GS198

THE

NEW SYSTEM

OF

MUSICAL GYMNASTICS

AS AN

INSTRUMENT IN EDUCATION.

A LECTURE

DELIVERED BEFORE

THE COLLEGE OF PRECEPTORS,

BY

MOSES COIT TYLER, M.A., M.C.P.,

Principal of the London School of Physical Education, Member of the American Association for the Advancement of Science, etc.

"Intellect in a weak body is like gold in a spent swimmer's pocket tho richer he would be under other circumstances, by so much the greater his danger now."

D. A. WASSON.

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A short life is not given us, but we ourselves make it so."—SENECA.

"We are weak, because it never enters into our thoughts that we might be strong if we would."—SALZMANN.

"The first wealth is health. Sickness is poor-spirited, and cannot serve any one: it must husband its resources to live. But health or fulness answers its own ends and has to spare, runs over and inundates the neighbourhood and creeks of other men's necessities."—RALPH WALDO EMERSON.

"I am convinced that he who devotes two hours each day to vigorous exercises, will eventually gain those two hours, and a couple more into the bargain."—WASHINGTON IRVING.

"The man who invented cricket as surely deserves a statue to his memory as he who won Waterloo."—ARCHIBALD MACLAREN.

"The excess of bodily exercises may render us wild and unmanageable; but the excess of arts, sciences, and music makes us faddled and effeminate: only the right combination of both makes the soul circumspect and manly." —PLATO.

"Surely none the worse Christians and citizens are ye for your involuntary failing of muscularity."—THOMAS HUGHES.

NOTE.

THE following Address was delivered before the College of Preceptors, at their rooms, in Queen Square, on the evening of Wednesday, March 7th, 1864, the Rev. Richard Wilson, D.D., F.C.P., being in the chair. It was published in *The Educational Times* for the succeeding month, precisely as it appears in these pages. By the multitude of letters I have since received from educators in all parts of the kingdom, I am tempted to hope that its publication in the present form may be not without good results to the cause of a wise and generous method of education.

29, Delamere Terrace, Bayswater,
May 1st, 1864.

MUSICAL GYMNASTICS

AS

AN INSTRUMENT IN EDUCATION.

Mr. Chairman, Ladies and Gentlemen,

The mind of Lord Bacon, brooding over and methodizing all knowledge within the reach of man, has indicated the boundaries and the relations of physical culture, in the following sentences which I extract from "The Advancement of Learning:"—"The good of a man's body is of four kinds—health, beauty, strength, and pleasure." Hence the knowledge that "concerneth his body is medicine, or art of cure; art of decoration, which is called cosmetique; art of activity, which is called athletique; and art voluptuary, which Tacitus truly calls '*eruditus luxus*.'" And after several paragraphs in exposition of the first two branches of bodily knowledge, he continues:—"For athletique, I take the subject of it largely, for any point of ability whereunto the body of man may be brought, whether it be of activity or of patience; whereof activity hath two parts, strength and swiftness: and patience likewise hath two parts, hardness against want and extremities, and endurance of pain or torment. . . . Of these things the practices are known, but the philosophy that concerneth them is not much inquired into."

I am quite sure that I do not need to consume the time of my auditors on this occasion with any laboured arguments to convince them of the importance of physical culture. Certainly I may be allowed to take this for granted, that all intelligent educators in this age are thoroughly persuaded that the body needs education as truly as does the mind; that this process of bodily education should commence and continue with that of the mind; and perhaps I may be indulged in the expression of the opinion, that if the general practice does not yet equal the general belief upon this subject, it is owing to certain inevitable obstructions presented by the current methods of carrying this belief into effect, rather than to any lack of sincerity in the belief. If those methods were more practicable they would be more practised.

At the same time, it has seemed to me that there might be a real advantage gained if I were to make, as the basis of my address this evening, a very brief sketch of the historical and literary antecedents of this important department of education, thereby indicating both the opinions and the proceedings of other ages and other nations upon the subject. I shall paint this sketch as a sort of consecrating background to my picture of "The New System of Musical Gymnastics as an Instrument in Education."

In searching for the first developments of the art of gymnastics, we must be content to go to that small but sacred spot of earth, whither we are obliged to look for the germs of all our science, art, and song. For, although traces of a crude athletic practice are to be found among the Hebrews and many of the early Asiatic tribes, it was in Greece that gymnastic cultivation first received that systematic attention which raised it to its true rank among the liberal arts.

The Greek education was divided into two branches, which comprehended their entire disciplinary method either in youth or maturity; and these two branches were, gymnastics for the body, and music (by which they meant the topics presided over by all the nine Muses, such as history, poetry, mathematics, painting, logic, rhetoric, &c.) for the mind. They placed the subject of gymnastics first, and they always kept it first. In their view the education of the body was in the front, both logically and chronologically. Any one familiar with the facts descriptive of Greek education related by Grote, or Thirlwall, or Mitford, will be quite prepared to accept the statement of the "Encyclopædia Britannica," which asserts that "the Greeks bestowed more time upon the gymnastic training of their youth than upon all the other departments put together." The following sentence from the profound and elaborate work of Mr. Grote describes the supreme devotion paid to gymnastics in Sparta, and reflects to a certain extent the prevailing practice of all the other Hellenic States:—"From the early age of seven years, throughout his whole life, as youth and man no less than as boy, the Spartan citizen lived habitually in public, always either himself under drill, gymnastic and military, or a critic and spectator of others." And, in another part of his history, the same distinguished scholar assures us, that "the sympathy and admiration felt in Greece towards a victorious athlete, was not merely an intense sentiment in the Grecian mind, but was, perhaps, of all others the most widespread and Panhellenic." And Bishop Potter, in the first volume of his "Antiquities," confirms this by the declaration, that "such as obtained victories in any of their games, especially the Olympic, were universally honoured, almost adored." Without entering farther into details, it may be sufficient to say, that we have abundant evidence to assure us that the art of gymnastics was held in the highest honour throughout Greece. It was recognised and sustained by the State. Solon introduced into his code a special series of laws for its protection. The art was consecrated by every sentiment, religious, literary, and domestic. Certain of the gods were regarded as the peculiar patrons of the gymnasium. The teachers of morals discoursed of attention to physical exercise as a distinct virtue, calling it *ἀρέτη γυμναστικὴ*, the gymnastic virtue. The great historic sects in Grecian philosophy took their titles from the gymnasia, where they were first expounded. Moreover, he who should excel in gymnastics thereby won high personal distinction and the most honourable rewards of the State. Thus in the mind and life of a Grecian in the ancient time, gymnastics entwined themselves with all his ideas of individual culture and personal dignity, piety, beauty, health, prowess, literary power, philosophy, and political renown.

We have not the same temptation to linger over the story of Roman gymnastics. With regard to the position of bodily culture in the Roman plan of education, there is the testimony of Eschenberg, who affirms that corporal exercises were viewed by them, especially in the earlier times, as a more essential object in education than the study of literature and science. This is a sentence which glances both ways. It may mean that their devotion to gymnastics was very great; it may hint that their appreciation of literature and science, at the period referred to, was very small. However, it seems evident that, prior to the time of the emperors, the gymnastics in vogue were of a rude character, having chief reference to the discipline of military recruits, and to the exigencies of certain athletic games, like the Consualia. Scientific gymnastics came in with the importation of other Greek ideas by the conquerors. The first gymnasium at Rome is said to have been built by Nero. Still the Greek gymnastics never became thoroughly naturalized and assimilated among the Roman people. The art seemed a fair but unprosperous exotic; and after serving a temporary purpose in the hands of scholars and gentlemen, it subsided into the brutality of pugilism and gladiatorship, and finally expired in the general wreck of the Imperial State.

The lost art rose again, after its slumber of centuries, with the dawn of Chivalry, but in an altered garb and tone. The mediæval gymnastics very naturally took their methods from the chivalric spirit. Fencing, wrestling, vaulting, boxing, the sword exercise, horsemanship, and the dance, now held the place in men's regard once occupied by the old Greek Pentathlon; and these forms of gymnastics revived the ancient credit of physical culture, and were accorded the universal devotion of princes, and noblemen, and poets, and artists. Tasso, Da Vinci, and Albert Dürer were among the renowned gymnasts of the period.

From the decline of Chivalry, onward through the sixteenth, seventeenth, and eighteenth centuries, the practice of gymnastics fell more and more into disuse; many forms of exercise became quite obsolete—only the limited methods of sparring and fencing seemed to remain in the memory of educators. The allusions to gymnastics, scattered through our English literature of the period, abundantly prove to how slight and contracted a scheme the once elaborate Art of Gymnastics had become reduced.

But although the practical details of gymnastics may have relaxed their hold upon human attention, the theoretical standing of physical culture, in any comprehensive plan of education, was on all hands, by all respectable writers in the principal languages of Europe, most abundantly and emphatically asserted. The renowned scholar, J. F. Scaliger, published at Lyons, in 1561, a work entitled "The Art of Gymnastics." Four years later, Leonard Fuchs put forth at Tübingen a treatise on "Movement and Repose;" and, in ten years from that date, Ambrose Pare issued at Paris a work with the same title. In the same year, at Cologne, Jules Alessandrini published a work in twenty-three books, called "The Art of Preserving Health." And, tracing the literature of the subject onward through the succeeding one hundred and fifty years, we find similar productions by Borelli, Brisseau, Paulline, Stahl, Hoffmann, and Burette. It is pleasant to find a distinct and very earnest statement of the claims of physical education in a continental writer who lived before Shakspeare, and whom we happen to know Shakspeare read and loved. For in a very brilliant essay by Montaigne on the education of youth, occurs this passage:—"I would have a boy's outward behaviour and the disposition of his limbs formed at the same time with his mind. It is not a soul, it is not a body, that we are training up; it is a man, and we ought not to divide him into two parts."

Turning from the continental languages to our own, we are proud and grateful to discover that English literature, so rich in philosophy and poetry, and in the gems of perfect speech, is by no means behind other literatures in the department of Physical Education.

Let it never be forgotten by us, that the first book ever written in our English tongue on education was on *Physical Education;* and so long ago as 1540, in the reign of Henry VIII., and by no less a man than Sir Nicolas Bacon, who is said to have trained Elizabeth to empire. I have already shown that his illustrious son, Lord Bacon, did not neglect this alcove of human thought and knowledge; and no one at all acquainted with his pages can have failed to observe how thoughtfully and reverently he considered the body's welfare, speaking of "the human organization as so delicate and so varied, like a musical instrument of complicated and exquisite workmanship, and easily losing its harmony."

The next important work in English literature upon this subject, is Milton's Tract on Education. In this most eloquent essay, the great bard defines education as "that which fits a man justly, skilfully, and magnanimously to perform all the offices, both private and public, of peace and war;" and after recommending a plan "likest to those ancient and famous schools of Pythagoras, Plato, Isocrates, and Aristotle, and such others, out of which were bred such a number of renowned philosophers, orators, historians, poets, and princes, all over Greece, Italy, and Asia," he claims that his own method should exceed them, and "supply a defect as great as that which Plato noted in the commonwealth of Sparta; whereas that city trained up their youth most for war, and these in their Academies and Lyceums all for the gown, this institution of breeding shall be equally good both for peace and war. Therefore, about an hour and a half ere they eat at noon should be allowed them for exercise, and due rest afterwards. . . . The exercise which I commend first, is the exact use of their weapon, to guard and to strike safely with the edge or point; this will keep them healthy, nimble, strong, and well in breath; is also the likeliest means to make them grow large and tall, and to inspire them with a gallant and fearless courage, which, being tempered with seasonable lectures and precepts to them of true fortitude and patience, will turn into a native and heroic valour, and make them hate the cowardice of doing wrong. They must be also practised in all the locks and gripes of wrestling, wherein Englishmen were wont to excel, as need may often be in fight to tug, to grapple, and to close. And this will perhaps be enough wherein to prove and heat their strength."

Advancing to the next prominent English writer upon education, we come to the calm and judicious works of John Locke; and no one will be surprised to hear that Locke's scheme of education recognized the value of full attention to the development of the bodily health and vigour.

"A sound mind in a sound body," remarks this great philosopher in his treatise entitled "Some Thoughts concerning Education," "is a short description of a happy state in this world. He that has these two has little more to wish for; and he that wants either of them will be but little the better for anything else. Men's happiness or misery is most part of their own making. He whose mind directs not wisely will never take the right way; and he whose body is crazy and feeble will never be able to advance in it."

The foregoing authorities from our earlier English literature are enough to indicate what I desired to represent—namely, that the department of Physical Education has an honourable and unquestionable basis in the recognition of the most illustrious writers of the English language; and it will be sufficient for me to add, that every important writer on education, from John Locke to Horace Mann and Herbert Spencer, has reiterated, in a great variety of forms, and with the use of erudition and logical appeal, these earlier claims on behalf of Physical Education.

I think no one can have accompanied me to the present point in my address, without having forced upon his mind this thought—the extraordinary contrast between theory and practice with reference to physical culture in our modern systems of education, especially in England and America. I have just made reference to our greatest and most influential writers on education, all enforcing the claims of physical culture; and yet, when we look at the facts as they stand before our eyes on every hand, we must acknowledge that these claims are strangely disregarded. It may seem a very bold statement, but it has been made by wise and cautious tongues, that our modern education practically ignores the body, practically forgets that boys and girls who are its subjects are endowed with corporeal natures, for the healthful, vigorous, and symmetrical development of which it is strictly responsible.

I do not doubt the existence of many beautiful and cheering exceptions to this rule. I know also that these exceptions are happily increasing. But up to latest dates, the vast majority of educational institutions, both in Great Britain and America, have failed to recognize the true position of physical culture in the work of education. Take London alone. Bringing schools of every grade into the account, the general rule is, that bodily culture is either wholly unprovided for, or at best is left to the option of each pupil; and even when, in exceptional cases, bodily exercise is made imperative, the amount required bears no proportion to the efforts made for intellectual exercise. Now, I most strenuously affirm that this is not recognizing the true position of physical culture. And I venture to lay down the proposition, that physical culture will not receive its true recognition until every school is founded on the creed that the body is as essentially the subject of its educational care as the mind, requiring for its development scientific preparation and earnest conscientious practice; that physical exercise should not be left as an optional thing, but should be made an integral part of every day's hearty work; moreover, that this branch of education should in every instance be conducted by wise, well-educated, and competent masters, and should be no more committed to the undirected efforts, to the whims and haphazard experiments of the pupils, than should geometry or grammar; and consequently, and finally, that it is as absurd to establish a school omitting to make provision for adequate gymnastic education, as it would be to invite pupils to a school in which no arrangements were made for desks, forms, chairs, books, pens, maps, or paper. In short, the word education should be understood to embrace in its operation our entire nature, mental and physical; both departments advancing together hand in hand, mutually respectful, helpful, and tolerant. Bodily culture should be received as an equal and an honoured occupant in the great Temple of Education, not kept standing upon the door-steps like a shivering beggar, nor thrust down into the scullery as if it were some servant of dirty work.

But having spoken of the vast and startling discrepancy between theory and practice in our modern education with reference to physical culture, I hasten to express the opinion that this is a phenomenon for which the conductors of schools cannot generally be censured. I am convinced that it has been chiefly owing to the low tone of public appreciation upon this subject, whereby schoolmasters have lacked the encouragement and support of parents in any efforts to bring this department up to its proper level; and second, to certain radical faults in the common methods of bodily culture, which have rendered their general adoption either inconvenient, undesirable, or impossible. I claim the right to bear this testimony. It is an honest one—not given with any purpose of empty compliment. It is my constant duty and privilege to be thrown into conversation with teachers; and I can truly say that I generally find them anxious to realize a higher standard of practice in the department than they have yet attained, but trammelled and thwarted by these practical difficulties to which I have made allusion.

Perhaps the fundamental remedy for this is direct and energetic action upon the general mind of the nation, to inform it more thoroughly of the reasons for bodily education, and to imbue it with more earnest convictions as to the duty of parents in sustaining schoolmasters in their efforts to attend properly to the subject. We must create a public sentiment for educational gymnastics. From pulpit and platform and lecture desk and printed column, there must stream a current of knowledge and influence for physical regeneration, which shall place the cause upon its proper basis in the intelligence and moral sense of the Anglo-Saxon race.

But, as I have already intimated, even when other difficulties are removed, obstacles frequently occur, arising from the methods of gymnastic practice commonly used. The old system of heavy gymnastics, with its fixed beams, bars, ladders, swings, and wooden horses, requires a considerable outlay for its construction; but more than all requires a large room for its occupation. Ours is a civilization of large cities; space is precious; and any system which is to meet the wants of the time must be so very simple in its machinery as to be capable of introduction wherever there is standing room. The civilization of precious space will not be apt to give up room for bulky systems, no matter how good. The gymnastics must be adapted to the civilization; the civilization will not adapt itself to the gymnastics. When, therefore, from want of room or other cause, teachers have been obliged to forego this heavy system, and have resorted to the method technically called "drilling," as administered by a "drill-serjeant," they have frequently been aware of a difficulty of the very opposite character, viz., that the method was too light and apparently superficial, besides soon becoming monotonous and uninteresting—so obviously inadequate as a means of physical culture, that they not seldom begrudged the time which they gave to it.

Accordingly, in very many cases, masters, dissatisfied with both experiments, have been obliged to content themselves by encouraging the usual games of the play-ground, if they are so fortunate as to have a play-ground; although conscious that these sports are by no means a realization of physical education, and especially that they do not counteract the worst tendencies of the school-room, viz., the tendencies to stooping shoulders and narrow chests.

It is at just this angle of thought that I desire to bring to your notice a new system of gymnastics, which has been devised by an eminent medical man, and a practical educator of our time, for the very purpose of filling up this lamentable chasm in our modern educational practice; a system which has now undergone the test of several years' rigorous experiment, and has come forth from the trial with success.

This system is at the present time attracting attention in England under the name of "Musical Gymnastics." It was constructed by Dio Lewis, M.D., of Boston, Massachusetts, a physician and medical writer of great renown in his native land.

I shall now endeavour to describe to you this very original and novel system; and to point out several particulars in which it seems to me beautifully adapted to meet our modern wants.

I shall first attempt a verbal description; but, as words can but poorly portray movements so unique as those which constitute this system, I have brought with me several of my juvenile pupils, who will present to you, after my lecture, some characteristic specimens of the method. Let it be said, then, in brief, that the new gymnastics differ from all preceding systems as regards the apparatus employed, the mode of the employment, and the results attending employment. The system discards, at once and totally, the heavy, complicated machinery of the old gymnasium, and adopts instead light wooden rings, wooden rods, wooden dumb-bells, and wooden clubs. None of these implements are attached to post, or wall, or ceiling; but each is merely held in the hand when used, and laid aside when the exercises connected with it are performed. Furthermore, the exercises which this simple apparatus involves are elaborated, with a view to their physiological value, in distinct sets; each exercise has its own invariable place in the series to which it belongs; all are adapted to quick and stirring music; they combine almost infinite variety with consummate simplicity and precision; and, finally, they admit of being performed in drawing-room, school-room, or hall, wherever there is space sufficient for outspread arms, in a manner the most graceful, pleasing, and appropriate.

With your permission, I shall now go over these statements, and develop them somewhat more in detail.

And, first, concerning the machinery of the new system. There have been two difficulties in constructing a system of gymnastics which should be capable of universal diffusion. On the one hand, if the method was thorough, the apparatus was too elaborate, too costly, and absorbed too much space; on the other hand, if the apparatus was simple, the exercises failed in thoroughness, variety, and prolonged interest. It seems to me that Dr. Lewis's system happily and ingeniously reconciles both extremes of difficulty. It will not be laborious to prove to you that the apparatus is simple. One of my boys has brought here to-night, in his hands, four gymnasiums. The apparatus is so slight and inexpensive, that the humblest primary school can afford to get them, and can find room to use them. And with these simple and uncostly implements are connected a vast multitude of the most varied, powerful, and graceful movements, bringing into play, under healthful conditions, every muscle, joint, and member of the human body. Perhaps the greatest encomium to be pronounced on Dr. Lewis is, that he has struck a vein which every teacher can go on working without end: he has indicated a path which leads to perpetual additions of exercise conceived in his spirit, but presenting constant variety to the pupil. So much for the apparatus.

Second, concerning the mode of its employment. Under this head there are several particulars to which I wish to direct your attention. And the first has reference to a gymnastic principle, interpreted by a law in mechanics. Momentum is made up of two factors, weight and velocity. Allowing momentum to remain the permanent quantity, the greater the weight, the less the velocity; and, conversely, the greater the velocity, the less must be the weight. Passing over to the realm of gymnastics, that term which corresponds to momentum is the amount of exertion each one is capable of putting forth with safety; and it is plain that if you have heavy weights, you must have slow movements; and, on the contrary, if you would have rapid movements, you must have light weights. It costs as much effort to pass a light body through the air swiftly, as it does to pass a heavy one slowly. Now, the more common idea in our modern gymnastics has been to give prominence to weight. How many pounds can you put up? what vast Herculean burden can you carry? have been the test questions, and have indicated the direction of the average gymnastic ambition. But the new system inverts this order, and seeks to give prominence to the idea of velocity in gymnastics rather than of weight. It claims that a better muscular result is obtained by this method. It claims that, while huge lifting power is quite desirable for those who design following the profession of a porter, or a hod-carrier, or a coal-heaver, it is not so important, for ladies and gentlemen in the more usual avocations of life, as flexibility, grace, ease, fineness rather than massiveness, poise, perfect accuracy and rapidity of muscular action, and a general diffusion of muscular vigour. Dr. Lewis is fond of illustrating the differentia in the systems—on the one hand of weight, on the other hand of velocity—by pointing to the van-horse, with his vast though stiff muscles, with his slow, ponderous elephantine movements, just fit to draw burdens for the world ; and then to the carriage-horse, with his graceful, airy, elastic step, his rapid movement, his vivacity, his fineness of nerve and muscle.

What I have just said will serve to indicate the mechanical principle of the new gymnastics. I must now direct your attention to its fundamental physiological principle. It adopts the plan of lively moderate exercises, in opposition to the plan of laborious, violent, exhausting movements. I believe the idea is becoming very generally accepted by physiologists, that the muscular system may be cultivated at the expense of the vital; that a man may develop a magnificent shell of muscle, and draw away to the surface the life and power of the interior; that a man may become very weak by becoming very strong. I need only remind you of the recent discussion upon this subject in *The Lancet*, suggested by the defeat of Heenan.* I think a wrong direction has been given to

* "Those who know what severe training means will, perhaps, agree with us that Heenan was probably in better condition five weeks before meeting his antagonist than on the morning of his defeat; although, when he stripped for fighting, the lookers-on agreed that he seemed to promise himself an easy victory, while exulting in his fine proportions and splendid muscular development. It is now clearly proved that Heenan went into the contest with much more muscular than vital power. Long before he had met with any severe punishment, indeed, as he states, at the close of the third round, he felt faint, breathed with difficulty, and as he described it, his respiration was 'roaring.' He declares that he received more severe treatment at the hands of Sayers than he did from King; yet, at the termination of the former fight, which lasted upwards of two hours, he was so fresh as to leap over two or three hurdles, and distance many of his friends in the race. It was noticed on the present occasion that he looked much older than at his last appearance in the ring.

"Without offering any opinion as to the merits of the combatants, it is certain that Heenan was in a state of very deteriorated health when he faced his opponent, and it is fair to conclude that deterioration was due in a great measure to the severity of the training which he had undergone. As with the mind, so with the body, undue and prolonged exertion must end in depression of power. In the process of the physical education of the young, in the trainthe ambition of boys. A vulgar desire has been created to rival draught-horses, and porters, and the muscular monstrosities of the circus. The idea has been cherished, that one must do *much*—must make vast, straining, depleting exertions. Has not this tendency been carried too far? Especially injurious is this process to the young. Many a fine fellow at Cambridge and Oxford trains for the boat-race, and wins heart-disease. Many a fine fellow carries off the oarsman's laurels, and expends in that attempt the vitality which might help him to get any other kind. But hastening from this point, I add, that the new system discards the *acrobatic* principle. It makes no provision for ground and lofty tumbling. It does not invite its disciples to practise locomotion by rolling over and over; it does not ask them to stand on their heads, or walk on their hands, or practise any form of personal inversion or revolution in the air. Those who are fond of acrobatic gymnastics will of course pursue them. I believe many people who need artificial exercise have been deterred from gymnastics by their repugnance to this sort of performance. I need not remind you, also, that any gymnastic method which makes much of acrobatics, so far forth excludes the whole female sex from the advantages of gymnastics. There is but one other point of which I desire to speak, while attempting to describe the *modus* of the new gymnastics; and that point has reference to the introduction of music, for the purpose of stimulating and regulating bodily movements. When I consider the value of music as recognized in dancing and in military life, I wonder that the importance of making it an essential and an inseparable element in gymnastics has not sooner attracted the deliberate attention of educators. In Dr. Lewis's system music is made so central a member, that without it we can do nothing. When the music leaves off, we adjourn.

Having spoken of the *machinery* and the *method* of the new gymnastics, I must say a few words as to the *results*. One of the

ing of our recruits, or in the sports of the athlete, the case of Heenan suggested a striking commentary of great interest in a physiological point of view. While exercise, properly so called, tends to development and health, excessive exertion produces debility and decay. In these times of over-excitement and over-competition in the race of life, the case we now put on record may be studied with advantage."—*The Lancet.*

most precious and honourable of these results is, that the new system is essentially fitted for both sexes; or, to bring out more pointedly the idea which I aim to convey, while it provides an elaborate scheme of exercise for man, there is not, within all its ritual, one exercise which cannot be performed with equal safety, propriety, and success, by woman. I do not need to insist upon the immense desirableness of such a result. Surely, if either sex is to be excluded from gymnastics, let it be ours. Boys and young men have at least something, in the athletic sports of the playground and the field, to atone for the loss of scientific bodily culture. If they lose gymnastics, the loss is not without a species of remedy. But if young ladies are denied gymnastics, there seems to be absolutely no indemnification. Herbert Spencer tells us that near his own residence is a school for boys and one for young ladies. In the uproar, the vociferation, the gleeful shouts of the playground, he was instantly informed of the existence of the former; but many months had elapsed, after taking that residence, before he was made aware that an establishment for young ladies was in full operation in the very next house, enjoying, too, a large garden overlooked by his own windows.* Among the physiological results of the new system, I can truly say, also, that a very marked feature is the symmetry of the muscular development produced. For every muscle of the body Dr. Lewis has devised movements. No class of muscles receives attention to the neglect of the rest. The result is a beautiful, harmonious, complete cultivation of the entire body. Moreover, a large series of movements are constructed with the view of counterbalancing the tendencies of our modern life, and especially of our modern school life, to a depression and narrowing of the chest, and to the formation of an uncomely roundness upon the shoulders. One of my pupils, a student in a well-known college of London, informed me last evening, that, although he has been under my care but one quarter, his tailor was startled to find the size of his chest enlarged by two or three inches. The great peril of our Anglo-Saxon race is from pulmonary weakness. Our

* "Look at the number, still too great, of schools,—I beg pardon,—of Academies, where young ladies are educated within an inch of their lives, perfected into paleness, and accomplished into spinal distortion and pulmonary phthisis."—W. B. Hodgson, Esq., LL.D.

gymnastics should direct their remedial enginery to that quarter. I can only hint at the peculiar benefit resulting from the habit of performing all these bodily movements in strict musical time. Whatever muscular development ensues becomes far more closely associated with the intelligence and will. The whole frame at last seems embued with the musical principle, vitalized and permeated by some breath of harmony, grace, and accurate ease. Although I have by no means brought forward all the important results which in experience have attracted my notice, I dare not trespass upon your patience longer than to mention this other one; namely, the attractiveness of the new gymnastics to those who practise it. The new system insists upon being enjoyed, if pursued at all. It seeks to stir the sources of exhilaration, mirth, enthusiasm. It seeks to achieve this by the vivacious character of the movements, by the contagion of perfectly concerted action, and by the delightful stimulus of music. Of course much depends, also, upon the magnetic power, the cheerfulness and playfulness of the teacher. I can honestly testify that when these conditions are complied with, the new gymnastics rise far above the dreary level of task-work and monotonous drudgery, and are literally and permanently a pleasure. They recognize the artistic necessity of touching the play-impulse. They attempt to inaugurate, during the hour devoted to gymnastics, a sort of physical jubilee, a carnival of the emotional and vital powers.

Ladies and Gentlemen, I have thus endeavoured to give you a verbal account of the new system of Musical Gymnastics; and in one moment you will have an opportunity of witnessing an ocular demonstration of it.

I cannot take my seat, however, without expressing the earnest hope, that the claims of physical education are destined to receive still more largely the recognition of the public, and especially of those engaged in the high, sacred, and most responsible vocation of teaching the young. In his brilliant and deeply suggestive work on Education, Rousseau has said,—"Do you wish to cultivate the intelligence of your pupils, cultivate the power that controls it. Exercise the body continually; made it robust and healthy, to make a wise and rational individual." Jean Paul puts a profound truth into exquisite imagery, when he says in Titan, that Don Gaspard, in revising a scheme of education for his son, "had chosen that more attention should be paid to bodily health than to mental superfœtation; he thought the tree of knowledge should be grafted with the tree of life. Alas, whoever sacrifices health to wisdom has generally sacrificed wisdom too."

APPENDIX.

I.

Remarks on Mr. Tyler's Lecture by Members of the College of Preceptors.

At the conclusion of the foregoing Lecture, Mr. Tyler introduced a class of his pupils who executed, to the accompaniment of music on the piano, a variety of movements with dumb-bells, rings, and wands. The subject was then open for discussion by the meeting, and the following are some of the remarks elicited as reported in the *Educational Times*.

Very excellent speeches also were made by Dr. Hessel and Mr. Oppler, which are here omitted. In my heart I honoured them for the patriotic enthusiasm with which, under the mistaken supposition of an attack by me, they came to the defence of "German Gymnastics" as practised by their countrymen at the present day; but, as their remarks were based on a misapprehension of my own meaning, doubtless bunglingly conveyed, I do not think it necessary to publish them. So far am I from disparaging what these gentlemen purposed to defend, that in all my public lectures on gymnastics I have endeavoured to pronounce an affectionate eulogy upon the Germans as the foremost of modern nations in devotion to physical culture, they having lifted it more than sixty years ago out of the sad limbo of Lost Arts, and having worthily and successfully cherished it down to the present day.

The Rev. A. Conder said, that he fully concurred with the Lecturer in the opinion that violent gymnastics, like violent muscular exertion of every kind, are most injurious. As a Cambridge man, he had had many opportunities of observing this; and it was well known that those who in early manhood were distinguished for their skill in athletic sports, too frequently paid the penalty for their disregard of the laws of health, by premature loss of vigour. He was acquainted with a large public school in Ireland, in which violent games were at one time very much in vogue; but it was observed that diseases of the heart became prevalent among the boys; and the result was, that the authorities had to prohibit the objectionable sports. Mr. Conder thought, therefore, that the system explained by Mr. Tyler deserved the serious consideration of all teachers, as it appeared to afford ample scope for the due exercise of the muscles, without the risk of producing any of the evils to which other plans often gave rise.

W. B. Hodgson, Esq., LL.D., F.C.P., said, that he had never listened to a lecture with which he was more pleased than he had been with Mr. Tyler's. He had not been impressed so much with the novelty of the views maintained in it, as with the clearness with which their soundness had been demonstrated, and with the constant reference to physiological principles. It was of great importance to remember that gymnastics deserved to be carefully studied, not merely, or even chiefly, for the sake of the body, but above all in order that the mind may acquire full development and strength. Some people might decry this doctrine as savouring of materialism; but it is now universally admitted that it is necessary to attend to the health of the brain as a condition of intellectual soundness and vigour; and it scarcely required to be proved that this admission virtually included the larger proposition, that the health of the whole body affects the condition of the mind. Every one must have had opportunities of convincing himself that this is the fact, and of the truth of Rousseau's assertion,—"The stronger the body, the more it obeys: the weaker the body, the more it commands." Dr. Hodgson expressed his concurrence in the principle laid down by Mr. Tyler, that the object of gymnastics should be to develop not mere strength, but rather rapidity and flexibility of movement, of which the exercises that they had seen performed were admirable examples. The reason for the preference had been clearly stated by the Lecturer, and it depended on the distinction between muscular force and vital force. These forces were by no means identical, or even convertible; and the latter might, and too often was, sacrificed to the other: a serious mistake, which amounted in fact to the sacrifice of the end to the means—of life to the instruments of life. For this folly there was now less excuse than at any former period, since the circumstances of civilized life rarely, if ever, required the exertion of great physical strength. The speaker said that he had always been a great pedestrian; and experience had satisfied him that the power of endurance exerted in walking twenty or thirty miles a day, depended much more on general good health, and especially on sound digestion, than on muscular development. With respect to the exercises which Mr. Tyler's pupils had gone through, every one must have been struck with their great diversity, their elegance, and their perfect adaptation to the requirements of females as well as of boys. He trusted that the Lecturer's system would be extensively adopted in this country, where there was a great need for well-devised and regulated physical education. Dr. Hodgson said he had no wish to discuss the question of originality, which had been raised, but which was comparatively unimportant. There could be no doubt, however, that the application of music to gymnastics was not new; it had been made years ago in the system known as the Kinder Garten; and the speaker had, six years ago, seen the girls at the London Orphan Asylum, Upper Clapton, go through a series of exercises accompanied with music.

F. J. Weightman, Esq., of Hollywood School, Brompton, said that as he had the honour and satisfaction of being the first schoolmaster in this country who had made use of Mr. Tyler's services for the instruction of his pupils, and had thus had good opportunities for observing the results of his system, he wished to make a few remarks on the subject. And first he would observe, that admirable as were the exercises which they had seen that evening, they must not be considered as anything more than fragmentary specimens of a complete and carefully progressive system, of which, consequently, they were altogether incapable of conveying an adequate idea. As the exercises required close attention and prompt action, they had considerable value as a means of mental training, and as aiding in the formation of habits of self-control and command. The memory especially was brought into a state of great activity, so that boys were able, with little or no external suggestion, to go through the whole or a long series of complex movements in their proper order. Another point was, that the pupils took very great pleasure and interest in the musical gymnastics, which they regarded not as a part of their school work—in which light drilling was too often viewed by boys—but as a real amusement and relaxation, from which therefore they derived the greatest possible benefit. The last observation he had to make was that Mr. Tyler's system was an excellent introduction to music, by developing and cultivating the perception of musical time. The speaker said he had often been much amused by the awkward attempts of beginners to keep time in their movements. At first many of them appeared to be quite uninfluenced by the music, but tried to do what was required by watching and imitating the movements of the other pupils. This necessarily prevented simultaneousness of motion, and led to highly laughable consequences. After a few lessons, however, even those who were the worst in this respect showed manifest signs of improvement; a new sense seemed to be awakened in them; and at length their perception of musical time became fully developed, and they were then able to perform the whole of the exercises, guided by the music alone. He considered that this, though a merely collateral advantage of the system, was one of considerable value.

Dr. Brewer, in moving a vote of thanks to the Lecturer, said that he was sure Mr. Tyler had no intention of giving offence to the admirers of German gymnastics, or of attributing to the systems now pursued in Germany the evils which he had so ably pointed out. He believed that the Lecturer employed the term "German gymnastics" to designate the system which he condemned merely as a brief mode of expression, which was justified to a certain extent by what had at one time prevalent in Germany, without at all intending to convey the impression that that state of things still existed.

J. P. Bidlake, Esq., B.A., seconded the motion for a vote of thanks to the Lecturer; and said that although he knew from experience that gymnastics, with the ordinary kind of apparatus, might be employed without injury, provided due care in superintending the exercises were taken, yet he believed Mr. Tyler's system was in many respects far preferable, and he intended therefore to endeavour to introduce it into his school.

Mr. Tyler, in acknowledging the vote of thanks, expressed his obligation to the meeting for the great kindness and attention with which he had been listened to, and disclaimed any intention to give offence by the use of the term "German gymnastics," his reason for employing which had been correctly interpreted by Dr. Brewer.

II.

Notices by the Press.

In pursuing my labours as a public lecturer, I have had the satisfaction of presenting the subject of Gymnastics to assemblages of every class; to the aristocratic visitors on Saturday mornings at the Royal Polytechnic, to the gentlemen of science and of critical acumen gathered at the meetings of the Metropolitan Board of Health Offices, to the learned scholars and the practical educators composing the College of Preceptors, and finally, to the more general and popular audiences who sustain the Literary Institutes of town and country. In chapels, in school-rooms, in lecture halls, in theatres, and even in the open air, during the last twelve months have I been trying to preach the ethics of physical regeneration, and to inaugurate a crusade against the embattled infidelities of bodily weakness and neglect. These manifold efforts have awakened in some quarters considerable discussion, among the newspapers and otherwise.

To those who shall, in this treatise, learn of the new system of Musical Gymnastics for the first time, it may be interesting to know somewhat of the voice of public opinion upon the subject, as echoed in the public journals. I therefore place together, in this article, a few of these newspaper accounts.

From The Albion, *Liverpool, December 21, 1863.*

"Among the many inventions and devices by which, of late years, new interest has been given to the pursuit of physical health by means of exercise, none is more beautiful or useful than Dr. Lewis's system of Musical Gymnastics, lately introduced in an improved form, and with marked success, by Mr. Hulley, at the Rotunda Gymnasium.

"The system is peculiarly adapted for ladies, because, while fully exerting, it does not overtask the strength of the participants, and it has a great charm for all who use it in the variety and liveliness of the exercises of which it consists. The appliances used are equally simple and ingenious. Amongst them are rings, balls, bags for throwing, sceptres, and other simple implements. By the varied use of these, a most complete education of the whole muscular system is secured; and by the adaptation of music to the exercises, a grace and fascination is thrown over them, which every one can appreciate, but which will be especially valued by those who are practically versed in the comparative merits of the different methods of gymnastic education. For its effects on the frame, the new system has such warm testimonies from principal members of the faculty as establish it to be fully as beneficial in its results as it is attractive in operation.

"We hope to hear of the extension of the system to many schools and institutions. The portability of the apparatus prevents the existence of any obstacle to its general introduction, and its popularity where tried is universal. It is most gratifying to find that, especially in the higher circles, the importance of gymnastics to both sexes is now generally recognized. It is not too sanguine to expect from this reform an absolute renovation of the race in process of time; and the great encouragement given to Mr. Tyler in London, is one remarkable symptom of its spread. All who aid in it may pride themselves that they have done something to banish from generations yet unborn many of the misshapen forms and languid constitutions which are a sad testimony to the physical declension that ensues when morbid habits of inaction are generally indulged."

From THE WEEKLY RECORD, *London, July 15th, 1863.*

"MUSICAL GYMNASTICS.

"A large and fashionable audience assembled in the Vestry-hall, Chelsea, last Monday evening, to listen to an address by Mr. Moses C. Tyler, M.A., and to witness the exercises of a class of Mr. Tyler's pupils in the new system of musical gymnastics. These gymnastics are entirely novel in their apparatus and methods; can be performed with equal success and benefit by ladies, gentlemen, and children; are executed to the accompaniment of music; and are not only very beautiful and conducive to health, but are also very attractive to those who engage in them.

"The chair was taken by George Wallis, Esq., of the Kensington School of Art, who presented Mr. Tyler to the audience in a very felicitous speech. Mr. Tyler's address was devoted to the importance of scientific physical culture, and to an explanation of the peculiar features of the new system of which he is the introducer in London. At its conclusion the platform was cleared, and a fine class of boys from Hollywood School, Brompton, took their places on the stage, and presented a succession of exercises which they had been taught. Their execution of these movements was in concert, and with musical accompaniment, and produced the greatest delight and enthusiasm in the spectators, who expressed their approbation by rounds of hearty applause. The exercises were, indeed, very exciting and picturesque, and must have a fine effect on the health and forms of all who practise them. They realized the description applied to them by the *New York Times*:—'They are poetry in motion, and motion set to music.'

"After these exercises had been given, brief speeches were made by Mr. Weightman, Master of Hollywood School, bearing testimony to the success of these gymnastics among his pupils; by B. Waterhouse Hawkins, Esq., the distinguished anatomist, whose eloquent approbation of the new system, from the stand-point of scientific observation, electrified the audience; by Dr. Woolmer, of Warwick-square, who expressed his views as to the importance of bodily culture, and his endorsement of the method which had been presented; by Mrs. Bessie Inglis, the accomplished lecturer, whose address was admirable in thought and diction; and finally by Mr. William Tweedie, who gave an account of his interest in physical education, and of his acquaintance with the gymnastic system which had been presented that evening, and who concluded by moving a vote of thanks to Mr. Tyler for his address, and to the members of Hollywood School for their brilliant part in the doings of the meeting.

"A vote of thanks to the Chairman, Mr. Wallis, was also heartily carried.

"The audience separated at a late hour, apparently highly delighted. Among the distinguished persons present we observed the intellectual face of Elihu Burritt, 'the learned blacksmith,' who seemed intensely interested, but whose delicate condition of health prevented his taking any active part in the meeting. As a whole, the meeting was a rare and striking success."

From the MARYLEBONE MERCURY, *January 1864.*

"METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

"The usual monthly meeting of the above association was held at the Scottish Corporation Hall, Crane Court, Fleet Street, on Saturday, the 16th inst., Dr. Thomson, F.R.S., president, in the chair.

"*Physical Training.*—Mr. Moses C. Tyler, M.A., who was present for the purpose of exhibiting by means of some of his pupils his system of physical training for schools, said that his mode of training claimed to be a compact and simple method of physical culture. He could only give a few samples, and those of the simplest nature, although whole schools could go through a similar course, and the usual accompaniment was a piano. A half dozen youths were then introduced, and to the chiming of a bell and the beating of a drum passed through a number of very graceful exercises with dumb bells, rings, and wands. Mr. Tyler at the conclusion said that the object of his system was, by exercise, to develop the whole of the muscles of the body, and that it was adapted equally for the strongest men or the most delicate ladies; and he would take the liberty of mentioning one result that his system had accomplished. He had been told by masters of schools where it was introduced, that that which before had been looked on as a mere mechanical effort was now viewed as a pleasing recreation. Another of the advantages would, he believed, be that it would do away with the tendency to round shoulders, which prevailed among both girls and boys, by the bending over the desks to their lessons. Mr. Liddle said he thought he might express the thanks of the association to Mr. Tyler. So far as he (Mr. Liddle) had seen of the system, it appeared to recommend itself for general adoption.

There was nothing violent in it, or likely to strain the muscles; and it would give health and physical development to both boys and girls. He would move that a vote of thanks be given. Dr. Druitt seconded. The Chairman said that he thought the system highly deserving of encouragement. Dr. Lankester had no doubt that it would be beneficial. The vote was carried unanimously."

From the CITY PRESS, *March, 1864.*

"LONDON MECHANICS' INSTITUTION.—On Wednesday, M. C. Tyler, Esq., M.A., gave a lecture on the 'Art of Gymnastics,' which was received with the approbation that it well deserved. Mr. Tyler pointed out the anomaly that, of those ancient nations whose intellectual works remain as models in literature, the Greeks, Romans, &c., actually devoted more time and space to the due training of the body than to mental culture, whilst most modern nations, until a very recent period, had neglected the muscular arts, or had caused them to become matters of reproachful tendency. The energy and effective address of the lecturer placed the cause in a favourable point of view, and having successfully pleaded the necessity for muscular exercise and recreation, he showed how, by musical accompaniment, the graceful motions imparting muscular power could be made most acceptable to childhood and to classes. Mr. Tyler received and deserved the thanks of the audience for his manly and patriotic influence in favour of judicious exercises and games."

From the STANDARD, *February 8th, 1864.*

"ROYAL POLYTECHNIC INSTITUTION.—The third fashionable morning entertainment was given on Saturday, February 6th. Among the novelties presented, was a lecture on 'The Art of Gymnastics,' by Moses Coit Tyler, Esq., M.A., illustrated by twelve of his pupils. This is a very interesting exhibition, abounding in graceful evolutions by the pupils. Mr. Tyler's system repudiates the course of gymnastics which prevailed some years ago, by which many boys were seriously injured. By his plan, the exercises are so regulated that females may adopt the system without any fear of injury from violent contortions of the body. Mr. Tyler's accompanying address on the importance of gymnastic training as promoting physical health was very striking."

The *Morning Advertiser* (Feb. 2) describes the exercises as "exceedingly graceful, manly, and beautiful;" the *Morning Star* (Feb. 2) as "at once attractive and useful as a means of physical development;" the *Daily News* (Feb. 2) as "something wonderful."

From the WHETSTONE CIRCULAR, *March 12, 1864.*

"WORKING MEN'S INSTITUTE.—Mr. Tyler's lecture on 'Gymnastics, Ancient and Modern,'' on Thursday evening last, was deservedly well attended. We went to get an idea worth carrying out, and we got it. The development of the intellectual to the neglect, and to a certain extent at the expense, of the physical energies of youth, has hitherto been sadly the rule in all our systems of education; but in Musical Gymnastics we find a remedy which cannot be gainsayed. How shall we enumerate the advantages of the system? The expense of its accessories is trifling, and the space for carrring it out can be found in any school-room of moderate dimensions. Moreover, parents cannot object to the system, seeing that their boys and girls can all engage in it, for its movements do not require turning over on heads and heels, or vaulting on each other's shoulders. Active motion without severe bodily exertion; muscular, as an aid to vital action; endless change of position; and the calling into play every joint and muscle of the limbs by turn, are its principal features."

From the Bethnal Green Times, *March 26th, 1864.*

PEEL GROVE INSTITUTE.

"Mr. Moses Coit Tyler, M.A., the celebrated Professor of Gymnastics, gave a highly interesting lecture at the above institute on Monday evening, March 21st.

"The lecturer gave a historical sketch of the gymnastic art, and quoted the opinions of eminent men concerning it, and concluded by exhibiting his new system, which is evidently far in advance of any other, with a class of boys who have been under his training. The audience was no more spell-bound by the graceful evolutions of these lads, all of which were performed to music, than they were by the lecturer's eloquence and forcible rhetoric. Their fixed eye, their riveted attention, and oft-repeated bursts of applause, were sufficient to show their appreciation of the speaker's delineation.

"Mr. Tyler's genius is well directed towards awakening an interest in the neglected subject of physical culture. In his hands it is sure to revive. We wish the gifted lecturer and his good work abundant success."

III.

The Gymnastic Club at Regent's Park College.

The following expression, as the latest one received from the different institutions with which I am connected, I append for the value it may have to those who are interested in the practical working of the new gymnastics as an educational process:—

"*Regent's Park College,*
"*April 19th, 1864.*

"Dear Sir,—I have been requested by the Members of the Gymnastic Club at Regent's Park College, to express to you their satisfaction and pleasure in receiving the course of exercises, through which you have led them, this last quarter. They would specially notice the interesting character given to the practice by the introduction of music.

"They already feel the benefit of these exercises, and are persuaded that, if persevered in, they cannot fail to accomplish their object in training all the muscles to a prompt and vigorous action, and so in promoting a sound physical culture.

"With warm assurances of regard, and with grateful acknowledgments of your kind attention,

"I remain,

"Yours very truly,

"JAMES SULLY,

"*Hon. Sec.*

"Moses Coit Tyler, Esq."