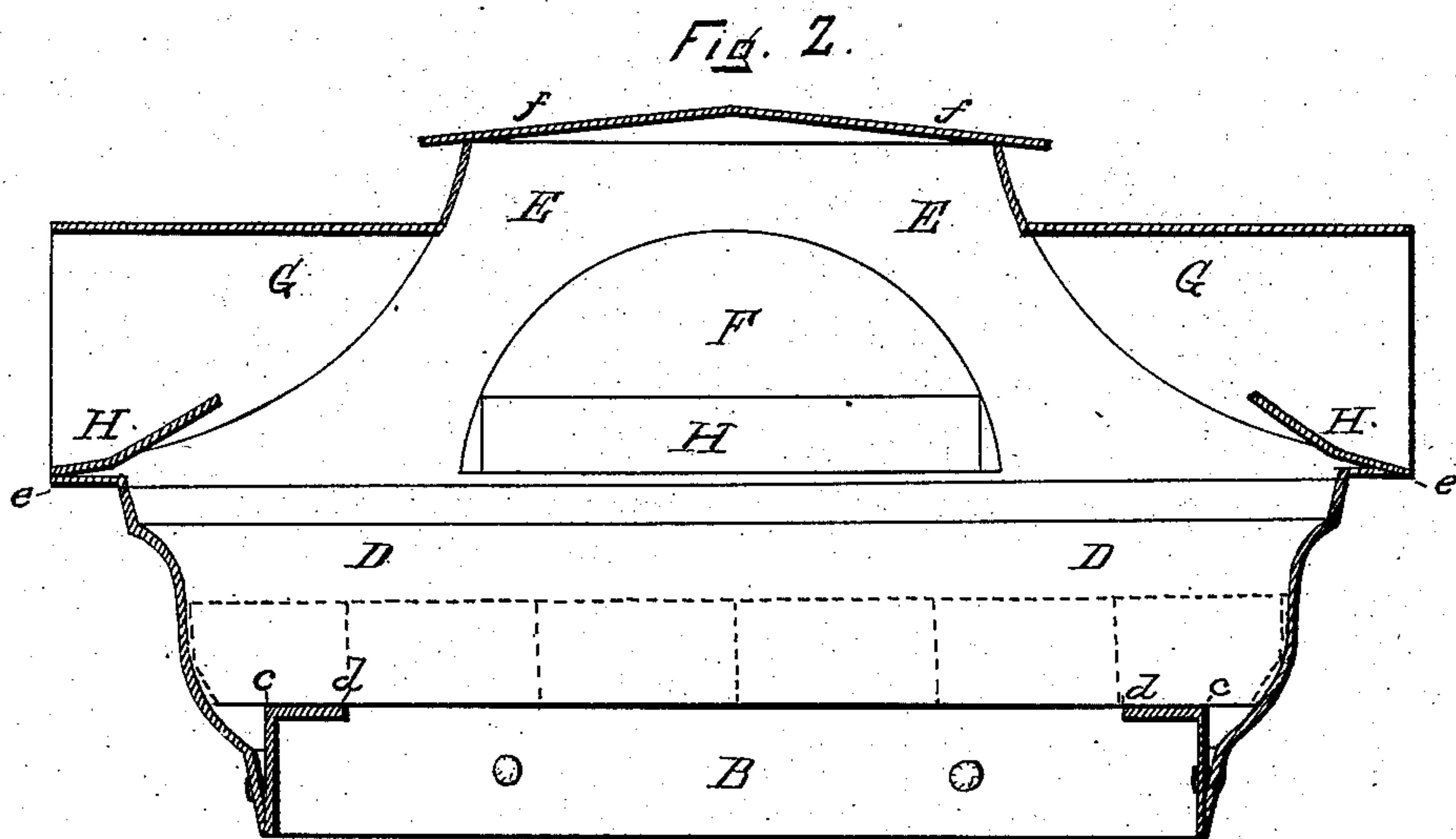
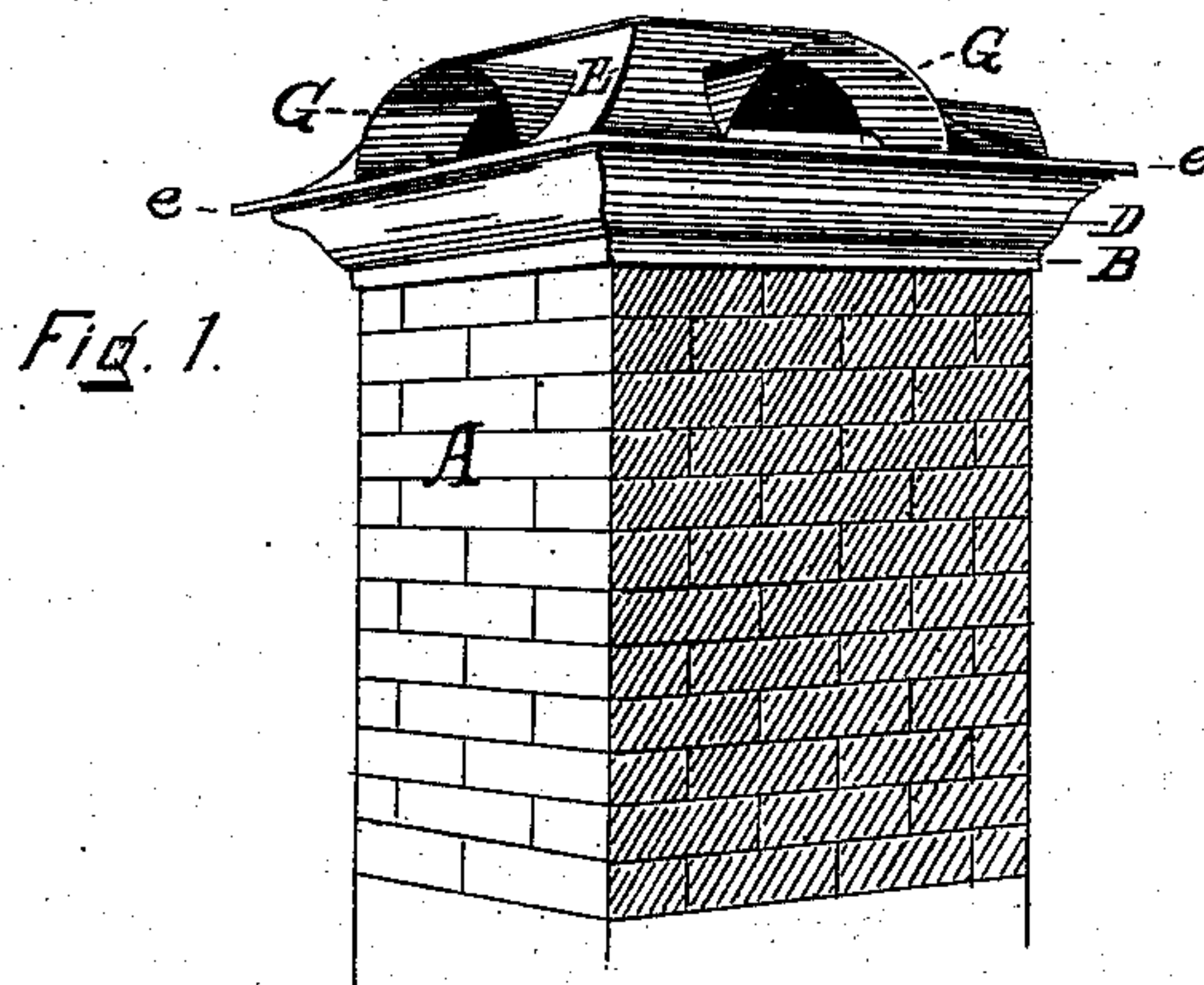


(No Model.)

I. A. SMITH.
CHIMNEY PROTECTOR.

No. 292,701.

Patented Jan. 29, 1884.



Witnesses:

James A. Harvey
E. C. Allen

Inventor:

Ira A. Smith
per Charles E. Allen
Atty.

UNITED STATES PATENT OFFICE.

IRA A. SMITH, OF EAST BERKSHIRE, VERMONT.

CHIMNEY-PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 292,701, dated January 29, 1884.

Application filed September 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, IRA A. SMITH, a citizen of the United States, residing at East Berkshire, in the county of Franklin and State of Vermont, have invented certain new and useful Improvements in Chimney Protectors and Roofs, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in chimney-protectors; and the objects of my invention are, first, to provide a guard to keep in place the tier of bricks which form the top of the chimney from becoming loosened and displaced by reason of the disintegration of the mortar in which they are laid, caused by the action of the smoke and the effect of the elements, especially water; second, to prevent sparks from leaving the chimney-flue, and to increase the draft of the chimney; and, third, to provide an ornamental top for a chimney, which will require less labor, time, and expense than one built of bricks in the ordinary way. These objects I attain by the device illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a chimney provided with my invention. Fig. 2 is a cross-section through the center of my device.

Similar letters indicate like parts throughout the several views.

A is the chimney.

B is a metallic band of suitable size and strength, designed to fit tightly around the outside of the usual upper tier of brick.

C C are angle-irons attached to the band B at suitable points, the top or horizontal projections, *d*, of which are designed to rest on the top of the bricks when the band B is in position.

D is a metallic molding of any desired form, which is riveted or otherwise attached to the band B, and is designed to form a suitable base for the roof E. I prefer to make this roof of what is known as the "Mansard" pattern, though any other form may be employed, provided the bottom or lower edge, *e*, of the roof is made to project sufficiently far over the perpendicular lines of the exterior of the chimney. The central portion of this roof over the chimney-flue is covered with a top, *f*, slanting outward, as shown in Fig. 2. In each

side of the roof E is an opening, F, having a circular top, which is covered with a projecting hood, G. On the inside of the bottom of each opening F is a flange or strip, H, which extends the entire width of the opening, and is curved or bent upward on the interior. After the chimney has been carried up as far as it ordinarily would be to receive the usual ornamental finish, a protector is selected, the size of whose band B shall exactly fit the exterior of the top tier of brick. The device then, having been put in place, is firmly secured to the chimney by another course of brick, laid in mortar, over the horizontal projections *d* of the angle-irons C, and against the interior of the molding D. (Shown in dotted lines in Fig. 2.) This can easily be accomplished by passing the hand through the apertures F. As the bottom of the roof, *e*, projects over the line of the chimney, and all the openings F are fully protected, it is apparent that not only no water can enter the chimney-flue, but the drippings from the roof E will fall outside of the brick shaft of the chimney; also, that all sparks, of whatever nature, will strike against the under side of the top *f*, and there be arrested and quenched. The upward curved form of the flanges H has the effect to direct the currents of air from the outside to the under side of the top *f*, the tendency of which is to draw and carry them out through the opening opposite.

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

1. A metallic chimney protector and roof consisting of the band B, connected to the roof E by the molding D, the roof having hooded openings F, provided with bottom inclined flanges, H, and projecting eaves *e*, substantially as described, and for the purpose set forth.

2. In a metallic chimney-protector, the combination of a roof provided with hooded openings F and flanges H with a molding, D, and band B, substantially as set forth.

In testimony whereof I do affix my signature in presence of two witnesses.

IRA A. SMITH.

Witnesses:

L. F. WILBUR,

CHARLES E. ALLEN.