

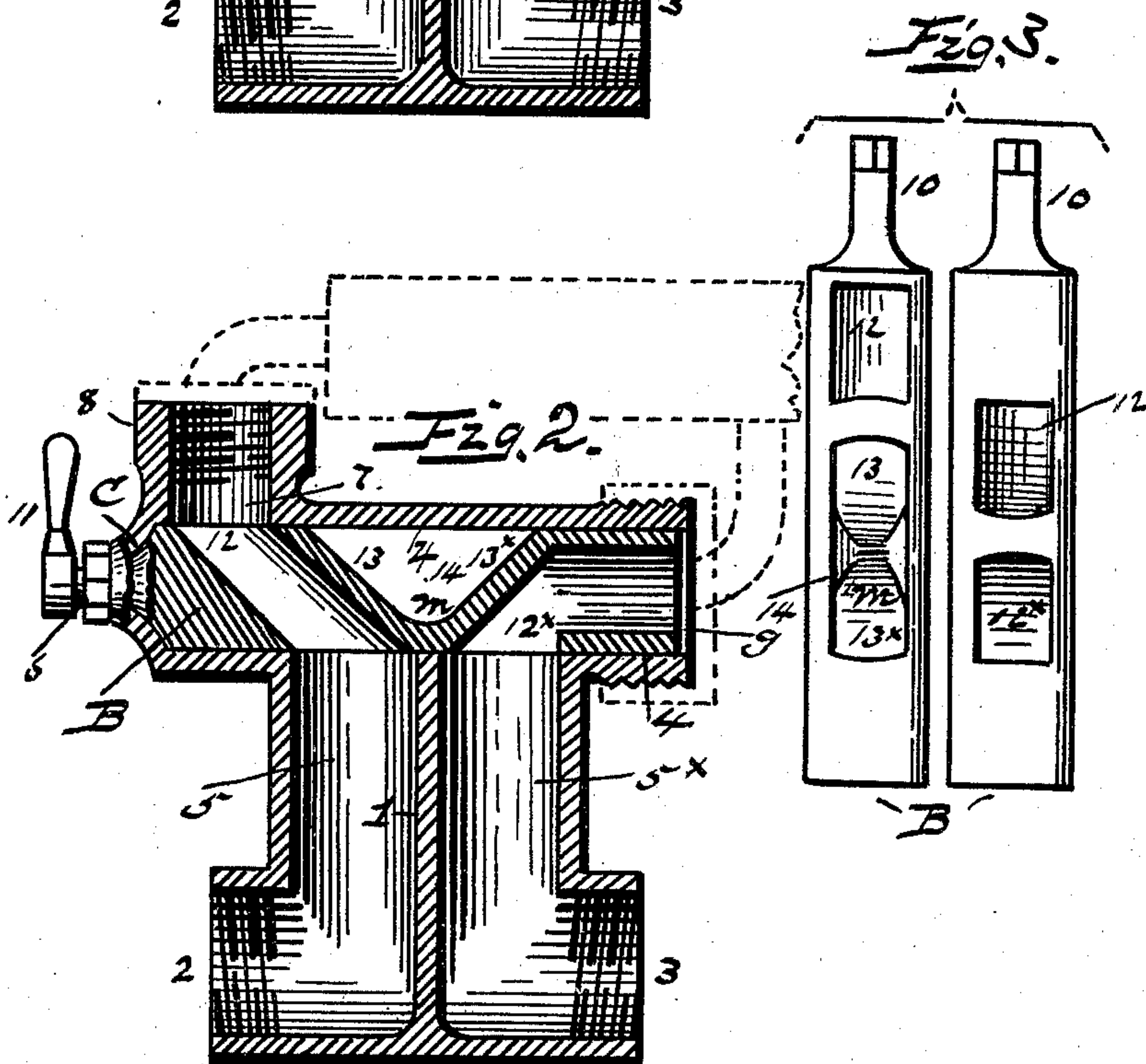
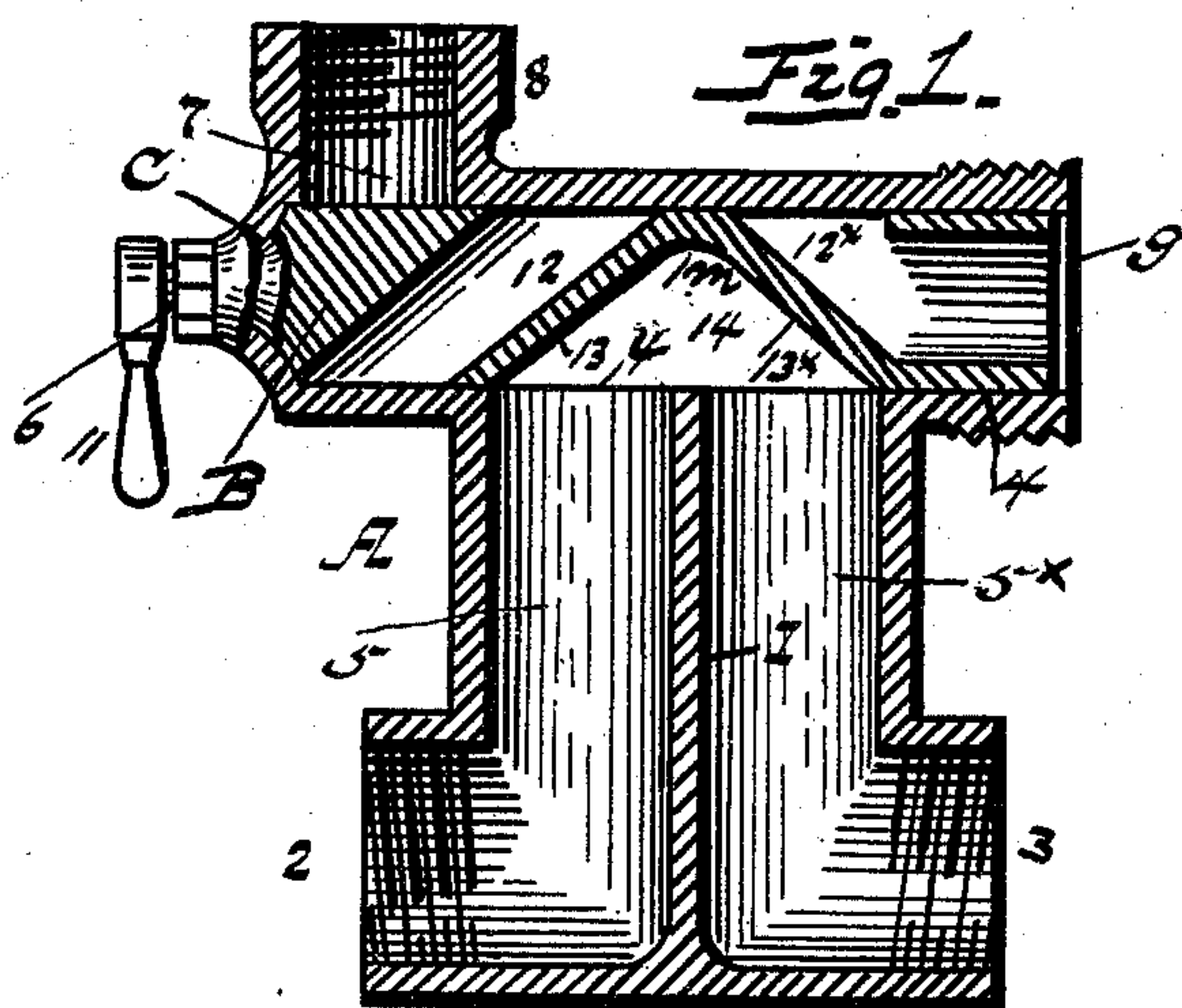
No. 638,362.

Patented Dec. 5, 1899.

C. SEAHORN.  
VALVE.

(Application filed Aug. 31, 1899.)

(No Model.)



WITNESSES  
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# UNITED STATES PATENT OFFICE.

CHRISTIAN SEAHORN, OF SCHENECTADY, NEW YORK.

## VALVE.

SPECIFICATION forming part of Letters Patent No. 638,362, dated December 5, 1899.

Application filed August 31, 1899. Serial No. 729,052. (No model.)

*To all whom it may concern:*

Be it known that I, CHRISTIAN SEAHORN, a citizen of the United States, residing at Schenectady, in the county of Schenectady and State of New York, have invented certain new and useful Improvements in Valves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to improvements in valves of that kind or style adapted to be interposed in steam or water pipes to direct, deflect, and control the course of the fluid as may be desired and which may be interposed in a system of heating apparatus or radiators.

The object is to provide an improved valve of the kind named and for the purposes intended which is simple and durable in construction and efficient and certain in operation.

The invention consists in certain novel constructions of parts and their combination, as will be hereinafter fully described, and particularly pointed out in the claims.

I have fully and clearly illustrated my improvements in the accompanying drawings, forming a part of this specification, and wherein—

Figure 1 is a central, vertical, and longitudinal section through the casing and valve, showing the valve or turning-plug turned so as to permit a free passage of the fluid through the main passages of the casing. Fig. 2 is a central, vertical, and longitudinal section through the casing and valve, showing the valve or turning-plug turned to shut off the flow through the pipe-channels of the casing and so that the fluid will be directed through the end passages of the valve. Fig. 3 is a detail view of the valve or turning-plug removed from its seat in the casing.

Referring to the drawings, A designates a cast or malleable metal casing of such size, dimensions, and capacity as will adapt it to the purposes intended. The lower portion of the casing consists of a chamber having a vertical partition 1, dividing it equally, and provided with an inlet-opening 2 and an outlet-opening 3, the ends of the openings being suitably screw-threaded to connect with pipe-sections (not shown) leading to and from the casing.

In the upper portion of the casing is formed a tubular valve-seat 4, arranged at right angles to the ways 5 5<sup>x</sup> in the casing, which ways open into the valve-seat substantially as indicated in the drawings, the upper end of the partition 1 being also coincidentally curved to partially encircle and set about the body of the valve. At one end of the valve-seat is an opening C, through which the stem of the valve projects, as shown, and adjacent to this end is a supply-passage 7, extending through a coupling-piece 8, suitably screw-threaded, and whereby the desired connection and communication may be made to a radiator or other device to which my valve is applicable. The other end of the valve seat or chamber is open, as at g, providing a return-passage and suitably screw-threaded, so that it may be closed by a screw-cap or connection made to a return-pipe.

B designates the valve or turning-plug, fitted snugly in the valve seat or chamber to turn therein and having its end or stem 10 extending through the opening 6 and provided with a suitable handpiece 11, secured thereto, by which the valve may be turned as desired. Through the body of the valve are formed two passages or ways 12 12<sup>x</sup>, inclined in opposite directions, as indicated in the drawings, the ways being separated by the inclined partitions 13 13<sup>x</sup>, terminating substantially at the longitudinal middle of the valve-body, as at m, a chamber or way 14 being thus formed between said ways, which chamber constitutes a passage between the pipe conduits or passages in the casing for the purposes of conducting the fluid from the inlet source to the outlet source or pipe. It will thus be perceived that when the valve or turning-plug is turned to bring the inclined ways or passages into the position shown in Fig. 1 the fluid is free to pass from the inlet-passage to the outlet-passage in the casing and that when the valve is turned into the position shown in Fig. 2, with apex or ridge of the inner inclines on the partition-wall, the fluid will have free passage through the way adjacent to the stem end of the valve and thence through the opening and through whatever medium or pipe provided and back through the return opening or passage out through the main outlet-pipe.



Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A radiator-fitting comprising a casing  
 5 having an inlet and an outlet adapted to communicate with a fluid-circulating system and a valve-chamber at substantially right angles to the inlet and outlet having a supply-passage and return-passage adapted to communicate with a radiator, a turn-plug in said  
 10 chamber provided with oppositely-inclined passages adapted to bring into communication the inlet and outlet and supply and return passages respectively when the plug is  
 15 in one position said plug being also provided with a third passage between the oppositely-inclined passages adapted to bring into communication the inlet and outlet when the plug is turned in a substantially opposite position,  
 20 the arrangement of parts of the device being such that the valve either allows fluid to flow through, or short-circuits the radiator to which it may be attached.

2. A radiator-fitting comprising a casing  
 25 having an inlet and an outlet separated by

a partition and adapted to communicate with a fluid-circulating system and a valve-chamber at substantially right angles to the inlet and outlet having a supply-passage and return-passage adapted to communicate with a  
 30 radiator, a turn-plug in said chamber provided with oppositely-inclined passages adapted to bring into communication the inlet and outlet and supply and return passages respectively when the plug is in one position, said  
 35 plug being also provided with a third passage between the oppositely-inclined passages adapted to bring into communication the inlet and outlet when the plug is turned in a substantially opposite position, the arrange-  
 40 ment of parts of the device being such that the valve either allows fluid to flow through, or short-circuits the radiator to which it may be attached.

In testimony whereof I affix my signature 45  
 in presence of two witnesses.

CHRISTIAN SEAHORN.

Witnesses:

HORATIO G. GLEN,  
 EDWIN C. ANGLE.