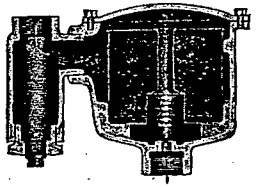
The No. 12 Hoffman Blast Trap is especially adapted for draining condensation from the following types of steam appliances:



No. 12 Hoffman Blast Trap

Indirect Radiators	Dryers and Drums
Blast or "Vento" Stacks	Hot-Water Generators
Ends of Steam Mains and Risers	Unit Heaters, etc.

Where the operating pressure is not in excess of 30 lb.

In functioning this trap distinguishes between steam, heated air and water of condensation giving free discharge of air and condensation.

The Trap embodies the desirable feature of open bucket or float traps because it relieves condensation immediately upon its arrival at the trap regardless of the water temperature. Coupled with the float is a thermostatic member which positively overcomes the chief difficulty with float traps by automatically relieving air as well as condensation from the system.

Normally the vent port is open and remains open until steam reaches the thermostat when closure takes place. If small quantities of condensation flow to the trap, the thermostat opens and discharges the water but if large amounts of condensation, beyond the capacity of the thermostat accumulate, the float lifts the thermostat from its seat and maximum discharge capacity is obtained.

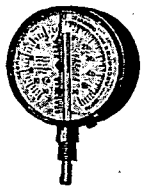
Table of Nominal Capacities No. 12 Hoffman Blast Trap

Pressure, lbs. per sq. in.	½	1	2	3	4	5
Capacity, lbs. per hr.	800	1,000	1,500	1,800	2,000	2,500
Capacity in sq. ft. of radiation on the basis of ¼ lb. of condensation per hr. per sq. ft.	3,200	4,000	6,000	7,200	8,000	10,000

Maximum Operating Pressure, 30 lb. Capacities for over 5 lb. pressure, furnished on application. With Strainer; inlet connection, 1 in.; outlet, 1 in. Without Strainer; inlet connection, 1¼ in.; outlet, 1 in.

HOFFMAN THER-KOMPO-GAGE

Measures pressure up to 30 lb., vacuum to 30 in., and temperature to 225 deg. Pressure is registered in ounces up to 5 lb. Vacuum is shown in half inches up to 10 in.



Hoffman Ther-Kompo-Gage

Temperature of steam or vapor being generated in the boiler is indicated on the thermometer.

Used in Hoffman "Controlled Heat" installations or in one-pipe gravity vacuum systems equipped with No. 2 valves; indicates efficiency of the apparatus when a warm house is maintained with vapor at a temperature considerably below 212 deg.

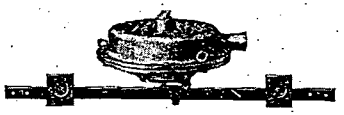
THE HOFFMAN VALVE LOCK



Hoffman Valve Lock

Prevents theft of No. 1 and No. 2 valves in public buildings, etc. No extra tapping is required as lock is easily applied when valve is inserted in radiator. By using set screws, valve is locked in position and can only be removed by a special key.

Write for Descriptive Circular—Hoffman Controlled Heat



Hoffman Damper Regulator

One of the most important features of the Hoffman Damper Regulator is the accurate control of the dampers so that only sufficient pressure is maintained at the boiler to insure adequate circulation to all radiators.

It is extremely sensitive in its action and accomplishes control so efficiently that when radiator inlet valves are opened or closed, the fire is accelerated or retarded to meet the change in demand for vapor.

The compensating or balancing plate is like a pair of scales. It is practically frictionless, remarkably sensitive and operates on slight changes in pressure.

It has an additional feature for the convenience of the installing fitter, in that the fulcrum on which the lever is suspended may be turned at different angles, permitting a straight chain connection with the dampers instead of at an angle, which might cause the dampers to bind.

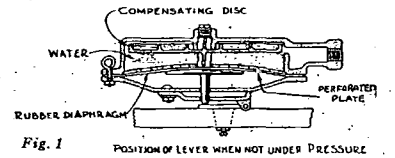


Fig. 1

Fig. 1 shows Damper Regulator under no pressure. Compensating plate is in its uppermost position, the bottom of the plate being in line with bottom of inlet. The space above diaphragm is filled with water up to the inlet. Weights on lever are to be so placed that they will hold the diaphragm against the perforated plate. Drafts are held open until the predetermined pressure is generated, when through diaphragm action which in turn is transmitted to the lever, drafts are closed.

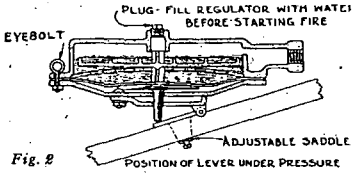
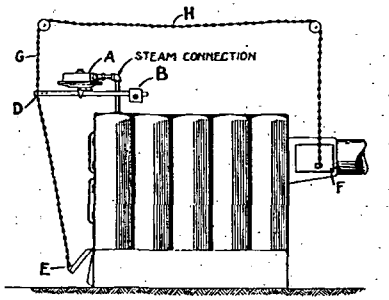


Fig. 2

Fig. 2 shows position of Damper Regulator when drafts are closed. Vapor pressure has overcome upward force exerted by the weights on lever arm and forced diaphragm downward. The water on the diaphragm lowers with it and likewise the compensating plate until top of the plate is level with the bottom of the inlet, thus preventing any addition to the water above the diaphragm. With a slight drop in vapor the weights force the diaphragm upward and drafts are opened.



IN MAKING steam connection to boiler, locate Damper Regulator so that chain to "E" and "F" operate freely. Regulator should be set level. Remove plug on top of Regulator and fill with water.

With no pressure on boiler and weight "B" in position on lever, connect chain between "D" and "E" so that draft "E" will be open as wide as required for sufficient draft. Connect "G" over pulleys to "F" leaving just enough slack to chain "G" so check draft "F" is closed.

Set weight "B" so lever "D" tilts when steam is raised to pressure to be maintained. If pressure increases, draft "E" will close and check fire. If fire is clean and pressure continues to increase, lever "D" moves downward, opening check draft "F," completely checking fire. As pressure decreases, "F" will *gradually* close and if pressure falls below the desired amount "E" will open.

Connections should be made so that draft "E" opens slightly and check draft "F" opens wide.

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