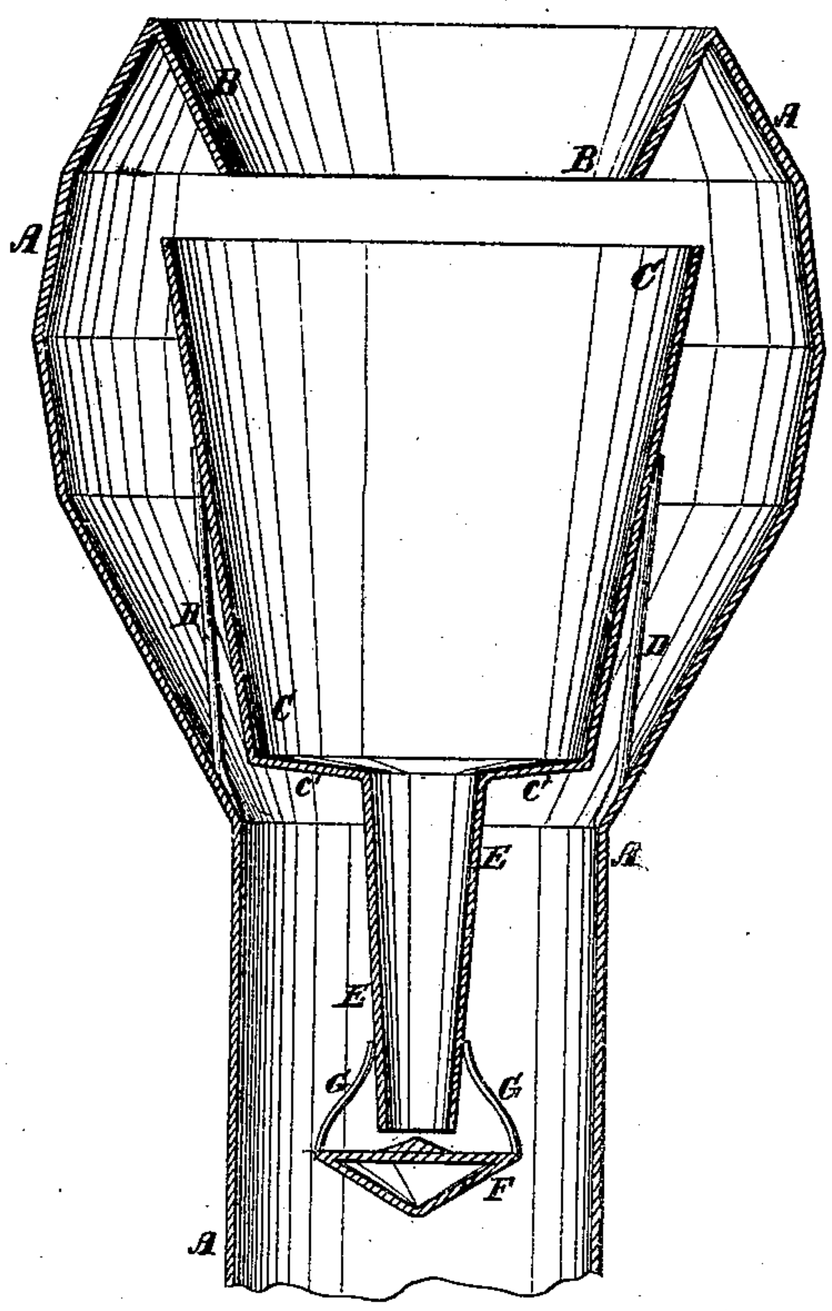
C. L. Pierpont,

Spark Arrester.

No. 110,676. Patented Jan. 3, 1871.



Witnesses.

A. Bennenendorf.

L. S. Mabee

Inventor.

C. L. Pierpont

per Munn & Co

Attorneys.

United States Patent Office.

CHARLES L. PIERPONT, OF DURAND, WISCONSIN.

Letters Patent No. 110,676, dated January 3, 1871.

IMPROVEMENT IN SPARK-ARRESTERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CHARLES L. PIERPONT, of Durand, in the county of Pippin and State of Wisconsin, have invented a new and useful Improvement in Spark-Arrester; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which the figure is a detail sectional view of my improved spark-arrester.

My invention has for its object to furnish a simple and effective spark-arrester for attachment to engine smoke-stacks; and

It consists in the construction and combination of the various parts of the apparatus, as hereinafter more fully described.

A represents the smoke-stack, the upper end of which is enlarged, as shown in the figure.

Upon the upper edge of the stack A is formed a flange, B, the lower part of which is contracted, as shown in the figure, giving it the appearance of the frustum of an inverted cone.

C is the reservoir to receive the sparks, which is made wider at its upper end than at its lower end, the upper end of said reservoir or receiver being made wider than the lower end of the flange B, as shown in the figure.

The reservoir C is supported in place by arms or braces D, the upper ends of which are attached to the said reservoir, and the lower ends of which are attached to the smoke-stack A.

The bottom *c'* of the reservoir C is made convex upon its outer or lower side, and concave upon its inner or upper side, and has an opening formed in its center, in which opening is secured the upper end of a pipe, E, which extends down into the stack A.

F is a double cone, suspended just below the lower end of the pipe E by the arms G, the upper ends of which are secured to the said pipe E.

This double cone prevents the main blast through the stack A from passing up the pipe E, and also prevents the sparks from lodging upon the upper side of said double cone.

By this construction the smoke, cinders, sparks, &c., pass up around the reservoir C. The smoke passes around the lower edge of the flange B and escapes at the top of the stack.

The sparks, cinders, &c., are stopped by the flange B, and fall down into the receiver C, from which they escape through the pipe E.

Having thus described my invention,

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

The spark-arrester, formed by the combination of the flange B, spark-receiver C *c'*, pipe E, and double cone F, with each other and with the smoke-stack A, said parts being constructed and operating substantially as herein shown and described.

CHARLES L. PIERPONT.

Witnesses:

H. E. HOUGHTON,

SIDNEY A. FOSTER.