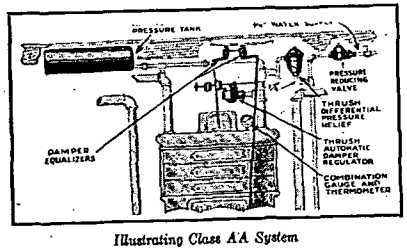
H. A. Thrush & Co.

Peru, Indiana

THRUSH TANK IN BASEMENT SYSTEM



Illustrating Class AA System

Thrush System of Hot Water Heating provides an automatically controlled heating plant, operating with high efficiency at low fuel cost. Circulation is increased, resulting in even and quick heat distribution. Installation cost is reduced because small pipe and valve sizes are required when Thrush System is used.

Thrush System may be installed with either old or new Hot Water Heating plants. It converts a gravity type job into a Closed System with accelerated Circulation and increased heat transmission.

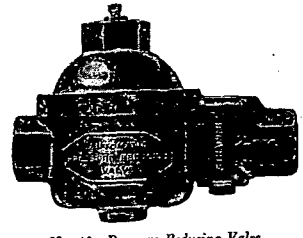
Thrush Tank in Basement Systems are made in different types to care for hot water heating jobs of every conceivable kind, all providing the advantages of the closed system with controlled circulation. Each system is made in sizes to care for the needs of any job. It is possible to provide varying degrees of automatic operation, damper control, automatic system filling, automatic pressure relief, etc., to meet the demands of any job or to offset any competition.

In all Thrush Systems the Thrush Pressure Tank takes the place of the ordinary gravity or open expansion tank. It is near the boiler where it cannot freeze. It provides a reservoir to take care of water expansion and to avoid waste of heated water. Being under pressure, the system circulates more positively and rapidly, saving fuel. Easy boiling is prevented and a wide range of boiler temperatures from 120 to 220 F. may be carried without noise or boiling. This gives the job extreme flexibility of performance and the highest thermal circulation efficiency possible to secure.



No. 4—Differential Pressure Relief Valve Tapped ¾ In.

No. 4. Differential Pressure Relief Valve is safe and dependable. It has a large metal diaphragm which actuates movement of a free working valve member —has no tight-fitting guide. It is fully guaranteed when properly installed. Set to open at 28 lb. pressure, suitable for 1, 2, or 3 story buildings. Special adjustment up to 35 lb. Weight 12 lb.



No. 12—Pressure Reducing Valve Tapped ¾ In.

No. 12. Pressure Reducing Valve provides automatic filling of the system and protects it from excessive line pressures. Large waterways. Working parts brass. Fully guaranteed against defects in workmanship and materials. Pressure setting is 12 lb., suitable for 1, 2, or 3 story buildings. Weight 7 lb.

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THRUSH FLOW CONTROL SYSTEM—For Automatic Hot Water Heating

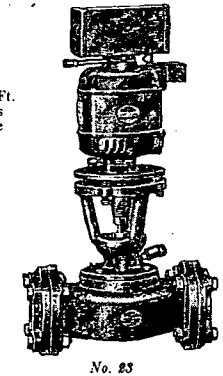
Every Boiler Burner Unit Hot Water Heating Plant should be equipped with Thrush Flow Control System because it makes the job *heat quickly*, maintains healthful temperatures automatically, increases the efficiency of the burner, permits economical year 'round use for Summer-Winter hot water supply and saves fuel. The water in the boiler is maintained at a constant temperature and cannot circulate through the radiators in the building when heat is not needed. When heat is required the thermostat operates the Thrush Circulator which quickly forces hot water through the Flow Control Valve to every radiator in the house, restoring room temperature almost instantly. Then the Flow Control Valve shuts off all further circulation, preventing overheating and attendant waste of fuel. Running time of burner is reduced.

THRUSH WATER CIRCULATORS

Silent, Efficient, Electric Motor Driven Water Circulating Pumps

Radiation Capacity 4,000 Sq. Ft. 100 gallons per minute

3 In. Flanged ¼ H. P.

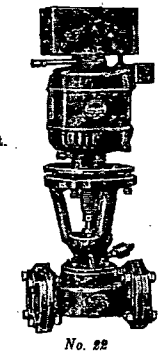


No. 23

110 V 60 Cycle

Radiation Capacity 2,000 Sq. Ft. 50 gallons per minute

2 In. Flanged 1/6 H. P.

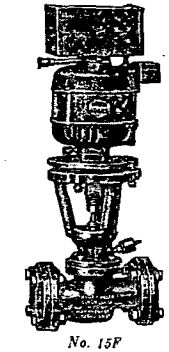


No. 22

A.C. Motors

Radiation Capacity 750 Sq. Ft. 25 gallons per minute

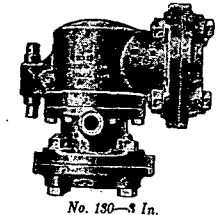
1½ In. Flanged 1/10 H. P.



No. 15F

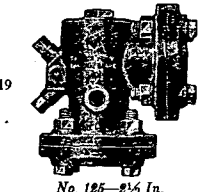
The complete Thrush Flow Control System consists of a Thrush Water Circulator of the proper size, a Thrush Flow Control Valve of proper size, a No. 12 Thrush Pressure Reducing Valve, a No. 4 Thrush Differential Pressure Relief Valve and a special Thrush Air Tight Pressure Tank of proper size. The system is thus converted from an open gravity job to a closed pressure system with automatic filling of the boiler, automatic relief of excess pressures, adequate provision for expansion when the water is heating and complete mechanical control of circulation. When used in conjunction with the regular thermostatic controls with which most automatic heating plants are already equipped, the heating plant becomes completely automatic, flexible and quick to respond to the slightest need for heat.

THRUSH FLOW CONTROL VALVES

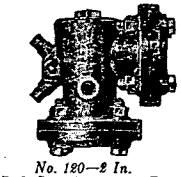


No. 130—¾ In. Rad. Capacity 4,000 Sq. Ft.

PATENT No. 1,931,419



No. 125—1¼ In. Rad. Capacity 2,000 Sq. Ft.



No. 120—2 In. Rad. Capacity 750 Sq. Ft.

The Thrush Water Circulator and the Thrush Flow Control Valve used together provide complete circulation control as the Flow Control Valve works by pressure head generated by the Circulator. There are no complicated fittings. Installation is inexpensive and easy on old or new jobs. Flow Control Valve has expansion opening to provide for escape of excess pressure and elimination of air and gases. (Manually operated set screws permit closing or opening permanently but are not needed for normal operation).