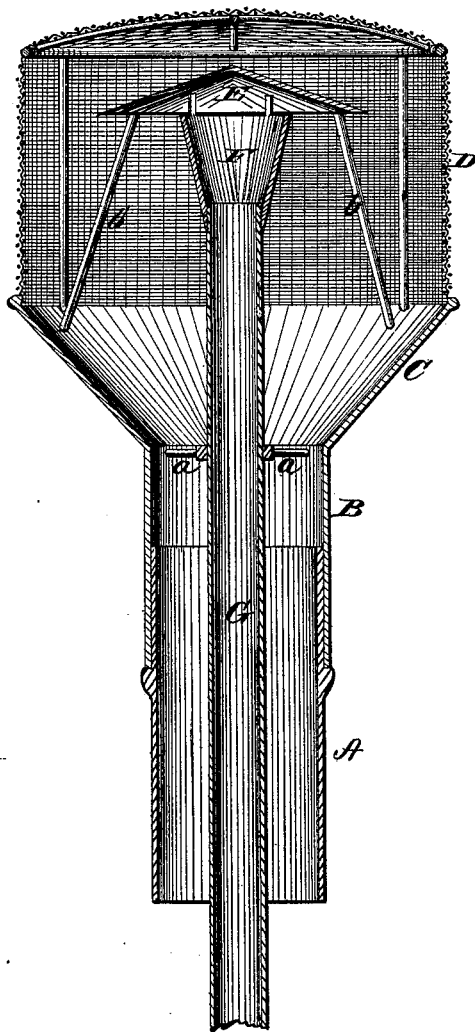


C. E. WYMAN.
Spark-Arresters.

No. 202,914.

Patented April 23, 1878.



WITNESSES
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UNITED STATES PATENT OFFICE.

CHARLES E. WYMAN, OF MARTINSBURG, INDIANA.

IMPROVEMENT IN SPARK-ARRESTERS.

Specification forming part of Letters Patent No. 202,914, dated April 23, 1878; application filed March 12, 1878.

To all whom it may concern:

Be it known that I, CHAS. E. WYMAN, of Martinsburg, in the county of Washington, and in the State of Indiana, have invented certain new and useful Improvements in Spark-Arresters; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a spark-arrester intended principally for use on agricultural and other portable engines, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a central vertical section of my improved spark-arrester.

A represents the upper end of the smoke-stack, to which the spark-arrester is applied. B is a cylinder fitting over the upper end of the smoke-stack A, and provided at its upper end with a funnel, C, to the upper edge of which the wire-cloth casing D is secured, said casing extending a suitable distance above the funnel, the top of the casing being strengthened by suitable ribs.

In the center, in the upper portion of the wire-cloth casing D, is an inverted funnel, E, supported by means of suitable braces *b b*. Within this inverted funnel or conical cap E

is a funnel, F, from the lower end of which a pipe, G, leads down through the smoke-stack inside, and then out at one side of the smoke-box, where there is to be placed a receptacle to receive the sparks. The pipe G is supported from the inside of the cylinder B or funnel C by arms *a a*.

The sparks, after they leave the smoke-stack, strike the funnel-shaped or conical cap E, and are conveyed in and down the pipe G by the force of the draft.

The sparks never get fast and stick in the wire-netting, but keep in continual motion until they are conveyed into the funnel or cap E, and fall down the exit-pipe. This continual motion of the sparks enables me to use very fine netting, and hence there is no danger of fire from escaping sparks.

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

The within-described spark-arrester, consisting of the cylinder B, with funnel C and wire-cloth casing D, the inverted conical cap E, and pipe G, with funnel F, all constructed and arranged as shown, and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of February, 1878.

CHAS. E. WYMAN.

Witnesses:

J. SPEED PEAY,
W. J. CLEMERSON.