

It should be carefully noted that the figures obtained from the experiments of Arthur D. Little Inc., seem to demonstrate that the results obtained from the measurements of fibre length and content of pitch for Jack Pine as against Spruce, show that the Jack Pine is *fully equal to Spruce in every respect.*

The following is an extract of the detailed report by Arthur D. Little, Inc.:

"FIBRE LENGTH AND PITCH."

The fibre length of pulp from Jack Pine was rigidly compared with that of Spruce and the results of our measurements are as follows:

Jack Pine Spruce

Maximum length of fibre	3 mm.	2½ mm.
Minimum length of fibre	1¼ mm.	1¼ mm.
Mean	2.26 mm.	1.92 mm.
Percent of fibre over 2 mm.	80 p.c.	73 p.c.

It will be observed that the fibres in the Jack Pine are superior in length to those of Spruce and should therefore be an excellent substitute for the Spruce, especially in connection with newsprint paper.

As the content of pitch in woods is practically always an indication of their behavior in either the sulfite or ground wood process, we have made an ether alcohol extraction of this Jack Pine to determine the total resins and waxes. These were found to be as follows:

Alcohol extract	2.28 p.c.
x. Ether extract.	.30 p.c.

Total Fats, Resins
and Waxes. 2.58 p.c.

x. Ether extraction made successive to alcohol extraction.

Results of this analysis do not indicate that an excessive amount of resin is present and, furthermore, that this amount of resin does not necessarily preclude the use of Jack Pine in the sulfite process.

It is to be hoped that any person who has made experiments along this line will publish the results of the experiments, for the benefit of all concerned.

F. I. RITCHIE.

Wayagamack Pulp & Paper Co., Ltd.,
Three Rivers, Que.

Mr. Grainger Resigns.

Mr. M. A. Grainger, Chief Forester of British Columbia, has resigned to enter private business. In making the announcement, the Minister of Lands, Hon. Mr. Pattullo highly praised Mr. Grainger's work. "He is a man of exceptional ability and the highest qualifications and his resignation will be keenly felt in the forestry service."

Mr. Grainger, who is an Englishman by birth and a graduate of King's College, Cambridge, having been twenty-first wrangler in mathematics in 1896, came to Canada the next year and participated in the famous gold stampede to the Klondike. There he engaged in hydraulic mining. When the South African war broke out he returned to England and enlisted as a private in Roberts' Horse and served throughout the war. He possesses the South African medal with six bars.

After the war he returned to British Columbia, where he spent some years in the mining and lumbering industries, finding time to contribute a number of articles to Old Country papers and also to write an interesting book, "Woodsmen of the West," a work which accurately depicted life in the lumber camps and described the vast forest wealth of this Province.

As secretary of the Forestry Commission which investigated the conditions of the industry and the extent of the forest areas of the Province, Mr. Grainger rendered valuable services.

In the legislation which has been drafted relating to the lumber industry Mr. Grainger has taken a leading part; he played a very important part in the organization of the branch which aimed to be one composed of men technically competent.