
William Coleman Meredith, of Belton, South Carolina.

Fire-Extinguisher.


Application filed December 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, William C. Meredith, a citizen of the United States, residing at Belton, in the county of Anderson and State of South Carolina, have invented a new and useful Fire-Extinguisher, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to fire-extinguishers especially adapted to be applied to steamboats; and it has for its object to provide an improved system extending to all parts of the vessel and connecting with the boiler, and by means of which the water from the boiler may be utilized to put out the fire should it occur, and thus there will always be on hand and ready for a certain means which may be employed at any time to extinguish the fire.

The invention further has for its object to provide the state-rooms and cabins of the vessel with perforated balls arranged to throw the water outward in sheets or streams, and also to arrange the distributing-pipes in such a manner as to be capable of turning in any direction, all as hereinafter fully set forth, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a sectional view of a steamboat illustrating the application of my improved fire-extinguishing system. Fig. 2 is a plan view of my improved system detached. Fig. 3 is a longitudinal section through the distributing-pipes. Fig. 4 is a detail view of one of the perforated balls.

Like letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a cock placed near the bottom of the boiler of an engine some distance from the blow-off cock, said engine and its boiler being of ordinary construction and arranged in the usual manner.

B is a supply-pipe leading from the said cock A to a cross-pipe, D, which extends transversely across the engine-room of the steamboat, as will be seen. A series of distributing-pipes, E E', are connected to the cross-pipe so as to turn within the same, the pipes E being provided with branches F, extending upward to the decks, both forward and aft, and the pipes E' extending downward toward the hold, likewise forward and aft. Perforated pipes G are attached at intervals to the branches F' of the pipes E', and extend outward in different directions in the hold of the vessel. Branches of pipe H are also attached to the branches F of the pipes E, the said branches H leading into and communicating with the state-rooms and cabins, and provided with perforated balls I, formed with ridges or grooves J on their interior faces, said balls being pivoted or journaled to the pipes H and arranged to turn by the action of the water passing through and striking the ridges, and thus the revolving movement of the balls will cause the water to be thrown in streams or jets in an outward direction, thereby insuring a speedy extinguishment of the fire. Another series of pipes, L, are connected to the pipes E, leading to the decks, and are provided with lines of hose M, which are to be used by the salions in directing the flow of the water in the upper part of the vessel. Stop-cocks N are arranged on the pipes E to shut off the supply of water to any one pipe, as desired, and thus the entire force of the water in the boiler may be directed to any particular point of the vessel, as will be seen.

From the foregoing description, taken in connection with the annexed drawings, the operation and advantages of my invention will be readily understood.

Should a fire break out at any particular part of the vessel, the entire force of the water in the boiler may be directed to that point; but if it should spread to other parts, then the connection with the other distributing-pipes may be opened to cause the water to branch out through the several distributing-pipes, and thus all parts of the vessel are reached by the flow of water. As will be seen, the flow of water from the boiler is opened by the turning of cock A, and when the engineer has been signaled that a fire has broken out on the vessel all he need do to extinguish the fire is to turn the said cock, when the water from the boiler flows through the various channels to the different parts of the vessel, as before stated. The revolving action of the balls I proves a very efficient means to extinguish 100
the fire within the state-rooms and cabins, where the hose could not reach, while the perforated pipes leading to the hold act to extinguish the fire without the aid of any one.

It will also be seen that the above-described system provides for the thorough extinguishment of the fire, the perforated pipes of the hold, the revolving perforated balls communicating with the state-rooms and cabins, and the hose attachments on the upper decks to be worked by the sailors reaching all parts of the vessel. The means employed in the system are extremely simple, and yet the efficiency of the same is apparent.

Having described my invention, I claim—

As an improvement in fire-extinguishers, the combination, with the boiler of a steamboat or building, of a series of pipes connecting with the boiler, perforated balls journaled on the ends of branches of the pipes, and formed with interior ridges or grooves, arranged and operating as described, so that said balls will turn or revolve by the action of the water passing through the same, as set forth.

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

WILLIAM COLEMAN MEREDITH.

Witnesses:
R. A. MILES,
JOHN S. GOODMAN.