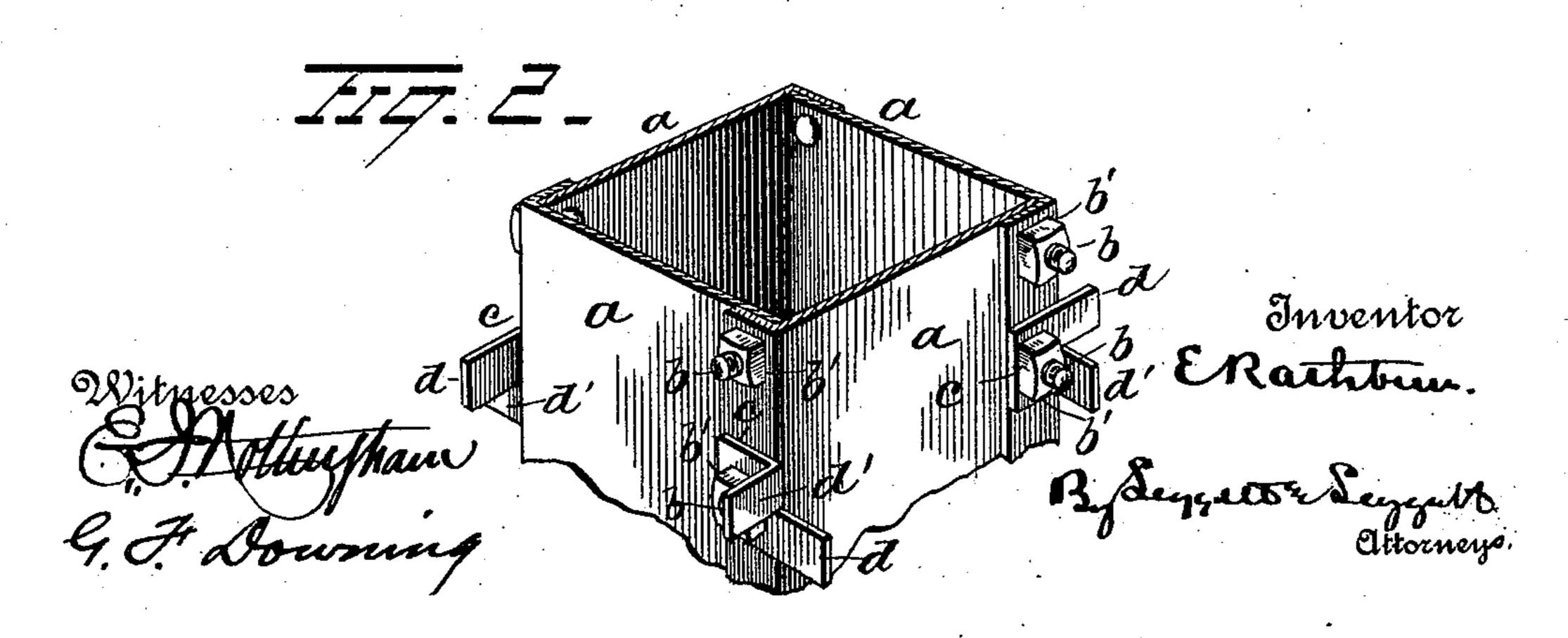
(No Model.) E. RATHBUN. CHIMNEY OR FLUE LINING. Patented Nov. 1, 1892. No. 485,479. BASEMENT



United States Patent Office.

ELIHU RATHBUN, OF CABLE, ILLINOIS.

CHIMNEY OR FLUE LINING.

SPECIFICATION forming part of Letters Patent No. 485,479, dated November 1, 1892.

Application filed January 7, 1892. Serial No. 417,308. (No model.)

To all whom it may concern:

Be it known that I, ELIHU RATHBUN, of Cable, in the county of Mercer and State of Illinois, have invented certain new and useful Improvements in Chimney or Flue Linings; and I do 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 it appertains to make and use the same.

My invention relates to an improvement in chimney and flue linings, its object being to produce a lining for the purpose specified which shall be fireproof.

A further object is to produce a metallic chimney or flue lining which shall be simple in construction and effectual in the performance of its functions.

A further object is to so construct a metallic lining that the bricks can be so placed relatively thereto as to leave a space between the lining and the brick chimney or flue and be maintained in such position.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a sectional view of a chimney or flue having my improved lining therein. Fig. 2 is a view of the lining.

A represents a chimney of brick, terra-cotta, or other suitable material. Within the chim-35 ney A my improved lining B is located. The lining B is preferably composed of four sheets of iron or steel a, each sheet having one longitudinal edge bent and adapted to overlap the longitudinal edge of the adjacent sheet. 40 The plates α are secured together by means of a series of bolts or screws b, having heads at one end and nuts b' at their other ends. Located between the nuts b' and the lining B, at points between the ends of said lining, are 45 metallic plates c, adapted to project beyond the edges of the corners of the lining. These disks c are preferably split to form two ears dd', which project from the corners of the lining at right angles to each other.

At the base of the lining B, at a point in the chimney preferably in the basement of the building, plates e are bolted and made

with flanges e', which project between the bricks of the chimney and serving to support the lining. At the top of the lining B bolts 55 f are extended through the brick chimney, on the ends of which plates g are secured by means of nuts g', thus securing the lining to the upper part of the chimney. By means of the ears d d' of the disks c the bricks com- 60 posing the chimney will be maintained at all times at a short distance from the lining to produce a space h on all sides of the chimney between said chimney and the lining. These spaces h may be filled with cement or other 65 fireproof material; or, if desired, the spaces h may be unoccupied, so as to produce airchambers. The sides of the lining may be made of about No. 19 thickness, or where the heat is unusually great the sides may be made 70 of thicker material.

A chimney having my improved lining therein is thoroughly fireproof, is simple in construction, easy and cheap to manufacture, and effectual in the performance of its func- 75 tions.

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

1. A chimney or flue lining composed of 80 several plates of sheet metal secured together at the edges, at which point reinforced corners are formed by the overlapping of the edges, and plates secured at the corners of the lining, the ends of said plates extending outwardly at angles to each other and in planes substantially parallel to adjacent plates of the lining, substantially as set forth.

2. A chimney or flue lining composed of several plates of sheet metal secured together 90 at the edges, at which points reinforced corners are formed by the overlapping of the edges, and split plates secured at the corners of the lining, the ends of said split plates bent outwardly at angles to each other and in planes 95 substantially parallel to adjacent plates of the lining, substantially as set forth.

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

ELIHU RATHBUN.

Witnesses:

D. F. Adams, F. M. Cleland.