more than any other existing agency in the reform of juvenile tramps.

The foregoing is but a suggestion as to the treatment of vagabondage. In the space at my command I have only been able to sketch a broken outline around what I consider the main points, which are as follows:

(1) All charity shown to beggars should be put into the hands of municipally employed specialists.

(2) Each town should have a police rendezvous for vagabonds, conducted on such principles that the seeker of work should be entirely distinguished from the professional tramp.

(3) The latter must fall under a system of graded punishment and enforced labor in institutions where he will be continually in contact with law and order.

(4) The juvenile tramp must be speedily eliminated from the problem by penalties imposed on his seducers.

These principles, as I have explained them, presuppose in municipal government a power over tramps which I am well aware does not always exist in this country; but if municipal government in the United States has come to the point where it is powerless to meet a growing evil in its own domain, or to where people are afraid to trust any more business in its hands, it is high time that a better government be begun. For until the treatment of vagabondage can be placed entirely in the hands of municipal authorities, it will not prove efficient.

Josiah Flynt.

The College Gymnasium.

IN the minds of some people, even of some educators, there is danger of misunderstanding the college gymnasium. Before describing it, therefore, it may be well to clear away some false impressions about it. In other words, before telling what it is, it is necessary to declare what it is *not*.

It is not primarily a place of exploits; it is not a place designed for teaching young men dangerous feats of strength or skill. If such things are taught in it, they are incidents, and not the chief ends, of the teaching. Though its purposes are served by means of the training of the muscles, the making of men into "lumps of muscle" is not the aim of the training.

Its chief aim is educational. The term "body-building," largely employed by the best instructors, well describes its main purpose. By a great number of prominent educators, education is made synonymous with study of books. In this view of study, what constitutes education is the evolving of brain-power through conscious cerebration, using the eyes and ears as the avenues of materials for thought contained in books. But this is a narrow view. It would not be hard to show, too, that if it were possible to carry it out to its logical issue, it would defeat its own purpose by weakening the brain instead of strengthening it; for the brain is one organ of the body, and depends for its healthful activity upon the healthy condition of all members of the body. So that when we are building up the body in the best possible way, we are really helping to form a good brain. Indeed, the first development of the brain, like the development of all the nerve-centers of which it is the chief, is by movement, and principally by conscious movement. The first years of life are taken up with movement, not always conscious, but, as the years increase, the conscious movements become more numerous. With these movements the brain develops, and if they are interfered with by an unwise system of conscious cerebration, only mischief results. Not only is the body injured, but the brain is enfeebled. A true system of education will aim not to repress movement in a growing child, boy or girl, but wisely to encourage and direct it. At first, physical education, pure and simple, is play. Action, varied yet continued, is the natural method of self-development in children. As they come toward maturity, less movement is necessary to their health, but some is still absolutely essential if they are to enter life fully equipped for the exacting demands of the modern world. So it comes about that, to the college, the gymnasium and the playground are still vitally important adjuncts. But how to use these adjuncts to the best advantage is the important question. Undoubtedly, exercise in the fresh air is superior to exercise in-doors. Athletic sports, for that reason, are to be preferred to the drill of the gymnasium. But in these sports, especially in competitive sports, the desire to excel often blinds the judgment with reference to their real value as a means of recreation and health. Some men enter them to their hurt. A thorough physical examination by an expert physician, followed by a preliminary training in a gymnasium under a competent instructor, would furnish a safeguard. For athletes, the gymnasium might stand as a gateway to the practice of athletics.

But there are, at the least estimate, three quarters of the students of every college who are either too lazy to exercise in the field, or too indifferent to the value of exercise to take the trouble to seek it anywhere. It must either be made a part of the prescribed curriculum, or it must be made so convenient and attractive that a majority of students will take it of their own choice and free will. The compulsory plan is the one adopted at Amherst. The optional plan is the one at present followed at the larger universities. To explain this latter system, I will take as a type of the modern gymnasium the one at Yale, the latest in methods and equipment, being moreover the one with which I am most familiar.

The gymnasium is large, well lighted, and well ventilated. The main exercise-hall has a floor-space of over ten thousand square feet. The height of this hall from the floor to the peak of the roof is fifty-six feet. The light comes from the roof, which is mainly of glass. So far as daylight is concerned, the student exercises in as much light as if he were out of doors. The hall is equipped with all the apparatus for exercise of the best and latest make. There are special accommodations for the athletes, such as rowing-tanks, etc. Bowling-alleys are in the basement. There are not only the ordinary facilities for bathing, but also a swimming-pool, and a system of Turkish baths.

The direction of the students in the matter of gymnastic exercise is in the charge of two regularly educated physicians, Drs. Jay W. Seaver and William G. Anderson. The first is an authority in anthropometry. He makes a thorough physical examination of every student who desires it. The result of this examination is indicated on a card, and is made the basis of the exercises prescribed by Dr. Anderson. Dr. Anderson and his brother, Mr. H. S. Anderson, have charge of the main floor.

The first anthropometrical lists were made by Dr. Edward Hitchcock, of Amherst. Successive investiga-

tors in the same line have added to them. Many charts of averages have been constructed from these various lists. At Yale an elaborate chart is furnished to every student at a slight extra charge. On this chart his measurements are graphically shown, in agreement or disagreement with the averages of the lists referred to. The results of measurements each successive year of his course can be represented on the same chart. He is thus able to see whether his exercise is followed by growth of body, symmetrical development, and improvement in strength.

Instruments are used for testing not only the strength of the muscles, but also of the lungs; for indicating the amount of abnormal development of one side of the body, or of members of any part of the body. In cases of spinal curvature the amount of such curvature is indicated, and the causes of it are investigated. Appropriate exercises are prescribed for all curable cases. Students requiring special exercises are given individual instruction by Dr. Anderson, by his brother, or by one of their assistants. Those whose cases are in no wise peculiar in abnormal or deficient development are put in classes meeting three times a week. For these classes the exercises are varied and progressive, and are designed to develop all parts of the body symmetrically. Most of these exercises are performed to the time of music, so that they may be done in unison. The instructor leads them in person.

The records of the measurements of students, and of the tests of various organs, and of special senses, give some interesting results. For the academic years of 1892–93 it was found that the number of those suffering from serious errors of refraction in sight without being aware of it was large, and several cases of recurrent headache and of similar troubles were relieved by the prescription of glasses by a specialist. The number of men examined in the Freshman classes of the academic and scientific departments was about 275, or slightly above 54 per cent. of these classes. Of these men 53 were found to be more or less near-sighted, and of these 34 were complicated cases of near-sightedness and astigmatism. There were 33 cases of far-sightedness, of which 10 were complicated with astigmatism. There were 34 cases of simple astigmatism. Of these cases 17 had already been examined, and the men wore glasses before coming to college. All required glasses, but having been notified of an error of refraction in sight, even those who did not immediately require the use of glasses were able to guard against undue eye-strain in the future. This seems to be a very simple statement of facts. But think of the amount of suffering saved to these students by the knowledge conveyed to them! The economy of suffering was not bodily suffering alone, but mental suffering as well. For eyesight is the main avenue of knowledge to a man. If that is defective, the facts acquired partake of the nature of the medium.

With regard to spinal deformities there were seventeen men with lateral curvature of the spine. In all these cases the curvatures could be traced to the mechanical condition caused by one leg being shorter than the other. The remedy was simple; namely, raising the heel and sole of the shoe on the foot of the shorter leg. Exercises were also prescribed to strengthen the muscles on the side required to draw the spine back into normal position. Simple and natural as were the remedies, they were sufficient to avert serious spinal troubles.

With regard to lesions of the heart, nine cases of organic troubles were discovered. Closely allied with heart lesions are the errors of circulation found in varicose veins. Four cases of fully developed varicose veins were found, while in many incipient cases men have been cautioned against certain forms of exercise.

Three cases of rupture were found, which were unknown previous to the examination. In two of these cases there was complete recovery. The third had so far developed as to make recovery extremely doubtful.

The sense of hearing was also examined. Two men were relieved of foreign bodies in the ear that were causing permanent impairment of hearing. Six cases of deafness were relieved.

To sum up, in about one half of the two classes there were 120 cases of eye trouble. These were either entirely remedied, or were put in the way of being remedied. Eight cases of deafness were cured. Two cases of rupture were relieved, and started on the way to recovery. There were 17 cases of curvature of the spine either cured or greatly relieved. In 6 cases of heart difficulty, and a number of cases of varicose veins, valuable advice was given looking to the improvement of the patients.

In 1893–94, the number of cases examined in the two Freshman classes was 282, or about 52 per cent. of the members of those classed. Among these men there were 140 cases of eye trouble, and of these 25 only had been examined before, and fitted with glasses. Fourteen men had lateral curvature of the spine. Five cases of heart trouble, and 5 cases of rupture, have prospects of complete recovery. About the same percentage of ear troubles was found as in the previous year.

The only regret which comes to one considering these facts is that the whole of the two classes could not have been examined. The writer believes that it would be wise so far to combine the compulsory and optional systems as to oblige every student entering college to submit to a physical examination some time early in his college course. Numerous mistakes in exercise, and much suffering due to abnormal physical conditions, would thus be avoided.

From what has been said, it will be seen that the office of the gymnasium is twofold, educational and sanative. Its educational work is extended beyond the mere exercise-hall into the class-room. For since the erection of the new building, a course of study in physical culture has been opened to the students, which is useful to those who think of making a life-work of teaching. The work comes under two branches—physiology, and the practice and theory of gymnastics.

It is too soon to pronounce on the complete results of this new departure in education; but one thing is certain, that since the opening of the new building the college has never been more orderly nor the students had better health. It is the opinion of the writer that as the work is still more widely followed its benefits will be still more marked.

Eugene Lamb Richards.

"The Century's" American Artist Series.

CECILIA BEAUX. (See frontispiece.)

CECILIA BEAUX was born in Philadelphia, where she received her first lessons in drawing from Catharine A.