

FORESTRY

"Rod and Gun" is the official organ of the Canadian Forestry Association.
The Editor will welcome contributions on topics relating to Forestry.

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THE NEW CENTURY.

A look backward to the beginning of the century just ended shows Canada a land of apparently interminable forest, and the task before the men of the nineteenth century was to hew out from those great forests a home where they and their descendants might dwell in peace and comfort, to clear the fertile lands that should yield of their fruitfulness to the wealth of the nation, to open up the avenues of commerce and to make a place for the founding of our great cities.

How well that work has been done is written plain over our great Dominion; but, unfortunately, the war against the forest seems to have induced a blindness to its value which has not yet been removed. As a result there is now many a tract of bare *brulé* which once was covered with noble trees, the destruction of which is an absolute loss without compensation of any kind; there is many a homestead whose beauty has been destroyed and whose value has been seriously impaired by a too ruthless clearing of its sheltering trees.

The dawning of the twentieth century brings the men of to-day face to face with the fact that our forest wealth is not inexhaustible, that much of it has been uselessly and needlessly destroyed, and that if this, one of the great sources of national prosperity, is not properly conserved the present century will see the wane of our pre-eminence as a lumber-producing country. The problems that are to be solved in the twentieth century are not those of the nineteenth, but the same qualities of intelligence, foresight and perseverance are required to work them out.

The Imperial bearing of this great work is brought into clear light by the strong and stirring words of the Earl of Roseberry at his installation as Lord Rector of Glasgow University:

Never, said the former Premier, had the Empire so urgently required the strenuous support of its subjects, because there was a disposition abroad to challenge both its naval and commercial supremacy. The twentieth century, he declared, would be a period of keen, intelligent and almost fierce international competition, more probably in the arts of peace even than in the arts of war. Therefore, he added, it was necessary to undertake periodical stock-taking, to remodel the State machinery and educational methods, and to become more business-like and thorough as warriors, merchants and statesmen.

Forest Botany in the Schools.

One of the declared objects of the Canadian Forestry Association is to teach the rising generation the value of the forest with a view to enlisting their efforts in its preservation. The Forestry Association is not, however, a pioneer in this

work, as the question has been given attention by some of the more progressive of our educationists.

At the meeting of the Ontario Educational Association held in Toronto in April last, Dr. W. H. Muldrew, of Gravenhurst, gave a paper on School Gardens, or rather, the teaching of Forest Botany in the schools, of which we give the following summary from the report of the proceedings:—

"The problems of practical forestry were being brought very near to thoughtful observers in Ontario. What were the schools of to-day doing to equip the next generation with the knowledge and the interest necessary to ensure their intelligent solution? Arbor Day, now permanently established in Public Schools, and the teaching of Botany in High Schools must exert a wholesome influence in this direction; but these forces needed to be broadly supplemented under the careful supervision of the teachers if the best results were to be obtained. To show that such was quite practicable under ordinary conditions, the speaker described briefly what had been done within a few years in connection with one of our smaller High Schools by the co-operation of trustees, teachers and pupils.

"Beginning with a school ground characterized only by a rather unusual extent, and an almost total absence of vegetation, a systematic attempt had been made to relieve the monotony of the scene by planting trees and shrubs in as great profusion as circumstances would permit, and in such form as to permanently mark out walks and playgrounds. This work had been carried out largely by the boys, stimulated by a nominal grant per tree from the Board to the athletic funds, and by an occasional part holiday. In spite of some discouragements resulting from unkind soil and unfavorable seasons, the work progressed until several hundreds of specimens had become fairly established and the number of species represented had suggested a complete collection of those native to the district. Already more than half the indigenous trees and shrubs of the locality were here to be found, and thus a rude, yet effective, arboretum was approaching completion. While the specimens were of necessity, in most cases, immature and struggling with a new environment, so that their appearance was by no means striking, they already afforded great assistance to the practical study of Botany, since the development of foliage, flowers and fruit could be readily followed from day to day.

"The speaker dwelt upon the value of identification and naming of species in sustaining the interest of learners, and recommended the use of keys or indexes based upon the leaf characters, and prepared, preferably by the science master, to suit the forest growth peculiar to each district. This suggestion was illustrated by the distribution among the members of the section of printed copies of such an index, which had justified itself by some years of service in the hands of beginners."

The index referred to is of the common native trees and shrubs of Muskoka, and is based on the leaf characteristics. Dr. Muldrew has distributed an edition of over one hundred copies of this index without remuneration, with the object of arousing an interest in the subject amongst educators; and by his kindness we have also been furnished with a copy. The index has been worked out by Dr. Muldrew himself for the trees of his own neighborhood, but it has been found to answer almost equally well in other localities throughout central Ontario. The first part is a systematic statement of leaf characters in general as to kind, arrangement, veining, surface, outline, etc. As a sample of the plan by which the species are distinguished in the following part of the work, we give the first division:—