



No. 2

B.C. Forest Service Photo.

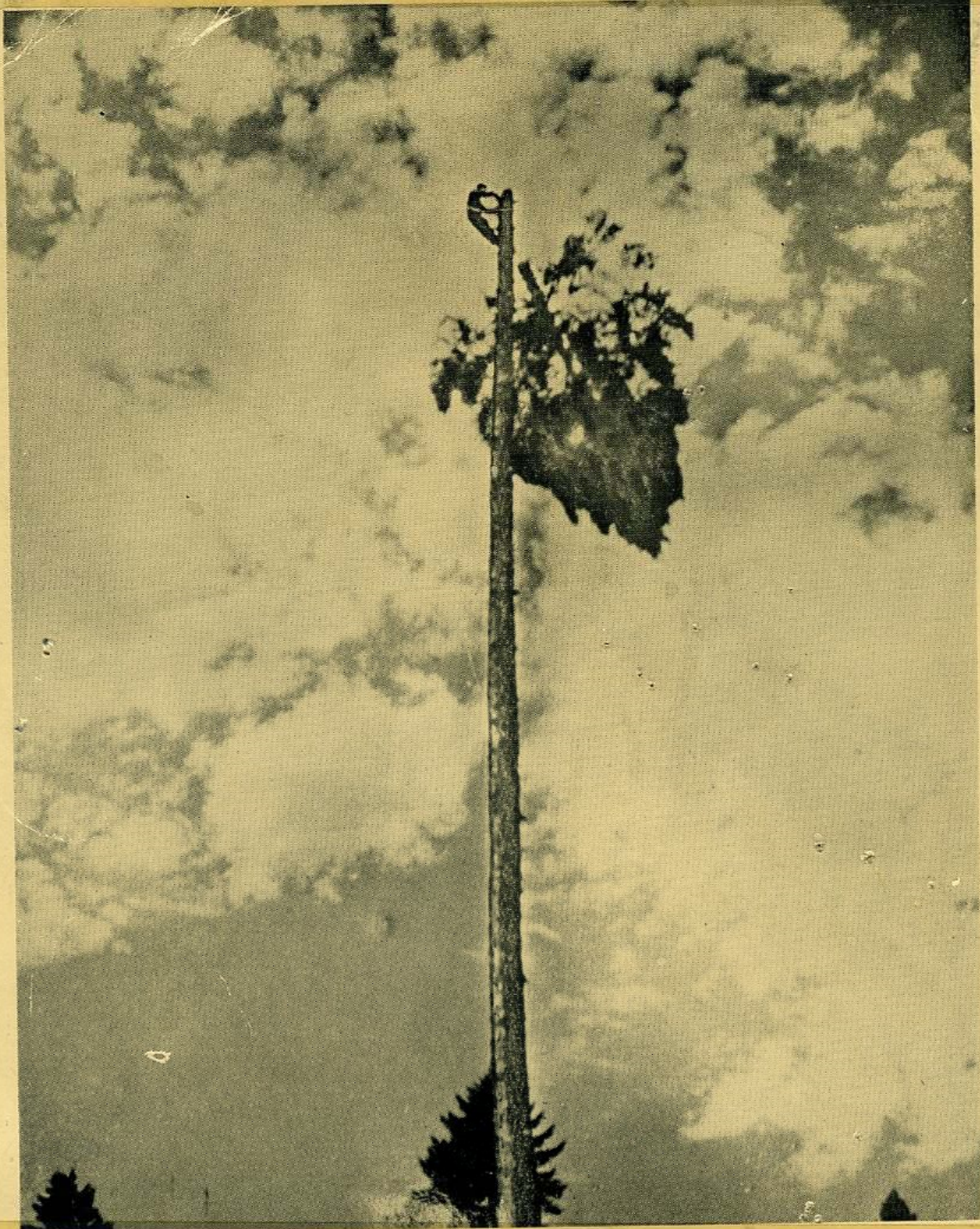
No. 2. Felling timber with a power chain-saw. Many British Columbia loggers use this method of felling because it is very speedy. Power-saws consist of a steel blade around which a chain, containing saw teeth, revolves at a rapid speed. The power for the saw is a small gasoline engine mounted on one end and equipped with two handles and the necessary controls. Two parallel cuts are made for the undercut and this is "chunked" out with a "pulaski" tool. A single cut is then made at the back of the tree.



No. 3

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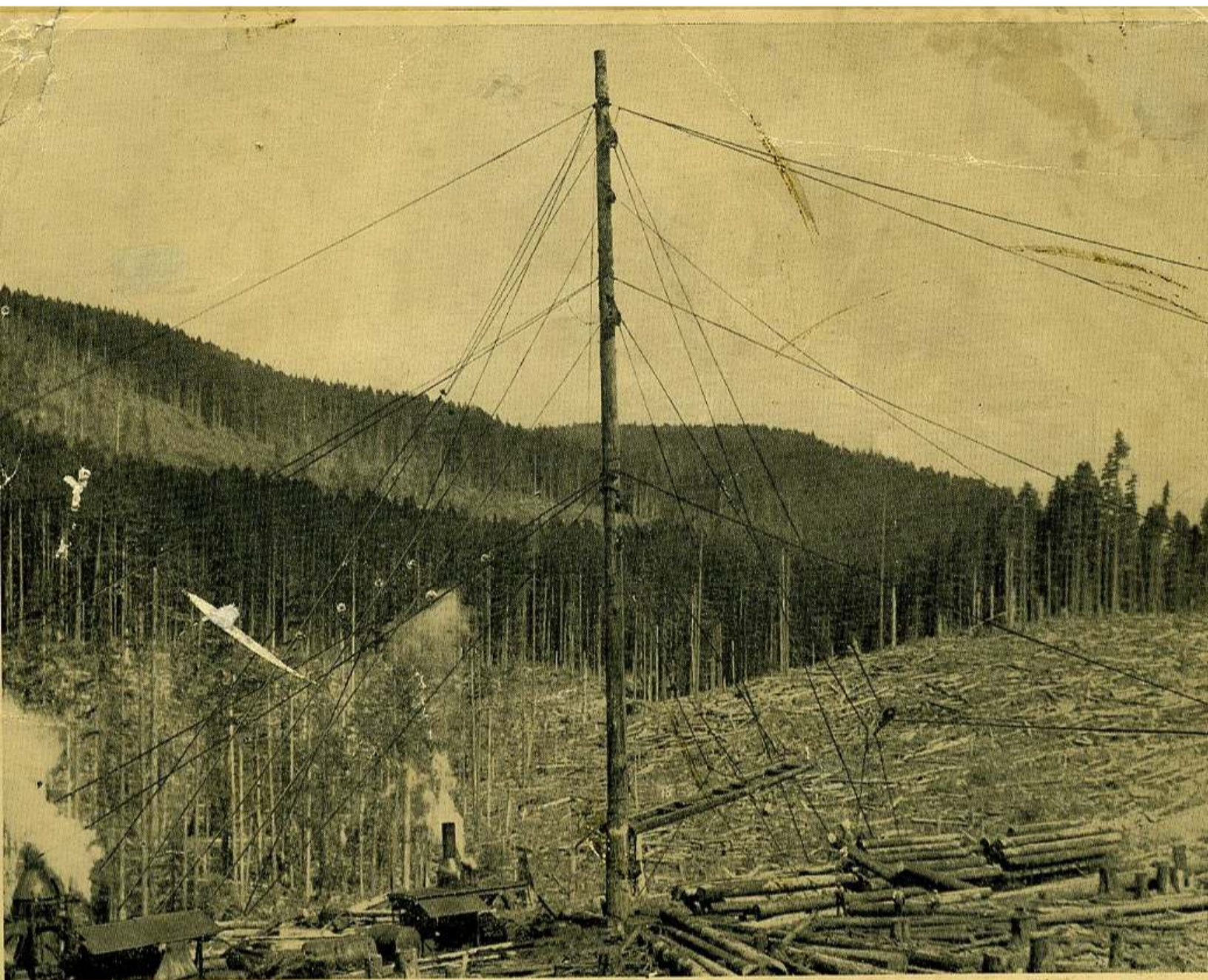
No. 3. Felled and bucked timber ready to be hauled out of the woods by the sky-line from the spar tree. In areas where fire hazard is high, the remaining material must be cleaned up and burnt in order to reduce forest fire dangers.



No. 4

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No. 4. A "high-rigger" topping a spar tree. He climbs the tree with the aid of spurs, belt, and climbing rope (a rope with a steel core), cutting off the branches as he goes. Then the upper part of the tree is cut off with axe and saw. This is a dangerous job that requires judgment and skill. After topping the tree, the "high-rigger" places all the blocks, lines, and other rigging in position. Often the first tree topped is used only for a raising tree to raise the final spar tree.



No. 5

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No. 5. Logging with slack sky-line and steam donkeys. Spar-tree yarding is used with various systems of cable-and-block combinations. Each has its advantages to overcome yarding difficulties encountered in different types of terrain. Economic considerations and the rough country in which coastal timber grows make this system of yarding a practicable method of harvesting the timber.



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No. 6

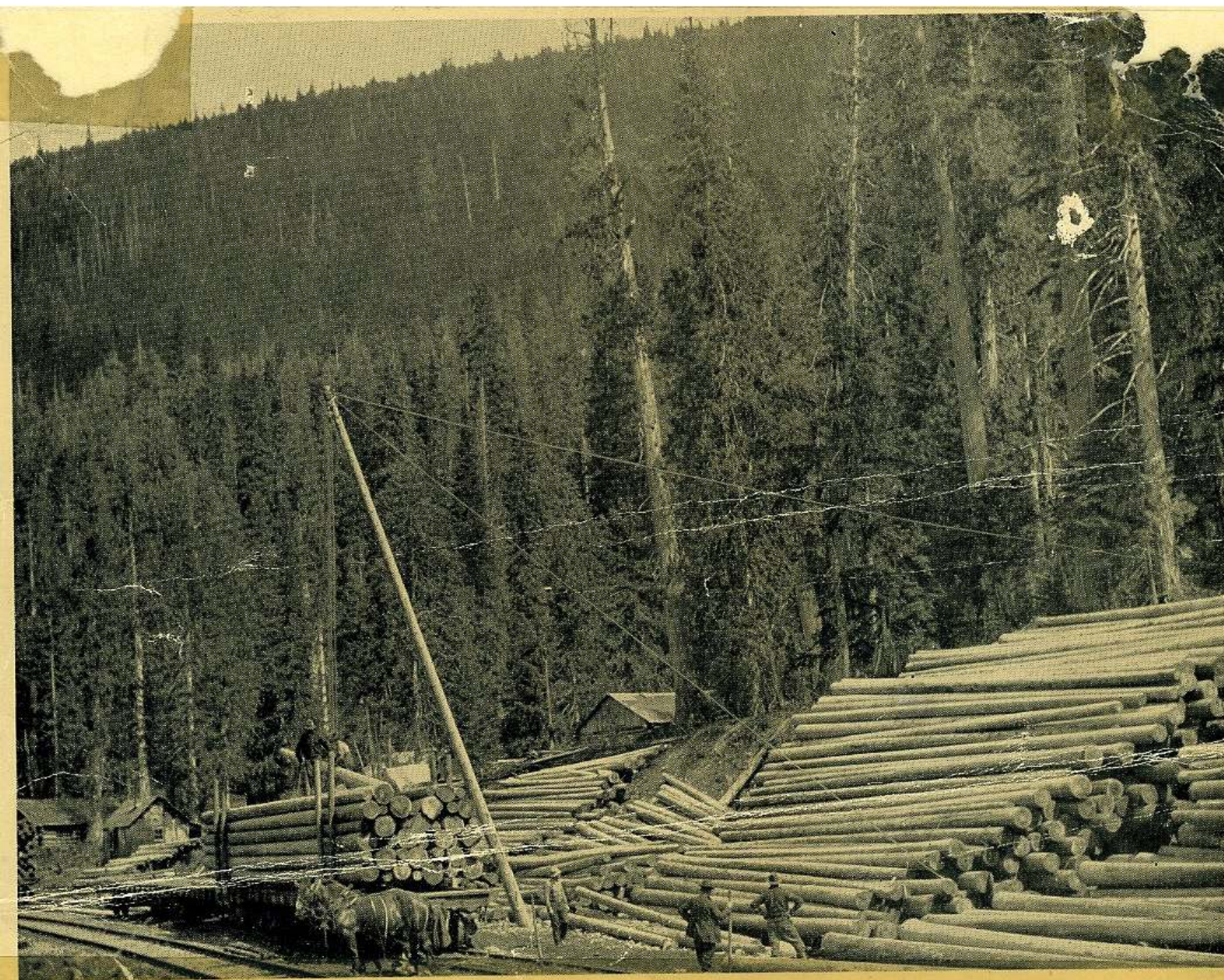
No. 6. This 120-ton steam skidder "unit" operates about 13 tons of steel cable on skidding, receding, and slack pulling drums, transfer line, sky-line, straw-line, heel tackle, and loading drums. A 75-ton Climax logging locomotive is shown in the foreground. Timber sufficiently accessible for logging by this method is scarce. To-day, trucks are more generally used for hauling the logs to the boom or market and gasoline and diesel winches or "donkeys" are replacing the heavier steam logging equipment.



No. 7

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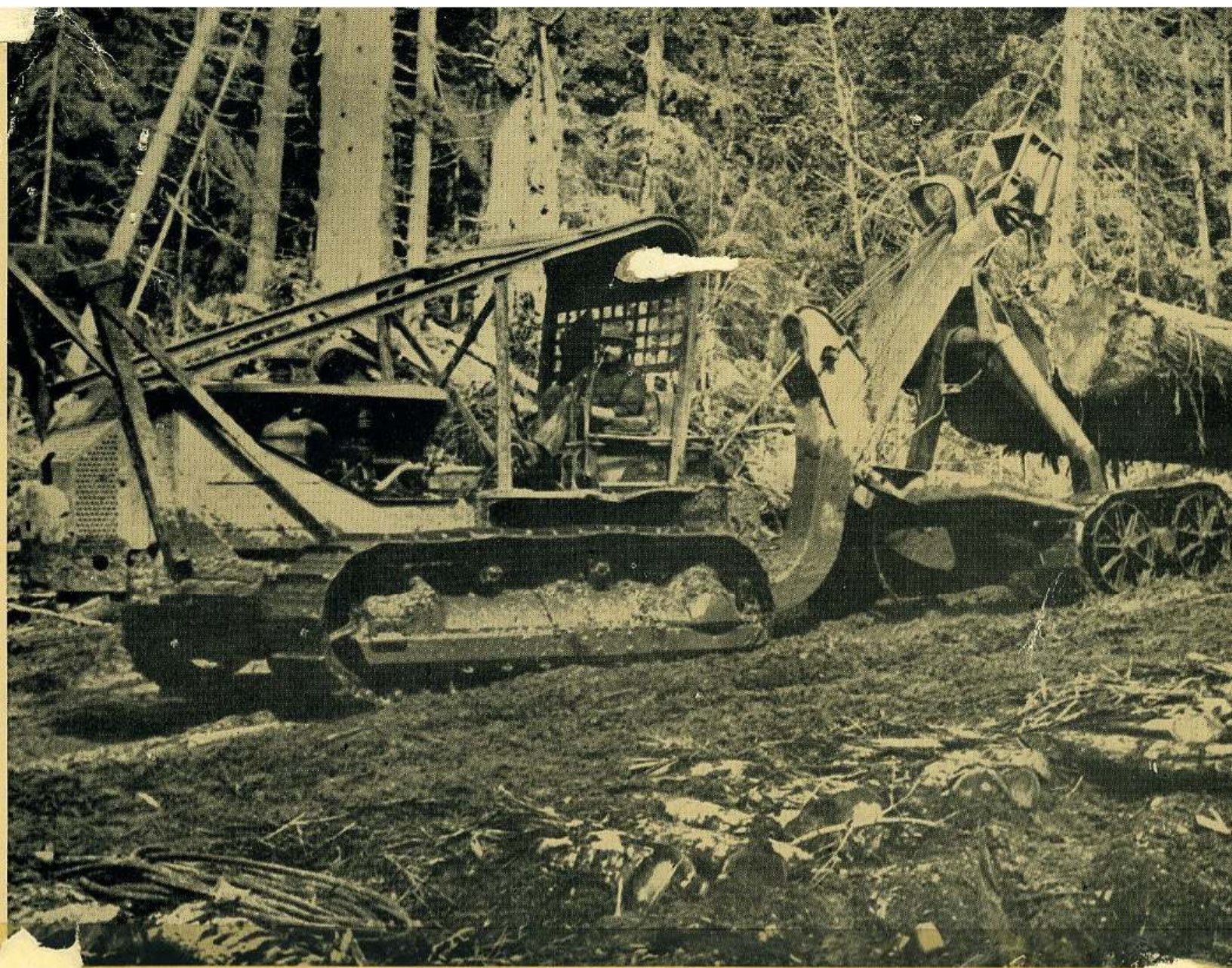
No. 7. Loading logs with a heel boom. After the logs have been yarded to the "side," a loader places the tongs on the log at a point somewhat behind its centre of gravity. The log is raised so that one end of it "heels" against the under-side of the boom. It is then swung over the truck by moving the boom with a cable and the hanging, counter-weight log—the "chunk." A cable from the loading donkey swings the boom back over the yarded logs still to be loaded.



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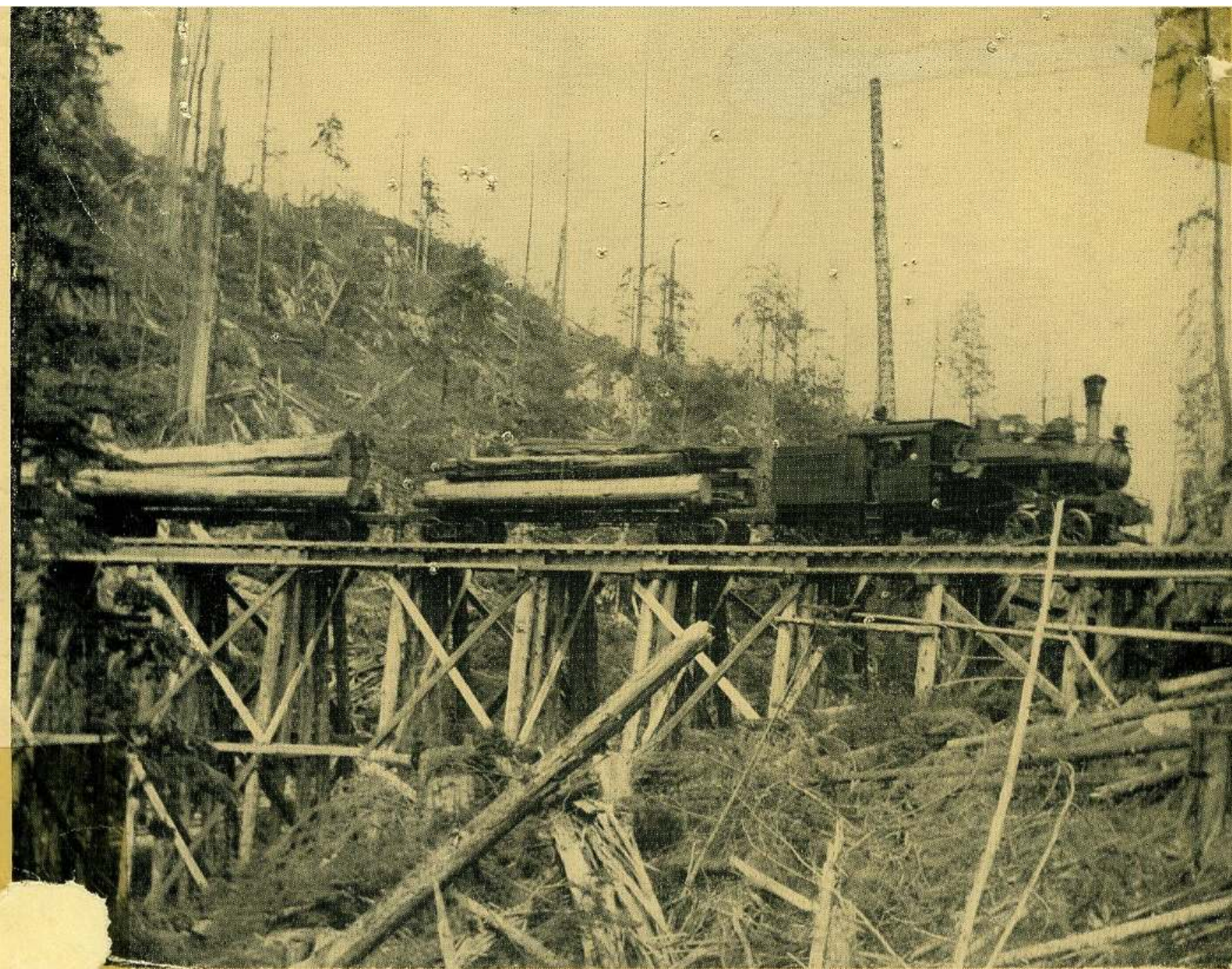
No. 8. Loading cedar poles on railway cars. For this type of operation, horses are used in many parts of the Interior of British Columbia. These poles will be used for carrying telephone-lines.



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No. 10. A "turn of logs" being hauled by caterpillar tractor and arch. These machines are used extensively in selective logging operations. The "cat" builds its own road and yards the logs to the road with its winch. Later, with the road-building blade at its removed, the "cat" raises the logs on the arch and hauls them to the dumping or log area. "Cat" logging is not practicable for removing timber from large areas of country but is very useful for logging scattered or isolated patches of trees.



No. 9

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No. 9. A Heisler logging locomotive pulling a train-load of logs over a trestle. Logging by railroad is one method used for removing timber in British Columbia's logging camps. These locomotives are low-g geared in order to enable them to climb the steep slopes over which they operate. Trucks can operate on steeper grades and road-building problems are far less than those in constructing railroad grades. Trucking makes possible shorter routes to the timber, so trucks are replacing railroads in many logging operations.



No. 11

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No. 11. Truck-load of logs ready for dumping at the booming-ground. These huge trucks are used for hauling logs from the "woods" to the boom or market. Some of the larger trucks have a gross vehicle weight of more than 100 tons. The truck-load is from 8 to 16 feet wide and 40 or more feet long. When returning empty, the trailer is loaded on the truck to give greater manoeuvrability, save wear on trailer tires, and give added weight for traction when climbing steep mountain grades.



No. 12

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No. 12. Boom-men building a "Davis raft" of Sitka spruce and cedar logs. These rafts are constructed by fastening the logs with steel cable so that they form a number of layers, one above another. This system is used when a boom of logs is to be towed for long distances in open waters where little or no shelter is available in case of a storm. In sheltered waters, flat booms are used instead of the "Davis" or other patented forms of rafts.



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13. Two 9-section flat booms of logs being towed into Vancouver Harbour. These are made up of tightly stowed logs, confined within the outer boom-sticks which are held together with chains. To prevent logs from working over the boom-sticks, long sticks known as "swifters" are chained on top of the boom at intervals of approximately 10 feet. Flat booms are suitable for towing in normal weather but are not as sturdy as "raft" and other patented systems of booming logs.