

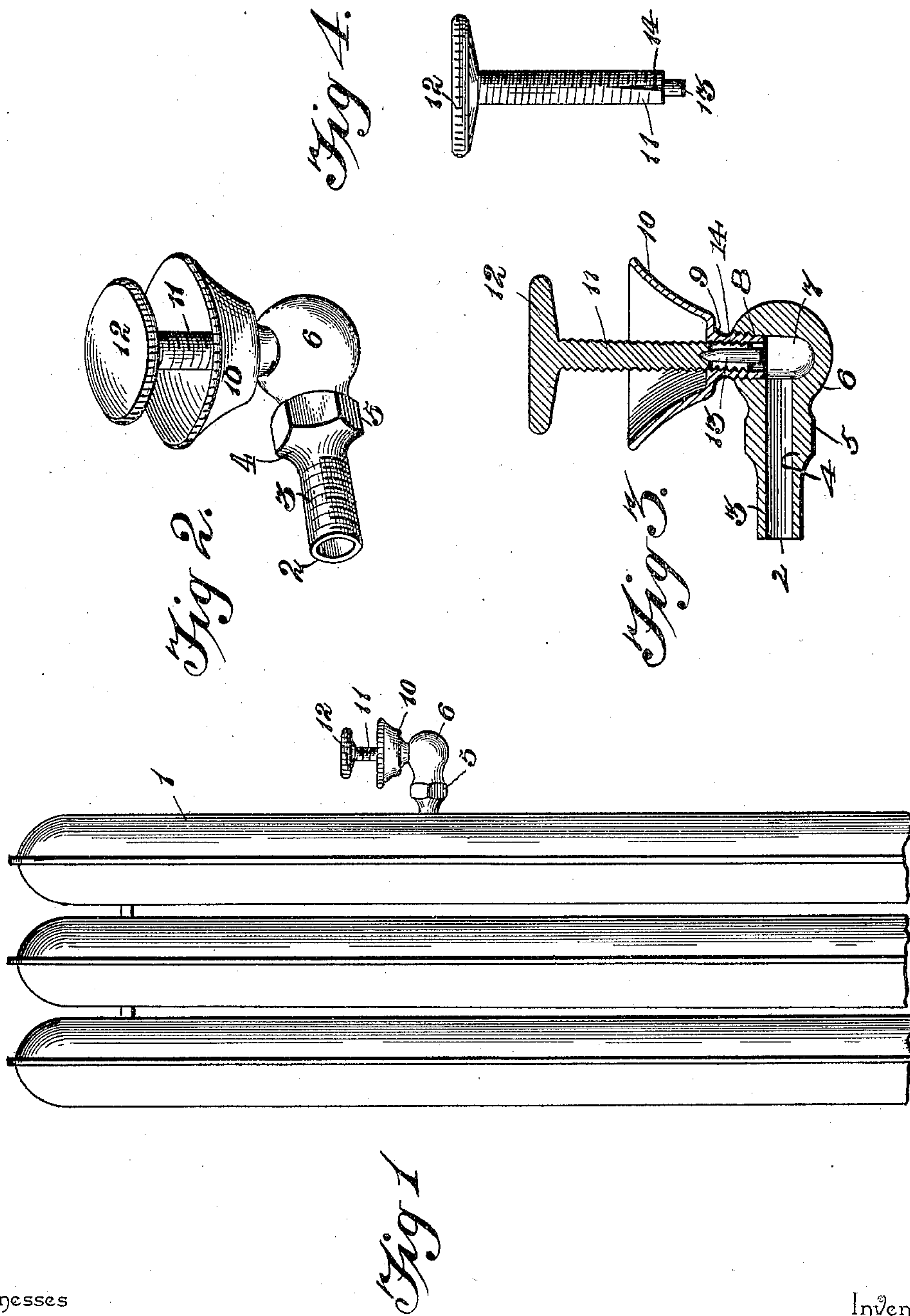
No. 688,631.

Patented Dec. 10, 1901.

T. H. GLEDHILL.
RADIATOR VENT.

(Application filed Oct. 10, 1899.)

(No Model.)



Witnesses
John Mampin.
Chas. S. Hoyer.

Fig. 1
By *hps* Attorneys. Thomas H. Gledhill.
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UNITED STATES PATENT OFFICE.

THOMAS H. GLEDHILL, OF LEWISTON, MAINE.

RADIATOR-VENT.

SPECIFICATION forming part of Letters Patent No. 688,631, dated December 10, 1901.

Application filed October 10, 1899. Serial No. 733,214. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. GLEDHILL, a citizen of the United States, residing at Lewiston, in the county of Androscoggin and State of Maine, have invented a new and useful Radiator-Vent, of which the following is a specification.

This invention relates to radiator-vents, and the object of the same is to improve the construction of such devices and render them more positive and reliable in operation.

To this end the invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of a portion of a radiator, showing the improved vent applied thereto. Fig. 2 is a detail perspective view of the improved vent. Fig. 3 is a longitudinal vertical section of the improved device. Fig. 4 is a detail elevation of the valve-stem.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates the radiator or other apparatus to be vented or to which the improved device may be operably applied.

The improved vent comprises a body 2, consisting of a tubular connecting member 3, having an enlargement 4, provided with wrench-engaging faces 5, the inner terminal of the member 3 being preferably externally screw-threaded for convenience in attachment of the device. On the outer extremity of the member 3 a spherical or other head 6 is formed and has a chamber 7 therein communicating with the opening through the member 3 and in a plane at right angles thereto. The said chamber 7 will be vertically disposed when the vent is properly applied, and the lower termination thereof is below the plane of the opening through the member 3. The upper portion of the wall of the chamber 7 is screw-threaded, as at 8, to receive the lower screw-threaded extremity of a tubular neck 9, depending from a cup 10, and the said cup has extending downwardly therethrough and adjustably in the neck 9 a screw-threaded valve-stem 11, supplied with an upper head 12. The lower end of the stem 11 is centrally split longitudinally a portion

of its length and tubular to receive a plug 13, which holds the said split portion open to provide opposite elongated inverted-V-shaped openings 14. It will be observed that as the stem 11 is adjusted vertically in the neck 9 the exposure of the opposite openings 14 will be varied proportionately and that a very fine adjustment can be obtained.

This improved device serves as an air-vent for either a steam or hot-water radiator or other apparatus which permits the escape of air.

The vent can be gaged at will by turning the stem 11, and the cup 10 will retain the condensed steam or water after the air is all out of the radiator or other apparatus and until the same evaporates. The plug preserves the stem in its desired form and gives body to the stem extremity and prevents the latter from becoming mechanically reduced and holds the openings 14 in the desired condition after the stem is inserted in and during adjustment in said neck, so that said openings will be free for permitting the escape of the air in the radiator to which it is attached. The plug is also of softer metal and expansible under a lower degree of temperature than the stem in which it is inserted, and thereby becomes firmly lodged in said stem when under heat influence.

The vent is advantageous in its operation of preventing the noise of escaping steam being heard as in ordinary devices of this character, and this is due to the particular construction and the collection of water of condensation in the cup 10, which will deaden the usual hissing sound.

To accommodate various applications, changes in the form, proportions, and minor details may be resorted to without in the least departing from the nature or spirit of the invention.

Having thus described the invention, what is claimed as new is—

1. A vent of the class described, comprising a support in communication with a heating device, the said support including a tubular member with an outer horizontally-disposed cup centrally communicating with a vertically-disposed screw-threaded seat, a stem having a screw-threaded terminal to adjustably engage said seat, the said terminal be-

ing longitudinally apertured and split, and a plug driven into the aperture of the latter.

2. A vent of the class described, comprising a horizontally-disposed tubular connecting
5 member having an outer enlargement with a chamber and an upper screw-threaded communicating aperture to the latter, a horizontally-disposed cup having a centrally-depend-
ing neck of tubular form with inner and outer
10 screw-threads, the said neck being fitted in the said communicating aperture, a stem with a screw-threaded terminal adjustably fitted in the said neck, the stem extending centrally upward through the cup and having the said

terminal thereof longitudinally split at diametrically opposite points to form V-shaped
openings and also longitudinally apertured,
and a plug inserted in the aperture of the
stem-terminal, the diametrical extent of the
stem remaining as primarily produced after
20 the plug is inserted therein.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

THOMAS H. GLEDHILL.

Witnesses:

N. M. EMERY,
EDITH M. HANSON.