to a room whose heat loss is 9000 B.t.u. or above. (See Figs. 51 and 52 which show that high temperatures are necessary if rooms of more than 9000 B.t.u. requirement are heated by stacks in 4 in. studding), should be run within 6 in. studded walls or should have multiple stacks. Stack

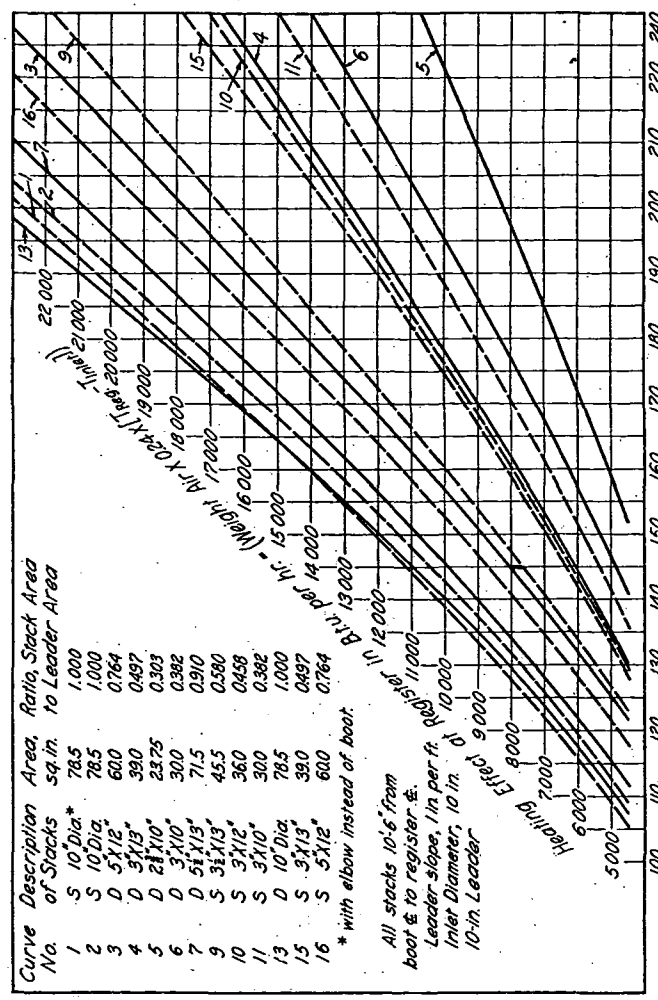

FIG. 51. HEATING EFFECT AT REGISTERS FOR VARIOUS STACKS WITH 10-INCH LEADER

sections, wherever possible, should be changed from the thin rectangular to the more nearly square shape. Stack heads should have upper end curved to provide easy flow of warm air to the room. Splitters in the upper end of the duct increase the air discharge.

WARM-AIR REGISTERS

The registers used for discharging warm-air into the rooms should have free or net area not less than the area of the leader in the same run of piping. The free area should be at least 70 per cent of the gross area

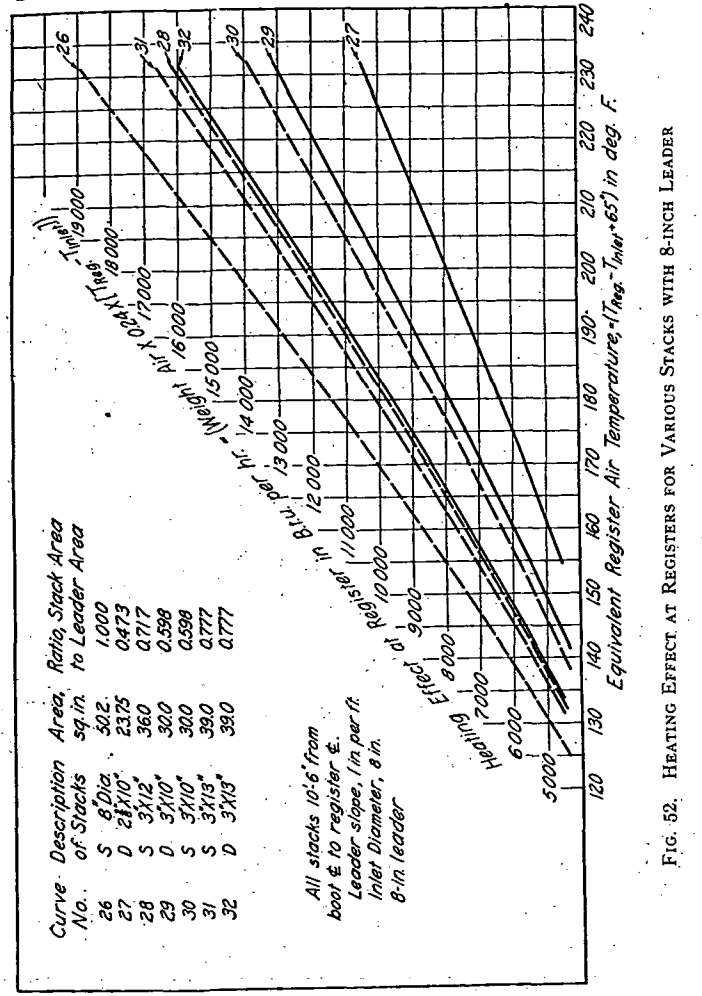

FIG. 52. HEATING EFFECT AT REGISTERS FOR VARIOUS STACKS WITH 8-INCH LEADER

of the register. No upper floor register should be wider horizontally than the wall stack, and it should be placed either in the baseboard or side wall, and not in the floor, First floor registers may be of the base-