

O-E Specialty Mfg. Co.

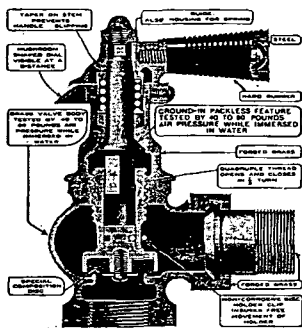
5-7-9 Keefe Ave., MILWAUKEE, WIS.

Packless Graduated Valves, Ball-Check Return Elbows, Thermo-Nickel Return Traps, Air Exhausters, Vacuum Valves, Vacuum Pressure Gages, Differential Return Traps and Balanced Swing Check Valves.

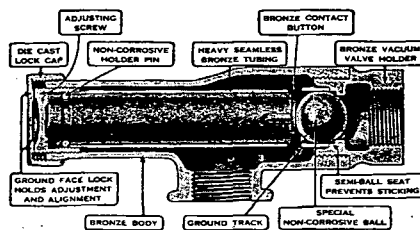
The operation of the "O-E" Perfect Vapor Vacuum-Pressure System is very simple: vapor generated at boiler passes up through main supply pipe and is admitted to radiator at top through the "O-E" Packless Graduated Valve. Water of condensation is returned to boiler through a 1/2-in. "O-E" Elbow. In passing through the Elbow the water is first trapped by means of a wall or diaphragm cast in the Elbow, outside of the radiator, making a water seal which holds the vapor in radiator and prevents it from short circuiting into the return main. Should the Supply Valve of radiator be closed and condensation form a vacuum any water that might be in the return pipes is prevented from returning to radiator by the "O-E" Patent Elbow, which is equipped with a small brass ball operating on a smooth guide or track, and so arranged that when a vacuum takes place in radiator ball will immediately roll against port and close it. Elbow is noiseless in operation, as water seal is below ball, which is an important feature. As soon as Supply Valve is again opened ball rolls off of seat allowing condensation and air to pass easily and freely into return main.

An air vent is tapped in the slot of the screw stop in the return elbow which not only allows air to escape freely into return system when Supply Valve is open, but also equalizes the pressure on both sides of Water Seal, thus preventing it from syphoning out, which it might otherwise do. All air and condensation pass through main return pipe in basement to a point above boiler where air is separated from water by means of "O-E" Patent Air Exhauster.

The "O-E" Perfect Ball-Check Water Seal Union Elbow with Adjustable Air Vent is made in two sizes, 1/2-in., each \$3.00. Capacity 250 sq. ft. 3/4-in. Capacity 500 sq. ft.



List Prices—1/2 in., \$6.00; 1 1/4 in., \$7.50.



The "O-E" Improved Air Exhauster and Vacuum Valve is simple and very sensitive, operating as follows:

Being connected at a high point above where the return main enters boiler, all air in the system seeks outlet at the Air Exhauster, which is open when there is any air in the system, and as soon as all air is exhausted and heat comes in contact with the Carbon Post in Exhauster, same expands and forces the Special Bronze Ball against the seat, closing the port. When closed system will cool slightly causing a vacuum which will hold ball on seat. As soon as vacuum is lost ball will roll away from seat and permit air to escape freely and quickly. The Improved cap locks the expansion post after it is properly adjusted and also holds post in a rigid horizontal position. All Exhausters are set for ordinary use, but can be adjusted to suit any particular system to which they are attached. All Exhausters are threaded for 1-in. I. P. both inlet and outlet.

Made in one size only, 1-in., each \$10.00. Capacity 2,500 sq. ft.

We also announce the Thermo-Nickel Return Trap, a combination thermostatic trap with a ball-check and many new features. Ask for descriptive bulletin.

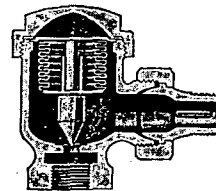
The "O-E" Improved Perfect Packless Graduated Valve is absolutely packless and never requires packing. It is tested by air and water test before shipment. It is quick opening, little more than one-half turn fully opens or closes it. Sand blasted and nickel plated. The handle being made of hard rubber, will not crack and is always cool and easy to operate. The graduated dial and pointer admit of partial opening so that just the amount of heat desired can be obtained. All valves are fitted with composition disc on a swivel seat without extra charge. Graduated Supply Disc will be attached when specified, at slight additional cost.

Sarco Co., Inc.

233 Broadway, NEW YORK

Boston Buffalo Philadelphia Cleveland Detroit Chicago
RADIATOR, BLAST AND STEAM TRAPS, TEMPERATURE CONTROL

RADIATOR TRAP SARCO



Radiator Trap Sarco

The Sarco Radiator Trap is operated by the expansion and contraction of a very sensitive liquid.

A slight change of temperature causes a wide open movement of the valve.

Its positive action keeps radiators thoroughly drained, preventing water hammer and air binding and increasing the heating value of every pound of coal burned.

The life of the spirally corrugated expansion element in the Sarco exceeds many times that of annularly corrugated tubes because its movement at any point of the tube is so slight that it is hardly perceptible due to the stress in expansion and contraction being distributed evenly over the entire surface.

Even if scale does reach the seat, it is practically impossible for it to collect there, for line contract only is had between the cone and seat of the valve.

The Sarco can be shipped without elements so that when operating as a gravity system all the scale and dirt can be washed out. The elements can then be easily dropped into place and the trap will function perfectly.

Removing the elements does not affect the adjustment because they are not attached to the body or cap. The Sarco is factory adjusted.

Brass castings are free from blow-holes or other defects and are exceptionally

SARCO RADIATOR TRAP SPECIFICATIONS

Size inches	1/2	3/4
Length over all inches	3 3/8	3 3/8
Distance, center of Inlet to face of Outlet, inches	1 1/2	1 1/2
Distance, center of Valve to face of Inlet, inches	3 3/4	3 3/4

Write for Steam Trap Bulletin.

heavy. There is no danger of cracking or straining the trap when connecting same. Made in 1/2, 3/4 and 1 in. sizes for vacuum, vapor and steam heating systems at pressures up to 25 lb.

Booklet 112 on request.

SARCO TEMPERATURE REGULATOR

Operated by an extremely sensitive liquid, the Sarco Temperature Regulators are instantly responsive to the slightest fluctuations in the temperature of atmosphere or liquids.

They are entirely self-contained and operated. No electrical, compressed air or other outside attachments are required for their operation. There are no rubber or leather diaphragms or complicated perishable parts.

The Sarco costs less than any other dependable control and is easily installed. There is no cost for operating.

Sarco Regulators operate steam, water and gas valves 1/2 to 6 in. They have 6 ft. of connecting tubing between elements, which can be increased where conditions necessitate. Supplied for any temperature between 30 and 300 deg. Fahr.

Ask for Booklet 77.



Type T. R. 21
for Air Ducts
and Tanks

TEMPERATURE CONTROL SPECIFICATIONS

Size In.	Weight Lbs.	Face to Face of Valve, In.	List Price T. R. 21	List Price K. R. 14
1/2	8	2 1/4	\$75.00	\$60.00
3/4	8	2 3/4	80.00	65.00
1	9	3 1/4	85.00	70.00
1 1/4	13	4 1/2	90.00	75.00
1 1/2	22	5	95.00	85.00
2	28	6	100.00	95.00
2 1/2	37	7 1/4	115.00	110.00
3	51	8 1/4	130.00	125.00
4	81	10 1/4	170.00	165.00
5	132	15 1/4	225.00	215.00
6	158	18	275.00	265.00