

tions is so thorough that it has created a demand for itself, and there is every reason to believe that the graduates of a first class Forestry School would be just as eagerly sought after as the graduates of our engineering and mining schools. The science of forestry includes both the theoretical and the applied portions of botany, ecology, physiography, dendrology, wood technology, silviculture, treatment of woodlands, seeding and planting, forest engineering and mapping, forest administration and law, forest protection, lumbering and transportation in all their complex relations, and forest hydrography. Whether such an extensive course of studies should be attempted in a four years' under-graduate course as it was at Cornell, and as both Queen's and Toronto Universities have proposed doing; or whether it should be made a post-graduate course for men who are university graduates in the natural sciences, as at Yale and Michigan Universities, will depend upon the degree of specialization we wish our foresters to attain.

A forester is not a mere botanist let loose to air his facts at the expense of others; neither is he a fire ranger, a lumberman, a sportsman, an arboriculturist, a dendrologist, a silviculturist, or any other ist. He must clearly understand all these phases of the question, and their relation to one another. He is constantly being called upon to deal with universal and economic questions of tremendous magnitude and importance. His profession touches life at many points, and he must of necessity be thoroughly well trained for his life work if he is to be of the highest service to the state. The state cannot afford to place such tremendously important questions as the Science of Forestry has constantly to deal with in the hands of a corps of inefficiently trained men. President Roosevelt says "The forestry problem is in many ways the most vital internal problem in the United States;" and Ex-President Cleveland says "Through the teachings of intelligent forestry it has been made plain that in our Western localities ruinous floods and exhausting droughts can be largely prevented, and productive moisture in useful degree at needed periods secured by a reasonable and discriminating preservation of our forest areas. The advocates of irrigation have been led to realize that it is useless to provide for the storage of water unless the sources of its supply (the forests) are protected; and all those who, in a disinterested way, have examined these questions concede that tree growth and natural soil on our watersheds are more valuable to the masses of our people than the foot-prints of sheep or cattle." From whatever point of view we approach the subject we cannot get away from the fact that the forestry question is one of national importance. The forester must possess a thorough knowledge of the life history of each kind of tree to be grown; the influences effecting its welfare; the methods employed in its management; the technical proper-