

(No Model.)

W. H. ASHTON.  
CHIMNEY COWL.

No. 494,454.

Patented Mar. 28, 1893.

Fig. 1.

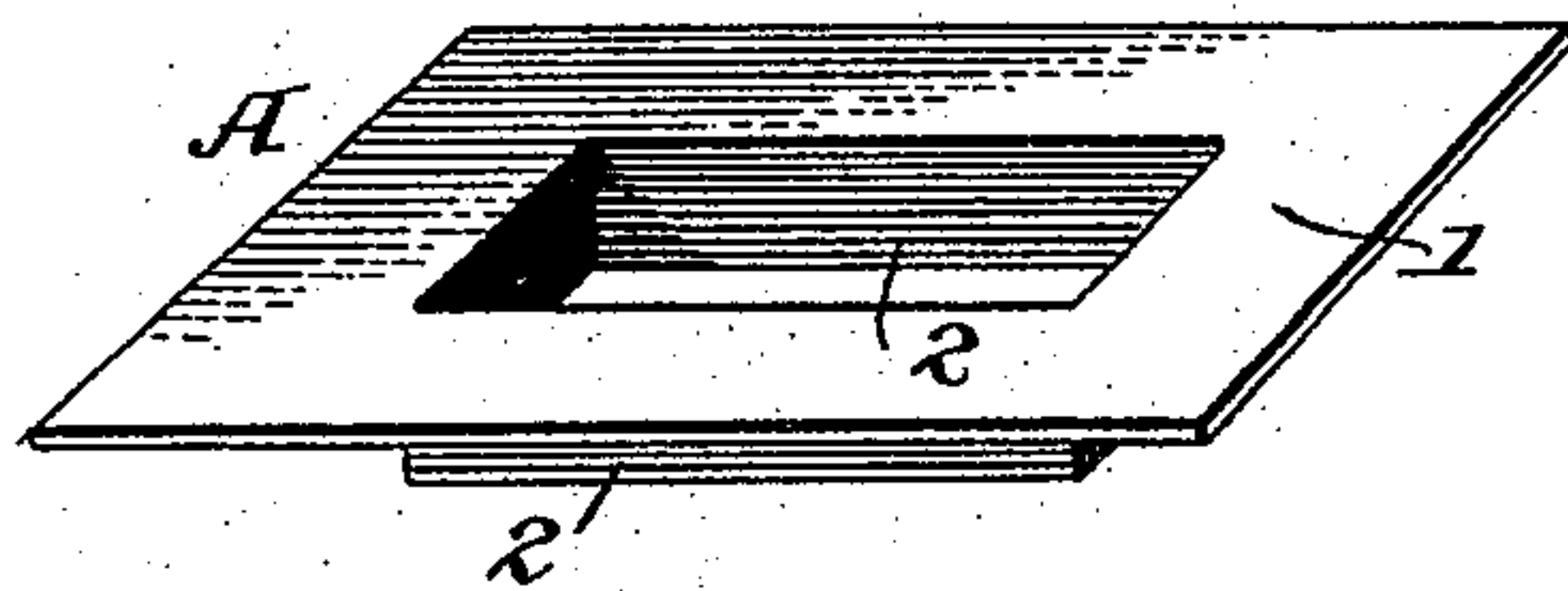


Fig. 2.

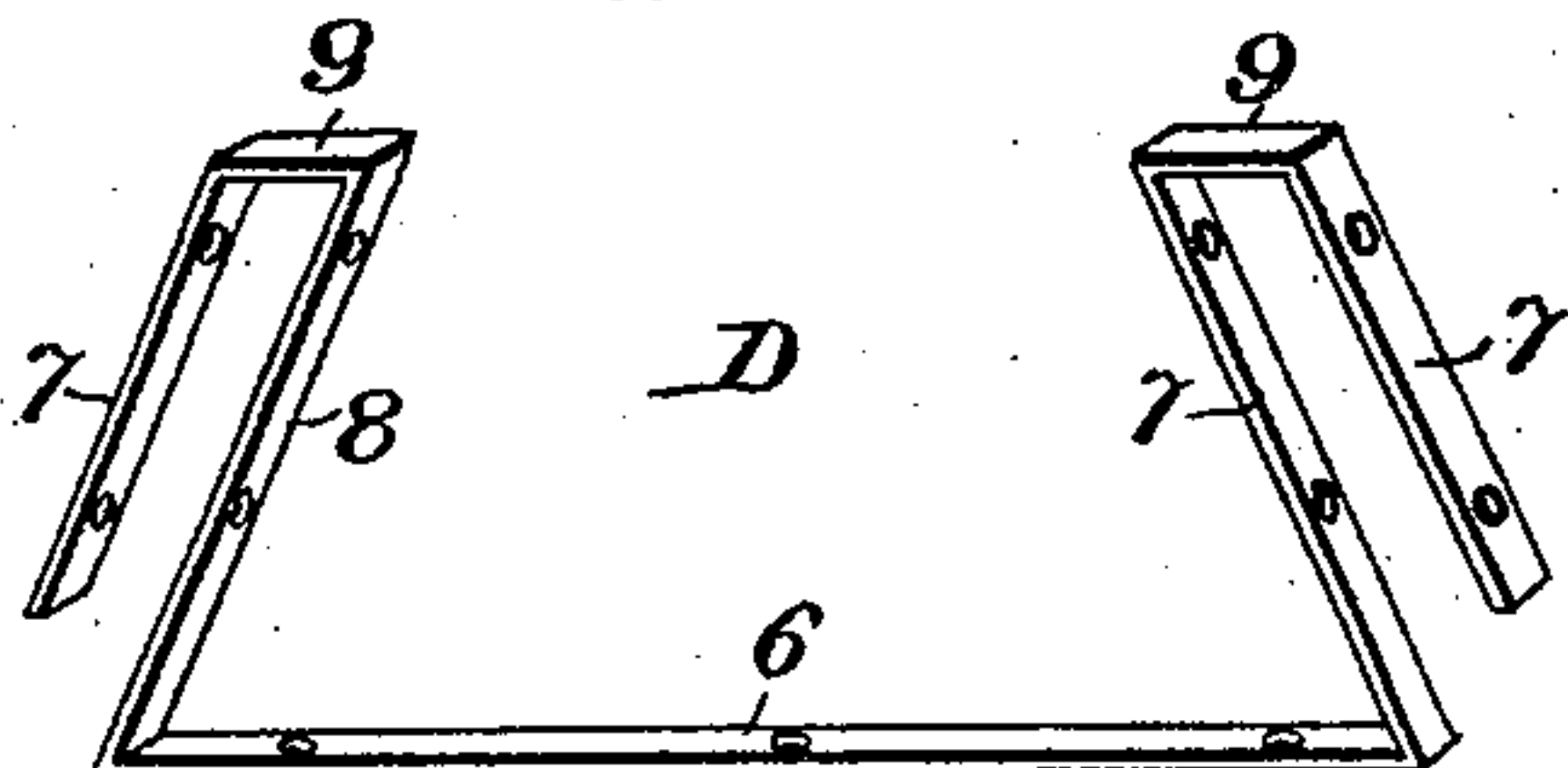


Fig. 3.

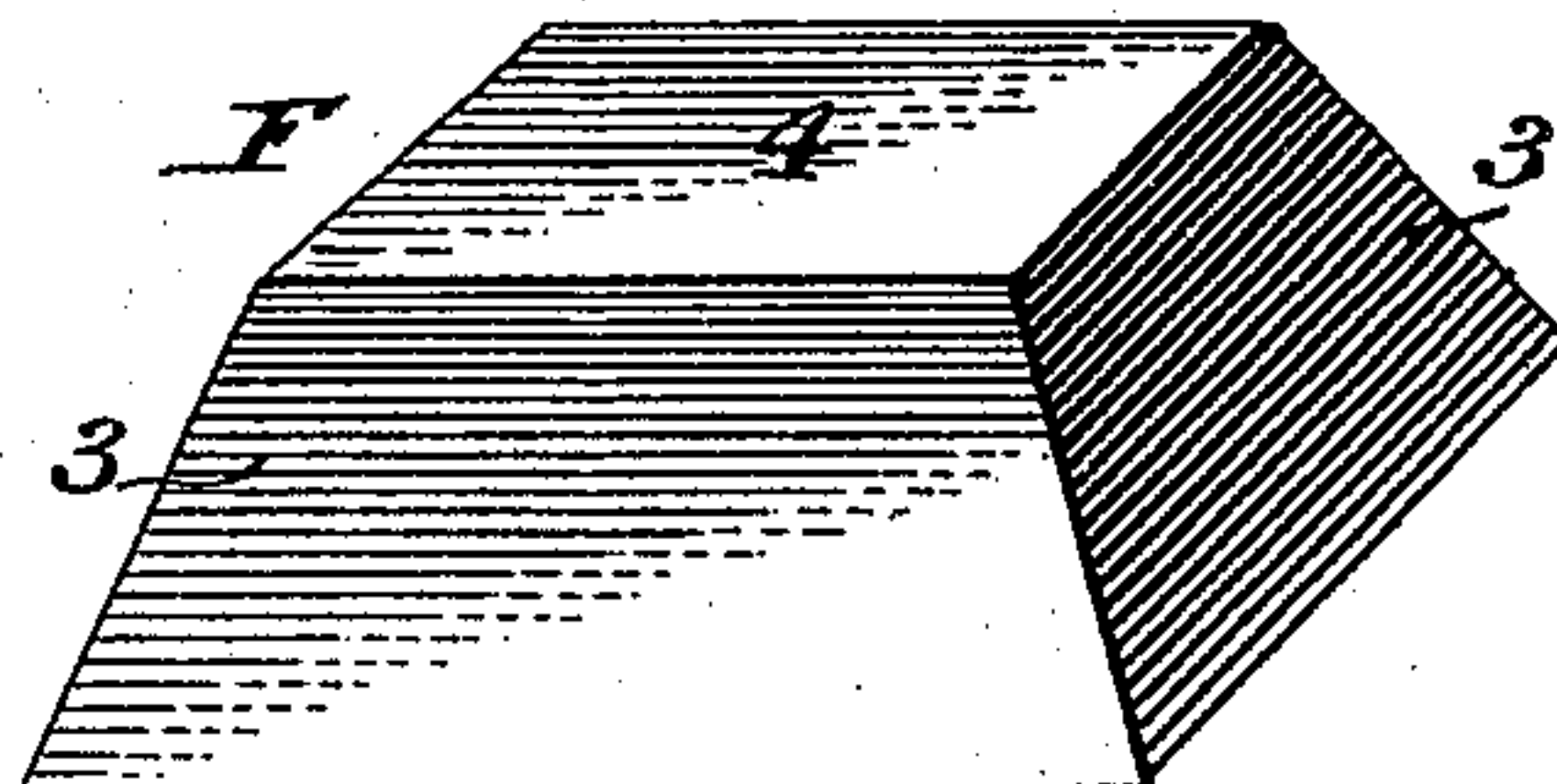


Fig. 4.

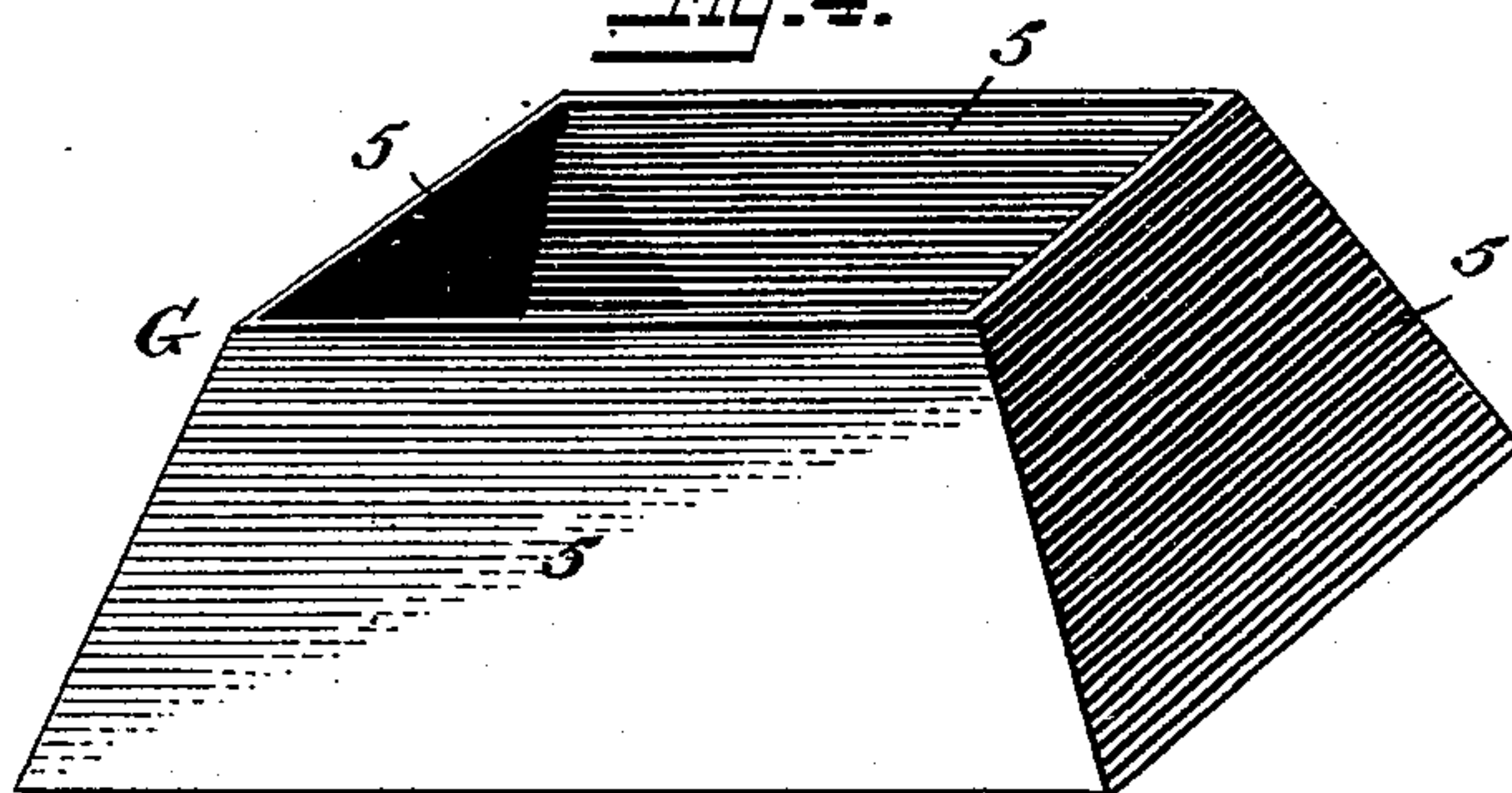
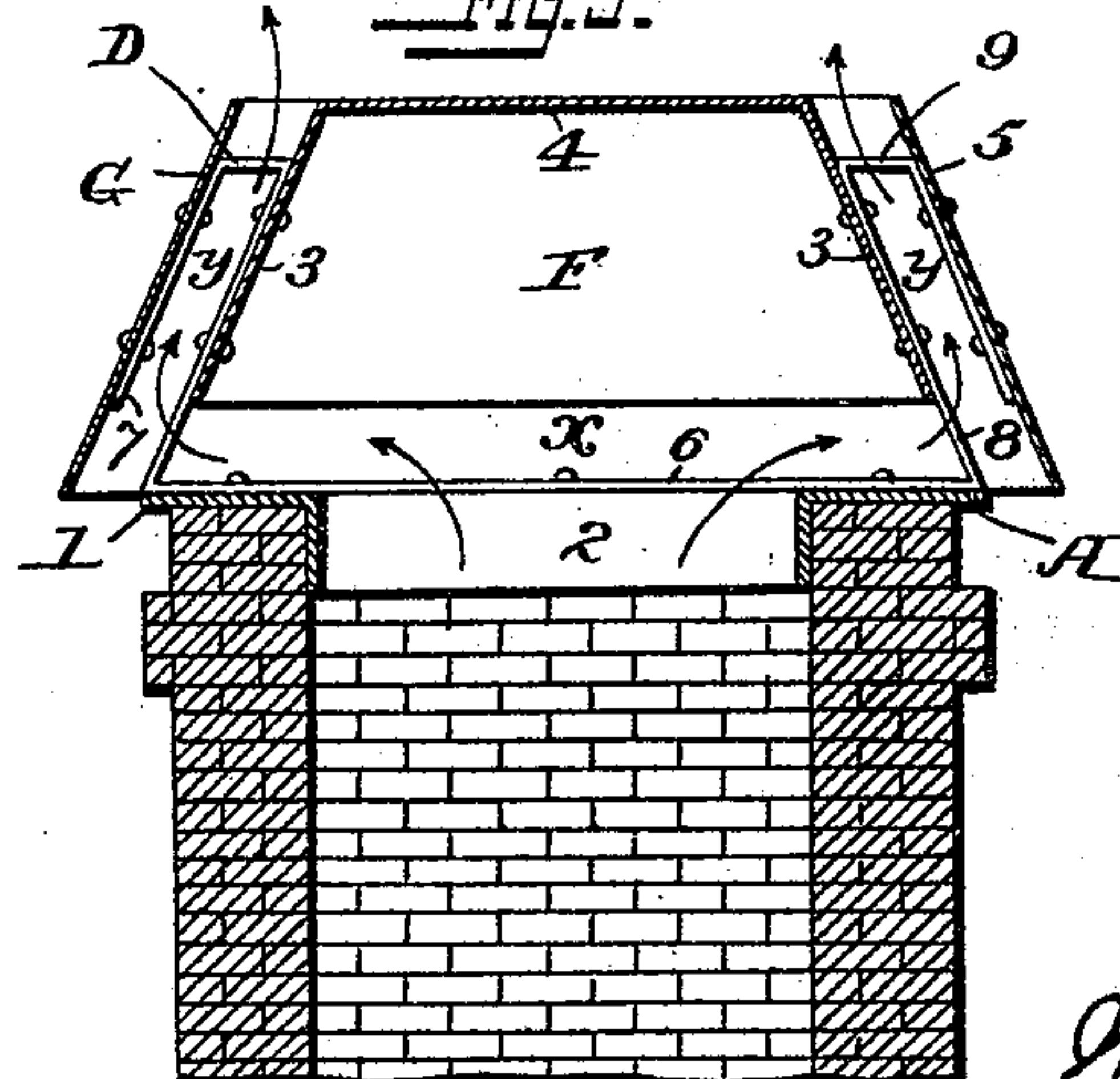


Fig. 5.



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# UNITED STATES PATENT OFFICE.

WILLIAM H. ASHTON, OF SEWARD, NEBRASKA.

## CHIMNEY-COWL.

SPECIFICATION forming part of Letters Patent No. 494,454, dated March 28, 1893.

Application filed September 8, 1892. Serial No. 445,296. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. ASHTON, a citizen of the United States, residing at Seward, in the county of Seward and State of Nebraska, have invented certain new and useful Improvements in Chimney-Cowls, of which the following is a specification.

My invention relates to a chimney cowl and consists of a cowl in which the parts are constructed as fully set forth hereinafter, and as illustrated in the accompanying drawings, in which,

Figure 1 is a perspective view of the base plate of the cowl; Fig. 2, one of the supports. Fig. 3, is a perspective view of the hood; Fig. 4, a perspective view of the shield; Fig. 5, a sectional elevation showing the cowl applied to the chimney.

The chimney plate A conforms in outline to the mouth of the chimney and consists of the flat plate or portion 1, and the pendent flange 2 which may be either at the inner or the outer edge of the plate, and which serves to retain and steady the plate in its position at the top of the chimney. The said plate and its flange may be in one or two pieces.

The hood or cowl F, is in the form of a truncated pyramid with inclined sides 3, 3, and horizontal top 4, and is suspended in position above the plate A, so as to leave an intervening passage  $x$ , and outside of the hood is the shield G also in the form of a truncated pyramid with inclined sides 5 and open at the top and bottom, the upper edges of the sides being upon a plane with the top of the hood and the lower extending to or below the plane of the plate A.

Instead of making use of a series of braces connecting the hood and the plate together, and an additional series for connecting the shield and the hood at different points, I make use of peculiar braces or supports D, each consisting of a bar of metal having a horizontal section 6, and two parallel inclined sections or arms, 7, 8, at each end, the inner sections 8, being united to the end of the section 6, and the parallel outer sections 7, being connected to the sections 8, by the short sections 9. The section 6 of each support is bolted or otherwise secured to the plate A, and the hood F, is placed between the inner sections 8 of two or more supports, and riveted thereto, as

shown in Fig. 5, and the shield G, is placed upon the outer section 7 and riveted thereto, as shown.

The supports D when properly proportioned with relation to the other parts not only afford a ready means of connecting all the parts together, but they serve to gage the relation of the parts to each other, so that an unskilled workman can hardly fail to bring the parts to their proper relative positions. It will further be evident that a single pair of supports D, will serve to hold all the parts firmly in place, and that by their use I am enabled to avoid the necessity of measuring the parts to determine the location of several series of brackets thereby avoiding time and labor in constructing the device.

When the parts are assembled and placed upon the chimney as shown in Fig. 5, the shield G prevents the passage of currents transversely across the mouth of the chimney, while the hood F prevents downward currents. At the same time the gases passing upward flow readily through the space  $x$ , below the edges of the hood, and upward and downward through the space  $y$  between the hood and the shield, and the upward draft is facilitated by the currents of air deflected upward by currents striking against the inclined sides 5 of the shield.

The shield, plate and hood may be made of galvanized iron or other suitable metal more or less ornamented as desired, or the parts may be made of terra-cotta or other material, and may be circular, oval or round in cross section instead of rectangular.

The supports D with their parallel sections or arms 7, 8, may be made of gas pipe or other material.

It will be seen that in operation the cowl F receives and retains the heated air or products of combustion to a certain extent and becomes heated thereby and thus aids in increasing draft of the chimney and the discharge of the products of combustion.

Without limiting myself to the precise arrangement and construction shown, I claim—

The combination, in a chimney cowl, of a plate A adapted to the end of the chimney, a cowl F having inclined sides and a top, a shield G also having inclined sides and of a size larger than the cowl whereby it is adapted

to fit over the latter and the braces or supports D, D, having the horizontal portions 6 adapted to be secured to the plate A, and the inclined portions 7 and 8 to which the inclined  
5 faces of the shield and the cowl are respectively secured, and the connecting parts 9, between the inclined portions, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of 10 two subscribing witnesses.

WILLIAM H. ASHTON.

Witnesses:

JOHN S. KITTLE,  
E. A. POLLEY.