PULPWOOD CONSUMPTION, 22,

decreased by 72.9 per cent, $\sigma_{1,5}$ 49 tons less being manufactured by this process than in 1911. The sulphate process was used practically for the first time in Canada during 1912 by three mills in Quebec, utilizing 66,938 cords of pulpwood and producing at least 33,469 tons of air-dry pulp. This process was first introduced by Dahl in 1883 for the treatment of straw, but has been adapted for rsc with coniferous woods. The name sulphate is derived from sulphate of soda, which is used in the process as a source of alkali.

This process yields an excellent pulp and by its use the soda recovery is greatly facilitated. The firms using this process reported being well satisfied with the results. Spruce was used to the greatest extent with a small percentage of balsam fir. The fibre of poplar is not strong enough for use with this process, the success of which depends on the strength of the paper made.



In Quebec 74.9 per cent of the wood used was spruce, together with 24.4 per cent of balsam fir and 0.6 per cent of poplar. Henlock was not reported from Quebec in 1912. Spruce in Ontario formed 90.7 per cent of the total, balsam fir making 8.7 per cent. Poplar, with 0.3 per cent, and hemlock, with 0.3 per cent, made up the remainder. New Brunswick used only spruce and balsam fir, the proportions being about 91.0 per cent of spruce to 8.9 per cent of balsam. British Columhia used more hemlock than all the other provinces combined, consuming 92.5 per cent of the total for all Canada. Approximately equal quantities of Western hemlock and spruce were used in this province, with a small proportion of Alpine fir and Western larch. This was the only province in which spruce did not head the list of woods used. The percentage of spruce in Nova Scotie was 83.2, balsam fir forming 13.0 per cent. Small quantities of hemlock and poplar were also used. Pine was recorded only from this province ; small quantities of this material, however, are mixed with spruce and balsam fir in the other provinces, but a more reported.

Quebee her the provinces in each of the three chief processes employed, but in the manufacture of soda pulp was passed by New Brunswick. Quebee consumed, in 1912, 68:1 per cent of the wood used in the mechanical process, 58:0 per cent of the wood used in the sulphite process and all the wood used in the comparatively new sulphate process.

Ontario made only ground-wood and sulphite fibre, consuming 22^{+1} per cent each of the totals of the wood used for these two processes. New Brunswick made much more sulphite than ground-wood fibre, consuming 12^{+9} per cent of the wood used for sulphite and only 1^{+4} per cent of the wood used by the mechanical process. This province, however, manufactured over half of the soda pulp made in Canada in 1912. British Columbia used both the mechanical i ad sulphite proceeses, producing 3^{+1} per cent of the ground-wood and 6^{+9} per cent of the sulphite fibre produced in Canada in 1912. Nova Scotia manufactured ground-wood pulp only, producing 5^{+2} per cent of the total for Canada.