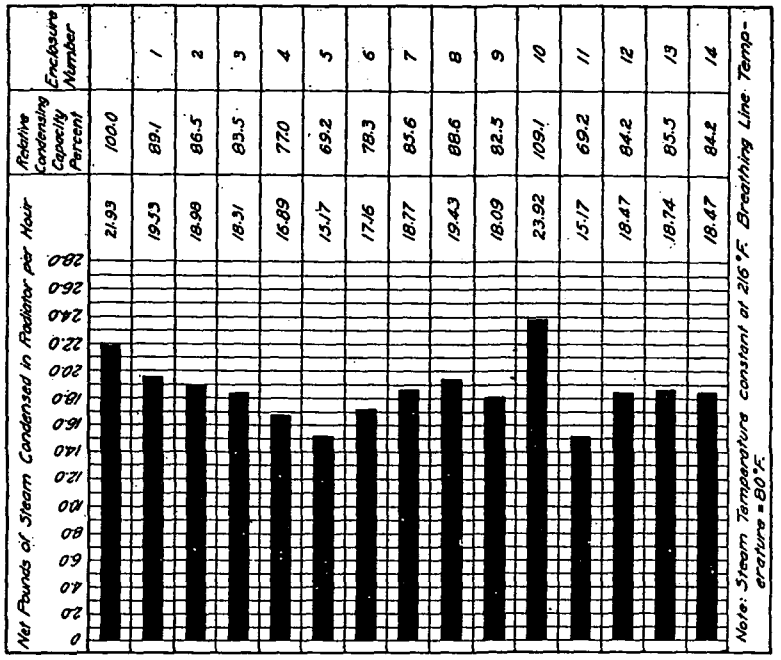
TABLE 3. EFFECT OF ENCLOSURE ON HEAT EMISSION FROM RADIATOR



Enclosure Number	Description of Enclosure: Height of Top of Enclosure Above Top of Radiator	Inlet	Outlet	Free Area of Inlet sq. in.	Free Area of Outlet sq. in.
	Radiator not enclosed—Painted (not dipped) with two coats of black Pecora paint				
1	0.0"	4'-3.0" Across front	9½'-3.0" Open top	200.0	462.5
2	0.0"	4'-3.0" Across front	9½'-3.0" Grilled top	200.0	209.4
3	0.0"	4'-3.0" Across front	12½'-3.0" Open front	200.0	625.0
4	0.0"	4'-3.0" Across front	4'-3.0" Open front	200.0	200.0
5	0.0"	4'-3.0" Across front	4'-3.0" Grilled front	200.0	92.1
6	17½"	4'-3.0" Across front	4'-3.0" Grilled front	200.0	92.1
7	34"	4'-3.0" Across front	4'-3.0" Grilled front	200.0	92.1
8	0.0"	4'-8½" Across front and ends	9½'-3.0" Grilled top	330.0	209.4
9	0.0"	2'-8½" Across front and ends	9½'-3.0" Grilled top	165.0	209.4
10	34"	4'-8½" Across front and ends	9½'-3.0" Open top	330.0	462.5
11	0.0"	4'-8½" Across front and ends	4'-3.0" Grilled front	330.0	92.1
12	0.0"	Punched metal grille front and ends, solid top. Grillework beginning 4" above floor. F.A. of grille = 44%			
13	0.0"	Woven metal grille front and ends, solid top. Grillework beginning 4" above floor. F.A. of grille = 33%			
14	0.0"	Same as (13) with F.A. of Grille = 42%			

Note: 20 Section, 38"-3 Column, (direct) C.I. Water Type Radiator used in all tests.

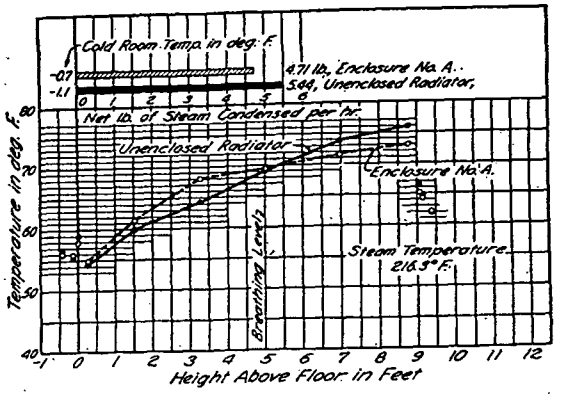


FIG. 3. ROOM TEMPERATURE GRADIENT AND STEAM CONDENSING RATE FOR RADIATOR WITH WELL DESIGNED ENCLOSURE

such information the reader is directed to manufacturers' guarantee in the catalog data section of THE GUIDE and elsewhere.

Pipe Coil Convectors

Table 4 has been developed by a method of deduction from the available data on such experimental work on pipe coils as has been recorded, and does not represent definite experimental results of tests.

Cast-Iron Gravity Indirect Convectors

Table 5 gives the cubic feet of air per hour (measured at 70 deg. fahr.) usually allowed per square foot of heating surface, through cast-iron gravity indirect convectors.

Table 6 gives the final temperature of the air leaving cast-iron gravity indirect convectors corresponding to different entering temperatures and different cubic feet of air per hour per square foot of surface.

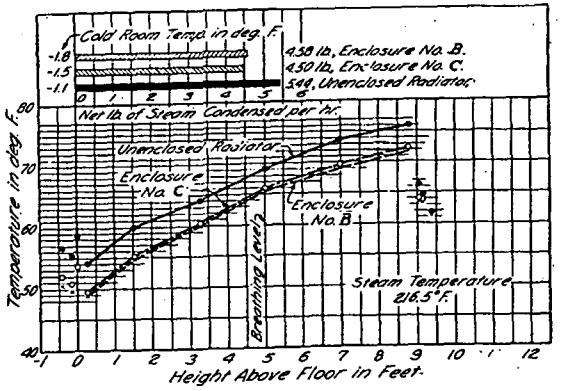


FIG. 4. ROOM TEMPERATURE GRADIENTS AND STEAM CONDENSING RATES FOR RADIATOR WITH IMPROPERLY DESIGNED ENCLOSURES