

T. NIMMO.
SPARK ARRESTER.
APPLICATION FILED JAN. 21, 1905.

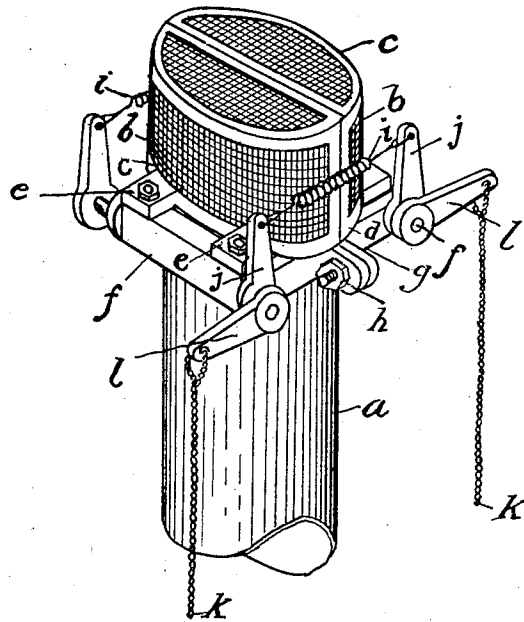


Fig. 1.

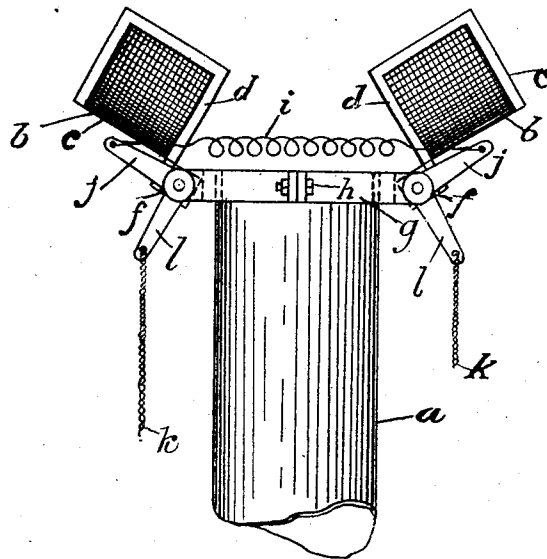


Fig. 2.

Witnesses:

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UNITED STATES PATENT OFFICE.

THOMAS NIMMO, OF SOUTH PORTLAND, MAINE.

SPARK-ARRESTER.

No. 796,751.

Specification of Letters Patent.

Patented Aug. 8, 1905.

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To all whom it may concern:

Be it known that I, THOMAS NIMMO, a citizen of the United States, residing at South Portland, in the county of Cumberland and State of Maine, have invented a new and useful Spark-Arrester, of which the following is a specification.

My invention relates to improvements in spark-arresters for smoke-stacks, chimneys, flues, &c.

The object of my improvement is to provide an arrester having means for quickly and thoroughly cleaning it of accumulations of cinders or other foreign matters adhering thereto.

In the drawings herewith accompanying and making a part of this application, Figure 1 is a perspective view of a stack with my improved arrester attached thereto, the parts of the arrester being shown in closed and operative position; and Fig. 2 is an elevation of a stack with my improved arrester attached thereto, the parts of the arrester being shown in open position.

Same letters of reference refer to like parts.

In said drawings, *a* represents a smoke-stack, and *b b* parts of the arrester, each part being movably attached to the top of the stack in any convenient manner. The parts *b b* are preferably made to form when in operative position a hood completely covering the open end of the stack, as shown in Fig. 1. A convenient method of forming the hood is shown, each part consisting of a suitable frame *c*, base *d*, and body part *e*, perforated to permit the escape of air, gases, smoke, &c. The perforations should be so fine as to prevent the escape of cinders. I have shown a convenient means for mounting the parts of the hood. Each member of the hood is secured to a rock-shaft *f*, pivotally mounted in a yoke *g*, securely fastened to the open end of the stack. Rigidly secured to shaft *f* are angle-levers *h j*. Connecting the corresponding arms *j* of said angle-levers is a spring *i*, and attached to the corresponding arms *h* of said angle-levers are cords or cables *k*, which pass downwardly to a convenient position for the operator.

I do not intend hereby to limit myself to the precise construction shown for mounting the members of the arrester nor to the means for automatically returning them to position after being opened, as shown in Fig. 2.

The operation of my improved arrester is as follows: When the mesh of the arrester

becomes clogged and needs to be cleaned, the operator draws down on cords *k*, which throws the parts of the arrester away from each other, as shown in Fig. 2. When released, the members return automatically to the position shown in Fig. 1 with a jar, the force of which will depend upon the power of the spring or other actuating means. The force with which they come together should be sufficient to jar out of them any cinders or obstructions in the mesh, the matter dislodged by the jar falling down the stack.

Having thus described my invention and its use, I claim—

1. A spark-arrester for smoke-stacks, chimneys, &c., comprising two parts pivotally mounted at the top of the stack or chimney and having perforations therein, means for separating the parts and means for bringing them together with jarring force, whereby cinders or extraneous matter adhering thereto is dislodged.

2. A spark-arrester for smoke-stacks, chimneys, &c., having the form of an inverted vessel divided vertically into two similar parts, each part provided with perforations and each pivotally mounted and forming together a hood for the stack or chimney, means for manually separating said parts and means for automatically bringing them together with jarring force.

3. A spark-arrester for smoke-stacks, chimneys, &c., comprising two parts pivotally mounted at the top of the stack or chimney and having perforations therein, a suitable yoke adapted to be secured to the open end of the stack or chimney, rotatable bars mounted in said yoke at opposite sides thereof, one of said parts being mounted upon each of said bars, an angle-lever rigidly secured to each of said bars, a spring connecting two of the corresponding arms of said angle-lever and tending constantly and automatically to draw the parts of the arrester together and cables attached to the other two corresponding arms of the lever for manually separating the parts of the arrester.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS NIMMO.

Witnesses:

ANNIE B. SMITH,
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