went into operation with the late Bishop Strachan as President, and Dr. McCaul as Vice-President and Professor of Classics, Logic, Rhetoric, and Belles-Lettres. The University had at that time a Chair of Theology, but by the Act of 1849 this was taken away and several important changes were made. The name was changed to the "University of Toronto," it was made strictly non-sectarian in character, and some alterations were made in its constitution and government. In 1853, other changes no less important were effected, amongst which was the abolition of the Chairs of Law and Medicine, and the separation of the Collegiate from the University functions, making University College, nominally at least, a separate corporation. The constitution remained unchanged till the Act of 1873 made new alterations in the constitution, without, however, radically changing the character of the institution. While it was undergoing these various modifications, Dr. McCaul occupied uninterruptedly the chair to which he had been at first appointed, and which he still occupies. He became President of the University in 1849, and when the separation of corporations took place in 1853 he was appointed President of University College and Vice-Chancellor of the University of Toronto. The former of these positions he has occupied ever since. In the successive revisions of the University curriculum since 1843 he has always taken a prominent part, and although a great classical scholar himself he has never shown any disposition to prevent the broadening of the curriculum in such directions as modern scientific progress called for, but quite the reverse. The introduction of Modern Languages and Natural Sciences, and their elevation into Departments, took place with his entire concurrence, if not on his own motion.

His administration of the affairs of the College over which he presides has been very successful. His intercourse with the students has always been marked by unvarying kindness and affability. He has taken a deep interest not only in their intellectual progress, but also in their amusements and recreations. Of the Literary and Scientific Society he has been from its inception a warm friend and patron, and he has always encouraged and promoted such a degree of devotion to athletic sports as was not incompatible with either physical health or academical progress. It is needless to say that he has won for himself a high degree of popularity amongst his students, and that with hundreds of the *élvées* of the College who have gone out into business or professional life the recollection of his unvarying kindness is far more enduring than the feeling of admiration for his learning, his ability, or his finished rhetoric. His style of public speaking is well-nigh faultless, as those who have heard him preside year after year at College Convocations know, and few who have ever been privileged to listen to him translating the finer passages of Demosthenes will ever forget the high character of the intellectual treat they enjoyed. In the promotion of objects of public and social interest he has always taken an active part, and in no respect has he conferred greater benefit than by assisting in the cultivation of a taste for high classical music, and indeed for art in all its branches.

THE LIMITS TO PHYSICAL CULTURE.

We have frequently had occasion to dwell upon the fact that, while moderate physical culture is a great benefit—indeed a necessity, to insure a proper balance of mental and bodily powers, and consequent health and longevity—physical over culture is a great evil, leading to results diametrically opposite to those sought to be attained. At one end of the series is a constitution weak and unfitted to resist disease or the effects of labor; at the other an organization strained to its utmost, and ready to yield under the slightest addition to the stress. Obviously between these extremes there must be a mean, up to which all culture is beneficial, and beyond which all is over-culture. The question is, however, whether that mean is in the nature of a personal equation for every one, differing for each individual constitution, or whether it is possible to formulate general laws, true for all systems. The tendency of modern investigation in all cases relating to the science of living, is generally favorable to the latter view. Mr. Charles Darwin sends out his formulated questions the world over, and deduces results from replies proportionally considered. Candolles does the same in his elaborate investigations into the antecedents of scientific men; the statistics relative to the recruits for our army we have shown, in recent articles, to admit of valuable deductions relative to our national characteristics; and we might add numerous examples, all showing that that which is proved true, on the average, for a large number of persons, may with reason be assumed to be true of an entire class, or even a race, when surrounded by generally similar conditions of life.

Now, in the case of physical culture, the point specially to be determined by actual physiological investigation is, to what extent the body may be benefited. This known, any one may easily discover for himself when the limit is reached, and will understand that to carry his training still further is a positive disadvantage and injury. Such an investigation has lately been made by Dr. Burcq, of Paris, in the *Ecole de la Faisanderie*, a gymnasium where are drilled the soldiers who are destined to be the gymnastic instructors of the French army. No better set of men could be selected for examination, for the reason that each individual is virtually intended hereafter to serve as a model for others, and therefore his physical culture is brought to the best possible state. Dr. Burcq continued his investigations with the utmost care and minuteness for six months, during which period the progress of over a thousand men was closely watched and criticised. As a general result, he tells us now that gymnastic exercises—

1. Increase the muscular forces up to 25 and even up to 38 per cent., at the same time tending to equilibrate them in the two halves of the body.
2. Increase the pulmonary capacity at least one-sixth.
3. Increase the weight of men up to 15 per cent., while, on the other hand, diminishing the volume. This augmentation exclusively benefits the muscular system, as is demonstrated by its elevated dynamometric value.

And Dr. Burcq further observes that, during the first half of the six months' course at the school, the increase of force was most markedly noted.

To Dr. Burcq's admirable studies upon this body of trained gymnasts may be added those of M. Eugene Paz, who for a long period has been observing the results which methodical physical exercises produce in certain invalids and in a large number of people of various callings, notably artists, literary and business men, and others whose muscles are normally less voluminous than those of the picked soldiers at the *Faisanderie* School.

By means of a variety of ingenious mechanical apparatus, and by a course of investigation wholly different from that of Dr. Burcq, M. Paz reaches precisely the same results. He notes especially the increase in weight and decrease of volume of the body above referred to, and also the augmentation of pulmonary capacity. Three operatic singers who were rigorously trained for a year attained a maximum lung power corresponding exactly to an increase of one-sixth. It follows, therefore, that Dr. Burcq's results may be considered in the light of a general law, and likewise as a guide to what is correct physical culture. In this view we commend them to the attention of college authorities and students.—*Scientific American.*

—Superintendent Wickersham, of Pennsylvania, in the recent meeting at Louisville, said of technical education: "I have seen large classes come out of our High School and go back home without a qualification for anything. Our people are partly right in saying that the common schools are not doing what they should for the common people. It would not be a bad thing if half the time of the girls were taken up in learning sewing, telegraphy, wood-carving, and other arts of like nature. I believe that it is practicable that the work for girls may be divided in this way. With boys the case would be more difficult, but we find in Europe that they do the same with boys. I am not sure but that if half the money expended in the schools of our cities were expended in the erection of shops to teach the boys and girls trades, it would be better."

—Among the countless vagaries and cruelties of parental despotism none is fuller of harm than the senseless haste in teaching children "their letters." At a time when the little ones are still aglow with the first ecstasies of budding life, parental despotism thrusts a dead book in the child's face, with the peremptory order to learn to read. Reading should not be taught the child, therefore, before his taste for independent work, his appreciation of his own powers, his faith in his own resources are sufficiently strong to enable him to resist the charms of a morbid fancy; it should not be taught before he can make use of it for the legitimate purpose of the art; and it should be taught him, though in ever so narrow limits, with constant reference to these purposes.—*The New Education.*