

DARWIN BEACH'S

IMPROVEMENT IN CONE SPARK CATCHER AND CONSUMER.

110890

PATENTED JAN 10 1871

Fig 1.

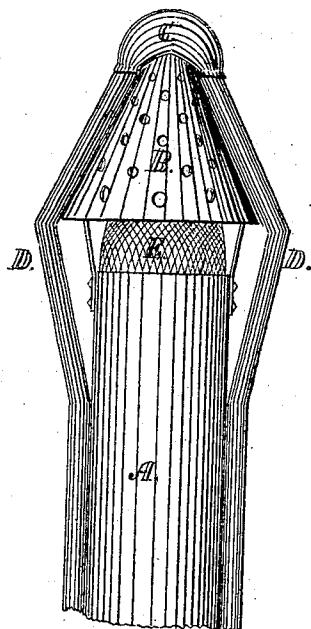


Fig 2.

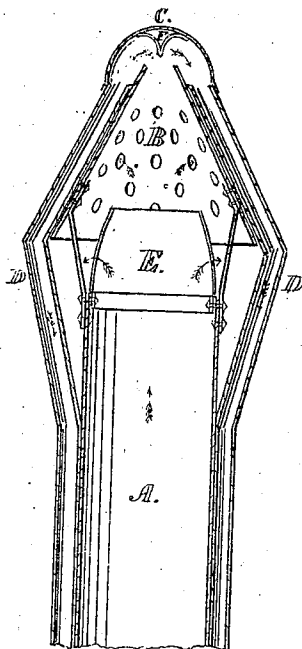
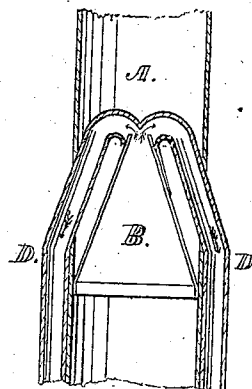


Fig 3.



WITNESS.

Oville Beach
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INVENTOR.

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United States Patent Office.

DARWIN BEACH, OF OSHKOSH, WISCONSIN.

Letters Patent No. 110,890, dated January 10, 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, DARWIN BEACH, of Oshkosh, of the county of Winnebago and State of Wisconsin, have invented a new and useful Improvement in Spark-Arresters; 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 which my invention pertains to make and use the same, reference being had to the accompanying drawing forming part of this specification

This invention relates to a new and useful improvement in spark-arresters, for the purpose of returning sparks, cinders, and other products of combustion unconsumed to the fire-box, or ash-pan, or any other receptacle; and

The invention consists in the introduction of a chamber or hood on the top of a smoke-stack, in which is hung a deflector. Said chamber is connected by flues, one on each side of the smoke-stack, extending over and outside of a larger cone or deflector, and thence to the ash-pit or receptacle; and further, in placing within the up-take a conical wire or perforated screen, as will hereinafter be more fully described, in which—

Figure 1 in the accompanying drawing is a front elevation.

Figure 2 is a sectional elevation of the same.

Figure 3 is a sectional elevation of the conical wire or perforated screen set in an up-take, with its connections.

Similar letters of reference indicate corresponding parts.

A is an ordinary smoke-stack.

B represents a conical deflector or concentrator, tapering to the top, where it is open.

Immediately over said opening is hung a small deflector, F, in the spark-chamber C, said spark-chamber C forming a connection with the return-flues D D, which return the sparks or other products of combustion to the ash-pit or fire-box, where they are mostly consumed.

E is a wire or perforated screen attached to the upper end of the smoke-stack A, extending up and into the cone or deflector B for the purpose of allowing the smoke to pass through, and at the same time convey the sparks, cinders, &c., up to and into the spark-chamber C, when they are forced down the return-flues D D by the force of the exhaust steam and draught into the receptacle.

B, in fig. 3, represents another form in which my invention may be carried out without departing from the spirit of my invention.

Having thus fully described the construction and operation of my invention,

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

In combination with the smoke-stack A, deflector F, conical deflector B, spark-chamber C on top or set in the up-take A, return-flues D D, and wire or perforated cone B, substantially as shown and described.

DARWIN BEACH.

Witnesses:

ORVILLE BEACH,
WM. P. WARWICK.