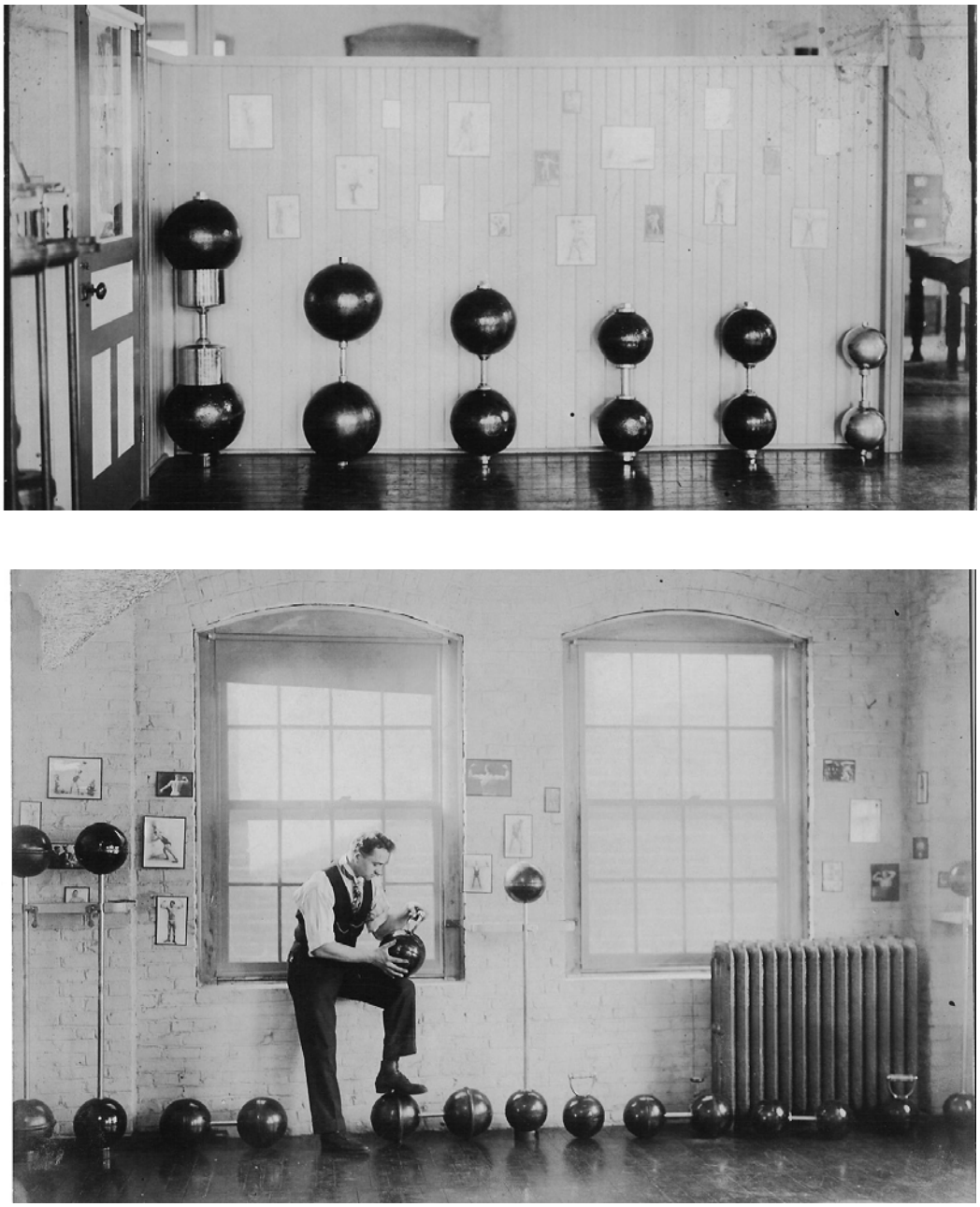

Figure 33. In the January 1916 issue of *Strength*, Calvert ran several photos on pages 14-15 showing his latest equipment and new showroom on Olive Street.

length and composition—hollow pipe or cold-drawn solid steel—of the nickel-plated handle(s) they wanted, as well as determine the types and number of grips on the bars.

Calvert's company did not have its own training gym, but according to historian David Willoughby, who was one of Calvert's 1918 "students," he had a "display room" and a room "full of weightlifting equipment with which the visitor's strength could be tested—provided he was in the mood for demonstrating it before an expert."[153] If Calvert really liked a visitor, he may have received an invitation to join Calvert in a training session at Herrmann's Institute of Physical Culture on the fourth floor of Keith's Chestnut Street Theatre building. Within a few years of the Milo Bar-bell Company opening its doors, Calvert began to stage "private matches" in his exhibition area between "tried and skilled men."[154] The area where this sort of truly heavy lifting occurred was apparently housed in the company's factory. As time passed, Calvert encouraged his advanced students and/or other strongmen who happened to be visiting the Milo offices to friendly, impromptu competitions of strength in his exhibition room at the "Milo Bar-bell Factory." These small gatherings soon escalated into full blown "exhibitions," with notices sent out and numerous men of strength—"pupils…outside experts and connoisseurs"—invited.[155] No admission was charged and Calvert described the occasions as having small, but well-informed audiences. "There never were more than one hundred men present," he wrote, "but if there happened to be eighty men in the audience, at least seventy-five of them would be expert lifters."[156] The first portion of the show consisted of various exhibitions of lifting by the invitees, including any possible record attempts. After the completion of the serious lifting, the audience mingled and

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[153] David P. Willoughby, "Alan Calvert's Views on Strength and Muscular Development," unpublished? manuscript, n.d.). Although undated, information within the manuscript date it to 1982. Willoughby died in January 1983 so the piece may not have been published. Willoughby Collection, TMPCC.
[154] Calvert, *Confidential Information*, 10. See also: Calvert, *Modern Milo*, 10.
[155] Ibid.
[156] Alan Calvert, "Who Is Joe Nordquest?" *Strength* 9(September 1924): 88.

met with the lifters and then a "general lifting carnival" took place.[157] According to Calvert these could last for three hours after the original exhibition. During that time "there were [strength] stunts performed that would have brought thousands of dollars to the box office of any vaudeville theater."[158] Descriptions and pictures of these events were published in *Strength* magazine throughout the mid and late teens. These gatherings became memorable events with iron gamers recalling them more than twenty years later.[159]

THE EARLY TRAINING COURSES

One of Calvert's earliest practices included mailing a printed training course and set of instructions to every customer who purchased a Milo barbell. According to Sig Klein's article on *Strength* magazine in 1935, Calvert's first course was based on the work of Theodor Siebert of Germany.[160] Harry Paschall, in his *Strength & Health* column, "Behind the Scenes," quoted Klein as saying, "I once asked Calvert how he came to make up the old Milo Barbell Courses. He told me he obtained the Siebert Course of Instruction from Prof. Theodor Siebert of Halle/Salle, Germany, using this as a basis for his course."[161] David Willoughby and Bob Hoffman also credit Siebert with the inspiration for Calvert's original course, although they may have been relying on Klein's information when writing their pieces several years later.[162] In 1925, however, Calvert wrote that after studying Sandow's methods—but before going into business for himself—he had contacted English authorities on weight-lifting, "studied *their* methods,

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157 Ibid.
158 Ibid.
159 Norm Miller, "22 Years Ago," *Strength & Health* (September 1939): 23, 43-4; Raymond Van Cleef, "News of the Past," *Strength & Health* (May 1946): 48.
160 Klein, "*Strength* Magazine as I Knew It in It's(Sic) Glamerous(Sic) Past of Years Ago," *Strength & Health* (July 1935): 92.
161 Paschall, "Behind the Scenes," *Strength & Health* (December 1952): 46.
162 Bob Hoffman, "Looking Back at the Last 50 Years," *Strength & Health* (May 1982): 29; Willoughby, "Alan Calvert's Teachings vs. Modern Methods," *Iron Man* (May 1955): 23.

and got so that I knew as much about their lifters and records as anyone could from across the ocean." He further explained that he had investigated German, Austrian, and French methods at a later date, "learning a lot of things which were valuable, tho[sic] practically unknown either in England or in this country."[163] When Jose Prada contacted Calvert in 1909, apparently one of the questions he asked Calvert was whether the Milo course was Siebert's course. Calvert answered, "Our book of instruction is original—not a translation of Siebert's."[164]

While it is plausible that Calvert ordered Siebert's course and generally patterned his own course after it, the fact that Calvert didn't speak or read German—and that Siebert probably didn't speak or write much English—made any transfer of detailed information difficult.[165] Calvert admitted in letters to Ottley Coulter that he didn't speak much German. One letter recounting Calvert's 1917 experience of trying to communicate with the German strongman, George Lettl, is endearing and telling:

> I have had two conversations with him [Lettl], and owing to a slight knowledge of German I was able to follow his general drift. His English is very badly broken; you might call it smashed. With the help of signs and a book of press notices, and some of my books and magazines we manage[d] to keep up a conversation, but I know positively that I would not be able to elicit much information about his training methods."[166]

Calvert's explanation about contacting the German experts at a later date makes more sense since his wife was reported to have been a "linguist, understanding French and German," and to have translated the foreign weight-lifting publications for him.[167] In

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[163] Calvert, *Natural Strength*, 4.
[164] Calvert to Prada, 23 June 1909. Found in Ottley Coulter's Milo Scrapbook, TMPCC.
[165] In a letter to Ottley Coulter on 25 October 1912, Theodor Siebert confesses to a limited amount of English. He wrote, "I will you write in English, but I have not perfection in this language." The letter is readable and, for the most part, grammatically correct, so Siebert most likely knew a little English around 1900, but how much is unknown. Ottley Coulter Collection, TMPCC.
[166] Alan Calvert, letter to Ottley Coulter, 5 September 1917, from Ottley Coulter's Milo Scrapbook, TMPCC.
[167] Klein to Willoughby, January 1981.

all likelihood, Calvert's first course may have been, as Ray Van Cleef suggested, simply a compilation of exercises, especially those common among strongman circles at the turn of the century.[168] A more likely person to have influenced Calvert's original course may have been Sandow. Sandow's exercises and their descriptions found in his 1894 book, *Sandow's System of Physical Training*, are roughly comparable to those presented by Calvert. These exercises are named in a slightly different way, but the descriptive text is remarkably similar. For example, Calvert described his first exercise, "Quick Lift from Ground to Shoulder with One Hand":

> Stand with feet about twelve inches apart. Place bell on floor between and parallel with feet, the rear bell being on a line with heels. Stoop by bending at knees and hips, keeping back almost straight; rest the left hand on left knee and grasp handle of bell with right hand…Now rise quickly to an upright position by straightening the legs…Now without stopping the upward movement of the bell, step backward with right foot, and dip the knees slightly, and at the same time pull bell in towards shoulder, and rest in position.[169]

Sandow's "How to Lift by One Hand from the Ground to the Shoulder" was described in the following manner:

> Place the dumb-bell longitudinally between the feet, sphere-ends to the front and rear, the connecting bar of the bell—which should be 4 ½ inches in length—in line with the hollow of the foot, the heels ten inches apart, and the toes turned out at a comfortable angle…In lowering the body to grasp the dumb-bell, bend the knees, but keep the back straight. Grasp the dumb-bell with the right hand, the arm straight, the left hand resting on the forepart of the left thigh. Without pausing, pull the dumb-bell straight up to the chest, using the left thigh as a fulcrum; at the same time, flex the forearm at the elbow, and straighten the knees. The instant this is done, dip the knees smartly, and, by a simultaneous motion, turn the bell upwards by getting the right forearm underneath it, the elbow resting on the hip-joint, the left hand at ease on the left hip.[170]

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[168] Van Cleef, "Builder of Men," 12.

[169] Alan Calvert, *Instructions in the "Milo" System of Progressive Weight Lifting* (Philadelphia: by the author, 1903), 7, Reuben Weaver Collection.

[170] Eugen Sandow, *Sandow's System of Physical Training* (New York: J. Selwin Tait & Sons, 1894), 219. Many physical culture/training entrepreneurs copied other programs with minor variations during this time. For example Charles A. Sampson, in his 1895 *Strength, a Treatise on the Development and Use of Muscle*, described his Heavy Dumbbell Exercise as the following: "Stand erect; heels about one foot apart, the feet forming nearly a right angle; the dumb-bell lying between them, bisecting the angle, the bulbs facing front

Regardless of whether Siebert, Sandow, or someone else served as the guiding light for Calvert, Siebert would have been a good instructor. Having written the "standard work for the study of training in strength sports" in 1898, *The Catechism of Athletics*, Siebert was a well-respected physical culture and strength training specialist.[171] Siebert knew Dr. Vladislav Krajewski of St. Petersburg, Russia, another well-known strength training expert and a physician to boot, and helped him train wrestling's heavyweight champion of the world, George Hackenschmidt, around the turn of the twentieth century.[172] Siebert reportedly based his training philosophy on information he learned from Professor Attila while the strongman was still teaching and touring across Europe.[173] Calvert even used pictures of Siebert in his book, *The Truth About Weight Lifting*, and referred to him on occasion in his articles in *Strength,* so he must have contacted him at some point or at least studied his courses and methods. Calvert also referred to Professor Attila in *Progressive Weight Lifting* as "the great trainer" who relied on the use of heavy weights to build strength in his pupils.[174] Mentioning contacts with such esteemed members of the strength world would have definitely increased Milo Barbell's reputation for providing expert advice. This would be important in the ensuing years.

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and rear; the center of the shaft…opposite the insteps…Bend down by flexing the knees and hips, keeping the back unbent. Rest the left hand on the thigh, halfway to the knee, and grasp the dumb-bell with the right hand as near the rear bulb as possible. Take a long, deep breath, and swing the dumb-bell up onto the right shoulder, assisted by the pressure of the left hand on the thigh; whilst swinging up the bell straighten up the body." See C.A. Sampson, *Strength, a Treatise on the Development and Use of Muscle* (Chicago: Rand, McNally & Company, 1895), 203.

171 For more information on Theodor Siebert see Bernd Wedemeyer, "Bodybuilding in Germany in the Late Nineteenth and Early Twentieth Centuries," *Iron Game History* 3 (August 1994): 4-7; Bernd Wedemeyer and David Chapman, "The Father of Athletics, Theodor Siebert (1866-1961): A Life Amongst Bodybuilding, Life Reform and Esoterica," *Iron Game History* 6 (May 2000): 3-4; Bernd Wedemeyer and David Chapman, "Theodor Siebert: A Biography," *Iron Game History* 6 (May 2000): 5-13.

172 Wedemeyer and Chapman, "Theodor Siebert," 9.

173 Paschall, "Behind the Scenes," (December 1952): 46.

174 Calvert, *Progressive*, 5, 19.

Although copies of Calvert's 1902 course are rare, an analysis of the 1903 training course should provide the same information since, according to Milo employee Robert L. Jones, they were exactly the same course.[175] Entitled *Instructions in the "Milo" System of Progressive Weight Lifting* and printed on four-by-seven-inch paper, it was divided into seven sections and had fourteen photographic images.[176] Calvert left nothing to chance and he advised his customers on the most basic of information. In Section One he cautioned "novices and those who have never done any weight-lifting" to begin with the empty bell and to focus on their lifting form. Proper form, which was "just as important as skill in boxing or wrestling," could be attained by reading the detailed instructions and studying the pictures provided.[177] Once form was mastered then weight could be added—a pound or two a week. According to Calvert the lifter needed to regulate the amount of weight so that instead of becoming exhausted, the lifter "finish[ed] strong."[178] Novice students were advised to use the same amount of weight for two-handed work as that used for the one-handed exercises. Calvert theorized—somewhat illogically—that since the world record one-armed press (held by Louis Cyr at 273 pounds) was approximately seventy-five percent of the world record for two-armed pressing (held by Hans Beck at 340 pounds) and that since "more than half of the work is done by the muscles of the legs and trunk, whether one hand or both hands are grasping the bell," a student would benefit the most by using the same weight for both one-armed and two-armed exercises in a workout.[179] It would also keep the number of weight changes to a minimum.

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[175] Robert Jones, "History of Milo Courses" (1939), Ottley Coulter Collection, TMPCC. It is unknown if this document was actually published in *Strength & Health* or some other publication.
[176] Calvert, *Instructions, 1903*.
[177] Ibid., 1.
[178] Ibid., 1-3.
[179] Ibid., 2.

So that the student could track his own progress, Calvert recommended the recording of girth measurements and the taking of physique photos at the beginning of the program and then again after every three months. In Section Two, Calvert advised advanced students—or "those who are already strong and skilled at weight-lifting"—to start with a weight that was no more than two-thirds of their one-hand record lift and then to add one or two pounds weekly.[180] Section Three taught the lifters how to change the weight of the bell by putting No. 2 or No. 3 drop shot into the thumb-screw opening, and how to store the bell on end so that it only took up eight inches of floor space. Section Four pertained to breathing; Calvert advocated exercising in a well-ventilated room and to never hold the breath while exercising with heavy weights. Proper ventilation was a common theme of health reformers in this era.[181] In alignment with today's programs—which caution the holding of the breath during a maximal single-effort lift to prevent a "Valsalva maneuver," which causes one to pass out—Calvert believed that holding the breath for extended periods of time during heavy lifting would hinder the lungs' ability to remove carbonic acid from the blood.[182] Oxygen helped to "purify the blood," so the lifter was encouraged to breathe freely, deeply and slowly for a couple of minutes before starting his weight exercise and to breathe normally during any actual exercise.

Nutrition was briefly addressed in Section Five of Calvert's course. He recommended a "mixed fare of meat, vegetables, cereals, and fruit," but believed, more importantly, that the lifter should pay closer attention to *how* he ate rather than *what* he ate. As a follower of the mastication theories of Horace Fletcher, Calvert advised his student to practice Fletcherism, and to "acquire the habit of chewing every mouthful of

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[180] Ibid., 3.

[181] Harvey Green, *Fit for America: Health, Fitness, Sport, and American Society* (New York: Pantheon Books, 1986), 77-100.

[182] Alan Calvert, *First Course in Body-Building and Muscle-Developing Exercises* (Philadelphia: Milo Bar-bell Company, 1915), 1; Gary T. Moran and George McGlynn, *Dynamics of Strength Training and Conditioning*, 3rd ed. (Boston: McGraw-Hill, 2001), 24.

food until it is in a liquid condition before swallowing."[183] Calvert also recommended that after an exercise session lifters should take a sponge bath in tepid water because it "refreshes one, and keeps the skin in good condition, and avoids the evil after effects of bathing with water at extreme temperatures."[184]

Calvert's first course was arranged so that the fewest weight adjustments had to be made to the bell. The course consisted of twelve exercises and began with one-handed exercises. After first affixing the short handle the lifter completed a "quick lift from ground to shoulder with one hand," followed "in a couple of seconds" by a quick lift of the bell to arms' length overhead. Three repetitions completed by each hand of these two exercises were followed by a one-handed swing movement (Calvert incorrectly called this stiff-armed exercise a "snatch lift.") The student—in this lift—swung the bell from the ground to an overhead position in one motion for four repetitions for each arm while keeping the arm "straight and stiff." Exercises four and five resembled exercises one and two, only they were performed at a slower pace—a slow lift from the ground to the shoulders, letting the elbow bend as in a modern biceps curl en route to the shoulder—and a slow press overhead. The slow press from shoulder to arms' length resembled a side press or bent press, according to the illustrations accompanying the course, and it required the most explanation:

> Standing…turn bell until palm of hand is toward the front. Keep inside of right upper arm close to right side of body. Place left hand on upper thigh, and bending slightly at knees, allow the left shoulder to sink gradually downward, and slightly forward, and let the whole body sink gradually to the left and under the bell, until a line drawn across the chest would be almost perpendicular to floor. Quickly remove the left hand from thigh and replace it with left forearm; and push bell straight up in air with right hand….Now straighten body, assisting upward motion by pressing on left thigh with left hand, until you reach position (Figure 8). On

[183] Calvert, *Instructions, 1903*, 5. For information about Horace Fletcher and Fletcherism, see James C. Whorton, *Crusaders for Fitness: The History of American Health Reformers* (Princeton: Princeton University Press, 1982), 168-200.
[184] Calvert, *Instructions, 1903*, 5-7.

performing this exercise always keep your gaze fastened on the hand that grasps the bell.[185]

After completing the slow combination five times with each arm the lifter attached the long handle to the bells in order to complete the training regimen. The last exercises included two repetitions of a "two-hand lift from ground to shoulder," followed by the two-handed jerk (getting the bell from the shoulders to an overhead, elbows locked-out position in one explosive move), and a slower overhead press. The slow press overhead, according to Calvert, was most beneficial because it created a "tonic effect on the vital system." It not only developed the muscles in the small of the back, but also "increase[d] the blood supply to the digestive organs and promote[d] great vigor."[186] Calf work was accomplished by placing the bar across the shoulders and tip-toeing around the room. Squats for thigh and buttock development were performed on the toes for ten to twenty-five reps. A reverse biceps curl to a horizontal position, followed by one-finger-lifting followed for those who desired greater hand strength. Straight-legged sit-ups keeping the arms overhead—"to develop the muscles of the abdomen"—completed the vigorous routine.[187]

Calvert used this basic course during 1902 and 1903 and then expanded it in 1904. Perhaps, he made the change because of his own increasing knowledge or perhaps he had students clamoring for advanced work. In any case, the 1904 course had twice as many exercises and began with the two-handed exercises rather than the one-handed exercises. Using a number of illustrations to clarify the instructions, the workout began with the two-handed, "palms upward" biceps curl performed six or eight times followed by the "knuckles up" curl for two or three repetitions. The two-handed clean (getting the

[185] Ibid., 13-15.
[186] Ibid., 19-21.
[187] Jones, "History of Milo Courses," 1.

bell from the floor to the shoulders in one quick movement) performed two or three times was followed by a slow, overhead press for three repetitions with the right foot slightly back, then taking the bar back to the floor it was cleaned and pressed again with the left foot back three times. The special instructions for breathing while performing these last two exercises developed the chest, Calvert argued. Once the slow press was performed the lifter completed a quick two-handed jerk for an undisclosed number of reps. A stiff-legged deadlift completed fifteen or twenty times was followed by a shoulder shrug—which developed the trapezius and neck—for ten to twenty repetitions. Tip-toeing with the bar across the shoulders "until the muscles of your calves begin to ache," and a squat performed on the toes for twenty to fifty reps rounded out the leg work.[188] Lying on the ground and hooking the feet, toes up, under the bar allowed one to perform a sit up "several times," before one rolled over and caught the heels under the bar for a back hyperextension. The lifter then unscrewed the long handle and held it at its central point at arm's length. Rotating the arm (at the shoulder joint)—and therefore the bar—back and forth in a circular motion while keeping the elbow locked produced great forearm development, a strong wrist, and deltoid improvement.

Affixing the short handle to the canisters one performed side bends to work the obliques and waist muscles. Speed work included an explosive, one-handed clean with either a dumbbell or barbell followed by a jerk. A quick, straight-armed, one-handed swing from floor to overhead had, according to Calvert, "a very invigorating effect on the whole system." The swing was followed by a slow, one-handed curl to the shoulder and an overhead press; the combination curl/press was done four or five repetitions with each

[188] Calvert, *Instructions in the "Milo" System of Progressive Weight Lifting* (Philadelphia: by the author, 1904B), 11. There were actually two training courses issued in 1904 with exactly the same title. I am designating the more primitive design cover as the 1904A version, and the one with a photograph of a lifter on the cover as 1904B.

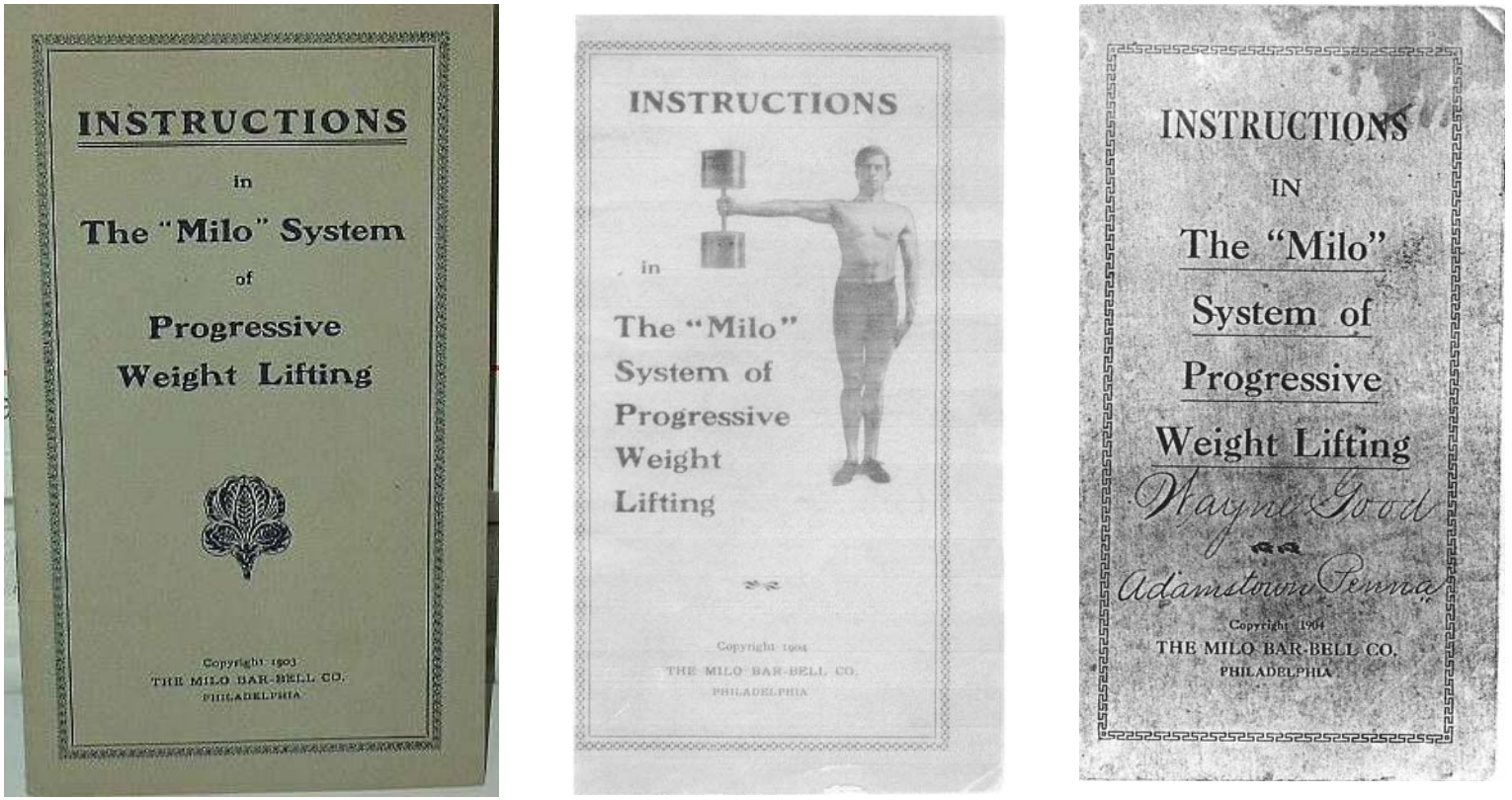

Figure 34. Calvert 's original training course stayed the same for 1902 and 1903 (left) and then expanded into two different editions in 1904. *Far left and far right covers from The Reuben Weaver Collection, middle cover from The Harold Weiss Collection, TMPCC.*

arm.[189] Calvert's program finished again with finger lifting to "develop enormous strength in the fingers" and a "grip of steel."[190] Apparently, Calvert published two versions of the 1904 course. Although it may be impossible to know which is older, one version has a student's image on the front, while the other does not. The one without an image has less prefatory information (the sections on advanced lifters and how to increase the weight of the bell are missing) but it has five additional exercises described at the end of the course. The additional exercises include the crucifix hold, the alternating press with ring weights, a one-handed shrug-like motion keeping the arm well behind the hip, side bends, and wrist curls using kettle-bells.[191]

There were a number of differences between the two courses. Six sections were nearly verbatim with only slight stylistic changes such as the use of sub-heading titles and a few minor text additions. One difference was that instead of having all novices begin with an empty bell, as in the 1903 version, Calvert advised his 1904 students to test their strength by holding an empty Milo dumbbell, weighing twenty-three pounds, at arm's length out to the side for several seconds. If they could hold it they could begin their workout with thirty-five pounds of weight; if not then they needed to begin with the empty bell.[192] Another major difference from the 1903 version is that the 1904 version concluded with some "Final Remarks"—in which Calvert gave more systematic training information. These remarks explained how the exercises should be split up during the week and which ones could be omitted if time was an issue. In order to keep the exercise sessions to only fifteen minutes, Calvert recommended that the first eleven exercises—the biceps curls to the forearm circles—should be done on Mondays, Wednesdays, and

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[189] Ibid., 18.
[190] Ibid., 23.
[191] Alan Calvert, *Instructions in the "Milo" System of Progressive Weight Lifting* (Philadelphia: Milo Barbell Co., 1904A); Jones, "History of Milo Courses."
[192] Calvert, *Instructions, 1904B*, 24.

Fridays. The last seven exercises—which used the short handle—would be performed on Tuesdays, Thursdays, and Saturdays, leaving Sunday to rest. Understanding that encouragement and motivation were key to the teaching and learning process, Calvert gave milestones for his students to attain. If they were able to train with a fifty pound dumbbell or fifty-five pound barbell for the duration of the fifteen-minute workout they would be able to "slow-press" above the head seventy-five pounds using only one arm. If they worked out with a seventy-five pound bell then a 112-pound press was possible.[193] Much like William B. Curtis, Calvert understood that resistance training enhanced athletic performance, but it was not the only kind of training needed for sports. Therefore, he also recommended in his final remarks that his students run "about one-half mile at a fair pace twice a week" and "practice going up stairs two and three steps at a time" for additional exercise.[194] Calvert's course remained essentially the same until 1911 or 1912.

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As the founder and promoter of barbell training in America, Calvert and his Milo Bar-bell Company not only provided men a place to congregate and talk about lifting, but actually helped it become a recognized, modern American sport by holding informal contests and keeping records. Being the Milo Bar-bell Company's proprietor naturally placed Calvert in a position of influence and the public turned to him for advice and information. His responses to these seemingly never-ending questions, the information he published in his advertising pamphlets, and the positive results gained from his training courses secured his position as the primary point of contact for those interested in

[193] Ibid., 23.
[194] Ibid.

weight-lifting. Much like Professor Attila's famous gym in New York City, the Milo building became a destination for Milo students because it was there that they could see performing strongmen, hand-balancers, and physique stars and learn the latest strength training information. Students like Lutcher Stark drove from Texas, Albert Tauscher visited from Portland, Oregon, and Sigmund Klein traveled from Cleveland, Ohio. Well-known men came too, like the physique artist and hand-balancer Otto Arco who came from Chicago, Illinois; "Milo stars" Charles MacMahon and Anton Matysek visited from Baltimore, Maryland; and of course, Ottley Coulter arrived from various addresses in Pennsylvania and Ohio.[195] Calvert presented the public not only with the tools for physical enhancement, but his educational campaign's success relied upon the public's perception of the Milo Bar-bell Company and himself as the leading source of valid information on strength and muscular development. Historian Thomas Haskell argues that the middle decades of the nineteenth century were a time when the "ascending levels of population density and per capita income made it possible for substantial numbers of people to make a living by selling advice and specialized services," which led to the development of the authority figure, or expert.[196] Health and physical culture "experts" were a dime-a-dozen at the turn of the century. They ran the gamut from professional strongmen trying to establish themselves as strength experts based on systems that worked because of their special genetic gifts, or who advised their students to use their special dumbbells and cable systems, to the so-called doctors and professors who linked muscles to the health of the entire body. The problem, of course, was that most of these

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[195] Stark info: T. Todd, "Strength Training at Texas"; Tauscher info: Alan Calvert, letter to Ottley Coulter, 12 February 1918, from Ottley Coulter's Milo Scrapbook, TMPCC; Klein info: Siegmund Klein, "My Quarter Century in the Iron Game, 2nd Installment," *Strength & Health* (April 1944): 16-7, 34-5; Arco info: Otto Arco, postcard to Ottley Coulter, 21 September 1916, from Ottley Coulter Collection, TMPCC; Ottley Coulter, letter to Otto Arco, undated, from Ottley Coulter Collection, TMPCC.

[196] Thomas L. Haskell, *The Authority of Experts: Studies in History and Theory*, *Interdisciplinary Studies in History* (Bloomington: Indiana University Press, 1984), xii. See also Mrozek, *Sport and American Mentality,* 67-102.

"expert" programs relied on light-weight, or "no-weight," systems and so purchasers did not achieve the desired results of muscular development and greater strength. Calvert developed his status as an expert because of his different approach.

An avid reader, Calvert studied Fernand LaGrange's anatomy and physiology lessons and spent several years experimenting with other training courses. His curiosity led him to contact experts in England and, later in Germany, Austria, and France—where lifting had already found popular acceptance. Calvert's ability to critically analyze all the various pieces of information he found, his skill at reworking the information into language that was easily understood by others, and his adoption of a form of training which actually led to the development of bigger muscles helped him emerge by 1910 as America's foremost authority on strength training. The final key to securing Calvert's place as *the* expert in the minds of the American lifter was the publication in 1911 of his first book, *The Truth About Weight Lifting*. The book was America's first true manifesto for heavy lifting and progressive training. It changed many people's attitudes toward lifting, and it became the bible of the new era of barbellism.

CHAPTER 4

"AS A SPORT, AS A MEANS OF BODY BUILDING, AND AS A PROFESSION…" *THE TRUTH ABOUT WEIGHT LIFTING*[1]

> "Physical prowess seems most often indisputable; a scientific or literary work does not tax the eyes the same way snatching a globe barbell tires the body, and the public hardly worries whether the book is worthy or whether the globes are empty—it is enough that the latter is large."[2]

When the respected French physical culturist Professor Edmond Desbonnet published these lines in 1911, he was making an observation about the power of impressions. Some people who attended strength performances and even a few of those who actually lifted the weights cared little about the truth, only about the impressions left behind. Alan Calvert agreed with the essence of Desbonnet's assertion, but he regretted that what the Professor asserted was true. Calvert had grown up watching and reading about strongmen and their crowd-pleasing antics, but after the Milo Bar-bell Company opened, he became personally involved in the business of strongmanism. He supplied many of the performers with equipment and many of his early students trained to become professional strongmen. However, Calvert knew that strongmanism had a dark side. Because strongmen had to amaze the public in order to sell tickets, many strongmen exaggerated their lifts, claiming to be stronger than they were. Those on the inside knew that a healthy dose of skepticism was needed when hearing about the feats of professional strongmen. But Calvert worried, with good reason, that if the sport—and his company—were to grow, the activity had to be placed on a higher and more ethical level. If

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[1] Alan Calvert, "Advertisement for *The Truth About Weight-Lifting*," *Physical Culture,* (September 1911).
[2] Edmond Desbonnet, *Les Rois De La Force* (*The Kings of Strength),* trans. David Chapman, (Paris: Librairie Berger-Levrault/Librairie Athletique, 1911), 2. The translation is unpublished and the page numbers found in the notes will refer to the translated copy unless otherwise indicated.

barbellism was to be promoted as a wholesome and beneficial sport Calvert had to find a way to make people believe the weights men lifted were accurately represented. You couldn't claim that training worked if everyone thought you—and your weights—were fake.

Calvert was particularly concerned about the effect of such false claims on amateur lifting. The public, Calvert feared, couldn't differentiate between the claims of the professional strongman and those of amateur lifters who made up the majority of Calvert's students and potential customers. Amateur lifters didn't try to make a living by giving strength exhibitions. They might informally compete against each other but they didn't generally resort to exaggeration or questionable practices since they stayed within their strength limits and didn't need to be regarded as a record holder or "world's strongest man" as the professionals did. In September 1911, after worrying about the effect of what he considered to be a growing cynicism toward lifting, Calvert decided to tackle the problem head-on in a book called *The Truth About Weight-Lifting*, the first hard-cover examination of the secrets of the strongman trade.

Calvert described the book in its inaugural *Physical Culture* advertisement as "a series of interesting articles on weight-lifting, dealing with it as a sport, as a means of body building, and as a profession."[3] His purpose for writing the book was "to describe some of the greatest known feats of strength; how such feats are performed, which feats are genuine, and which feats are tricks, or fakes; also to endeavor to give the reader some idea of who are the strongest men of the present day and the records to prove them so."[4] In many ways, the book represented the first peal of the death-knell for the professional strongman business. Calvert recognized those men he believed to be truly strong, but

[3] Calvert, "*The Truth* Advertisement," *Physical Culture*, (September 1911).
[4] Alan Calvert, *The Truth about Weight Lifting* (Philadelphia: by the author, 1911), 9.

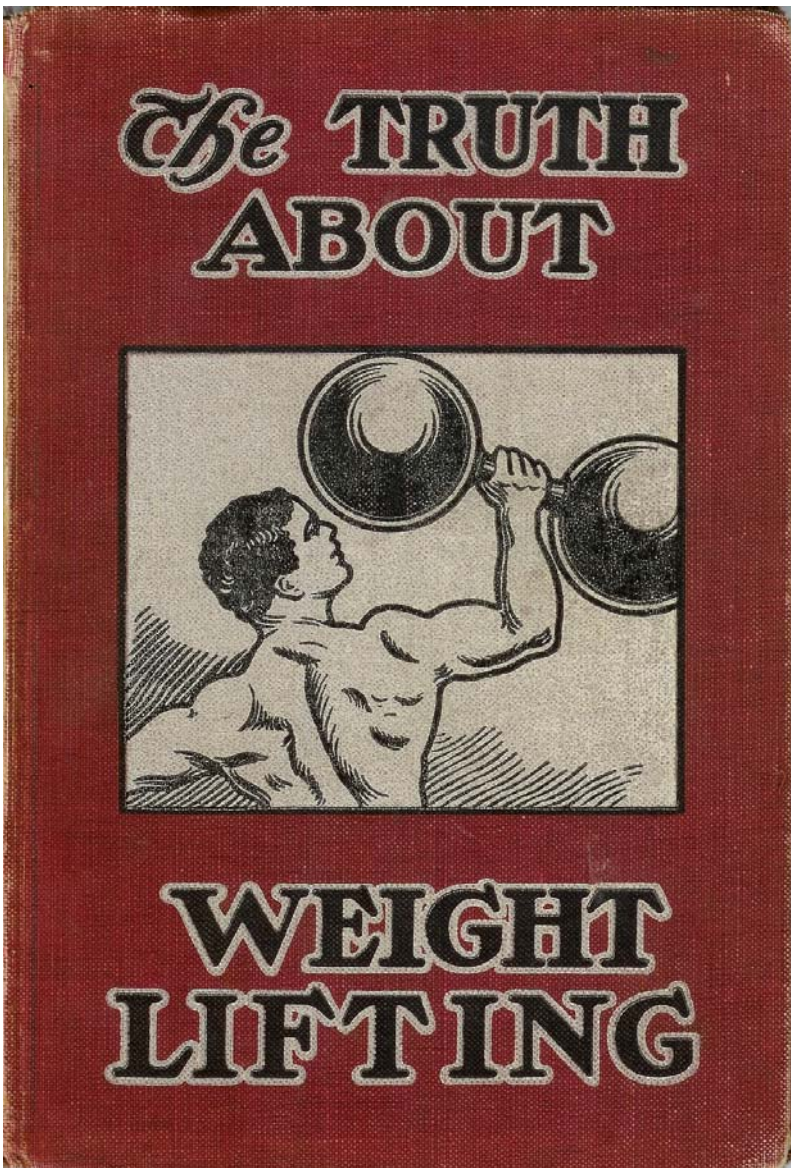

Figure 35. Published in 1911, *The Truth About Weight-Lifting* ushered in a new era of barbellism.

also exposed the fakers and exaggerators. *The Truth About Weight-Lifting*'s other thrust was to call for the organization of "the sport of lifting." At the same time that he condemned the dishonest professional strongmen, Calvert argued for the standardization of weights and lifts and for the creation of an amateur lifting organization that would keep records and oversee competitions.

Calvert began the book with a description of his qualifications: "Originator of Progressive Weight Lifting in America. Inventor of the 'Milo' and 'Milo Triplex' combination dumbbells. Proprietor of the Milo Bar-Bell Co."[5] Although George Barker Windship has a more legitimate claim to the title—"father of resistance exercise in America"—Calvert, was by far the most important American figure in the first few decades of the twentieth century. The research he conducted both before and after he opened the company led him to develop a vast pool of knowledge about weight training. Although he didn't claim to know much when he opened his business—"my knowledge of bar-bell exercise and of lifting methods was rather limited"—he wrote that what he *did* know was "encyclopedic, when compared to what the average athlete knew about the subject."[6] He had continued to educate himself and put himself at the top of the weight lifter's resource guide, if there had been such a thing at the time. Readers of his new book were encouraged to accept what he had to say as being a truthful evaluation because he was writing about weight-lifting "from the inside." Calvert wrote that the book was groundbreaking and sure to "create a sensation," because he was using previously unpublished information.[7]

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[5] Ibid., title page, 3.
[6] Alan Calvert, *An Article on Natural Strength versus "Made" Strength* (Philadelphia: by the author, n.d.), 3.
[7] Calvert, "*The Truth* Advertisement," *Physical Culture*, September 1911.

The book sold for one dollar in 1911 before it went down to ten cents during a "September Special" in 1912. Calvert began his "series of interesting articles" by explaining the state of American weight-lifting, as both a recreational and competitive activity. He firmly believed the United States had the "raw material," but not the history and know-how of lifting to create renowned record-breakers. American athletes tended to favor light athletics, i.e. track and field or baseball, while European nations, especially Germany and Austria, favored heavy athletics, such as weight-lifting, in which they held many of the lifting records.[8] Another reason for weight training's elevated status in Germany was that some of the *Turner* and lifting clubs had existed for fifty years or more and their members had had access to an assortment of training implements—including barbells and heavy dumbbells—for most of the second half of the nineteenth century.[9] American men had no such heavy-lifting clubs and had to wait for the opening of the Milo Bar-bell Company in order to purchase heavily-weighted, adjustable barbells. More importantly, because of longer experience with lifting, the Europeans had found that the most productive method of strength training was to gradually make "the exercise harder and harder."[10] Calvert argued that their highly developed, all-round strength beat out the more selective strength that Americans tended to build by targeting only one or two lifts.

The primary reason for these disparities, however, was the difference in the number of people involved in the activity in the different countries. Calvert wrote that it was "no exaggeration to say that there are, in the average German lifting club, more first-class lifters than there are in the whole United States of America."[11] David Willoughby reported that the German Athletic Association—*Deutschen Athletik Sport Verbandes*—

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[8] Calvert, *The Truth*, 11-4.
[9] Jurgen Giessing and Jan Todd, "The Origins of German Bodybuilding: 1790-1970," *Iron Game History* 9(December 2005): 11.
[10] Calvert, *The Truth*, 12.
[11] Ibid., 13-14.

founded in 1891 to bring all the *Kraftsport* (strength sports) clubs together, had a membership of over three hundred clubs and over twelve thousand athletes by 1900.[12] These German and Austrian lifting clubs held tournaments weekly, and sometimes daily in the larger cities. On some occasions, as many as 150 to two-hundred entrants would compete in different weight classes performing various lifting feats. No such competitions occurred in the U.S. However, the greatest factor for the neglected state of American lifting, according to Calvert, was the effect of the professional strongmen:

> Probably the principal reason [why weight-lifting as a sport is not popular in this country] is the very foolish and short-sighted attitude of the professional lifters in this country. These professionals have made a practice of deceiving and "buncoing" the public for so long a time, that the public has become disgusted with their methods and has come to the conclusion, either that all weight-lifters are fakirs, or else that weight-lifting is a peculiar kind of sport in which only a few men can excel.[13]

So, Calvert had to not only compete against barbell illiteracy as he launched his fledgling company, he also had to compete against the dishonest image of the professional strongman as a charlatan.

Sport historians Allen Guttmann and Melvin Adelman might say that American weight-lifting before Calvert was operating with pre-modern tendencies. A "modern" sport, according to Guttmann, involves secularism, equality of opportunity to compete in standardized competitions, specialization of roles within the sport, rationalization of the rules and training for the sport, bureaucratic organizations to lead and unify the sport, quantification of some sort, and the quest for records.[14] Adelman further argues that a

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[12] David P. Willoughby, "The Kings of Strength - Chapter XIII - When Weightlifting Was First Organized in Germany and Austria, 1891-1906," *Iron Man* 18(April-May 1959): 30, as quoted in T. Todd, "History of Resistance Exercise," 54.
[13] Calvert, *The Truth*, 15.
[14] Allen Guttmann, *From Ritual to Record: The Nature of Modern Sports* (New York: Columbia University Press, 1978), 16-55.

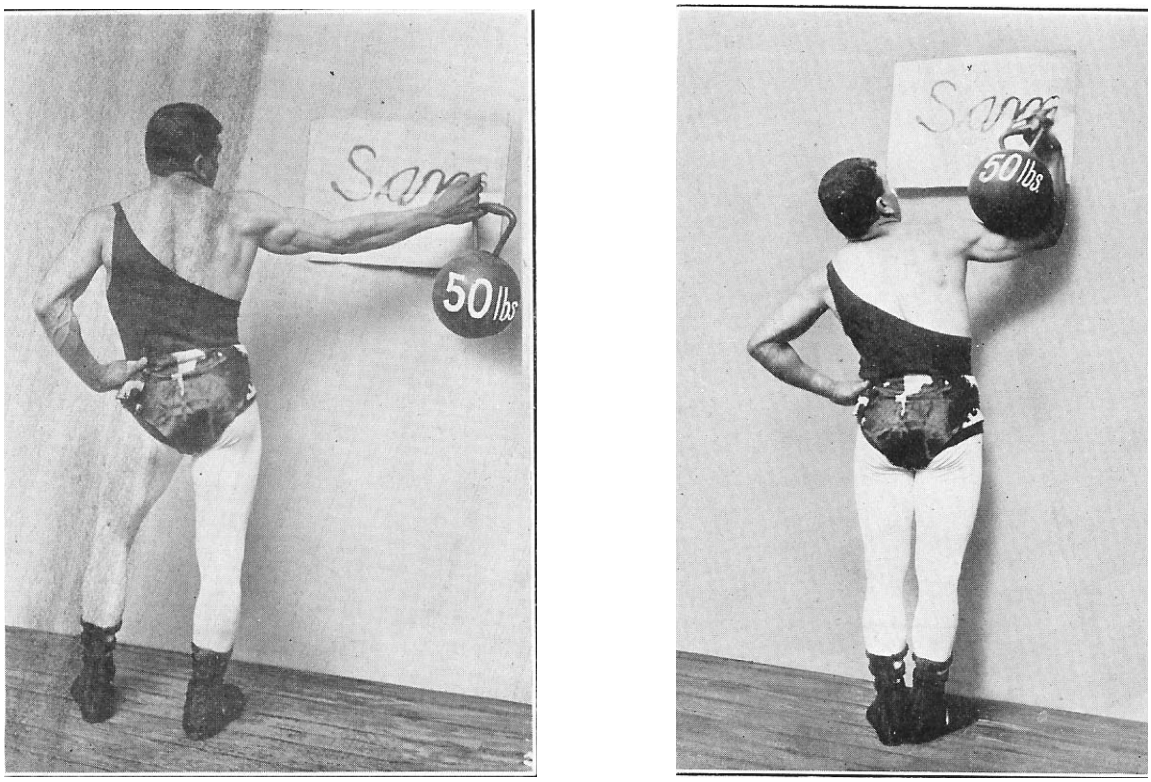

Figure 36. This is one example of a strongman "buncoing" the public. The photograph on the left is what the posters advertise that the strongman can do, but the picture on the right is how he actually performs the trick. These illustrations appear in *The Truth About Weight Lifting* on pages 69 and 70.

"modern" sport involves multiple levels of organization; competes by written, formalized, and standardized rules; provides chances to compete at local, national, and international levels; exhibits role differentiations; regularly reports in local and national media as well as its own specialized literature; and publishes statistics and records on a regular basis.[15] The professional strongmen who performed in circuses and variety theaters were not trying to create a sport, of course. They were entertainers who used lifting as a means to an end—their paychecks. However, unlike jugglers and acrobats where the performance is everything, lifting is an activity that requires quantification. Lifting is interesting only because it allows us to compare one man's strength to another. Thus, professional strongmen had to claim to hold records and be title holders even though no association sanctioned their records. For Calvert, the fact that no agency regulated the various claims of the professional strongmen meant that it was harder to encourage a young person to take up heavy lifting. If the amateur had only the hyperbolic records of the professional strongmen as a goal, it might seem pointless to train at all.

In the early twentieth century, Calvert did more to move-weight lifting toward being a modern sport than anyone else. His Milo barbells allowed men in different parts of America to train on identical equipment so that lifting conditions were standardized. In his educational out-reach, Calvert worked to standardize the lifts themselves, creating a canon of exercises which allowed men in different parts of America to replicate each others feats and thus to compare themselves to each other. In publishing his first book—*The Truth About Weight-Lifting*—Calvert took the nascent sport one step closer to modernization by supplying outsiders with "inside" information and by exposing the fraudulent claims of some of the professionals.

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[15] Melvin L. Adelman, *A Sporting Time: New York City and the Rise of Modern Athletics, 1820-70*, Illini Books ed., *Sport and Society* (Urbana: University of Illinois Press, 1990), 6.

STRONGMAN "TRICKS"

Arguments about the validity of many lifts, even when seen in person, were commonplace in the early twentieth century. Calvert explained that the strongmen's easiest ruse "trade[d] on the ignorance of the audience" by making absurd statements about the weight of their equipment.[16] Since most exhibition bars tended to have globe ends, just counting the visible plate-weights, as would be done today, was impossible. If a photograph was to be published in a newspaper or magazine, an art editor, or the photographer himself, often wrote the poundage of the bar on the globes in the photograph so that all would know the bar's weight. It was therefore easy for the performer to simply tell the photographer an exaggerated weight which was then relayed to the art editor. As an example, Calvert told of a weight-lifter who borrowed a 160-pound barbell to put on a strength exhibition. A reporter took pictures of the strength show and Calvert saw the resulting photos in the newspaper describing the barbell as weighing 260-pounds—one hundred pounds more than the actual weight.[17] Another such incident which amused Calvert, but added to the fuel for his book, involved a reporter and a "Herculean 'hand-balancer'" who performed at a local theatre. The reporter asked the hand-balancer to pose for some photos to publish with an article he had written. When the reporter, hand-balancer, and Calvert met at the photographer's studio they found that the theatre manager had forgotten to send the gymnast's seventy-five pound kettle-bells to be used in the pictures. A call to the theatre assured them the bells would be brought post-haste by a team of horses. After ten to fifteen minutes had passed, Calvert and the others saw a young boy employed by the theatre parading down the street

[16] Calvert, *The Truth*, 17.
[17] Ibid., 16.

with two kettle-bells in one hand and a third in the other hand—each kettle-bell had seventy-five pounds stenciled on its globe. Calvert only commented, "If this gymnast's muscles are as strong as the language he used on that occasion he must be a wonder."[18]

Calvert also exposed the fact that many professional strongmen had their own stage weights specially made. A strongman's reputation and marketability depended on his remaining undefeated in regards to the challenges he tossed at fellow performers and the audience. To preserve this image of invincibility, many strongmen had unique "tricks" built into their equipment. Anyone not knowing about the trick could not lift the bar on the first try, which was all they were likely to get. One method was to make a dumbbell ten to twenty pounds heavier on one end. A challenger would lose the balance of the bar when he gripped the handle in the middle and tried to lift it. The strongman, knowing that the bar was heavier on one end, could make the lift look effortless by gripping the handle closer to the heavier end.[19] Some large-handed strongmen had thick handles on their equipment, often two inches and more in diameter. This was not exactly a trick, but only those with very large, strong hands had any hope of picking up the implement and so the average man who might be invited to the stage to "test" the weight would have no chance of success.[20] Other strongmen were known to put a liquid of some sort, e.g. mercury, in a hollow handle to throw the balance off when the bar was in motion and the challenger tried to keep the bar level.[21] The strongman was able to control the weight by simply keeping one end of the bar lower than the other so that the mercury would not flow from one end of the bar to the other.

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[18] Ibid., 151.
[19] Ibid., 20-21.
[20] Ibid.
[21] Ibid., 152-54. See also Wilfrid Diamond, "Thomas Inch and the Strong Men He Knew," *Muscle Power* 3(September 1947): 34.

If anyone questioned Calvert's source for this information, his advertisements for the book explained that he had inside knowledge. He had supplied "exhibition dumb-bells for many of the most prominent professional 'strong-men'" and "celebrated lifters" and, therefore, knew who gave fake representations to the public as to what their equipment weighed.[22] He estimated that "not more than one professional lifter out of five will tell the truth, or anything like the truth" about the weight of their equipment.[23] With so many "tricks" being employed by the performing strongmen, it was only natural that portions of society began to believe that there was a "catch" or "knack" to lifting. By publishing *The Truth About Weight-Lifting* Calvert didn't make many friends among the professional strongman circles; in his words, he became "extremely unpopular with many of the professionals."[24] Many wrote to defend themselves and their act and called Calvert a "bum sport."[25] One professional who Calvert saw perform in person and who turned down Calvert's offer to verify his purported records even explained that he wasn't really a strong man at all, but a "showman."[26] For the strongmen unaccustomed to such scrutiny and criticism, Calvert was the harbinger of the tough times to come. To the amateur lifter and uninitiated audience, though, Calvert was a welcome font of knowledge.

Calvert also explained the difference between true lifting feats and the showier supporting tricks. True lifts tested one's muscular strength while supporting feats shifted the emphasis to the bones of the skeleton, which are structurally much stronger than the muscles. Popular supporting acts included "bridging," in which weight of some kind—men, automobiles, animals, etc.—was added to planks situated across the knees,

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[22] Calvert, "Advertisement, *The Truth*"; Calvert, *The Truth*, 18.
[23] Calvert, *The Truth*, 18.
[24] Alan Calvert, *Confidential Information on Lifting and Lifters* (Philadelphia: by the author, 1926): 13.
[25] Ibid., 14.
[26] Ibid., 13-14.

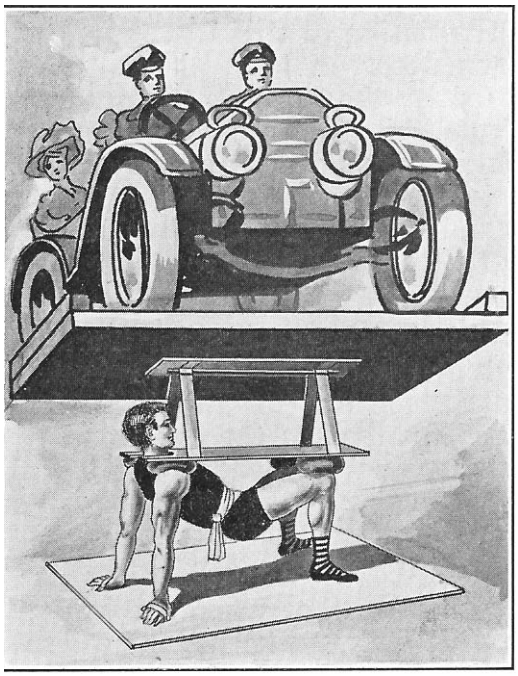

Figure 37. This feat was labeled the "Human Bridge." It is one of several types of bridging, or supporting, acts. Calvert explained to his readers that most of the weight was supported by the skeletal system since the points of contact were at the knees and shoulders. This illustration appears on page 61 of *The Truth About Weight Lifting*.

shoulders, and/or feet of the strongman who held or supported the whole apparatus for the audience. Bridge acts took quite a bit of preparation and careful consideration to create the best visual impression for the audience but, according to Calvert, these feats also represented the times when "a professional will work [hard physically] in order to create an impression."[27] Supporting feats, for example, included one-armed feats in which great amounts of weight were supported at arm's length overhead. Sandow's performance always included several of these stunts since he believed he could support "almost any amount of weight" above his head "on a straight arm if it was lifted into position" for him.[28] To Calvert's way of thinking these acts were great for leaving an impression with the audience, but did "not prove that he [the strongman] is a particle stronger than the average sturdy day-laborer."[29]

Strongman stunts such as coin-breaking, chain-breaking, and card-tearing also received Calvert's attention. Acts like these, he assured his readers, were usually accomplished with the help of some deception. Those claiming to break coins were usually good at sleight of hand tricks. A previously torn coin (compliments of a vise and pliers before the show) was palmed while the strongman acted like he was ripping a whole coin. During some contrived struggling the previously-torn coin replaced the whole coin with the audience oblivious of what had taken place.[30] Men who wrapped a chain around their biceps with the intention of breaking it had usually doctored the chain first by filing through a link, subjecting the chain to acid, or replacing a steel link with a much weaker lead link.[31] Card tearing, on the other hand, could be accomplished a

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[27] Calvert, *The Truth*, 63.
[28] Ibid., 71-72.
[29] Ibid., 72.
[30] Ibid., 73-74. See also: Terry Todd, "The Quest for the Quarter Master," *Iron Game History* 9 (December 2005): 21-31; David P. Willoughby, *The Super-Athletes* (South Brunswick: A. S. Barnes, 1970), 225-28.
[31] Calvert, *The Truth*, 74-75. For more analysis on chain breaking see: Willoughby, *Super-Athletes*, 220-21.

number of ways—some legitimate, some not. Calvert believed that anyone who trained for three months with heavy dumbbells should be able to rip a deck of cards and anyone who was an advanced lifter, meaning they could put a 150-pound dumbbell overhead with one hand, should be able to rip two decks. Calvert explained the mechanics of how the trick was honestly completed and introduced factors which contributed to one's ability to tear decks of cards: the material of the cards, their age, and whether or not they had been baked in an oven before the show.[32]

When Calvert discussed who should be considered the "strongest man in the world," he summarized, "There is no man who stands head and shoulders above all other men in point of strength." However, he gave credit to several famous lifters for what he believed to be their true accomplishments. Relying upon the European standards because "they understand such things," Calvert recognized Joseph Steinbach of Vienna as "the strongest man" because he was the strongest two-handed lifter. He could put overhead in a two-hand jerk 390 pounds and he could two-hand press 328¾ pounds. Others believed Arthur Saxon of the famed Saxon Trio to be the strongest man of this era. Saxon held the record in the bent press with 336 pounds. Calvert conceded that Saxon was strong, but since his best lifts were one-armed exercises he was automatically excluded from consideration for the overall strongest man title. One-armed exercises demanded skill and agility, but in Calvert's opinion the two-handed exercises required more brute strength. He argued, "When a man gets a heavy bar-bell of 250 pounds, or more, to his chest, no tricks, skill or quickness in movement will enable him to get the bell aloft in the two-hand 'press.'" Calvert mentioned John Marx's record-breaking abilities in back-lifting and tearing horseshoes, but since he rarely practiced with barbells and dumbbells he wasn't a serious contender for the title either. The only other contender for the title

[32] Calvert, *The Truth*, 75-77. See also: Willoughby, *The Super-Athletes*, 228-31.

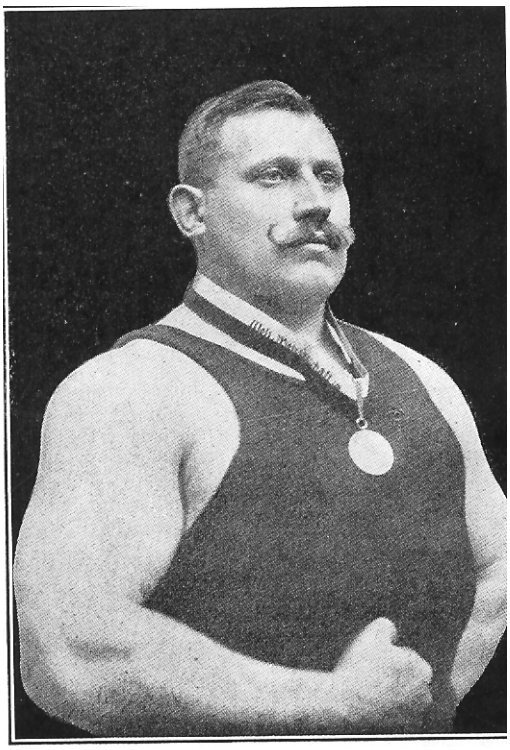

Figure 38. Alan Calvert believed that Joseph Steinbach was the "World's Strongest Man" because of his enormous strength in two-handed overhead pressing motions. Calvert published this image on page 2 of *The Truth About Weight Lifting*.

was Karl Swoboda; he had lifted four hundred pounds overhead in the two-handed jerk, ten pounds more than Steinbach. However, Swoboda outweighed Steinbach by fifty pounds, so Calvert thought the title should remain with Steinbach for being stronger pound-for-pound.[33]

Calvert called attention to the fact that there weren't any Americans in consideration for the title. This was primarily because America, in Calvert's opinion, did not have "an absolutely first-class 'strong man'" in the entire country.[34] He blamed this on America's tendency to favor the supporting feats instead of the purer strength lifts. However, he believed that the standardization of rules, events, and equipment would take care of that problem, but that it would take time. Trying to help his readers understand the kind of time it would take, and to brag on his hometown, Calvert used an analogy with the national past-time of baseball. The Germans, he argued, would need time to develop a baseball team to compare with the two-time World Champion Philadelphia Athletics, just as the United States needed time to match the German strength stars.[35] Since the Milo Bar-bell Company had opened its doors, Calvert assumed that the eventuality of American lifters actually competing against the European lifters was nearing. To speed up the process, he openly challenged the American lifters:

> I would at any time gladly pay $100.00 to see an American lifter raise from his shoulder to arms' length above the head with the right arm a 300-lb. bar-bell, or to see any American lifter raise from the ground to arms' length above the head a bar-bell weighing 400-lbs. Any aspiring young strong men who think they can perform either of these feats can take a chance any time they are in Philadelphia by calling at my factory, and I can assure such lifters that they will receive absolutely fair treatment, and that they can have the pick of the kind of bells they want to use, and that if they succeed in performing either of the above feats I will

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[33] Calvert, *The Truth*. Calvert discusses the title of the strongest man in Chapter Eight, pages 81-92, but the quotes used in the above paragraph come from page 89, 83, and 84, respectively. Calvert spells Swoboda's first name, Karl, with a "C" but most historians traditionally accept it as beginning with a "K." See Willoughby, *The Super-Athletes*, 87-90.
[34] Calvert, *The Truth*, 91.
[35] Ibid., 92.

> not only hand over the money, but will also do the utmost in my power to assist them to establish their claim for American records in these feats. I feel that my money is pretty safe for some years to come.[36]

Calvert also included a chapter discussing bodily measurements in *The Truth About Weight Lifting*. Anthropometry was popular in early twentieth century America and when strongmen began to display their physiques as well as put on strength exhibitions, many strongmen included their physical measurements in their publicity materials. Because of the public's interest in anthropometry, strongmen found that people would flock to the circus or variety theater not just to see phenomenal lifting, but also to see a man with a forty-six inch chest and twenty-four inch thighs. Calvert reminded his readers that the numbers on a seamstress's measuring tape could also be exaggerated by strongmen to their advantage. For instance, Calvert told how Sandow reported in his book on physical culture that he had a forty-eight inch normal chest, a sixty inch expanded chest, nineteen inch arms, a twenty-eight inch thigh, and that he weighed two hundred pounds. In the back of Sandow's own book, Calvert shared with his readers, the famed Dr. Dudley Allen Sargent's measurements of Sandow. According to Sargent, Sandow weighed only 180 pounds on the day he weighed him and Sandow had a forty-four inch normal chest, a forty-seven inch expanded chest, a sixteen and three-quarters inch arm and twenty-four inch thighs.[37] Obviously, Sargent's measurements were dramatically different from those claimed by Sandow elsewhere. A person's bodyweight does often fluctuate during his or her lifetime. However, in Sandow's case, we have an extensive photographic record of his body and that record does not indicate that he put on twenty pounds. In fact, Sandow's claim of a sixty inch expanded chest seems illogical since modern strongmen with sixty inch chest

[36] Ibid., 91.
[37] Ibid., 93.

measurements normally weigh closer to three hundred pounds than two hundred, and most of these are bench press specialists who have particularly built the pectoral muscles of the chest. Sandow did not do bench presses; the exercise had not even been invented. After claiming to have "examined the measurements of several hundred amateur and professional lifters" Calvert found their average measurements to be a forty-two inch chest, a fifteen inch arm, and twenty-three inch thighs.[38] But, Calvert conceded, much strength came from one's skeletal structure, therefore measurements weren't everything.

Although Calvert didn't discuss his philosophy of perfect proportions and ideal measurements in *The Truth About Weight-Lifting*, he did have some ideas on proper amounts and types of muscle. Due to his interest in building strength, Calvert admonished his readers that "*quality* counts for more than *quantity*" where muscles were concerned.[39] The function and ability of the muscle meant more than the volume and appearance of the muscle. This concept, that size mattered less than know-how, was one of the recurring themes in Calvert's writings. Training with heavy weights, he believed, forced a person to learn how to use the muscles in groups and to apply the proper application of force.

In an era riddled with fears of constipation and other digestive system maladies Calvert also attributed one's strength and health to a "square-built, powerful waist."[40] Therefore, a person should not have more than eight or nine inches difference between the chest and waist measurements. If the waist was twelve or more inches less than the chest measurement, one had inadequate waist development, according to Calvert. However, he pointed out that strongmen often quoted *expanded* chest measurements—

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[38] Ibid., 94.
[39] Ibid., 93.
[40] Ibid., 99-100. For turn of the century health ailments see: James C. Whorton, *Inner Hygiene: Constipation and the Pursuit of Health in Modern Society* (New York: Oxford University Press, 2000).

not the more natural, relaxed chest as one might expect—which would throw the waist-to-chest ratio off a bit. In order to take an expanded measurement the strongman took a deep breath and flexed the latissimus dorsi of the upper back which made the measurement much larger.[41] Exaggeration of measuring tape readings was fairly easy to accomplish, but deceiving the actual eye of the beholder took more imagination.

In order to make their physiques appear larger and more defined to the naked eye, Calvert explained that the strongmen commonly employed several tricks. For example, strongmen often posed during their live acts in a three-sided posing cabinet where the lighting threw the muscles in shadowed relief and gave an impression of greater size. Photographers often took pictures of the strongmen in a similar cabinet for the same effect. Sometimes a photographer would also enhance a physique by applying shadows or lines of definition directly on the actual photo. Some unscrupulous professionals even retouched their photos to an even greater extent, providing muscle where none was before. Calvert explained that this often resulted in "truly fearful and wonderful" muscle shapes not often found on a human. Another method to enhance visualization in live performances involved the application of powder or burnt cork to the strongman's body and then having an assistant wipe away portions of the powder while he flexed the muscles. This practice, done just before a performance, left dark shadows of powder in the valleys between muscles which, when lit properly, appeared more defined and significantly larger.[42]

[41] Calvert, *The Truth*, 98-101.
[42] Ibid., 103.

AMATEUR LIFTING AND STANDARDIZATION

Perhaps the most important aspect of *The Truth About Weight Lifting* was Calvert's plea for the standardization of lifting in America. If weight lifters knew how to do a core number of competitive lifts, they could be better prepared for any competition that might arise. Relying upon Europe's history of conducting strength contests, Calvert described the eight accepted standard competition lifts: right-arm snatch, left-arm snatch, right-arm jerk, left-arm jerk, right-arm swing, left-arm swing, two-arm press, and two-arm jerk. As he described each exercise, Calvert gave important information about how other countries performed the lift, the records and exceptional lifts generally accepted to be true, and occasional references to a professional strongman who found some tricky way to perform a particular exercise more easily or more impressively for the audience. One such example began with a discussion of the form displayed while performing the snatch. After explaining the basics of the lift Calvert wrote that in Europe credit was given to the athlete not only for the amount of weight lifted, but also "for the manner in which he lifts it." Bad form sometimes correlated to moving one's feet during the lift, such as when "an amateur, or a badly trained professional" makes a "tremendous effort to get a bell above his head, and then after he has gotten the bell aloft he will have to take a few rapid steps in order to maintain his balance." Calvert went on to accuse American professional strongmen of abusing this show of effort in their performances by "using a light bell and making a tremendous effort when lifting," thus giving "the impression to the audience that he is raising a tremendous weight."[43]

Calvert described the snatch, the swing, and the jerk as the "quick lifts." The quick lifts "put a premium on activity and skill," and since the smaller, lighter man had an easier time developing both, such lifts allowed him to compete against a larger,

[43] Ibid., 30-31.

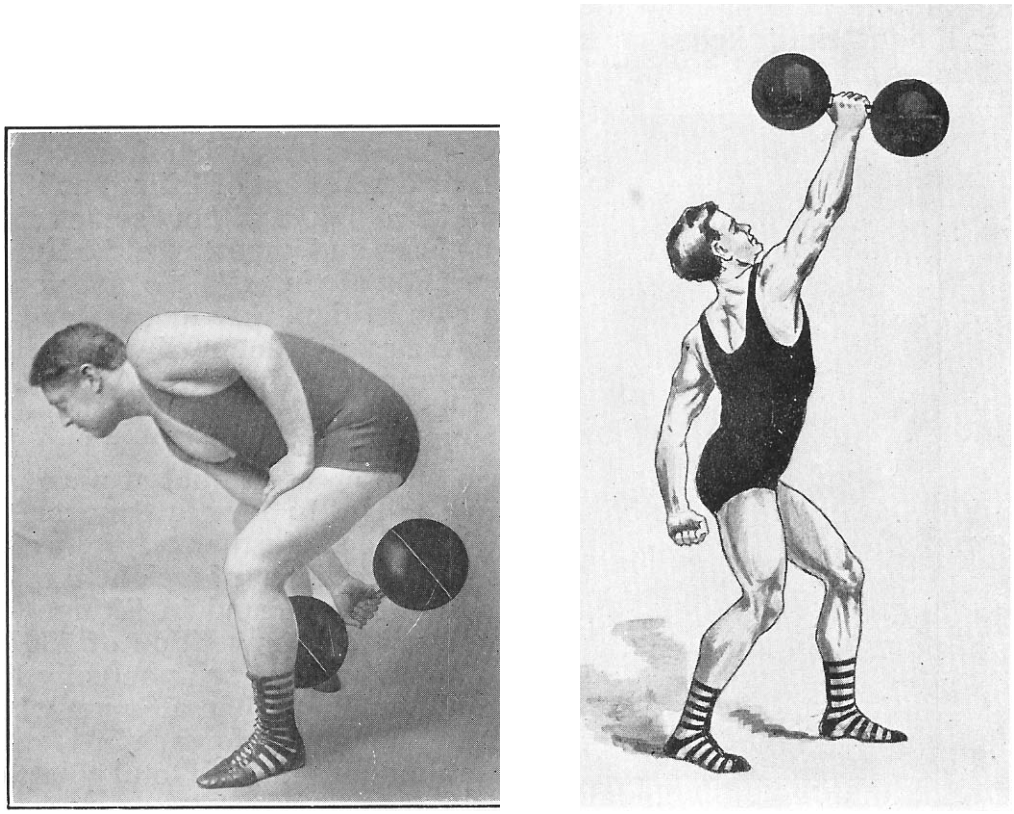

Figure 39. Calvert himself posed for this photo of the one-arm swing from *The Truth About Weight Lifting*, page 32.[44] The ending position of the lift is shown on the right in an illustration from the same book, page 33.

[44] James A. Cameron letter to David P. Willoughby, 31 January 1983, Willoughby Collection, TMPCC. Cameron's letter is to thank Willoughby for copies of the book, *The Truth About Weight Lifting*, "I appreciate this beyond words. I will treasure them very much. I note you marked one of the illustrations, the start of the swing, as been [sic] Calvert himself." This letter was unknowingly written posthumously by Cameron since Willoughby died two weeks earlier.

heavier man. The man who made best use of his strength—whether he was small, but quick and explosive, or large and powerfully strong—was the best man in the competition, according to Calvert. With the exception of the swing, these same quick-lift exercises involving the use of two hands comprise today's Olympic sport of weightlifting. The only thing different in today's sport is that the "clean and jerk" replaces just "the jerk." The clean portion of the exercise, while treated cursorily by Calvert in his description of the overhead jerk and overhead press, addresses the accepted methods of getting the bar to the shoulders for either one of the overhead lifts to commence. Calvert explained that some countries allowed a "continental clean" in which the bar could touch and rest on the body one or more times en route to the shoulders. A "true" clean meant that the bar traveled directly—cleanly, without touching the body—from the floor to the shoulders. Eventually, the "clean" was universally adopted and included in the name of one of the two present day Olympic weightlifting events.

After discussing the core competitive lifts, Calvert moved on to explain other well-known lifts often seen or contested. He explained in detail several presses, including the bent-press, the military press, and an ordinary press, and commented that they were rarely seen in Europe anymore, but that America seemed to still enjoy contesting them.[45] Sandow had been a good bent-presser and claimed he could press over three hundred pounds, but Calvert only credited him with the 271-pounds he did in a public exhibition in London in 1891.[46] Although Calvert believed Sandow had a fabulous physique, he also believed that as Sandow still belonged in the professional strongman category he was therefore prone to stretching the truth about his lifts as well as his measurements. Calvert also explained stunts like "muscling out" the bells, harness

[45] Ibid., 43-50.
[46] Ibid., 49. Willoughby only credits Sandow with 269 pounds. See: Willoughby, *Super-Athletes*, 61.

lifting, back-lifting, and dead-weight lifting. Continuing his diatribe against professional strongmen, Calvert described these special lifts, gave the record lifts if he knew them, and then proceeded to tell how the professional would do the lift in order to make a good impression. If Calvert didn't know of a way to fake or cheat on an exercise he accepted the lift as a "test of pure strength." Such pure strength tests included dead-weight lifting—like today's partial deadlift, or Windship's health lift of fifty years earlier—and dead-weight lifting to the cross position—like a modern stiff-legged deadlift.[47]

Calvert also argued for standardization in the competition itself. He differentiated between contests of strength and contests of endurance. It made sense to Calvert that weightlifters should be testing the amount of weight they could lift, not how many times they could lift a particular weight—which was often done in strongman contests where only fixed-weight barbells were available. Calvert argued that contests should consist of exercises chosen from the standard lifts with the goal of seeing who could lift the most in each movement. Above all, in order to keep the lifting contest a true test of strength, it should not mix different types of lifting such as dumbbell lifting and back-lifting.[48] These mixed types of competitions were the primary avenues professional strongmen used to win the challenges they threw at each other…on the rare occasions when they actually met in competition. In an effort to get publicity in a local or national newspaper, the strongmen were "prolific with challenges," but when it came time to actually "put up or shut up," according to Calvert, "most American professional lifters avoid competitions as they do poison."[49]

As for dumbbell lifting, Calvert maintained that it needed to be performed with equipment that was "uniform and of standard style." Each lifter should be "compelled"

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[47] Calvert, *The Truth*, 50-59.
[48] Ibid., 78-80.
[49] Ibid., 78.

to use the same equipment, argued Calvert, "thus placing every lifter on absolutely equal footing regarding apparatus."[50] This was quite a novel idea in 1911 and, more than likely, Calvert envisioned all the competitions using Milo barbells. By restricting the kinds of lifts possible and making all competitors use the same equipment, Calvert could foresee regular and sensible competitions taking place across America. Each person would be properly trained in the lifts and records could be easily verified. This was the only way, Calvert believed, that the United States could develop lifters to compete against the European strength stars.

Taking the concept of standardization another step, Calvert discussed the future organization of American weightlifting. He stressed the need for a Board of Control so that standardized competitions would be held and rules enforced—an important aspect to a sport's modernization, according to both Guttmann and Adelman. Calvert reminded his readers about the beneficial effects of such organization on track and field. Athletes in track and field now knew the rules of performance for each of the competitive events and knew what steps to take in order to establish records. However, until William B. Curtis and the Amateur Athletic Union organized track and field, the sport was like lifting—a morass of claims, counter-claims, and unverified records that made it impossible to follow as a real sport. Calvert pointed out that, as of 1911, American weightlifting had no set competitive lifts, no rules of performance, and no supply of qualified referees; this meant that a reliable and comprehensive set of records could not be kept. A Board of Control, he explained, would establish the lifts and their rules of performance, and would allow referees to be trained and certified. This was an important aspect to the standardization process, according to Calvert, who also argued for the separation of professional and amateur lifters and the development of weight classes. Willing to assist

[50] Ibid., 79.

in the formation of a "national association," Calvert believed it "would do more than anything else to develop champion lifters in the United States." He even suggested that the European system of governing lifting contests be followed, with the rules of performance patterned after the German rules.[51]

BREAKING NEW GROUND

The Truth About Weight-Lifting broke new ground in many other ways as well. Before Calvert came on the scene, the term "dumbbell" meant more than just a short-handled weight lifting bar to most lifting aficionados. Generally more inclusive, the term was also used when talking about the long-handled version, presently referred to as a barbell. Calvert was one of the first to begin making distinctions between the terms "dumbbell" and "barbell." In this text he explained the differences in barbells, dumbbells, and kettle-bells and their affects on the body. Barbells, he argued, were better for heavy, overhead, weight work since the lifter often had to "concentrate all his attention and will power on making the lifting muscles contract strongly enough to raise the weight."[52] If only one piece of equipment was used the focus stayed narrow, but if a pair of dumbbells were used the lifter's focus would be divided and, therefore, the lifter would be less likely to succeed.

Calvert differentiated between "weight-lifting" and "heavy dumbbell exercises" but he worded his explanations according to traditional usages. "Weight-lifting" proper involved "the lifting of heavy dumbbells" in the standard competitive lifts. Although six of the eight exercises were performed with only one arm, most of them were described as being done with a long-handled barbell. "Heavy dumbbell exercises," on the other hand,

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[51] Ibid., 104-13. See, especially, page 105 regarding the formation of a national association.
[52] Ibid., 119-20.

involved the use of "moderately heavy dumbbells, or bar-bells, and are intended to prepare the muscles for the more arduous work of weight-lifting." Calvert recommended weight-lifting proper for those sixteen and older, but heavy dumbbell work was acceptable for those as young as fourteen. A person's best heavy work, Calvert believed, was accomplished between the ages of thirty and forty, but great benefits from weight training could be gained by those older than forty years.[53] He had recently redesigned his training courses (to be discussed later) to reflect several different levels of preparation—developmental exercise, competitive exercise, and exhibition strongman work.

The book also furthered a theme expected of the proprietor of the Milo Bar-bell Company and common to nearly all of Calvert's writing—opposition to the notion that lifting light weights would develop significant muscle tissue. Calvert wrote that light dumbbell training was "valuable as a means of benefiting the health and keeping the body in good working condition, but…valueless for the purpose of developing great muscular strength and energy."[54] As the years progressed Calvert associated muscular strength with muscular growth and development and realized that a lifter generally did not get one without the other. He tried to relay this information to his students and the book's readers. Train for muscular development and the strength will come. The muscles need to be worked in groups, Calvert emphasized, and only the use of moderately-heavy to heavy weights forced an increase in strength and muscle growth to occur.[55]

In an attempt to overcome other superstitions and myths surrounding weight training Calvert attacked the concept of muscle binding. He explained that the quick lifts encouraged the development of speed and agility; therefore, they could not be associated

[53] Ibid., 114-23. See also pages 26-42 for the competitive lifts' descriptions and illustrations.
[54] Ibid., 114.
[55] Ibid., 116-17.

with the muscle-bound state.[56] Another criticism of weight-lifting by some of the public included the unsightly development of a "knotty" physique. Calvert explained that the bearers of these "knots" were just used to tensing up their muscles while posing in front of people or a camera. Strong men had muscles that were smooth when not in a tensed state, Calvert confidently assured the readers.[57] Also, much like the aches, pains, and strains associated with today's weekend warrior syndrome, Calvert revealed that the ever-dreaded "strain" was caused by "the conceit which prompts the untrained individual" to handle too much weight too quickly or to show off to their friends.[58] Although "strain" was often associated with abdominal ruptures, or hernias, during this time period, Calvert didn't seem to include this malady in his version of the term. Although, he warned readers of "abdominal rupture" earlier in the book when discussing the proper back alignment for one of the deadlifting exercises, when discussing strain, Calvert referred to the foolishness that surrounds men who chance upon a heavy dumbbell.[59] Even though untrained, they will all strain themselves trying to lift the heavy object since "the average man is secretly very proud of his strength and very loath to admit that any one of his fellows can outdo him in any feat where strength alone is required."[60] These types of incidents, in Calvert's opinion, did much to give weight-lifting an unwarranted, bad reputation. Other types of strains, such as those on the heart, would be thwarted by systematic and rhythmic breathing during exercise.[61] Fulfilling another one of Guttmann's modernity characteristics, Calvert also warned that athletes had to specialize and begin training according to their sporting interests. Although subsequent events

[56] Ibid., 130.
[57] Ibid., 130-31.
[58] Ibid., 132. For weekend warrior syndrome see: http://www.cayugamed.org/consumer/read.dbm?ID=263.
[59] Ibid., 57.
[60] Ibid., 131-32.
[61] Ibid., 141.

would prove him wrong, Calvert asserted that if an athlete wanted extreme strength then he had to give up some speed. He also believed that if the athlete wanted to be the fastest man on the track then he had to forget the idea of being enormously strong. However, Calvert emphasized to the reader, correctly, that a good mix of the two abilities—speed and strength—led to great benefits and produced powerful, above average men.[62]

Calvert finished the book by giving tips to those interested in entering the realm of the performing strongman. Although he claimed not to be preparing young men for the strongman profession, Calvert noted that others believed this was the sole aim of his business. In reality, he advised young men to not set their sites on the profession because it would take away from their enjoyment of the activity of lifting weights. "Weight lifting as a sport is not only one of the most beneficial forms of exercise, but is also one of the most fascinating of pastimes," stated Calvert.[63] Becoming a professional strongman would require the young lifter to resort to exaggeration and trickery because the public demanded sensational acts filled with danger—not an honest, straightforward heavy lifting act. To prove his point he recounted a story about a touring vaudeville strongman who traveled "on his shape." He was "gifted by nature with a superb figure, and by doing a moderate amount of heavy dumbbell work he was able to keep his muscles in the finest, clear-cut condition." The man claimed he could lift a ton, but Calvert knew that he was "all 'looks.'" Making an average of $100 to $150 a week, he "trades on his appearance" and is "very clever in giving the audience the impression that he is working very hard" with his weights.[64] On the other hand, Calvert contrasted this with the story of a young strongman who "has been lifting dumbbells for years; he is remarkably clever in his work and lifts so correctly and gracefully that you cannot realize

[62] Ibid., 138-39, 142-43.
[63] Ibid., 146.
[64] Ibid., 147-48.

how much strength he is putting forth." Because of his non-remarkable build and the effortless ease with which he lifted the weights he couldn't get "a paying engagement on the stage" because the customers would believe him to be a faker.[65] In this way, Calvert reminded his readers that the public demanded beautifully-built and heavily muscled-men, and that a lifter must "look the part" if he hoped to make it as a professional.[66]

Although Calvert understood that the professional strongmen tried to make a living by their performances, and that they believed it was necessary to exaggerate and falsify claims, he was fervently opposed to the effects such farces had upon the amateur or novice lifter. He believed that many young men declined to pick up a bell because of their fear of not being able to equal the strength of a famous or idolized professional. It was these individuals Calvert targeted when he wrote the parting statement for his book, "If this little volume encourages any number of young men to take up this fascinating sport, I will consider that the time and trouble spent in producing it have been well repaid."[67]

NEW TRAINING COURSES

Professional strongmen may have suffered to a degree at the hands of Alan Calvert and his ground-breaking book, but amateur lifting and the Milo Bar-bell Company benefited significantly from its publication. Because Calvert had the courage to tell "The Truth About Weight-Lifting," more men began buying his barbells and training with weights. His reputation for honesty and integrity grew. In 1911, after his Triplex combination bell had been out for a few years Calvert revised his training course. Where he had previously offered one course, he now advertised three—*Preliminary*

[65] Ibid., 148.
[66] Ibid., 147.
[67] Ibid., 160.

Instructions, *The Eight Standard Lifts*, and an *Advanced Course of Instructions*. The *Preliminary* course contained instructions for breathing, bathing, and the timing of exercise; it was similar to the earlier version. However, with this course Calvert changed his advice on how often a person should exercise and advocated a day of rest between days of exercise. He explained that muscle tissue was broken down and then "subsequently replaced by fresh material supplied by the blood," and this tissue rebuilding occurred during the day off, hence its importance.[68] Workouts took only twenty-five to thirty minutes if Calvert's beginner's course was closely followed. Aimed primarily at building a foundation for later, heavier work, Calvert introduced the lifter to twenty-four basic exercises—barbell and dumbbell biceps curls, cleans, stiff-legged deadlifts, hack squats, sit-ups, back hyperextensions, kettle-bell and barbell overhead presses, calf raises, squats, oblique side crunches and twists, the bent press, the pull-over and press, "muscling out" dumbbells, alternating kettle-bell swings, wrist and forearm rolls, shrugs, and upright rows.

The most important innovation in the course was that Calvert took a more active role in his students' training and gave each correspondent individualized instructions on choosing a starting weight and determining the proper number of repetitions. He let it be known in *The Truth About Weight-Lifting* that "the average man…is not able to judge for himself the proper amount of weight necessary to properly exercise a given set of muscles, especially at the start of his course."[69] This was a job for an expert who had "handled thousands of such cases"—an expert such as himself.[70] To make sure that the lifter continued to progressively train, Calvert wrote that every third day the lifter should

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[68] Alan Calvert, "First Course, Preliminary Instructions," (Milo Bar-bell Company: by the author, 1912), found in Ottley Coulter's Milo Scrapbook, TMPCC.
[69] Calvert, *The Truth*, 135.
[70] Ibid.

increase the number of repetitions by one or two until he reached the maximum number of reps suggested for that exercise. When the lifter could do all the assigned repetitions, the weight should be increased, the number of repetitions reduced, and the cycle begun once again. Ottley Coulter, for example, asked Calvert in 1912 for an updated personalized training course. In the personal letter he received from Calvert, Coulter was told to start in the clean and press "with 110 pounds, increase the number of repetitions 1 every third day until you reach 10 times, then increase the weight of the bell 10 lbs. and start again with 5 repetitions."[71] Weight-lifters often call this the "double progressive method" of training, and credit Calvert with its original prescription and popularity.[72]

The fact that Calvert began prescribing a fixed number of repetitions and weight to be used was unique. Earlier systems of physical training such as those recommended by David P. Butler and George Barker Windship also advocated progressive lifting schedules. They did not, however, advise their students to start at a certain weight and then to add a set amount and increase the number of repetitions each workout.[73] Dio Lewis, of course, didn't believe in lifting heavy weights so he wouldn't have instructed his students to regularly increase the resistance and Blaikie's program was a high-repetition, low-weight system which precluded any significant advancements. Sandow explained the exercises in his system of training but didn't give any indication of how many times each should be performed; an instructor at a gym was needed for that piece of

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[71] Alan Calvert letter to Ottley Coulter, 20 November 1912, from Ottley Coulter's Milo Scrapbook, TMPCC. See Exercise No. 2 in "Preliminary Instructions."

[72] Willoughby, "Alan Calvert's Teachings vs. Modern Methods," *Iron Man* (May 1955): 23.

[73] David P. Butler, *Butler's System of Physical Training. The Lifting Cure: An Original, Scientific Application of the Laws of Motion or Mechanical Action to Physical Culture and the Cure of Disease. With a Discussion of True and False Methods of Physical Training* (Boston: by the author, 1868), 94-95. Because no papers of individually-trained students of either Barker or Butler have survived, it is impossible to know for certain what sets and repetitions they would have recommended.

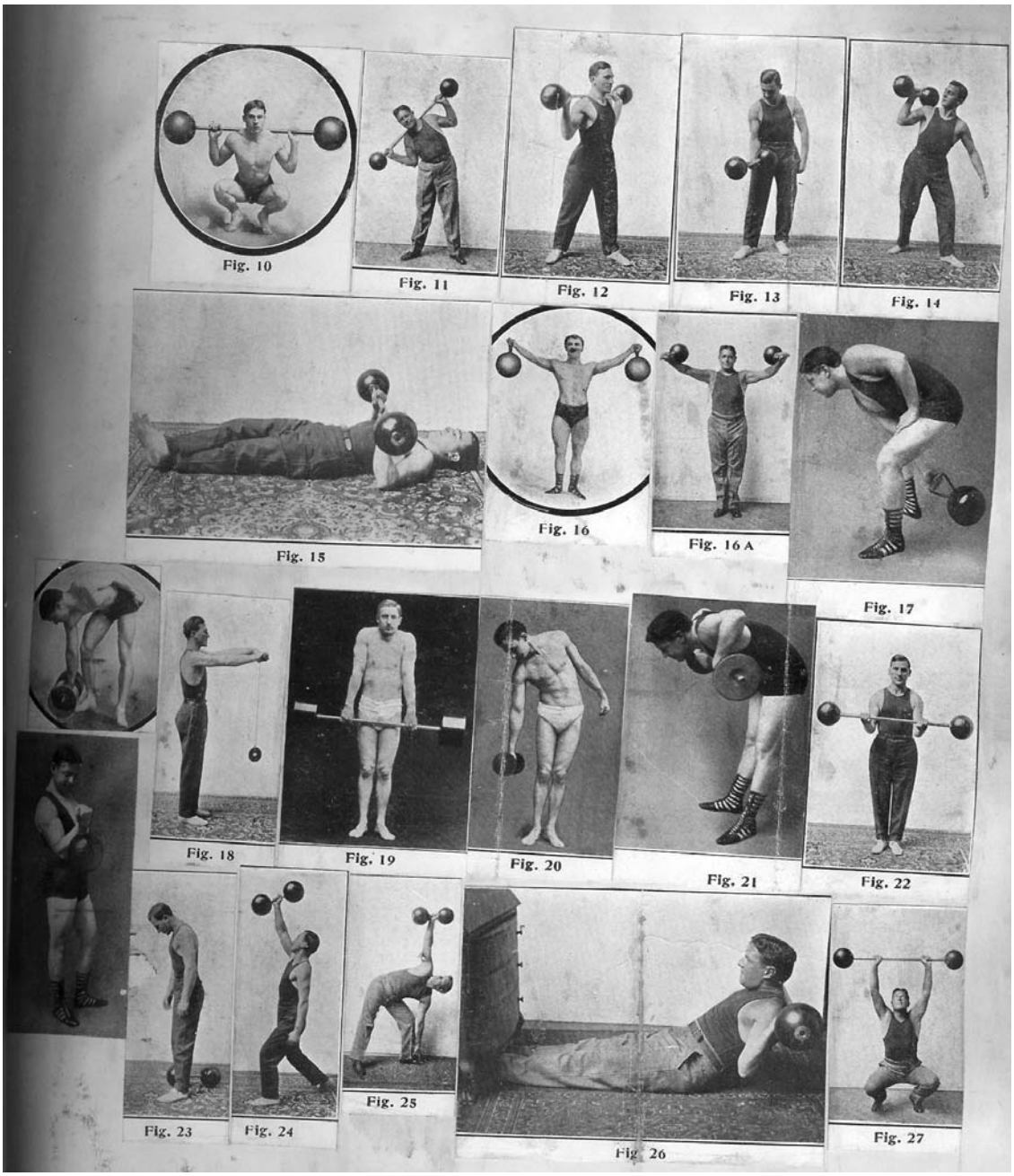

Figure 40. Ottley Coulter cut all the pictures from Calvert's training courses and pasted them in sequence in his Milo Scrapbook. This page illustrates, primarily, the developing exercises. Coulter's scrapbook is housed at TMPCC.

information.[74] That Calvert studied the student's current measurements and abilities and prescribed a starting weight and number of repetitions based on that information was truly novel. That he kept in contact with his students and customers via letters, checking on their improvement and suggesting new progressions, indicates that he regarded each student as important. Clearly, this would have endeared him to his many loyal students over the years.

The second course, *Eight Standard Lifts*, instructed the lifter on Calvert's canon of acceptable overhead lifts. Calvert divided the exercises into two basic groups: one-arm exercises and two-arm exercises. He spent considerable time explaining the one-arm exercises and then simply referred back to them when discussing the two-arm exercises. Much like he did in *The Truth About Weight-Lifting*, Calvert gave an occasional short history lesson about how the lifters in Germany, Austria, England, or France performed the lifts and who was especially known for holding the records. For example, when describing the one-arm snatch Calvert made the observation, "It is noticeable that the English lifters, infuenced[sic] by their specializing on the 'Bent Press' lift, when performing a 'Snatch' will drop to the side by bending the body at the waist instead of dropping the body by bending the knees. The Germans and French, who always drop straight down in the 'Snatch' hold all the records; while the English records in the 'Snatch' lifts are comparatively poor."[75]

Since weight-lifting was so new to the public, racks to hold the bar at shoulder level, like squat racks, did not exist. If a person wanted to perform an overhead lift, he had to find a way to get the bar from the floor into position at the shoulders to begin the actual lift. In this second course, *Eight Standard Lifts*, Calvert demonstrated four

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[74] Eugen Sandow, *Sandow's System of Physical Training* (New York: J. Selwin Tait & Sons, 1894), 202-34.
[75] Alan Calvert, *Eight Standard Lifts* (Philadelphia: Milo Bar-bell Company, 1912), 6. Ottley Coulter's Milo Scrapbook, TMPCC.

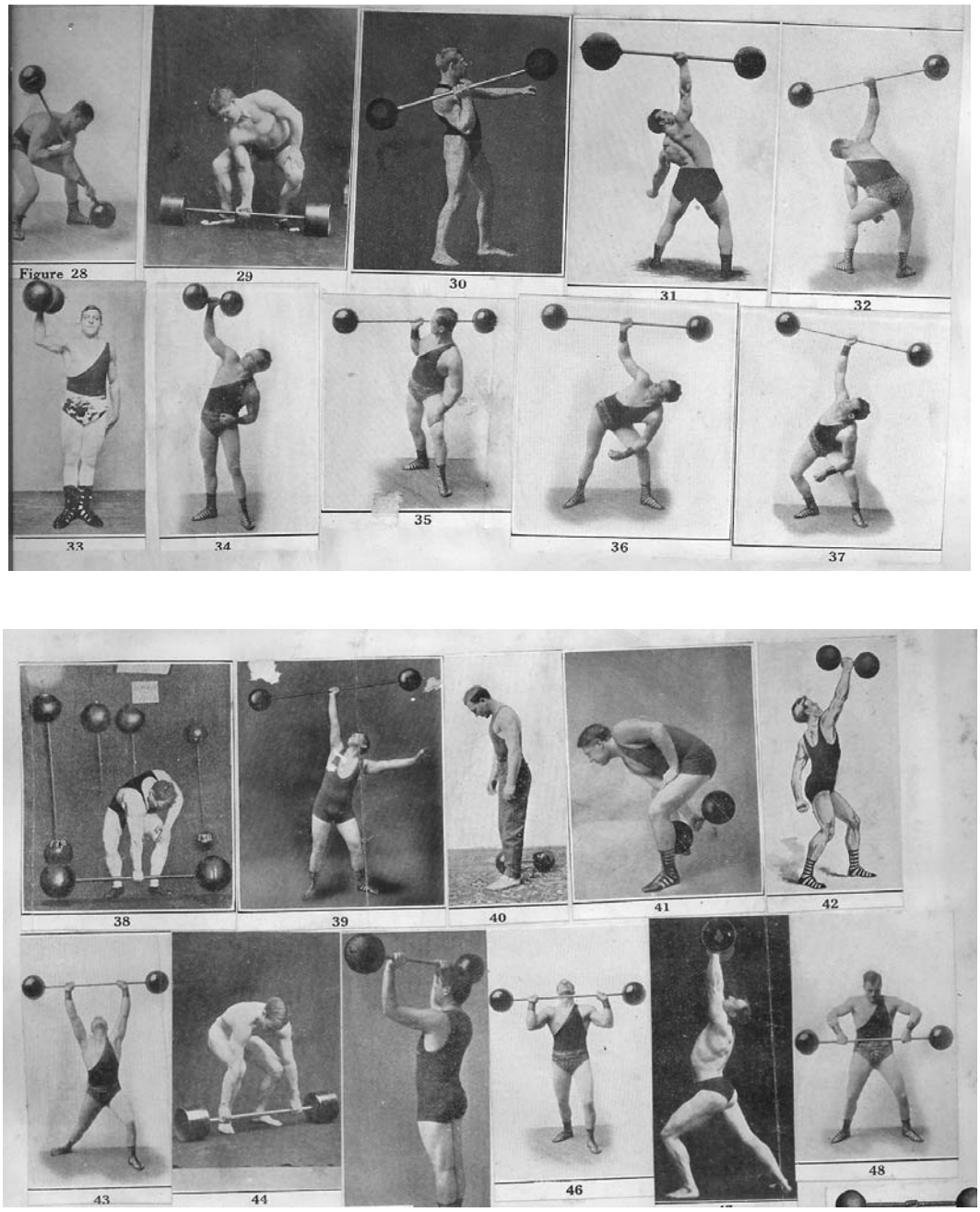

Figure 41. By placing all the course illustrations on one large page, Coulter could easily follow the exercises as he trained. *Ottley Coulter's Milo Scrapbook, TMPCC.*

different methods—using only one-hand—to get the bar to the shoulder. Once in position at the shoulder, Calvert then explained four different methods to get the bar to arms' length above the student's head—the one-arm jerk, the one-arm military press, the one-arm side press, and the one-arm bent press. When combined with the one-arm snatch and the one-arm swing, the one-arm exercises were completed. Calvert next described the two-arm snatch, the two-arm press, and the two-arm jerk before finishing with a lengthy explanation of how the "continental style" of getting the bar from the floor to the shoulders in three to four motions differed from the "clean style" of lifting as he had done in *The Truth About Weight-Lifting*.[76]

All Milo customers—whether buying the cheapest or the most expensive bell—received the first two courses for free. However, only those customers who purchased a Milo Triplex barbell received the *Advanced Course of Instructions* free of charge. Other Milo customers could buy it for two dollars fifty cents whereas a non-Milo customer paid five dollars for the course—a very large sum in a day when the average worker earned approximately $12 a week.[77] The third course introduced seven new, "advanced" exercises and then gave advice to those men interested in entering the professional strongman ranks. The advanced exercises worked the entire body: "slow and steady" step-ups and a free-weight leg press for the legs; a straight-armed pullover done while lying on the floor for the chest and ribcage; a pullover and press while in a wrestler's bridge position for the neck, pectorals, deltoids, and back; a release-and-catch dumbbell exercise for a strong grip; a stiff-legged deadlift for the back; and a sit-up with weight performed while leaning back across a chair or bench for the abdominals. As in the first

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[76] Ibid.

[77] Alan Calvert, *A New First Course in Muscle-Developing and Body-Building Exercises* (Philadelphia: by the author, 1912). The $12/week figure was calculated using figures from Bureau of the Census United States, *The Statistical History of the United States, from Colonial Times to the Present* (New York: Basic Books, 1976), 168, Series D 779-93. The average annual earnings in 1912 for all industries (excluding farm labor) was $646. Divide this be the fifty-two weeks in a year for $12.42 weekly salary.

two courses Calvert informed the lifter of the number of repetitions to use at the beginning of each exercise as well as an approximation of the amount of weight to begin with for each.[78]

Once the lifter completed these exercises as recommended, especially the abdominal exercises, Calvert suggested moving on to more difficult feats. His first suggestion for the student was to build a Roman chair. A Roman chair was simply a sturdily-built chair with a back no higher than one inch less than the measurement of one's heel to the bend of the knee. A thick strap was attached to the seat so that when the lifter stood on the chair seat with his calves to the chair back, he could slide his feet under the strap and lean backwards, bending at the knees, without flipping over. The Roman chair exercise was "two or three times more severe than even the Advanced Abdominal Exercise" because the weight of the body was "supported from the bend of the knees," not from the hips as in normal sit-up-style exercises. Eventually, the student learned to "lower the body further and further until…[he could] touch the head to the floor with the back well arched."[79] Once this motion—using only bodyweight—was mastered, picking up a barbell from the floor and returning to an upright position became the challenge.

Calvert next suggested juggling with kettle-bells, bar-bells and dumbbells. He taught that all lifters, not just the performing strongman, should practice juggling because it increased "a man's agility and grace in handling his body." Moreover, the activity developed "quickness of the eye and hand," and required "as much nimble foot-work as boxing."[80] Kettle-bells were easy to juggle, Calvert explained, if one remembered to

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[78] Alan Calvert, *Advanced Course of Instruction* (Philadelphia: Milo Bar-bell Company, 1912), found in Ottley Coulter's Milo Scrapbook, TMPCC.
[79] Ibid., 4-5.
[80] Ibid., 6-7.

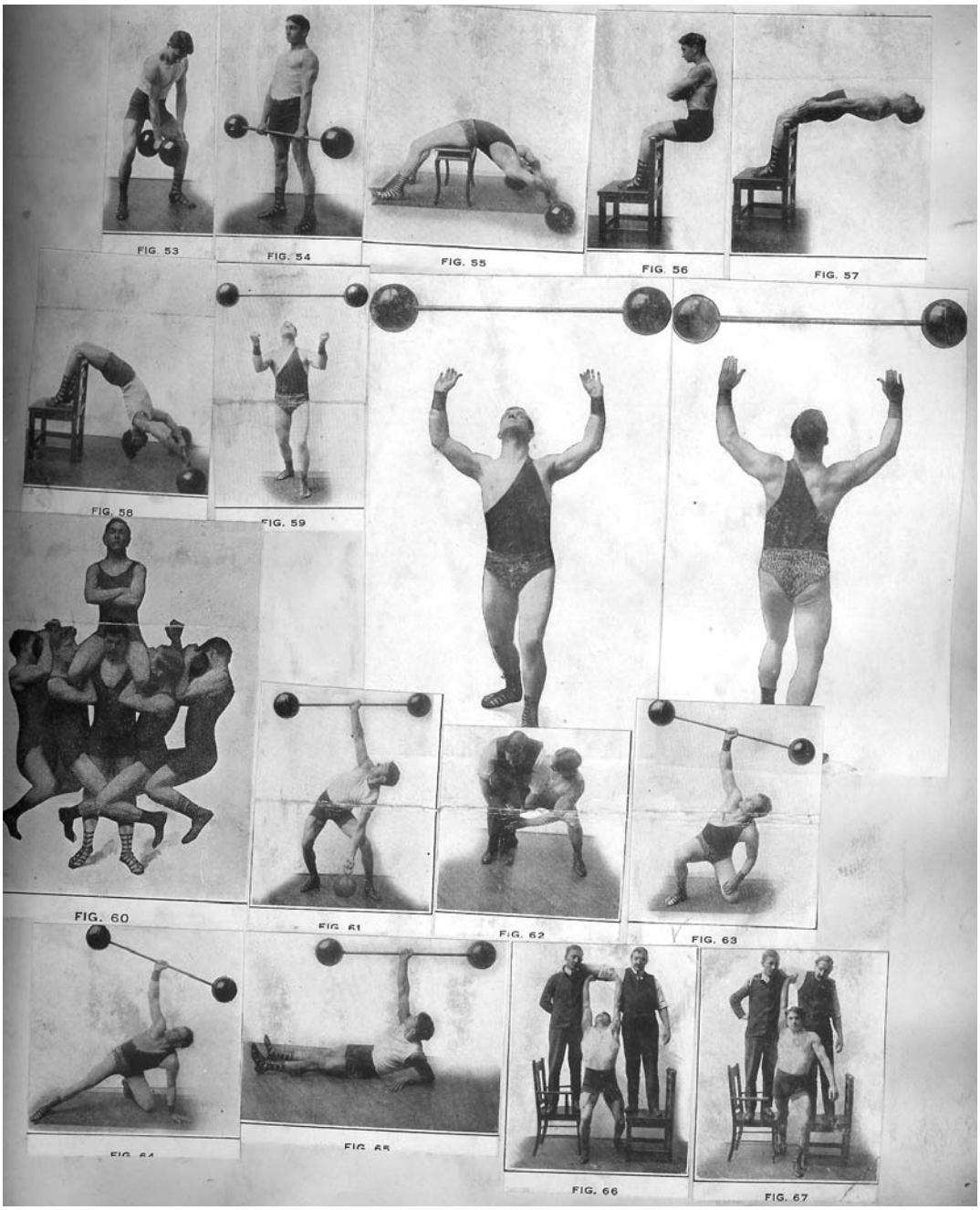

Figure 42. On this page of Advanced Exercises and Exhibition Feats from Coulter's scrapbook the Roman chair exercise is shown in the top right and barbell juggling is in the center of the page. A "Pyramid," a "human kettle-bell," and other supporting feats are also shown near the bottom of the page. *Ottley Coulter's Milo Scrapbook, TMPCC.*

"swing the kettle-bell first backwards through the legs, and then forwards and upwards until it is to the height of the chin. Leave go of the handle and give it a vigorous push *from you*, so that the kettle-bell will turn completely over in the air, and as the handle comes up again you can grasp it either with the right or left hand." Failure to push the bell away from the body meant the lifter would "in a fraction of a second receive a terrific blow on the chest from the flying kettle-bell."[81] Calvert's advice on juggling barbells and dumbbells was similar to that for the kettle-bells. A heavy barbell—more than one hundred pounds with a little practice—could be lifted overhead, suddenly dropped, and carefully caught in the crook of the elbows. While still cradled by the elbows, it could then be heaved back in the air, and caught at the shoulders with either one or two hands. Using lighter weight dumbbells or barbells (training started with forty or fifty pounds), the lifter positioned the bell overhead then tossed it from hand to hand using lower body strength to get it moving.[82] Always conscious of the potential for injury, Calvert described these events in considerable detail. For example, when catching a heavy barbell with the elbows, Calvert cautioned the lifter to not actually catch the bell with the elbows, but rather to make sure "the arms are extended upwards to meet the bell as it comes down." The actual moment of impact involved the bell striking "first on the inside of the upraised forearms, about three inches above the elbows, the arms being drawn back to the sides at the same instant." A bending of the knees to lessen the shock of the weight was also imperative while dropping and catching heavy barbells.[83]

In the section titled "Exhibition Feats of Strength" Calvert described several supporting feats which were always crowd favorites. The first consisted of lying on the floor "with the center of the handle-bar touching crown of head, pull bell across face to

[81] Ibid., 5.
[82] Ibid., 6.
[83] Ibid.

chest, push aloft two or three times…hold bell aloft with both arms straight and let a man sit on each end of the bell." At a predetermined signal, the men would raise their feet simultaneously so that the lifter supported all the weight. According to Calvert, an advanced student of his should have no trouble supporting four hundred pounds, while weights in the range of five hundred to eight hundred pounds were possible. A variation on this exercise involved two barbells—one balanced upon the raised knees of the performer and one held as above. As a hint to showmanship Calvert suggested that even though a bell was easy to hold on the knees, "it creates quite an impression if you apparently have a great deal of trouble in balancing it there."[84] When performing "The Pyramid," the lifter stood in an upright position holding a thick-handled barbell across the shoulders, like a modern day back squat. A "nimble man" crawled up to sit on the performer's shoulders while a man hung from each end of the bar. An advanced performer would have two men hang from each end of the bar along with supporting the man on his shoulders. To create more drama the lifter could turn around or walk a few steps while holding his "pyramid."[85]

Lifting two weights above the head using a barbell and kettle-bell also made for a "very good exhibition lift" according to Calvert. Although the barbell could be lifted using only one hand, Calvert recommended that the performer use two hands to raise the barbell overhead. After quickly adjusting one's grip to the center of the bar and while keeping it balanced, the lifter bent his legs and body and used his other hand to reach down to lift the kettle-bell off the ground and even to the shoulder and overhead. The kettle-bell "must be light enough so that you can lift it from the floor to the shoulder before you commence to straighten up the body." Once both bells were overhead and

[84] Ibid., 7.
[85] Ibid., 7-8.

side-by-side, the lifter could demonstrate some flair by first putting down the kettle-bell and then "juggling" the barbell from hand to hand as described earlier. The great Arthur Saxon, Calvert reported, put a barbell weighing 336 pounds overhead using only one hand and then lifted a kettle-bell weighing 112 pounds to the shoulder and overhead. As Saxon was a phenomenon, Calvert told his students that they should begin practicing with a seventy-five to eighty-five pound barbell and a kettle-bell of twenty-five to thirty pounds. An average lifter, he claimed, could manage no more than a 150 pound barbell and fifty pound kettle-bell, while a total combined weight of over 250 pounds was considered "remarkably good."[86]

Another impressive feat involved a "Human Kettle-bell." The performer's assistant would "stand with feet close together, bend down and clasp his hands under his knees, interlacing his fingers to make the grip secure." From the assistant's left side, the lifter then passed his right arm between the "human kettle-bell's" left arm and body and grasped the right arm near the armpit. When ready, the "kettle-bell" would give a slight upwards jump while the lifter assisted the move to get the "weight" to his shoulder. From this position the lifter would perform a bent press until the "human kettle-bell" was lifted overhead. Yet another exercise involved an assistant's body in the role of a "human barbell." In this feat, the lifter put his hand in the small of his assistant's back and then reached down to grab his ankle. As the lifter stooped down the assistant would lean backwards and then maintain a rigid posture. The lifter would then stand erect with the stiff body of his assistant at his shoulders. From this position the lifter could release his grip on his assistant's ankle and then complete either a bent press or jerk exercise using a "human barbell."[87] Another "human barbell" feat involved the assistant lying on

[86] Ibid., 8.
[87] Ibid., 9.

his right side on the ground with his ankles crossed and his left arm placed behind his back causing his shoulder blade to protrude. The lifter hooked one hand on the projecting shoulder blade and put the other hand on the inside of the thighs just above the knees. From here, the strongman lifted the stiff body as if it was a barbell to his shoulders and then pressed him overhead. A difficult stunt, it made a "very pretty exhibition feat."[88]

Another stunt involved two men standing approximately twenty inches apart with their arms across each others' shoulders. From this position they could be lifted by one man who would squat down, and with his arms fully straight and over his head grasp their crossed arms near the arm pits and then stand up straight. Calvert reminded the lifter that this was a supporting stunt. The lifter, therefore, had to use his legs to do the actual lifting after he "locked" the arms straight and squatted into position to lift the men up. A strong performer could do this feat with more than just two men, but in order to leave a favorable impression he needed to walk with the supported men several steps or even across the stage. [89]

Another feat described included raising a barbell or human assistant overhead and then lying down on the floor and getting back up again. The stunt was fairly complicated and Calvert gave detailed instructions for the lifter to follow while holding the weight overhead in the right hand:

> hold left arm out to the side and bend the left leg and kneel on the floor with the left leg only, as shown in position Figure 63. Keep the eyes directed steadily upon the hand which holds the bell so as to keep the balance. Lean over to the left and place the left hand on the floor and straighten out the right leg, as shown in Fig. 64. Now, cautiously sit down on the floor and push the left leg out straight. Keep the left hand on the floor in order to steady yourself, and slowly and cautiously lie down full length upon the back, as in Figure 65, still holding barbell aloft. Rest a moment, and then quickly to the left, thrust the right arm and shoulder upwards; at the same instant, place the left hand on the floor and double

[88] Ibid., 10.
[89] Ibid.

> the left leg under the right. This is the most difficult part of the whole lift. From this position regain position Figure 64 and then position Figure 63 and rise again to the feet. This is a very taking and effective feat of strength, and after a couple of months' practice you should be able to perform it either with a bar-bell weighing 125 lbs., or a man weighing 135 or 140 lbs.[90]

Calvert provided information on personal costume, feat selection, and even suggested an order to the exhibiting strongman's performance in the section, "How to Give an Exhibition." The average audience didn't really understand feats of strength, Calvert assured his students, but they had a "fixed idea" that "no man is really strong unless he *looks* strong." Therefore, the strongman's costume and personal appearance should be carefully considered with that in mind. Calvert recommended making the arms and legs look as large as possible through the wearing of a "leotard—a one-piece garment, armless, and cut low in the front like an evening vest, and cut high over the hips." This particular type of clothing allowed the deltoids and thighs to be displayed to their fullest. The "greatest mistake" a strongman could make, according to Calvert, was to wear a costume which hid his shoulders or was "bunchy" around the hips:

> The stage athletes at one time wore a pair of trunks around the hips, and these trunks were edged top and bottom with plaited silk, or with fringe, which had the effect of making the hips seem large and the legs and chest small. Old-time lifters also made the mistake of wearing shirts, or jerseys, with quarter-sleeves. These jerseys gave the chest a very peculiar appearance, and dwarfed the arms.[91]

Calvert was referring to the attire worn by mid and late nineteenth century performers such as Felice Napoli and Louis Cyr. Photographs taken of these men in their performance costumes reveal puffy, fringed costumes.[92] The mores of the Victorian era dictated to a large degree the attire of performers—the sight of too much flesh was taboo. Although Calvert encouraged the wearing of revealing costumes, for some communities

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[90] Ibid., 9.
[91] Ibid., 11.
[92] Many examples of mid-to-late strongman attire can be found in Edmond Desbonnet, *Les Rois De La Force*.

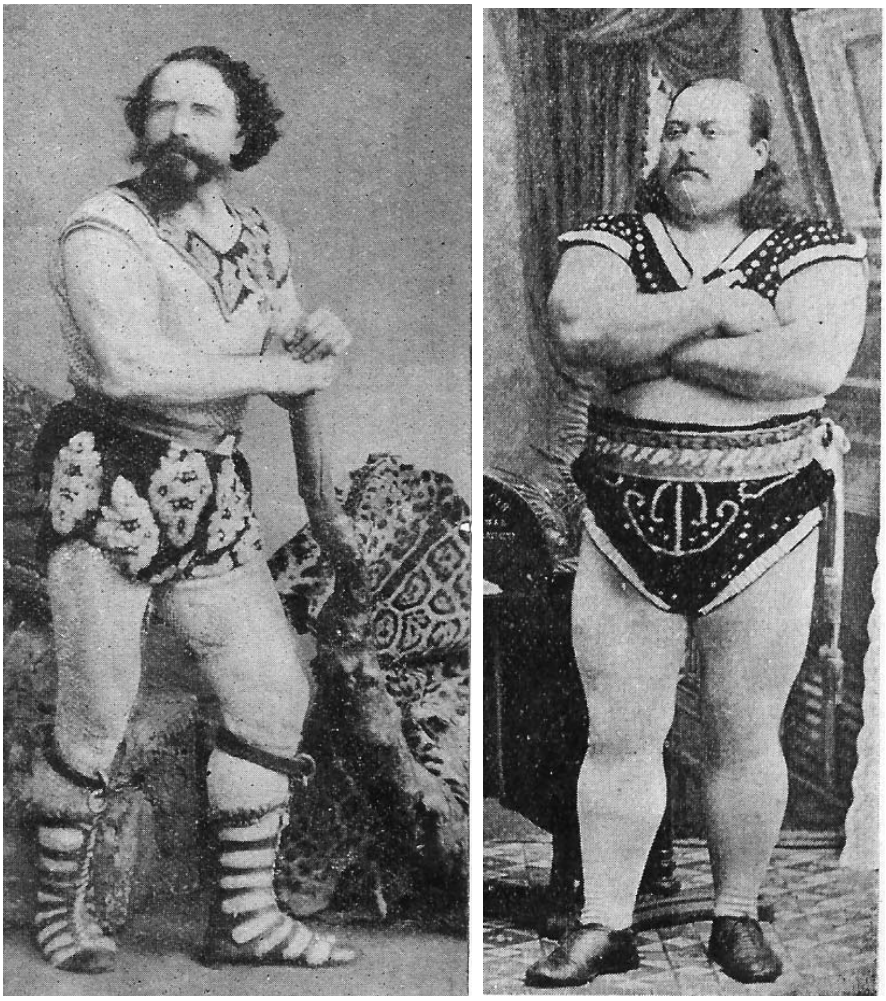

Figure 43. Felice Napoli (left) and Louis Cyr (right) in traditional mid-to-late nineteenth strongman attire. Images from Desbonnet's *Les Rois de la Force*, pages 85 and 459 respectively.

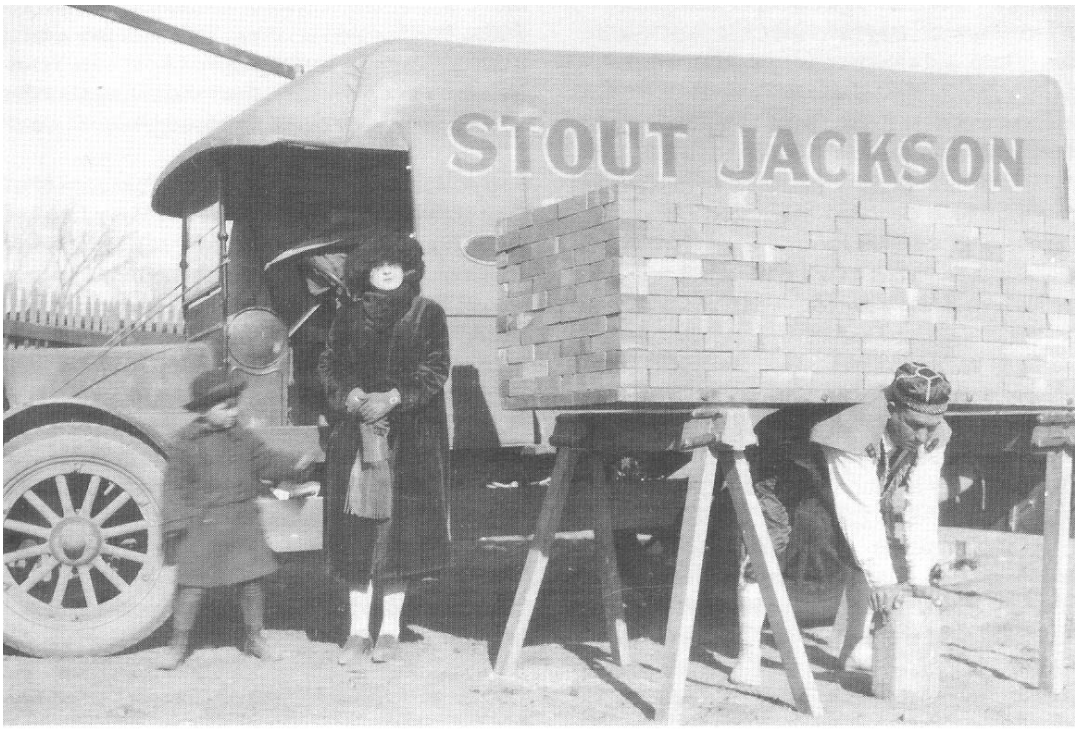

Figure 44. Due to his family-oriented shows Thomas Jefferson "Stout" Jackson often used costumes which covered his entire body in the first half of the twentieth century. *Photograph from The "Stout" Jackson Scrapbook, TMPCC.*

traditional views toward the body held sway well into the twentieth century. For example, the strongman Thomas Jefferson "Stout" Jackson wore a fringed, non-revealing outfit in the early decades of the 1900s while touring from the Rio Grande Valley of south Texas to the northern states putting on strength shows for migrant workers and their families.[93] His physique-covering costume was most likely a calculated move designed to entice a more conservative, family-oriented customer to his act.

A pair of full-length tights, preferably flesh-colored, worn under the snug leotard, a pair of "high strapped sandals, and a pair of long wrist-supporters" rounded out Calvert's ideal costume. The sandals "accentuate the development of the calf of the leg, and they hide the ankle and instep, which parts of the body are rarely beautiful in a man." The wrist supporters "make the forearm look very much thicker, and thus give an appearance of great strength to the whole arm."[94] Once the costume had been decided upon the next thing was the exercises and their order of performance.

Calvert wisely instructed his students to choose those exercises "which have the greatest effect upon the audience." Keeping the pure barbell and dumbbell lifts to only two or three, Calvert advised that most of the feats should be of the supporting-type—using whenever possible a human weight. Knowing that Sandow's body and showmanship were what an audience unconsciously paid money to see, and not his actual strength, Calvert advised a "considerable show" of effort with barbells and an "appearance of ease" when lifting human weight. The audience wouldn't understand, or appreciate, a 175-pound barbell overhead press, warned Calvert, but they would report to all their friends the ease with which a 135-pound man was picked up and pressed. Whenever exercises using human weight were performed, Calvert emphasized, "you

[93] Kimberly Ayn Beckwith, "Thomas Jefferson "Stout" Jackson: Texas Strongman," *Iron Game History* 3(January 1994).
[94] Calvert, *Advanced Course*, 11.

ought to do it in just as easy and *jaunty* a manner as you possibly can." "Remember," he explained, "that practically every one in your audience has at sometime or other picked up and carried a full-grown human being, and knows just about how much exertion it takes." Calvert claimed he didn't want "to advise amateurs to 'fake' in any way, but if you want to give a successful exhibition you will find that it is wise to heed the above advice."[95] It may seem strange that Calvert offered such advice, given that he was the most outspoken critic of the trickery and scams used by many performing strongmen, but it appears Calvert truly believed that anyone considered an accomplished amateur, especially if he was a Milo student, would be capable of handling a fair amount of weight—at least enough to put on a decent strength act. If one of his students was considering putting on a strength show, Calvert assumed he would put on a good, honest show. His bits of advice were purely to enhance the show by working on the showmanship of the performer in order to assure success.

Calvert's recommended performance began with two or three poses "to show the muscular development of the arms and shoulder muscles." Building a "pyramid"—holding a barbell and one man on the lifter's shoulders with four more men hanging from the bar—followed some introductory juggling of a barbell or dumbbells. Holding either a man or heavy barbell overhead while getting up and/or returning to a supine position preceded a couple of Roman chair or Roman column exercises. A Roman column functioned somewhat similarly to the Roman chair except that the column was either gripped by the legs while the performer leaned backwards toward the floor, or the column had two cuff-ending chains attached to it which were fastened around the performer's legs just below the knees. As the performer "stands" on the side of the column he would bend backwards at the knees to retrieve an object from the floor. Calvert recommended

[95] Ibid., 11-15.

positioning the apparatus so that the performer's body was sideways to the audience so that the two exercises would "show the strength of the abdominals." After mounting the chair, "sit upright in the first position." This meant the body was in a seated position with the lower legs braced on the chair back and perpendicular to the floor, the thighs were parallel to the floor, and the upper body was upright and perpendicular to the floor. An assistant maneuvered a light barbell to the proper spot on the floor so the lifter could "lean backwards, pull the bell across the face, rest it on the chest right across the nipples, and then raise up until you are in second position"—lower legs were braced on the chair back and perpendicular to the floor while the rest of the body was parallel with the floor. After holding this position for a couple of seconds, the lifter returned to the seated position and "push[ed] the bell aloft two or three times" followed by the backwards lean to replace the bell on floor.

The second Roman chair exercise started the same but when the lifter descended to pick up the barbell, instead of resting at mid-chest he brought it "all the way over until it rests on the waist." The lifter would come up to the second position and have his assistant and another man straddle each end of the bar while it rested at the waist, or on the hips if the lifter lacked adequate strength to hold the weight at the waist. Calvert believed it was "possible to support 300 or 350 lbs. this way without much trouble." However, he stressed, "You will have to practice a good deal before attempting this feat on the stage, and learn exactly the amount of weight which you can support without danger of strain." If done correctly, this strength feat would give the lifter "a greater reputation for strength than any amount of dumbbell lifting."[96]

A "two-hand-anyhow" lift, pressing both a barbell and a kettle-bell overhead, followed the Roman chair act. Next, and using only one arm if possible, the performer

[96] Ibid., 13.

carried two men overhead at arms' length across the stage and then tore first one, then two decks of cards. As a grand finale Calvert recommended some sort of bridge lift, such as the "Tomb of Hercules," which he detailed in *The Truth About Weight-Lifting*. Instead of using the automobile illustrated in his book, Calvert suggested the lifter should "let anywhere from six to twelve men stand on the plank." This plank was placed at right angles across the heavily padded "shoulder-and-knee board" placed in position by assistants. Calvert reminded his student to position his head toward the audience for this feat. This position left the best impression with the audience because they would only notice the shape and "state of high flexion" of the triceps muscle on the back of the arm, and not the position of the cross plank which should be situated closer to the stronger and more stable knees than the relatively weaker shoulders. Always the educator, Calvert reported his own experiences with this lift:

> I have seen a man support in this way twenty other men, total weight of over 3,000 pounds. Sandow, who introduced this feat in America, used to support three small horses. An athlete in Europe recently supported a small elephant in this manner. I have even seen a comparatively slender woman, who certainly did not weigh over 140 pounds, support in the bridge lift a number of men and heavy iron dumbbells, whose aggregate weight was nearly a ton.

While his own order of exercises was just a suggestion, Calvert stressed, above all, that the lifter must "perform those feats which you can do easily." All participants in the strength act should be "thoroughly prepared" and the performer should never attempt something in which he might fail. After all, impressions were important.

1912 AND BEYOND

Although the basic design of the Triplex model stayed the same for approximately ten years, Alan Calvert was granted a third patent in 1912 in which he made minor improvements to the Triplex. Lifters had complained that the plates moved around inside

the shell too much causing the balance to shift, so Calvert introduced a system of internal ridges and beads as well as small changes to the inside collars and shot-loading ports to make the bell more compact and sturdy.[97] By this time the Milo Bar-Bell Company advertised several combinations of bells, plates, and handles from which to choose, such as the Light Model Milo Triplex—"so light in weight that when empty it can be handled with ease by the average woman, and yet can be made heavy enough to test the strength of a Hercules."[98] It came with two seven and one-half inch globes, one long and one short handle, two kettle-bell handles, and thirty-five pounds of plates. Loadable to a total of 110 pounds, it cost eighteen dollars. For $27.50 a similar, but heavier (up to 235 pounds) Large Size Milo Triplex arrived with nine and one-half inch globes, the same variety of handles, and seventy-five pounds of plates. Incorporating another selling scheme the Milo Bar-bell Company also offered "Full Sets." These sets ranged from $40 for two hundred pounds of apparatus to $65 for 445 pounds, and included enough globes to fully equip a dumbbell, a barbell, and two kettle-bells simultaneously.[99] The advantage of these sets was that the owner did not have to change out the handles or change the weight as often as he would need to do if he only had one barbell's worth of globes.

With the 1912 improvements to the Triplex design Calvert managed to keep his lock on the barbell business secure. He declared in a letter to Ottley Coulter that he made "good sized profits from 1912 to 1917" with his business.[100] Corroborating Calvert's self-proclamation, the Continental Company, a barbell competitor, noted in 1915,

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[97] Patent #1044018, Dumb and Bar Bell and Ring Weight, 12 November 1912, Alan Calvert, Philadelphia, PA. Found on USPTO online website: http://www.uspto.gov/patft/index.html.
[98] Alan Calvert, "Milo Bar-bell Advertisement," *Physical Culture* (July 1911).
[99] Alan Calvert, *Concerning the 1912 Pattern Milo Triplex Bells* (Philadelphia: by the author, 1912).
[100] Alan Calvert letter to Ottley Coulter, 15 July 1918, Ottley Coulter Collection, TMPCC.

somewhat disparagingly, that "the Milo Bar Bell Company seems to have monopolized the weight lifting business in America."[101]

Even though the business seemed to be doing well, the early years of the second decade of the twentieth century involved some up-and-down emotional swings at the Calvert homestead. Besides the death of Mary's father, Benjamin Githens in 1910, Mary and Alan's third child and second daughter, Marian, was born on 13 October 1912. The next year, however, Calvert's father, Pehrson Butler, passed away at Thanksgiving at the age of 67.[102] By the time Calvert's fourth, and last, child, Alan Breck, was born on 16 June 1915, the Milo Bar-bell Company had a new venture off the ground and running. Although the manufacturing end of the business was booming Calvert wanted to do, and say, more. He believed that he needed to keep encouraging men to train with barbells and heavy weight and to spread his training information to as many people as possible. For years he had been writing and offering to the public small pamphlets such as, *The Royal Road to Strength* and *The System that Made All "Strong Men" Strong*, which contained information about progressive lifting in order to get more customers. These small publications however, generally had only four or five photos of trained men included with the text. *The Truth About Weight-Lifting* did much better, of course, with forty illustrations scattered among its 160 pages. Photographs were motivating, and so Calvert decided to launch a publication incorporating a large number of photos of his star pupils. As the rest of the world entered into World War I in 1914, Calvert began

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[101] The Continental Company letter to Ottley Coulter, 14 January 1915, Ottley Coulter Collection, TMPCC.

[102] Pehrson Butler Calvert died on 24 November 1913. Philadelphia City Archives, death index files viewed 30 June 2004.

portraying the physical transformations possible through systematic weight-lifting in the first "muscle magazine" in America. He named it, appropriately, *Strength.*

CHAPTER 5

BUILDING STRENGTH: AMERICA'S FIRST MUSCLE MAGAZINE

> In 1919, an advertisement appeared in "Physical Culture" magazine that attracted my attention….a notice that subscriptions were being accepted for a little magazine called "Strength," and that "Strength" was being published again, having discontinued publication during the "World War."
>
> I ran to the post office to mail in my subscription. I always thought that my subscription must have been the first one received.
>
> After what seemed ages to me, "Strength" magazine finally arrived. I could hardly wait to get the magazine out of the envelope. I read and re-read every page of that little magazine. Here for once, barbells were being advocated for exercise![1]

Siegmund Klein's reminiscence recalls the anticipation and enthusiasm many barbell users felt as they waited for their copy of *Strength* magazine. Although Klein didn't find the magazine's advertisement until he was seventeen, in 1919, he understood the rarity of its contents, for much like Calvert twenty years earlier, Klein had looked in vain for training information to enhance his strength and muscularity. Although weight trainers and competitive lifters in *fin de siècle* Europe could stay informed by reading *Internationale Illustrierte Athleten-Zeitung* (*The International Illustrated Athlete's Newspaper*) and *Kraft und Gewandtheit* (*Strength and Skill*) in Germany and *Neuigkeits Welt-Blatt* (*Piece of News World Newspaper*) in Austria, Americans had no such literature.[2] While Europeans were already struggling toward the organization of an acceptable international governing body for their young sport in the decade leading up to

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[1] Siegmund Klein, "My Quarter Century in the Iron Game," *Strength & Health* (April 1944): 17, 41.

[2] Although I wasn't able to verify and analyze the amount of weight-lifting coverage in these periodicals, strength historians and lifting authors, both of modern-day and of old, often reference their titles. For example see images of periodical front pages on the unnumbered pages between 20 and 21 and after page 32 in Gottfried Schèodl, *The Lost Past* (Budapest, Hungary: International Weightlifting Federation, 1992).

the twentieth century, it wasn't until Calvert's 1911 book, *The Truth about Weight-Lifting,* that Americans were encouraged to think about a similar organization. America was, thus, several decades behind some European nations in creating a national governing body for weightlifting. In part this delay can be attributed to the fact that American weightlifting had no voice in the early twentieth century. As the historian Mel Adelman has argued, sports generally don't become "modernized" until they develop a specialized literature of instructional books, regularly-published magazines, and newspapers that cover the activities occurring within the sport.[3] *The Truth About Weight-Lifting* gave Americans a blueprint for how to train, but it would be Calvert's founding in 1914 of *Strength*, "the pioneer weight lifting publication," that allowed weightlifters to advertise contests, to keep meaningful records, to compare themselves to lifters in other parts of the United States and, ultimately, to spread the gospel of the barbell to thousands of young men who had not read Calvert's book or heard of the Milo Bar-bell Company.[4] Although it was not his primary intention, Calvert's decision to start the magazine *Strength* moved weightlifting closer to Adelman's model of a "modern sport."

Calvert initially began *Strength* to advertise his barbell company. He needed to increase the number of barbell sets he sold, and figured that the best way to do that was to increase his customer base. A magazine, he ventured, would be an ideal medium to help his current customers stay motivated and to introduce weight training to new customers. Brand identity and reputation became increasingly important in the early twentieth century, facts which helped Calvert build his reputation as the expert on all matters related to strength. Calvert had already established Milo Bar-bell as a name associated with high quality standards and expert instruction, and so when he began *Strength* he

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[3] Melvin L. Adelman, *A Sporting Time: New York City and the Rise of Modern Athletics, 1820-70*, Illini Books ed., *Sport and Society* (Urbana: University of Illinois Press, 1990), 6.
[4] Raymond Van Cleef, "Builder of Men," *Your Physique* (December 1944): 12.

quickly found a readership. *The Truth About Weight-Lifting* may have whetted his interest in writing longer pieces, or perhaps the American lifting fraternity, realizing Calvert's knowledge and integrity, urged him to deliver more information. Whatever his reasons, Calvert decided to create a new kind of magazine—one which kept the interests of the barbell user in mind.

In the beginning he kept it pretty simple. The first issue of his new magazine, titled "General Strength," was a sixteen-page (including the front and back covers), 5"x7¼" pamphlet printed on off-white, high quality coated paper, with a simple copyright mark with month and year on the back cover.[5] With the publication of the second issue in October 1914, Calvert changed to white, coated paper; increased the size of the magazine to 6" x 9"; and shortened the name to simply *"Strength."*[6] The paper, measurements, and title in quotations remained unchanged until the May 1920 issue when the new owners dropped the quotations from the title; began to publish the magazine on cheaper, pulp paper; and expanded the magazine's thematic content.

The seventeen issues published on a more or less bimonthly schedule under Calvert's leadership between June 1914 and January 1918, followed the same basic template—lots of pictures, a few informative articles, many testimonial letters, and no advertisements. Judging by comments he made in a letter to Ottley Coulter a month after the October 1914 issue (the first with the *Strength* title), one of Calvert's motivations for starting the magazine was to publicize the amazing pictures sent in by his students and

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[5] *"General Strength"* had at least two printings in 1914 since the author found two copies with different months listed for the copyright. The magazines were identical, only the copyright months differed.

[6] When Alan Calvert began publishing *Strength* magazine in October 1914 he actually put the title in quotations (*"Strength")*. He used this same format along the top heading line of every page and continued to do this until he sold the magazine in 1919. The new owners continued with this practice until they changed the look and content of the magazine in 1920 at which time they dropped the quotations from the title. Due to current referencing methodologies and to keep confusion to a minimum I have elected to use the title without quotations even when referring to the early issues.

customers.[7] Two years later Calvert boasted, "The readers of *Strength* have the opportunity of studying and admiring the pictures of the most perfectly developed class of men in the world—my advanced pupils."[8] According to art critic, John Berger, Calvert used the photos in *Strength* magazine to create a sense of envy in his readers.[9] Calvert wanted them to be jealous of the bodies in his photographs and thus invest in Milo equipment and train with the Milo system of progressive weight-lifting so they could achieve the same ends. Calvert therefore devoted at least half of each issue to testimonial letters and photographs, and in the remaining space he wrote articles relating strength and muscular development to health, outlined his teaching methods and philosophy, and presented informative pieces on general anatomy and physiology.

In order to attract readers—and knowing from personal experience that viewing a well-developed body was very inspirational—Calvert used dramatic physique photos on seventy-one percent of the covers during his years as publisher.[10] The cover of the first issue, for example, featured a Roman column superimposed on a photograph of Charles MacMahon, a Calvert student who would be made famous through his appearances in *Strength*. MacMahon is bent over, hands behind his head as if he, and not the column at his back, is supporting a massive piece of marble. Wearing only a posing jockstrap and Roman sandals, MacMahon displays well-defined muscular development throughout his body but especially in his leg and back muscles. The use of Greek and Roman imagery such as the column and sandals was common practice for strongmen and physique artists

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[7] Alan Calvert letter to Ottley Coulter, 7 November 1914, Ottley Coulter's Milo Scrapbook, TMPCC.
[8] Alan Calvert, "Waldon R. Adams," *Strength* (July 1916): 12.
[9] John Berger, *Ways of Seeing* (New York: Penguin Books, 1977), 131-35.
[10] This number represents twelve of the seventeen covers between June 1914 and November 1917. The pictures considered physique photos were those that were, for the most part, posed and not performing some sort of strength stunt. One cover, of the seventeen, was a drawing of an arm from the shoulder down. Although this cover was included in the total number of covers, it was not included in either the posed physique photos nor the strength stunt calculations, hence the reason for the percentages to not equal one-hundred percent.

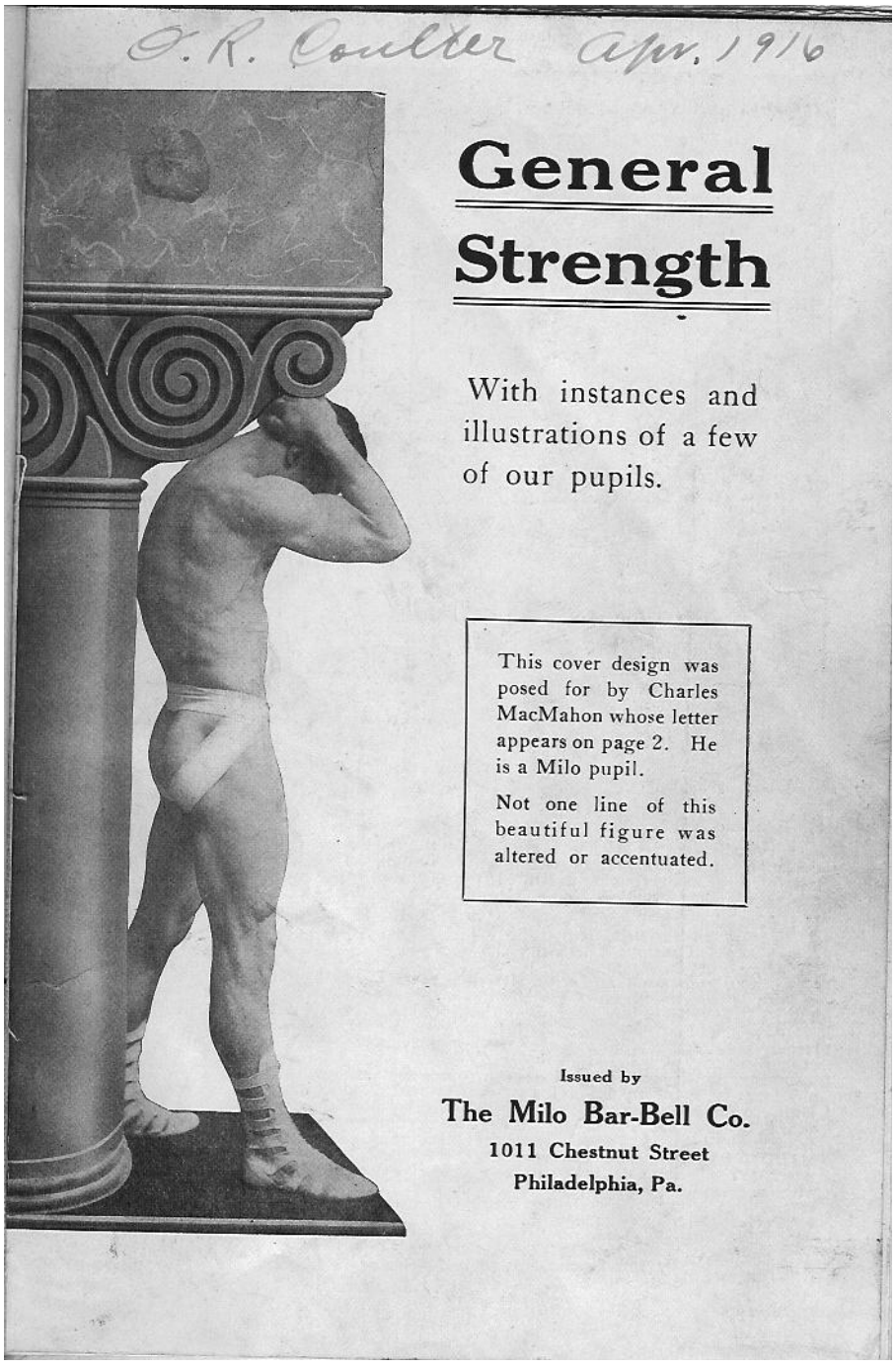

Figure 45. Charles McMahon appeared on the cover of the first issue of *Strength* magazine published in June 1914. Note the classical motif suggested by the use of the column and Roman sandals.

who played on the popularity of Greek Revivalism during this era—as did Calvert.[11] Even Sandow—who symbolized the perfect, *living*, male form—relied on neo-classicism in the staging of his photographs and the performance of his strength act. Sandow's popularity and connections to British royalty had helped "legitimize viewing the male figure as an erotic object," but even with his popularity the viewing of a nude, or partially clad, male physique in the early 1900s (with the exception of scientific or artistic studies) was still considered risqué.[12] Photography historian, Allen Ellenzweig, argues that these early physique studies needed "the imprimatur of the antique" or a "veil of antiquity" to legitimize their essentially erotic or inspirational purposes.[13] Undoubtedly, Calvert used the idealism of the Classical Greek statues to de-eroticize the photographs of his students, but in doing so he also proclaimed the perfection of the barbell-trained figure. In particular, the photographs on *Strength* covers portraying Anton Matysek, the most famous of Calvert's pupils, who posed as "The Resting Gladiator" on one issue and as "Achilles" on another, were so popular with readers that Calvert began selling the individual photos for framing.[14] Since Greek statuary was considered the ideal of male physical perfection in this era, Calvert's students trained to become living works of art. His success may be measured in an art critic's comment that Calvert was "turning out men whose perfection of figure equals that of the ancient classical Greek model."[15]

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[11] R. Hinton Perry, "The Relation of Athletics to Art," *Outing* 40(July 1902): 456-62; Jan Todd, "The Classical Ideal and Its Impact on the Search for Suitable Exercise: 1774-1830," *Iron Game History* 2(November 1992): 6-16.

[12] Allen Ellenzweig, *The Homoerotic Photograph: Male Images from Durieu/Delacroix to Mapplethorpe*, *Between Men—between Women* (New York: Columbia University Press, 1992), 14. For information on the various types of photographs taken of strongmen and physique stars during *fin de siècle* America, see also: David L. Chapman, *The Photographs* (2000 [viewed March 2006]); available from http://www.sandowmuseum.com/.

[13] Ellenzweig, *Homoerotic*, 15-16.

[14] Alan Calvert, "Achilles," *Strength* 3(January 1918); Alan Calvert, "The Resting Gladiator," *Strength* 3(May 1917). Matysek's portrayal of "Achilles" became the first photograph sold by Calvert. An announcement at the end of the September 1915 issue informed *Strength* subscribers that a 6"x8" print could be obtained for twenty-five cents "on heavy paper and suitable for framing ,"(p.24).

[15] Alan Calvert, "Owen Carr," *Strength* (July 1916): 10.

Figure 46. The covers of *Strength* portrayed Calvert's students in muscle poses as well as in feats of strength. Clockwise from top left: January 1915, September 1916, January 1917, September 1917.

Although neo-classical images were widely used by magazines in the first two decades of the twentieth century, Calvert didn't rely strictly on copying ancient statuary. Twenty-four percent of *Strength's* covers depict circus-type strongman stunts such as Charles MacMahon performing on a Roman Column, Charles Durner breaking a piece of rope, Anton Matysek lifting a heavy dumbbell, or Robert Snyder holding his human partner overhead with one hand—all of which gave credence to the magazine's title. However, even on these covers, clothing was kept to a minimum so that Calvert's readers could study the body as well as view the feat of strength.

Half of the first issue's sixteen pages was devoted to testimonial letters and photographs of Milo Bar-bell students. Each of the eleven physique photos included in that issue was accompanied by a short analysis written by Calvert, with words of praise for what the man had accomplished. The remaining space was used for articles entitled: "General Strength," "The Importance of the Waist Muscles," "Concentrated Exercise," "The Twin Secrets of Strength," and "It is a Poor Rule that Don't Work Both Ways." In future issues of the magazine Calvert continued to use this basic format. He always emphasized photography—as he believed it would inspire his readers—running an average of 1.26 physique photos per page for the first seventeen issues. His use of high quality, coated paper allowed the photographs to be clear and sharp. In comparison, MacFadden's publication, *Physical Culture*, used only 0.56 pictures per page and many of these photos were of things such as food, fashion designs, large group pictures, or other sports.[16] The physique images in Macfadden's publication often appeared grainy and slightly unfocused due to the lower quality, uncoated paper.

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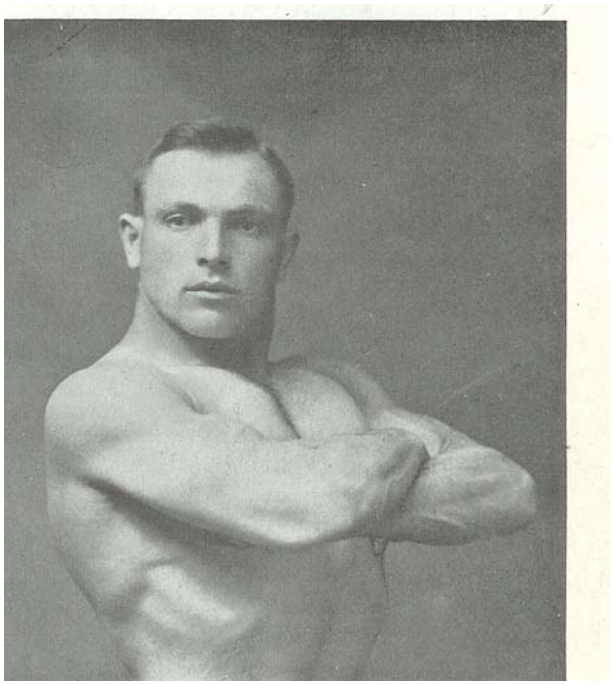
[16] Photographs or reproductions of photographs (no pen and ink drawings) from every page of *Strength* magazine for the first seventeen issues were counted since it did not contain advertisements. Only the photographs found on the pages of articles, special features, or departmental columns—such as "Questions from Health Seekers," "Woman's Council Corner," "Solving the Boy Problem," and "Comment, Counsel and Criticism by Our Readers"—for issues of *Physical Culture* (for the same month and year as those counted for *Strength*) were counted; again, no drawings or photographs found in the advertising section



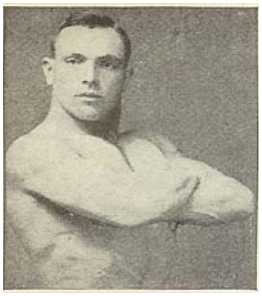


Figure 47. These two images of Alexander Karasick show the difference Calvert's use of good paper and higher quality printing processes made in the reproduction of photos in his magazine. The image on the left was published in the October 1914 and September 1915 issues of *Strength*. Notice the sharpness and clarity of the image. The image on the right is from the October 1914 issue of *Physical Culture*. Both images were scanned at 300 dpi for inclusion in this dissertation and are printed here in their original size.

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were included unless the page was the continuation of an article or column. Macfadden often concluded articles and especially the departmental columns in the advertising section; it was in these pages that many of the physique photos sent in by the readers appeared since they were "question and answer" columns.

The types of pictures used by Calvert can be broken into four basic categories—lifting (full body), lifting (partial body), posing (full body), and posing (partial body) Lifting photos, those in which weight of some form—either living or not, and sometimes both—was being lifted, comprised thirty-one percent (153 out of 496) of the total number of photographs. The remaining sixty-nine percent (344 out of 496) consisted of pictures in which the subject assumed some sort of muscular pose, mostly without, but occasionally with a light-weight prop of some sort, such as a rope, a spear, or a cane.

Calvert's use of the physique study was critical to the success of his magazine and to the evolution of early bodybuilding. Perhaps he had read Marcus Aurelius Root's advice in the 1864 book, *The Camera and the Pencil*, that men and women should be positioned in pictures according to their "general character;" which for men meant that their placement should indicate "an aptness and propensity to action, vigorous exertion, and power."[17] In any case, all of Calvert's photographs rely on these concepts. The physique shots certainly communicated strength and power, while the lifting photos were the ultimate action shots. Calvert even used action-oriented language when analyzing the photos, such as this description of a photograph of Owen Carr:

> I doubt whether you have ever seen a finer type of physical manhood than this clean-cut young American Hercules. The first impression given by these pictures is one of alertness and activity, and this effect is given by Carr's wonderful balance and symmetry. If, however, you examine his figure, detail by detail, you find that the man is made for strength as well as for speed. First, note the column-like neck, and the deep roomy chest; then, although there is no attempt at muscular display, you simply cannot overlook the extremely capable looking arms and shoulders—an example of perfect development; and lastly, see how a sense of immense vigor and power is conveyed by the wonderful modeling of the legs, and the firmly planted feet.[18]

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[17] M. A. Root, *The Camera and the Pencil; or the Heliographic Art, Its Theory and Practice in All Its Various Branches* (Philadelphia: J.B. Lippincott & Co., 1864), 253.
[18] Alan Calvert, "Owen Carr," 10.

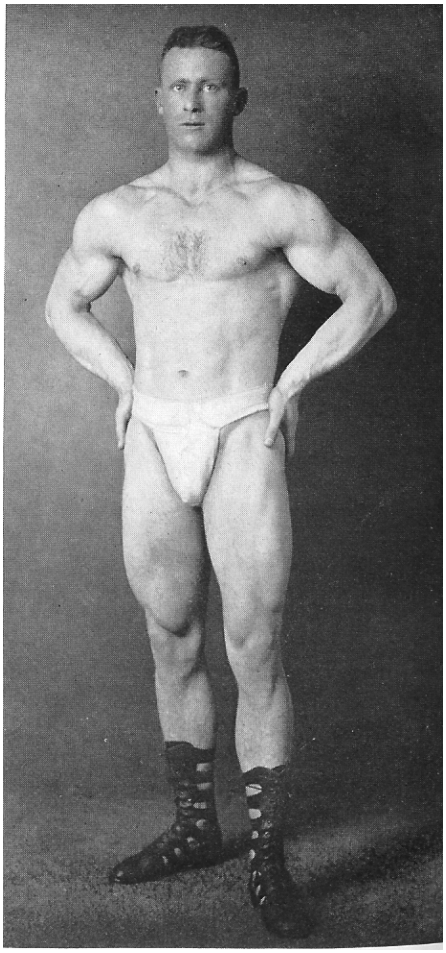

Figure 48. Owen Carr of Portland, Oregon, was among the first Calvert students to receive publicity in *Strength*. Over the years, readers of *Strength* watched Carr's physique develop through his pictures in the magazine. This photograph appeared in the July 1916 issue on page 10.

Sixty-nine percent of the photographs in *Strength* (340 out of 496) showed the entire body of the subject. Nearly all the lifting pictures used in *Strength* (ninety-five percent), were full-body shots since the body's positioning at all phases of the strength feat would have been important to Calvert's readers. Calvert argued that, "A really strong man should be equally and symmetrically developed from head to foot. Therefore, full-length pictures give a much better idea of a man's beauty of form and athletic ability than half-length poses do."[19] Also, a full-body picture, especially those which depicted the man as standing on his feet, such as that of Carr on the preceding page, also tended to give the impression of complete self-control—"the preeminent value of middle-class masculinity," according to photography historian, Andrea Volpe.[20] "Broad, muscular shoulders and an expansive, well-defined chest and torso, the sturdy model with legs firmly planted on the studio floor represented," Allen Ellenzweig argues, "a paradigm of manliness."[21] Of the 340 full-body photos, forty-three percent show a lift in progress and fifty-seven percent are simply physique studies. The full-body physique shots can be broken down further into a fifty-fifty split between front views and back/side views of the body.

When Calvert used a photograph of only part of the body it was, invariably, a physique study and generally of the upper body. Thirty-one percent of the total number of photos in *Strength* were partial body shots and of these, ninety-five percent are posed physique studies. More than half of these displayed a front view of the body with the remainder (forty-seven percent) split more or less evenly between back and side photos. Unlike modern muscle magazines, in which photographs of the lower body are

[19] The knees had to be present to be counted as a full body. Alan Calvert, "Hints About Posing," *Strength* 3(November 1917): 13.
[20] Andrea Volpe, "Cartes De Visite Portrait Photographs and the Culture of Class Formation," in *The Middling Sorts: Explorations in the History of the American Middle Class*, ed. Burton J. Bledstein and Robert D. Johnston (New York: Routledge, 2001), 166.
[21] Ellenzweig, *Homoerotic*, 7.

commonplace, only three isolation studies appear in *Strength* during Calvert's time as editor—and these three images are pen and ink sketches, not photographs.[22]

Calvert's readers were no different than modern bodybuilding fans who admire upper body development more than they do powerfully built legs. Calvert admitted ruefully that most of his readers admired well-rounded deltoids, a large ribcage, an impressive upper back, and, especially, large biceps and triceps—even though the body's strength and power were generated by the lower body. Anthropologist Desmond Morris would not find Calvert's readers' interest in the upper body out of the ordinary. Broad shoulders, a deep chest, and bulging biceps have been equated with hyper-masculinity throughout history.[23] In his book, *Human Zoo*, Morris discussed the human tendency to create "super-normal stimuli":

> At puberty there is a marked difference in the growth rate of the shoulders in males and females, those of boys becoming broader than those of girls. This is a natural, biological sign of adult masculinity. Padding the shoulders adds a super-normal quality to this masculinity and it is not surprising that the most exaggerated trend occurs in that most masculine of spheres, the military, where stiff epaulets are added to further increase the effect.[24]

According to sociologist Erving Goffman, "What the human nature of males and females really consists of then, is a capacity to learn to provide and to read depictions of masculinity and femininity and a willingness to adhere to a schedule for presenting these pictures, and this capacity they have by virtue of being persons, not females or males."[25] American men, in their display of muscle, or in Goffman's term—a "portrayal of

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[22] These lower body sketches are found in the following issues: *Strength* (July 1916): 4; *Strength* (January 1917): 5; *Strength* (March 1917): 5.

[23] Kenneth R. Dutton, *The Perfectible Body: The Western Ideal of Male Physical Development* (New York: Continuum, 1995), 189; Marc E. Mishkin et al., "The Embodiment of Masculinity: Cultural, Psychological, and Behavioral Dimensions," in *The American Body in Context: An Anthology*, ed. Jessica R. Johnston (Wilmington: Scholarly Resources Inc., 2001), 105-9.

[24] Desmond Morris, *The Human Zoo* (New York: Dell, 1971), 175-76, as quoted in Dutton, *Perfectible Body*, 189.

[25] Erving Goffman, *Gender Advertisements* (Cambridge: Harvard University Press, 1979), 8.

gender," were providing what they believed to be a depiction of a new and improved shape of masculinity.[26] Increase the size and breadth of the shoulders—especially through self-conscious effort, discipline, and willpower—and a man subconsciously increased his masculinity. The popularity of Calvert's magazine, at least among this fraternity of men, suggests that his subscribers were reading messages of ideal masculinity in the photographs and buying into the notion that a man could make himself into a perfect specimen of manhood. It was an idea that fit the era's Progressive mindset.

Although the expression was not used in his day, Calvert, urged his readers to "read" the photographs he included, for it was during this activity, he believed, that his readers learned the most. His use of pictures served two purposes: they provided actual proof of the results brought about by his equipment and training methods, and they encouraged careful observation of either a particular lift or a notable physique. If the photo depicted a lift, Calvert recommended the reader pay attention to the body's positioning; the viewer should note the placement of each arm and leg, and even see where the lifter's eyes were fixed. Calvert advised his readers to take note of every muscular connection and shadow so that they might educate themselves about anatomy and the nuances of bodybuilding in a way that would benefit their personal strength training. In an article on arm training, Calvert observed, for example,

> I am glad to be able to show my readers pictures of my pupil, Mr. Durner…because it helps me to make more clear the points in my article on "Arm Development." In that article I referred to the picture…calling attention to the comparative size of the biceps and triceps muscles….Mr. Durner's right arm is wonderfully proportioned. The great size of the biceps is balanced by the equally large triceps and deltoid muscles; the forearm is in proportion to the upper arm, and this gives the whole arm an appearance of tremendous power.[27]

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[26] Ibid.

[27] Alan Calvert, "Chas. W. Durner," *Strength* (September 1915): 14.

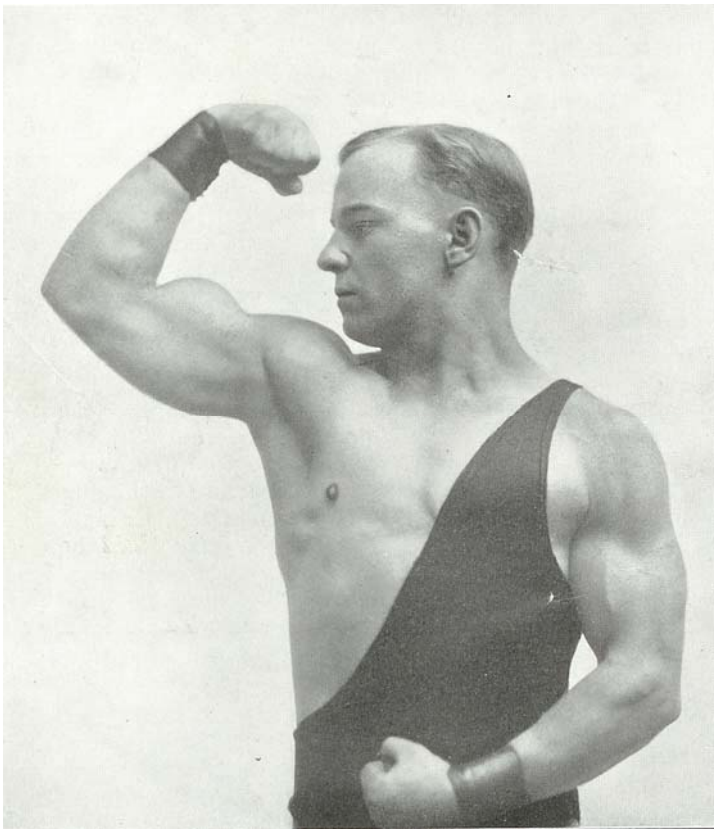

Figure 49. Calvert urged his students to study every detail in the photos found in *Strength*, such as this one of the arm and shoulder of Charles Durner in the September 1915 issue on page 14.

Proud of their training accomplishments, many readers made the trip to their local photographer to get pictures made specifically to send to the new publication.[28] If a promising student made the trip to see Calvert in person, a trip to Scott of Philadelphia—Calvert's favorite photographer—was planned and paid for. His students all hoped to have their pictures published and to have Calvert say a few words about their progress. Calvert was generally only too glad to comply. He supplied feedback on the photographs by critiquing the weaknesses and extolling the strengths of the physique photography supplied by his students:

> I am describing the case of Mr. Paschall…because it furnishes an example of how much a man *can* develop. I think that any young man would be perfectly willing to practice for a year to obtain a build like Paschall's….His present measurements are not extraordinary, but even now he has the appearance of the finished athlete. The pictures…certainly make him appear a great deal stronger and better set up than the average 17-year-old boy. In fact, very few fully developed adult athletes have a build which would compare with Mr. Paschall's….In studying Mr. Paschall's picture, please note that there is nothing about his figure that makes him look heavy or clumsy. While the muscular development is pronounced, the muscles are of a shape that makes for speed as well as for strength.[29]

His ultimate goal, Calvert told Ottley Coulter, was to create a national contingent of amateur strong men who could compete favorably against the European lifting clubs. To do this, he explained, every lifter must be smart in the ways of lifting as well as in the physical development it produces.[30] Although he wrote articles about each set of muscles and how best to develop and strengthen them, Calvert also penned articles such as "Posing for Muscular Display," "Muscle Control," and "Hints on Posing."[31] These articles focused on the presentation of the

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[28] See for instance, Sig Klein's memories of the use of photographs in his rise to the status of respected strongman in Klein, "My Quarter Century in the Iron Game," *Strength & Health* (March 1944): 16. Andrea Volpe also has an interesting article on what a visit to a photographer's studio meant in terms of middle-class associations in the last half of the nineteenth century: Volpe, "*Cartes de Visite*," 157-69.

[29] Alan Calvert, "Harry Paschall," *Strength* (September 1915): 6.

[30] Alan Calvert letter to Ottley Coulter, 22 December 1913, Ottley Coulter's Milo Scrapbook, TMPCC.

[31] Calvert, "Hints."; Alan Calvert, "Muscle Control," *Strength* (July 1916): 20-1; Alan Calvert, "Posing for Muscular Display," *Strength* (July 1916): 14-7.

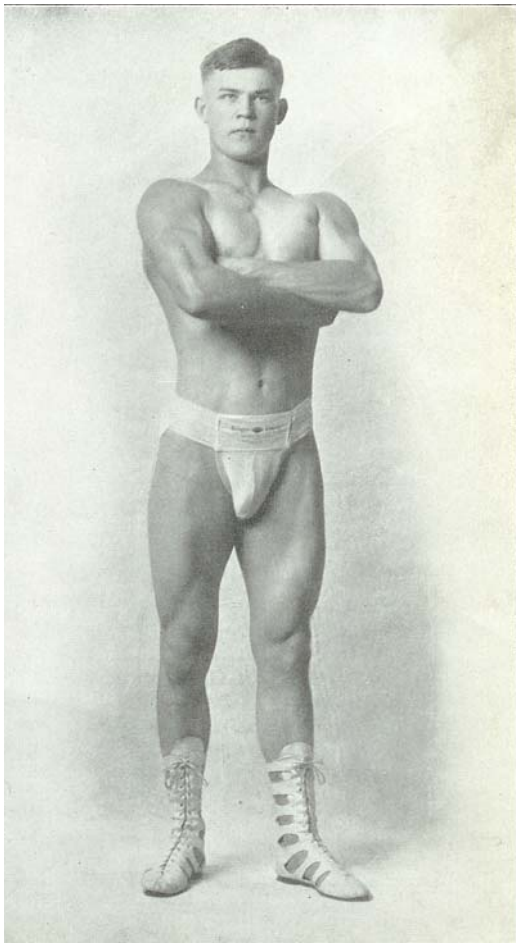

Figure 50. Harry Paschall's physique, as seen in this September 1915 photograph, created a "sensation" at Milo headquarters and inspired many young men to begin training. According to Calvert, letters from artists and lecturers from all over the country wrote him to comment on Paschall's development.[32]

[32] Alan Calvert, "Harry Paschall," *Strength* (September 1916): 23.

muscles and, arguably, provided some of the earliest information pertaining to such a topic. If standing solidly on one's own two feet was a sign of independence, then having "the ability to make a muscle contract without any movement of that limb or that part of the body which usually accompanies such contraction" indicated the ultimate in self control.[33] Practicing posing would also help harden the developed muscles, Calvert advised; but he warned his readers that it would do nothing toward increasing the size or strength of the muscles.[34] One first had to train faithfully to attain the muscular development before one learned how to control or display the body to its best potential.

One of Calvert's contributions to the evolution of bodybuilding was his inclusion of photographs in which the body was not displayed to its best advantage. Calvert included such images for instructional purposes as he had come to understand the importance of lighting in muscular display. By sharing these faulty images with his readers, he hoped to educate others about how to take better photos of themselves which, he believed would benefit the common good. For example, when Melvin Tampke consented to have his pictures critiqued in *Strength*, Calvert wrote in gratitude, "This is the spirit which is going to make weightlifting a great sport in this country. If we all help each other, we can all go far."[35] His analysis of Tampke's outdoor physique photos reveals just what an important role Calvert undoubtedly played in the evolution of early physique photography:

> You cannot get good pictures when you face the sun unless the sun is directly overhead….If you are going to stand in the sun, I suggest that you stand three-quarters front to the sun so that the light will throw shadows across the body. Better still, stand in a shaded position and have a time exposure taken. Do not stand under the branches of a tree, or under a porch roof, or an awning; stand alongside of a vertical wall so that you can get a clear light from overhead. Now I will prove to you why it is better; look at the first picture in this article, Tampke is shown lifting in the Wrestler's Bridge position. In this case, he has his right side

[33] Calvert, "Muscle Control," 20.
[34] Ibid., 21.
[35] Alan Calvert, "Melvin Tampke," *Strength* (March 1917): 7.

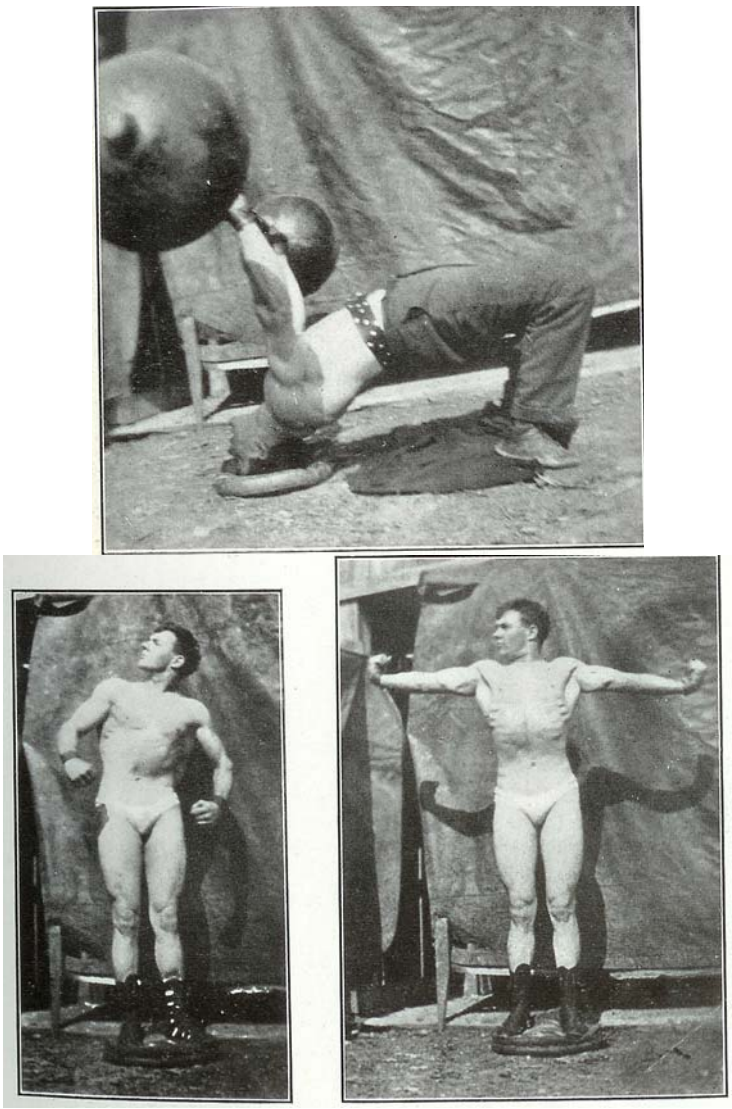

Figure 51. Calvert used these pictures of Melvin Tampke in the March 1917 issue of *Strength* (pages 6-7) to teach his readers about the affects of light and shadow on physique photography. Note the highly visible muscular definition of the shoulder and upper arm in the shadow of the bell in the top photo versus the washed out muscularity in the bottom pictures in which Tampke faces the sun.

> to the sun with the result that the right-hand sphere is throwing a shadow which cuts across most of his right arm and shoulder. Look closely at the part of the arm which is shadowed, and you will see the muscles show out most distinctly, but that the outlines of the different forearm muscles disappear beyond the end of the shadow; also note, that on the right side just below the arm-pit, you see the detail of several muscles, but that this detail vanishes beyond the edge of the shadow.[36]

Captions such as this were immensely useful to young men trying to learn how to take good photographs. They also reveal, however, the sophistication of Calvert's understanding of photography and his heightened artistic sensibility. Although Calvert might be critical of the lighting in the photos of Tampke, he nonetheless praised Tampke's "glorious outlines" even though the muscular poses didn't "show the details of the different muscles…every strap and band of muscle" that he wished they had shown. Calvert always found something positive to say about a man's physique, a trait that no doubt increased his popularity among his readers and made them willing to submit their photos for publication. Tampke's photos might be of poor quality, Calvert wrote, but the pupil definitely "has the shape."[37]

Calvert's articles were filled with utmost sincerity and enthusiasm. He believed in giving his best and most honest opinion on every topic, for that was how American lifters would learn and excel. If a letter-writer gave someone (including himself) too much credit, Calvert quickly corrected him, as Ottley Coulter found when Calvert chided him for statements that Coulter had made about Robert Snyder, a fellow light-weight lifter and Milo pupil. Although Coulter and Calvert had been corresponding for several years at the time of this exchange, Calvert bluntly told him, "I think that you are too apt to give credit only to the people whom you have met personally. It is very risky to make sweeping statements. I consider Snyder to be a first-class lifter for his weight, but I

[36] Ibid., 6.
[37] Ibid., 7.

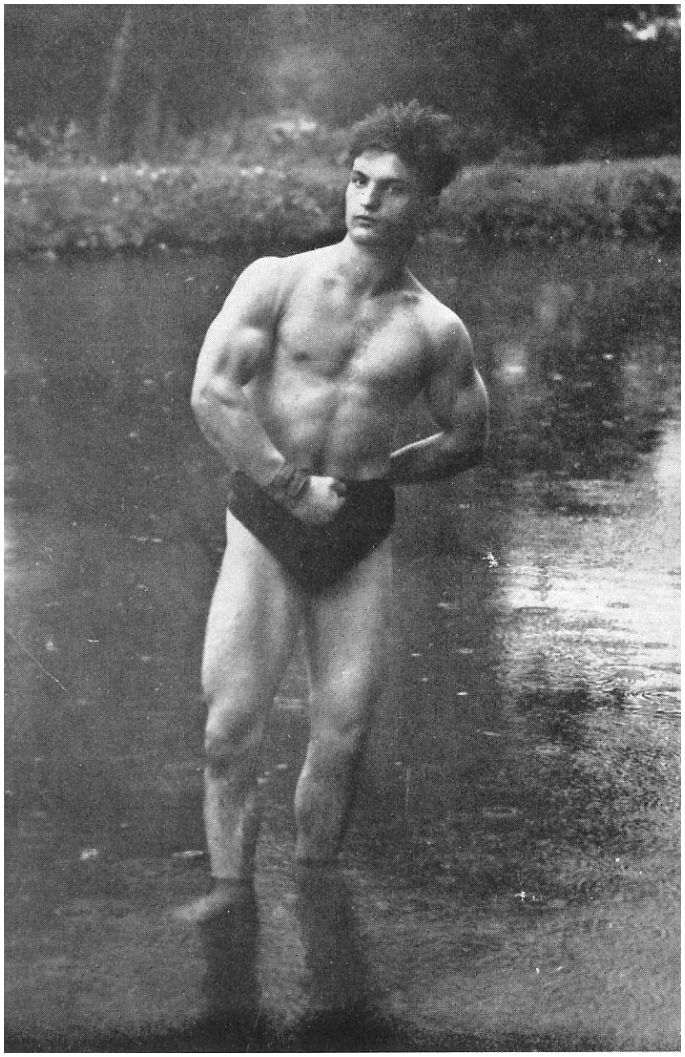

Figure 52. Robert "Bob" Snyder was made famous through the pages of *Strength*. This photograph, dubbed the "Bathing Hercules" by Calvert, was taken when Snyder was eighteen years old. It appeared in the September 1915 issue, page 22.

would not venture to state that he was the best of his weight or the next best."[38] When Coulter made reference to another entrepreneur's comments, Calvert cautioned him, "[Paul] Von Boeckman praise is certainly great, but you must remember that when he says the "finest ever produced" what he really means is the finest he has ever seen. It is very reckless to say that such and such a person is the finest, or the best, or the strongest, in the world. The world is a big place."[39]

Calvert knew far more about what was happening in the rest of the world related to strength than most American strongmen did. Calvert studied the methods of, and stayed in contact with, several respected European trainers and also subscribed to the more popular European weightlifting periodicals. Coulter would later describe Calvert as "the Desbonnet of [the] U.S.," a reference to the famous French trainer and historian who was at the center of European physical culture.[40] This was indeed an honor as Calvert considered Edmond Desbonnet as "one of the best authorities on lifting, and certainly the very best authority on the French school of lifting."[41] For Calvert to be compared by Coulter to one of the foremost authorities on strongmen and weightlifting in all of Europe suggests that by 1916 Calvert's magazine and writings had not only enhanced his reputation but made him central to the American weightlifting scene.

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[38] Alan Calvert letter to Ottley Coulter, 10 August 1915, Ottley Coulter's Milo Scrapbook, TMPCC.
[39] Alan Calvert letter to Ottley Coulter, 9 November 1915, Ottley Coulter's Milo Scrapbook, TMPCC.
[40] Although the following letter is undated due to the loss of the first page, a postcard, postmarked September 1916, included with the letter indicates that Otto Arco had visited Calvert while in Philadelphia as Coulter suggested in his earlier letter: Ottley Coulter letter to Otto Arco, undated, Ottley Coulter Collection, TMPCC.
[41] Alan Calvert letter to Ottley Coulter, 30 June 1914, Ottley Coulter's Milo Scrapbook, TMPCC. In David Chapman, "Physiques for *La Patrie*: Edmond Desbonnet and French Physical Culture" (paper presented at the North American Society For Sport History Annual Meeting, Seattle, WA, 1999), Desbonnet is described as "renowned as a gymnasium operator, journalist and athlete in France of the *Belle Epoque*. His training techniques, literary output, and efforts to improve the physical condition of his fellow citizens brought Desbonnet to the forefront of sporting and literary France."

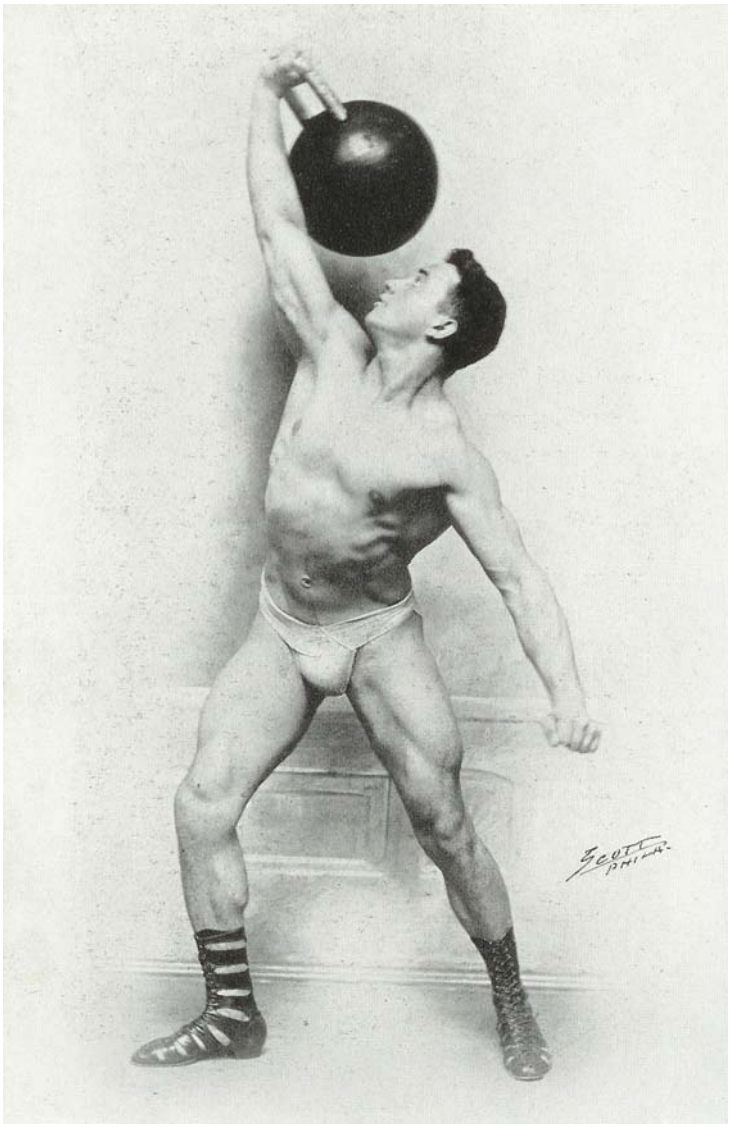

Figure 53. The most famous of the Milo students was Anton Matysek. This picture, found in the March 1915 issue (page 17), reportedly won awards in photography contests.

HONESTY & INTEGRITY

Ever since writing *The Truth About Weight-Lifting* Calvert resolved to promote "straight, honest lifting" in his business endeavors.[42] To that end Calvert judged at the various lifting exhibitions of his protégés as well as of other local strong men, and he brought in accomplished, professional strongmen, such as Ottley Coulter, to help bear witness to these record-setting attempts. Ottley Coulter kept scrapbooks pertaining to his career as a professional strongman and labeled with pride each time he judged a Milo event.[43] Calvert organized and attended his star pupil, Anton Matysek's, attempts to set a world amateur record in the bent press in 1913 and 1914. Calvert even attempted to capture the event on film.[44] When word reached Calvert that Adolph Nordquest's little brother, Joe, was even stronger than the older, renowned Adolph, Calvert traveled to Ashtabula, Ohio, to witness the young man's feats of strength for himself. Calvert also helped Al Treloar of the Los Angeles Athletic Club get weightlifting re-instated at the 1915 San Francisco Panama-Pacific World's Fair.[45] Many of these contests and exhibitions found their results written up in the pages of *Strength*.

Calvert wrote all but one article published in *Strength* from 1914 to 1918 while he was editor-in-chief. The one *Strength* article not Calvert's own, written by Ottley Coulter and titled, "Honesty in Weight Lifting and the Necessity of Making Lifters Prove Their Claims," may have been a product of the correspondence between the two men about the need to verify the actual lifts made by strongmen. Ottley Coulter's letters from Calvert

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[42] Alan Calvert, *Confidential Information on Lifting and Lifters* (Philadelphia: by the author 1926), 13-14.
[43] Ottley Coulter Personal Scrapbook, Ottley Coulter Collection, TMPCC.
[44] Calvert attempted to film the event, but was unsuccessful. See the pamphlet/flyer: Alan Calvert, "American Amateur Lifting Record Broken by a Pupil of the Milo Bar-Bell Company," (March 1914), Ottley Coulter Collection, TMPCC.
[45] Alan Calvert, "The Lifting Contest at the Panama-Pacific Fair," *Strength* (September 1915): 17-21; see also David P. Willoughby, "A History of American Weight-Lifting: Alan Calvert and the Milo Bar-Bell Company," *Your Physique* 11(August 1949): 47.

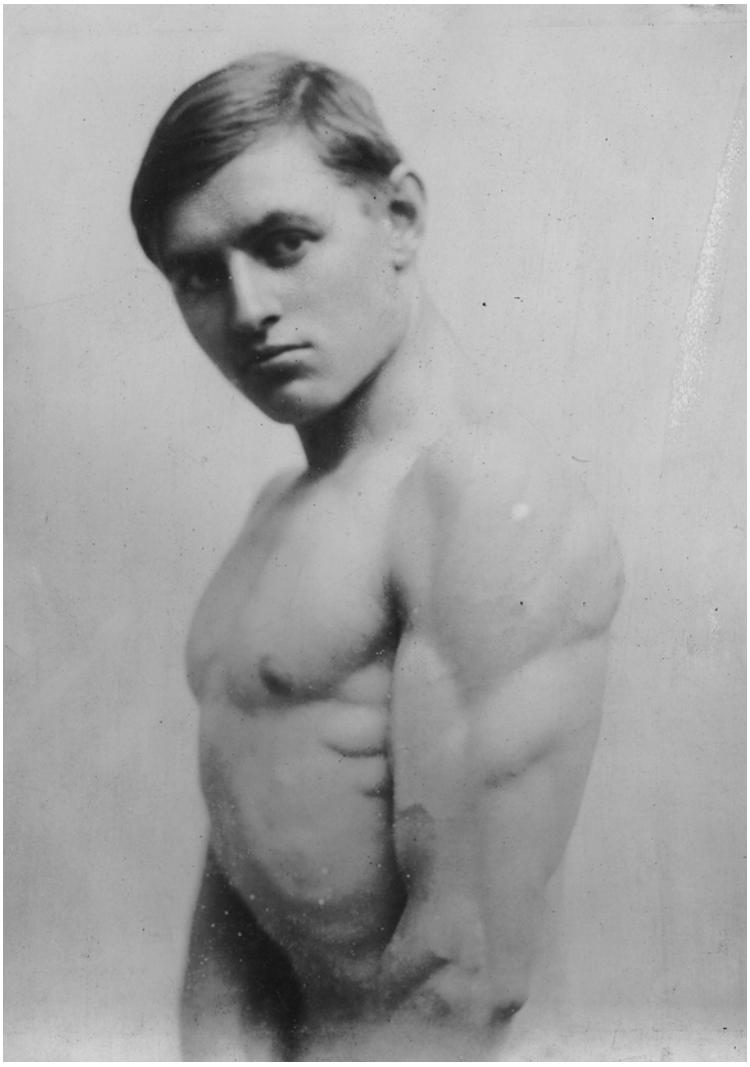

Figure 54. Ottley Coulter was the first writer, other than Calvert, to publish an article in *Strength*. This photograph of Coulter appeared with his article, "Honesty in Weight Lifting and the Necessity of Making Lifters Prove Their Claims," in the May 1916 issue. Coulter became an avid collector for materials related to strength, muscular development, and physical culture in general.

reveal an on-going conversation about Max Unger—or Lionel Strongfort as he was known professionally—for neither Calvert nor Coulter believed Unger's strongman claims.[46] In 1916, Strongfort, one of Calvert's entrepreneurial competitors, apparently began an attack on Calvert. The exact nature of Strongfort's attack is unknown, other than the fact that Calvert did not give him credit for a particular pressing record. Calvert felt the need to speak with a legal advisor about the situation and he also contacted Professor Titus, another physical culture entrepreneur in New York City, who had had similar dealings with Strongfort. Calvert's lawyer advised him to pay no attention to the attack and Titus supported a $100 challenge to Strongfort to prove his claims. Although Unger's name was never mentioned in the letters containing the information about the attack, a $100 challenge was posted in the January 1917 issue of *Strength* directly after Coulter's article, as Calvert suggested he would do.[47] A follow-up notice confirmed that Unger never responded to the challenge.[48]

Coulter may have originally approached Calvert with the idea of writing the "Honesty in Weight Lifting" article because he truly believed he could compete and beat anyone his size,[49] but in a letter Calvert suggested that Coulter should address the following points, some of which echo his sentiments from *The Truth About Weight-Lifting*:

> 1. Lifting should be placed on the same strict basis as any other amateur sport;
> 2. But the rules and conditions should be framed by those familiar with lifting, and should include only real lifts, and all stage tricks and supporting feats should be barred;

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[46] Alan Calvert letter to Ottley Coulter, 21 April 1913; Calvert letter to Coulter, 30 June 1914, Ottley Coulter's Milo Scrapbook, TMPCC.
[47] Alan Calvert, "An Offer to Max Unger," *Strength* (January 1917): 16; Alan Calvert letter to Ottley Coulter, 19 December 1916; Calvert letter to Ottley Coulter, 28 December 1916, Ottley Coulter's Milo Scrapbook, TMPCC.
[48] Alan Calvert, "Notices—Mr. Unger Didn't Accept," *Strength* (March 1917), 5.
[49] Jan Todd and Michael Murphy, "Portrait of a Strongman, the Circus Career of Ottley Coulter: 1912-1916," *Iron Game History* 7(June 2001): 5.

3. Show how lifting is controlled by strict laws in England, France, Germany, and Austria; also how the rules in all the European countries (except England) are practically the same, so that international contests can be held, and yet the lifters of every country are familiar with the rules;
4. Speak of the desirability of such rules in this country;
5. Speak of your own personal experience with me; and I don't think I am saying too much if I say that you can truthfully state that I am heart and soul in favor of the strictest honesty regarding lifting, and that you know that I would not purposely exaggerate the feats of any of my pupils, nor depreciate the work of any stranger who lifted honestly. You might state that you have had opportunities to observe; that you know of cases where I have arranged for record-breaking feats by my favored pupils, and that if the pupils happen to fail, no claim is made for a record, and no excuse made for failure.

Finally, don't attack anyone – you can imply that there are others who are not strict about their claims, and who attempt to deceive the public, but you must speak in the most general terms.[50]

Ottley wrote the article using Calvert's guidelines, almost verbatim. For instance, the last paragraph of the article addresses the honesty of Calvert (fifth point):

> I think we all see the need of a lifters' organization in this country, and I have wished for some time to see Mr. Calvert take the initiative in the movement, as I have known him personally for some time, and know him to stand for the strictest honesty in lifting. I know he would not purposely exaggerate the feats of his pupils, or belittle the lifting of any stranger who lifted honestly. I have lifted before him personally, and have seen some of his star pupils attempt a lift and fail, and no claim was made for a record and no excuse offered for failure. He has a greater knowledge of lifting than any man in this country that I have ever associated with, and I am acquainted with the best. He has done more for legitimate lifting in this country than anyone else. I feel sure he is heart and soul in favor of the sport, and will do all in his power to promote honesty in lifting.[51]

The early 1920s saw the fruition of both men's foresight when George Jowett, Ottley Coulter, and David Willoughby created the American Continental Weight Lifters' Association (ACWLA).[52] Although the name has changed several times over the past

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[50] Calvert letter to Coulter, 19 December 1916, Ottley Coulter's Milo Scrapbook, TMPCC.
[51] Ottley Coulter, "Honesty in Weight Lifting and the Necessity of Making Lifters Prove Their Claims," *Strength* (January 1917), 15.
[52] For a detailed history of the American Continental Weight Lifters' Association see the series of articles: John D. Fair, "George Jowett, Ottley Coulter, David Willoughby and the Organization of American Weightlifting, 1911-1924," *Iron Game History* 2(May 1993): 3-15; John D. Fair, "Father-Figure or Phony? George Jowett, the ACWLA and the Milo Barbell Company, 1924-1927," *Iron Game History* 3(December

century, the organization which started because of a suggestion in *The Truth About Weight-Lifting* that was reiterated in Coulter's article in *Strength,* is now known as the U.S. Weightlifting Federation and is the modern affiliate of the U.S. Olympic Committee.

During his editorial reign, Calvert averaged four articles per issue, and after the first couple of years he generally included an editorial-like "Announcement" or "Notice" as well. So, articles such as "Perfect Proportions – How Much Should You Measure?," "More About Development–Train for 'Development' First," "What Does 'Muscle-Bound' Mean?," and "My Most Important Work is Body-building for Amateurs" all came directly from Calvert's creative mind.[53] He wasn't opposed to other writers, he told Coulter after receiving a second Coulter-penned article which consequently went unpublished, but he felt that he shouldn't open the magazine to other writers until, "…I can make the magazine go on a big scale." His hope, he told Coulter, was to eventually "get a good sized subscription list," which would allow him to bring in other authors.[54]

One of the ways he could have smoothed his magazine's passage into a larger scale of production would have been to allow advertising in his pages. However, he chose not to do so. Calvert may have thought of his small publication as a "polite" magazine—a type common in the last half of the nineteenth century in which advertising was incidental to the main content.[55] Or perhaps *Strength* magazine was just a labor of love for Calvert. He used it to advertise the benefits of his own products and perhaps did not want to become bogged down with the more complicated, business-related aspects of

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1994): 13-25; John D. Fair, "From Philadelphia to York: George Jowett, Mark Berry, Bob Hoffman, and the Rebirth of American Weightlifting, 1927-1936," *Iron Game History* 4(April 1996): 3-17.

[53] Alan Calvert, "More About Development," *Strength* (January 1915): 16; Alan Calvert, "My Most Important Work Is Body-Building for Amateurs," *Strength* (July 1916): 2-4; Alan Calvert, "Perfect Proportions," *Strength* (October 1914): 3, 6-7, 10-3; Alan Calvert, "What Does "Muscle-Bound" Mean?," *Strength* (March 1915): 2-5.

[54] Alan Calvert letter to Ottley Coulter, 18 June 1917, Ottley Coulter's Milo Scrapbook, TMPCC

[55] See comments made in John F. Kasson, *Houdini, Tarzan, and the Perfect Man: The White Male Body and the Challenge of Modernity in America* (New York: Hill and Wang, 2001), 16.

publishing. Family obligations may also have played a role. With the last two of his four children—Marian arriving in October 1912 and Alan Breck born June 1915—he had plenty of responsibilities already without taking on the job of advertising agent. Ray Van Cleef described Calvert's efforts as having "humanitarian motives."[56] Calvert did all the writing, choosing of photographs, and most likely laid out the magazine himself. He charged nothing for a subscription in the beginning, taking on all the costs of the production and postage himself. He constantly queried his readers for the names of those interested in his magazine's contents so he could add them to his mailing list. According to weightlifting historians David Webster and David Chapman, Calvert's subscription list reached 45,000 subscribers before he began charging a nickel per issue or a quarter for a year's subscription in May 1917 due to the rising cost of paper during World War I.[57] When Calvert offered to sell the business in 1918, the itemized list he supplied to Ottley Coulter contained "40,000 names on Metal Plates" ready to be printed on new mailings.[58]

END OF AN ERA: CALVERT SELLS *STRENGTH*

The Great War caused a drop in Milo's business since "…it is a very bad time to launch a new proposition like this. Every young man thinks he is going to be among those selected, and they are not making any investments in exercising apparatus and I do not know whether one can blame them."[59] Eventually war activities evolved to the point that Calvert had to shut down Milo Bar-Bell and quit publishing *Strength*. His last effort was a double issue, which appeared in January 1918. He included a small article titled

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[56] Van Cleef, "Builder of Men," 12.
[57] David Chapman, "Making Muscles, Part 2: Bodybuilding before the Weider Principles," *Muscle & Fitness* 49(August 1988): 238; David Pirie Webster, *Bodybuilding: An Illustrated History*, 1st Arco ed. (New York: Arco Publishing, 1982), 54.
[58] Alan Calvert letter to Ottley Coulter, 15 July 1918, Ottley Coulter Collection, TMPCC.
[59] Alan Calvert letter to Ottley Coulter, 18 June 1917, Ottley Coulter Collection, TMPCC.

"Hints on Posing," but the majority of the issue was devoted to Milo students, including several that managed to train while on military duty. In his "Notice to Readers" he does not hint that it will be his last issue and he actually declares that a return of the "editorial articles on anatomy and special training" will occur with the March issue.[60]

As the American involvement with the War escalated, however, Calvert had trouble getting iron and paper to support his businesses. Labor unrest, especially steel mill strikes in Pennsylvania in the preceding years no doubt also played a role in the problems he had acquiring materials. In March 1918, when his next issue should have appeared, Calvert wrote to Coulter that he was "gradually losing interest" in the magazine and "in the subject of lifting in general. No one could now call me an enthusiast on the subject."[61] By May he wanted out of the business altogether, "It is my earnest desire to retire from this business at the first possible moment…I have utterly lost interest in weightlifting and everything connected with it, and I never expect to resume this business."[62] Why Calvert was so disenchanted with his companies and lifting in general is not clear from his surviving letters.[63] What is known is that in July of 1918, he submitted an itemized list of Milo holdings valued at over $10,000 and offered to sell everything to Ottley Coulter for $5,000.[64] Calvert offered it again to Coulter for $3,000 cash in September.[65] Coulter didn't have the funds so Calvert sold the barbell company and *Strength* magazine for an undisclosed amount in early January 1919 to Robert L. Hunter and Daniel G. Redmond, the son of the man who owned The Fairmount Foundry—the same foundry which supplied Milo Bar-Bell with its plates and bars.[66] In

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[60] Alan Calvert "Notice to Readers," *Strength* 3(November/January 1917-1918): 2.
[61] Calvert letter to Ottley Coulter, 20 March 1918, Ottley Coulter's Milo Scrapbook, TMPCC.
[62] Calvert letter to Ottley Coulter, 1 May 1918, Ottley Coulter's Milo Scrapbook, TMPCC.
[63] There is no evidence that Calvert had begun studying Edwin Checkley's system as early as 1918.
[64] Calvert letter to Ottley Coulter, 15 July 1918, Ottley Coulter's Milo Scrapbook, TMPCC.
[65] Calvert letter to Ottley Coulter, 5 September 1918, Ottley Coulter's Milo Scrapbook, TMPCC.

doing so Calvert "agreed never to re-enter the bar bell business, so all my connection with the P.C. game is at an end." [67]

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[66] Both Sig Klein and Harry Paschall note that Redmond's father owned the foundry which supplied Milo Bar-bell with its weights. See: Siegmund Klein, "Letters from Siegmund Klein: To Osmo Kiiha," *The Iron Master—The History of the Iron Game* (August 1993): 28; Harry B. Paschall, *Bosco's Strength Notebook*, vol. 1 #3 (Alliance: Iron Man Publishing Co.), 29. Advertisements for Fairmount Foundry Co. begin to appear in *Strength* in April 1922 and indicate the address as located on 15th Street and Indiana Avenue in Philadelphia, but Reuben Weaver, "The Jackson Mother Load!" *Muscle Museum Forum*, (January 2003) indicates that Andrew Jackson, proprietor of Jackson Barbells in the 1930s-70s, had acquired the Duplex Barbell patterns from the Fairmont Foundry in Hamberg, PA, so it is possible that the two companies are not related or that it moved.

[67] Alan Calvert letter to Ottley Coulter, 31 January 1919, Ottley Coulter's Milo Scrapbook, TMPCC.

CHAPTER SIX

FROM *STRENGTH* TO *SUPER-STRENGTH*

Following the sale of the Milo Bar-bell Company, Calvert's career in physical culture was far from over. Keeping his mind and hands active while his publishing career was on hold, Calvert spent time working on a hand-held "reflecting device consisting of a combination of mirrors" for which he applied for a patent on 7 October 1919. It was granted 17 August 1920.[1] Ray Van Cleef wrote that Calvert also worked on developing a weapon of some sort, although no information could be found that he had been granted any sort of patent.[2] At some point in 1920 or possibly in early 1921 Calvert moved his wife, four children (aged 12, 10, 7 and 4 years), one butler, and either one or two other servants to 310 Pembroke Avenue in the Radnor Township in Delaware County, just outside of Philadelphia. While Calvert never again sold weightlifting equipment, he maintained a formal association with *Strength* until 1924 and made a brief reappearance in the magazine's pages in the 1930s.

Following the company's sale, the new owners, with encouragement from Calvert's Milo students, resumed the manufacture of Milo Duplex barbells in March of 1919 and began publishing *Strength* again in November of that year—with J.C. Egan as editor. It is unclear what role, if any, Calvert played in the editorial transition. Calvert stated that he remained with Milo Bar-bell via his "own solicitation…as an employee…first as a writer of magazine articles; and later on resuming my directing of

[1] Patent #1,349,558, Reflecting Device, 17 August 1920, Alan Calvert, Philadelphia. Found on USPTO online website: http://www.uspto.gov/patft/index.html.
[2] Raymond Van Cleef, "Builder of Men," *Your Physique* (December 1944): 12.

the pupils' exercise."[3] Robert Jones, in a letter to Coulter, wrote that "Redmond was not a physical culturist and his interest was solely that of a commercially minded man. He was wise enough to retain Calvert as [a] 'front' and the business was so legitimate and so productive of results that it went ahead by leaps and bounds."[4] Under Egan's direction, the scope of the magazine was considerably broadened, as was the list of contributors. Egan invited several Milo students to submit articles, including Ottley Coulter, and the first issue included pieces on diet, speed and vitality, and the psychology of lifting.[5] Calvert authored two articles for that first issue, one on arm training and another on his favorite topic, "All-Round Strength." For this first issue, and the two that followed it, Redmond and Egan retained most of Calvert's previous practices: they used high quality paper, they included a number of photographs showcasing Milo students, and they had a number of informative articles in each issue that related to barbell training. The big difference, of course, was that now most articles were written by someone other than Alan Calvert.

Egan and Redmond must have had concerns about the financial viability of continuing with Calvert's model because with their fourth issue, in May of 1920, the magazine took on an entirely new look. The most noticeable difference was that cheaper, pulp paper took the place of the high quality, coated paper while the use of photographs declined by fifty percent or more.[6] For the next two years Calvert continued to contribute sporadic articles on strength and training, and at first they were placed prominently near

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[3] Alan Calvert, *An Article on Natural Strength Versus "Made" Strength Preceded by an Explanation of Why I Abandoned the Field of Heavy Exercise*, 3rd ed. (Philadelphia: by the author, n.d.), 5.

[4] Robert Jones letter to Ottley Coulter, 26 July 1939, Ottley Coulter Collection, TMPCC.

[5] R.L. Hunter letter to Ottley Coulter, 18 September 1919, Ottley Coulter Collection, TMPCC. Technically, Coulter was not a Milo student and never considered himself one. See Ottley Coulter letter to Jack Kent, 30 November 1960, from Angelo Iuspa/Michael Murphy Collection. Coulter had already been an accomplished strongman when he first corresponded with Calvert. Although Calvert provided him publicity, he never called him a Milo pupil. The new owners did not make the same distinction.

[6] Only twenty-four photos were used in May and fifteen in July. Each issue contained thirty-six pages (up from the twenty-four pages previous). This results in averages of 0.66 and 0.42 photos per page.

the magazine's front. Following the December 1921 issue, however, Calvert assumed a more active role and wrote the magazine's lead editorials in January, February and March of 1922. However, Egan remained as the magazine's listed editor until the July 1922 issue when Calvert and two others replaced him. The other two editors were Theodore von Ziekursch and Ralph Hale. Ziekursch was a newspaperman, editor, and novelist who lived in Philadelphia and submitted fairly regular articles on the outdoors, baseball, and general athletic excellence to *Strength* in the early-to-mid 1920s.[7] "Ralph Hale," on the other hand, was a pseudonym used by Calvert during these years. Calvert claimed that his contract with Redmond demanded several articles a month, but only one of them could be under his own name.[8] "Hale," therefore, contributed occasional articles beginning in October 1921 and running through September 1923, when he disappeared as editor. The next month, October of 1923, Carl Easton Williams—who had edited *Physical Culture* from 1916 to 1923—became the "Managing Editor" and Calvert and Ziekursch were listed as "Associate Editors."[9] It is worth mentioning at this juncture that Calvert had become interested in Edwin Checkley's training program, a system of exercise that required *no* equipment by the early 1920s.[10] What is more, Calvert placed ads in *Strength* for *Checkley's Natural Method of Physical Training*, which he sold

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[7] For brief biological information on Theodore von Ziekursch and a list of his published articles, see: http://users.ev1.net/~homeville/fictionmag/s1531.htm viewed March 2006.

[8] Alan Calvert, "How to Breathe While Exercising," *Body-Molding* (April 1925): 41.

[9] Carl Easton Williams breathed new life into *Physical Culture* magazine during his reign as its editor. No doubt, Redmond hoped he would do the same for *Strength* magazine. See Chapter Eight of Annie Riley Hale, *"These Cults"; an Analysis of the Foibles of Dr. Morris Fishbein's "Medical Follies" and an Indictment of Medical Practice in General, with a Non-Partisan Presentation of the Case for the Drugless Schools of Healing, Comprising Essays on Homeopathy, Osteopathy, Chiropractic, the Abrams Method, Vivisection, Physical Culture, Christian Science, Medical Publicity, the Cost of Hospitalization and State Medicine* (New York: National Health Foundation, 1926). Viewed online at http://www.soilandhealth.org/03sov/0303critic/030315cults/cults-ch8.htm.

[10] Edwin Checkley, *Checkley's Natural Method of Physical Training* (Philadelphia: The Checkley Bureau, 1921).

privately.[11] It was an amazing departure for this former advocate of heavy weight training, and one which will be explored in Chapter Seven.

From the beginning, Redmond seemed unsure about what editorial direction the magazine should follow. The October 1920 editorial declared that there would be:

> very little change in the policy of *Strength*. It will always be primarily a man's magazine, and we are going to try to make it of real interest to every red-blooded man in the country. It will always be devoted to weight lifting—the best form of exercise ever devised for the male of the species—but will also have articles from time to time dealing with wrestling, boxing and other forms of sport appealing to red-blooded men.[12]

The November 1920 issue, however, contained only two, out of seven, articles that directly related to weight-lifting: "Chest Development" and "Concerning Lifting Records." Another article spoke indirectly to weight training—"Can We Build a Reserve of Energy?" Two articles discussed the Olympics, and there were also individual articles on camping and wrestling—not exactly a magazine "devoted to weight lifting." Over the next months, weight-lifting played a much less prominent role in the magazine's editorial thrust. Physique and strength photographs, always seen on the covers under Calvert's guidance, disappeared under the new owners. Even so, for ten consecutive issues, May 1920 to April 1921, a classical template involving strongmen and columns was used to highlight the table of contents which appeared on *Strength's* covers. Beginning in 1921, in line with the move toward traditional sports during the so-called Golden Era of Sports in the 1920s, *Strength's* covers began to portray photographs of men and women from other sporting events—baseball, boxing, rowing, tennis, football, ice skating, and even skiing.[13] However, beginning in 1922, the cover format changed to commercially drawn

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[11] The first ad appeared in the February 1922 edition of *Strength* on page 64. By this time Calvert was running what he called the "Checkley Bureau" as well as selling Checkley's book.

[12] J.C. Egan, "Editorial," *Strength* 5(October 1920): 3.

[13] Richard A. Swanson, and Betty Spears, "The Growth of Sport and Physical Education During Social Change, 1917-1945," in *History of Sport and Physical Education in the United States* (Boston: McGraw-Hill), 205.

Figure 55. The male image appeared much less frequently on the cover of *Strength* after Calvert sold the company.
Top row (l-r): May 1920, May 1921, February 1922;
Middle row (l-r): October 1925, October 1927, June 1929;
Bottom row (l-r): November 1931, May 1932, February 1935.

Figure 56. Images of women athletes and dancers dominated the cover of *Strength* from 1921 to 1933.
Top row (l-r): December 1921, July 1922, October 1923;
Middle row (l-r): July 1924, March 1925, May 1927;
Bottom row (l-r): September 1929, November 1930, June 1933.

illustrations similar to those seen on *Physical Culture* in this era, and covers of this type continued for the duration of the magazine. A woman first appeared on the cover of *Strength* in December 1921. Over the next few years women gradually dominated the cover of *Strength*. In 1922 five covers portrayed women skiing, golfing, diving, playing tennis, and dancing. In 1925 and 1926 every issue carried a woman's figure on the cover. Although a few issues portrayed men between 1927 and 1929, women rose to 100% coverage again in 1930.

Another major change in *Strength* after the sale to Redmond was the introduction of advertising. Calvert had managed to produce the magazine without ads because it was the mouthpiece for the Milo Bar-Bell Company and because he kept the number of pages relatively small. Under Calvert, readers occasionally found inserts added to the magazine announcing new Milo products such as the arrival of the 1917 Milo-Duplex Combination Bell announced in the September 1916 issue. The only other items that would be remotely considered advertising were notices about the availability of prints of Antone Matysek, Calvert's star pupil, or photos of Milo students. Beginning in July 1920, however, *Strength* began carrying ads for other vendors. *Matysek's Muscle Control Course* and The Wizard Company—which sold shoe repair tools—were the first advertisers. The Marshall-Stillman Company advertised a series of "how-to" books about boxing, wrestling, and self defense in August, and Earl Liederman began advertising his training courses the same month. Several issues later, Bernarr Macfadden placed an ad for his book, *Vitality Supreme*, and wrestling experts Farmer Burns and Frank Gotch—then the world heavyweight wrestling champion—advertised their Farmer Burns Wrestling School. Within two years, roughly 30% of the magazine, which was now up to sixty-four pages, was ads, and these undoubtedly helped foster the growth of many mail order courses on physical culture. Names such as Charles Atlas—"the 97-lb.

weakling"—and Earle Liederman became common in the field of mail-order training with the help of *Strength*'s new advertising policy.

As for Calvert, his popularity remained undiminished with readers. When *Strength* editor, J.C. Egan, began a Prize Award Contest in 1922 in which the readers voted on the most popular article of the issue, Alan Calvert won three of the five times the results were published. In March of 1923, *Strength* began a question and answer forum called "The Mat," conducted by Calvert. Described as "a department where you can fight for your views or where you can sit in the reserved seats and watch your fellow readers 'go to the mat' in defense of their convictions," "The Mat" was a chance for Calvert to respond to readers' questions and to comment in areas of health, muscular development, sports, and athletics.[14] Through this column, as well as his article(s) each month, new readers were introduced to Calvert's inspirational writing. Not surprisingly, these readers asked to return to the format of the magazine as it had been under Calvert's leadership, especially in regard to pictures of Milo students. One reader sent the editorial staff the following letter:

> Personally, I think you would gain a larger reader interest, and consequently a larger circulation, if you would show in each issue photos of Milo pupils described as in Mr. Calvert's article. The average man looks at the figure of the usual professional strong man, and despairs of ever reaching his physical proportions; photos of other average men of a build and physical possibilities similar to his own, encourage the average man to strive to better his physique, the reason being that "if the other fellow can do it so can I.[15]

Calvert continued the forum until the December 1924 issue when he declared that he was resigning from "The Mat" and turning it over to George F. Jowett because there were too many letters on too many subjects and he had "a rooted objection to any one

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[14] Alan Calvert, "'The Mat' Advertisement," *Strength* 8(December 1923): 82.
[15] Alan Calvert, "The Mat," *Strength* 9(November 1924): 67-8.

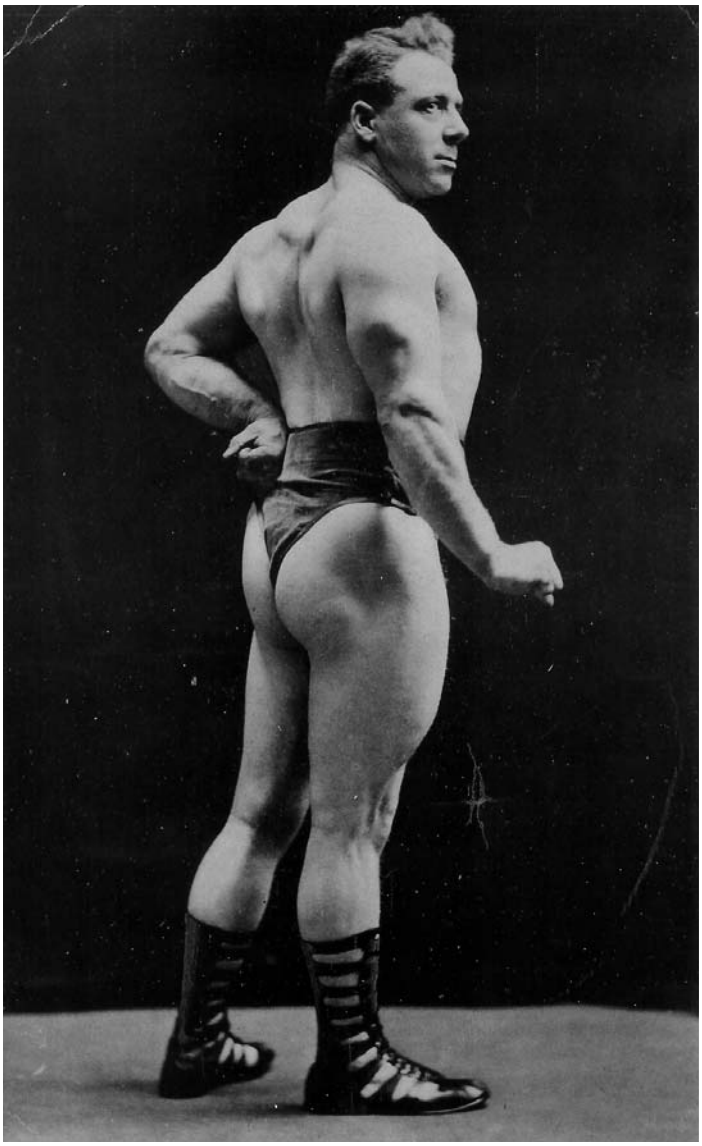

Figure 57. George F. Jowett edited *Strength* from 1924 to 1927. He also served as president of the American Continental Weight-Lifters' Association from its inception in 1922 to its end in 1934. *Photo from The Ottley Coulter Collection, TMPCC.*

else writing letters over my signature."[16] George Fuisdale Jowett had recently begun the American Continental Weight Lifters' Association (ACWLA), the first national weightlifting organization in the United States, in Pittsburgh, with the help of Ottley Coulter and previous *Health & Strength* editor, Bernard Bernard. Although Carl Easton Williams made a success of Macfadden's magazine, he lasted only a year at *Strength* before he was replaced by Jowett.[17] Calvert supposedly helped hire Jowett in an effort to restore some of the weightlifting appeal of the magazine, but almost immediately a rift appears to have developed between the two men and Calvert's name disappears from *Strength* for the next several years.[18]

When scholars and enthusiasts of the iron game discuss the relationship between Calvert and Jowett they always point to "Enthusiasm Breeds Enthusiasm," the glowing report Calvert wrote about Jowett and the ACWLA which appeared in the November 1924 issue of *Strength*. "Mr. Jowett has long been interested in competitive and record lifting as well as the development of a science of body building methods," Calvert wrote. "He is undoubtedly the most scientific lifter in this country, but instead of devoting his time to booming himself, or to glorifying his own lifts and strength feats, he has unselfishly spent all his spare hours in spreading the gospel of lifting."[19] While Calvert saw Jowett in a positive light in the beginning of their relationship, historian John Fair's research on Jowett and the ACWLA suggests that Jowett's motives were far more complex, that he *was* interested in "booming himself," and that this self-interest was

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[16] Alan Calvert, "The Breast and Abdominal Muscles," *Strength* 9(December 1924): 83.
[17] For information about Carl Easton Williams' stay as editor of *Strength*, see: Sig Klein, "*Strength* Magazine as I Knew It in It's(Sic) Glamerous(Sic) Past of Years Ago," *Strength & Health* (July 1935): 92; John D. Fair, "Father-Figure or Phony? George Jowett, the ACWLA and the Milo Barbell Company, 1924-1927," *Iron Game History* 3(December 1994): 13.
[18] John D. Fair, "George Jowett, Ottley Coulter, David Willoughby and the Organization of American Weightlifting, 1911-1924," *Iron Game History* 2(May 1993): 13.
[19] Alan Calvert, "Enthusiasm Breeds Enthusiasm," *Strength* 9(November 1924): 30-31.

eventually detrimental to the association.[20] David Willoughby, who visited Jowett in Philadelphia in 1924, corroborates Fair's assessment. Willoughby traveled east in September of 1924 to meet with Jowett on matters related to American Continental Weightlifting Association and to see about the possibility of working for *Strength* magazine. While he was in Philadelphia, Willoughby helped Jowett write the first official rules for the federation, but ultimately left Philadelphia disenchanted with Jowett. Apparently, the idealistic Willoughby was shocked to learn that what he'd been doing in California for the love of the sport, Jowett was doing primarily for the love of profit. Willoughby, for example, disagreed with Jowett's insistence that he be paid a salary from the membership monies, and Jowett found Willoughby to be "too much of an idealist. He cannot see the material side or business aspect of us."[21]

Although all the details are not known, friction clearly existed between Calvert and the management of the Milo Bar-bell Company during this era. Harry Paschall remarked in the early 1950s that Calvert had been forced to take Redmond on as a partner after World War I due to financial obligations to Redmond's father, who ran the foundry where Calvert received his exercise equipment.[22] Paschall claimed that Redmond didn't like Calvert, or barbells, started throwing his weight around the office, and eventually let Calvert go.[23] Parts of Paschall's information may be incorrect however, since Calvert's letters to Coulter during the time leading up to the sale never mention Redmond or

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[20] See Fair's articles outlining the history of the ACWLA and Jowett's connection with it: Fair, "Jowett, Coulter, Willoughby, 1911-1924;" John D. Fair, "Father-Figure or Phony?"; John D. Fair, "From Philadelphia to York: George Jowett, Mark Berry, Bob Hoffman, and the Rebirth of American Weightlifting, 1927-1936," *Iron Game History* 4(April 1996): 3-17.

[21] George Jowett letter to Ottley Coulter, September 1924, Ottley Coulter Collection, TMPCC. This letter was quoted in: Jan Todd, "Weightlifting's Polymath: The Amazing Career of David P. Willoughby" Paper presented at the annual meeting of the North American Society for Sport History, Glenwood Springs, Colorado, May 19-22, 2006; and in Fair, "Jowett, Coulter, Willoughby, 1911-1924," 14.

[22] Harry B. Paschall, *Bosco's Strength Notebook*, vol. 1 no. 3 (Alliance: Iron Man Publishing Co.), 29-30. See also: Siegmund Klein letter to David P. Willoughby, 1 January 1981, Willoughby Collection, TMPCC.

[23] Paschall, *Notebook No.3*, 29-30. See also: Klein to Willoughby, January 1981.

problems with the foundry, other than the unavailability of metal for his weights, and he even referred to the new proprietors as "very agreeable people to deal with."[24] John Fair's research determined that Redmond denied Calvert royalties from the sale of his book when Robert Jones informed Ottley Coulter in the late 1930s that Calvert contracted a "'sour grapes' complexion" resulting from an agreement with Redmond on the publishing of *Super-Strength*:

> Later *Super Strength* was written and from subsequent experiences with Redmond, I am inclined to think that he had a verbal agreement with Calvert of a more or less vague sort, which he later tried to convert more favorably to himself. At any rate, I understand that this was the last straw and I actually believe that Calvert was so disgusted and perhaps jealous with the great success Redmond had made when he himself had failed—yet he had been sincere, while Redmond was but a few jumps ahead of Charlatanism.[25]

Another piece of the puzzle involving Calvert's leaving the Milo Bar-bell Company is found in 1981 correspondence between Sig Klein and David Willoughby. Klein wrote that when he had visited the Milo Bar-bell Company in 1923 he had many long talks with Calvert and learned that "Calvert did not particularly get along well with Dan Redmond."[26] Calvert wanted to leave the Company but wanted "to 'break in' someone to take his place." Klein told Willoughby that Calvert and Redmond were looking at Jowett, Bob Snyder, Ottley Coulter and himself to fill Calvert's shoes. Upon hearing Jowett's name, Klein wrote that he had exclaimed, "How could you consider anyone else but Mr. Jowett!" However, Klein then explained to Willoughby in his next sentence, "I did not know him at that time," a statement that suggests Klein held a less favorable impression of Jowett in later years. Calvert also told Klein according to this

[24] For information about availability of material see Alan Calvert letter to Ottley Coulter, 1 May 1918, Ottley Coulter's Milo Scrapbook, TMPCC. For description of the new owners, see Alan Calvert letter to Ottley Coulter, 31 January 1919, Ottley Coulter Collection, TMPCC.
[25] Jones to Coulter, 26 July 1939, as quoted in Fair, "Father-Figure or Phony?," 17.
[26] Klein to Willoughby, January 1981.

letter, that Klein's "suggestion influenced them to hire Jowett." However, Klein told Willoughby, "Calvert did not, after meeting Jowett, like him. Calvert later left."[27]

Apparently, there were problems for Calvert from several directions. His dislike for Jowett and Redmond, combined with his dislike for the magazine's new format and the direction Milo Bar-bell was headed, was more than he could stand, so he apparently quit.[28] Calvert informed his loyal readers in 1925 that he had left the company in October 1924, shortly after his new book, *Super Strength,* was released to the public, and before the publication of the strongly-positive article about Jowett and the ACWLA.[29] Assuming that Calvert's comment was true, this would mean that the editors of *Strength* had a surplus of Calvert articles, or that his contract dictated the length of time he had to submit articles, because his by-line continued to appear in the magazine through December of 1924.[30] After that time, communication between his old company and himself seemed to be severed for good. Calvert commented in one of his 1926 *Body Molding* books, "Although I founded that particular magazine [*Strength*], I do not believe that there are any inducements which would make the present management accept one of my advertisements. As far as that goes, I would not care to use its pages, for fear that my public might think that I was endorsing its policy and teachings. (It is bad enough to have one of my books advertised in its pages.)"[31]

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[27] Ibid.

[28] For evidence of his dislike for the direction and content of *Strength* magazine see comments made in his advertising pamphlet: Alan Calvert, *Announcing My New Magazine "Body-Molding"* (Philadelphia: by the author, 1925), 2.

[29] Alan Calvert, *Body-Molding* (Philadelphia: by the author, April 1925), 42.

[30] Another reason may be what Jowett mentioned in a letter to Ottley Coulter on 23 December 1935. Jowett told Coulter that magazines are put together three months in advance. This would explain the lapse between Calvert's leaving and the eventual absence of materials by him, as well as the appearance of Jowett articles in *Strength* in early 1927 after he was let go by Redmond. Letter from Ottley Coulter Collection, TMPCC.

[31] Alan Calvert, "Between Ourselves," *Body Molding–Number Six* (1926): 8.

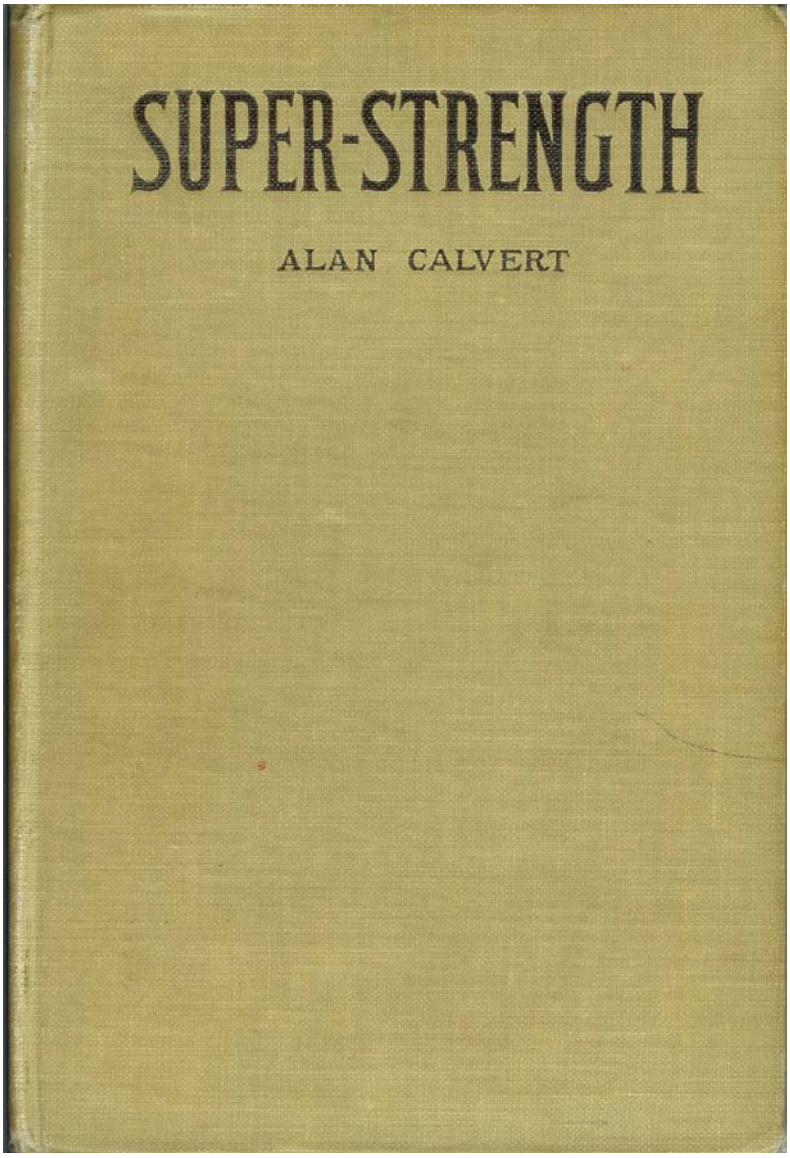

Figure 58. Although it appeared plain on the outside, Calvert's masterpiece, *Super-Strength*, contained 179 high quality photos (and three drawings) on the inside.

SUPER-STRENGTH

Regardless of why or how he left, Redmond's company retained the rights to all of Calvert's publications, including his new book, *Super-Strength,* regarded by many as his most significant work.[32] A culmination of all Calvert knew and believed, *Super-Strength* was an instant bestseller in weight-lifting circles. After all, according to an ad for *Strength* magazine, Alan Calvert "stood alone in his genius for writing the most interesting and helpful lessons on physical training and development."[33] Calvert apparently spent most of 1923 and the early part of 1924 writing and preparing the *Super-Strength* manuscript for publication. Sig Klein mentioned in a letter to David Willoughby that the book was already complete by the time he visited the Milo headquarters in 1923.[34] According to ads found in *Strength*, the book became available in June 1924. However, *Strength*'s newest editor, Carl Easton Williams, claimed in June 1924 that Calvert "wished to be excused from [his monthly] article…because he is writing a book." Instead of Calvert's normal article for the months of June and July and "knowing that thousands of our readers would be disappointed if there was no special article by Mr. Calvert," Williams "induced him to allow me to publish one chapter of his forthcoming book."[35] Williams used the book's chapter, "Muscle Control—Have You Learned It?" in June and "Your Back—the Keystone of Your Strength," in the July issue, even though the book was already available to the public.[36] The chapters were touted as representations of "the fruit of the author's life study of these matters, and his ripest

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[32] Alan Calvert, *Body-Molding* (April 1925), 42.
[33] Calvert, "*Strength* Ad," *Physical Culture*, December 1923.
[34] Klein to Willoughby, January 1981, Willoughby Collection, TMPCC.
[35] Alan Calvert, "Muscle Control—Have You Learned It?," *Strength* 9(June 1924): 50.
[36] Ibid., 50-53, 86; Alan Calvert, "Your Back—the Keystone of Your Strength," *Strength* 9(July 1924): 28-31, 76, 78.

conclusions."[37] A cloth-bound version of the book sold for $2.50 while a limited edition volume bound in soft-leather and autographed by Calvert could be bought for $5.00.

While writing *Super-Strength* Calvert kept four different classes of readers in mind: those interested in records, measurements, and pictures of leading strongmen; those interested in the physical development of their own bodies; those interested in bodily exercise from the standpoint of health; and those interested in every issue of *Strength* magazine since its first publication.[38] Part instructional manual, part record book, and part physique analysis, there was something for everyone. Calvert introduced the book by putting at ease those who might be a little less knowledgeable in the area of strength or muscular development by discussing what he meant by "super-strength":

> I will talk a great deal about lifters and lifting, which means that I will have to say a great deal about heavy barbells and dumbbells; but I do not mean you to think that I claim it is only lifters and bar-bell users who are gifted with super-strength. As a matter of fact, super-strength is not a gift of nature. If it were, there would be no use of writing this book; because if great strength was the monopoly of a few favored individuals what would be the use of *you* trying to acquire such strength? For every man who inherits great strength, or who possesses great strength by virtue of having an unusually large and powerfully made body, there are a dozen other men who have *deliberately and purposely made themselves strong*. I have seen laborers, farmers, football players, physicians, singers, artists and business men who were wonderfully built and tremendously strong; but every one of these men could have been improved by a course of scientific training. To balance that, I have seen scores of men and boys who started with below-average development, and very little strength, who have absolutely *converted themselves into "Strong Men."* All these individuals got their strength, health and development by practicing with adjustable bar-bells.[39]

The ultimate goal of the book relied upon the related ideas of progressive resistance exercises and overall bodily strength, both favorite topics for his pen in *Strength* magazine:

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[37] Calvert, "Your Back," 28.
[38] Milo Bar-bell Company, "*Super-Strength* Ad," *Strength* 9(August 1924): 80-81.
[39] Alan Calvert, *Super-Strength* (Philadelphia: Milo Publishing Company, 1924), 5-6.

> The *bodily* strength possessed by the so-called "Strong Men," whether amateur or professional, is vastly greater than the strength possessed by the average gymnast, track athlete, oarsman, football player, or workman. The "Strong Man" has a different kind of strength. His arms may be no bigger than those of a Roman-ring performer; his legs may be no bigger than those of a great football player; but he has a *bodily* strength which is not possessed by any other class of athlete; and this bodily strength is due, first to the perfect development of every muscle, and, second, to the ability of making those muscles co-ordinate.[40]

To illustrate his point, as he so often did when writing, Calvert told of an experience he witnessed. A professional strongman named Charles Herold had arrived at the Milo factory to pick up a specially-ordered barbell. A slightly larger handle had to be made by putting a hollow pipe around a solid bar of steel. When the worker tried to insert the steel bar it became stuck and wouldn't progress any further. Before the worker could put the handle in a vice to extract the solid bar, Herold "grasped one end of the pipe in his right hand, and told the workman to take hold of the projecting steel bar and pull it out." The workman could not do it; only with the help of Calvert could the two of them together loosen the steel bar. All the while, Herold "stood as though he were carved out of bronze. Even when both of us were pulling against him we never shook him a particle, and neither did we draw his right elbow a fraction of an inch from his side."[41] Herold's ability to withstand the pull of two men and to maintain his starting position impressed Calvert and served as one of his primary examples of bodily strength throughout *Super-Strength*.

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[40] Ibid., 8.
[41] Ibid., 1.

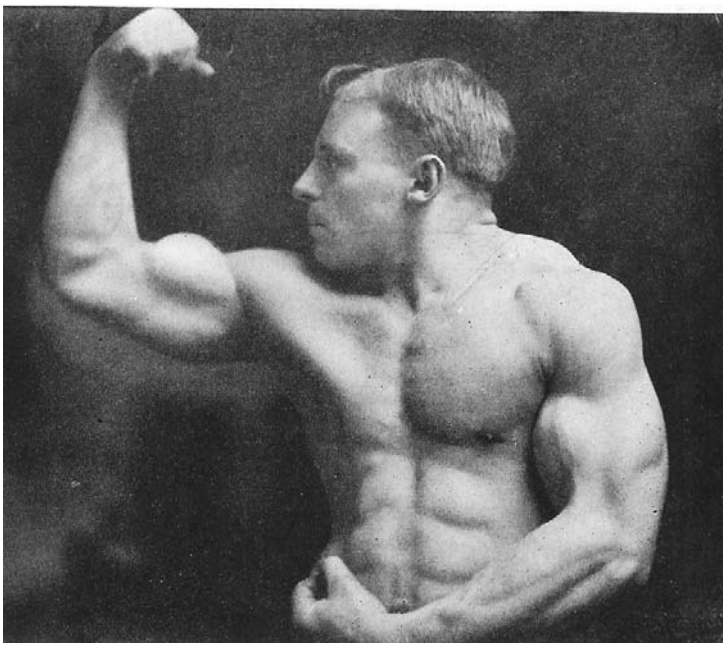


Figure 59. Calvert used Charles Herold as an example of a "strong man" throughout *Super-Strength*. Herold had an impressive physique to go along with his great strength. He later sold his own training courses as Professor Charles Herold. This photo of Herold appears on Plate 1 of *Super-Strength*.

Calvert arranged his twenty-six chapters over 220 pages, but he realized that many would buy the book primarily to look at the pictures. Therefore, he included 182 pictures of strongmen on an additional ninety-five pages of high-quality, coated paper for sharp images. Although each of the chapters could be read independently of the others, Calvert interspersed chapters pertaining to a body part—"The Back," "The Legs," "The Sides," "The Abdominal Muscles," "The Chest," "The Upper Part of the Back," "The Shoulder Muscles," and "Arm Strength"—with chapters in the first half of the book which discussed "Some Lifting Records," "Harness and Platform Lifting," "The 'Swing' and the 'Snatch'," "The Jerk Lift," and "Lifting a Bar-bell from Floor to Chest."

Although it was undoubtedly the most sought-after information for readers, Calvert's bias against upper body training is apparent in the book's organization. Chapter Thirteen—"Arm Strength"—does not appear until the mid-way point. Its placement there was yet another example of Calvert's efforts to convince his readers that bodily strength was more beneficial and important than arm strength. At only four pages, it was also one of the shortest chapters in the book.

The chapters covering each set of major muscle groups followed a similar template. Calvert would discuss the muscle(s) themselves—location, shape, basic anatomy, importance—and emphasize the interdependence of that particular muscle group with its neighboring muscle groups. He would usually relay a short story or a snippet or two of information pertaining to the group, perhaps give an account of a few well-known lifts that relied on the specified muscle group, and then follow up with a description of an exercise or two to develop that body part. For example, when discussing the upper back, Calvert began by stating that it was one of the easiest muscles to develop, but that students should not overdo it as the lower back was more important. The trapezius muscle looked "like an old-fashioned kite." Its main job was 'to raise, or

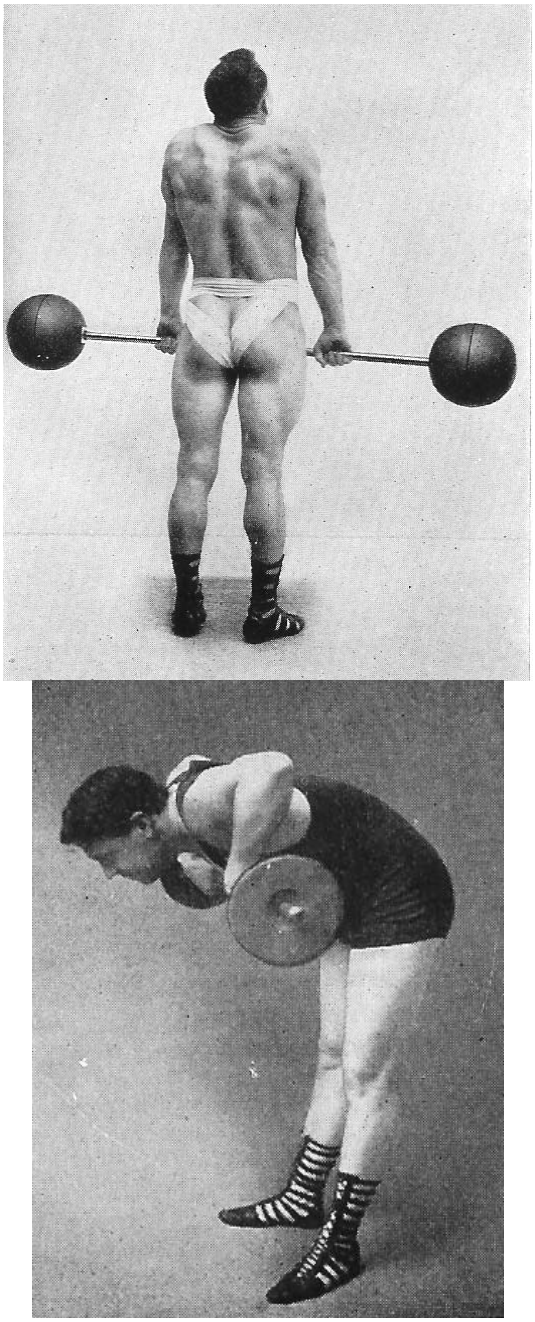
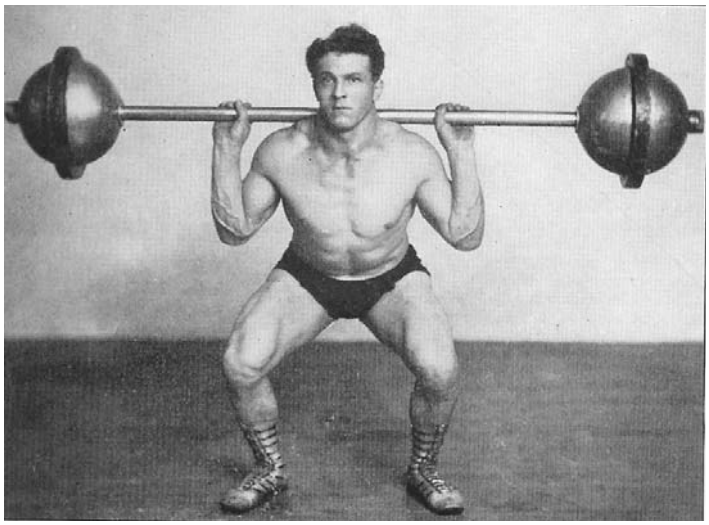


Figure 60. In *Super-Strength* Calvert showed Anton Matysek working his "traps" using the barbell shrug (top). To work the latissimus dorsi muscles Calvert demonstrated the two-handed barbell row (bottom). This exercise was a favorite with the Germans and Austrians. These images appear on Plates 22 and 23 respectively.



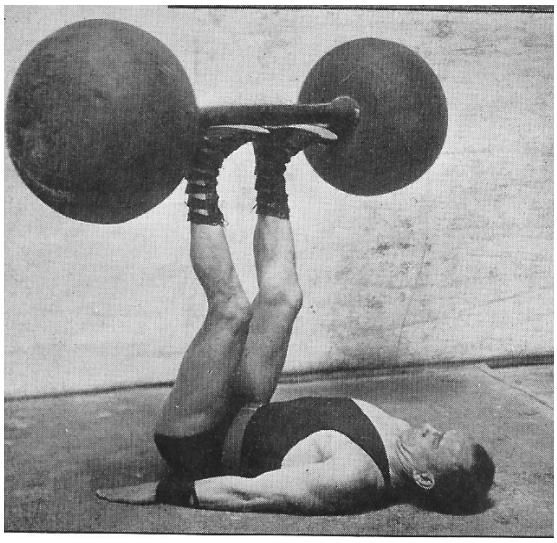


Figure 61. Milo Steinborn (top) demonstrated the squat style he made famous in America which involved doing a deep knee-bend with the feet flat on the floor. Before Steinborn, most people demonstrated the squat with the heels up. In *Super-Strength* Calvert also showed Walter Donald performing the leg press (bottom) with a light, but large barbell, as a leg exercise. Before leg press machines were available men simply balanced a bar on their feet by resting it against the heel of their shoes. These images appear on Plates 14 and 10 respectively.

shrug, the shoulders, or to pull the shoulder-blades closer together." A well-developed trapezius muscle gave the appearance of "sloping shoulders" from the neck to the point of the shoulders, and the best exercise to develop "the trap" was "to hold a fairly heavy bar-bell in the hands and shrug the shoulders." The Jefferson lift, in which the bar was straddled and then picked up, also developed the trapezius muscle quickly, according to Calvert.[42]

The other large muscle group of the upper back included the latissimus dorsi, or 'the broad of the back," which pull the arm "backwards and downwards." They also "control the shape of your sides." Calvert explained that "the side-line of the body from the arm-pit to just above the waist is dependent on the size and shape of your latissimus muscles, and the ultimate size of your chest is influenced by the development of these muscles and other muscles in the back."[43] Other good exercises to develop the latissimus dorsi muscles included the stiff-armed pullover movement while supine and dumbbell rows. First-class oarsmen, Calvert noted, had great "lats"—an indication that rowing motions were also especially good for back development. Two-handed, bent-over rows were a favorite among German and Austrian lifters for upper back development, he explained, but Calvert liked better the one-handed, dumbbell row as it allowed a greater range of motion and allowed one to use more weight per arm without worrying about "toppling over on your face."[44]

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[42] Ibid., 57-58.
[43] Ibid., 59-61.
[44] Ibid.

The majority of *Super-Strength's* pages contained information on "the function of the barbell as a body-building and muscle-developing instrument."[45] Over the years, however, Calvert's training philosophy had shifted. In the early days of the Milo company his message had centered around getting stronger and breaking lifting records. By 1923, when *Super-Strength* was written, Calvert believed that *bodily improvement* using barbells should come "first, last and all the time."[46] In the improbable event his readers needed reminding, Calvert attributed the craze for a perfectly built body to Sandow,

> If 3000 men attended one of his performances, it is safe to say that not 300 of them could the next day have told you how many pounds Sandow had lifted; but each and every one of the 3000 would probably have told you that Sandow was the finest physical specimen he had ever seen. For every one man who says, "I would like to lift as much as Sandow did," there are one hundred men who will say, "I wish I could get a build like Sandow's."[47]

In his chapter titled "On Individual Training" Calvert argued that training should focus on increasing the *size* of the chest, the *strength* of the lower back, and the size *and* strength of the thighs.[48] One's rib-box contained the "storehouses of your power"—the chest and lungs, and so as the rib-box grew, the shoulders broadened, the lungs got bigger, endurance increased, and the arms and legs developed almost automatically.[49] The lower back, or the "small" of the back, as he so often emphasized in the pages of

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[45] Ibid., 83.
[46] Ibid., 103.
[47] Ibid., 102.
[48] Ibid., 105.
[49] Ibid., 51-52.

Strength, was "the keystone of the arch of a man's strength."[50] All the body's strength was centered in the development of the lower back. Neglect this portion of the body and one severely limited the development and strength of the rest of the body because "when a man is standing on his feet he positively can*not* exert the full strength of his arms *unless the strength of his back and legs is in proportion to the strength of his arms*." Calvert advised his readers that the proportion he mentioned meant that the back "must be *many times stronger*" than the arms, not just as strong.[51] Above all, the legs, the back, and the lungs worked together, Calvert believed. Exercises for the legs and back used many muscle groups in concert and, as a by-product, caused the lifter to increase the breathing rate which challenged the lungs and enhanced their size. "*Back and leg strength,*" Calvert wrote,

> *is the foundation of the so-called 'abnormal' power of professional 'Strong Men'*; and if *you* who read this book are sincere in your desire to become very strong, you must never make the mistake of spending most of your time at exercises which strengthen only the arm muscles. By cultivating your back and legs you can get a fund of vitality, and a degree of bodily strength which you will never be able to get from 'biceps' exercise.[52]

All training should begin in one's own home, Calvert recommended, at least for the first few months—so that one could concentrate on learning the exercises and correct postures necessary for progressively heavier work.[53] Echoing a similar message as those

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[50] Ibid., 10. See also: Alan Calvert, "The Importance of the Waist Muscles," *General Strength* (June 1914): 8.
[51] Calvert, *Super-Strength*, 12.
[52] Ibid., 29.
[53] Ibid., 105-06.

broadcast in the early pages of *Strength*, he did not recommend group work unless you just wanted moderate results:

> Class-work is a lot of fun. You meet your friends; and after a lot of dilly-dallying, you stand up in rows and try to imitate the different movements of the instructor. You stretch your muscles, shake up your liver, get in a mild perspiration and give your lungs a little moderate work. When the drill is over, you all troop to the showers and do a lot of shouting; and afterwards, you all go away telling each other how 'perfectly bully' you feel. After the first two or three sessions, *any excuse is good enough to keep from going to the next class-drill*. If you *did* keep it up all winter, you'd be benefited to some extent. Your muscles would work easier and would gain in tone. Your digestion would probably improve, and so would your complexion. Understand me, almost any kind of exercise is good; but class-drills are more like play than serious work.[54]

Calvert's goal in *Super-Strength* was to teach his readers how to become strong—so "super-strong" that they became members of a new class of men he referred to as Strong Men. Class work would not result in Strong Men. The greatest results, Calvert wrote, were a "matter of individual instruction, individual training, and individual study."[55] One must put in the hard work in order to achieve the elevated status of super-strength. Even if one was born with less-than-ideal genetics, "individual training and individual effort" could "overcome the handicaps of heredity."[56] Super-strength could be cultivated; one did not have to be born with it.

In his discussion of "Where Does It All Come From?" Calvert determined that muscular development and strength came from an increase in girth and "muscular contents."[57] Upon beginning a new exercise program Calvert noted that it took about two

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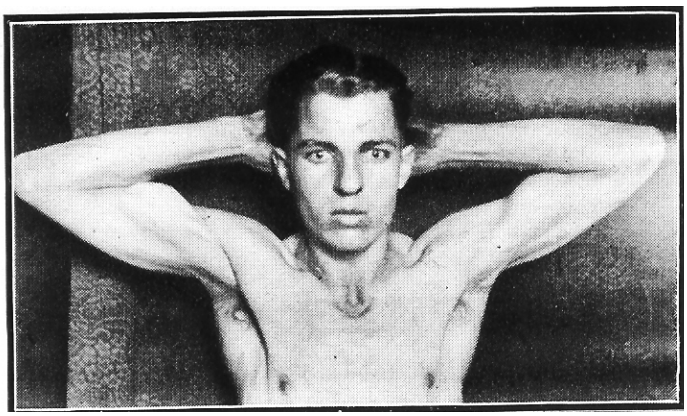
[54] Ibid., 106-07.
[55] Ibid., 108.
[56] Ibid., 115.
[57] Ibid., 133.



Progressive weight-lifting could take a young man such as A. P. Hedlund above and make him into…

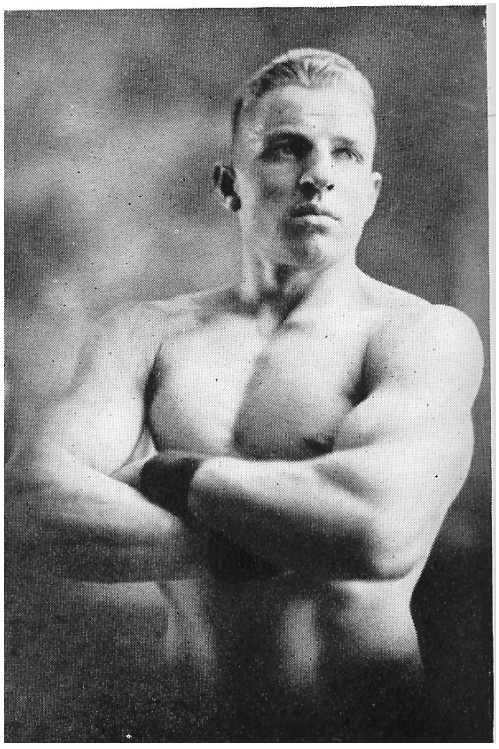


Figure 62. A new man! Eighteen months of training put eight inches on his chest measurement and three inches on his arms. Hedlund's pictures appeared on Plate 60 of *Super-Strength*.

weeks to break the body into a new routine and learn the lifts.[58] Undoubtedly, this information resulted from his years of observation and contact with his students as there was no scientific information to back it up, yet. One year after Calvert wrote *Super-Strength*, Hans Selye, who became famous for his work on the body's response to stress, started medical school, a path that would lead him to his seminal work on the General Adaptation Syndrome.[59] Selye would argue that the body undergoes a period of adjustment when a new stressor (in Calvert's case, exercise) is introduced to the body.[60] This was the response that Calvert had already witnessed and written about in regard to exercise.

As for "muscular content," Calvert asked a question which future physiologists would debate for decades. Although he didn't use the terms hypertrophy and hyperplasia, Calvert described the make-up of muscle as a "bundle of fibrous tissue" and then he asked whether muscular growth happened because "the fibres in your muscles become thicker; do they become more numerous; or both?"[61] Calvert answered the question by explaining the basic concept behind hypertrophy—that muscle tissue is "broken down" during exercise and then "replaced and reconstructed by fresh material supplied by the blood" during the rest day.[62] All of this writing about muscle tissue and material in the blood led Calvert to examine diet. He admitted that much confusion existed about the best type of food to build muscle and strength:

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[58] Ibid.

[59] There are many online websites which outlines Hans Selye's life and research. See: http://www.brainconnection.com/topics/?main=fa/selye or http://www.stress.org/Mementos.htm. Selye first published his findings in "The General Adaptation Syndrome and the Diseases of Adaptation," *Journal of Clinical Endocrinology* 6: 117-231, 1946. His book, Hans Selye, *The Stress of Life*, (New York: McGraw-Hill, 1956), was well-known for its successful attempt to explain to the general population how stress affects everyday life.

[60] See http://www.eapcism.com/Starttrainingstress.asp for an overview of the general adaptation syndrome, especially the "alarm" stage in which the stressor is introduced and the body tries to adapt.

[61] Calvert, *Super-Strength*, 134.

[62] Ibid.

> No one nation has a monopoly of "Strong Men." In East India there are "Strong Men" by the dozen, and most of these Hindus live on rice and highly spiced meat dishes. I have seen giant Chinamen who ate nothing but rice. I have seen enormously powerful Scandinavians who seemed to live entirely on fish. There are in the north of Italy some very strong men whose staple diet is macaroni, boiled chestnuts and white bread. I know personally some amateur "Strong Men" in New England who eat almost nothing except pork and beans. I can show you negroes and mulattoes who are magnificently built and very, very strong; if given a choice, they will live entirely on chicken and pork chops. Going to the opposite extreme, there are famous Turkish "Strong Men" who would rather die than eat one mouthful of pork.[63]

Wisely, Calvert told his readers that "Super-strength is a matter of bodily proportions and muscular strength…you can get such proportions and such strength, no matter what kind of food you eat, so long as you do the right kind of muscular work."[64] To give his loyal customers at least *some* guidance, Calvert summarized what he considered essential to a barbell user's nutritional plan: "drink plenty of sweet milk; eat meat at least once a day; eggs at least once a day, and such veggies and fruits as tempt [the] appetite." Calvert's nutritional guidance was less sound, however, when he went on to explain that he saw "no reason why one should eat bran, or whole wheat, or cereals, in place of white bread."[65]

Calvert also believed that diet and exercise did more than build external muscle; they also invigorated the internal organs. Every time a lifter bent over to pick up a weight, he massaged, compressed and shook up the digestive organs; his continued work developed the muscles in the neighborhood of the organs.[66] Those who developed the "washboard pattern" on their abdominals also worked the underlying digestive tract and

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[63] Ibid., 136.
[64] Ibid.
[65] Ibid., 137.

helped it function more efficiently. Barbell users who developed the muscles in the small of the back and along the sides of their torso also helped to "tone up" the liver. And perhaps most importantly—strengthening "the muscles which lie across the loins and near the lower part of the spine greatly augment *virility*." Virility, Calvert explained, "cannot be discussed in this book, but any user of barbells can tell you that remarkable increase in vigor comes from developing the lower part of the back."[67]

In the remaining chapters Calvert revisited topics he had previously written about either in *Strength* or *The Truth about Weight-Lifting*, or sometimes both: muscle control, the professional strongman's exhibition work, the strongest man in the world title, some out-worn superstitions, the performance of various specialty lifts, and statuesque development. Muscle control, Calvert reminded his readers, meant that one had mental control over the muscles. In order to exhibit control the reader had to put "the body, or limb in the most favorable position" before flexing or contracting the muscle.[68] Calvert's main message to his readers, however, was that before one could control the muscle, one must have developed the muscle. Therefore, one did not need to focus on muscle control until 'big and thick muscles" had been attained.[69]

When discussing the professional strongman, Calvert carefully distinguished between exercise which created strength and the exercise a strongman did in his exhibitions. The strongman performed to suit the desires of the audience, Calvert cautioned. The public wanted to be amazed and impressed, so the show catered to the

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[66] Ibid., 142.
[67] Ibid.
[68] Ibid., 145-46.
[69] Ibid., 147.

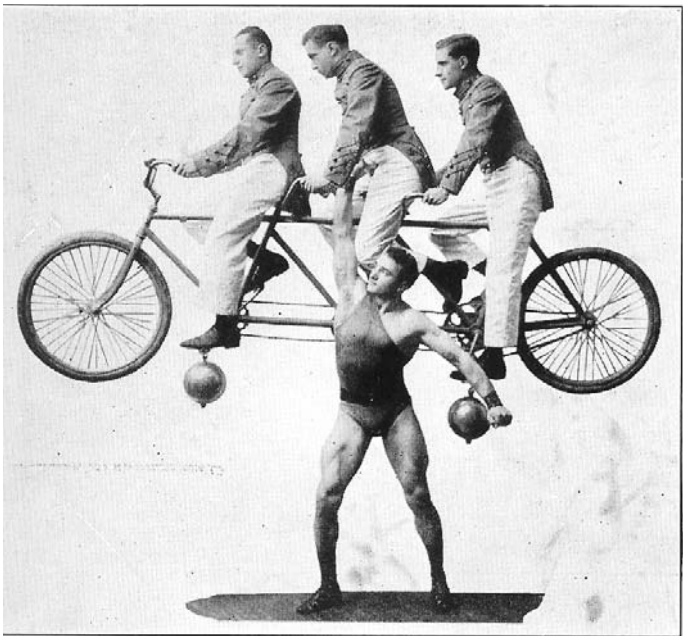

Figure 63. Reproduced in both *Strength* (January 1916, page 12) and *Super-Strength* (Plate 49), this image of Anton Matysek supporting three men on a bicycle was symbolic of the kind of strength Calvert believed possible with proper training.

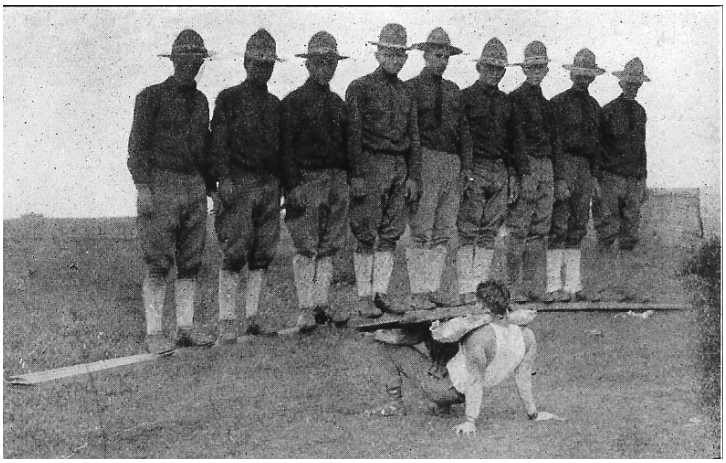

Figure 64. This photo from *Super-Strength* (Plate 49) shows a stunt popular with the performing strongman—the "Human Bridge." The weight on the plank could be almost anything—men, large animals, even automobiles.

spectacular. Events such as supporting great amounts of weight with an extended arm, building a human bridge and allowing a car to cross over it, or lifting a plank with ten to twenty men standing on it created enthusiasm in a crowd of on-lookers. Achieving strength, on the other hand, was a more mundane activity; it took hours and hours, weeks and weeks, and possibly years of serious training to develop super-strength and a beautiful physique.[70]

The title of "Strongest Man in the World" had not advanced all that much in the thirteen years since Calvert had published *The Truth About Weight-Lifting*. Calvert reservedly considered Cyr, Apollon, and Youseff as the strongest of the times although he recognized that others believed strongmen such as Horace Barre, La Vallee, and Karl Swoboda should be considered for the title. As he always stated in his writings, Calvert claimed to know dozens of amateurs he had trained who were just as strong as some of the professional strongmen but they wouldn't allow Calvert to publish pictures of them or even to mention their names.[71] He also admitted that in many strength contests—just as in many beauty contests—there was often someone prettier or stronger who chose not to compete.[72]

One of *Super-Strength's* longest chapters dealt with "Statuesque Development." Calvert credited "the great popularity which bar-bell exercise has achieved in the last few years" to "the phenomenal physical improvement made by users of bar-bells."[73] A discussion of ideal measurements—similar to the articles he had written in *Strength* and in a pamphlet titled *How Much Should I Measure and How Much Should I Weigh*—was followed by Calvert somewhat proudly noting that his suggested measurements were

[70] Ibid., 160.
[71] Ibid., 163.
[72] Ibid.
[73] Ibid., 194.

greater than those of the sculptors, artists, physicians, and various authorities on bodily proportions and that his articles were used as the standard in many quarters.[74] Calvert discussed the perfection of ancient Greek statuary and warned his audience that these representatives of the Greek culture resembled the best Greeks at the time of the statues' origins. He noted that a similar comparison could be made with the artists' models of the current day. Several of Calvert's students, including Charles MacMahon and Anton Matysek, did some posing for art students at nearby universities. MacMahon even wrote an article for *Strength* magazine on how to be an artists' model.[75]

"Effects of Exercise" ended the book by informing the readers that one who has obtained super-strength "commands a good deal of admiration," since the public still "worships physical strength."[76] But Calvert understood that strength alone was not necessarily the most beneficial thing for the body. Modern training methods, including the use of barbells, allowed one to develop a combination of the best athletic characteristics: strength, speed, agility, and suppleness, he argued.[77] Calvert assured his readers that they would not achieve a build like that of the ponderous strongman Louis Cyr if they picked up a barbell:

> If you should take up bar-bell exercise with the avowed intention of becoming super-strong, you need not waste any time worrying about the danger of getting a build like Cyr's. He was always big, and always fleshy. I suppose that few of you would object to getting a build like that of Herman Saxon, of Sandow, of Adolph Nordquest, of Steinborn, of Carr, or Matysek. All those just named are big men; but they are big without being bulky; powerfully developed without being slow or clumsy, and withal, noticeably graceful in build….I would not advise anyone to exercise with weights if I thought for one moment that such

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[74] Ibid., 196. Calvert's *How Much Should I Measure and How Much Should I Weigh* (Philadelphia: Milo Bar-bell Company, n.d.) is simply a reprint of his 1914 "Perfect Proportions" article with a new and very short section to discuss average bodyweights. See also Alan Calvert, *Growing up to Your Hips* (Philadelphia: by the author, 1933), 5.
[75] Charles MacMahon, "How to Become an Artist's Model," *Strength* 10(January 1926): 30-2, 71-2.
[76] Calvert, *Super-Strength*, 210.
[77] Ibid.

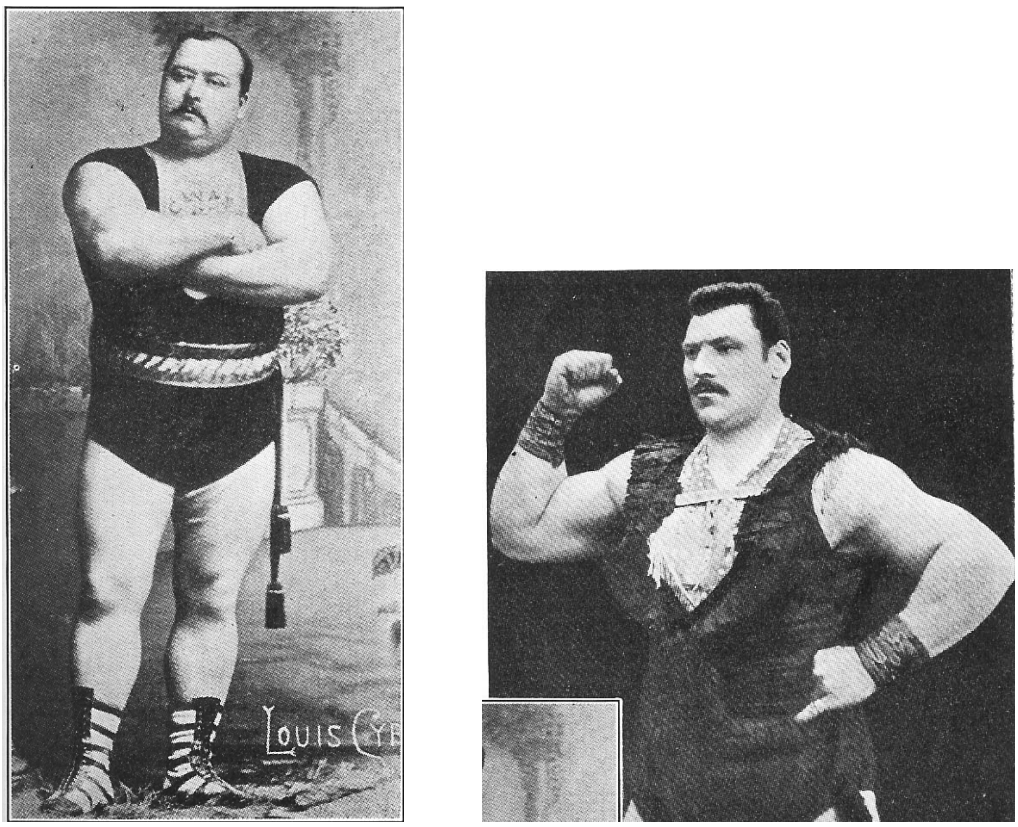

Figure 65. Two of the "World's Strongest Man" contenders—Louis Cyr on the left, and Apollon on the right. Young men had to constantly be assured that lifting weights would not make them "musclebound" or large and ponderous in their movements. These images appear on Plate 3 of *Super-Strength*.

> training was likely to produce a body which was bulky without being shapely, or which would create strength at the expense of speed and suppleness.[78]

Although many athletes and coaches were experimenting with new training methods in the 1920s, Calvert's proselytizing on behalf of weight training for athletics went largely unheard during his lifetime. It would not be until the 1960s that many athletes would begin strength training to enhance their athletic performance, and the man most responsible for that sea-change would be York Barbell manufacturer and *Strength & Health* magazine publisher Bob Hoffman, a man who learned much of what he knew about lifting from Calvert's writings and the other articles in *Strength*.[79]

STRENGTH AFTER CALVERT: THE LATE 1920S

As Calvert moved on to other pursuits, *Strength* continued its path into the realm of general physical culture and the Milo Barbell Company continued manufacturing equipment. Jowett assumed the editorial reins of *Strength* from late-1924 to mid-1927 while serving as president of the American Continental Weight Lifters' Association. The imaginary "Ralph Hale" put in many appearances during Jowett's leadership.[80] However, since the new Hale articles dealt with women's beauty and included images of scantily-clad women, it is highly unlikely that Calvert was the writer. John Fair found that Jowett used the pseudonym John Bradford in his reports of ACWLA meetings, so he probably wrote under the name of Hale as well.[81] If Redmond could force Calvert to use

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[78] Ibid., 211-12.
[79] John D. Fair, *Muscletown USA: Bob Hoffman and the Manly Culture of York Barbell* (University Park: Pennsylvania State University Press, 1999), 33-34.
[80] The Ralph Hale articles which appeared during Jowett's editorship began with "The Beauty Question," *Strength* (September 1925): 20-3, 92; and "Do Stage Beauties Exercise?" *Strength* (October 1925): 20-3. There was a Hale article nearly every month of 1926, one in January 1927, and two in November and December 1928.
[81] Fair, "Father-Figure or Phony?," 14.

pen-names, the same strategy would have worked with Jowett. *Strength* magazine served as the voice of the ACWLA during Jowett's reign, but when the ACWLA became a drain on Milo Bar-bell's finances and Redmond's profits Jowett was dismissed.[82] This occurred in mid-1927, and Mark Berry took Jowett's place as editor in July 1927—a position he held through 1935.[83]

In May 1930, beginning to feel the initial financial difficulties of the Great Depression, *Strength* combined with *Correct Eating,* which resulted in "an improved magazine of practical value to the sincere seeker after physical and mental efficiency and the perfect health with which they should be accompanied." Older readers of *Strength* "will be given an opportunity of having the latest ideas on dietetic science."[84] This unsuccessful association lasted for two years. According to letters between George Jowett and Ottley Coulter during these early years of the Depression, Redmond was in dire straits.[85] Not knowing how bad things would get, Redmond struggled to make the magazine profitable by moving its focus closer to its roots by merging in May 1932 with *The Arena*, a boxing magazine. During this final partnership the magazine returned to themes closely related to strength—weightlifting, boxing, and wrestling—even going so far as to use physique photographs on the final two covers. However, Milo Bar-Bell now had competitors as more companies were selling barbells and several "muscle magazines" competed with *Strength* for readers.[86]

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[82] Ibid.

[83] For information about Mark Berry's relationship with *Strength* magazine see John Fair, "From Philadelphia to York," 3-17.

[84] "Editorial - Correct Eating," *Correct Eating Combined with Strength* 15(May 1930): 21.

[85] George Jowett letter to Ottley Coulter, 13 May 1930; George Jowett letter to Ottley Coulter, n.d.; George Jowett letter to Ottley Coulter, 5 October 1935. These are just example letters in which Jowett mentions Redmond's financial difficulties and problems with the Federal Trade Commission. Jowett apparently didn't care for Redmond after his dismissal and his letters reflect his attitude. This also means that this evidence should be used with caution as some of it could be exaggerated. All letters from Ottley Coulter Collection, TMPCC.

[86] Although competitive barbell companies' advertisements were curtailed in the post-1930 issues, a few companies such as Professor Anthony Barker's Monarch bells were found in *Strength's* 1920s advertising.

Little did the management of *Strength* realize when they allowed advertising into their pages that they were creating more competition for wage-earners' dollars. Even though there weren't many companies selling heavy dumbbells, the simple fact of just having more books, pamphlets, courses, chest expanders, rowers, and other gadgets to spend money on meant less money to spend on Milo-specific products. Times were hard—very hard—as the Great Depression gained momentum. Fewer barbells were sold, the subscriptions list grew smaller, less money was coming in, and the magazine slowly reduced its length and content. It appears that Berry even convinced Calvert to write a fictional series, "Strength versus Magic," in 1932 in an attempt to gain readers for the magazine.[87] In 1933 Calvert wrote another series of articles, "Clothes and Your Figure," and the article "These Big Gains" for Berry, but these may have been in exchange for advertising space for three, ten-thousand-word essays he had written.[88] Jowett even claimed in a letter to Coulter that Redmond's advertising agent approached him to come back, to no avail.[89] Just as many other businesses were having problems during the Depression, nothing seemed to help Milo out of its financial difficulties. But the hard times were not the only culprits.

Other muscle magazines available during the 1920s and early-1930s include *Health and Life*, *Klein's Bell*, *Super Man*, *Health and Strength*, *Trevor Bulletin*, *La Culture Physique*, and *Strength & Health*.

[87] Alan Calvert, "Strength Vs. Magic, Part I, in Which Many Magic Hindu Mysteries, So Much Talked About, Prove to Be Pure Feats of Strength," *Correct Eating & Strength* 17(March 1932): 15-6, 54-7; Alan Calvert, "Strength Vs. Magic, Part II," *Correct Eating & Strength* 17(April 1932): 28-9, 42, 44; Alan Calvert, "Strength Vs. Magic, Part III," *The Arena and Strength* 17(May 1932): 24-5, 40, 42.

[88] Alan Calvert, "Clothes and Your Figure, Part I," *The Arena and Strength* 18(August 1933): 17-8, 44-6; Alan Calvert, "Clothes and Your Figure, Part II," *The Arena and Strength* 18(September 1933): 17-8, 52; Alan Calvert, "Clothes and Your Figure, Part III," *The Arena and Strength* 18(October 1933): 23-4, 57-8; Alan Calvert, "These Big Gains," *The Arena and Strength* 18(November 1933): 23-6, 42-4. The ad for Calvert, *Growing Up*, is found in *The Arena and Strength* 18(August 1933): 41; and 18(September 1933): 41. An ad for Alan Calvert, *The Globular Chest* (Philadelphia: by the author, 1933) was found in 18(October 1933): 43; and an ad for Alan Calvert, *The Hip and Thigh* (Philadelphia: by the author, 1933) was found in 18(November 1933): 57.

[89] George Jowett letter to Ottley Coulter, 23 September 1930, Ottley Coulter Collection, TMPCC.

Customers, as well as Milo employees, began to question D.G. Redmond's business ethics. He reportedly treated old Milo stars and contacts with disdain, did not pay for his supplies, and did not pay his employees' salaries:

> Milo is down and completely out. They have not published an issue this year. [Redmond] is selling all his books to the stores on consignemnt[sic] for anything he can get. This alone is bad. He is selling hes[sic] barbells for half price. Less than they cost him. Guess I was the cause of hurting him. I get my material at the foundry where his father is a partner. They had a row when he was knocking me. They came up to see me and said they would only run one barbell account—mine—and gave him his patterns back because he owed them for fige[sic] years. Can you imagine that. He is getting then[sic] wherever his credit will wear than[sic] beats it elsewhere. Never pays a bill.[90]

As things worsened, Redmond kept accepting money for orders placed even though the Milo Bar-bell Company didn't have enough money to ship the orders. Orders he *did* manage to fill took longer and longer to arrive. Obviously upset at the loss of their hard-earned money, customers filed complaints with the Federal Trade Commission:

> The Federal Gov. are seriously after Redmond and Berry for fraud. Based on accepting orders, subscriptions, etc, for years and not filling them or returning the money. They want to know where the money went since Redmond did not pay his bills. Federal agents were several hours with various people who had worked with or for Redmond and Berry, checking up on what they did.[91]

As the Depression wore on and Milo customers became dissatisfied with Redmond's tactics, the new kid on the block, York Barbell Company, began to offer disgruntled Milo customers half-priced bells and subscriptions to what would become the new voice of weight-lifting—*Strength & Health* magazine. These tactics put the final

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[90] George Jowett letter to Ottley Coulter, 20 March 1935, Ottley Coulter Collection, TMPCC. For other accounts of poor business practices see: Bob Hoffman, "Sincerity Necessary for Success," *Strength & Health* 3(August 1935): 62-3, 84-5. Bob Hoffman apparently did not get along with the 1930s administration of Milo because he talked of their greediness and lack of loyalty to their star students in Bob Hoffman, "A Great Strong Man Needs Our Help," *Strength & Health* 2(December 1933): 10-11.

[91] Several letters between George Jowett and Ottley Coulter mention the bad business choices and practices of D.G. Redmond. See: George Jowett letter to Ottley Coulter, 21 November 1935; Jowett to Coulter, 20 March 1935, Ottley Coulter Collection, TMPCC. Alan Carse described the fall of Milo as partly a result of the early 1930s depression but also the "competition of another company [York Barbell], the faulty business methods, unfair treatment of purchasers the old Milo Company pursued over a decade ago." Alan Carse, "The York Barbell Company," *Strength & Health*, (September 1941): 27.

nail in Milo's coffin. The Milo Company filed for bankruptcy in 1935 with $200,000 in liabilities and nine hundred unfilled orders on their hands, according to George Jowett.[92] Robert "Bob" Hoffman of York, PA bought the remains of the business, including the rights to the books and courses written by Alan Calvert, Earle Liederman, Charles MacMahon, and others which had been published by the Milo Company.[93]

From the sidelines Calvert watched the Milo Bar-bell Company and *Strength* magazine—enterprises which he began decades earlier—flounder amid allegations of dishonesty and fraud. He had always endeavored to present an image of honesty and sincere enthusiasm during his administration. The tarnished Milo image left by Redmond must have hurt—even though Calvert was not responsible for its fall from grace—at least not directly. Although most of the poor business practices can, and apparently should, be placed at the door of Daniel Redmond, people may always connect the beginning of Milo's problems with Calvert's leaving. When he sold the company and magazine he had at least forty thousand subscribers and a thriving business. With the granting of the patent on 23 September 1919 for Calvert's newest, and most successful, barbell design, the Milo Duplex—a globe shell filled entirely with graduated plates—Redmond had the tools to succeed—plus a head-start.[94] If only he had had Alan Calvert's drive and enthusiasm for barbells and progressive exercise things may have turned out differently. As the events played themselves out, Calvert was forced from the business he had

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[92] Jowett to Coulter, 5 October 1935.

[93] Although John Fair, in *Muscletown* , 49, recognizes that Hoffman officially bought the copyrights with the sale of the business, there is some doubt. Many of Jowett's letters to Coulter indicate that many of the authors and mail-order course instructors, including Calvert, ended up suing Hoffman because he published their books and courses without the copyrights. John Fair verified that Mark Berry successfully sued Hoffman in *Muscletown*, 56, note 27. I was not able to verify one way or the other for Calvert. See: Ottley Coulter letter to George Jowett, 7 August 1936; George Jowett letter to Ottley Coulter, 16 October 1935; Jowett to Coulter, 21 November 1935; George Jowett letter to Ottley Coulter, 8 April 1936. All letters from Ottley Coulter Collection, TMPCC.

[94] Patent #1,316,683, Dumb Bell, 23 September 1919, Alan Calvert, Philadelphia. Found on USPTO online website: http://www.uspto.gov/patft/index.html.

created. In its stead he began to write about the work of Edwin Checkley, a man who advocated no-apparatus-exercise. Needless to say, Calvert's readers and students felt abandoned and mystified by the reasons behind this seemingly sudden and complete reversal in training philosophy.

CHAPTER SEVEN

RENOUNCING STRENGTH: CHECKLEY'S SYSTEM, 1925-1930

> Do you know what caused Calvert to embrace the Checkley System? I was reasonably well acquainted with Calvert. He was the leading booster for weightlifting for a number of years but it had not done anything especially for him that I ever seen. A depression came on and he became indebted to the foundry that cast his discs and they took over his business to collect what was owed them. They also hired George Jowett and eventually Calvert was sort of eased out of the picture. This made him bitter to think that after all he had done for weightlifting that weightlifting had done so little for him. He became bitter towards all weightlifters. I know because we had previously been very friendly but he did not even cooperate when I visited him in Philadelphia to try to check on just what all he had published in connection with the Checkley System.[1]

Fifty years after Calvert's separation from the Milo Bar-bell Company, Calvert's readers still wondered why he turned his back on weightlifting. Even his correspondent of almost fifteen years, Ottley Coulter—who wrote the letter above in 1974—was left in the dark. In correspondence with weightlifting friends Jack Kent and Angelo Iuspa, Coulter speculated on Calvert's change of heart and the change in Calvert's attitude toward Coulter. He gave me "a rather cold reception," wrote Coulter to Iuspa in 1961; and he told Jack Kent that he felt he'd been "received very coolly" upon his last personal visit with Calvert.[2] Although Calvert claimed in his last article that he would remain in contact with his long-time strongmen friends and "Old Guard" correspondents after leaving Milo Bar-bell, his treatment of the universally-admired Coulter—and the fact that he stopped attending contests and participating in the sport in general—suggests that his

[1] Ottley Coulter letter to Frank J. Thompson, 13 August 1974, Ottley Coulter Collection, TMPCC.

decision to step away from the business may not have been entirely on his own terms.[3] His coolness toward Coulter, in fact, lends credibility to the scattered comments this author found in both the surviving correspondence and in Calvert's later publications about his dislike of George Jowett and Daniel Redmond.[4] Since Jowett and Coulter were working together on building the American Continental Weight-Lifters' Association at the time of the split, Calvert may have felt inclined to distance himself from Coulter because of the latter's friendship with Jowett and Redmond. The record simply isn't clear. Calvert had shown no animosity toward Coulter when Coulter was unable to buy the business from him in 1918, but something clearly changed during the early Twenties that created a rift between the two men. While Coulter was hurt by Calvert's behavior, he continued to "regard Calvert highly for his fine treatment of me during the Milo Barbell days that he was the owner and for the good pay that he gave me during my writing days for him."[5]

Although it is not possible to know why Calvert finally stopped writing for *Strength*, once he quit, he was apparently banned from re-entering the barbell business. In a letter Calvert wrote to Coulter in 1919—just after he sold the business to Redmond—Calvert claimed that he had agreed in the sale contract to never re-enter the

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[2] Ottley Coulter letter to Angelo Iuspa, 1 March 1961; Ottley Coulter letter to Jack Kent, 30 October 1959; Ottley Coulter letter to Angelo Iuspa, 22 December 1958. All letters from Angelo Iuspa-Michael Murphy Collection.

[3] Alan Calvert, "The Breast and Abdominal Muscles," *Strength*, 9 (December 1924): 83. This was Calvert's last article prior to his separation from the Milo Bar-bell Company.

[4] John Fair argues that Calvert continually lashed out at Jowett in his writings in 1925, especially in the *Natural Strength vs. Made Men* and *Confidential Information* pamphlets. See: John D. Fair, "Father-Figure or Phony? George Jowett, the ACWLA and the Milo Barbell Company, 1924-1927," *Iron Game History* 3 (December 1994): 18.

[5] Coulter to Kent, 30 October 1959.

barbell equipment business or sell similar information.[6] Assuming that this agreement was in fact legally binding, then Calvert's options would have been severely limited in 1925 after he severed his ties with the Milo Bar-bell Company. It therefore seems possible that his decision to begin promoting the training system of Edwin Checkley—while it made no sense to most of his weightlifting followers, who saw it as a reversal of all he had stood for in the past—should be viewed in light of the fact that Checkley's was an exercise system that Calvert could promote without breaking his contract with Redmond. But there was more. Apparently, Calvert had some sort of philosophical conversion that caused him to question the value of heavy lifting. There were indications of his interest in Checkley as early as 1920; even so, few of *Strength's* readers that year would have dreamed that five years later Checkley's system would be Calvert's new mantra.

EDWIN CHECKLEY

Born around 1855 in England, Edwin Etherington Checkley immigrated to Boston as a young man in 1874 and became a naturalized American citizen in 1879.[7] Checkley had a somewhat eclectic career in England, working at one time as a machinist and later

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[6] Alan Calvert to Ottley Coulter, 31 January 1919, Ottley Coulter Collection, TMPCC.

[7] Personal communication with Edwin Checkley's grandson, George D. Devine, 25 August 2003. Devine knows his grandfather was born in England, he believes around 1855, and emigrated to the United States in 1874. Devine has Checkley's naturalization papers which state when he arrived in the United States and indicate that he was under the age of eighteen. However, Walter in David Walter, *Today Then: America's Best Minds Look 100 Years into the Future on the Occasion of the 1893 World's Columbian Exposition* (Helena: American & World Geographic Pub., 1992), 173, has Checkley's birth year as 1847 and place of birth as upper New York state. Alan Calvert wrote in his forward, "Edwin Checkley—An Appreciation," in the reprint edition of Checkley's book, that Checkley was seventy-five years old when he succumbed to gas poisoning in 1921 so the year 1847 would make more sense. However, if the naturalization papers are correct then the 1855 approximation calculates that Checkley was only nearing sixty-five or sixty-six years of age at the time of his death.

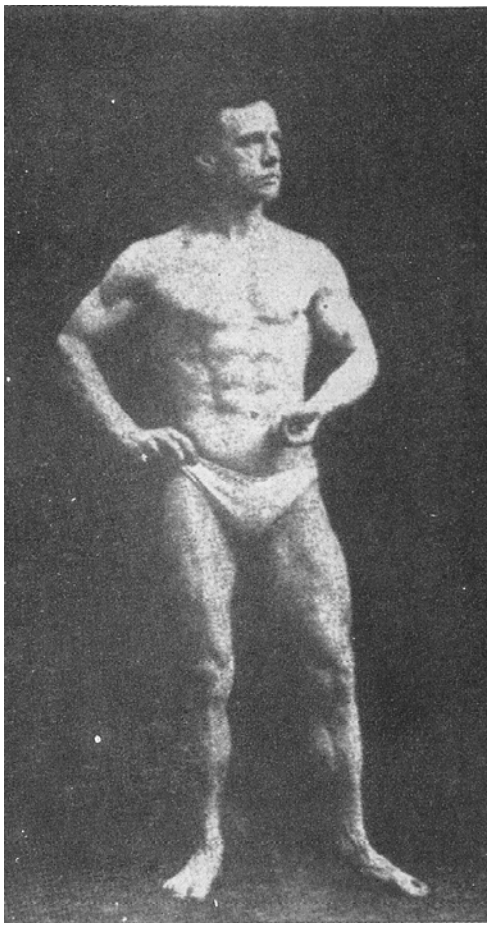

Figure 66. This photo of Edwin Checkley's physique appeared on the frontispiece of *A Natural Method of Physical Training*. Although the quality of the photo was not very good, the reader could still see his muscular frame.

developing a tumbling act. It's possible that his immigration to America came about because of his work as a performer, as he appeared in both the circus and vaudeville and it was common for performers to cross the Atlantic in search of new appearances. In any case, at the time of his naturalization in 1879, Checkley was living in Philadelphia and training at a gymnasium associated with a local *Turnverein*. Most major cities had German gymnastics societies during this era, and it was not unusual for traveling performers to ask permission to train at the local *Turner* gym when they visited a new town. At the Philadelphia gym, Checkley met William Boeckel, the owner of a brass works foundry. Because of Checkley's background as a machinist, Boeckel invited him to work in his factory as a "lathe hand on a turret lathe."[8] Checkley moved to New York in the early Eighties, but whenever he found himself in Philadelphia during his show's off-seasons he reportedly worked at Boeckel's foundry.

The details of Checkley's early life are sketchy, but at some point during his first decade in America he became interested in medicine. An article in the *Brooklyn Daily Eagle* newspaper indicated that Checkley was studying medicine at Long Island College Hospital in 1890.[9] Brooklyn city directories list his occupation as "physiculturist" in 1890 and 1891, but he is then identified as a "physician" in 1892 and 1893. As Checkley studied in the medical field, he had discussions with other doctors about the impact of exercise on the body's health and he began to develop a holistic philosophy of medicine, based on exercise. By 1890, he was calling his new theory "physiculture" and his idea

[8] Robert L. Jones, "Wm. J. Herrmann, Health Builder," *Strength & Health* (May 1947): 32. See also: Robert L. Jones letter to David P. Willoughby, 5 April 1939, Willoughby Collection, TMPCC.
[9] George D. Devine's family notes.

was "to integrate the mind and body in the pursuit of exemplary health."[10] His book, titled *A Natural Method of Physical Training, Making Muscle and Reducing Flesh Without Dieting or Apparatus,* published that same year, was exceptionally well reviewed. It was regarded by one reviewer "as an exceedingly useful one[book] embodying common-sense views upon a subject concerning which some radically false ideas prevail. The work deserves to be widely circulated."[11] Periodicals such as *The Phrenological Journal and Science of Health* and *The Ladies Home Journal* boosted the book by publishing excerpts.[12] Eliza Putnam Heaton wrote a syndicated article about Checkley's text in *Current Literature*.[13] The book was also mentioned in *The Critic: a Weekly Review of Literature and the Arts*, *The Literary World – a Monthly Review of Current Literature*, *Life*, and the *New York Times*.[14] Reportedly, Checkley even organized a publicity stunt—a bicycle ride from New York to Chicago—in order to prove the theories set forth in his book. *The Critic* announced that "Little Giant" Edwin Checkley broke the long distance record between the two cities by completing the trip in

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[10] Walter, *Today Then*, 173.

[11] "Review of *A Natural Method of Physical Training: Making Muscle and Reducing Flesh without Dieting or Apparatus*," *The Manufacturer & Builder* 22(October 1890). Viewed via the American Periodical Series Online database (APS Online database).

[12] "Book Reviews—Checkley," *The Ladies' Home Journal* 7(July 1890); H S D, "Do You Know How to Stand Properly," *The Phrenological Journal and Science of Health* 91(April 1891). These were both viewed via the APS Online database.

[13] Eliza Putnam Heaton, "Physical Culture," *Current Literature* 5(July 1890). Viewed via the APS Online database.

[14] Bookishness, *Life*, 17 December 1891; Books Received, *New York Times*, 19 September 1892; Brief Comment: Literary Doings, *Current Literature* 6(1891); Magazine Notes, *The Critic: a Weekly Review of Literature and the Arts*, 11 July 1891; Magazines and Periodicals, *Zion's Herald*, 29 July 1891; Review of "A Natural Method of Physical Training," *The Critic: a Weekly Review of Literature and the Arts,* 14 June 1890; Notes, *The Critic: a Weekly Review of Literature and the Arts,* 22 March 1890; Periodicals, *The Literary World; a Monthly Review of Current Literature,* 20 June 1891. These were all viewed via the APS Online database.

a little over fourteen days.[15] Publicity of this sort drew the public's interest and helped his book sales immensely. By the end of 1890, Checkley's book was in its fifth edition. The book's success and Checkley's growing fame also garnered him an invitation to participate in a publicity campaign related to the 1893 Chicago World's Fair.

In an effort to create interest in the upcoming World's Columbian Exposition, also known as the World's Fair, the editorial staff of the American Press Association (APA) decided to promote American progress—the focus of the upcoming Exposition—by asking experts in various fields to contribute essays on what life would be like one hundred years in the future. Read as historical documents, the essays reveal much about life in the 1890s. More than seventy individuals were featured in the syndicated series, which appeared in hundreds of small-town papers as well as in the big city dailies during the weeks leading up to the opening of the World's Fair.[16] Checkley's essay, entitled "Marked Changes in Medicine, Theology, Education," was based on ideas found in his book and predicted:

> The true relation of the muscular system to the organic system, and their combined influence on the nervous system, will become more fully and generally understood. The combined action of the patient's mind and muscles will be depended on instead of drugs to prevent, allay, and cure disease….School children will have a playground instead of a yard for recreative purposes. And they will not be made to walk around it in lockstep manner. They will rather be incited to romp, shout, and play.
>
> 'Physical culture,' so termed, I call physical destruction, and it will not be taught. A knowledge of how to breathe, sit, stand, stoop, walk, and run will comprise all

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[15] Notes, 13 September 1890. George D. Devine's family notes on Checkley also reference *The Steven Point Journal*, Wisconsin, 30 August 1890, as covering this event. Personal communication with George D. Devine, 16 July 2006.

[16] Walter, *Today Then,* 21. Other noted Americans in the series were: Reverend Thomas De Witt Talmage; author Ella Wheeler Wilcox; capitalist George Westinghouse; political analyst Mary E. Lease; and politician William Jennings Bryan.

> the physical training that is necessary—and even that will not be forced on children under 15 years old.[17]

Several of Checkley's predictions clearly came true. The neuro-muscular system is much better understood today as the discipline of exercise physiology has studied human movement from many new perspectives. Although some might argue that doctors rely more heavily on drugs now than at any other time in history, holistic medicine is also on the rise. Many physicians now also consider the connection between mind and body as essential to health and the healing process. The Playground Movement, which had its beginnings in the late 1880s, gained steam through the 1890s and earliest decades of the 1900s; and the playground became an essential part of most elementary schools and recreational parks in American during the first half of the twentieth century.[18] Checkley was also correct in his suggestion that physical culture, or what he called "physical destruction," would not be taught in 1993—but not for the reasons he believed. By 1993, the basis of Calvert's progressive exercise had been validated, but it had also been ignored by certain groups of people. Indeed, if one looks only at the history of school physical education, Checkley looks like an all-seeing prophet because in the late twentieth century, school-boards across the United States began to cut back on school

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[17] Ibid., 173-74.

[18] Richard A. Swanson and Betty Mary Spears, *History of Sport and Physical Education in the United States*, 4th ed. (Madison: Brown & Benchmark, 1995), 178-80. See also: Dominick Cavallo, *Muscles and Morals: Organized Playgrounds and Urban Reform, 1880-1920* (Philadelphia: University of Pennsylvania Press, 1981).

physical education programs to save money and to spend more time preparing students for standardized tests.[19]

Where Checkley missed on his predictions, of course, was in his suggestion that people would adopt other kinds of healthy habits in place of exercise. Checkley's motto was "health through habit." He argued that one must employ good habits with regard to everyday posture and muscular control, including the natural actions of breathing, sitting, standing, and walking. Checkley emphasized that these actions should be natural and unconsciously performed at all times of the day, not just for a few minutes a day or so many repetitions at a time. Other American physical culturists during the latter half of the nineteenth century—men such as Dio Lewis, William Blaikie, and David L. Dowd—advocated training methods in which one followed a specified routine counting repetitions and stressing the body's systems through various kinds of exercises in set training sessions. Checkley regarded these types of practices as the "bugbear of training," arguing that such practices did not achieve the kind of exercise most needed to create true health.[20]

Calvert may first have come into contact with Checkley's ideas when, as a young man, he was taken by an uncle to see Checkley give a lecture and exhibition at the Franklin Institute in Philadelphia in front of "an assembly of doctors, college-professors and grave middle-aged men whose interest was in things mental rather than physical." Calvert described Checkley as "standing 5 ft. 5 or maybe 5 ft. 6 inches, and…weighed

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[19] David Del Busto, "Children Need Physical Education & Play," *The Sport Supplement (a Supplement of The Sport Journal)* 13 (Summer 2005). Viewed online at http://www.thesportjournal.org/sport-supplement/vol13no3/04_physical.asp.

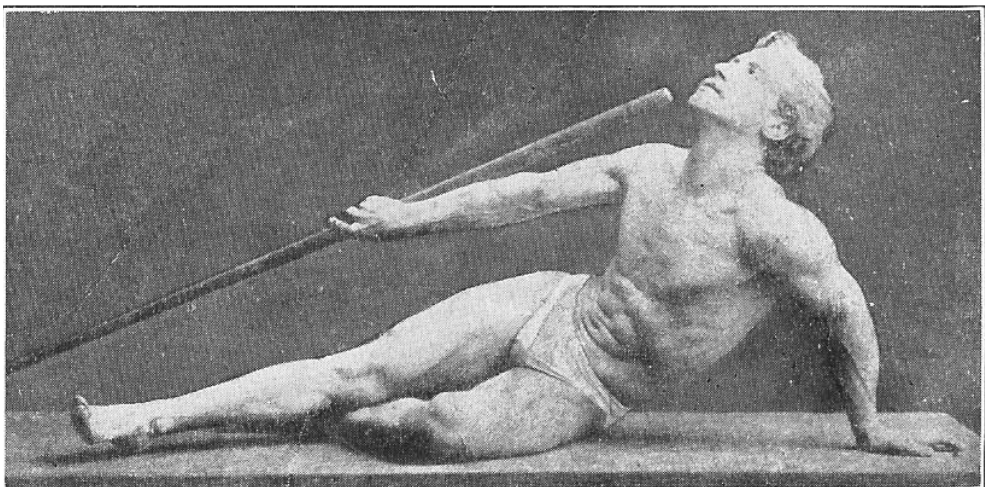

Figure 67. Calvert published this rare photo of Checkley in the July 1925 issue (page 17) of *Body Molding*. Checkley's physique convinced people that his system of training really worked. They didn't realize that he had a background in tumbling which would have developed such a muscular body.

[20] Edwin Checkley, *Checkley's Natural Method of Physical Training*, 2d ed. (Philadelphia: The Checkley Bureau, 1922), 7-16.

somewhere between 150 and 160 pounds. His arms, while beautifully rounded, were not unusually large—possibly 14 ½ or 14 ¾ inches with the biceps flexed. But his shoulder muscles, (his deltoids,) were marvelous. It was, however, his chest which attracted the attention of his audience."[21] In his presentation, Checkley advocated against training systems that used equipment of any kind, as well as the systems which called for particular exercises for a specified time. He preached, instead, a philosophy based on correct breathing, proper walking, and just generally good posture. Although Checkley's strength stunts impressed Calvert, he put the simplistic philosophy of exercise aside, correctly believing that it wouldn't produce the immense power and muscularity he desired. As he later stated, "I had been brought up on [William] Blaikie's 'How to Get Strong.' I went to see Sandow perform every time he visited my city. Also I knew his books almost by heart. I had seen the performances of "Strong Men" like Barre, Samson, Irving, Kennedy, Wahlund, and hosts of others. [I] Had studied Dowd, Oswald, and every other writer who dealt with body-building and muscle-culture."[22] Checkley's no-apparatus-needed approach just didn't fit Calvert's understanding of muscular development and his desire for adjustable barbells to advance his own training. So, like many teenagers, he enjoyed the show and chose not to adopt the method. After all, he wanted to be like Sandow at that stage of his life, not like Checkley.

Checkley, however, must have been an inspiring speaker as he continued to promote his system during the 1890s by giving lectures throughout the Eastern United

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[21] Alan Calvert, "A Sketch of Edwin Checkley," *Body-Molding* (July 1925): 11.
[22] Ibid., 10.

States and Europe.[23] In addition to this appearance at the Franklin Institute, Checkley is known to have given a series of lectures on physical culture at the Montclair Athletic Club in New Jersey in 1896.[24] He gave a similar talk during Temperance Week at Long Beach in Asbury Park in 1895, and according to New York's *Times and Register*, he presented a paper titled "Telepathy" at the Medico-Legal Congress of 1895 held in New York City.[25] Checkley's main work during these years however was the running of his own "very popular school" of physical culture in Brooklyn, New York.[26] From this vantage point, Checkley kept himself before the public by writing articles such as "Physical Culture" and "Muscle-Building" for *Lippincott's Monthly Magazine,* the latter of which was then excerpted in the "Medical Digest" section of New York's *Times and Register*.[27]

Checkley married Celina Veronica Dooley in 1886 and although they had four children by 1893—Irene, Edwin, Jr., Arthur, and Gertrude—Celina died while giving birth to Gertrude.[28] By 1901 Checkley had moved his four children to Philadelphia, where he opened the Edwin Checkley Gymnasium—in the Witherspoon Building. Those who trained there naturally followed the "Checkley System of Physical Culture." In

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[23] Personal communication with George D. Devine. Devine's family notes report that Checkley spoke several languages—French, Greek, Latin, and English—and traveled back and forth to Europe.
[24] "Entertainments in Montclair," *New York Times*, 19 January 1896; "Many Pleasant Entertainments," *New York Times*, 12 January 1896. These were both viewed via the APS Online database.
[25] "Crowds at Asbury Park," *New York Times*, 22 July 1895; "Medico-Legal Congress—Summer Vacation of 1895—Preliminary Announcement," *Times and Register,* 10 August 1895. Viewed via the APS Online database.
[26] Personal correspondence with George D. Devine, 25 August 2003. Devine's family notes mention "many, many school ads in [Brooklyn] newspapers." Dave Walter mentions a school in New York City in Walter, *Today Then,* 173.
[27] Edwin Checkley, "Muscle-Building,," The Medical Digest, *Times and Register,* 29 October 1892. Viewed via the APS Online database.
[28] Personal Communication, George D. Devine, 25 August 2003 and 16 July 2006.

1903, he also became the Physical Culture Editor for the well-respected national magazine, *Outing: an Illustrated Monthly Magazine of Recreation*, and in it he published articles such as "How to Train the Body for Health and Poise," "What is Strength?," and "Why is Physical Training a Necessity?"[29] Even though he didn't believe in set courses or systems of exercise, the management of *Outing* convinced Checkley to provide a "course of physical culture" to all their new subscribers as a publicity stunt to attract readers.[30] Because Checkley and Calvert now lived in Philadelphia and were in the same business—more or less—it was only natural that they kept up with each other's activities. In a sketch Calvert later wrote about Checkley, he claimed that Checkley told him the Milo Bar-bell system of training would make one muscle-bound; and that barbell training would only produce "hard muscles" and "stiff-strength."[31] Calvert dismissed Checkley's attitude toward barbell training and eventually lost track of him as his own company flourished. Although Checkley might not have approved of barbell training, Calvert's sales figures suggested that such training was doing something that satisfied a need.

In 1920, however, having lost control of his own company, Calvert began to ask new questions concerning training and muscular development. For example, why had some men exhibited great strength without the use of heavy weight training? And why hadn't the use of weights always strengthened and developed his students? Striving to

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[29] Edwin Checkley, "How to Train the Body for Health and Poise," *Outing, an Illustrated Monthly Magazine of Recreation* 42(April 1903): 137; Edwin Checkley, "What Is Strength?," *Outing, an Illustrated Monthly Magazine of Recreation* 42(May 1903): 274; Edwin Checkley, "Why Is Physical Training a Necessity?" *Outing, an Illustrated Monthly Magazine of Recreation* 41(March 1903): 784.

[30] "Checkley/Outing Advertisement," *The Independent, Devoted to the Consideration of Politics, Social and Economic Tendencies, History, Literature, and the Arts*, 24 September 1903; "Checkley-Outing Ad," 22 October 1903. Viewed via the APS Online database. The author could not find any information about the content of this "course."

[31] Calvert, "A Sketch of Edwin Checkley," 13.

find an answer for these questions, Calvert looked up Checkley to see if there was more to his "natural training" methodology than Calvert originally believed. According to Calvert, he tracked Checkley down in the hospital—poisoned by a leaky gas pipe at his home.[32] As Calvert tells it, Checkley, although near death, remembered him from his early years in Philadelphia and immediately asked him, "Have you come to tell me you have finally found out how terribly wrong your ideas were?"[33] No doubt happy to be discussing his theories with someone, Checkley invited Calvert to visit again and so they met each day until Checkley's death on 30 August 1921. Their discussions, Calvert later wrote, covered training and exercise and such Checkley-isms as "the effect of lower-spine posture on the action of the kidneys."[34]

Calvert later maintained that he was deeply moved by these death-bed conversations with Checkley and that he saw himself as Checkley's spiritual heir. In 1921, shortly after the older man's death, Calvert opened the Checkley Bureau in order to teach Checkley's methods to future generations. Operating from the "Bureau," Calvert convinced Checkley's son Edwin, Jr. to extend the copyright and republish Checkley's famous text as *Checkley's Natural Method of Physical Training*.[35] The new editions—published in 1921 and 1922—included a forward by Calvert, who signed his piece "a grateful pupil." Also included were two new chapters, pieced together by Calvert from materials found in Checkley's surviving notes and papers.[36]

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[32] Ibid., 13-14.
[33] Ibid., 14.
[34] Ibid.
[35] Ibid., 17.
[36] Alan Calvert, "Editorial," *Body Molding* (September 1925): 15.

BODY MOLDING & OTHER PUBLICATIONS

Calvert began advertising the Checkley Bureau in *Strength* magazine in February 1922. While the use of the term "bureau" suggests a group of individuals united in a like-minded cause, the bureau, in reality, consisted only of Calvert who used it as the basis for his new mail order business. In June of 1925, Calvert declared his full-fledged commitment to Checkley's methods with the publication of *Natural Strength versus "Made" Strength Preceded by An Explanation of Why I Abandoned the Field of Heavy Exercise*. In this twenty-four page pamphlet, Calvert claimed that "anyone who has followed my work can easily see, in *Super-Strength*, how my views had been modified and changed thru the influence of Checkley."[37] Actually, the influence is hard to see; although, Calvert did, at one point in *Super-Strength,* specifically refer to Checkley—whose ideas on breathing he heartily endorsed. However, most of the rest of *Super-Strength* explores familiar Calvert territory: how to build great bodily strength, how to work the muscles together as a unit, and how to build a bigger rib-cage. And the underlying theme of *Super-Strength*, of course, was the systematic lifting of heavy weights. Calvert had been taking the same basic approach to these topics in the pages of *Strength* for the past decade.

For these and other reasons, the publication of *Natural Strength versus "Made" Strength* was a disappointing surprise to most of Calvert's followers. While Calvert had, in the preceding years, occasionally mentioned Checkley in articles he wrote for *Strength*, there was no suggestion prior to 1925 that he considered Checkley's method equal to

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[37] Alan Calvert, *An Article on Natural Strength Versus "Made" Strength, Preceded by an Explanation of Why I Abandoned the Field of Heavy Exercise*, 3rd ed. (Philadelphia: by the author, n.d.), 6.

progressive weight training—let alone superior.[38] Calvert's sudden 1925 rejection of the use of weights and weight training made no sense to his readers who, by following Calvert's advice on weight-lifting, had come to understand that resistance exercise really worked. They were skeptical of Checkley's ideas because they had the physical evidence of their improved bodies and greater strength to support their belief in Calvert's earlier methods. Many men wrote to Calvert demanding to know why, after two decades of teaching strenuous exercise for muscular development, he was suddenly changing his mind. For example, one long-time follower, who apparently did not give permission for his name to be used, wrote:

> Received your *Broad of the Back* a few weeks ago, and must admit that a determined effort to keep my hips level, has not only improved the shape of my back but has apparently increased my store of virility.
>
> But what I want to know is, *What is the matter with weight lifting?* I suppose you know that you are known as "The father of weight-lifting in America." I, myself, can remember when you first launched your campaign, and I saw you advance the cause, from the point where a bar-bell was a curiosity, to where it is an accepted standard piece of apparatus. I know that I, and a number of my friends, took up bar-bell work because *you* converted us, and I imagine that you have similarly influenced thousands of other men.
>
> And now you are apparently putting bar-bells into the discard; which has my little crowd up in the air. If there is one thing we believe in, it is your sincerity; and we feel that there must be some reason why you have so suddenly stopped advocating heavy exercise. Can't you tell us your reason? Please do that at least, for we do not know whether to continue our bar-bell work, or whether to drop it. If it is a question of your having discovered any bad results coming from heavy exercise, we think you ought to tell us; and if you have anything you know is better, we are willing to be shown.[39]

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[38] Calvert specifically mentions Checkley's method of breathing in Calvert, *Super-Strength* (Philadelphia: Milo Publishing Company, 1924), 118.

[39] Alan Calvert, *Announcing My New Magazine "Body-Molding"* (Philadelphia: by the author, 1925), 11.

In response to letters such as the one above, Calvert wrote *Natural Strength versus "Made" Strength* to explain his new philosophy. He marketed Checkley's ideas as a foundational program that the average man, "who constitutes the great bulk of the population," should follow before he began weight training.[40] It should be remembered that before he became financially involved in promoting Checkley's system, Calvert had always advocated weight training for everyone, even beginners. Now, however, he claimed that the majority of the population did not have the right mental attitude, had a "lack of physical resources" to begin exercising with weights, and needed preparatory work first.[41] The average man—before beginning with weights—needed to acquire "a foundation of physical fibre, a certain amount of skill in the management of his body, and—enough judgment to keep him from overexerting himself," wrote Calvert in *Natural Strength vs. Made Strength*.[42] Men with "made strength," Calvert claimed, were those with large, muscular physiques attained by the use of weights. Their kind of strength wasn't permanent, he argued, and would eventually disappear when they quit lifting.[43] On the other hand, "natural strength" was a part of his person—a personal attribute—and it would remain with him no matter what he did throughout life. A naturally strong person had "everything; shape, speed, strength, suppleness, endurance, abounding health, and every blessed physical advantage a man *can* have," wrote Calvert. "They never get fat, and are always 'in shape.' Some natural men, Calvert went on to explain, can do

[40] Calvert, *Natural Strength*, 6.
[41] Ibid.
[42] Ibid.
[43] Ibid., 13-14.

more casually "than some champion athletes can do after a long siege of training."[44] While many people believe the kind of natural strength Calvert described is primarily the result of one's heritage, Calvert explained that it was more than that. Natural strength could be a result of "physical proportions (exceptional size or shape)…a very high quality of muscle resulting from a perfect digestion...the super-vitality induced by a wonderful pair of lungs: but most often from a combination of all three of those things."[45] Most importantly, natural strength could be "grown" and further enhanced through the use of "special exercises." The much gentler, yet just as rigorous exercises of Checkley were meant to prepare the body for such growth. Calvert just needed to convince his followers of the benefits of the Checkley System.

To help him sell the Checkley system, Calvert again turned to magazine publishing. Prior to publishing the *Natural Strength* booklet, Calvert released a thirty-two page book called *The Broad of the Back, Its Influence in Forming and Controlling the General Lines of the Figure*.[46] In April 1925 he published a prequel to the first issue of a new magazine he called *Body Molding*. This April 1925 prequel was also titled *"Body-Molding,"* only its title contained quotation marks and a hyphen.[47] In this new magazine's first official issue—July 1925—Calvert promised in his opening editorial to give his readers "information which will help each and every reader to acquire for himself, and by his own efforts, the very maximum of health, vitality, shapeliness and

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[44] Ibid., 15.
[45] Ibid.
[46] Alan Calvert, *The Broad of the Back, Its Influence in Forming and Controlling the General Lines of the Figure* (Philadelphia: by the author, 1925).
[47] Shortly after *The Broad of the Back* was published Calvert released a publication he titled, "*Body-Molding,"* (April 1925). Three months later Calvert began publication of *Body Molding—A Magazine of*

beauty of form."[48] To do this, Calvert explained, he would need to translate Checkley's teachings as Checkley tended to be "too concise" in his writing. Calvert admitted that Checkley "had the habit of condensation to the Nth degree. In one sentence he will state a revolutionary general principle, and yet say it so casually that nine out of ten readers fail to recognize the immense possibilities of the principle described."[49] Clearly dissatisfied with the editorial direction *Strength* magazine had taken after its sale, Calvert claimed in an advertising flyer for his new magazine—mailed to all those who bought copies of *Checkley's Natural Method of Physical Training*—that *Body Molding* would contain no "girl-pictures on the covers," no sex-stories, no ads, and no advocacy of diet fads.[50] In other words, *Body Molding* was for men—real men—but it did not come cheaply. Calvert charged one dollar for a single issue, (comparable to $10.83 in 2005) or five dollars for a yearly subscription (twelve issues).[51] The magazine itself was strikingly reminiscent of his early issues of *Strength*. Each issue contained sixty-four-pages on six-by-nine-inch, high-quality, coated paper. Although *Body Molding* did not use photographs on the cover, which was actually gray card-stock, the good paper used inside meant that the photographs he included were sharp and easy to study—just like the early *Strength* issues. No ads ever appeared *Body Molding.*

The first concept Calvert explained to the confused readers who subscribed to the new magazine was that "body-building is not a mechanical process, but [rather] a vital

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Instruction, (July, 1925) (no hyphen between "Body" and "Molding" or quotations). Calvert identifies this July issue as volume 1, number 1.

[48] Calvert, "Editorial," *Body Molding* (July 1925): 3.

[49] Julian Hawthorne, *The Secret of Checkley* (Philadelphia: Alan Calvert, 1926).

[50] Calvert, *Announcing My New*.

[51] S. Morgan Friedman, *Inflation Calculator*, available from www.westegg.com/inflation/.

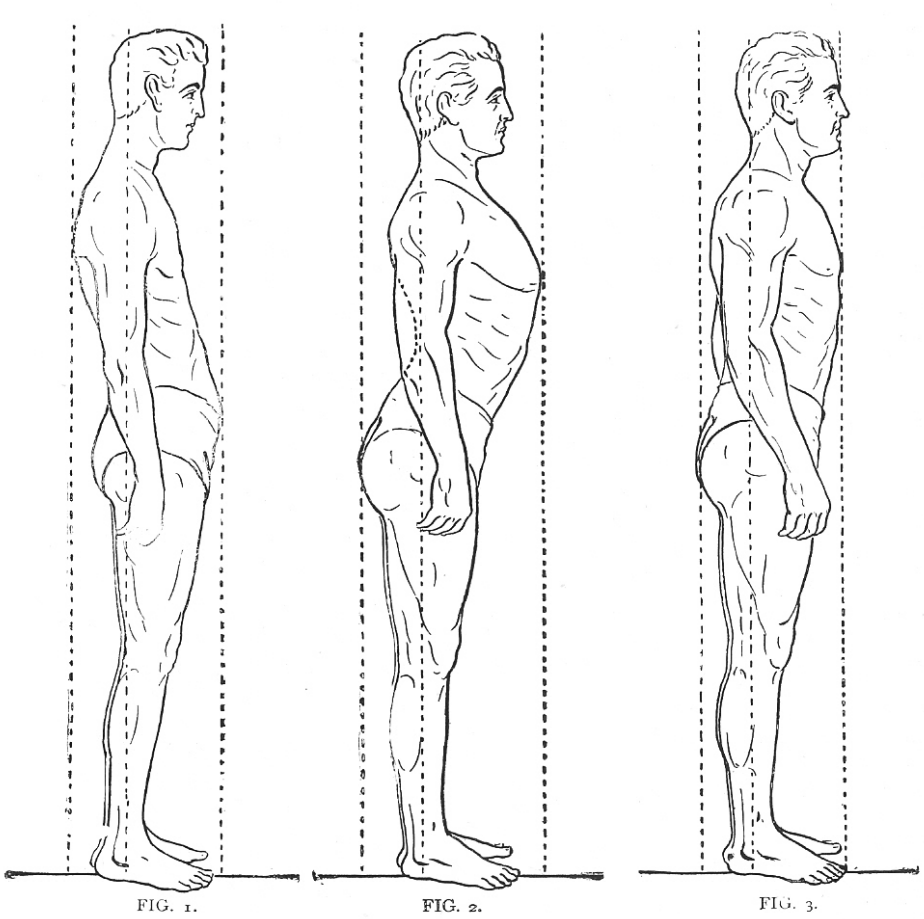

Figure 68. Calvert combined three of Checkley's illustrations so that *Body Molding* readers could easily compare the body postures common to men. The figure on the right was the desired stance so that the muscles supported the body and not the skeletal system. This image is from *Body Molding—Number Eight*, page 18.

process."[52] One did not build the body by the use of artificial devices, such as dumbbells and barbells, but rather one built the body through its own actions and mechanisms. With this idea in mind, according to Checkley's teachings one had to understand that the blood was the body's most important component. "The body, or any part of it," Calvert explained, "will thrive and grow, or deteriorate (and either shrink or bloat) according to the amount and character of the blood supply it habitually receives." But first and foremost, the blood had to be activated. To accomplish this the body had to be put into use because "Blood is drawn to a muscle which is in action." If, as Checkley stated, "the prime object of exercise—of the up-building kind—is to insure[sic] a better blood supply to the part being exercised," then the idea that "*any* use" of a muscle was considered exercise was very important for his readers to grasp.[53] For example, good posture meant that one's muscles, and not the skeleton, supported the body—thereby bringing a constant supply of blood to the muscles, which in turn allowed them to be enlarged and, consequently, shaped. If one slouched and had bad posture the skeleton supported the body and the muscles were not being used, which meant the blood was not channeled to the muscles and promoting growth. Therefore, the development of good muscular habits, as he called them, was essential to Checkley's method. As Calvert further explained, "Habit is the great compeller. Properly used it is a molder of beauty, and a source of strength. Misused, and it is an uglifier, and a warper; a cause of weakness."[54] Habits must be practiced all day long without real thought occurring, therefore Checkley's

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[52] Alan Calvert, *Bulletin No. 44* (Philadelphia: by the author, n.d.), 2-3.
[53] Ibid.
[54] Alan Calvert, "The Influence of the Standing Position on the Size of Your Chest," *Body-Molding* (July 1925): 26.

"exercise" routine continued all day long and blood was drawn to the muscles throughout the day. On the other hand, any type of course which required only ten, fifteen, or thirty minutes of exercise a day was considered "spasmodic exercise" by Checkley. Spasmodic in that the exercise, and therefore the movement of blood to particular muscles, was performed for only a short while every other day, and then usually given up entirely the following day, creating little or no chance for building muscle or strength.[55] However, muscular habits "will in themselves insure the automatic bringing of the body to its highest state of beauty, health and efficiency" since a habit involves "continuous physical exhilaration."[56]

Much detail was given to the habits of standing, walking, and breathing in Calvert's magazine articles during this era. For example, Calvert now claimed that most people walked from the knees down and didn't use their hips. "*Use* your hips as you walk, and you can get a thigh-development beyond your wildest dreams," Calvert encouraged his students. "The hip-use builds up the upper part of the thigh, makes the leg sort of melt into the hip, imparts the proper taper to the whole leg; and finally, puts wonderful muscles on the hips themselves."[57] Calvert provided detailed explanations and diagrams of what he thought Checkley meant by walking with the hips, but often it went over his readers' heads. However, a few students took great pride in having figured it out for themselves and they confidently told Calvert that they had put an inch on their thigh

[55] Alan Calvert, "Using the Hips in Walking," *Body Molding—Number Five* (November 1925): 36.
[56] Alan Calvert, *Broad of the Back,* 31.
[57] Calvert, *Bulletin No. 44*, 7.

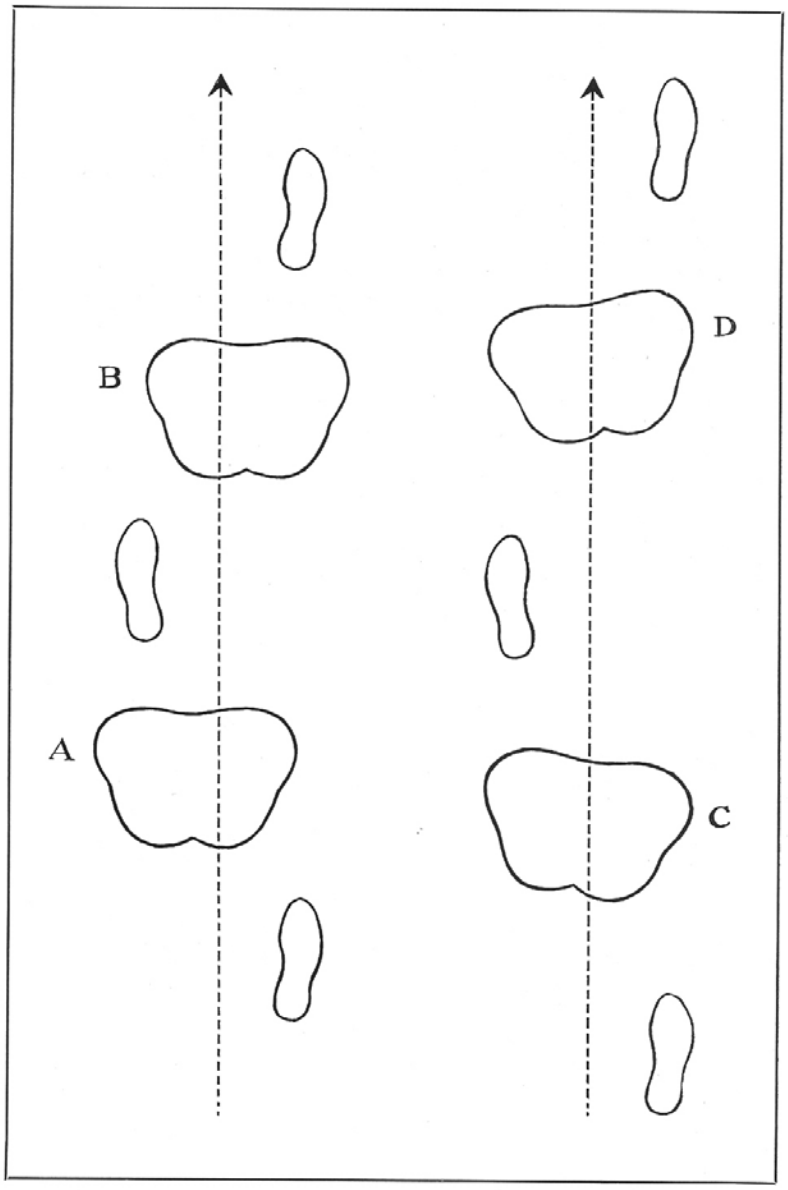

Figure 69. Calvert devised this diagram to help his readers visualize the correct method of walking. The left-hand drawing illustrated the incorrect method, or "walking from the knees down." In this style the hips move in a side-to-side motion as the body is moved forward. The right-hand drawing was the correct method in which the hips are swiveled along a vertical axis as shown by the center of the hips staying positioned on the dotted line. This image appeared in *Body Molding—Number Five*, page 34.

or a half-inch on their calf due to their new method of walking.[58] Calvert quickly praised their successes at improving their vitality, as well as their muscular development. As Calvert wrote, "When a man has vitality in the highest degree the thighs "plump up" in a mysterious way; when the vigor declines, all the individual muscles slightly shrink and flatten, then the thigh gets a "drawn" appearance, no matter how big the individual muscles are."[59]

Breathing was one of the highlights of the Checkley system and the first component that Calvert had openly accepted and recommended. "To learn to breathe," Checkley wrote, "is to learn the ABC[s] of physical health."[60] Calvert considered breathing to be the "very foundation of bodily strength" and argued that costal breathing, or that done with the upper chest, was best.[61] Holding one's chest up, Calvert argued, and not necessarily out, while taking deep, lung-filling breaths at all times of the day would not only aerate the blood but would also mean more blood entered the chest muscles so that those muscles would specifically grow. This was only possible, of course, if one were standing or sitting up straight and using the body's other muscles to maintain good posture and allow full expansion of the ribcage. Reminiscent of his earlier writings in *Strength* and *Super-Strength* in which the muscles worked as a unit and not individually, Calvert's new message to his readers was that this style of muscle building was an on-going process in which everything was interconnected:

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[58] Ibid., 14.
[59] Ibid., 7.
[60] Checkley, *Checkley's Natural Method*, 33.
[61] Calvert, *Bulletin No. 44*, 11.

> All these postural and muscular habits are interlocking; [they] sort of reinforce each other. Thus, you cannot breathe properly unless you get your chest up; to get the chest up you must get the spine straight; to do that you have to get your hips balanced. You cannot walk with a strength-giving stride unless you deliberately hold your body's weight off the hips—which again involves the straight back. It is this continual use of the whole body which gives it shape and transforms it into one mass of supple power.[62]

Between 1925 and 1927 Calvert published the only eight issues (not including the prequel issue) of his *Body Molding* magazine. It is not known how large his circulation was during those years since Calvert offered the magazine on a "private subscription only" basis, but given the rarity of the magazine among modern collectors it is likely the circulation remained quite small. However, in one of his later *Bulletins*, Calvert wrote that he believed his articles were "read by some 35 or 40 thousand people; all of one general class; men and youths of average normal health who are deeply interested in the cultivation of their own physical powers."[63] It is highly doubtful that Calvert's *Body Molding* reached nearly that many readers since it was so short-lived and its philosophy in regards to producing muscle mass was shaky at best. Probably, *Body Molding* reached its highest numbers in 1925 when Calvert's loyal students followed him from *Strength*.

Following what turned out to be the death of *Body Molding* in 1927, Calvert published seven *Bulletins* containing ten-to-sixteen pages each. The *Bulletins* began with *Number 44* and ended in 1930 with *Bulletin Number 50*.[64] Although additional *Body*

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[62] Ibid., 14.

[63] Alan Calvert, *Bulletin No. 48* (Philadelphia: by the author, n.d.), 2.

[64] Why Calvert started at No. 44 is something of a mystery. The author's theory is that Calvert had an organizational system for his printed materials based on "folders." A folder number is sometimes seen on the top of many of his publications, e.g. "Folder No. 16" on *Moderate Weight Combinations Possible with a Milo Triplex Outfit*—a short pamphlet which explained how to construct variations of the Triplex bell to make lighter dumbbells—and "Folder No. 18" on *General Training Program*—an advertising pamphlet announcing his new three-part training course released around 1911. Although I occasionally found

Molding magazines never appeared, Calvert occasionally mentioned and advertised in his *Bulletins* the "upcoming issues" of *Body Molding*—numbers nine through twelve. In these *Bulletins* Calvert appears bitter and takes an even harsher stance against weight-lifting. At one point Calvert admitted that "formal 'feats of strength' performed by gymnasts (and weight-lifting is only another form of gymnastics) leave me strangely cold. In a comparison of power it is man-to-man stuff that counts. If you want to see how strong you are measure yourself against a good man in a pushing or pulling contest. An athlete is always a better man than a gymnast; athletics give a man 'guts;' gymnastics rob him of that quality."[65] Most of the *Bulletins* simply reiterated concepts he had gleaned from Checkley's book, and occasionally Calvert reprinted a popular article from *Body Molding*, such as "Getting a Great Torso Development by Using the Muscles which Control the Spine and Hip-Bones."[66] According to Calvert this particular article took all of eight thousand words to explain Checkley's theory of posture and to "fully expound the muscular action (and consequent bodily control) which Checkley had briefly hinted at in the few lines of small print underneath the illustration [on page sixty-four of his book]."[67]

Although he had earlier claimed that Checkley's system was against the idea of taking specific workouts with specialized exercises, Calvert began selling a training

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different pieces of literature with the same folder number, the numbers seem to get larger as the years progress. Therefore, it may be plausible that *Bulletin No. 44* was simply Folder No. 44.

[65] Alan Calvert, *Bulletin No. 45* (Philadelphia: by the author, n.d.), 13.

[66] This article, found in Alan Calvert, "Getting a Great Torso Development," *Body Molding—Number Eight* (Philadelphia: by the author, 1927), was supposedly reprinted as *Bulletin No. 46*, although the author did not have access to the actual issue. See: Calvert, *Bulletin No. 45*, 16. Beginning with the *Body Molding—Number Eight*, Calvert changed the publication from a "Magazine of Instruction" to a "Series of Instruction Booklets."

[67] Calvert, *Bulletin No. 45*, 16.

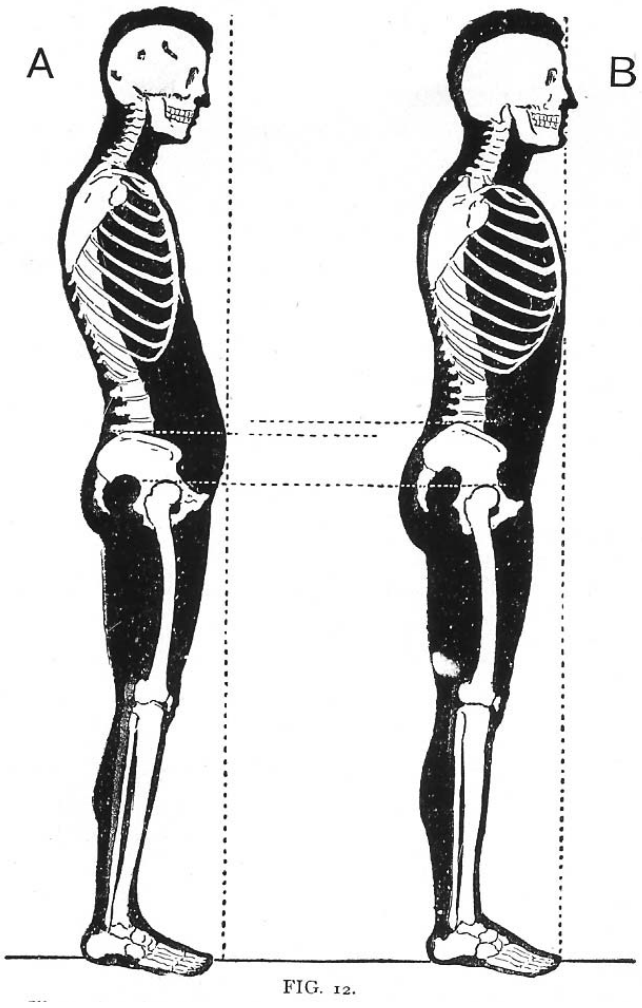

FIG. 12.

Figure 70. This illustration, found on page sixty-four of Checkley's book, illustrated interconnectedness of the hips, back, and ribcage. These images are the same as those in Figure 65 with the additions of the skeletons.

course in 1926. Advertised through the *Bulletin*, the training course came about, Calvert wrote, because of the great demand for more information about the Checkley method. He was tired of writing the same things over and over again in personal letters to his readers, Calvert explained, and so he thought that publishing specific lessons might be helpful. At this time, Calvert said he wanted it understood that he was not running a training establishment. He had four or five pupils who didn't pay him, he explained, but if others wanted his special advice they could order his course and get his advice in that way.[68] For thirty dollars and three full-body pictures (front, back, and side views) subscribers would get a letter of analysis, criticism, and advice on the photos, as well as the printed "General Lessons" which described special exercises to build up the "weak spots." Non-subscribers paid thirty-five dollars for the same package.[69] The "General Lessons" consisted of four sets of instructions. The first set of instructions discussed the body's primary positioning involving the use of the hips and spine. The mastering of this basic position was crucial to the everyday activities of standing, sitting and walking. Calvert's suggested exercise progression to help master this position was as follows:

> Remove your coat, but keep your vest buttoned. Stand with your back to a wall. Have your heels, buttocks, shoulders and back of the head touch the wall. Now—keeping those four parts in contact with the wall make the small of the back touch. To do so you have to straighten the lower spine to take the kink out of it.
>
> For some of you it will be a struggle so here is the easiest way to master it. Lift the front part of your hips. The instant you do that you will notice that your abdomen seems to retract, and that your chest lifts itself. Your vest is now much too loose around the waist, and uncomfortably tight around the chest.

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[68] Alan Calvert, *Body Molding—Number Five* (Philadelphia: by the author, 1925), 64.

[69] Alan Calvert, "On Individual Training," *Body Molding—Eight,* (1927): 54-55. Calvert mentioned that he first advertised the offer of individual instruction as an "Announcement" apparently sent through the mail. The initial cost had been twenty dollars but the price went up to thirty dollars as of 15 December 1926 because of the time he spent on each person's analysis and exercise prescription.

> Practice this a few times—first relaxing into your usual pose and then by changing the hip-angle to bring the small of the back in contact with the wall and remember, always keep head, shoulders, buttocks and heels against the wall.
>
> Next step away from the wall and then if you can, control the hips and spine without having the guidance of the wall. Stand squarely balanced on your two feet—see that your hips are in line with your shoulders and knees…Soon you will get control—probably in ten minutes at most. You will get the ability to take the hollow out of your lower back, and to make the whole back almost perfectly flat from the hips to shoulder blades. But that is an exaggeration and I don't want you to stand that way all of the time. But you must keep the back almost flat all the time you are standing, for one week whether you are on the corner waiting for a bus or trolley or when you pause for a moment's conversation and at all other times. [70]

The second and third lessons explained costal breathing and control of the diaphragm. Lesson Two taught the reader "how to make the diaphragm act in apparent opposition to the tide of air," while Lesson Three increased "the muscular power of the diaphragm itself and also [the] mental control over it."[71] Calvert believed that ninety-nine out of one hundred people forced themselves into breathing abdominally simply because they hadn't mastered the positioning of the hips and spine as discussed in Lesson No. 1, thereby cramping "the upper rib action."[72] Calvert explained:

> The lungs grow by use. Most men use but little of their lung space. The upper parts of the lungs are used but seldom. Consequently when a habitual abdominal breather starts in at serious practice of costal breathing all the dormant cells in the upper part of the lungs are put to work and become thoroughly alive and active.
>
> As the lungs make room for themselves, the rib-box is enlarged. I have seen the flattest kind of chests converted by costal breathing into high-arched chests the

[70] Alan Calvert, *General Lesson No. 1—The Control of the Hips and Spine* (Philadelphia: by the author, n.d.).
[71] Alan Calvert, *General Lesson No. 3—More About Breathing and the Control of the Diaphragm* (Philadelphia: by the author, n.d.), 1.
[72] Alan Calvert, *General Lesson No. 2—Costal Breathing* (Philadelphia: by the author, n.d.), 1.

> actual enlarging of the rib-box causing an increase of anywhere from four to eleven inches in normal chest measurement.[73]

Lesson No. 4 concerned the "Practice of Walking" in which Calvert once again explained how to stride while walking so that the leg muscles received the necessary exercise.[74] But, he cautioned that as proper walking relied upon the ability to hold one's spine and hips in the proper positioning the student must not forget the earlier lessons.

While most of Calvert's explanations of Checkley's ideas sound logical—at least to some extent—his system clearly would not create the muscularity and strength that many of Calvert's followers desired, nor would it result in an increase in the circumference of the chest by four inches, much less eleven inches. Calvert's readers who had stuck with him from the days when he was at Milo Bar-bell's helm had done so because he had been their trustworthy leader in progressive resistance exercise. Such exercise produced great strength and the use of heavy weights produced larger muscles. Just like today, bigger muscles and greater physical strength were the goal of many young men interested in exercise, and because Calvert's weight training system worked so successfully, he'd been able to sell magazines and barbells and earn the respect of his customers. Because of that earned trust, when Calvert first began expounding upon his new Checkley-based method some of his readers—in the belief that he had developed a new style of training which would produce even more muscular development and

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[73] Ibid., 3.
[74] Alan Calvert, *General Lesson No. 4—The Practice of Walking* (Philadelphia: by the author, n.d.).

strength—followed him into the world of Checkley exercise. When it didn't produce these results his readers began to grumble and fell away from him and his teachings.[75]

One can only speculate as to Calvert's real reasons for promoting the Checkley method. Perhaps he sincerely believed in Checkley's ideas and decided it was superior to weight training. Perhaps he got involved because it required no apparatus and would allow him to continue to have a product to sell. Perhaps he did it because he'd seen the success several other experts were having promoting exercise systems without apparatus and thought he'd jump on the same dishonest train. Perhaps it was all of the above. In any event, it seems difficult to believe that so intelligent and analytical a man could have actually believed that the Checkley System was superior to progressive resistance exercise. One thing is certain—during the Twenties, Calvert was not the only man promoting an exercise system based on body alignment and muscular control rather than apparatus. Joseph Pilates' new exercise method was growing popular in New York at approximately the same time that Calvert left the Milo Company. In 1904 in Denmark, J.P. Müller had introduced his new fifteen-minute-a-day approach to exercise in the best selling book, *Mein System,* which again, involved no apparatus.[76] By the 1920s it was popular throughout Europe and the United States.

Joseph Hubertus Pilates was born a frail child in 1880, near Düsseldorf, Germany. Because of his early childhood sicknesses, he reportedly began studying Eastern and Western forms of exercise at a young age. Eastern exercise, such as yoga, tended to

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[75] Jowett declared that Calvert's Checkley business was a "pitiable proposition." George Jowett letter to Ottley Coulter, 16 July 1931, Ottley Coulter Collection, TMPCC.

emphasize controlled breathing, controlled movements, and highly focused attention.[77] Pilates worked in England for several years as a circus performer, boxer, and self-defense instructor while building up his own body. During the First World War he began perfecting a system of rehabilitative exercises while working in the intern camps and hospitals in England. His method represented "a unique approach to exercise that develops body awareness, [by] improving…the body's postural and alignment habits and increasing flexibility and ease of movement."[78] The basics of Pilates' approach sounds remarkably similar to Checkley's teachings. In fact, it seems likely that Pilates read Checkley's book as part of his study of the body and its anatomy. Pilates moved to New York City in the early 1920s and opened a "body-conditioning studio" in 1926 with his wife. His primary customers were dancers, as he shared the building with the New York Ballet. It was a fortuitous choice of location. Pilates soon had a number of dancers among his clients who appreciated the help his system, called Contrology, gave them with posture, coordination, and balance.[79] Pilates published several books in the 1930s and 1940s and created a method of exercising which has enjoyed a rebirth in recent years.[80]

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[76] Jens Peter Muller, *Mein System* (Kopenhagen: Tillage's buchhandlung, 1904). The translated version for the United States is J. P. Muller, *My System; 15 Minutes' Work a Day for Health's Sake* (New York: G. E. Stechert & Co., agents, 1905).

[77] Online website: http://momentum-fitness-studio.com/pilates/history.html; viewed 30 June 2006.

[78] Online website: www.pilatesfoundation.com/whatis.php; viewed on 30 June 2006.

[79] Online website: www.pilatesfoundation.com/history.php; viewed on 30 June 2006.

[80] Joseph Pilates published two books: Joseph H. Pilates and William John Miller, *Return to Life through Contrology* (New York: J.J. Augustin, 1945); Joseph Hubertus Pilates, *Your Health; a Corrective System of Exercising That Revolutionizes the Entire Field of Physical Education* (New York: C. J. O'Brien, Inc., 1934). Although he never trademarked the term "pilates" the legal system determined in 2000 that it could no longer be protected since the term had become generic for exercise instruction services in American society. A similar case is being made for yoga, see: "Yoga Copyright is Challenged" at http://www.fitcommerce.com/Blueprint/Module/Desktop/Announcements/ViewAnnouncement.aspx?ItemID=1051&mid=112&portalId=2&cid=112.

Yoga, studied by Pilates, was featured at the 1893 World's Fair in a collection of meetings and addresses called the World's Parliament of Religions. Yoga was also getting a foothold in America as an aspect of holistic medicine in the 1930s with the help of naturopath Benedict Lust and others.[81] An ancient, religious practice based in controlled breathing, it has changed over the centuries to also include forms of meditation and exercise postures. Although it is an ancient discipline in the East, it is fairly new to the Western world—to which it was introduced by a group of Englishmen who studied "all things Indian" and translated many texts on yoga in the late eighteenth century.[82] This research made it to America in the early-to-mid nineteenth century and influenced men such as Henry David Thoreau, Ralph Waldo Emerson, and other Transcendentalists. A young Indian man, Tirumalai Krishnamacharya, born in 1888, is generally thought to have studied in the early 1900s an old text devoted to the physical aspect of yoga. This text "borrowed heavily from an assorted array of gymnastic moves, wrestling exercises, push-ups, and rope tricks, as well as yoga asanas."[83] Krishnamacharya's interest in these moves and postures influenced his teachings, which eventually made it to America in the forms of Ashtanga yoga, Sai yoga, and Iyengar yoga. These yoga styles, especially the Ashtanga and Iyengar styles, remain popular in health and fitness studios today and are the forms through which exercisers expect to be bent, twisted, and stretched into a body with great abdominals, toned muscles, and healthy flexibility.

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[81] Linda Sparrowe, *The History of Yoga, Exerpted from Yoga, a Yoga Journal Book* (2003 [viewed 30 June 2006]); available from www.yogajournal.com.
[82] Ibid.
[83] Ibid., page 9 of the printed version.

Another popular early twentieth century exercise system which advocated a no-apparatus approach was Lieutenant J.P. Müller's *Mein System*, first published in Denmark in 1904.[84] America received its first translated edition—*My System*—in 1905. Müller described his system of health exercise as a middle of the road course between the two extremes of Eugen Sandow's system of light-weight dumbbell exercises and Pehr Heinrich Ling's Swedish System, which was aimed at producing "an exaggerated uprightness, at the expense of other equally important points."[85] The primary goals of Müller's system were to promote the functions of the skin, the action of the lungs, and the digestion.[86] Müller's fifteen-minute routine was probably abhorred by Checkley, but it began with eight increasingly difficult, bodyweight exercises, such as arm and leg swinging, torso twisting, and push-ups, designed to make one break a sweat by their end, followed by a quick bath and a thorough drying. This routine concluded with ten rubbing exercises done to stimulate the surface of the skin. At set intervals Müller also expected one to take a few seconds to perform a few deep breathing exercises for the lungs along with some deep knee bends. The rubbing exercises began as simple stretching and sliding moves to invigorate the skin surface; for those whose body had become hardened to the additional friction, the rubbing was more massages-like in its technique.[87]

Müller's highly popular *My System* was translated into twenty-four languages and underwent numerous editions and revisions. According to its publisher, the book was the

[84] Muller, *Mein System*.
[85] J. P. Muller, *My System*, 13.
[86] Ibid., 18.
[87] Ibid., 45-79.

most popular book on health exercise ever printed through 1938.[88] Müller even took his program further and published *My System for Ladies*, *My Sun Bathing and Fresh Air System*, *My System for Children*, and several others in later years. No doubt part of *My System's* appeal was the relatively short time one had to devote to training each day.

While exercises such as Pilates, yoga and the Checkley system were generally helpful and could enhance a person's overall well-being, they could not create the kind of strength or advanced muscular development Calvert's weight-lifting system could produce. Some men obviously tried the Calvert/Checkley method but, interestingly, Calvert did not use their images in *Body Molding* or in the *Bulletins* as models of what the system could produce. Instead, despite his reputation for honesty and integrity, Calvert chose to use pictures of advanced lifters, men such as Anton Matysek, who was made popular during the Teens on the covers and in the pages of *Strength* magazine.[89] Matysek's body had been produced through the proven methods of progressive resistance, not the ideas of Checkley. Calvert also used pictures in *Body Molding* of his old idol Sandow, and Clevio Massimo, a weight-lifter known for his great strength and physique.[90] Calvert also co-authored a series of articles in *Body Molding* on muscle control with Otto Arco, a well known hand-balancer and strength artist who trained with heavy weights. The concept of muscle control fit Calvert's ideas of precise control of the body, but he used many pictures of the hyper-muscular Arco even though he admitted that Arco was "gently reproachful" toward him for abandoning heavy weight work.[91] Calvert also used photographs of established athletes, and a few images of men like

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[88] "Passing of a Great Physical Culturist," *Superman, the National Physical Culture Monthly* 9(January 1939): 1.

[89] There are eleven photos of Matysek in Calvert's *Broad of the Back*. Six photos of Matysek are also found in Calvert's prequel, *Body-Molding* (Philadelphia: by the author, April 1925).

[90] Alan Calvert, "The Hips and Thighs," *Body-Molding* (April 1925) includes six photos of Massimo. For Sandow see: Alan Calvert, "On Four Pictures of Sandow," *Body Molding—Number Five* (November 1925).

[91] Alan Calvert, "Otto Arco, Athlete Extraordinary," *Body-Molding* (April 1925): 30.

Figure 71. Images of Calvert-Checkley students were only rarely displayed in the pages of *Body Molding*. Although this student's physique is slender and lean, it would not have inspired anyone looking to build a muscular frame, especially with its minimal upper-body development. This image appeared in *Body Molding—Number Five*, page 59.

stevedores who had physically active jobs. However, he used very few photos of his new Checkley-method students. Calvert attributed this to the short time he had been supporting Checkley and to a lack of confidence on the part of his readers and pupils. The problem, he explained, was that most of the men currently training under Checkley's system "are physically below the average standard" and were not even vigorous enough, to take part in sports. Those drawn to the Checkley system, Calvert explained, "hate to go to a gymnasium, because they are bashful about appearing in gymnasium costume. Naturally, they are the ones who take up home training. Most of them derive both inspiration and instruction from pictures of well built men; though they won't have pictures of themselves made, for fear some stranger will get hold of them."[92] Calvert also shaded things a bit in his enthusiasm for Checkley's physique, which he claimed was the result of his postural and deep-breathing methods. Calvert neglected to point out to his readers that Checkley already had an exceptionally well-developed physique from his training as a gymnast and tumbler prior to his development of the Checkley System.

Even so, while the Calvert/Checkley system as espoused in *Body Molding* would not do many things Calvert claimed for it, it did help some men. "No question about it," wrote one man,

> the things you teach in "Body-Molding" work like a miracle. I can say that after the few weeks that I have conscientiously tried to follow your teachings. Considering the short time I have been at it, the improvement in my legs is remarkable; the more so, when you consider that for years I have used heavy exercise and that along with my age—36—makes this old carcass of mine a pretty tough proposition to make any marked improvement in.[93]

[92] Calvert, "Individual Training," 63.
[93] Ibid., 25.

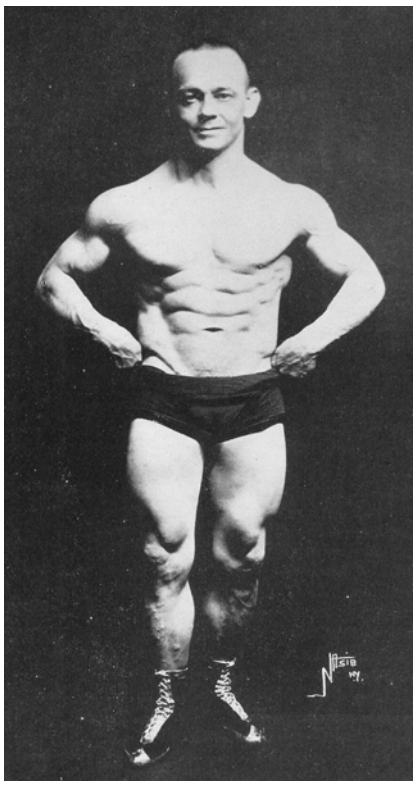

Figure 72. Calvert used numerous pictures of Otto Arco who was already famous as a hand-balancer, muscle control artist, strength athlete, and wrestler. This image appeared in *Body Molding—Number Five* (page 28).

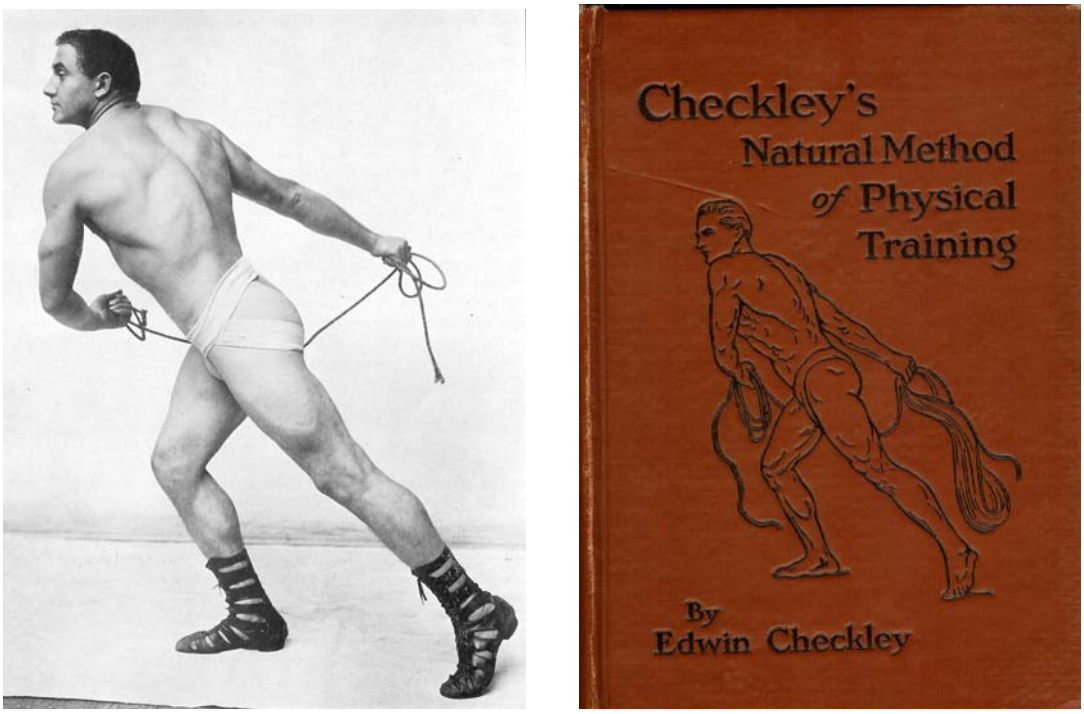

Figure 73. Calvert also photographed his own star pupil from *Strength*, Anton Matysek. This image of Matysek published in *The Broad of the Back* (page 29) was supposed to imitate Checkley's cover art. Practices such as this seemingly dishonest representation of the Checkley System's benefits hurt Calvert's reputation.

Another convert was Frank J. Thompson who told Ottley Coulter that he had just retired from his university job and he was considering teaching the Checkley method as a means to make extra money. Thompson told Coulter that he had been diligently studying the Checkley System for over twenty years and was "completely sold" on it.[94]

Had Calvert continued to try to market the system he might have found a greater following, as an aesthetic shift in male body iconography occurred in the late Twenties and extended through the Thirties.[95] As movie stars became celebrities in the 1920s, the desire to look like film stars became linked with the physical culture movement. Bernarr Macfadden was the first to use film stars to sell fitness magazines when he asked silent film star Annette Kellerman to become a regular contributor to *Physical Culture*.[96] For men, Tom Mix, Douglas Fairbanks, and the elegantly built Rudolph Valentino became icons of ideal manhood. Their bodies, of course, did not look like those of weight-lifters; They were athletic-looking, yet relatively slender. In fact, the most famous "bodybuilder" from this era, Tony Sansone, was much closer physically to Michelangelo's David than he was to Glycon's Farnese Hercules.[97]

Whether Calvert would have been able to energize Americans to follow the Checkley system remains unknown, for in the early 1930s—as the Great Depression escalated—Calvert packed up his typewriter and ended his publishing career. He gave

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[94] Frank J. Thompson letter to Ottley Coulter, 18 December 1972, Ottley Coulter Collection, TMPCC.
[95] Kenneth R. Dutton, *The Perfectible Body: The Western Ideal of Male Physical Development* (New York: Continuum, 1995), 130-56.
[96] Kellerman initially became famous for her swimming exploits and her body which she unabashedly displayed in her new, eponymous style of bathing suit— the "Annette Kellerman." Kellerman first appeared in *Physical Culture* as an author beginning with "Things Worth Knowing About Swimming," *Physical Culture* 26(August 1911): 119-23.
[97] Dutton, *Perfectible Body*, 132-38; Jan Todd, "The History of Cardinal Farnese's "Weary Hercules"," *Iron Game History* 9(August 2005): 29-34.

his readers no warning that he planned to end his involvement with the Checkley system and apparently he did not refund money to those people whose subscriptions and courses he did not service. Ottley Coulter, loyal to Calvert's memory to the end, suggested in a letter to Jack Kent that Calvert may have "turned over the Checkley business to some one else," and so it was the new owner's fault, and not Calvert's, that people did not receive what they paid for.[98] When Calvert left the world of physical culture he was fifty-five years old.

Information about Calvert's final years is scarce at best. Except for the two articles in *The Arena and Strength* in 1932 and 1933, mentioned previously, the short pieces on "'Dancing' the Spinal Muscles" and "Eugen Sandow—An Appreciation" for *Klein's Bell* in 1932, and a three-article series on "The Art of Display" done at the request of Bob Hoffman for *Strength & Health* in 1934, Calvert appears to have had no further involvement with exercise and/or American weight training after the early 1930s.[99] George Jowett mentioned in a letter to Ottley Coulter that Calvert had some sort of accident in the mid 1930s which caused him to quit writing.[100] In later letters Jowett also states that Calvert was suffering from angina pectoris and was doing poorly.[101] From interviews with family members, and from his obituary, we know that he and his

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[98] Coulter to Kent, 30 October 1959.

[99] Alan Calvert, "'Dancing' the Spinal Muscles," *Klein's Bell* 2(July 1932): 2; Alan Calvert, "Eugen Sandow—An Appreciation," *Klein's Bell* 1(May 1932): 3,7; Alan Calvert, "Eugen Sandow—An Appreciation, Part 2," *Klein's Bell* 2(June 1932): 4-5; Alan Calvert, "The Art of Display, Part 1," *Strength & Health* 2(July 1934): 8-11, 31; Alan Calvert, "The Art of Display, Part 2," *Strength & Health* 2(September 1934): 10-11, 32; Alan Calvert, "The Art of Display, Part 3," *Strength & Health* 2(October 1934): 10-11.

[100] George Jowett letter to Ottley Coulter, n.d., Ottley Coulter Collection, TMPCC. Although this letter is undated it is in a folder marked "1930-1933 Correspondence."

[101] George Jowett letter to Ottley Coulter, 8 April 1936; George Jowett letter to Ottley Coulter, 10 August 1936, Ottley Coulter Collection, TMPCC.

wife were financially sound, perhaps even well-off. He became interested enough in tennis to have a court built near his home in Radnor Township, a building project which suggests discretionary income.[102] His house, at the time of the 1930 census, was reportedly worth $50,000, again suggesting substantial wealth.[103] Family friends remember him selling "novelty items" during the early 1930s but the exact nature of these items is unknown.[104] Despite the Depression, Calvert apparently had sufficient funds to send his daughter, Jean, to Wellesley College and his son, Breck, to Harvard. Jean eventually moved to Hawaii in the early-to-mid 1930s where she married a lawyer named Howard E. Wiig and thereafter made Hawaii her home. Breck graduated from Harvard University in 1937 and, according to Calvert's only grandchild, Howard Calvert Wiig, never had a real job, living off a trust fund from his mother that was sufficient to allow him to travel extensively in Europe.[105] The oldest Calvert child, Benjamin Githens, died of peritonitis after an automobile accident in 1931 or early 1932. As for the founder of the Milo Bar-bell Company and the creator of *Strength*, Alan Calvert died on 24 June 1944 after a short illness; he was sixty-nine years old. His wife, Mary Githens Calvert, died in the late 1950s.[106]

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[102] Raymond Van Cleef, "Builder of Men," *Your Physique* (December 1944): 44.
[103] 1930 U.S. Census.
[104] Personal communication with Howard C. Wiig, 27 June 2005.
[105] Ibid.
[106] Ibid. Joseph B. Handy's genealogical records. The exact date of Mary's death is unknown.

CONCLUSION

Alan Calvert did his best to share his enthusiasm for powerful, well-developed bodies with other men. He believed that all men had a right to create a new vision of their body with a sound and effective program. He felt that if he provided men with the education and tools to improve not only their physical body, but their anatomical and physiological knowledge, then he had accomplished something important. A major reason for Calvert's overall success was his sincere enthusiasm and passion for the developed body. Like Peary Rader, the founder of *Iron Man* magazine, Calvert was influential not because of his own physique, but because he saw himself as an educator. As a teenager, he'd been awed by Sandow and had then figured out how Sandow had achieved his "look." He knew that form follows function and so he urged men to build *real* strength, not just work on appearance. He believed that America could compete with European lifters if given the same opportunities and training information, so he devoted much of his early career to the development of an American crop of amateur strongmen. He succeeded in his goal first by manufacturing barbells and then by teaching men how to lift them in his articles in *Strength* magazine.

For some years, *Strength* served as the voice of the weightlifting subculture. It focused attention on Calvert's equipment, of course, and showed the kinds of results one could expect by training with the Milo system, but *Strength* also allowed lifters to connect with one another. *Strength* featured instructional articles on training and muscular development, communicated record attempts by amateurs and professional lifters alike, announced competitions, reported contest results, and created the "only contact with the world of strong men."[107] Although the magazine headed in a different

[107] Leo Gaudreau, "'An Old-Timer Recalls the Past' in Letters to the Editor," *Muscle Builder* 8(August 1966): 50.

direction after its sale, its earliest form served to reinforce the idea of a fraternity of strong men ruled by a few outstanding stars who carried the sport in new directions.

One such star was Sigmund Klein. Calvert motivated Sig Klein to open one of the most prominent and respected gyms in New York City. Klein claimed that Calvert's article in October 1922, "Klein, the Latest Addition to the 'Perfect Men'" was "the actual turning point of my life, for then and there I decided that I would devote my future to teaching bar bell training."[108] Klein's inclusion in *Strength* meant, he wrote late in his life, that I'd finally gotten into "that inner circle of Strongmanism."[109] Klein's love for the game brought many physical culture adherents to the way of the barbell for fifty years—between the mid 1920s and the 1970s. Harry Paschall also became a long-time celebrity in the barbell movement. He authored many books and published his own training course. He is probably best remembered for "Bosco," his popular German cartoon strongman, and for his many articles in *Strength & Health*. During his formative years, Bob Hoffman also established contact with Alan Calvert. A few years before purchasing the Milo Bar-bell Company in 1935, Hoffman began his own equipment company—which eventually cornered the iron-weight market in America—and then began his own publishing empire by starting *Strength & Health* and later *Muscular Development*. Just north of the border, a young Canadian weight trainer and bodybuilder named Joe Weider also studied *Strength* magazine. Weider worked at the routines put forth by Calvert, but he wanted even more muscle.[110] His desire for the largest, most beautiful bodies, along with his ability to see genetic potential for muscular growth in his

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[108] Klein, "*Strength* Magazine as I Knew It in It's(Sic) Glamerous(Sic) Past of Years Ago." *Strength & Health* (July 1935): 92.

[109] Siegmund Klein, "My Quarter Century in the Iron Game, 2nd Installment," *Strength & Health* (April 1944): 17.

[110] For Weider's comments about Calvert's simple, uncomplicated programs, see Dick Tyler, "Editorial—and Giants Shall Walk Upon the Land," *Muscle Builder/Power* 11(March 1970): 8-9, 63*;* Joe Weider, "Training Three Times a Week Is Bunk!" *Muscle Power* 19(March 1956): 16-7, 53; Joe Weider, "The Weider System," *Flex* 13(May 1995): 154-60.

students, made bodybuilding into a cult phenomenon and allowed Weider to build an immense business empire over the next sixty years. Financially and in terms of cultural influence, Weider eventually surpassed all the names mentioned previously. His fleet of publications, dealing with the sport and fitness activity of bodybuilding and with men's and women's health and fitness in general, sold for $350 million in 2002.[111]

Calvert's book, *Super-Strength*, became the bible of a new group of barbell enthusiasts. Sig Klein, Bob Hoffman, Joe Weider and scores of other young men bought personal copies of the book hoping to join Calvert's special class of men he called "Strong Men." Calvert's writing from *Super-Strength* remained in circulation for decades. For example, Hoffman re-published one chapter in *Strength & Health* magazine in 1945 and Joe Weider described the book as having "Words That Changed Bodybuilding History," when he reprinted Calvert's chapters on the various body parts in *Muscular Power* in the 1950s.[112] With their multitude of physique pictures and advice on physical development, *The Truth About Weight Lifting*, *Strength* magazine, and *Super-Strength* became sought-after by the dedicated lifters, and the author of those texts was revered for his expertise and honesty. Men felt deeply loyal and grateful to Calvert because he had shed light where only darkness, or at least semi-darkness, prevailed. Men even named portions of the gym in his honor:

> And he who made the 'dumb-bell corner' possible is Alan Calvert, of Philadelphia. Mr. Calvert was the first man on this side of the Atlantic to suggest and popularize the idea of progressive weight-lifting. He fought valiantly and

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[111] Interview with Joe Weider, 16 April 2004, Austin, TX. See also, http://www.scitecnutrition.com/2003/news/news.asp?code=0004 which states that American Media Incorporated won the bidding war for the Weider publications on 27 November 2002, but the closing was not supposed to occur until the first quarter of 2003.

[112] Alan Calvert, "Building Virility through Developing the Back," *Strength & Health* (July 1945): 15, 32-4; Alan Calvert, "Words That Changed Bodybuilding—The Chest," *Muscle Power* 19(July 1956): 28, 42-6; Alan Calvert, "Words That Changed Bodybuilding History—The Back," *Muscle Power* 19(August 1956): 24, 52-6; Alan Calvert, "Words That Changed Bodybuilding History—The Legs," *Muscle Power* 19(December 1956): 9, 36-7.

> passionately for the recognition of this idea, and the criticism that a thousand fossilized physical directors heaped upon his head failed to daunt him.
>
> Fired by his teachings, a handful of strong men started the 'dumb-bell corner' and dedicated it to his fighting spirit. In this corner, where collars fade and muscles grow, the name of Alan Calvert is almost sacred. In his honor, the students are determined to turn out a Hercules or a Thor and then tell the world that he was built on the foundation laid by that illustrious Philadelphian.[113]

Calvert's great legacy, of course, is the modernization of American weight training. Not only did his barbells make it possible to compare lifts performed in Baltimore, Maryland, with those done in Portland, Oregon, but his straight-forward, no-nonsense, motivational teachings made it possible for men of the darkest blue-collar jobs to train alongside men from the brightest of white-collar jobs. The weights didn't care about your background nor did they notice your starting physical condition; the only thing that mattered was that one worked hard, built muscles, and got stronger. When Alan Calvert cut all ties to the Milo Bar-bell Company in 1924 and turned his back on the training philosophy he helped popularize—the belief that heavy progressive resistance training was the best method to produce muscular development and strength—most of his fans were shocked. Checkley's system, introduced in the early 1890s, required no equipment and advocated proper breathing, standing, and other postural aspects of life for the development of "vital strength" and "inward health." Calvert's change in philosophy struck a blow to the emerging sport of competitive weightlifting and slowed the acceptance of the use of weights for athletic enhancement. It also confused his followers

[113] George H. Johnston, "Where White Collar Men Get Laborer's Muscles," *Muscle Builder* 1(April 1924): 27, 30.

and ultimately damaged his personal reputation and place in the history of exercise and competitive lifting.

The reasons for training with weights are varied. The effectiveness of progressive exercise is a standard principle taught in today's health and wellness courses, thanks in part to Alan Calvert. He manufactured a new, standardized barbell, propagated progressive weight training, and urged Americans to improve themselves. He also proselytized for the standardization of weightlifting rules and equipment, and he published specialized literature especially for the barbell user. The foundation laid by Calvert resulted in the modern sport of weightlifting, the modern sport of bodybuilding, and a widespread acceptance of the idea that weight training was socially acceptable. That he abandoned the one aspect of physical culture in which he made his greatest contributions; that he did not live long enough to see how commonly weights are now used by men, women, and children in the modern era; and that he will never know the high regard the medical community now holds the activity he nurtured, is very unfortunate. Even so, given the importance of weight training in modern sports and fitness, the "Father of American Weight-lifting" would have good reason to flex his lats and expand his chest at the thought of what he set in motion.

RESEARCH NOTE

Alan Calvert and the Milo Bar-bell Company's story began and ended in Philadelphia, Pennsylvania. Consequently, early in my research on Calvert I traveled to Philadelphia to search for records of his family and business. I began at the Philadelphia City Archives and the Free Library of Philadelphia. Because of the time period involved, this research necessarily included searching census data, examining city directories, reading old city newspapers, and requesting public records such as birth and death certificates, marriage licenses, obituaries, and estate administrations/probates. While in Philadelphia looking for family records, I also searched for evidence of the Milo Bar-bell Company. The staff at the Free Library introduced me to the "Philadelphia Architects and Buildings" website. This online site is dedicated to conserving the city's architectural heritage. On this site, I found pictures of several buildings important to Calvert's story, which no longer exist. The site also helped me think about the importance of place and geography and made me interested in trying to capture the spirit of turn-of-the-century Philadelphia. Being in the city, walking the streets that Calvert walked, and thinking about how the city helped to shape his family and business was especially useful to me as I began to think about this project.

During my trip to Philadelphia, I kept hoping, of course, to find some collection of papers related to Calvert and/or his business. Sadly, I found no trace of his company during my research in Philadelphia, not even in the Free Library of Philadelphia's Small Businesses Collection. My other hope for my trip to Philadelphia was that I might find some Calvert or Githens descendents. I found none in Philadelphia, and in fact could not

even find his obituary until I made a special trip to the *Suburban and Wayne Times* newspaper offices in Radnor-St. David's, Pennsylvania. From Calvert's obituary I was able to track down—via the internet—Calvert's only grandson, Howard Calvert Wiig, in Honolulu, Hawaii. I began an email correspondence with Howard Wiig, who it turned out knew nothing about his grandfather's business, and Wiig eventually traveled here to Austin where I was able to introduce him to a side of his grandfather which was totally unknown to him. Naturally, finding Wiig allowed me to fill in many blanks in the family history, but to my disappointment no family member had saved any of Calvert's personal papers. I realized after finding and meeting Wiig that I would have no scrapbooks, diaries, letters, or business records to work with on this project. To tell Calvert's life, I was going to have to rely on his printed works and on the recollections of those who knew him.

To tell the business side of Calvert's story I needed to collect everything I could related to the Milo Bar-bell Company—from the first magazine advertisement, to the advertising pamphlets and circulars, to the information sent to those responding to the ads, to the price lists and catalogs, to the registered patents, and ultimately, to Calvert's letters to his students. Normally, due to the sport/activity involved—weight-lifting—and the time period in question—first three decades of the twentieth century—this would have been extremely challenging. Fortunately, the archival materials found in the Todd-McLean Physical Culture Collection (TMPCC) at the University of Texas at Austin proved to be invaluable. Not only, does the TMPCC own the only known existing 1905 Milo model dumbbell, a complete 1908 Milo Triplex barbell, and a 1919 Milo Duplex

model kettle-bell, but it has all of Calvert's major publications, most of his courses, as well as many of the minor texts.

The collection which put the TMPCC on its way to becoming the world's largest archive of such material belonged to Pennsylvanian Ottley Coulter. Coulter worked as a circus strongmen in the Teens and later had a handbalancing act in the Twenties. Coulter collected materials related to strength and resistance training throughout his life. In his personal quest for strength, he ordered many of the early training courses and engaged in on-going correspondence with some of the instructors. He subscribed to most of the early physical culture magazines, saved the copies, and later had them bound. Later in his life he was known for typing long letters filled with "stories about the greats of the game, his search for new materials for his collection, his love for his family, and his nearly seventy-year passion for physical culture."[1] He kept most of the letters he received, and often included a carbon copy of his response letter in his personal files. He also clipped stories, images, and miscellaneous information about the strongmen popular during his lifetime.

Most of his correspondence with Alan Calvert—from his earliest query for a Milo bell, to his letters requesting information about the Checkley course—are found in a scrapbook with a cut-out of the Milo Triplex letterhead on the cover. Although not a Milo student in his own, or in Calvert's, eyes, Coulter's letter collection reveals a more human side of Calvert. He clearly regarded Coulter as a friend in the Teens and from his letters I learned much about Calvert's life. Correspondence from the 1930s through the

[1] Jan Todd and Michael Murphy, "Portrait of a Strongman, the Circus Career of Ottley Coulter: 1912-1916," *Iron Game History* 7 (June 2001): 4.

1960s between Coulter and George Jowett, the editor of *Strength* when Calvert severed his ties to the Milo Bar-bell Company, were also informative. Weightlifting collector Michael Murphy of West Warwick, Rhode Island, also contributed copies of letters he owned between Ottley Coulter and New York film collector Jack Kent and between Coulter and New Jersey Iron Game collector Angelo Iuspa for my project. Coulter's letters to Iuspa were particularly helpful in understanding Calvert's conversion to the Checkley system.

A full run of Calvert's *Strength* magazine, as well as copies of his two books are also found in the Coulter Collection. The David P. Willoughby, Roy J. McLean, and Harold Weiss Collections in the TMPCC also provided pieces of Milo literature and/or letters. The only publications not found in the TMPCC were some of Calvert's earliest information pamphlets and training course. Reuben Weaver, a well-known Milo collector in Strasburg, Virginia, provided a few of these, which included some testimonial booklets. Weaver originally began collecting and restoring Milo bells and eventually moved to letters and Milo publications. His collection contains original copies of some of the early training courses, a few Calvert letters to his students, as well as several pamphlets which Calvert sent to people responding to advertisements. I am deeply grateful for the loan of these materials.

To trace the Milo Bar-bell Company's business path I also examined the ads found in *Physical Culture* magazine. The TMPCC has a nearly complete run of this magazine in the first three decades of its existence, but unfortunately, when the early issues were bound the advertising sections were sometimes not included. Although this

was a common practice at the time, it is one which plagues modern historians who depend on advertisements to supply information not found elsewhere.

Finally, I need to explain my use of the terms weightlifting and weight-lifting. The competitive strength sport found in the Olympic Games involving the "clean-and-jerk" and "snatch" is generally referred to as "weightlifting." Thus, whenever I refer to a competitive activity which is a direct precursor to the modern sport I used the term "weightlifting" to keep with traditional usage. When discussing the general activity of training with weights for fitness I use either "weight-lifting" or "weight training."

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The Todd-McLean Physical Culture Collection at the University of Texas at Austin contains the following materials used in this dissertation:

The Ottley Coulter Collection.
The Coulter/Milo Bar-bell Scrapbook.
The David P. Willoughby Collection.
The Harold Weiss Collection.
The Roy J. McLean Collection.
The Jan and Terry Todd Collection.
The Sig Klein/Louis Durlacher (Professor Attila) Collection.
Strength Magazine.
Physical Culture Magazine.

Private Collections used in this dissertation include:

The Angelo Iuspa/ Michael Murphy Collection, West Warwick, Rhode Island.
The Reuben Weaver Collection, Strasburg, Virginia.

Philadelphia City collections used in this dissertation include:

Philadelphia Architects & Buildings Collection: Available at http://www.philadelphiabuildings.org/pab/index.cfm.
Philadelphia City Archives.

Patents
(in order of Patent Number)

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VITA

Kimberly Ayn Beckwith was born in Austin, Texas on 26 May 1967, the daughter of Mary Joan Parker and Clois Ray Beckwith. She graduated from Vernon High School in Vernon, Texas, in May of 1985 and entered Vernon Regional Junior College that same summer. She received the Bachelor of Arts degree in biological sciences from the University of Texas at Austin in 1990 and her Secondary School Teaching Certification in Composite Science from the same institution in 1992. In the Spring of 1993 she began work for the degree of Master of Education in Sport Management at the University of Texas at Austin. She taught for the Department of Kinesiology and Health Education as a Graduate Teaching Assistant during her studies. She graduated in 1995.

Beckwith began powerlifting in 1989 for the University of Texas at Austin Longhorn Powerlifting Club. Over her four-year collegiate career she attended the American Drug-Free Powerlifting Association's National Collegiate Powerlifting Championships four times, winning in three of those years. She set four American records and earned the country's "Best Lifter" title three times. Beckwith continues her association with powerlifting by working as a USA Powerlifting Association (USAPL) National Referee, serving as the University of Texas powerlifting coach, directing the largest USAPL powerlifting meet in Texas, and holding the position of USAPL State Chairperson for Texas.

Beginning in the Summer of 1991 and continuing to the present Beckwith has taught weight training, outdoor education, and officiating at Austin Community College. She began an intramural sports program at ACC in 1995 which she continued until 2000. In the Fall of 1999 Beckwith officially entered the interdisciplinary doctoral program in Sport Studies taking coursework in Kinesiology, American Studies, and History at the

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Beckwith has one book chapter and four articles published. She has presented her research on five occasions at the North American Society for Sport History annual meeting and once at the Annual Conference on Girls' and Women's Physical Activity and Sport. She also participated in a poster presentation at the American College of Sport Medicine annual meeting. She is also the business manager of *Iron Game History: The Journal of Physical Culture*.

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