ON PHYSICAL TRAINING IN THE UNITED STATES.

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Philosophical speculations regarding the nature and future of man's soul and body, underlie and determine all our schemes and efforts for the nurture and training of youth. There appear to be four principal ideals of manly excellence, which, singly or in combination, have dominated the minds of the promoters and governors of educational foundations, and in accordance with which physical training has been favored, tolerated, neglected, or condemned. We may characterize these ideals as the Greek or aesthetic, the ecclesiastical or monkish, the military or knightly, and the medical or scientific. The first three have been influential in varying degrees from the earliest times: the fourth, though compounded in a measure of ancient elements, is so strongly tinged with utilitarian and psycho-physical ideas as to be best described as modern. All these ideals are traceable to conceptions of human nature and destiny, which may be roughly classed under the two heads of lugubrious and cheerful.

Charles Kingsley has well characterized the Greek ideal as follows: “To produce health,—that is, harmony and sympathy, proportion and grace, in every faculty of body and mind,—was their notion of education.” The antithesis between the Greek and the ascetic ideal is clearly indicated in a remark of Apuleius concerning Egyptian and Greek modes of worship. “The Egyptian deities,” he says, “were chiefly honored by lamentations, and the Greek divinities by dances.” Monasticism, which was the extreme expression of the ascetic spirit, was of Asiatic, and to a considerable extent of Egyptian, origin; and, after the first two or three centuries of the Christian era, exercised a profound influence on European thought and life. “The duty of a monk,” said St. Jerome, “is not to teach, but to weep.” Weeping and self-torture might well absorb the energies of men who championed such beliefs as that body and soul are independent and hostile entities; that “the greatest of evils is pleasure, because by it the soul is nailed or riveted to the body;” and that mental and spiritual health are best subserved by bodily weakness. Though such views were generally treated as heretical by the early fathers of the church, yet they became dogmas of the mediæval church of Rome, and you may find similar doctrines, far from faintly echoed, if
you search the sermons of Scotch, English, and American divines, who have labored within the last three centuries to establish or perpetuate religious terrorism.

Side by side, when not confronting it, with the ideal of the monk, has stood the ideal of the soldier and the gentleman. Until the establishment of industrialism in civilized countries, the military ideal exercised a most potent influence in the education of the sons of gentlemen throughout Europe. Herodotus tells us that the sons of the Persians, “from their fifth to their twentieth year, were carefully taught three things only,—to ride, to draw the bow, and to speak the truth.” “Plaienge att weapons” formed a necessary part of every gentleman’s education in England, as well as on the continent, as late and even later than the sixteenth century. “I swear I’d rather that my son should hang than learn letters [benefit of clergy saved many a neck in those days]; for it becomes the sons of gentlemen to blow a horn nicely, to hunt skilfully, and elegantly to carry and train a hawk, but the study of letters should be left to the sons of rustics.” These are the words of an English gentleman in the time of Henry the Eighth, who, on hearing letters praised, was “aroused to sudden anger, and burst out furiously.”

The ideal of the Greeks sprang from a passion for beauty and harmony, and a joyous sense of well-being. That of the theologian and the monk was conditioned by a profound ignorance of and a bitter contempt for the body; while that of the soldier and the knight owed its peculiarities to a rude appreciation of bodily force and skill, based upon the experiences gained in camp and field. It is not to the generative power of any or all these ideals, unless it be the Greek, that we owe our modern doctrine of the interdependence of mind and body, which doctrine is but vaguely, if at all, apprehended by the majority of those who quote with generousunction the time-worn injunction of Juvenal, “Pray for a sound mind in a sound body.” The next line, “Ask for a brave soul unscared by death,” they usually omit. No, the belief “that to work the mind is also to work a number of bodily organs; that not a feeling can arise, not a thought can pass, without a set of concurring bodily processes,” is the child of the scientific spirit, and was engendered through the labors of Harvey and Haller, of Du Bois Reymond, Weber, and Helmholtz, and Wundt.

When we recall the fact that our oldest American colleges, like their early English models, were established primarily to furnish trained recruits to the ranks of the clergy, there remains no ground for wonder that physical training has been slow to win recognition as a necessary part of a sound education. American educators were long ruled by British notions as to curriculum and discipline, which notions have never been in favor of systematic physical training. Certain national sports, however, have long been considered by the educated class as constituting an important bulwark of the British constitution. Accordingly American collegians, those who were not too serious to play, disported themselves after inherited British fashions. The means afforded
students for sports a hundred and fifty years ago were decidedly meagre, if we may judge from the only mention concerning them in the "Ancient Customs of Harvard College, established by the government of it," in which "Custom 16" reads thus: "The freshmen shall furnish bats, balls, and foot-balls for the use of the students, to be kept in the buttery." The first president of Dartmouth college, Dr. Wheelock, admonished his students in 1771, two years after the college was opened, "to turn the course of their diversions and exercises for their health to the practice of some manual arts, as cultivation of gardens and other lands, at the proper hours of leisure and intermission from studies and vacations," i. e., vacations. We learn from a letter written by Dr. Benjamin Rush, of Philadelphia, in 1790, on "The Amusements and Punishments proper for Schools," in which, by the way, he commends the Methodists for "wisely banishing every specics of play from their college," that the experiment had been tried, "with the happiest effects," of introducing the care of vegetable gardens as an amusement "in the Methodist college at Abington in Maryland." He also says that "all the amusements of the children of the Moravians at Bethlehem, Pennsylvania, are derived from their performing the subordinate parts of several of the mechanical arts, and a considerable portion of the wealth of that worthy and happy society is the product of the labor of their little hands." Fifty years later manual labor societies came into vogue in several of the New England colleges, but, proving failures as a means of putting wealth into the hands of their members, they fell into desuetude as educational agencies. In some colleges the authorities used to grant holidays "for the purpose of fostering in the students the habit of physical labor and exercise, so essential to vigorous mental exertion," which holidays were devoted to "raking off the chips, and clearing the grounds, and graveling the college walks."

When such notions and practices obtained with our forefathers, it is hardly strange that the first impulse to a physical training deserving of the name should have come from without. As a matter of fact it came from Prussia, where during the last fifteen years of the eighteenth century and the first two decades of the nineteenth, Gutsmuths and Jahn, the father of the German Türnvereins, accomplished a great work in reviving physical education. Enamored of the Greek ideal, they strove in an elaborately systematic way to embody Greek gymnastics in modern forms. The first gymnasia in this country were constructed out of doors, in bald imitation of Græco-German models, and a very considerable, though as it proved a very transient, interest in gymnastics was evoked by German exiles. Drs. Beck, Follen, and Lieber were foremost in the matter. In 1828 there was published in Northampton, Mass., "A Treatise on Gymnasticks, taken chiefly from the German of F. L. Jahn." This translation was by a pupil of Jahn's, Dr. Beck, who had in 1825 been instrumental in establishing a gymnasia at the Round Hill school in Northampton. On page iv of the preface Dr. Beck states that "The school of Messrs. Cogswell & Bancroft, in Northampton,
Mass., was the first institution in this country that introduced gymnastick exercises as a part of the regular instruction, in the spring of 1825."

I am greatly indebted to the venerable Dr. George C. Shattuck, of Boston, who was a pupil at Round Hill, for the following account of this gymnasium: "Dr. Beck, the teacher of Latin, afterwards the professor of Latin in Harvard University, was the first teacher of gymnastics. A large piece of ground was devoted to the purpose, and furnished with all the apparatus used in the German gymnasia. The whole school was divided into classes, and each class had an hour three times a week for instruction by Dr. Beck. At the same time there were a dozen riding horses, and classes for riding three times a week. Gardens were assigned the boys, in which they raised plants and vegetables. A piece of land was set aside for building huts. Base-ball, hockey, and football were the games. Though the school had only an existence of twenty years or less, and failed from the want of pecuniary support, I believe that its influence has survived. Developing the bodily powers and strengthening the constitution were there first recognized as of great importance in the education of boys."

Dr. John C. Warren, who for forty years was professor of anatomy and surgery in the Harvard Medical School, was about this time in the habit of delivering annual lectures to the students at Cambridge on the preservation of health. He was the first president of the Tremont gymnasium in Boston, in whose establishment in 1825 he took a prominent part. It is a matter of interest that Dr. Warren attempted to secure the services of "the distinguished philosopher and gymnasiarch, Professor Jahn," who could not be led, at the salary offered, "to abandon his own country and establish himself in ours." Dr. Francis Lieber, who later attained such eminence as a publicist and as professor in the Columbia Law School, was for a time connected with the Tremont gymnasium. In 1826 Dr. Follen, who, like Dr. Beck, was a teacher at Round Hill, and finally became a professor at Harvard, established a gymnasium at Harvard college, being seconded in his efforts by Dr. Warren and others of the "medical professors."

"One of the unoccupied commons halls was fitted up with various gymnastic appliances, and other fixtures were erected on the Delta," i.e., the college playground. In the same year (1826) the corporation of Yale college voted the sum of $300 for the fitting up of a gymnasium on the village green. Dr. Warren states that "small gymnasiums were established in connection with most of the schools, academies, and colleges, male and female."

The following extract from the published works of Dr. Warren, though I am uncertain whether it was originally penned in 1830 or 1845, affords good evidence that the interest in gymnastics became feeble after the first teachers of the art became ordinary college professors. "The establishment of gymnasias," says Dr. Warren, "through the country, promised at one period the opening of a new era in physical education. The exercises were pursued with ardor so long as their novelty lasted, but owing to not understanding their importance, or some defect in the institutions
which adopted them, they have gradually been neglected and forgotten, at least in our vicinity. The benefits which resulted from these institutions within my personal knowledge and experience far transcended the most sanguine expectations. The diversions of the gymnasium should constitute a regular part of the duties of all our colleges and seminaries of learning.”

It would appear that no well considered and systematic course of physical training was maintained for any considerable length of time in the period extending from 1826 to 1860 in any American college. It may be possible that the University of Virginia presents an exception to the above statement, inasmuch as there was a large out of doors gymnasium maintained on the grounds of that institution from 1852 till the outbreak of the war. A competent gymnast and fencer had it in charge, but in order to support himself he was obliged to eke out the small sums received from the students by cultivating a kitchen garden and keeping a Russian bath-house.

Although in the period from 1855-1860, under the combined influence of the writings of Dr. Winship, Dio Lewis, Thomas Hughes, and other writers, much interest, especially amongst young men, was awakened in gymnastics, feats of strength, and athletic sports, still prior to 1859 no college in the country possessed a commodious and well furnished building devoted to the purposes of physical training. In the year 1859-60, however, Amherst, Harvard, and Yale erected gymnasiums which cost respectively $15,000, $10,000, and $13,000. These, for their time, were costly, elaborate, and well furnished. Those at Amherst and Harvard having been outgrown, have recently been replaced by more costly and vastly improved structures, of which we shall have occasion to speak further on. From the outset, compulsory exercise of all able-bodied students has been required at Amherst, under the control and direction of an educated physician whose professorial chair was given an equal standing with all others at the faculty table. Gymnastics at Harvard have never been required, I believe. Dr. Sargent was made assistant professor of physical training and director of the Hemenway gymnasium in 1879. His predecessors were a professional teacher of boxing; and a military drill-master. At Yale no very comprehensive or commendable system has as yet been adopted.

A consideration of the salient facts regarding the department of hygiene and physical education of Amherst college is well worth our attention at this point; for, as has been well said by President Eliot, of Harvard,—“It is to Amherst college that the colleges of the country are indebted for a demonstration of the proper mode of organizing the department of physical training.” As was stated, the department was at the outset put into the hands of a physician. Dr. J. W. Hooker, the first incumbent, resigned his charge before the end of the year 1860. Dr. E. Hitchcock, Sr., a graduate of Amherst, and of the Harvard Medical School, still holds the professorship of hygiene and physical education to which he was appointed in August, 1861. Dr. Hitchcock’s duties have been and
still are of a three-fold nature, namely,—1st, of lecturer and instructor in anatomy, physiology, and hygiene; 2d, of director of the gymnasium; 3d, of health officer of the college.

At the Chicago meeting of this Association, in 1877, Dr. Hitchcock read a paper detailing the history and workings of his department, and later, in 1881, published "A Report of Twenty Years' Experience in the Department of Physical Education and Hygiene in Amherst College." In the latter are six valuable statistical tables derived from his health and anthropometrical records, covering the period 1861–1880. The paper and the report will well repay perusal by those who may be interested in the details of the Amherst experiment. The following extract from the paper alluded to may serve to indicate the means of training employed at Amherst:

"Each of the four classes in college meets the professor for an exercise in the gymnasium of half an hour's length, on four days in the week. In this way the student presents himself for a public visit to the professor, and may always have a private interview either before or after the exercise, if either desires it. The hours for exercise are mainly at the beginning and close of the day, as both the most valuable time for exercise, and those which best adapt themselves to the college routine. Each class has its own captain and as many other officers as are best adapted to maneuver and handle the class in its movements. The general method of the conduct of the exercises is military, though considerably modified to be adapted to the peculiar condition of things. The required exercise of each man and class is best known as that of light gymnastics, or those bodily exercises performed by a class with one or two pieces of apparatus in the hands, each movement timed to music, and all simultaneous and uniform. And the only apparatus successfully used at Amherst is the pair of wooden dumb-bells, weighing less than a pound apiece. The students here have universally preferred the bells to the rings and wands, though they have been thoroughly tried. Each class has its own "exercise" or series of bodily movements with the bells, and these are so managed as to give free, lively, graceful, and vigorous work to the whole muscular system during the time of the exercise. In addition to the bell exercise, marching by the file and flank is considerably practised, and during the cold months, running or 'double-quick' movements. This running is encouraged that the student may gain the very valuable assistance that it gives to the 'wind' by furnishing warm air to the lungs, and a more rapid relief by sweating, and greater freedom to the body by the lesser amount of clothing required than if the necessary amount were taken in the cold temperature of out-of-doors. This exercise varies from fifteen to twenty minutes, and with the temperature from 55° to 60° the student almost always finishes with a moist skin. The remainder of the half hour is occupied in voluntary exercise. Some use the heavy apparatus—about one in eight—or take a longer run; others dance, use clubs, sing, pull rope, toss in the blanket, turn somersaults, and occupy themselves in any proper manner to secure exercise, sport, or recreation."

The list of colleges which provided their students with gymnasiums during the period covered by Dr. Hitchcock's report is a considerable one, and includes such institutions as Beloit, Bowdoin, Dartmouth, and Princeton colleges, Brown, Wesleyan, and Vanderbilt universities, and Phillips Andover Academy and Williston Seminary, for young men, and Wellesley and Vassar colleges and Mt. Holyoke Seminary, for young women. In none of them, however, has the course adopted been so comprehensive as that at Amherst, or so carefully and continuously carried out. Brains and funds have been too often lacking in this department during the period named.
At the request of the vice-minister of Japan, who visited Amherst in 1876, G. A. Leland, M. D., gymnasium captain of the class of 1874 at Amherst, was designated by President Seelye to introduce the Amherst system of gymnastics into the government schools of that country, and for three years he was engaged in that work to the "high satisfaction of the government."

In 1869 the Princeton college gymnasium was built at a cost of $38,000, and from then until the completion of the Hemenway gymnasium at Harvard it was the first in the country. For fifteen years Mr. George Goldie, a most competent and successful teacher of gymnastics, has been its superintendent. His pupils have been noted for high proficiency in acrobatic feats.

One of the most potent factors in bringing about the revival in recent years of an interest in exercises, games, and training, was the war. With the war came a genuine appreciation of the worth of a good physique and of the educational value of bodily training. After the war the youth of the country engaged more actively, enthusiastically, and intelligently than ever before in athletic sports, and collegiate and inter-collegiate contests in great variety gained unexampled prominence and favor in the estimation of the general public as well as of the college world. I do not propose to enter into the discussion of the vexed question of athleticism in colleges. My belief is, that in the larger colleges the athletic spirit has gained such headway that no college can afford to crush it, that it ought not to be crushed, and that under control it is susceptible of being turned to the utmost advantage of the students. The spirit of inter-collegiate rivalry should be kept within reasonable limits, and every tendency towards professional methods and practices should be disallowed.

A few facts concerning the play-grounds of Harvard, Yale, and Princeton, and the sums raised and expended in a single year, may serve to indicate how highly developed an interest that in athletics has become, and it should be remembered that it has been developed and organized chiefly by the students and alumni of the last twenty years, who have also contributed munificently towards the erection of our finest gymnasiums. Dr. H. I. Bowditch, in his Centennial Address on Hygiene in America, in 1876, predicted what is in a measure already fulfilled. "Meanwhile," he said, in speaking of hygiene in colleges, "although the instructors of the colleges thus neglect important duties, the youths of their own free will, and at times, lately, with the aid and counsel of the college governments, have commenced athletic sports. This will gradually force the colleges to take on their own parts a higher position."

The playing-fields at Harvard, on grounds belonging to the college, embrace about ten acres of land in the heart of the city of Cambridge. Within eighteen months more than $6,000, of which the college contributed $2,000, have been expended in improving them, so that the facilities for ball-playing, tennis, lacrosse, bicycling, and running, are ample and excellent. The new athletic field at Yale will, by the time it is ready
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for use, have cost about $56,000, which sum was chiefly contributed by students and graduates of the college. “It will embrace a quarter-mile cinder track, two ball-fields, a foot-ball field, and a cricket field. It has on it a $6,000 grand-stand, and is enclosed by a wire fence, surrounding nearly thirty acres of land.” The director of field sports at Yale, who was in college distinguished both as a student and as an athlete, was appointed a year ago by the graduate and undergraduate athletic interest at a salary of $1,200, towards which the faculty paid nothing. Both Harvard and Yale have large and valuable boat-houses. Princeton has an athletic field of nearly ten acres, well appointed for field sports. The following table shows the financial condition of the athletic departments of Princeton, Harvard, and Yale, for the years 1882-83:

<table>
<thead>
<tr>
<th>Name</th>
<th>Numbers</th>
<th>Expenditures</th>
<th>Income for 1882-83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvard</td>
<td>1,428</td>
<td>$15,542.44</td>
<td>$18,036.82</td>
</tr>
<tr>
<td>Princeton</td>
<td>500</td>
<td>4,252.17</td>
<td>4,293.78</td>
</tr>
<tr>
<td>Yale</td>
<td>1,050</td>
<td>17,476.04</td>
<td>18,048.03</td>
</tr>
<tr>
<td>Totals</td>
<td>2,978 students</td>
<td>$37,270.65</td>
<td>$40,398.62</td>
</tr>
</tbody>
</table>

It may be said, in passing, that not a tithe of the attention given to athletic sports at the Northern colleges is discoverable in those of the South. Military drill is the favorite form of physical training at the South. Since the war military schools for boys have multiplied at the North, and all state colleges organized under the Morrill land grant act are obliged to teach military drill. A few have evaded this provision, but most are glad to secure the services of a specially detailed officer of the U. S. army as instructor in drill and tactics. The fullest data yet accessible to me show that out of forty-five colleges which attempted in 1882-83 to give a course in physical education, thirteen employed military drill. Military drill is well adapted for preparatory students, and has worked well in many new institutions; but he would be a bold man who should undertake to make it compulsory at Harvard, Yale, or Princeton. Paternal government is breaking down in our best colleges, and military discipline cannot be erected on its ruins.

Unquestionably the best considered and most successful experiments made to secure physical training in this country are those which have been carried out at the U. S. military academy and at the U. S. naval academy: it is therefore eminently desirable that the recorded experience of those institutions, touching the physique, health, and longevity of their cadets and graduates, should be made available as an example and stimulus to the managers of our scholastic youth. I am convinced that no class of our students, with the possible exception of the picked athletes, will bear comparison with the West Point and Annapolis cadets, as regards mental and bodily vigor.
A great impetus was given to the cause of physical education by the building of the Hemenway gymnasium of Harvard college in 1879, and the adoption therein of Dr. Sargent’s system of developing gymnastics, Dr. Sargent being made its director. I shall not undertake to describe the Sargent machines, or the Sargent system. Dr. Sargent spoke for himself and for his own views before this association at its last meeting. I may be allowed to say, however, that I deem it the most scientific system yet adopted in this country, and that in many ways it is an advance on the class gymnastics which have so long been used at Amherst. The measurements made at Amherst had no relation to the exercise of the individual Amherst student,—i.e., they were used for statistical and not for diagnostic purposes. According to the Amherst system, two men, the one having a flat chest and the other a slight spinal curvature, would be given the same exercise. Under the Sargent system, which, by the way, has been adopted in a large measure at Amherst, the men would have totally different kinds of exercise prescribed. More than forty gymnasiuims have been fitted wholly or in part with the Sargent appliances.

Exercise is prescribed, on the developing machines, on the basis of a careful examination and series of measurements made of the person receiving the prescription, in the following named institutions:

Harvard University, Cornell University, Johns Hopkins University, Lehigh University, Amherst College, Smith College for Women, Hartford Theological Seminary, Y. M. C. Union Gymnasium, Boston, Sanatory Gymnasium, Philadelphia, Sanatory Gymnasium for Women, Cambridge, Mass., Penn Charter School, Philadelphia, the National Deaf Mute College, and Haverford College.

That means that many thousands of anthropometrical measurements and tests are made annually on school and college students, male and female, and also on clerks and mechanics. The importance of such statistics in determining the natural history of the average and mean adolescent, male and female, is too obvious to require remark.

There are probably not far from fifty college gymnasiuims or drill halls in the United States. Of these the best are the Hemenway gymnasium, costing $110,000, the gift of A. Hemenway, Esq., of Boston, and a recent graduate of Harvard, to his Alma Mater; the Pratt gymnasium at Amherst, just completed at a cost of $77,000, named for C. S. Pratt, Esq., of Brooklyn, and a graduate of Amherst in 1879, who gave $38,000 towards its erection; the Lehigh University Gymnasium at Bethlehem, Pa., built out of university funds in 1882 at a cost of $40,000. These three gymnasiuims are far superior to any others in the country, if we except the gymnasium now building for the New York Athletic Club, which, it is estimated, will cost upwards of $200,000, and is planned to be the largest, most complete, and most elegant building in the world devoted to the purposes of physical training. The Harvard, Amherst, and Lehigh gymnasiuims are all sightly and elegantly finished structures, fitted with the most recent gymnastic and sanitary
appliances. Each has a running-track, commodious dressing-rooms, generous bathing facilities, and convenient offices for the directors. Each has several bowling-alleys, and those of Amherst and Lehigh have billiard-rooms; with tables. The gymnasiums at Amherst, Cornell, Harvard, Haverford, and Johns Hopkins are in charge of regularly educated physicians.

There are new gymnasiums building at Bryn Mawr College for Women, Dickinson College, and Lafayette College, all in Pennsylvania, and a new gymnasium is projected at West Point. These will cost upwards of $50,000 it is estimated.

The colleges have, however, not yet emerged from the building stage of development as regards their departments of physical training. It is easily susceptible of proof that the best of them has not yet reached such a highly organized and differentiated state as to promise the best results. More generous endowments are needed, and a fuller complement of teachers is called for. There is a crying need for scientific medical direction on the one hand, and for competent teachers of gymnastic specialties on the other; but there is reason to hope that this need will be met before many years elapse.

Before physical training shall constitute a part of the regular course of instruction in the public schools of even the most enlightened states, a vast number of trustees, committee-men, teachers, and physicians must be educated, as they are not now and never have been, in regard to personal hygiene in all its branches. As a rule, the medical schools make no attempt to teach those who bear away their diplomas how to recognize a normal man or woman; and so long as the average medical man is indifferent or ignorant on the subject of physical training; which, in the last analysis, is a training of the nervous system, we cannot expect teachers, either in school or college, as a class, to have intelligent practical notions on this subject.

By showing what has been done, and pointing out what might be learned and carried into practice in this field of hygiene, the American Public Health Association can do much to further the ends for which it was established.

Table showing the cost of the principal gymnasiums and drill halls built in the United States since 1860.

In the period 1860–1870 gymnasiums were built as follows at

<table>
<thead>
<tr>
<th>Institution</th>
<th>Year</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amherst College</td>
<td>1859–1860</td>
<td>$15,000</td>
</tr>
<tr>
<td>Dartmouth College</td>
<td>1866</td>
<td>24,000</td>
</tr>
<tr>
<td>Harvard University</td>
<td>1859–1860</td>
<td>10,000</td>
</tr>
<tr>
<td>Pennsylvania College</td>
<td>1870</td>
<td>3,000</td>
</tr>
<tr>
<td>Princeton College</td>
<td>1869</td>
<td>38,000</td>
</tr>
<tr>
<td>Washington University</td>
<td>1870</td>
<td>7,000</td>
</tr>
<tr>
<td>Wesleyan University</td>
<td>1863</td>
<td>5,000</td>
</tr>
<tr>
<td>Williston Seminary</td>
<td></td>
<td>20,000</td>
</tr>
<tr>
<td>University of Wisconsin</td>
<td>1868</td>
<td>5,000</td>
</tr>
<tr>
<td>Yale College</td>
<td>1859–1860</td>
<td>13,000</td>
</tr>
</tbody>
</table>

$140,000
In the period 1870–1880 the following gymnasiums were built at

- Beloit College in 1874, at a cost of $5,000
- University of California in 1878, at a cost of $12,000
- Harvard University in 1879, at a cost of $110,000
- Newton Theological Seminary in 1876, at a cost of $4,000
- Smith College for Women in 1880, at a cost of $4,000
- Vanderbilt University in 1879, at a cost of $22,000

Total $157,000

In the period 1880–1884 the following named gymnasiums were built at

- Amherst College in 1883–84, at a cost of $77,000
- Cornell University in 1882–83, at a cost of $40,000
- Johns Hopkins University in 1883, at a cost of $10,000
- Lehigh University in 1882, at a cost of $40,000
- Mass. Agricultural College in 1883, at a cost of $6,000
- University of Minnesota in 1884, at a cost of $34,000
- National Deaf Mute College in 1881, at a cost of $14,600
- Tufts College in 1882–83, at a cost of $10,000
- University of Wooster in 1882–83, at a cost of $4,200

Total 1880–1884, $235,800
Estimated cost of fitting gymnasium in buildings, used partially for other purposes, and of gymnasiums now building, $125,000
Grand total, $657,800

Note. It is proper to state, that the data used in preparing this paper belong to the United States Bureau of Education, and will be embodied in my forthcoming Report on Hygiene in American Colleges and Universities. It is due to the kind permission of Gen. John Eaton, commissioner, that I have been enabled to prepare this paper.—E. M. H.