

IMPROVED HARVESTING METHODS

EQUIPMENT SURVEY NOTES

SELF-LOADING SEMI-TRAILERS

Observations made of a self-loading semi-trailer unit in Montana indicate that similar units can be used in other localities, especially where tree-length logging is practiced.

The truck and trailer are a standard unit built to self-load and carry the trailer "piggyback" on the return trip to the woods. Such units are equipped with a winch driven from the power takeoff for loading the trailer (fig. 1).

The loading of logs is done with the same winch. The only modification required to existing equipment is to add an upright to the safety shield behind the cab. This extension is to hold a pulley or roller which should be slightly higher than the highest load to be handled (fig. 2). When loading logs the cable from the winch is placed over the pulley and extends to the rear of the trailer.

The use of a mobile chute in connection with the truck-semi-trailer unit is the unique feature. However, in some locations a bank or extended rollway could be used in lieu of the portable chute. On the operation illustrated a chute mounted on two automobile wheels is used. Two holes dug in the ground for the wheels allow the axle and frame to rest on the ground (fig. 3). A thin sheet metal lining in the chute and a roller on top reduce friction and wear. The first few logs are loaded one at a time for ease in getting them over the bunks (fig. 4). From then on, one to several logs are loaded at a time depending upon size.

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Figure 1.--Loading a trailer for return trip to the woods

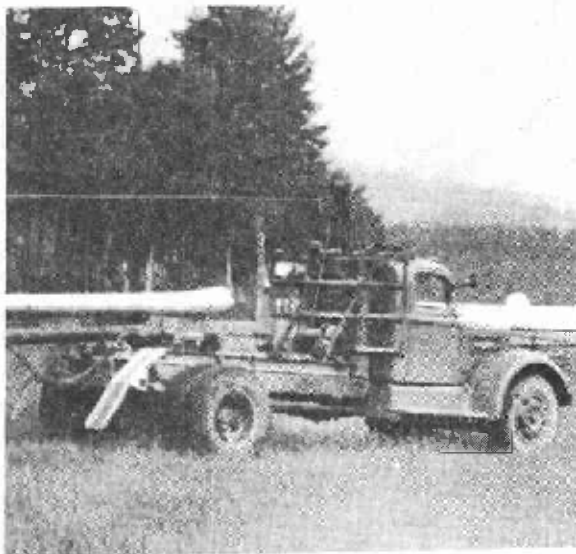


Figure 2.--Extended frame behind cab to hold loading pulley

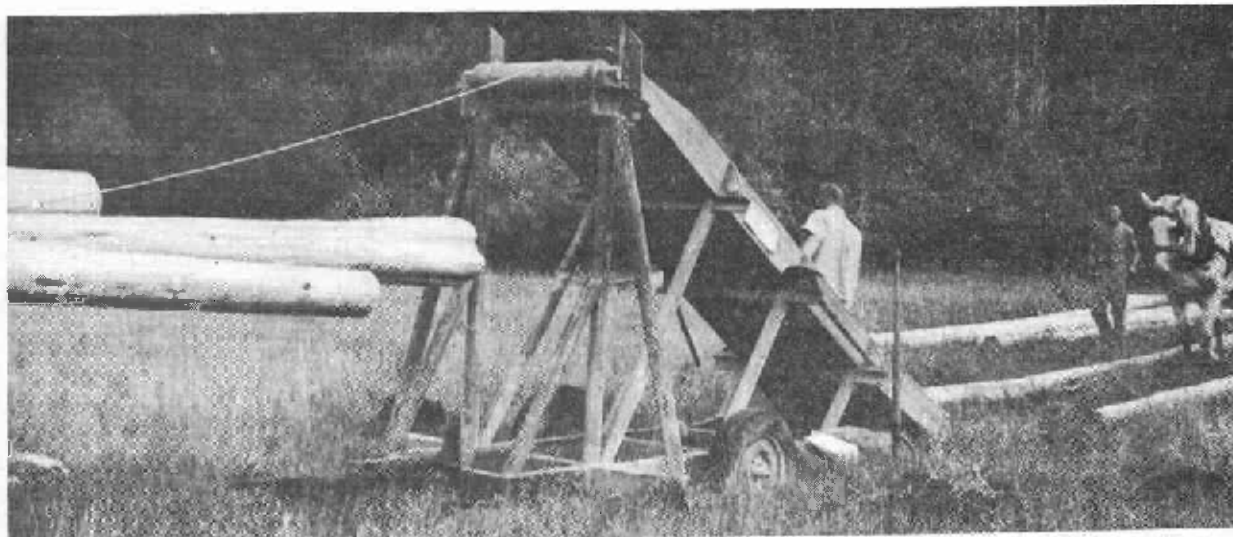


Figure 3.--Portable chute



Figure 4.--Loading the first tier of logs