

In the report of 1885, taking in the whole province he says:—"The chief trees are white spruce, balsam fir &c., on the more elevated and drier grounds, and on the swampy grounds we find spruce fir, white birch, poplar and white cedar in abundance." In later reports Mr. Chalmers tells of the rapidity with which the second growth of spruce covers the sections of the country upon which the forces of destruction have exercised their most powerful influence. Without any care, without any forestal supervision, nature unaided, not given any fair play, has been able to carry on the reproduction so successfully as to create an equilibrium.

In the Province of Nova Scotia the comparatively greater degree of moisture stimulates the growth of the forest, so that though the demands have been made during a longer period and to a larger extent than in some other portions, the spruce still abounds and pulp manufacturers have set up four or five mills for the production of pulp.

From an investigation made in 1894 it appeared that from 38 to 40 per cent. of Canada consists of woodland and forests. This is about 1,400,000 square miles. One-half of this area is spruce there will be about 450,000,000 acres of spruce area in Canada. In the manufacture of newspaper wood pulp according to present methods a cord of spruce wood is estimated to equal 650 feet of board measure, and this quantity of raw material will make half a ton of sulphite pulp or one ton of ground wood pulp. Newspaper stock is made up with 20 per cent. of the sulphite pulp and 80 per cent. of the ground wood pulp. Now, as figured by experts, the best of spruce land possesses a stand of about 7,000 feet to the acre. This is equal to 5 tons of sulphite and 11½ tons of ground wood-pulp per acre.

Taking ground wood pulp as the basis and 10 tons per acre as the product, there are 4,500,000,000 tons of wood pulp in sight in Canada.*

*In a paper read before a number of persons interested in forestry, since the text was written, Dr. Bell, Assistant Director of the Geological Survey, estimates the area of the northern forest of Canada at 1,657,600,000 acres. This, he calculates, would yield 16,500,000,000 cords of spruce. The estimate in the text is therefore a very conservative one. (See Appendix A.)