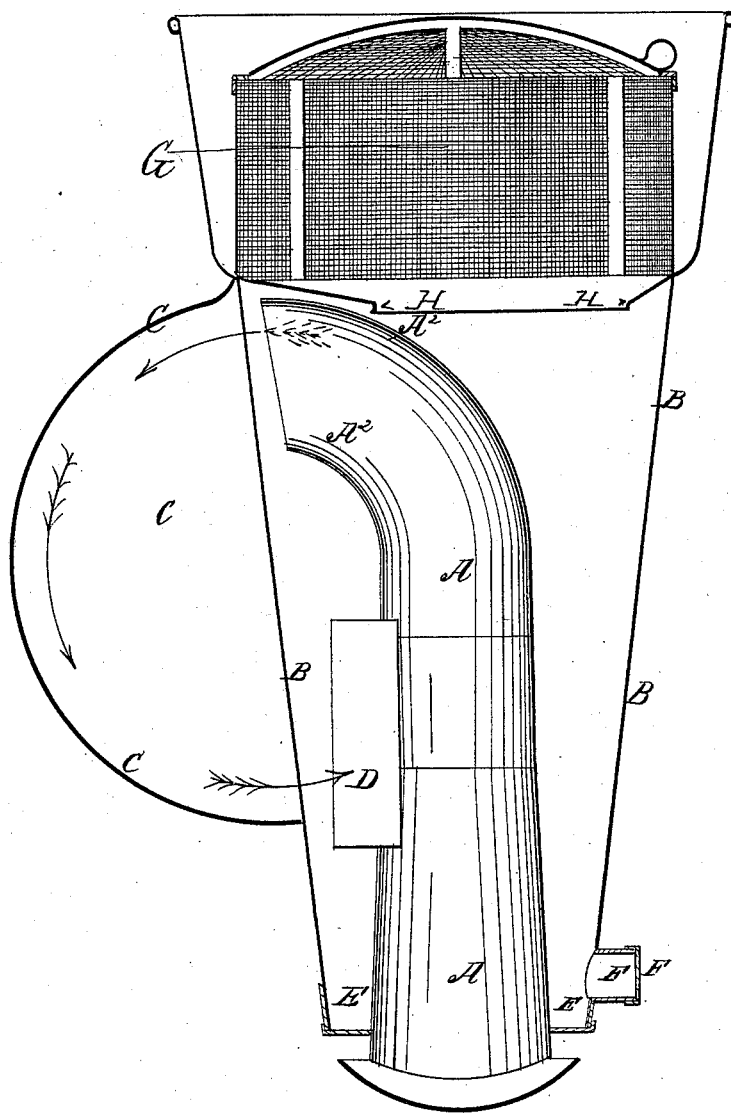


*J. V. L. Hoagland,*  
*Spark Arrester,*  
*No. 2,496, Patented Mar. 18, 1842*



# UNITED STATES PATENT OFFICE.

JOHN V. L. HOAGLAND, OF JERSEY CITY, NEW JERSEY.

## SPARK-ARRESTER.

Specification of Letters Patent No. 2,496, dated March 18, 1842.

*To all whom it may concern:*

Be it known that I, JOHN V. L. HOAGLAND, of Jersey City, Hudson county, and State of New Jersey, have invented a new and Improved Spark-Catcher for Locomotive and other Steam-Engines; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in carrying my funnel or chimney A up through the outside casing B B B, and giving the top of the funnel a bend or curve, so as to arrest the sparks in their course, and direct them downward to the bottom E, E, by means of the concentric casing C, being of a semicircular form, attached to the front of the outside casing B, and concentric with the bend or curve of the top of the chimney or funnel A<sup>2</sup>, A<sup>2</sup>.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

I construct my funnel, or chimney, marked A, A. I then construct my outside conical casing B, B, B for the purpose of holding the sparks. I then attach to the front of the outside casing, and placed concentric with the curves of the top of the funnel A<sup>2</sup>, A<sup>2</sup> a semicircular casing marked C, C, C, for the purpose of giving the sparks a downward direction as is shown by the arrows in the drawing; by so altering the direction of the sparks, they will strike against the chimney or funnel at the point D, which is a plate fastened to the funnel and bent at an angle so as to throw the sparks off easy from the chimney

and not allow them to cut the metal which they would do should the striking plate not be placed there. Now the course of the sparks being changed from their upward course to a direct downward course by the aforementioned bent top of the funnel A<sup>2</sup>, A<sup>2</sup>, in conjunction with the curve of the concentric casing C, C, C, it will be readily seen that they will be carried below the influence of the draft or force of the exhaust steam, and drop by their own gravity to the bottom E, E, and rest there until taken out through the small opening F, F. Should there be any disposition with the lighter sparks to ascend, they will be immediately arrested by the wire netting covering the inverted top G, and thrown down through the aperture or hole H, H, which is so constructed as to throw the sparks behind the back of the inside funnel and out of the influence of the exhaust steam, the whole forming a combination of arrangements for a spark catcher altogether new.

What I claim as my invention and desire to secure by Letters Patent is—

The combination of the curved top of the funnel with the concentric casing, placed in that or any other part of the chimney or funnel which constitutes the whole of my claim as is fully shown and set forth in drawings and specification.

J. V. L. HOAGLAND. [L. S.]

Witnesses:

PAUL R. HODGE,  
I. H. BAILEY.