

almost inexpressible; and no one nowadays doubts the value of instruction, even if it goes no further.

The saying that a little knowledge is a dangerous thing is, to my mind, a very dangerous adage. If knowledge is real and genuine, I do not believe that it is other than a very valuable possession, however infinitesimal its quantity may be. Indeed, if a little knowledge is dangerous, where is the man who has so much as to be out of danger?

If William Harvey's life-long labors had revealed to him a tenth part of that which may be made sound and real knowledge to our boys and girls, he would not only have been what he was, the greatest physiologist of his age, but he would have loomed upon the seventeenth century, as a sort of intellectual portent. Our "little knowledge" would have been to him a great, astounding, unlooked-for vision of scientific truth.

I really can see no harm which can come of giving our children a little knowledge of physiology. But then, as I have said, the instruction must be real, based upon observation, eked out by good explanatory diagrams and models, and conveyed by a teacher whose own knowledge has been acquired by a study of the facts; and not the mere catechismal parrot-work which too often usurps the place of elementary teaching.

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## PHYSICAL TRAINING AND ATHLETICS IN THE SCHOOLS.

BY

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**N**O indoor training is to assume to take the place of open-air play in the elementary schools. Calisthenics are unobjectionable, but with little people they are no substitute for natural play. Playgrounds may cost more, but they are worth more. No matter what they cost, it is the public business and function to provide them. Happy is the town which does it early, when it may do it well.

If the buildings are hygienically pure, if there is sufficient air space and sunlight, if the mechanical appliances and the possibility of their refusing to work are kept at a minimum, if the grounds are ample and dry, and if teachers are sane about the relations of work and of freedom in children, there need be no fear for physical training in the elementary schools.

This is not saying that special teachers, who will quickly see the special needs of multitudes of children in the city schools and who

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will aid the class teachers to see the need of artificial exercise, which must often be substituted for real work or natural play, are not desirable in large systems of schools. I think they are; but the special circumstances ought to govern.

It is not necessary to discuss the advantages or disadvantages of different systems of physical exercise. All have advantages and are practically beyond criticism. Adaptation to conditions is the paramount and not very serious question. Enthusiasts will not agree with me; it is their mission in life to stand up for their own, and they generally do it well. If we let them do that and give them their chance, they ought to be content without expecting that we will let any "system" own the schools.

Passing from the elementary up to the secondary schools, we come upon different situations, both as to the schools and the pupils. The schools are likely to be almost exclusively in congested districts. The pupils have gotten over the kind of play that is best for them. They have become more constrained and a trifle more conventional. They resent leading strings—and they know a lot that is not so. They are at a critical stage in the bodily development. They do need less care, but a little more guidance, sympathetically and unostentatiously given. If the population is not dense, there is little trouble, for they get about all the help they require in this connection in their ordinary work and natural play, but at the centres of the cities it is hardly so. There a gymnasium is well, and often practicable. There is no doubt whatever of the advantage of regular work in a gymnasium, both for young men and young women. If they do not commence it at the high school age, they are not likely to do so at all.

Whether the public high school should supply this desirable addition to the opportunities of youth is not so much a question of educational necessity as of neighborhood feeling and expediency. Often there is no local need for one, and no local appreciation of the uses of one. Often, private enterprise or associated enthusiasm, like the Christian associations, the Turner societies, or the athletic clubs, provide them. While the high schools are not bound to provide them, still, if the deliberate sentiment of their constituencies will sustain them in doing so, it may be done without invading any sound principle of the educational system. The difficulty is that when one school does it, the others think they must, in order to be up to the times, and they undertake it upon a basis which cannot succeed. A gymnasium is worthless unless thoroughly equipped and made inviting, and unless managed by specialists who are themselves not only able to use the apparatus in attractive ways, but are also sympathetic and inspiring teachers. Gymnasium work will be without result unless very regular and very persistent. *With all these* it will be with splendid result. Without a ready and popular support, and a clear understanding of all the conditions which alone can assure results worth the while, it

is safe to say that the establishment of a gymnasium in a secondary school is a move not to be encouraged. It must at all times be had in mind that so long as pupils live at home, there are some things concerning them which may well be left to the homes to see to.

When we come to the colleges and universities the conditions are again different. The students are away from home, with all that implies. Much closer mental application is exacted. The need of regular exercise is much ignored. Youngsters dare fate senselessly when they are free to do so, and in college they are likely to come into a larger freedom for the first time. The need of a complete gymnasium with ample instruction, and required attendance at least in the freshman, or the freshman and sophomore years, is manifest enough. Here gymnasiums are both necessary and practicable. Ready and sensible medical supervision of all the students and all the affairs of the institution is also very desirable.

The physical training of a whole body of students evenly is better than the training of a few elaborately. But inevitably some will excel, and such will have special ambitions, and they will gain special attention. Good rivalries will ensue, not only between individuals in the same institution, but between experts in different institutions. Then of course there will be the utmost effort and the most exact and complete preparation.

I am not now referring to sports, or games, or to "teamwork" at all, but to the strength, endurance, and skill of the individual man, and to competitions where they are put to their highest tests. They are wholesome and quickening in every way—nothing short of a spur to the schoolboys, and an inspiration to the educated manhood of the country. If the notable contests are narrowed down to a few men in any one year, the opportunities are open to all, and very large numbers get the uplift which goes with them. The conditions of the competition are well settled, the management is exact, and the opportunities for frauds are very slight, and the temptations hardly perceptible. The boys manage these contests themselves, and beyond all doubt they manage them upon a plane so high that it ennoble the managers, pleases the contestants, and satisfies all. The uncertainties do not invite betting. The disappointments are not deep. All honor the victor, and none more than his closest competitors, for none know the cost of the triumph so well as they. If the achievement is noteworthy, it is at once known in every part of the country. There is not a college boy worth to the country the salt which he eats who does not know that in 17 of 19 recognized athletic events the world's record is held in this country. Most boys of that kind can tell you that in April last, Rose, of the University of Michigan, put the 16-pound shot 48 feet, 7 1-5 inches, and that on the same day Dole, of Stanford University, cleared the bar in the pole vault at 12 feet, 1  $\frac{3}{16}$  inches, and that no one in the world had ever done so much before. They can tell you that in the eighth, quarter, half, mile, and

2-mile runs, and in all the jumps save one, American boys have beaten all the other boys in the world. It makes some of us sedate ones dizzy, if it also makes us proud, when one American boy stands still and then jumps 11 feet, 4 7-8 inches, and another stands still and then clears a bar at 5 feet, 5 inches from the floor, under regulations, and before the crowd, with nothing but strength, skill, and courage to help them,—when we know that no one ever did the like before.

The English say that we strive especially for the records rather than gain them from normal work; that we concentrate supreme effort in a few, rather than get the benefits of the work for all; and that we almost lose the point of physical training altogether. They must say something, and it must be admitted that there is something in what they say. But our way is the American way and theirs the English way, and we are both getting on very well—and we are all mighty glad that we are getting on so well together. We are each likely to tell the other much that it is very desirable to know.

The intense application, and the long and exact special training incident to these sharp contests, seem to require caution against “over-training” or the development of some part or function of the body at the expense of some other. There is danger enough of this to claim educated and experienced oversight. Aside from the possibility of this, there seems to be nothing hurtful to the participants or demoralizing to the student body from this high grade physical work or from the ensuing contests.

The distinction between physical training and “athletics” seems to lie between indoor and outdoor work; between what institutions do for students and what students do for themselves; between work performed to keep health and promote strength, and sport for the excitement and fun that are in it; and between the work of an individual and that of a “team.”

By the way, a good part of the people in New England hardly seem to know what a *team* is. Probably the ones who think that a horse and wagon make a team will hold that a boy and a bat make a baseball team, or a boy and a shin guard make a football team. But those of us who agree that it takes at least two horses to make a horse team will understand that it takes at least nine boys, with all appliances, to make a baseball team, and eleven boys, with astonishing equipments, to make a football team, and we are not surprised that it takes from fifteen to twenty boys to make a first-class baseball “nine,” and all the way from twenty to forty to make a formidable football “eleven.” But whether it be two, or whether it be forty, the “nine” or the “eleven” pulling together make a “team.”

Any criticism brought against physical work in the schools is stirred by these team contests. No matter how many it takes to make a team, it takes thousands and more to make a game. The crowds of fervid partisans on either side; the banners and streamers, and songs, and

horns, and calls, and yells, and yell-captains; the officials, and coaches, and trainers, and doctors, and rubbers, and bottle bearers, and scrubs, and athletic statesmen, must all supplement the teams which struggle for the mastery and for the prestige of their universities, in order to have a game. There are some who dislike all this. If you are out for fun, it is quite as well to have it. The men who know little about it are able to find enough to criticise. Old men, who never thumped one another when boys, are apt to be against it. Boys who do embroidery work while their mothers read poetry to them, men who want a fire engine or a lifeboat to slow down for fear something might break—without seeing that something *must* break if it does slow down, and men who hug the constitutional negatives after the council is over and the bugles have sounded the advance which must enforce the constitutional commands, or save the Constitution itself, are hardly likely to be in love with games which turn upon strength, force, nerve, sense, and skill.

But the American crowd likes them. Training has to be sustained, perhaps required. The strenuous games attract the multitude, perhaps in a measure which has some perils in it. The fact that the crowd likes them is not against them. That people do *go* is no reason why they should not be allowed to go. The common feelings are not necessarily all wrong. The crucifixion of the flesh, the breaking of the spirit, have no part in modern ethics, and no share in twentieth century teaching. The fair questions are—Are these great games fraught with unpreventable evils, which outweigh any good they may have? Are they on the whole good, or bad, for the youth of the country? And, what ought to be the attitude of the school concerning them?

We would meet these questions squarely. To do that we must face the exact criticism, and focus the discussion. Baseball is a natural college game. It is open, and all may see all that occurs. It is not so technical that people who follow ordinary pursuits cannot understand it. It is relatively free from dangers, and while it attracts the throng, it is not encompassed by many temptations. It comes in the spring, when there must naturally have been almost a year of residence in college. Rowing has many good features, and not many bad ones. It seems to encourage gambling in some measure, but otherwise is mostly beyond criticism. Tennis is ideal, but many young men want heavier work. Golf is hardly a college game; it has been said that it is a state of the social mind. The game which holds the centre of the stage in the fall, and draws all the criticism, is football. It has more ins with more outs than any other college game invented. The troubles with it are not in the high schools, unless it is in the influence of the college game upon them. If there is trouble, it is in the college game itself, in the consequences to college boys, and the general bearing of the game upon the thought and feeling of the country.

### 338 SPORTS, PASTIMES, AND PHYSICAL TRAINING

Let us put the criticism as pointedly as we may. This is what "they say."

1. That the game is dangerous and exhausting.
2. That the 'varsity teams do not represent the bodies for which they stand.
3. That the game makes heroes of men who have no right to the commendation of a democracy of learning.
4. That men who give the time and energy required in successful football, cannot maintain positions as good students.
5. That the coaching system is vicious, training men to evade the rules when that will aid success.
6. That the greater part of the game cannot be seen by spectators, and that this aids the evasion of the rules, and worse; that it encourages real battle rather than open manliness and a chivalrous spirit on the part of the players.
7. That it induces connivance on the part of students and graduates, on the part of the sporting element in the community in larger measure, and on the part of college authorities in some measure, to get men who can play a strong game by paying them for it in one way or another, and without reference to their standing in college, or their right to admission at all.
8. That it is too expensive for sport, and gathers more money than ought to be under the control of students, and that the game turns on factors which money brings into it, and therefore that it does not afford a fair basis for intercollegiate contests.
9. That it breeds a good deal of loafing, gaming, and drinking, and does not make for educational effectiveness and sound living.
10. That success is such a factor in college prestige and university preëminence, that the popularity of the game is so general, the pleasures of university triumphs so delightful, the meaning to youngsters who are yet to go to college so significant, that the authorities fall short in courage to deal with the evils of it, and that these are degrading to the student life of the whole country.

Now, I feel assured that none will have the hardihood to deny that this list is sufficiently comprehensive, or that it is lacking in the effort to give point to criticism.

Some will deny the facts or the reasonableness of the objections, but the facts are not overstated, nor is much of this criticism without reason. It may well be surmised that the game cannot endure as a college sport unless such serious evils as common knowledge associates with it are admitted and corrected. If that is done, it must be by the men who manage or are responsible for it.

The youngsters and some of the "oldsters," who know all about it, won't tell as frankly as my friend Governor Black tells about the baseball team at his summer home in New Hampshire. He says they can never entertain any doubt about results. They make sure that among the neighbors' boys, or the invited guests, there is a pitcher

from Harvard, a catcher from Dartmouth, a shortstop from Columbia, and a first baseman from Yale, etc., and then, if there is any residuum of uncertainty, they send over the mountains and hire professionals enough to guard against the possibility of any unseemly slip. That will do for a summer frolic, or for an after-dinner speech in mitigation of a New York statesman's working himself to death over a farm in New Hampshire in vacation time, but it will hardly do for the regular order of intercollegiate contests in term time. Yet there are coaches and graduates, and athletic politicians, who could tell about as strong a story about college football, and tell the truth—if they would.

As I have been reflecting upon this address, I have been bringing together the evidences which have reached the public of unmistakable fraud in getting and keeping men in the teams who are in college for nothing else. These evidences cannot be presented here, but they may be indicated. One of the leading universities in the country is called upon to defend itself against the charge, brought upon it through the course of its athletic managers, that it has in its team a bruiser who has made the round of three or four universities to play in this game; another that it has a player who is a professional pugilist; and a third that its football team is largely sustained through political and other jobs which thinly disguise bribe money given to the players in order to keep them in the university. That the atmosphere of the game as now managed predisposes to gaming can hardly be doubted by any one with his eyes open. But with me it is not wholly a matter of inference. I have sat in a hotel lobby before a great game, and seen scores of boys from two leading American universities daring each other to put up money on their respective teams, and when the dare was accepted, and the terms settled, as frequently happened, they placed their money in envelopes, which they gave to the clerk of the house, to be delivered to the winner after the game. The thing could hardly have been worse, and it surely would not have been more bald at a racing centre, and with professional sports.

The advantages of the game are unmistakable. It makes for pluck, nerve, endurance, self-control, and alertness in emergencies. Fair students, who are successful football players, are not only among the very best men in college, but their promise of marked success in life is exceptionally high. The game brings to many boys their first real ambition to do something better than others can do it. It smells of the ground, and that is healthful—physically and mentally healthful. Its influence upon the thought and life of the players is quickening and steadying. It makes for generalship and for organized effectiveness. I have no doubt about American football having had something to do with the new method of fighting, and the new measure of energy and resourcefulness shown by American boys at El Caney and San Juan, at Manila and Santiago. Moreover, it is exhilarating, and invigorating, and it binds men together and develops class feeling and

college spirit through splendid coöperative effort. It brings colleges to the fore in the thought of the masses. And it takes the conceit out of boys, and in many ways makes for genuineness in living. On the whole, it goes as far as anything else in the universities to make their thought square with the affairs of life, and lead educated men to the places of the most decisive consequence in the concerns of a great people.

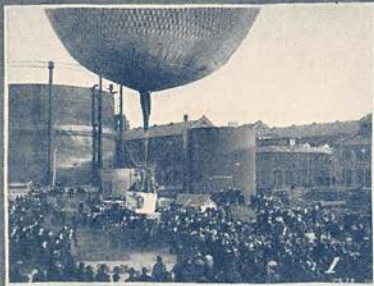
It is all this which makes the game so well worth fighting for. But in the end it must be said that if these things are to be gained at the expense of fifteen lives, and many hundred serious injuries in a season, or, worse yet, at the cost of a widening spirit of lawlessness, the cost is too great, and all these advantages will have to be foregone or gained in some other way.

All true and pure sport capable of use for college contests must be fought for. The better the sport the truer this is. As it becomes exhilarating and popular, the larger and meaner are the barnacles which fasten upon it. But the more quickening the struggle and the more uplifting the spectacle, the more it is worth contending for. To the young men and women who are in our universities, who know not much of physical effort, and practically nothing of physical danger, there is more legitimate leaven which makes for lives that can do things, in the rush and struggle, the strategic assault and defence of a 'varsity football team on a fall afternoon than is brewed in a good percentage of the college classrooms of the world in a semester. Then the game is worth purging and saving. Of course, there are enough who think the game will last without cleansing. If it should, it would distinctly lower the educational and æsthetic plane of American colleges, and when that is ascertained, something decisive will be done. Would it not be better to do it now?

The evils may be put out of it by authority. Students may be expected to go as far in their excitements as the authorities who are charged with the duty of regulating their strenuousness and enthusiasm will allow. They will have no difficulty in finding excuse for excesses which faculties live to see—and refuse to see. And with boys who have the stuff in them the outlook is clear or cloudy, and moral fibre becomes firm or flabby as those to whom they look for commendation, or remonstrance, or punishment give, or fail to give, them about what is their due.

Until all possibility of it disappears, the moral sense of America should rebel against any view of college government which leaves college boys to go to the bad without much hindrance. The theory that all a professor has to do is to be intellectually, or even *unmorally* scientific, may have to go in some countries, but it should never be accepted here. Fathers and mothers who give their sons and daughters over to any such intellectual leadership as that deserve the distress which unrealized hopes are likely to inflict upon them. It is not a question of college freedom. Freedom is not license any-







BALLOONING, FENCING, DUMB-BELLS AND WRESTLING

1. A Balloon Ascent. Just Leaving the Earth. Dr. Thomas photographing the crowd beneath him. The other occupants of the balloon are Charles Levee and the Comte de la Vaulx.
2. A Society Girl who is a devotee of fencing, in a bout at the Fencing Club.
3. A Gymnasium Class at dumb-bell exercise.
4. Wrestling.

where. Freedom is stainless. There is no such thing as freedom to do wrong, in college any more than in the state. I am not unmindful that the point of sport and of college contests is lost if college faculties manage them. Endow American sport, or American college athletics, and you doubtless expel the soul and spirit from them. But students must distinctly know that their management must keep in step with good morals, and in key with all the beneficent ends for which colleges and universities exist. More than the point of sport is lost if this is not so.

If in any case students run amuck, or get to running the faculty amuck, the board would well install a new faculty, and if they should be too much for faculty and board together, parents would well withdraw their sons, benefactors would well withhold their gifts, affections would be well placed somewhere else, and what is left would well go down into the depths together. The right to have free contests and exhilarating sports, and the right to gain the benefit of managing these for themselves, is not to be confounded with the right to carry the college into unseemly places, or to gamble under the name and colors, and lights of a university. Boys are to have freedom to manage college sports only when they realize that they are managing for all, and when they manage in ways that hold out welcome to every honest man, and bring no blush to any fair and modest cheek.

But let it be repeated that where the wrongs come in, it is less likely that they spring from student inclinations than from official inefficiency. Students sustain a government which governs. All they want to know is that it is strong enough to govern, and that it is sane and sympathetic enough to govern well.

Whether or not tariffs are to be regulated by their friends, it is mighty true that boys are. No man is much of a friend of boys who has forgotten about being a boy, who cannot see things from the outlook of the boy, or who cannot sympathize with the activities in which every real boy must engage.

If I were a university president, I would not only have part in the athletics because I liked to, but I would use the sports to make management easy. I would go to the hurrah meetings as often as the crowd would welcome me, and I am confident they would welcome me as often as I was genuine about it. I would go down into the gymnasium pretty often, and before I started I would take off my shell and leave it in the sanctum. When the university lined up for an issue, I would be with it. I would pay my dollar, and get into the crowd, and yell for the flag, and if we won I would embrace a freshman quite as quickly as the professor of philosophy—who might be shocked by it. I would earn the right to have my word welcome at the athletic end of the establishment. I would not put it in very often. I would never impose it upon a boy management that was square, and decent, and right. But I would hold the right against the time when it was needed to bar out the vicious and temper the

excesses: against the time when it would bind all the parts together, and keep the whole upon the earth and rather near the middle of the road. On suitable occasions, I would try to speak the word in the crowd which would marshal sentiment, set up standards, and fix the pace. I would draw upon the moral sense, which is never lacking in a college throng, to brace up the weak, and cool off the heads that get unduly heated. If, after that, the bad persisted, I would join the issue so squarely that in a little time the air would be clearer and the outlook more encouraging,—or else the demonstration would be absolute that a new administration would be a good thing to have.

There ought to be no difficulty about the university managing the boys who manage the athletics, or settling the tone and character of the athletic work. The authority is as absolute as the responsibility is immediate. It is the common law of the schools that their authority covers everything that may aid their usefulness or stain their good name. None can use the name or fly the flag of an institution without submitting to its direction, or else being posted as a fraud. Only a sincere and authoritative word to any student should be sufficient. If students ever band together to resist the deliberate word of college authority, it is not altogether certain that they are wrong, but there is no possibility of doubt about the fact that they need a walloping that will last a student generation, and be handed down to student generations which come after; or that the college needs a government that can govern. But happily be it said that such cases are so unusual as to be hardly in the reckoning at all.

Then let us hope that the great universities will serve the good cause of physical prowess and strenuous sport in all the schools by saving this game. If they request, the rules will be changed so as to make the game more open and attractive, less hazardous and unseemly, and so as to make the maiming of an opponent under the pile impossible. A university direction that none shall represent it in an inter-university contest but a matriculated student who has been in residence a year, would very nearly settle matters. The factors of a game are bound to square with the honor of the university, and the management of the university is bound to see that they do. The insistence that the gate fees, which are senselessly high, having amounted to \$60,000 at a single game, shall be at a rate which does not discriminate against great numbers who love the sport and want to follow the flag, would be a good preventive medicine against a malady that is becoming too common and serious in university life. If, beyond this, it might become distinctly understood that there is nothing in common between a university and a saloon, and that it is a crime in the university, as it is in the state, for a boy to gamble on university contests, about all the grounds for the criticism which I have set forth would be removed.

If it be said that these measures would take the life and the interest

out of the game, I answer that I do not think so, but if so, then the life ought to go. Any game which is not consistent with full college work on the part of the players; any game which does not beget moral character and true manliness on the part of the truest lovers of sport; any game which must be handed over completely to professional coaches, who use up boys to vindicate systems of coaching, and who are strangers to the main and enduring purposes of college life, will have to go. If the enthusiasts are not on their guard, they will prove more than they would wish.

Possibly I have occupied too much time with college athletics, but it comprehends the whole matter. Children imitate their seniors; the schools below imitate the schools above. And they are more aggressive in imitating the vices than the virtues. The high schools, and the little boys in the primary schools, and the kindergartens imitate the play and the sports of the colleges, and they copy the worst phases without appreciating the best. Put college athletics upon a sound footing, and you make matters easy for all the teachers and all the parents of the country. The responsibility of college authorities concerning the purity and influence of all play and sport, of all games and contests, is obvious and weighty. The better sentiment of the country should enforce the responsibility. The colleges and universities will willingly respond, but they need the support of insistent public sentiment.

All of the responsibility is not upon the colleges. The extent to which students in the high schools are often encouraged to seize upon a freedom which is only permissible with older students, and to use it in dangerous ways, is absurd. It seems to be going from athletics to organizations and activities of every kind. The responsibility of boards of education and faculties is immediate, and the authority is absolute. It is needless to say that whatever involves the good name of the school, that whatever concerns the moral sentiment of boys and girls, is to be dealt with. We all owe something to them. I am for paying what we owe.

Five or six years ago I had occasion to leave my home early on the morning after Thanksgiving—the morning corresponding to this one—to meet an engagement at a teachers' association. On the way the football team from one of the central and conspicuous high schools of the country, who had been out to play a Thanksgiving game, came into the car on their way home. They had been victorious, and their conduct was beyond description. Boys of the high school age, who manifestly lived in respectable homes, seemed to think it manly to indulge in profanity and obscenity with a familiarity which was shocking. They passed a bottle of liquor from one to another, and when the train stopped, went out to have it refilled. The conditions were appalling and most suggestive. I think I owed those boys something; I did what I could to pay it. I think I owed the management of that high school something: I did what I could to pay that. But the

supreme and controlling wrong of it all was that they should have been travelling alone, and under such conditions at all. I lift up my voice against a view of athletics or administration which could make such a gross development, such a menace to young men, possible. Does one say that they are to take care of themselves, and to learn to do it by doing it? Yes, when the time comes, and gradually. Not at the high school age, nor at any other time if there is not sufficient promise of maturity and sense enough to do it. Parents and teachers are on earth to do it, and they had better not abdicate the function.

Let me, in coming to a conclusion, recapitulate. This is my physical training and athletic creed up to date. But this, like all creeds, will perhaps need rewriting now and then:

1. Work and play are vital to the growth of physical symmetry, strength and skill, and the rounding out of the perfect man.

2. The more real the work, and the more natural the play, the better.

3. Where these are lacking it is desirable to create artificial means for supplying them.

4. Mind, heart, and body are dependent upon each other, but not equally dependent.

5. Physical training is not to be counted among the fundamentals or the essentials of the common school system; it is not incompatible with that system; special circumstances are to determine whether the schools should assume it. There is little call for it in the rural districts and small towns, but more where the population is congested and resources are ample. There is not much call for it in the primary schools, but more in the advanced schools.

6. The main business of the common elementary schools is to initiate the correct use and expression of the intellectual faculties, with such reference to moral sensibilities as the régime of the system may impose and the opportunities of teachers, with correct moral perspective, will afford—and with such regard for health and balanced physical development as sanitary schoolhouses and sane teachers, with a little general assistance by special teachers, in the cities, make practicable.

7. In the secondary schools special facilities for physical training, such as gymnasiums, are quite permissible, but here too the conditions of population and the neighborhood feeling should govern, and nothing should be undertaken without a good understanding of all that is involved, or without carrying out all that is attempted in good form and completely.

8. In the advanced institutions physical training is practicable, should be provided for, and, generally speaking, may well be required.

9. Contests of strength, endurance, and skill between individuals are desirable.

10. The lowering of records is a distinctly laudable ambition, because of the bearing of individual accomplishment upon all concerned.

but the highest consideration is the growth of physical proficiency in the multitude.

11. Team contests have a more distinctly invigorating influence upon students and upon the common thought of the country than individual contests, but they are encompassed with corrupting tendencies which demand the alert oversight and more decisive protection of competent authority.

12. Students are to manage student contests, but only when the management is thoroughly compatible with the ideals of the institutions represented. There is no school freedom not consistent with the ends for which schools stand.

13. An institution dishonors itself when it permits one not a regular and genuine student to represent it.

14. Any physical work or contest incompatible with regular student work bears heavily upon a few and discredits all of the serious work of an institution.

15. A system of coaching which cares nothing for the man who is a factor in a game, which stops at no method, which cares only for success and for the prestige of a professional coach, and which is not representative of the honor of an institution, is vicious and intolerable.

16. A contest between educational institutions must be free from features which make for profligacy or corruption.

17. The use of athletics to advertise an institution is reprehensible.

18. No sport can stand for an institution which, by reason of the large gate fees, bars out (or ought to) a large percentage of the constituency of the institution who want to be present at its contests.

19. The friends of college sport will have to fight for its integrity, and the more inspiring it is the more the barnacles of society will seize upon it and the more true manliness ought to contend for it.

20. Physical exercise and open-air play are very great factors in the development of men, and in the evolution of the social health of a people. Educational administration should make use of them, and should be held responsible for keeping them clean and making the most of them. In the athletics of the school system as in everything else associated with the schools, the government of the schools is bound to govern.

These seem like commonplaces and platitudes. It is hoped they are. If they are, there is no dissent. But it is rather obvious that some of them may claim a fuller measure of enforcement.

I have discussed the physical training and athletics for boys. I am quite aware that there are phases of the question which concern the girls.

This is no mean subject. It goes to the decline of physical vitality in the cities, and would postpone the death penalty which nature imposes upon people who are useless. It not only bears upon the character of the educational system and exemplifies the conscience

of the nation, but it goes to the making of character and conscience in school and nation. The plays and sports of a people, when guided by conscience, make for toleration and forbearance; for strength which makes littleness and petulance unseemly; for world relations which are self-conscious and direct; and for an effectiveness on occasion which uplifts free institutions in the eyes of all mankind. Life in the open gave us Lexington and Concord and Bunker Hill, and life in the open must make good the assurance that "there they will remain forever."

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### PHYSICAL TRAINING AT HARVARD.

BY

DR. DUDLEY A. SARGENT, DIRECTOR HEMENWAY GYMNASIUM, HARVARD UNIVERSITY. AUTHOR OF "HEALTH, STRENGTH, AND POWER," ETC.

If the work of Dr. D. A. Sargent, the director of the Hemenway Gymnasium, at Cambridge, Mass., were expunged from the field of gymnastics it would be found that America's original contributions to the cause of physical training have been comparatively, until recent years, few. But with his inventions America is able to make a very respectable showing of originality. His "chest weights" in their various forms, and his other machines in the American gymnasium, give it an individuality and a national character that it would otherwise lack.

The athletic clubs, the Young Men's Christian Associations, and most of the college gymnasiums have adopted Dr. Sargent's ideas very largely, and the following extracts from his address before the Physical Training Conference are, therefore, useful in describing the practices of those gymnasiums as well as that at Harvard under Dr. Sargent's immediate supervision:

That you may understand what the system is in its present form, as carried out at Harvard University, let me ask you to follow me through one of the physical examinations of a student, and see what we do for him. Every student who enters the university is entitled to an examination, and 87 per cent. of the whole number avail themselves of this privilege.

As soon as the student presents himself at the director's office (which is done by application and appointment), he is given a history blank, which he fills out, giving his birthplace, nativity of parents, occupation of father, resemblance to parents, natural heritage, general state of health, and a list of the diseases he has had, all of which information is absolutely necessary in order for the examiner to put a correct interpretation upon the observations to follow. The student is then asked to make certain tests of the muscular strength of the different parts of his body and to try the capacity of his lungs.

He then passes into the measuring room and has his weight, height, chest girth, and fifty other items taken. His heart and lungs are then examined before and after exercise, and a careful record made of the condition of the skin, muscles, spine, etc., which the tape measure fails to give.

All the items taken are then plotted on a chart, made from several