## LOGGING METHODS IN BRITISH COLUMBIA

The methods employed in logging operations in British Columbia differ in many respects from those in vogue in Eastern Canada. While horses are employed almost exclusively in the east for hauling the logs in the woods, in British

fitable to haul a longer distance. This engine is capable of hauling 10,000 feet of logs at a time. The price of the road engine varies according to the weight and size from \$2,200 to \$3,000.

The timber in British Columbia being so



10 x 12 DOUBLE DRUM LOGGING ENGINE AS USED IN BRITISH COLUMBIA.

Columbia steam engines perform this duty to a large extent. By request, we give some particulars regarding the logging engines used for this purpose.

The logging engines which are generally used in British Columbia are operated by steam, and are fastened on to a big sleigh moved about in the woods wherever required under their own steam.

There are two kinds of logging engines. One is called the yarding engine, which is generally put on the main skid road and hauls the trees and logs as they are cut from the bush out onto the main road. The engine hauls the logs out of the woods without making any road for them. For yarding it is customary to use a single drum engine having about 7x10 cylinders, the cylinder usually making six revolutions for one o. the drum. In yarding it is not considered advantageous to haul more than 600 feet; it is found to be more profitable to keep the roads up close to the main road.

The engine is bolted on to a sleigh, made of two runners about 18 inches x 24 inches, usually 30 feet long. It is moved through the woods by running out the rope and fastening it to a tree and thus hauling itself up. The 7x 10 engine is worth about \$1,500; 7% wire rope is worth about 15 cents per foot, and the blocks are worth about \$20 each.

The other engine is called a road engine and is used for hauling the logs on the main skid road down to the water. It is usually much larger than the yarding engine, with two drums instead of one. The second drum is for the haul back. There is a block made fast at the back end of the haul, one-half inch rope being run through it, and when the load is at the landing the top drum is put in motion and the main line is taken back to the woods. The line used is usually of one inch. An engine of this kind will haul a distance of one mile very satisfactory, but it is doubtful whether it is pro-

heavy and large, difficulty was found at first in getting the engine stong enough, and consequently the operators who first started to use them had considerable trouble on account of breakages. The manufacturers have since studied the difficulties which were experienced

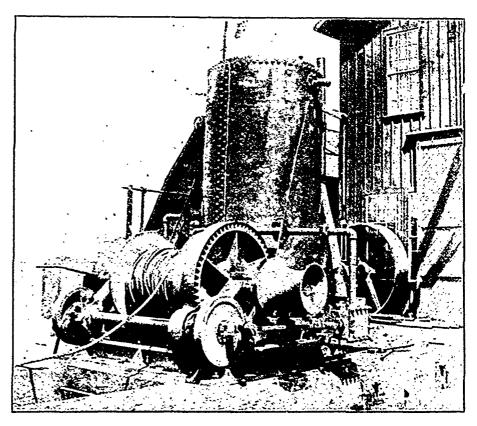
from which the accompanying illustrations were made the Albion Iron Works Company say:

"We are manufacturing here at the present time a 10" x 12" double cylinder log hauler with main haul drum and haul back drum; this machine is specially built for roading purposes and contains one mile of 1-inch cable. We are asso manufacturing two yarding engines double drum 9" x 10" cylinders, the other singular drum 9 x 10" cylinders; these machines are capable of handling from half to three-quarters a mile of 1% inch cable. The single drum machine is worth \$1,650; the double drum 9" x 10" \$2,300, and the double drum 10" x 12" roading engine \$3,000."

## THE VICTORIA LUMBER AND MANUFACTURING COMPANY'S METHODS.

Modern methods of logging are employed by the Victoria Lumber and Manufacturing Company, of Chemainus, B.C.. the following particulars of which will doubtless be of interest.

Having purchased from Henry Croft and his associates the small mill and mill site then at Chemainus, soonafter the Esquima't & Nanaimo railway land grant was made, the Chemainus Lumber & Manufacturing Company entered into negotiations with the E. & N. Ry. Co. for the purchase of all the timber lands contained in their grant. Numerous parties of expert cruisers were at once put in the field, and the E. & N. railway lands from the Koksilah river on the south to the 50th parallel on the north, were thoroughly cruised, and all the lands suitable for logging and containing timber were



9 x to Single Drum Logging Engine as Used in British Columbia.

by the loggers, and the machines are now giving splendid satisfaction, and taking the place of horses almost altogether.

Logging engines are manufactured by several Canadian firms, including the William Hamilton Manufacturing Company, of Peterboro, Ont., and the Albion Iron Works Company, of Vancouver, B.C. In sending use the photographs

selected, and purchased by the company. These lands were not taken up in sections or blocks, but the lines were run just around the timber, taking in no land but what was suitable for logging. The result of such thorough cruising, and the manner in which the lands were selected, is that this company now own one hundred and sixteen thousand acres of the best tim-