of shots less disastrous by stopping up leaks, on the other hand, bullets for rifle use are made from paper pulp. Of food products, sugar (glucose) and alcohol can be derived from it, and materials resembling leather, cloth, and silk have been successfully manufactured from it. An entire hotel has been lately built in Hamburg, Germany, of material of which pulp forms the basis, and it also forms the basis of a superior lime mortar, fire and water proof for covering and finishing walls.

"The state of New York leads all other states in the manufacture of wood pulp, having seventy-five mills engaged in the industry, out of the 237 mills in the United States. Wisconsin comes next, with twenty-six mills; then comes Maine, with twenty-four; and then New Hampshire and Vermont with eighteen each. Canada has also a very large production of wood pulp from its thirty-three mills, besides supplying

large quantities of timber to mills situated in the United States.

"Of the seventy-five mills in the state of New York, sixty-four mills draw their entire supply from the great forest of Northern New York, or what is known as the Adirondack woods."

## THE FINANCE MINISTER ON SAW-LOGS AND PULPWOOD.

## From "The Canadian Trade Review."

Since our last week's article on wood pulp, in which we made a strong protest against sending our raw materials to the States, the Finance Minister has declared that the question will require the gravest consideration of Parliament next session. The duty of Canada is to make hay while the sun shines. The Americans must have our logs or close their mills, or buy our manufactured lumber and our pulpwood or close their paper mills in New York and New England. If we put an export duty on them they will still largely go to the States, but we shall have a revenue out of them. The true, sensible course is to keep the logs at home, and let Americans buy the manufactured article, which they would be compelled to do, as their native supplies are fast disappearing.

## SIR CHAS. TUPPER, BART., ON WOOD PULP IN UNITED KINGDOM.

(Circular, Department of Trade and Commerce, July 6th, 1893.)

DEPARTMENT OF TRADE AND COMMERCE, OTTAWA, July 6th, 1893.

I am directed by the Honourable the Minister of Trade and Commerce to call your attention to information that has reached this department through the High Commissioner in London, having reference to the demand for, and importation of wood pulp into Great Britain, which would seem to indicate that with the resources at the command of Canadian manufacturers of the article an extensive trade could be worked up with the consumers in that country.

The information may be summarized as follows:-

Most of the pulp imported into Great Britain is from Germany and Scandinavia.

The best sulphite pulps are made in Germany, though large quantities are also made in Scandinavia and Austria, those from the latter country being very good.

The products of the best known works in Germany bring high prices, samples from some of them are marked as being worth in Liverpool £11 5s., £12 5s., £12 10s., £12 15s., £13 5s., £13 10s., and £16, less  $2\frac{1}{2}$  per cent per ton.

Samples of sulphite pulp from Norway are marked £12, £12 5s., £12 10s., and £13 5s.; of Scandinavian pulp, £12 5s., £12 10s., £13 5s.; of Austrian, £12 10s., and £13. 10s. These samples can be seen at this office by any one interested in the trade.

In Norway and Sweden different kinds of wood pulps are made, viz.: soda pulp and mechanical pulp, these latter being quoted on the 14th June, 1893, at about 40s. to 60s. per ton.

The different qualities of wood pulp are legion, and it seems there is not much difficulty in finding a market for all that is made.