

(No Model.)

A. P. MASSEY.

DRAIN CUP AND STRAINER FOR AIR PIPES.

No. 530,702.

Patented Dec. 11, 1894.

Fig. 3.

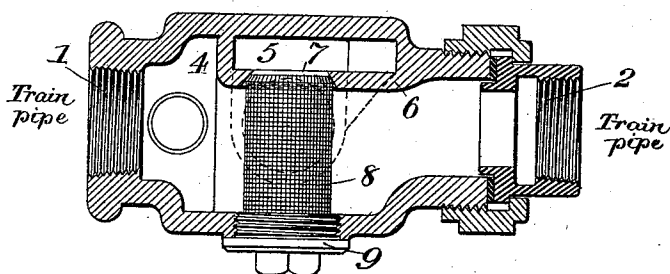


Fig. 2.

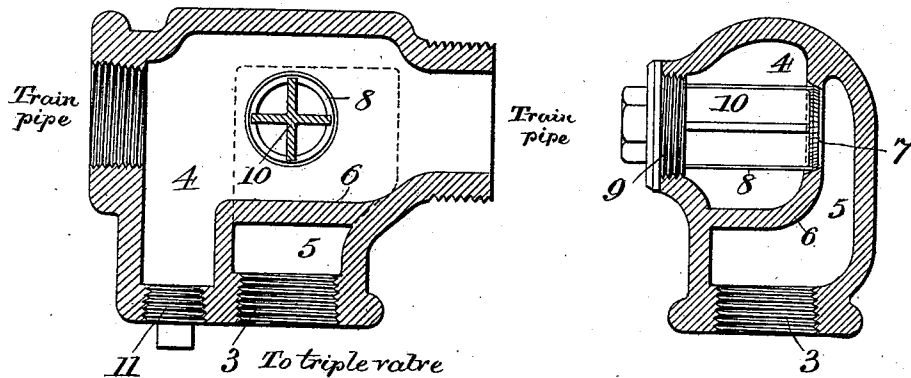


Fig. 1.

Witnesses

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UNITED STATES PATENT OFFICE.

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DRAIN-CUP AND STRAINER FOR AIR-PIPES.

SPECIFICATION forming part of Letters Patent No. 530,702, dated December 11, 1894.

Application filed March 2, 1894. Serial No. 502,062. (No model.)

To all whom it may concern:

Be it known that I, ALBERT P. MASSEY, a citizen of the United States, and a resident of the city of Watertown, county of Jefferson, and State of New York, have invented a new and useful Improvement in Drain-Cups and Strainers for Air-Pipes, of which the following is a specification.

Strainers have long been used in connection with the train pipe of air brake systems, similar to those described in Patent No. 245,109, issued to G. Westinghouse, Jr., August 2, 1881, but they soon become clogged with sediment and greases so that at times they prevent proper action of the brake.

The object of my invention is to obtain a more efficient drain cup and strainer for air pipes and to facilitate the cleansing or renewal of the same when needed.

I have made the strainer removable by means of a separate opening whereby it may be examined without disturbing any of the pipe connections. I have also located the strainer in the upper part of the casing and provided a catch pocket in the lower part with an opening for removing sediment without disturbing any of the pipe connections.

Figure 1 is a longitudinal section of a drain cup and strainer. Fig. 2 is a transverse section of the same. Fig. 3 is a sectional plan of the same.

The apparatus is inserted in the line of the train pipe by the connections 1 and 2 and has an opening 3 for the connection to the triple valve. The casing is divided into two chambers, 4 and 5, by the septum 6. This septum has a passage 7 connecting the two chambers. A cylindrical strainer 8 extends across chamber 4. One end of this strainer is closed by the cap 9 and the other end abuts against the margin of passage 7 so that the inside of the strainer is open to chamber 5 and forms an extension to said chamber. The cylindrical strainer is kept in position by a winged extension 10 on the inner side of cap 9, to which it may be secured in any desirable manner. When cap 9 is removed the strainer comes with it, and thus the strainer may be examined or renewed without disturbing any of the pipe joints.

The chamber 4 which forms a portion of the main train pipe is extended downward forming a pocket for collecting any sediment. A removable plug 11 in the bottom of the pocket allows the sediment to be removed from time to time without disturbing any of the pipe joints. The chamber 5 has an orifice 3 connecting it to a branch pipe leading to a triple valve.

From the above description it may be seen that chamber 4 forms a continuous passage with the main train pipe; that chamber 5 is connected only with the triple valve; and that the strainer 8 is therefore interposed between the main train pipe and the triple valve in a manner to thoroughly exclude from the triple valve any substance that may be in the main train pipe, while it gives free passage to air through the meshes of the strainer. The strainer is located so high that any liquid or heavy substance will be deposited in the pocket without coming in contact with it; its convex surface is favorable to reject any light substance that may be floating in the air of the main train pipe and any that adheres to the outside of the strainer may be blown off when the current of air is reversed, as occurs when the brakes are applied. The strainer may be inspected or renewed and the drip pocket may be emptied without disturbing any pipe joints.

What I claim as new, and desire to secure by Letters Patent, is—

The combined drain cup and strainer for an air pipe consisting of a chamber 4 with drip pocket and removable plug 11, a strainer 8 attached to a removable cap 9, located in the upper part of chamber 4, and a chamber 5 open to the interior of the strainer, and having a connection for a branch air pipe, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 28th day of February, 1894.

ALBERT P. MASSEY.

Witnesses:

H. W. BOYER,
M. J. MORKIN.