

SMALL SAWMILL IMPROVEMENT
PRACTICAL POINTERS TO FIELD AGENCIESBURNING WASTE MATERIAL ATSMALL PLANTS REMANUFACTURING WOOD PRODUCTS

In wood remanufacturing plants located in towns or cities, the common type of burners used by small sawmills (Rept. No. R899-22) may not be suitable because of the smoke nuisance and fire hazard. In the refuse burner described here more complete combustion will take place, and the stack will carry the smoke higher making it less objectionable.

In remanufacturing plants the waste consists largely of shavings, sawdust, small trimmings, and small edgings. The shavings and sawdust are usually handled with a blower system and can be discharged to the burner at a point above the feed hole. From here it can be spouted into the furnace with an iron chute. The iron cover to the feed hole is kept partly open allowing sawdust and shavings to flow into the furnace. The trimmings and pieces too large for the blower to handle can be shoveled in through the fuel door.

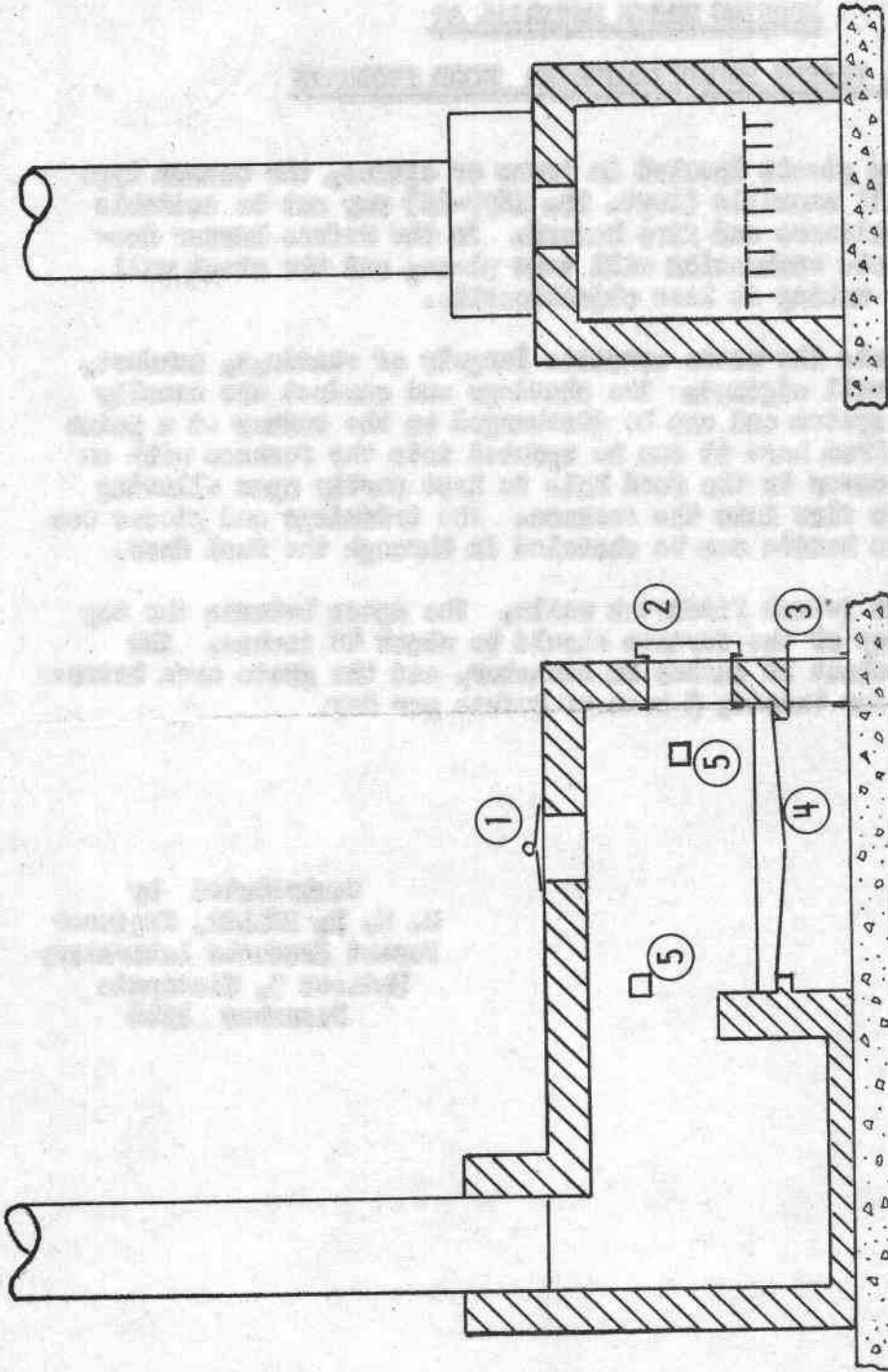
The furnace should have 9-inch firebrick walls. The space between the top of the grate and the top of the furnace should be about 48 inches. The steel stack should be about 16 inches in diameter, and the grate area between 20 and 25 square feet for burning 5 tons of refuse per day.

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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



DUTCH OVEN TYPE OF REFUSE BURNER

- (1) Manhole and cover for feeding fuel into furnace.
- (2) Fuel door with openings for secondary air.
- (3) Ash pit door with openings for primary air.
- (4) Grate bars.
- (5) Secondary air inlets on sides of furnace.