C. A. Dunham Co.

Administrative and General Offices: 230 East Ohio Street, Chicago
Factories at Marshalltown, Iowa, and Toronto, Ont., Canada

BRANCH SALES OFFICES:

Birmingham, Boston, Cheyenne, Chicago, Cincinnati, Cleveland, Dallas, Davenport, Denver, Des Moines, Detroit, El Paso, Indianapolis, Kansas City, Los Angeles, Louisville, Milwaukee, Minneapolis, New Orleans, New York, Omaha, Philadelphia, Pittsburgh, Portland (Ore.), Rochester, St. Louis, Salt Lake City, San Francisco, Seattle, Spokane, Troy, Washington.

C. A. DUNHAM CO., LTD., General Offices and Factory, Toronto, Ont.

BRANCH SALES OFFICES: Calgary, Montreal, Ottawa, Toronto, Winnipeg, Vancouver, Halifax.

FOREIGN SALES OFFICES: London, England; St. John's, Newfoundland
Distributors: Munsing & Co., Paris, France, 47 Rue Fontaine-au-roi

Manufacturers of Specialties for The Dunham Systems of Heating

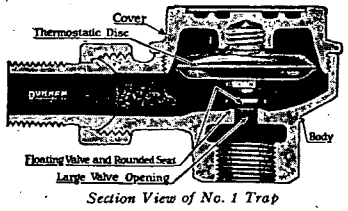
The DUNHAM HEATING SERVICE

This Service is delivered through over 60 Branch and Local Sales Offices throughout the United States and Canada. These branch and local sales offices bring Dunham Heating Service as close to your office as your telephone. Consult your telephone directory for the address of our office in your city.

Products

Specialties for use in connection with The Dunham System of Heating, known according to its several adaptable forms as The Dunham Home Heating System; The Dunham Return System and The Dunham Vacuum System—all two-pipe systems, and The Dunham Air Line System for use in connection with one-pipe steam systems.

These specialties are Radiator Traps; Float and Thermostatic Traps; Air Line Valve; Return Traps; Medium Pressure Traps; Packless Radiator Valves; Pressure Reducing Valves; Vacuum Pumps; Vacuum Pump Governors; Air Eliminators; Air Check; Oil Separators; Suction Strainers; Air Vents; Damper Control; Gauges.



Section View of No. 1 Trap

Dunham Radiator Trap

The Dunham Radiator Trap first put into service in 1903 completely revolutionized Steam Heating.

The Dunham Thermostatic Trap consists of two major parts, a body, and a cover. In the cover the operating member, the Dunham Thermostatic Disc, is securely placed. It has an exceptionally large valve opening. There are no detached loose parts in the path of flow, no sliding contacts to gum up, and no guide or pin to obstruct the valve opening or cause the valve to wear unevenly. The position and design of the valve is such that it is self-cleaning, and the closing of the trap will be tight even where the water is high in incrustants which deposit on the interior of the piping. The action of the disc is positive and the floating valve seats squarely, like a globe valve. The body is standardized, also the cover and disc, giving the further advantage of interchangeable parts.

The traps conform with the standard dimension of 3¼ in. from center of trap to end of union nipple, as adopted by The Heating and Piping Contractors' National Association for one-half in. radiator traps.

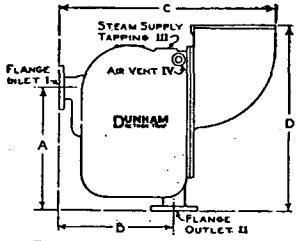
The working part of the Trap, the Thermostatic Disc, is fully exposed to the actual conditions within the radiator and it, therefore, responds instantly to any change taking place therein, preventing waste of unused steam, backing up of water and air binding.

It is made in five sizes and for varying pressures not to exceed 10 lb. gage.

These traps are used principally in steam heating work where they are attached to all forms and types of radiation, and to steam piping and risers for dripping purposes. The Nos. 1 and 2 Traps are used almost exclusively on radiators. The No. 3 Trap is used for large radiators, for medium sized pipecoils, and is particularly adaptable for dripping risers and short runs of steam piping. The Nos. 4 and 5 Traps are used where traps of large capacity are required on large pipe coils, for dripping main feed risers, and steam mains.

DUNHAM RETURN TRAP

Used to separate the air and water discharged into the dry return piping by the Radiator Traps, to release the air, and to automatically return the water to the boiler. For use on installations where the boiler steam pressure does not exceed 10 lb. gage.

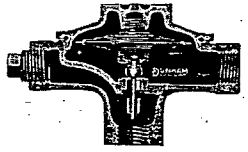


Size No.	Capacity Sq. Ft. Div. Radiation	Size of Connections, inches				Dimensions, inches				Width Over All
		I	II	III	IV	A	B	C	D	
9A	2700	1½	1½	1	½	13⅝	11¼	22⅜	20⅛	9
10	4000	2	2	1	½	14½	14½	25¾	21¼	9⅜
11	7000	2½	2½	1½	¾	16¾	15	28⅞	26¼	17½
12	12000	3	3	2	¾	16⅝	22⅝	36⅞	26¼	18¾

The above capacities are based upon a minimum distance of 6 in. between bottom of trap and water line of boiler. The capacities increase as this distance above water line increases. Further capacities upon request.

DUNHAM MEDIUM PRESSURE TRAP

This embodies the principle so successfully used in the Dunham Radiator Trap, and is just as simple and satisfactory.



Size	Pipe Connection, In.	Capacity, Water per Hour, Lb.
No. 13	½	100
No. 14	¾	200
No. 15	1	400

Always state operating pressure when ordering.

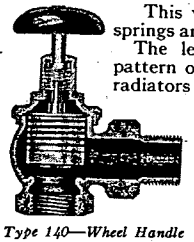
Designed for steam pressures higher than those used in heating systems. It handles air and condensate. Adapted for process work, hospital sterilizers and distilling apparatus, steam tables and kitchen equipment where a steam pressure of from 0 to 60 lb. is used.

Dunham Packless Radiator Valve

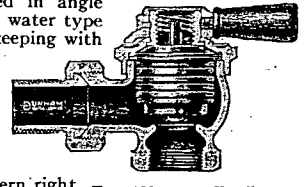
This valve is really "packless." Neither packing of any kind nor any springs are used in its construction. It is built in two specific styles.

The lever handle valve is furnished in angle pattern only and recommended for hot water type radiators with top inlet connection in keeping with the most approved modern steam heating practice. The low bonnet is one of the attractive features of the valve.

The wheel handle valve can be used on any steam system and is furnished as follows: angle pattern, straightway pattern, right hand pattern and left hand pattern.



Type 140—Wheel Handle



Type 100—Lever Handle

Only the best of materials are used. Both types are neat in appearance, and are quick opening and closing valves.

The valve is made packless by means of the bellows construction, consisting of a series of corrugated phosphor bronze diaphragms which permit the free up and down movement of the spindle and valve disc. This construction obviates the use of springs, packing or stuffing boxes of any kind and entirely prevents the leakage of steam, air or water.

Made in following sizes: Lever ½, ¾, 1, 1¼, 1½ in. Wheel ½, ¾, 1, 1¼, 1½, 2 in.

Type 100 made only in angle pattern.

Type 140 made in angle, straightway and corner patterns and can be supplied with wheel or lever handle.

The valves can be supplied with lock and shield, and special extension stems for use on radiators behind grilles, seats, etc., or on ceiling of the room.