Feb. 7, 1928. 1,658,104

L. STADELHOFER

AIR VALVE FOR RADIATORS

Filed Oct. 8, 1926

Fig. 1

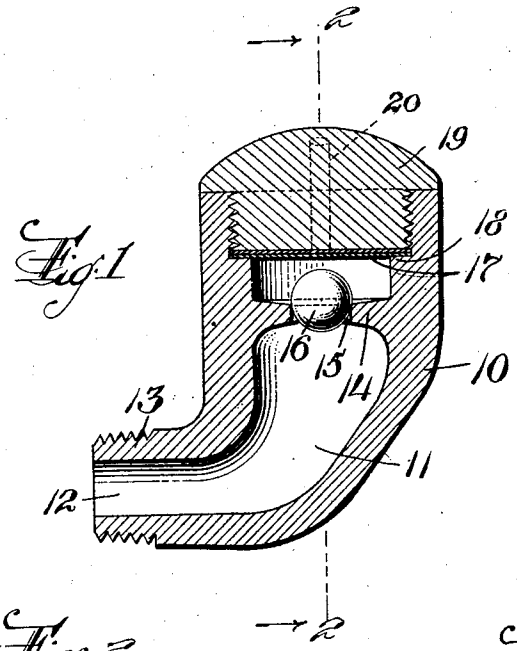


Fig. 2

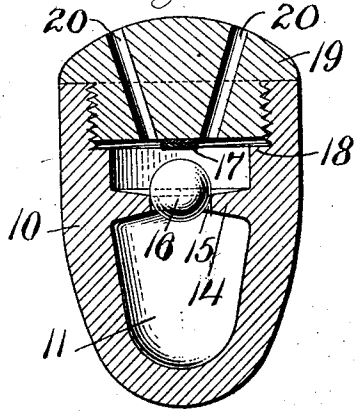
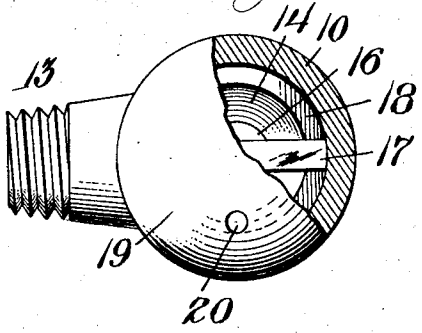


Fig. 3



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LESLIE STADELHOFER, OF NEWARK, NEW JERSEY.

AIR VALVE FOR RADIATORS.

Application filed October 8, 1926. Serial No. 140,238.

This invention relates to an improved air valve for steam radiators which permits the escape of cold air but which closes to prevent the escape of steam when the valve becomes heated and prevents the entrance of cold air from the atmosphere when the valve cools.

The invention is designed to provide a valve of this kind which is positive in its operation and which has but few parts and in which a closure for the vent opening therein is held down by a thermostatic strip or its equivalent when the valve is heated.

The invention is illustrated in the accompanying drawings in which Figure 1 is a central vertical section of a valve made according to my invention and Figure 2 is a section on line 2—2 in Figure 1. Figure 3 is a top view of the valve illustrated with a part thereof broken away.

In the drawings, 10 indicates the casing which has an air passage 11 therein and which also has an air inlet at the bottom, the air inlet being shown at 12 and arranged in a threaded boss 13 by means of which the valve is secured in a coil of the radiator. The horizontal partition 14 is arranged in the casing and has an opening 15 therein which opening has a suitable closure, preferably a ball 16 which is influenced by gravity to normally close the opening 15, the ball is of a weight to permit its being raised by pressure of the air attempting to escape from a radiator that is becoming heated so that the heating of the radiator is facilitated by reason of all such escape of cold air above the ball, a thermostatic strip 17, this strip being of the usual kind that flexes or bends under increasing temperature, being normally held out of contact with the ball 16 but when heated bulging or flexing to hold the ball 16 down.

In the form shown the thermostatic strip 17 rests on a shoulder 18 and is secured by a cap 19 which fits on to the casing 10, the usual way being to screw the cap down so that it engages the thermostatic strip.

Suitable air outlets 20 are placed in the cap 19. It will be evident that the ball will remain seated after the strip cools and becomes straight when the pressure is from the outside, thus retaining any partial vacuum that is set up in the heating system when the pressure is reduced.

The construction enables the valve to be manufactured cheaply as there are but few parts to be assembled and these are simple and require no fine adjustment in the assembling.

I claim:

1. A radiator air valve comprising a casing with an air inlet at the bottom and having a horizontal partition above the inlet, the partition having a central opening therein, a ball resting by gravity in the opening, a cap insertible in the top of the casing and having an air outlet to one side of the centre and a thermostatic strip lying against the inside face of the cap and adapted, when heated, to be distorted enough to engage the ball and prevent its unseating, the ends of the strip being disposed between the cap and the casing.

2. A radiator air valve comprising a casing with an air inlet at the bottom and a horizontal partition with an opening therein, a ball in the opening, a cap with an outlet opening and adapted to close the end of the casing, and a thermostatic strip normally held above the ball and adapted to hold the ball down when heated, the strip being secured at its ends between the casing and the cap.

3. A radiator air valve comprising a casing with an air inlet at the bottom and a horizontal partition with an opening therein, a ball in the opening, a cap with an outlet opening and a flat thermostatic strip normally lying against the bottom of the cap and above the ball to engage the ball when heated.

In testimony whereof I affix my signature.

LESLIE STADELHOFER.