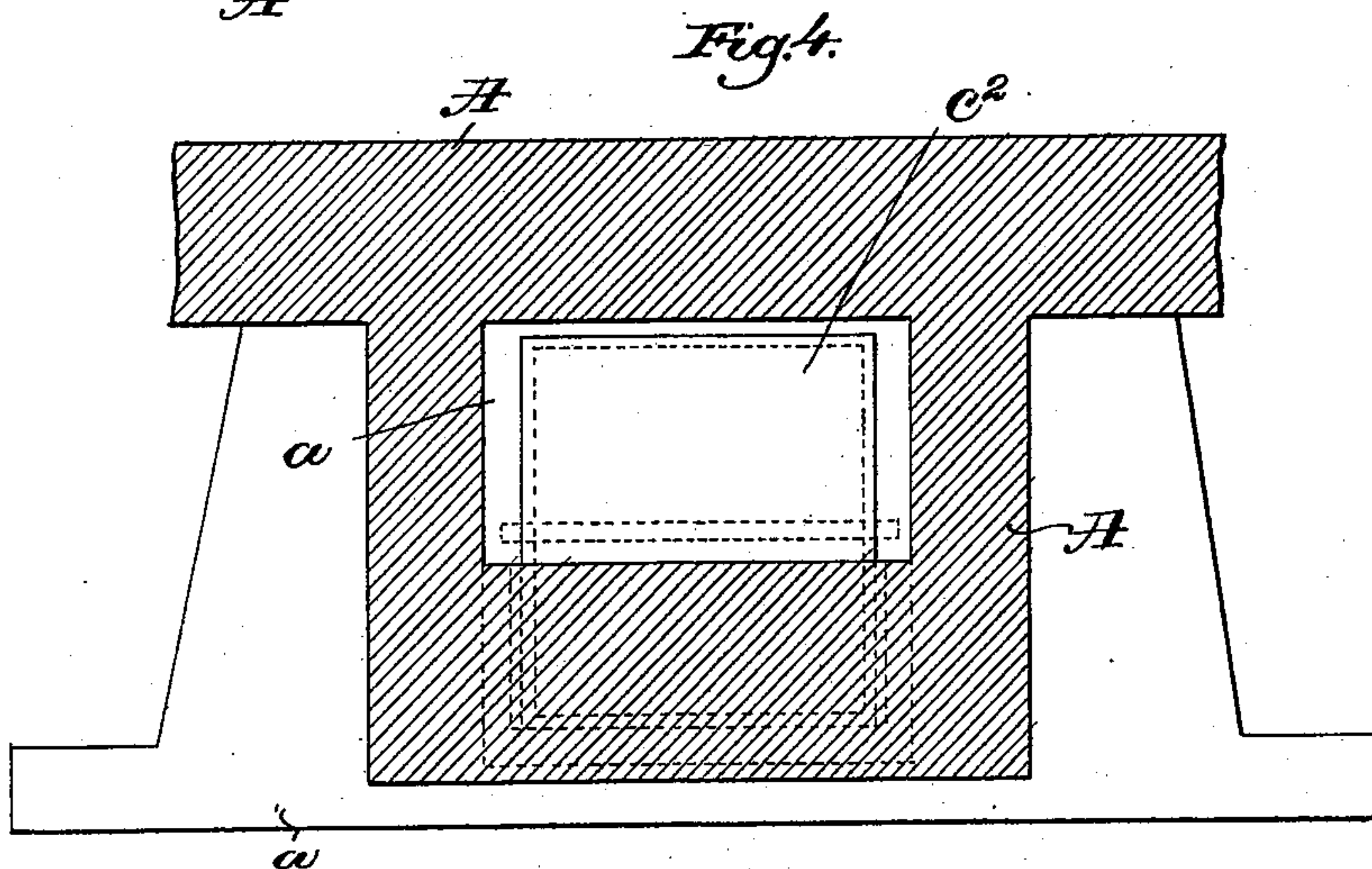
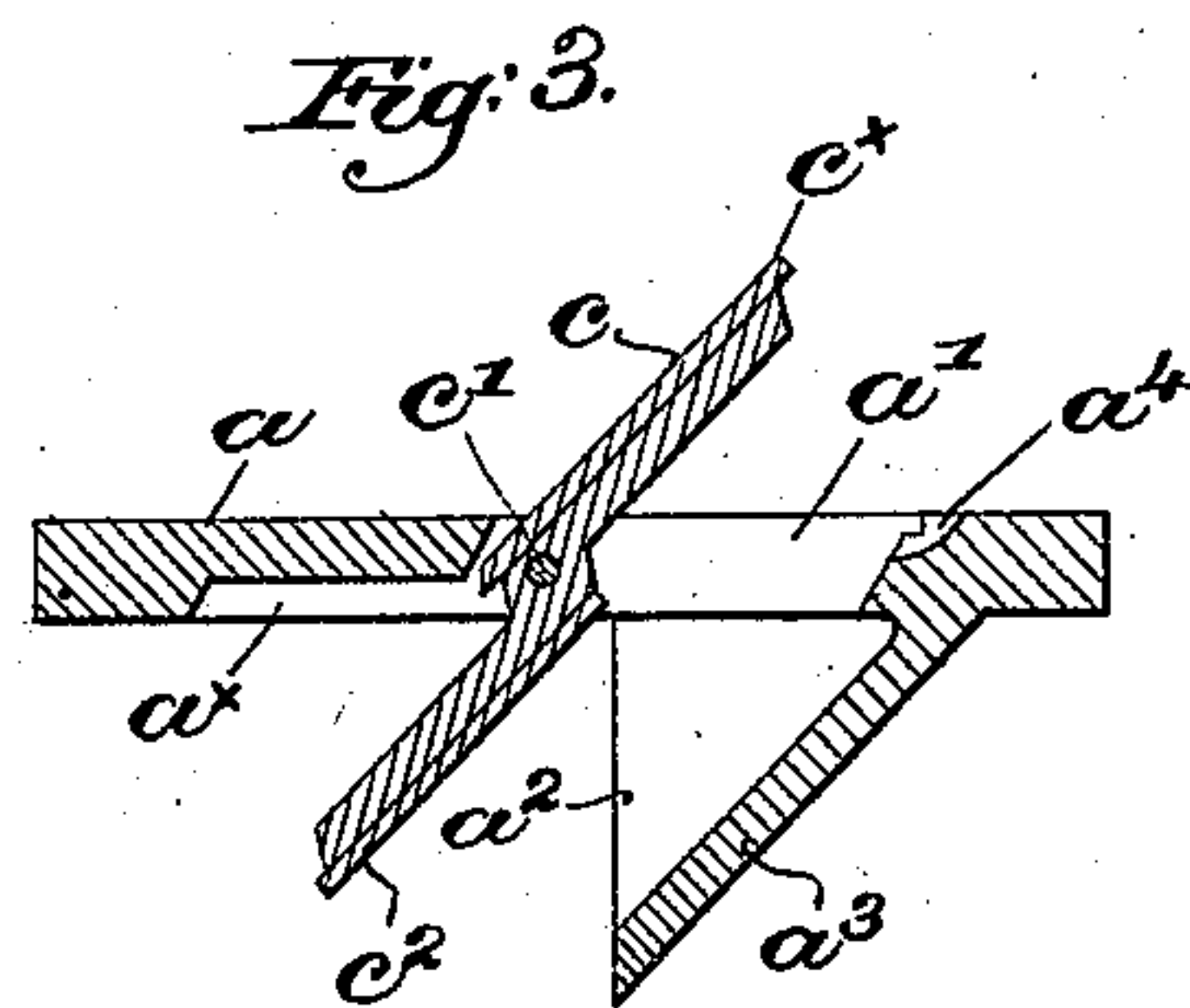
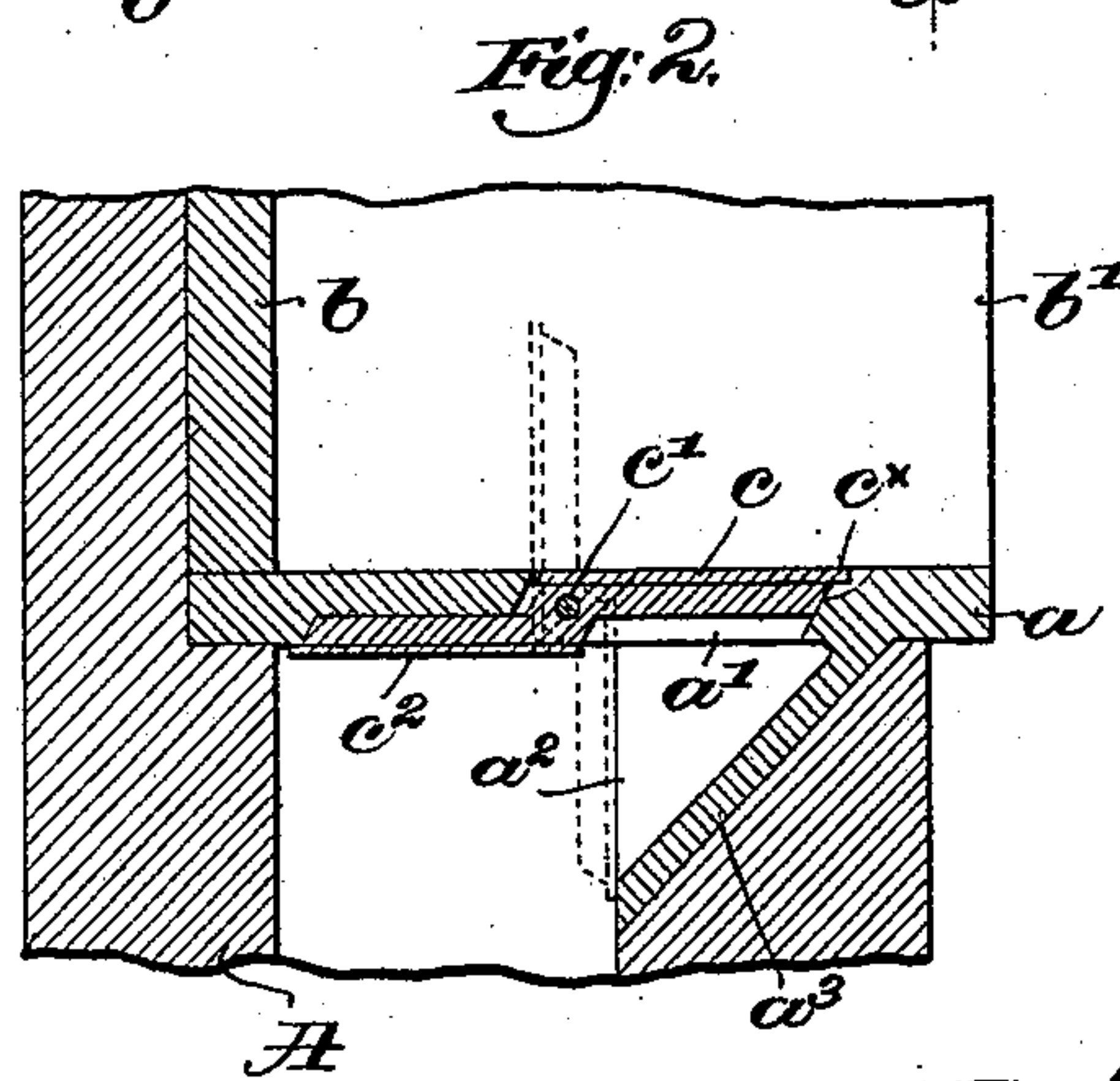
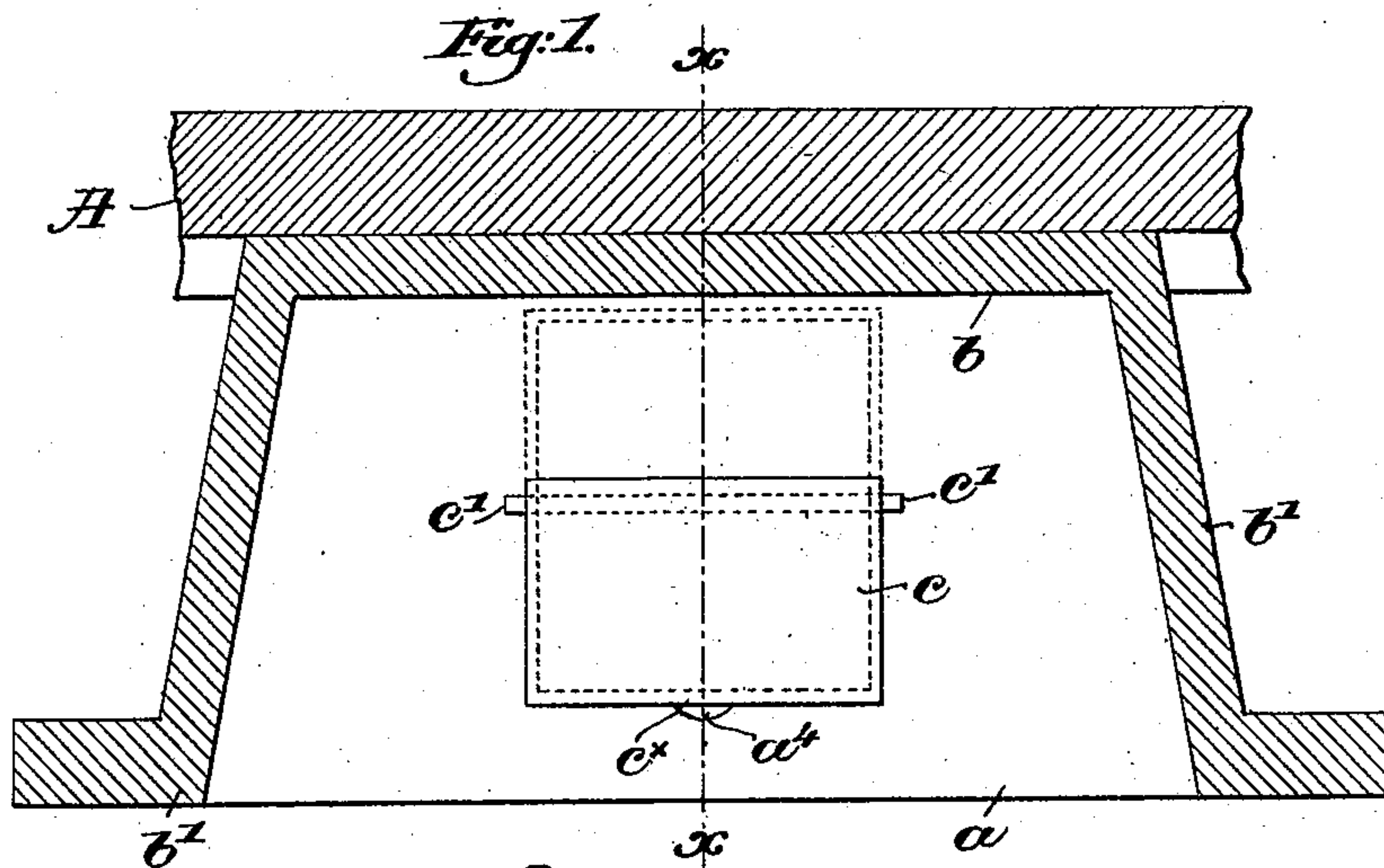


(No Model.)

A. STRETTON.  
COMBINED ASH CHUTE AND UNDERFIRE.

No. 551,174.

Patented Dec. 10, 1895.



Witnesses  
Thomas J. Drummond.  
Edward F. Allen.

Inventor:  
Arthur Stretton.  
By Crosby Gregory, attys.



# UNITED STATES PATENT OFFICE.

ARTHUR STRETTON, OF WAVERLY, ASSIGNOR TO THE CHAS. A. MILLEN  
COMPANY, OF BOSTON, MASSACHUSETTS.

## COMBINED ASH-CHUTE AND UNDERFIRE.

SPECIFICATION forming part of Letters Patent No. 551,174, dated December 10, 1895.

Application filed January 19, 1895. Serial No. 535,574. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR STRETTON, a subject of the Queen of Great Britain, residing at Waverly, county of Middlesex, State of Massachusetts, have invented an Improvement in a Combined Ash-Chute and Underfire, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of a combined underfire and ash-chute for open fireplaces, whereby a solid foundation for the fireplace is attained without the use of tiling, &c., and providing means for disposing of the ashes without the liability of their being blown into the room by the back-draft.

By my invention I overcome the derangement of parts and dangerous loosening of joints due to unequal settling of the fireplace, and this I accomplish by making the underfire of a single piece of iron or other fireproof refractory material, the ash-chute preferably forming an integral part thereof, the underfire resting on the masonry of the ash-duct and chimney, and the sides and back of the fireplace are built upon the upper surface of the underfire.

In accordance therewith my invention consists in an underfire having an opening therein, a cover-plate hinged at one edge of the opening and extended underneath the underfire, and an ash-chute below the underfire and its opening and having an outlet in the path of and to be closed by the extension of the cover when the latter is lifted, substantially as will be described.

Other features of my invention will be hereinafter described, and particularly pointed out in the claims.

Figure 1 is a top or plan view of a fireplace with my invention applied thereto, the back and side walls of the fireplace and the chimney-back being shown in section. Fig. 2 is a partial vertical section taken on the line  $x\ x$ , Fig. 1, looking to the right. Fig. 3 is a transverse sectional view of the underfire and ash-chute with the cover of the chute partially open, and Fig. 4 is an under side view of the construction shown in Fig. 1.

I have herein shown the underfire as a plate  $a$  of metal or other refractory fireproof material, of a suitable shape and size to support the back and side walls  $b$  and  $b'$  of the fireplace, the underfire  $a$  resting upon the masonry of the ash-duct  $A$  and chimney. (Shown in section in Fig. 4.)

An opening  $a'$  is made in the underfire, toward its front edge and midway between its sides, with its sides preferably slightly beveled inwardly, and under said opening an ash-chute  $a^2$  is located, preferably made integral with the plate  $a$ , the inclined bottom  $a^3$  of the chute sloping rearwardly and downwardly from the front edge of said opening, as clearly shown in Figs. 2 and 3. A cover-plate  $c$  is pivoted at  $c'$  in the underfire, to normally close the opening  $a'$ , the edges of the cover fitting snugly therein. The under side of the plate  $a$  is recessed at  $a^x$ , (see Fig. 3,) at the back of the opening  $a'$ , to receive therein the extension  $c^2$  of the cover  $c$  when the latter is in its normal closed position, Figs. 1, 2, and 4. The extension  $c^2$  is of sufficient area to close the delivery end of the ash-chute when the cover  $c$  is raised, as shown in dotted lines, Fig. 2, the inclined bottom  $a^2$  of the chute extending to a point substantially beneath the pivots  $c'$  of the cover, to thereby form a closed receptacle into which the ashes may be swept through the opening  $a'$ , the chute when thus closed holding about an ordinary burning of coal or wood ash.

As the receptacle is closed there is no back-draft to blow the ashes about or to scatter them about the room, as they are swept through the opening  $a'$ , and as the closing of the cover  $c$  opens the chute by withdrawing the extension  $c^2$  therefrom the ashes are free to slide down over the bottom  $a^2$  into the ash-duct  $A$  to a proper point of discharge, without making a cloud of dust as would be caused by dumping the ashes directly out of the chute. The cover  $c$  is slightly heavier than the extension  $c^2$  and thereby is normally kept closed, and for convenience in raising it it is provided with a lip  $c^x$ , a shallow recess or pocket  $a^4$  in the upper surface of the underfire  $a$  permitting the insertion of a suitable device beneath the lip  $c^x$ .

Inasmuch as the underfire  $a$  rests on the



masonry of the ash-duct A and the adjacent wall of the chimney, parts of the latter may settle without causing a separation of the joints of the fireplace or trimmer-arch, for the fireplace is built upon and sustained by the underfire, which forms a firm and solid foundation therefor. This obviates the settling of one part of the fireplace more than another, as is the case frequently when one part is built on the chimney-breast and another part on the trimmer-arch.

No tiling, hearth-brick, &c., is necessary, and the ash-chute, being an integral part of the underfire, cannot become loosened therefrom by settling or burning out of joints.

It will be obvious that as the cover *c* is pivotally supported at its rear edge, and lifts to uncover the opening *a'*, it cannot be accidentally opened by the weight of anything placed thereon, such as an andiron, a grate, &c.

I claim—

1. An underfire having an opening therein, a cover plate hinged at one edge of the opening and extended underneath the underfire, and an ash-chute below the underfire and its opening and having an outlet in the path of and to be closed by the extension of the cover when the latter is lifted, substantially as described.

2. An underfire having an opening therein, a cover hinged at one edge of the opening and extended underneath the underfire away from the opening, and an ash-chute below the opening, the bottom of said chute inclining rearwardly from the front edge of the opening to beneath the pivotal point of the cover, to form a vertical outlet thereat in the path of the cover extension, to be closed thereby

when the cover is lifted, substantially as described.

3. An underfire for fireplaces, consisting of a rigid plate of fireproof material forming the bottom of the fire place and having an ash discharge opening therein, and a hinged normally closed cover therefor, said underfire being laterally and rearwardly extended to sustain the back and side walls of the fireplace, substantially as described.

4. An underfire for fireplaces, consisting of a rigid metal plate having an ash discharge opening therein, and an ash-chute composed of depending side walls and an inclined bottom on the under side of and integral with said plate, the bottom of the chute inclining downwardly from the front edge of the discharge opening, substantially as described.

5. An underfire for fireplaces, consisting of a rigid metal plate forming the bottom of the fireplace and having an ash discharge opening therein, an ash-chute on the under side of and integral with said plate, the bottom of the chute inclining downwardly from the front edge of the discharge opening, and a cover for the opening pivoted at the rear side thereof and provided with an extension below the plate, to close the open end of the ash-chute when the cover is raised, substantially as described.

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

ARTHUR STRETTON.

Witnesses:

JOHN C. EDWARDS,  
MARY J. SHERIDAN.