

apex
young men and women attend the High Schools for the purpose of acquiring a superior education for its own sake. Although High Schools were primarily established for the purpose of preparing pupils for the learned professions, such is the appreciation of their course of study now that thousands flock to them for the mental training which they afford. The sons of working men, of farmers, and of the mercantile classes, who have no other object than to fit themselves for the ordinary duties of their callings, have found the High School course an exceedingly profitable one. Since 1872 no fewer than 16,601 left the High School for mercantile life and 12,504 for agriculture.

Under our system of training teachers the High Schools have within the last ten years been obliged to assume the non-professional course for the teachers of the Province, which was formerly done in the Public and Normal Schools. The superior attainments of High School masters qualify them particularly well for the work of instruction in the non-professional subjects, and it is hard to overrate the advantages which young men and women enjoy in being brought into competition with each other at a leading High School to receive instruction from University graduates, many of them specialists in their departments. Were we to undertake as a Province the task of providing

a system of training equally efficient by means of Normal Schools the cost to the country would be greatly increased and without any substantial advantage by way of compensation; but from the organic connection which we have now established between all parts of our school system we are able to use at no additional cost to the Province our High Schools for work which in the United States, in England and Germany is done in the Normal Schools at the expense of the State. The Province of Nova Scotia has recently followed our example, and is now using the High Schools and academies of the Province for the non-professional training of her teachers.

It will be observed from the estimates that we have made no increase for the last three years in the grant to High Schools. I hope the House will see its way before many years to supplement the increased liberality of the taxpayer by an additional grant. In 1867, when we paid but a trifle over \$50,000 for High School purposes, the grant amounted to \$9 43 per pupil enrolled; last year, although the sum of \$100,000 was paid for High School purposes, it amounted to but \$4 38 per pupil, or less than one-half the amount per pupil paid 25 years ago. In the same period of time the expenditure for teachers' salaries has increased from \$94,820 to \$472,029, and the total expenditure for all High School purposes from \$124,181 to \$696,114. The liberality of the Legislature, having regard to the number of pupils enrolled, is not nearly as great as it was 25 years ago. If our High Schools are to continue to be accessible to all classes of the people, they should not be barred by excessive fees. The Farmers' Institute a few weeks ago adopted a resolution to the effect that "any interference with our High School system which would remove it beyond the reach of the poor and make higher education the exclusive property of the rich was not in the public interest."

DEPARTMENTAL EXAMINATIONS.

The House will observe that I am asking for the sum of \$16,000 for departmental examinations. This is a slight increase on last year, but will be recouped by the fees of candidates. The Education Department considers it but reasonable, if the country provides what is almost free education for the pupils attending Public and High Schools, that those who want a test applied to their attainments by which they can enter on an educational career for the purpose of their own maintenance should themselves bear the cost of this test. Formerly a great part of the sum now paid by the candidates was paid by County Councils, and, as somebody must bear the expense of the examination, it is thought that those specially interested are not the persons entitled to relief.

It might be interesting to the House to know that the system of conducting examinations by a joint board of the department and of the University has worked well. By means of this board we are able to obtain examiners of the very highest standing, and, as a consequence, the value of the certificate which they recommend is greatly enhanced. For admission to the examinations of the Medical Council it is the only standard now accepted. For University purposes it is also accepted pro tanto, and, inasmuch as candidates can prepare in the same class either for matriculation into the University, law, medicine or a teacher's certificate, the classification of the High Schools is, as a matter of course, very much simplified. The generous acceptance of this standard by the different Universities of the Province has contributed very largely to the success of the scheme.

Another feature of this scheme which

should not pass unnoticed is that it makes teachers to a great extent the guardians of their own profession. This is the case in law, in medicine and in arts. In 1883 the departmental examinations were conducted by men engaged in other callings, some of them young and inexperienced, others too much absorbed in their own professional work to sympathize fully with other professions. The year before I entered upon my duties the examination papers of candidates for teachers' certificates were read by law students, medical students, lawyers in active practice, clergymen and others with little or no professional experience. Last year and for several years back these papers were read only by graduates of our Universities actually engaged in teaching.

TECHNICAL EDUCATION.

The growth of Mechanics' Institutes and free libraries in the last ten years is worthy of notice, the increase being from 93 in 1883 to 255 in 1893. The number of volumes issued in 1883 was 251,920, and in 1893 1,415,867, an increase of nearly 600 per cent. I am asking for an additional grant this year for Mechanics' Institutes mainly that their advantages might be extended to the residents of small towns and outlying villages, and I do so with the greater pleasure because I observe that the tendency towards the perusal of a higher class of literature is in the ascendant. For instance, in 1886 60 per cent. of the volumes circulating by means of our Mechanics' Institutes and free libraries was fiction; last year (1893) only 43 per cent. of the volumes issued was fiction. I attribute this change very largely to the improved taste for substantial reading which we have been able to cultivate through the literature course in our High Schools and Collegiate Institutes. The demand for the best literature of the language, either in history, in poetry, in biography or in the magazines, is constantly growing, and I know of no better way by which a young man can continue his education after he leaves the Public School, or even the High School, than by becoming a subscriber to a Mechanics' Institute or a free library.

SCHOOL OF PRACTICAL SCIENCE.

The School of Practical Science has grown out of the School of Technology established in 1871. Up till 1886 the work of the school was limited to the study of civil and mechanical engineering with such instruction in practical and analytical chemistry as was necessary. Owing to the strong demands for more adequate provision for mechanics, engineers, architects and miners, the accommodation in the School of Science was greatly increased and such equipment provided as would facilitate the practical study of a complete course in practical science and technology.

In company with Prof. Galbraith I visited, in 1886, some of the largest schools in the United States, such as the School of Science in connection with Lehigh University, Cornell University, Columbia University, the School of Technology at Boston and other schools. The basis of the South Kensington School in London was also considered and the faculties in the School of Science were, as a consequence, greatly enlarged. The new buildings projected in 1886 were completed in 1890 and formally opened in 1891. The total cost of the building and equipment, including the old building now used for chemistry and mineralogy, was \$220,000.

It is most satisfactory to know that the provisions made for technical education will now compare favorably with the best institutions on the continent. Nowhere in Canada, at all events, unless it be at McGill University, is there such ample provision for the education of engineers, architects and mechanics, and in no school in the United States, unless it be the Boston School of Technology, is there a school superior to that now established in Toronto.

The course of study includes mechanical, electrical and mining engineering, with full courses in architecture, analytical and applied chemistry. By the appointment of Prof. Coleman the Department of Mineralogy, Metallurgy and Assaying has been greatly strengthened, and although not as yet as complete as I would desire, nevertheless the work done must ultimately prove of the greatest value in the development of the mineral resources of the country.

That this addition to the educational facilities of the country has been appreciated is evident from the increased attendance of students. In 1882 the number of students in attendance was eighteen, in 1893 the attendance was 143, a very gratifying increase in such a short period. Twenty-six counties of the Province, two districts and two Provinces of the Dominion are represented in the school and contribute among them 89 students; four are from the United States, and the remainder from the City of Toronto.

Apart from the advantages which must accrue to the country from the training of skilled workmen in the departments of