The Operation of the Hoffman Differential Loop

HSCo is peculiar, inasmuch as it absolutely maintains an unvarying water line in the boiler, independent of boiler pressure, that is no matter whether the boiler pressure is 8 oz. or 5 lbs. the water line in the boiler will maintain at a constant level. It also maintains, when the boiler pressure is more than 10 oz. a fixed pressure difference of 10 oz. between the main steam line from the boiler and the main air return line from the radiators. In other words the pressure in the steam main is always 10 oz. ahead of the pressure in the return line when the boiler pressure is above 10 oz. The maintenance of this pressure difference between the steam main and the return line insures a continuous flow of steam into and through the radiators. It also means that should an out-of-service radiator be put into service when the boiler pressure is 1 lb. or over, that this radiator will heat just as quickly under boiler pressure of 1 lb. or over as it will when boiler pressure is maintained at 8 oz. because the pressure at the inlet valve is 10 oz. more than the pressure at the outlet valve.

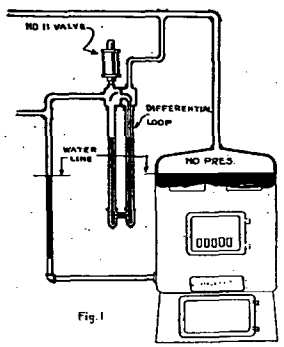


Fig. 1

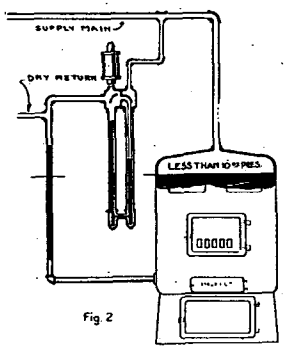


Fig. 2

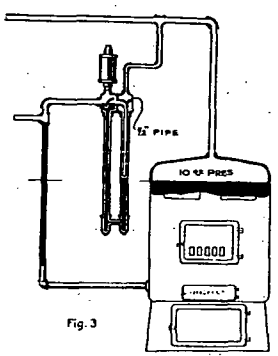


Fig. 3

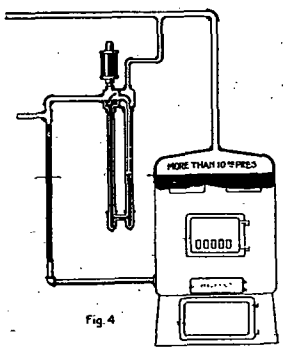
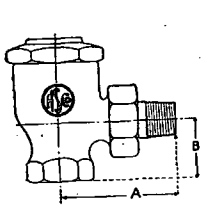
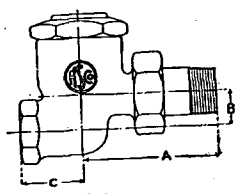


Fig. 4

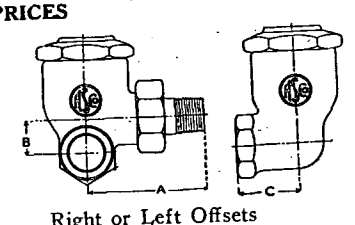
DATA AND LIST PRICES



Angle



Straightway



Right or Left Offsets

Style	Size	Diameter Valve Port	Maximum Capacity Square Feet	Dimensions A	Dimensions B	Dimensions C	List Price
No. 8 Angle	½"	¼"	200	2 3/32	1 3/32		$6.00
No. 8 Straightway	½"	¼"	200	2 3/32	25/32	1 1/32	6.00
No. 8 Offset	½"	¼"	200	2 3/32	25/32	1 5/16	6.00
No. 9 Angle	¾"	3/8"*	600	3 3/32	1 11/32		8.00

*No. 9 Valve furnished with 5/16" Port for pressures above 15 lbs.

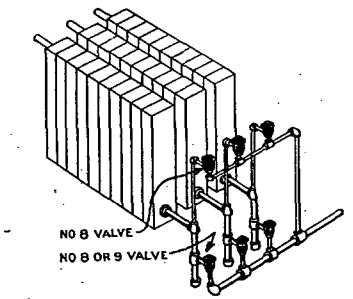


Fig. 1

Figs. 1 and 2 show application of Nos. 8 and 9 Hoffman Valve for venting Blast Heaters into gravity or vacuum returns.

Fig. 3 shows application of No. 9 Hoffman Valve for draining and venting sterilizer in gravity or vacuum return.

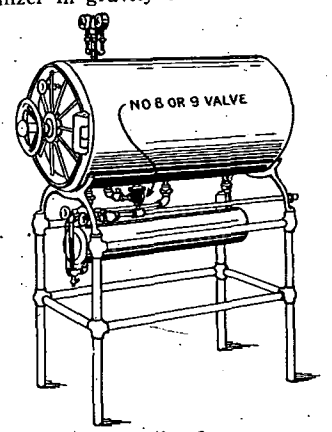


Fig. 3

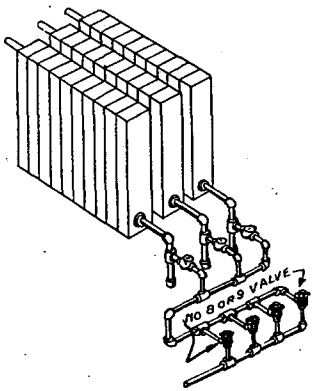


Fig. 2

Fig. 4 shows application of No. 9 Hoffman Valve for dripping steam or cooking kettles into gravity or vacuum return.

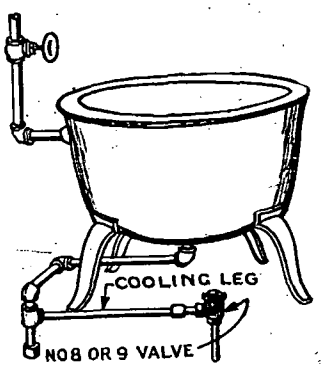


Fig. 4