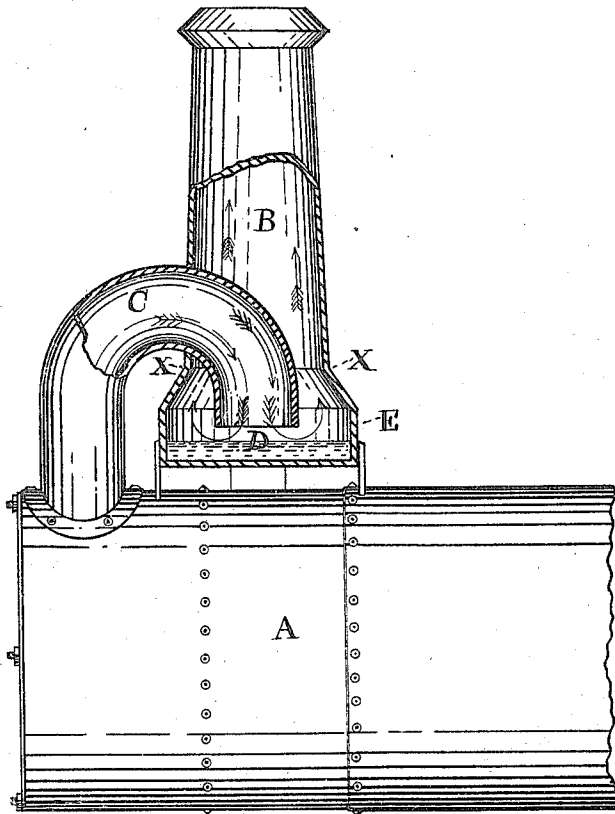


N. M. MENDENHALL.

Spark Arresters.

No. 134,301.

Patented Dec. 24, 1872.



Witnesses

Nelson A. Hunt

James H. Brown

Inventor

Nathan M. Mendenhall

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UNITED STATES PATENT OFFICE.

NATHAN M. MENDENHALL, OF DUBLIN, INDIANA.

IMPROVEMENT IN SPARK-ARRESTERS.

Specification forming part of Letters Patent No. 134,301, dated December 24, 1872.

To all whom it may concern:

Be it known that I, NATHAN M. MENDENHALL, of Dublin, county of Wayne and State of Indiana, have invented certain Improvements in Spark-Extinguisher, of which the following is a specification:

My invention relates to an improvement in spark-extinguishers wherein I use a tank or receptacle for the sparks, said tank being placed in any suitable position above the boiler and having the smoke-stack mounted upon it, said stack having a curved pipe entering it from the boiler and curving downward to near the bottom of the tank.

The drawing is a side elevation, partly in section, showing the manner in which the curved pipe enters the stack and curves downward into the tank.

A is the boiler; B, the smoke-stack; C, the curved pipe entering the same; and E, the tank or receptacle for the sparks. The tank may be partly filled with water, as indicated at D, or it may be used without water, and having suitable openings to fill it or discharge its contents. If necessary when using the tank, with or without water, wire netting may be placed in the stack B at the line X X.

By this construction I entirely obviate the necessity of placing a cone or netting at the top of the smoke-stack, leaving the top of the stack entirely clear and open, which greatly facilitates the draft. When water is used, as shown at D, the sparks are thrown upon it and instantly extinguished. But if water is

not used the netting will keep the sparks below the line of the same. This arrangement may be used with or without the netting, or with or without the water. If used without either the inwardly-inclined side of the upper part of the tank serves the purpose that a cone in the upper part of the stack is intended to do.

I do not wish to confine myself to the precise construction shown and described so long as I use the tank with a smoke-stack mounted upon it and having a curved pipe proceeding from the smoke-box of the boiler and entering the stack B and curving downward into the tank, as many modifications may be used without affecting the principle of my extinguisher.

I am aware that the sparks have been arrested and extinguished in tanks or reservoirs containing water, over which the smoke-pipe was mounted, and consequently I do not claim the same, broadly; but

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

The smoke-stack B mounted upon the tank E and having the curved pipe C proceeding from the smoke-box and entering the stack B and curving downward into the tank, when all the parts are constructed and arranged substantially as shown and described.

NATHAN MARSHALL MENDENHALL.

Witnesses:

NELSON A. HUNT,
E. M. STUBBS.