

No. 613,119.

Patented Oct. 25, 1898.

W. P. COBURN.
SPARK ARRESTER.

(Application filed May 5, 1898.)

(No Model.)

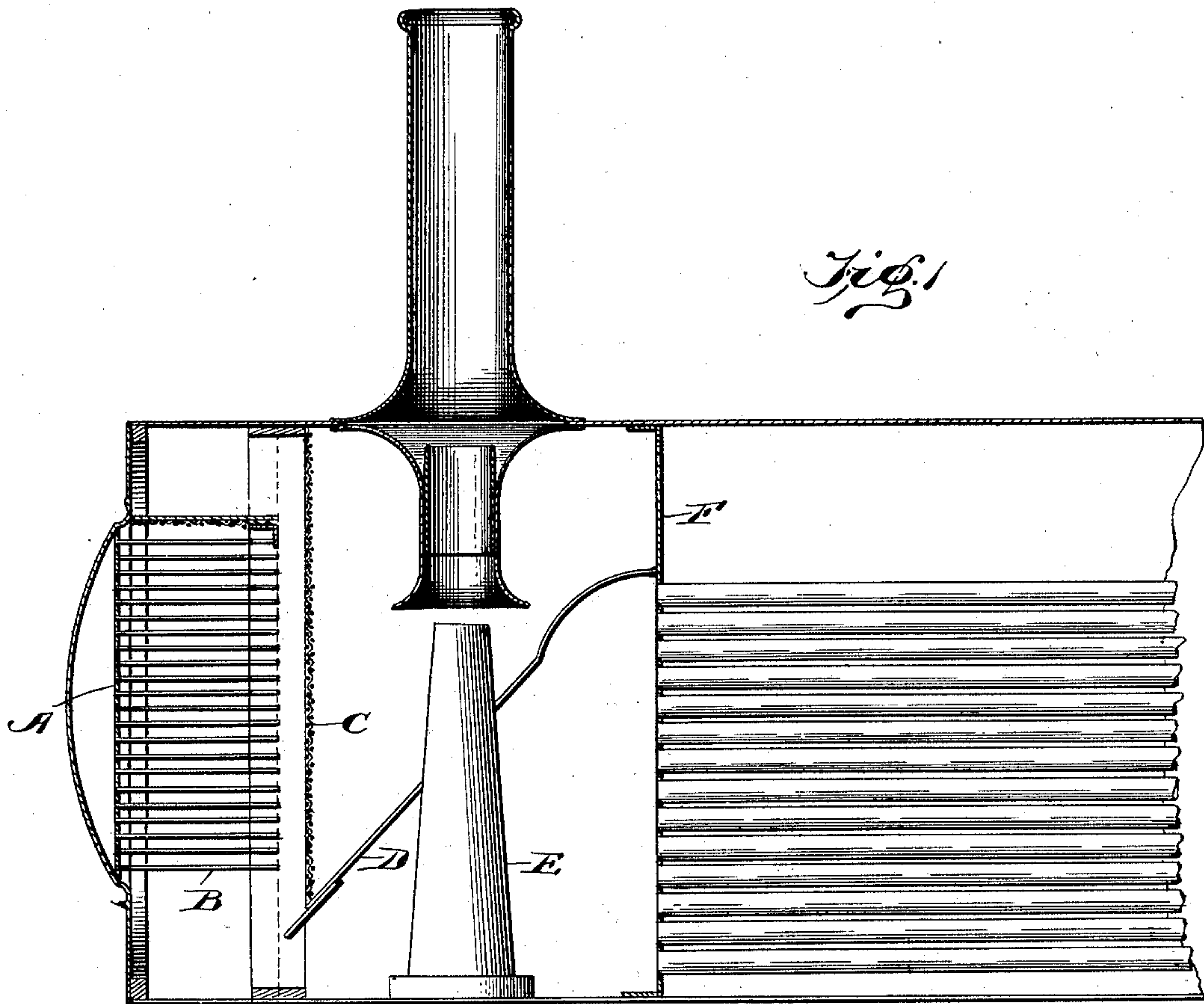
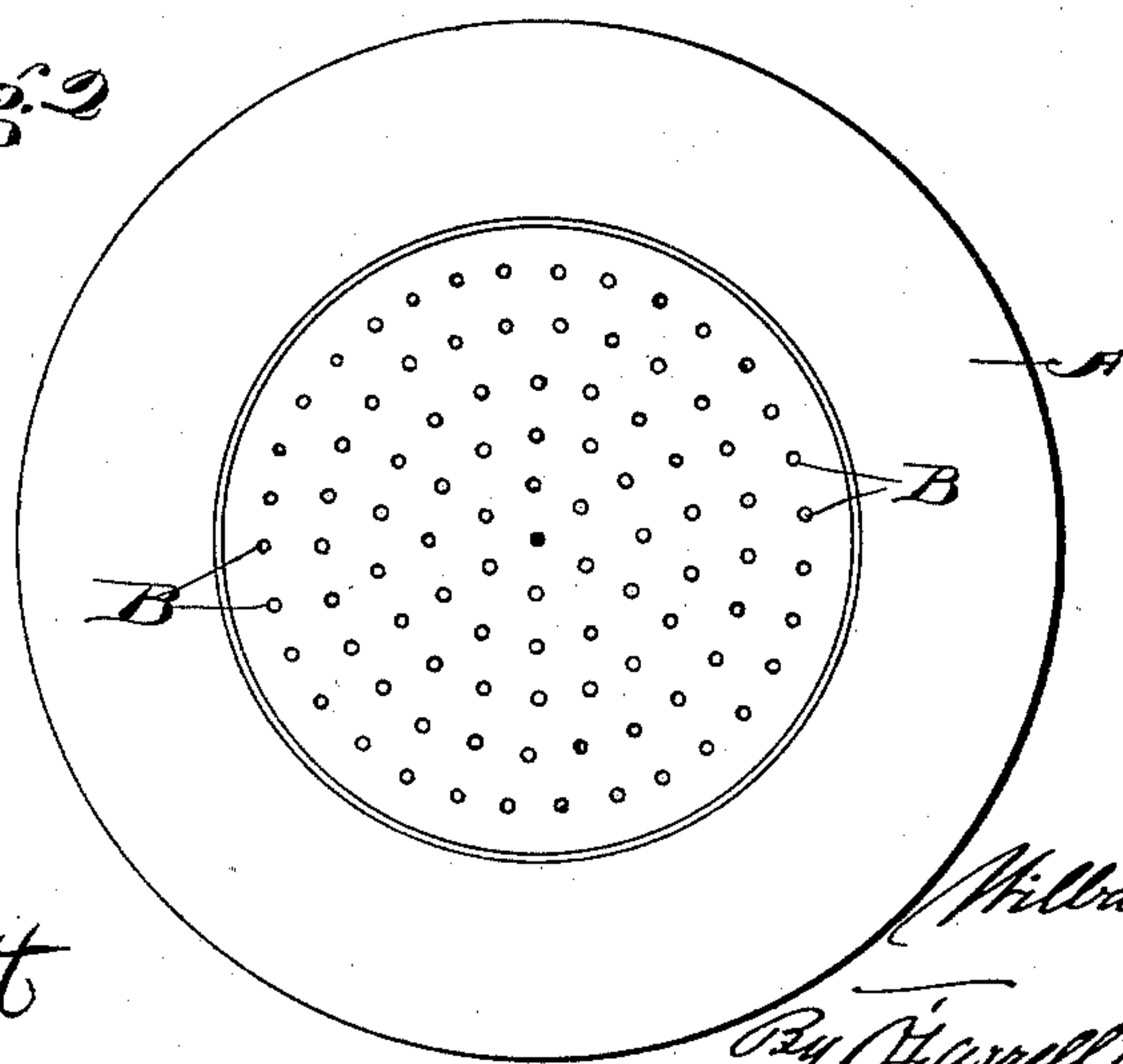


Fig. 2



witnesses:

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UNITED STATES PATENT OFFICE.

WILBUR P. COBURN, OF LAFAYETTE, INDIANA.

SPARK-ARRESTER.

SPECIFICATION forming part of Letters Patent No. 613,119, dated October 25, 1898.

Application filed May 5, 1898. Serial No. 679,822. (No model.)

To all whom it may concern:

Be it known that I, WILBUR P. COBURN, a citizen of the United States of America, residing at Lafayette, in the county of Tippecanoe and State of Indiana, have invented certain new and useful Improvements in Spark-Arresters and Cinder-Breakers, of which the following is a specification.

This invention relates to spark-arresters and cinder-breakers adapted to be used upon locomotives, the object of which is to provide an exceedingly cheap and simple device which can be easily and quickly applied and will proficiently perform all of its intended functions.

Another object of this invention is to construct a spark-arrester and cinder-breaker so as to prevent sparks from passing through the smoke-stack and to break, crush, and pulverize the cinders, so as to allow the use of a finer wire-netting than is now used, thus lessening the danger of fire from the sparks from a locomotive.

With these objects in view my invention consists in the particular construction of the various parts and in the novel manner of combination or arrangement of said parts, all of which will be described hereinafter and pointed out in the claim.

In the drawings forming a part of this specification, Figure 1 is a portion of a locomotive in side elevation, partly broken away, showing my invention as applied. Fig. 2 is a vertical sectional view taken through the spark-arrester and cinder-breaker.

Referring to the drawings, A represents a casting adapted to be attached to the inner

side of the door on the front end of a locomotive and provided with rods or bars B, secured perpendicular thereto and extending horizontally into the interior of the smoke-box, the free ends of which are approximately near the wire-netting C, secured vertically therein, the lower end of which is attached to a deflector D, which extends at an angle therefrom, being supported by the exhaust-pipe E and the boiler-head or flue-sheet F.

It will thus be seen that the sparks and cinders coming in contact with the deflector will be thrown in engagement with the rods or bars and crushed or pulverized to such an extent that the same will be drawn freely through the vertical arrester and pass out through the smoke-stack.

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

In a spark-arrester and cinder-breaker, the combination of a casting adapted to be secured to the inner side of the door on the front of an engine, the said casting having a series of rods or bars secured at right angles thereto, and adapted to project horizontally into the smoke-box, of a wire-netting secured within the smoke-box, approximately near the free ends of the said rods or bars, of a deflector, secured to the lower end of the said wire-netting and supported by the exhaust-pipe and boiler-head, substantially as shown and for the purpose set forth.

WILBUR P. COBURN.

Witnesses:

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