

SMALL SAWMILL IMPROVEMENT
PRACTICAL POINTERS TO FIELD AGENCIESLAYOUTS AND SHEDS FOR SMALL MILLS

More sawing days, fewer delays, greater comfort to workmen, and longer life of equipment result from housing small mills beneath sheds such as described here. Two plans are given, both of which apply either to tractor or steam powered mills cutting at least 200,000 board feet at one site. Plan No. 1 differs from No. 2 in that it provides for a dip tank, an inclined slide instead of trucks to carry refuse to the burner, and a wood instead of a corrugated iron roof. These features are interchangeable.

Plan No. 1.--This shed can be built with about 9,000 board feet of lumber. Side and end elevations for two methods of roofing the structure are shown. Gravity will carry slabs and edgings to the fire if the location permits erecting a slide having a 1 foot fall in each 2 feet of horizontal distance. Rails are either unsupported for the 12 feet nearest the fire or metal supports provided.

Plan No. 2.--This shed requires about 4,000 board feet of lumber, exclusive of trestle, and 1,650 square feet of corrugated roofing. In this layout slabs passing over dead rolls are loaded on a small car and together with edgings are run out about 75 feet and dumped so as to slide 20 feet down five inclined rails to the fire. Lumber loaded on another car is run out to piles over a separate track. The columns supporting the trestles are placed in pairs at 8-foot intervals and are joined with 2 by 6 inch caps. In the event a relatively small portion of the material goes through the edger the rolls are omitted and the lumber car brought within 6 feet of the headsaw in line so that sawn boards and slabs fall to the car, the slabs being carried across the carriage tracks and loaded on a slab car outside the mill. The floor of the slab car is supported by a single beam lengthwise along the middle. The beam has bevelled ends resting in notches so that it pivots as the load is dumped. One end of a chain is permanently fastened to the car floor and the other temporarily to the truck body to prevent pivoting prior to dumping.

General.--In both plans the 4 by 6 inch joists supporting the mill floor (see side elevation) are spaced about 3 feet apart, but care should be taken to have a joist directly under the breaks in the carriage track. It is advisable to provide for a roomy sawdust pit under the headsaw (at least 3-1/2 feet from saw rim to bottom of pit) and one under the edger large enough (6 feet deep by 4 feet wide) to permit a wheelbarrow to directly catch sawdust. For steam powered mills the engine would be mounted in the space labeled tractor and the boiler set up preferably accessible to the slabs on the opposite side outside the mill at the rear.

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† Maintained at Madison, Wisconsin in cooperation with the University of Wisconsin.

* See outline in Small Sawmill Improvement Working Plan, March 1930, for explanation of indexing system proposed.

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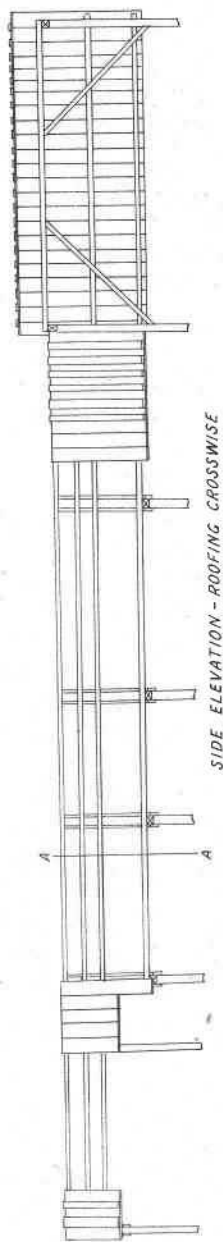
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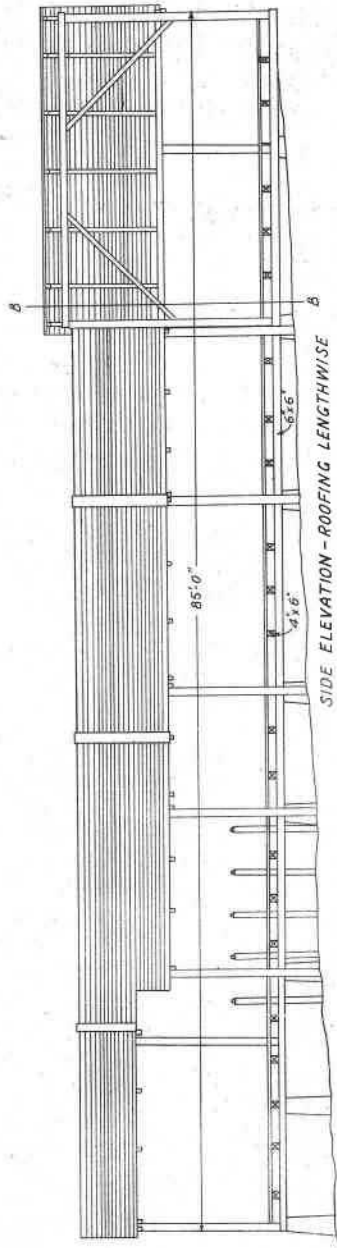
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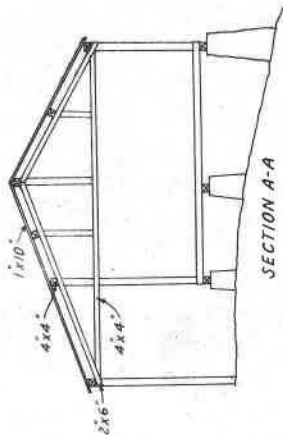
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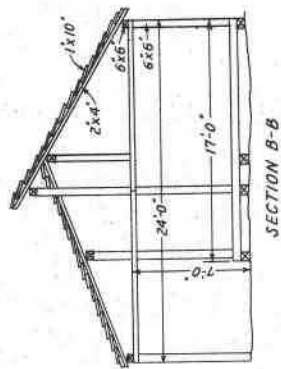
SIDE ELEVATION - ROOFING CROSSWISE



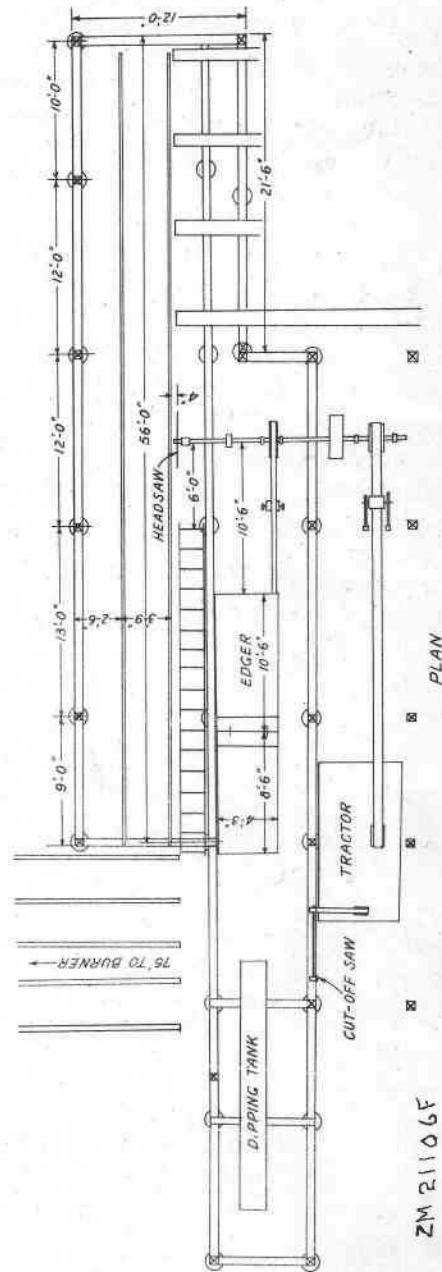
SIDE ELEVATION - ROOFING LENGTHWISE



SECTION A-A



SECTION B-B



PLAN

SMALL MILL PLAN NO. 1

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