

dites the skidding by clearing the logs at the track out of the way of the following logs.

Each engine also drives two drums for carrying side guying cables, and are used for taking up the slack in the guy lines when setting the machine. The guy line runs from the drum to a block attached to the side of the boom head and thence to a stump or tree at a convenient distance. When the guy is tightened, the guying drum is held with heavy steel ratchets and the driving mechanism thrown out of gear so that the shafts and guying portion of the machinery are not in motion when the machine is working at skidding logs.

The frame of the Clyde Skidder is constructed of heavy steel I-beams and steel angle braces, hot riveted and trussed throughout to withstand the sudden and severe shocks to which a machine of this nature is subjected.

Two trusses or hog-backs of heavy steel channels are fastened to the frame near the center of each truck to stiffen the frame for carrying the weight of engines and boiler.

These trusses are built into the cab frame, thus stiffening the cab as well as strengthening the frame of the machine.

Supporting guys from the peak of each boom are fastened to the top of the trusses.

The trucks are either four or six wheel according to the size of the machine, the weight of the rail, and the condition of the tracks on which the machine is to operate.

The truck wheels are 28 inches in diameter and have five inch tread. Shoe brakes are applied to the wheels and are operated both by steam and a hand wheel.

*Engines:* Clyde Skidding engines are built with steel gears having machine cut teeth, extra long journal bearings and large diameter shafting. Ratchet rings on all gears are cast steel. The highest refinement of workmanship prevails throughout.

Each engine, to handle two skidding lines on a cable outhaul skidder, operates two drums for skidding, two for outhaul, two for setting, two for decking and two for guying. Each of these drums is independent of all others and operated by adequate frictions of double "V" type, and controlled by levers within easy reach of the operator.

On the larger machines, skidding drums may be equipped if desired with band frictions. The high speed outhaul drums have asbestos composition friction blocks.

Engines used on the larger machines may be equipped with outside piston valve motion.

The large two line double-end machines, especially adapted to

