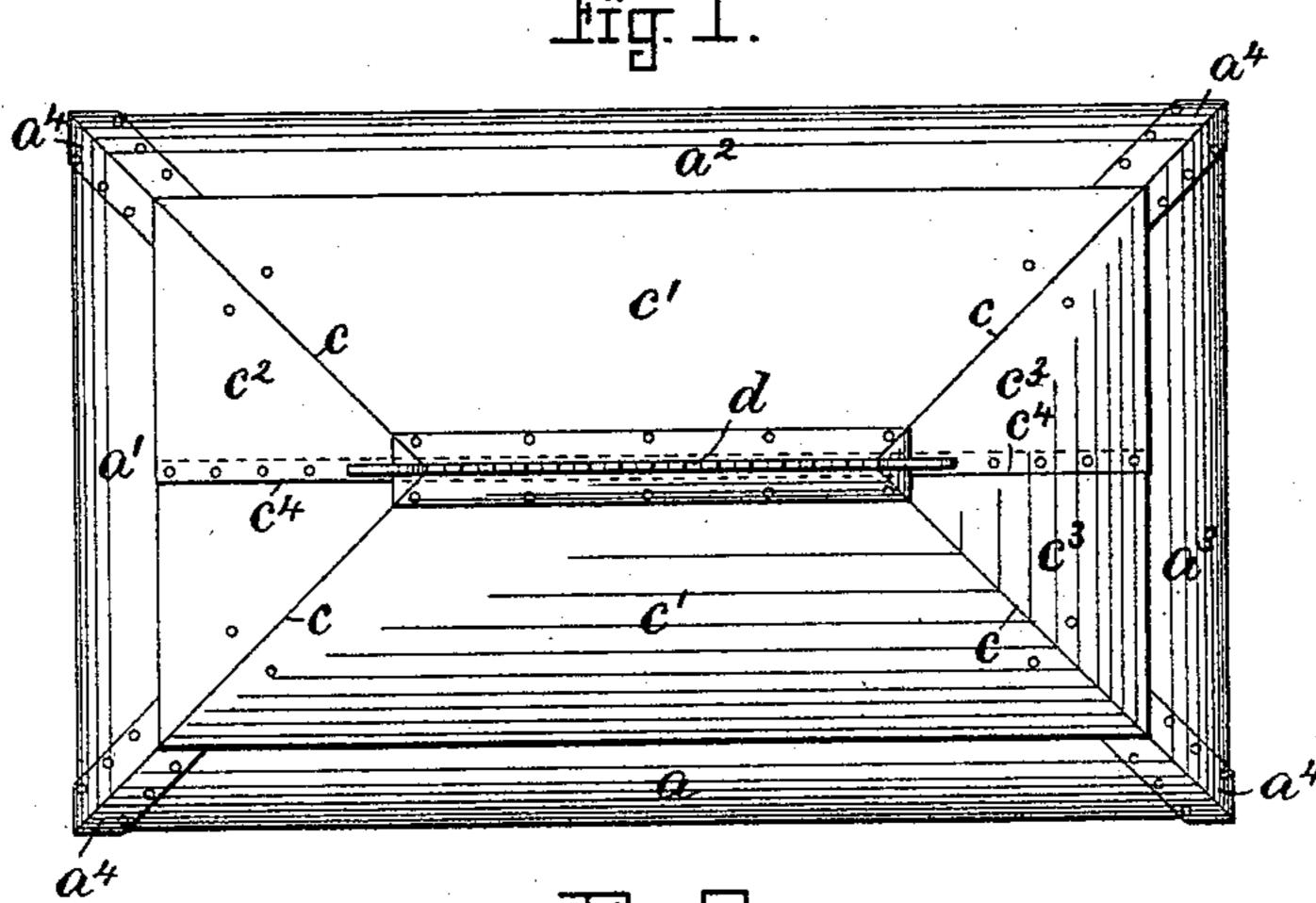
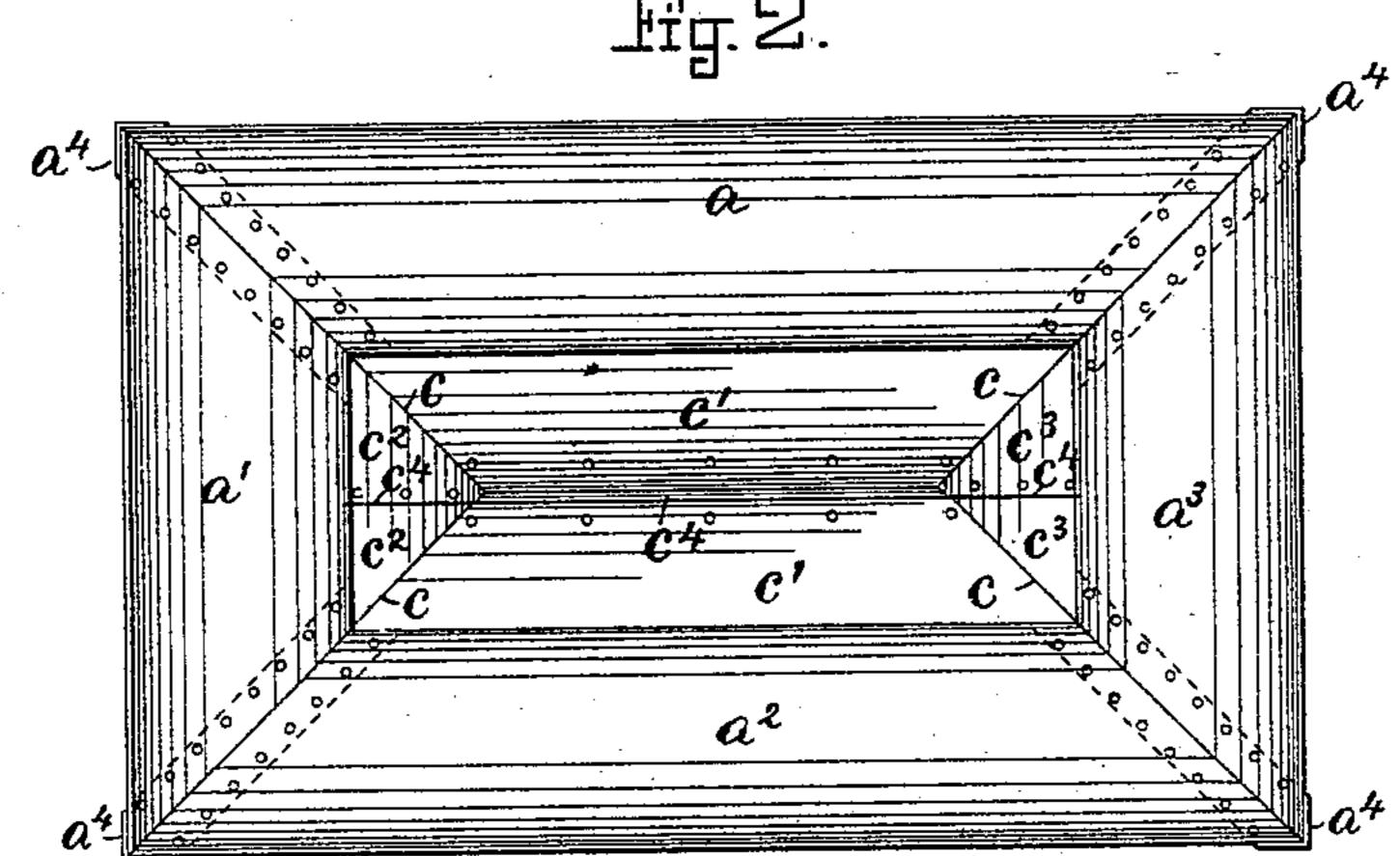
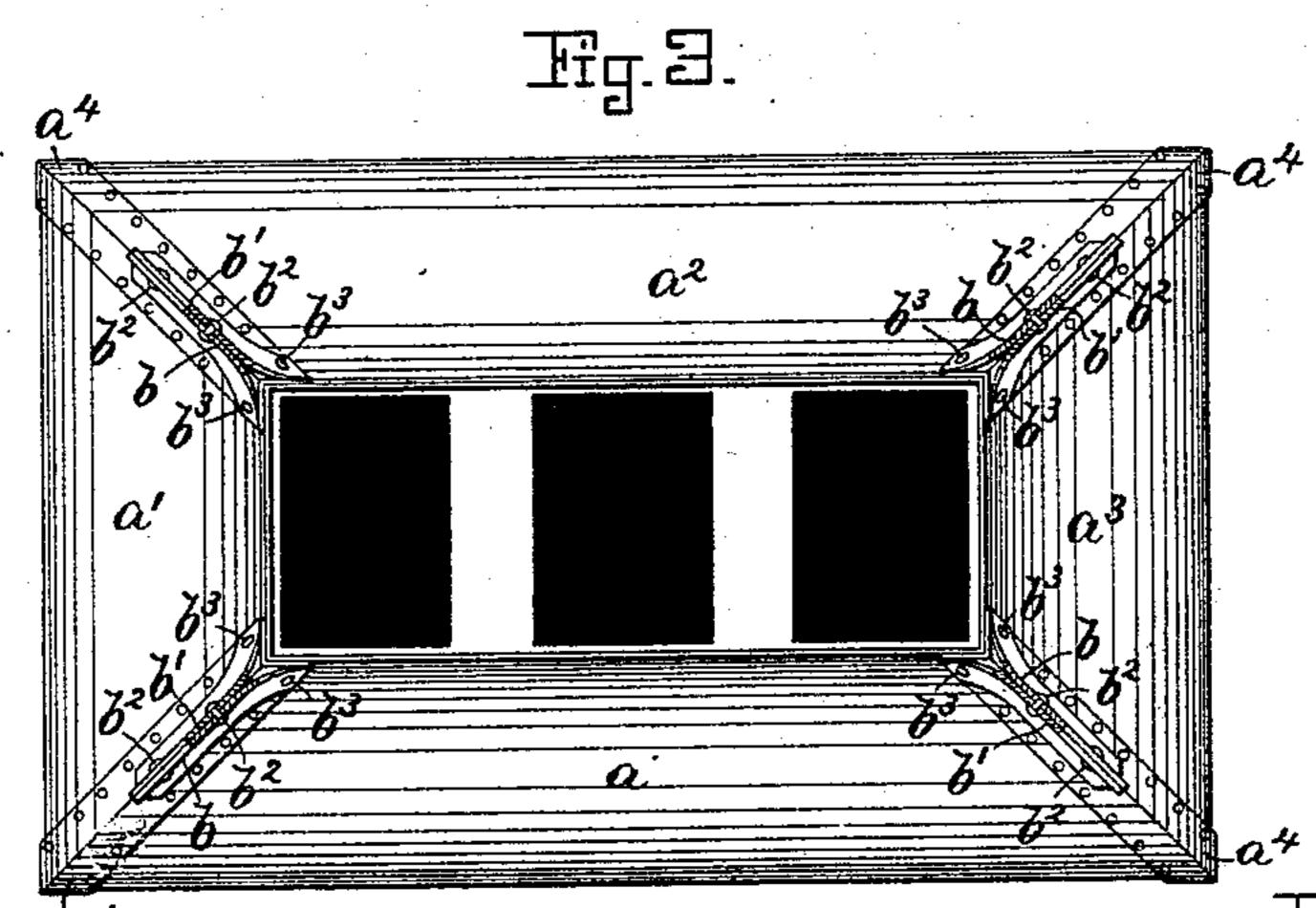
W. COOLEY. CHIMNEY CAP.

No. 539,471.

Patented May 21, 1895.







Witnesses

Daniel E. Kempster. Anna M. Dolloff. Inventor

William Cooley Henry Chadbourn W. COOLEY. CHIMNEY CAP.

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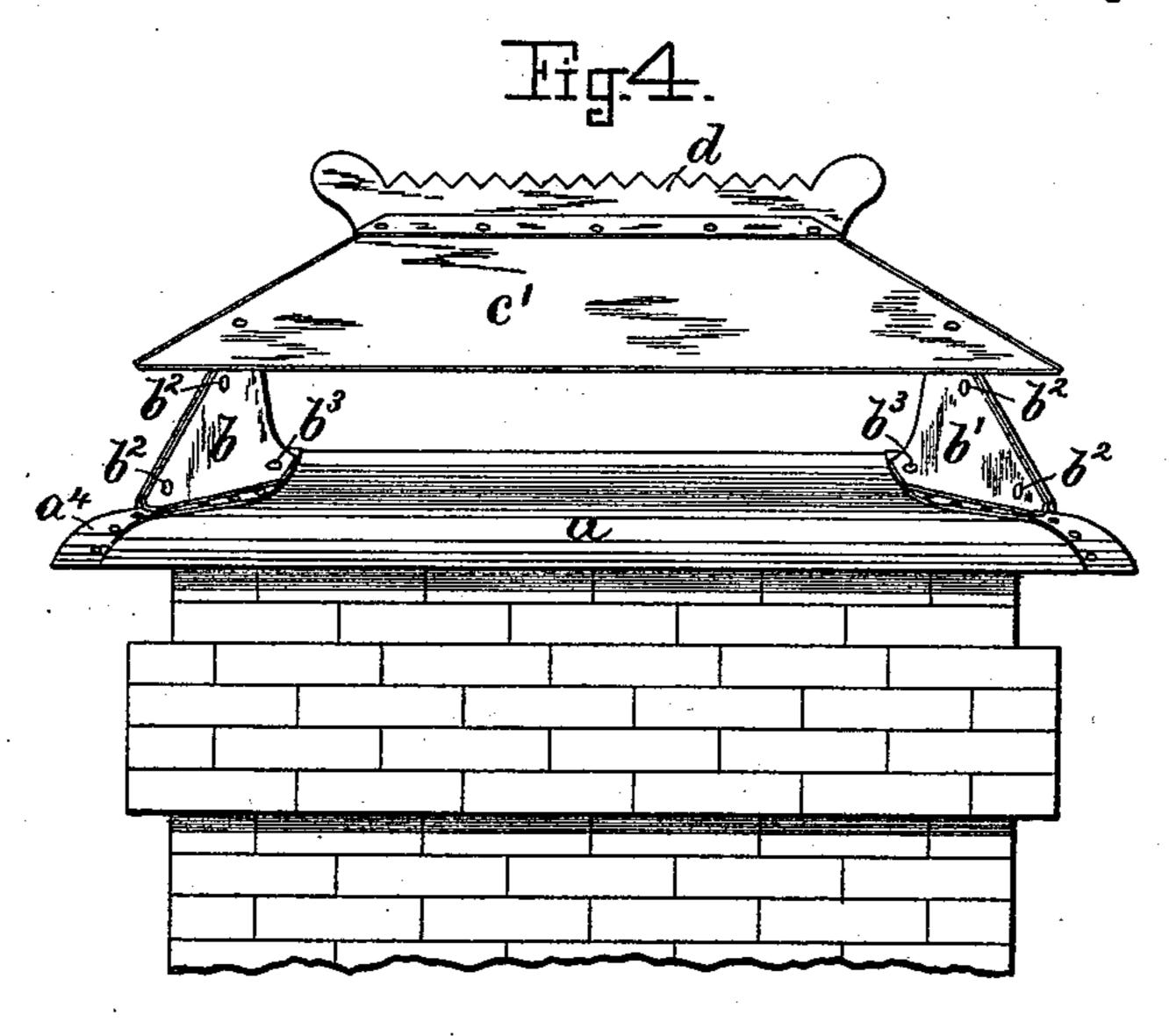
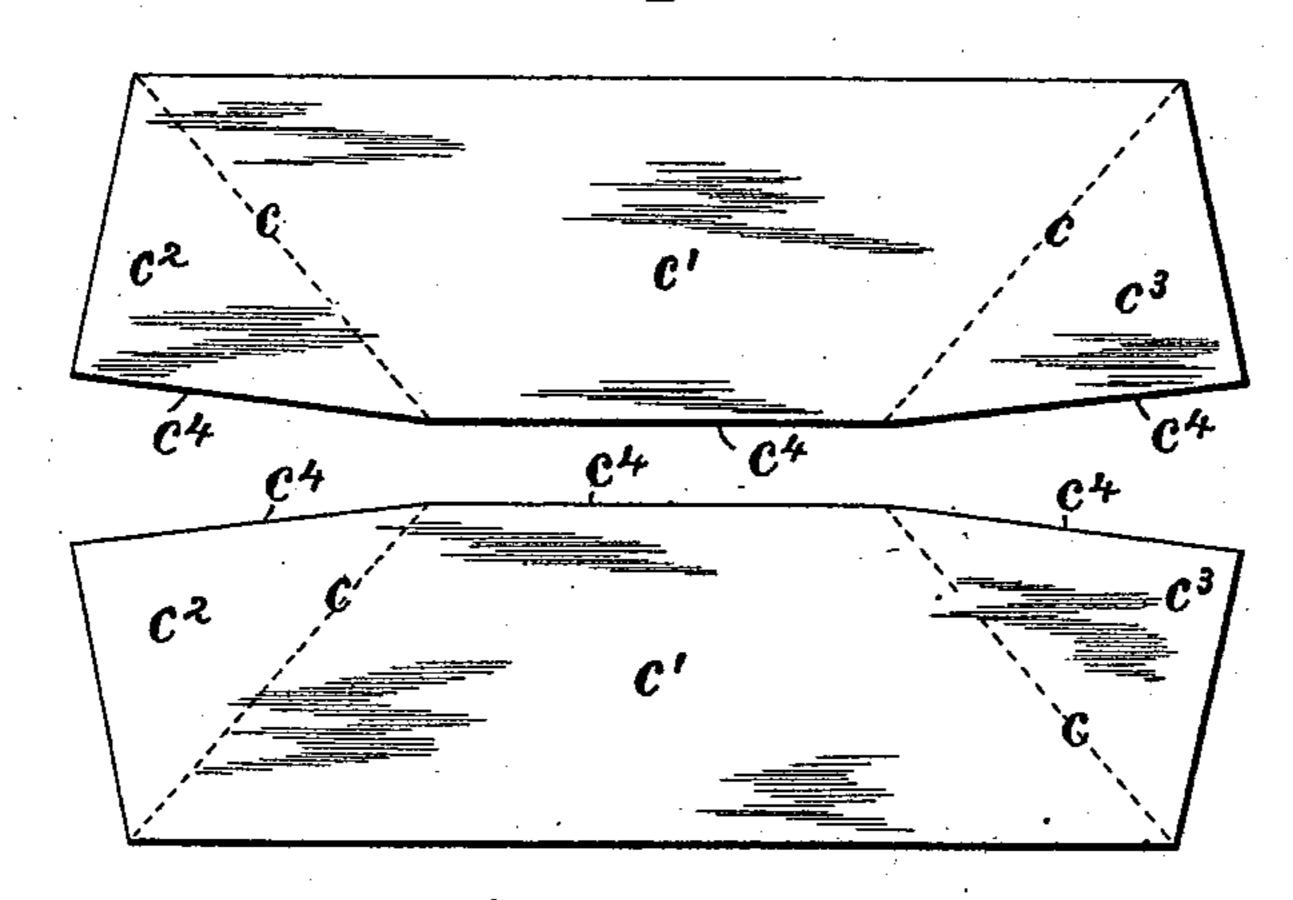


Fig.5.



Witnesses

Daniel E. Kempster. Anna M. Dollaff. Thentor

Henry Chadbrurn Juis Other

## United States Patent Office.

## WILLIAM COOLEY, OF WATERBURY, VERMONT.

## CHIMNEY-CAP.

SPECIFICATION forming part of Letters Patent No. 539,471, dated May 21, 1895.

Application filed January 6, 1893. Serial No. 457,531. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM COOLEY, a citizen of the United States, residing at Waterbury, in the county of Washington and State of 5 Vermont, have invented certain new and useful Improvements in Chimney-Caps; and I hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which 10 it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in chimney caps for the protection of chimneys 15 against the injurious effect of storms and weather, and has for its object to produce a cheap, simple, light and strong cap, made en-

tirely from sheet metal.

The invention is carried out as follows, ref-20 erence being had to the accompanying draw-

ings, whereon—

Figure 1 represents a plan of my improved cap. Fig. 2 represents a bottom view of the same. Fig. 3 represents a horizontal section 25 of the cap on a plane just below the roof of the same, showing the construction of the supports for the roof and the base portion of the cap. Fig. 4 represents a side elevation of the cap placed upon a chimney-top. Fig. 5 30 represents a diagram of the manner of cutting the metal to form the roof portion of the cap. Fig. 6 represents a perspective view of one of the standards for supporting the roof of the cap upon the base of the same.

Similar letters refer to similar parts wher-

ever they occur on the drawings.

The base of the cap is formed by the pieces of sheet metal a, a',  $a^2$ ,  $a^3$ , rolled into the desired cross sectional configuration as shown, 40 mitered at the corners and there provided with the angular sheet metal binding strips  $a^4 a^4$  which are stamped into the desired shape and riveted to said pieces. The base is preferably made of such a size as to project a lit-45 the beyond the side walls of the chimney upon which it is to be placed, so as to shed the water clear of said side walls.

At each corner of the base is placed one of the standards which supports the roof of the 50 cap. These standards are each made of two

pieces of sheet metal b b' riveted together at  $b^2$   $b^2$  and to the base at  $b^3$   $b^3$  as shown. The

pieces bb' are flared in opposite directions at their lower edges so as to embrace the corner of the base and to connect them more rigidly 55 to the base. The upper ends of the pieces b b' are bent in opposite directions, at an angle to the body of the pieces as shown in Fig. 6, and are there riveted to the roof of the cap.

The roof of the cap is formed of two pieces 6c of sheet metal cut in the shape as shown in Fig. 5. These pieces are each bent upon the lines c c in such a manner that the portion c'of each piece will form a side and the portions  $c^2$  and  $c^3$  will each form one half of the ends 65 of the roof.

The two pieces when riveted together along their edges  $c^4$   $c^4$  will form a hipped roof having but one joint extending from the center of each end to and along the ridge of the roof. 70 This construction reduces the number and length of joints in the roof to a minimum.

The roof may, if so desired be provided with a crest d as shown, flared at its lower part to cover the joint along the ridge of the 75 roof, and I prefer to use such a crest as it increases the strength of the cap and gives it a more ornamental appearance.

A chimney cap constructed from sheet metal as herein described is very light, and the man- 80 ner of forming and arranging the joints in the cap make it very strong and rigid. Furthermore the manner of constructing the supports for the roof from two pieces of sheet metal riveted together as described, enables 85 me to use the small pieces of sheet metal which would otherwise go to waste, and makes said supports very strong and firm.

Chimney caps made of cast metal are very liable to become cracked in cold weather by 30 the uneven expansion of the different parts caused by the heat of the chimney coming into contact with one portion and expanding it while other portions are cold. This brings a great strain upon the cool portions and is 95 very liable to cause them to be cracked. By making the cap of sheet metalit is very flexible, thus compensating for the uneven expansion of the cap and obviating its liability to become cracked.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent and claim—

1. In a chimney cap, the combination with

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the roof portion, the base portion formed of the sections a, a',  $a^2$  and  $a^3$  mitered at the corners, and the binding pieces  $a^4$   $a^4$  to join said sections together as described, of supports for the roof portion riveted to the roof, being formed of two pieces of sheet metal b b' fastened together by rivets, and flared at their lower edges so as to embrace the two abutting sections of the base forming the corner, being riveted to the same at both sides of the joint to strengthen the joint at the corner of the base as well as to form a rigid support for the roof of the cap, as set forth.

2. In a chimney cap, the roof portion formed of two pieces of sheet metal, cut and bent into

shape as described each piece forming a side and one half of each end of the roof, said pieces being attached together at their meeting edges and forming a hipped roof with a joint through the ends and along the ridge of the same, thus reducing the number and length of the joints, for the purpose set forth.

In testimony whereof I have hereunto affixed my signature in the presence of two sub-

scribing witnesses.

WM. COOLEY.

Witnesses:

O. E. SCOTT, E. E. TRACY.