

# Market for Railway Ties in United Kingdom

**Russian and German Supply Cut Off, While Sweden Is Unable to Fill Demand—Drop in Cargo Market Will Permit British Columbia to Compete.**

The Weekly Bulletin of the Department of Trade and Commerce, Ottawa, under date of September 6, 1915, published an article by Mr. H. R. MacMillan, formerly Chief Forester for British Columbia, on the railway tie market in Great Britain, which is of great interest and value to British Columbia lumber manufacturers.

The supply of railroad sleepers has been one of the most difficult timber problems to solve since the outbreak of the war. The length of railroad tracks in the United Kingdom is, exclusive of sidings and yards, over 40,000 miles.

The importation of sleepers for 1914 was:—

Country.	Numbers.	Value C.I.F. Each.
(1) Russia .....	1,697,536	\$ .84
(2) Sweden .....	556,656	.69
(3) Germany .....	1,104,720	1.10
(4) Netherlands .....	12,336	1.57
(5) Other foreign .....	64,240	1.09
(6) British possessions	25,648	1.18

The total number of sleepers imported in 1914, an average year, was 3,461,136, equal to about 129,762,604 feet board measure and valued at \$3,161,400.

The number of domestically produced sleepers used is small, consisting of Scotch pine used in Scotland and Ireland, some Douglas fir used in Scotland and Ireland, and European larch and oak used for switch timbers in England.

The Swedish and Russian sleepers consisted of Scotch pine shipped from the Baltic. The German and Netherlands supply consisted of Scotch pine from Russia, Germany, and Austria, shipped through German and Dutch ports. These four sources of supply were shut off immediately on the outbreak of the war.

There are over one hundred railway companies purchasing sleepers in England, each with slightly different requirements. The specifications for each company remain practically unvaried from year to year. Copies of the specifications issued by the leading railway companies have been forwarded to the Commissioner of Commerce, Ottawa.

The important terms of the specifications, which are common to nearly all the companies, have been:—

1. Nearly all the sleepers are purchased either in hewn blocks 10 in. by 10 in. by 8 ft. 11 in. to 9 ft., which the railway companies split into two sleepers, or in sleepers 10 in. by 5 in. by 8 ft. 11 in. or 9 ft. When blocks are purchased one inch of wane is allowed on each corner. When sleepers are purchased one inch wane is allowed on two corners only.

2. Sleepers must not have the heart of the tree further than one inch from any surface.

3. Timber must be free from bark, shakes, splits, large, loose or decayed knots.

4. The requirements for delivery of the sleepers vary, but the various companies usually require the sleepers to be delivered, creosoted, according to their individual specifications, or uncreosoted, to their trucks at places and on dates named in the specification.

5. The companies purchasing sleepers also insist on the privilege of inspecting and rejecting sleepers after their arrival in England.

6. Payment for the sleepers is usually made in full, in from fourteen to sixty days after delivery of the sleepers.

7. Some of the companies insert in their contracts clauses making the contractor responsible for any loss they

may suffer through having to buy sleepers elsewhere, in case the contractor fails to deliver the sleepers at the stated time.

The above requirements on the part of railway companies have resulted in the development of timber firms who specialize in the delivery to the railway companies of sleepers manufactured or creosoted to their special requirements.

These companies receive all the inquiries issued by the railway companies, buy the timber, creosote it, if required, and take the responsibility for the delivery of the sleepers at the points named by the railway companies.

When the sleeper trade was forced into new channels this year many shippers made contracts directly with the railway companies but it is doubtful if the shippers or the railway companies will find it more profitable or satisfactory to do business directly than through the medium of the sleeper merchant, or British timber merchant, who finances the transaction and looks after the creosoting and the handling of the timber between the ship and the railway tracks or storage yards and markets the timber rejected by the railroad.

The railroads and sleeper merchants ordinarily carry a six to ten months' supply of sleepers on hand in England, seasoning, or passing through the treating process. The existence of this supply, together with the decreased use of sleepers brought about by the enlistment of railroad employees and the curtailing of maintenance expenses enabled the railway managers to look about them for a new source of supply to carry them through the period of the war.

Before the war very little experimenting had been done with woods other than Scotch pine from Sweden, Germany and Russia. This timber creosoted so satisfactorily and with a treatment of 8 to 10 pounds of creosote per cubic foot, held spikes and screws, and gave such a life of service, usually fifteen to twenty years, that practically all railroad engineers were disinclined to try new woods. There had, from time to time, been importations of jarrah, various West Indian hardwoods, Californian redwood, and twelve years ago, a fairly large shipment of Douglas fir sleepers from Canada. This shipment had creosoted well and the sleepers are still giving good service in the tracks of the Great Western Railway Company.

Within two months after the outbreak of the war, the representatives of an American pitch pine sleeper company had explained the merits of pitch pine sleepers to two conferences of the engineers, managers and purchasing agents of the thirty or forty railway companies, claiming that uncreosoted pitch pine sleepers would last twenty years. As a result of the aggressive methods of the firm selling pitch pine sleepers and because the pitch pine district of the United States was the most accessible territory in a position to ship large quantities, the greater part of the requirements of the railways have been filled in pitch pine.

Pitch pine sleepers have been sold f.a.s. at American ports for about 75 cents each, and the delivered cost c.i.f. English ports during the past three or four months has been \$1.50 to \$1.75 each. Since the shipments of pitch pine sleepers have begun to arrive, it has been observed that many of the sleepers are manufactured from inferior species of pitch pine, and that the grade of timber sent forward in some shipments is poor. The creosoters have found pitch pine a difficult wood to handle for the reason that in the same shipment there will be mixed together sleepers of such varying qualities and grades that when sent into the creosoting cells there will be in one charge sleepers that will absorb only three pounds per cubic foot, and others that will absorb twenty pounds, a result that is unsatisfactory both to the railway companies and to the creosoting firms,