No. 759,623. PATENTED MAY 10, 1904.

O. LINK.

FUNNEL COCK FOR HOT WATER HEATING SYSTEMS.

APPLICATION FILED OCT. 14, 1903.

NO MODEL.

Fig. 1.

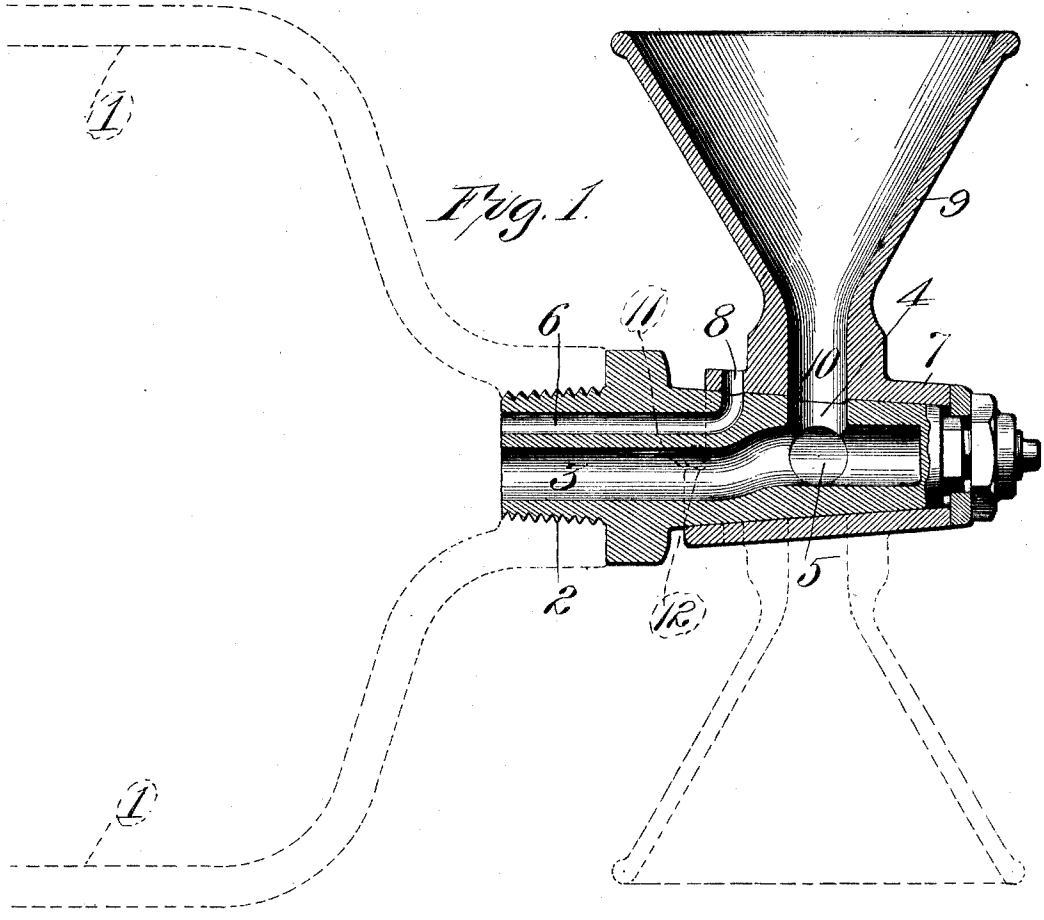
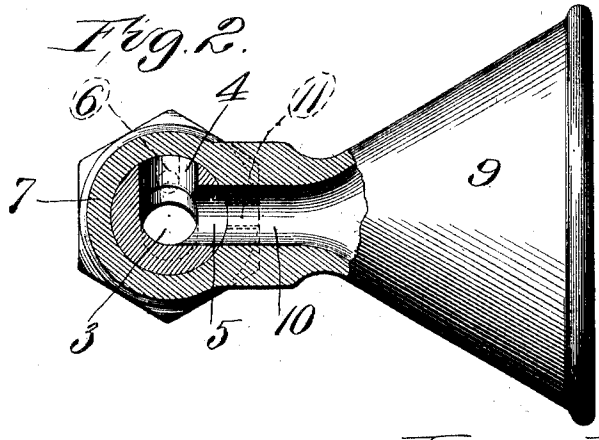


Fig. 2.



Witnesses:
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 759,623. Patented May 10, 1904.

UNITED STATES PATENT OFFICE.

OLIVER LINK, OF ST. CHARLES, MISSOURI, ASSIGNOR TO AMERICAN CAR & FOUNDRY COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF NEW JERSEY.

FUNNEL-COCK FOR HOT-WATER HEATING SYSTEMS.

SPECIFICATION forming part of Letters Patent No. 759,623, dated May 10, 1904.

Application filed October 14, 1903. Serial No. 177,022. (No model.)

To all whom it may concern:

Be it known that I, OLIVER LINK, a citizen of the United States, residing at St. Charles, Missouri, have invented a certain new and useful Improvement in Funnel-Cocks for Hot-Water Heating Systems, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal sectional view through my improved funnel-cock, and Fig. 2 is a cross-sectional view.

This invention relates to a new and useful improvement in funnel-cocks for hot-water heating systems designed especially for use in connection with railway rolling-stock.

The object of this invention is to simplify the construction of funnel-cocks and to utilize the funnel on the cock as an operating-handle.

With these objects in view the invention consists in the construction, arrangement, and combination of the several parts, all as will be hereinafter described, and afterward pointed out in the claims.

In the drawings I have shown a tank to which the funnel-cock is attached by dotted lines and indicated the same by the numeral 1.

2 indicates the threaded stem of the funnel-cock, which is provided with a passage 3, having ports 4 and 5. This stem is also provided with a vent-opening 6.

7 indicates a hub for the funnel, which is held in position by an appropriate nut and washer secured on the stem of the funnel-cock in a well-understood manner. This hub 7 is provided with a passage 8, which is designed when the funnel is in an upright position to register with the vent-passage 6; but when said funnel is in other than an upright position the vent-passage is closed.

9 indicates the funnel secured to the hub 7, whose lower end terminates in a port 10, adapted to register with the ports 4 and 5.

In practice when it is desired to fill the system the funnel is turned to the position shown in Fig. 1, wherein it is upright. In this position the vent 6 is opened, and the ports 4 and 10 register. Liquid may now be poured into the funnel 9 and enters the tank through the passage 3. A sufficient quantity of liquid is introduced to overflow the vent-opening 6, and as soon as the operator concludes that he has filled the system about the desired water-line he moves the funnel to the position shown in Fig. 2, where the port 10 registers with the port 5. In this position the surplus water in tank 1 will flow through passage 3 and out of the funnel to the exterior, the water reaching the desired level by this means. When the surplus water has been drawn off, the funnel is moved to the lower position. (Shown in dotted lines in Fig. 1, wherein both ports 4 and 5 are closed.) In this position of the funnel no dirt, dust, or cinders can accumulate to interfere with the action of the valve. To determine the upright and lower positions of the funnel, I preferably insert a pin 11 in the stem of the cock and provide the hub 7 with shoulders 12 on each side, which coöperate with the pin and arrest the funnel in its upright and lowered positions.

I am aware that minor changes in the construction, arrangement, and combination of the several parts of my device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

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

1. In a funnel-cock, the combination with a stem having a port opening through its upper face and through its side, and a funnel having a single port designed to register with either of said ports in the stem, said funnel-cock having an opening coinciding with an opening in the funnel, which openings are adapted to register when one of the ports of the stem registers with the opening in the funnel and closed when the other port in the stem registers with the port in the funnel, for the purposes described.

2. In a funnel-cock, the combination with a stem having a passage 3, ports 4 and 5, and a

vent-opening 6, of a funnel rotatably mounted on the stem and having a passage 10 designed to register with the ports 4 or 5, and an opening 8 designed to register with the vent-passage 6, and means for arresting the funnel in its upright and lowered positions; substantially as described.

3. In a funnel-cock, the combination with a stem having passage 3 and communicating ports 4 and 5, and a vent-passage 6, of a funnel 9 having a hub portion 7 rotatably mounted on the stem, said funnel having a passage 10 designed to register with the ports 4 or 5 when said funnel is moved in an upright and a lateral position respectively, the hub of said funnel also having a passage 8 designed to register with the vent-passage when the funnel is in an upright position, means for holding the funnel on its stem, and a stop for arresting the funnel in its upright and lowered position; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 8th day of October, 1903.

OLIVER LINK.

Witnesses:

LEONARD C. SCHAFER,

TER. C. BONIRE.