

"In this work one point particularly should not be overlooked, namely, that observations on tree growth for use in forestry must be made under forest conditions. The nurseryman and gardener have very different objects in view. They work under different conditions; their experiences may often mislead the forester, and their methods, in most cases, he cannot adopt. If anything, therefore, is to be accomplished in forest experimentation, the experimenter must study forest conditions and employ them in his experiments.

"I see that the Dominion Lands Act, as amended, provides for reservations on the slopes and crests of the Rocky Mountains for the purpose of preserving an even water supply. Such reserves should be placed under the same direction as the eventual forest experimental stations. Other reserves in the plain, giving the opportunity of studying different forest conditions and of applying conclusions for practical results, are not only an essential adjunct to forest experimentation, but may eventually form the nucleus for systematic forest economy.

"Such reserves, while in the first place designed to serve as experimental grounds, should be made large enough to establish and support a regular forest department, and, with a conservative policy, may be so managed as to demonstrate financial possibilities, and could in time be made to pay for the expenses of all forest experimental stations. Germany, with a forest area of 35,000,000 acres, of which only 33 per cent. are State forest, expends on experimental stations alone in the aggregate over \$30,000, out of which only few salaries are paid, the experimenters being otherwise paid officers. Experimentation in forestry then, as in agriculture, is of a double character, the nursery and forest garden in connection with the botanical laboratory corresponding to the laboratory of the agricultural chemist, while the model farm finds its counterpart in the natural forest and the plantation.

"It would lead me too far to enter into the details of organization, except to say that centralization of the work is a necessity, and that the central station should be connected with agricultural colleges or experimental stations, where the aid of scientific apparatus can be most readily and cheaply secured. Forestry being based, somewhat similarly to agriculture, upon a knowledge of natural sciences, the aid of the scientific staff of such institutions would be an advantage; specialists in botany, chemistry and technology, geology, &c., can be directed to give attention to their subjects as related to forestry, and occasional or regular lectures on forestry matters, by the forest director and his staff, will soon engage close attention from the students of agriculture and practical application in the management of their wood lots at home.

"I hope you will find, in the foregoing suggestions, something to aid you in deciding whether and how your Government should take steps to provide for the future, not only of Canadian forests, but also of successful agricultural settlements on the treeless plains.

"If I can aid you further, please indicate in what manner, and I will cheerfully do so.

"Yours very truly,

BERNHARD E. FERNOW."

I add, as an interesting item from the Budget of Prussia (the most economical of the German administrations), for the year 1st April, 1885-86, the following figures (rounded off):—

Total expenditure for State.....	\$315,000,000
Total area.....	86,000,000 acres.
Total State forest area.....	6,600,000 "
Total expenditure for Forest Department.....	8,250,000
Of which special appropriation for purchase of waste lands and removal of easements.....	575,000