

No. 725,526.

PATENTED APR. 14, 1903.

R. W. WHITEHURST.
ANCHOR BOX FOR JOISTS.
APPLICATION FILED JAN. 3, 1903.

NO MODEL.

Fig. 1.

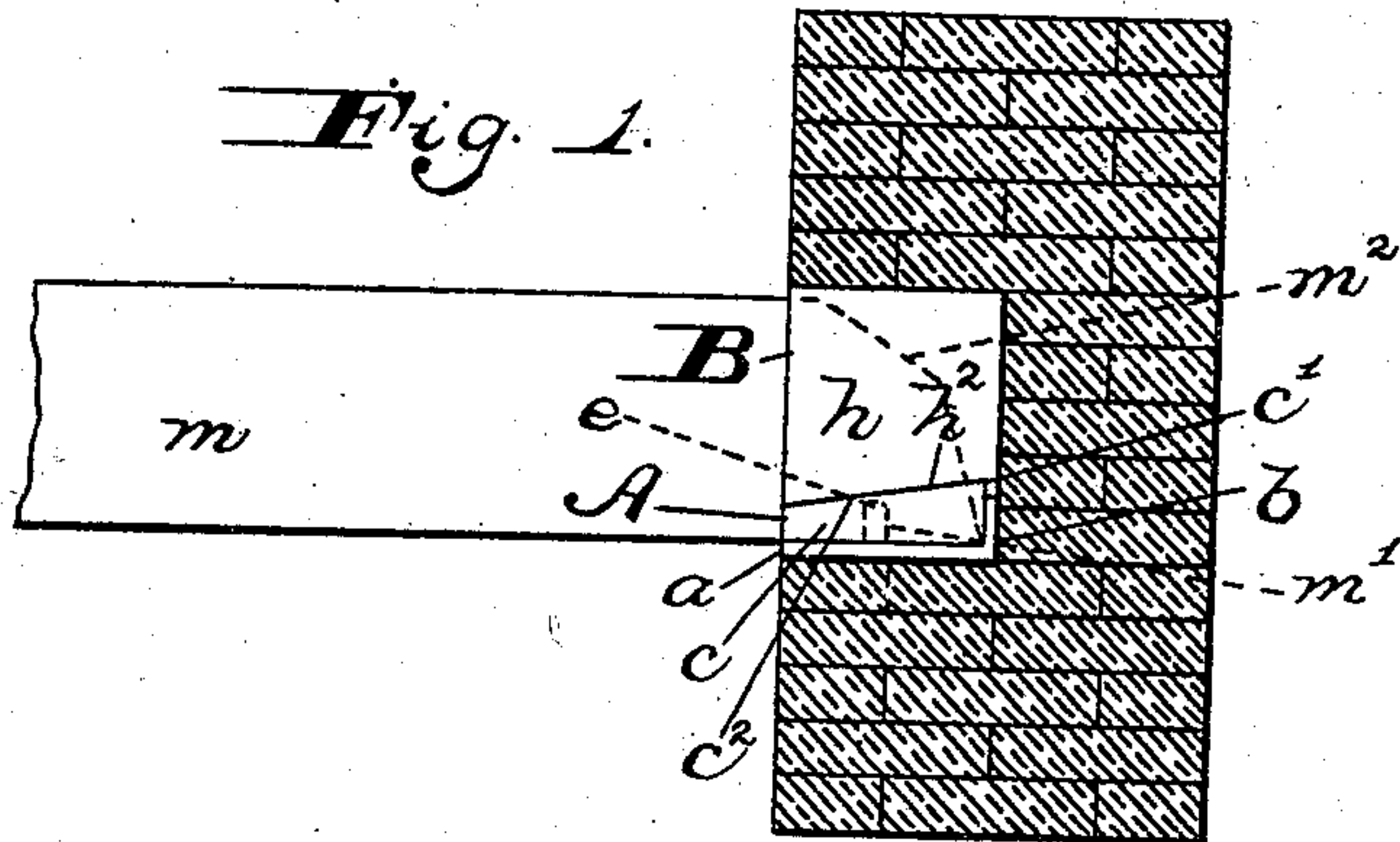


Fig. 2.

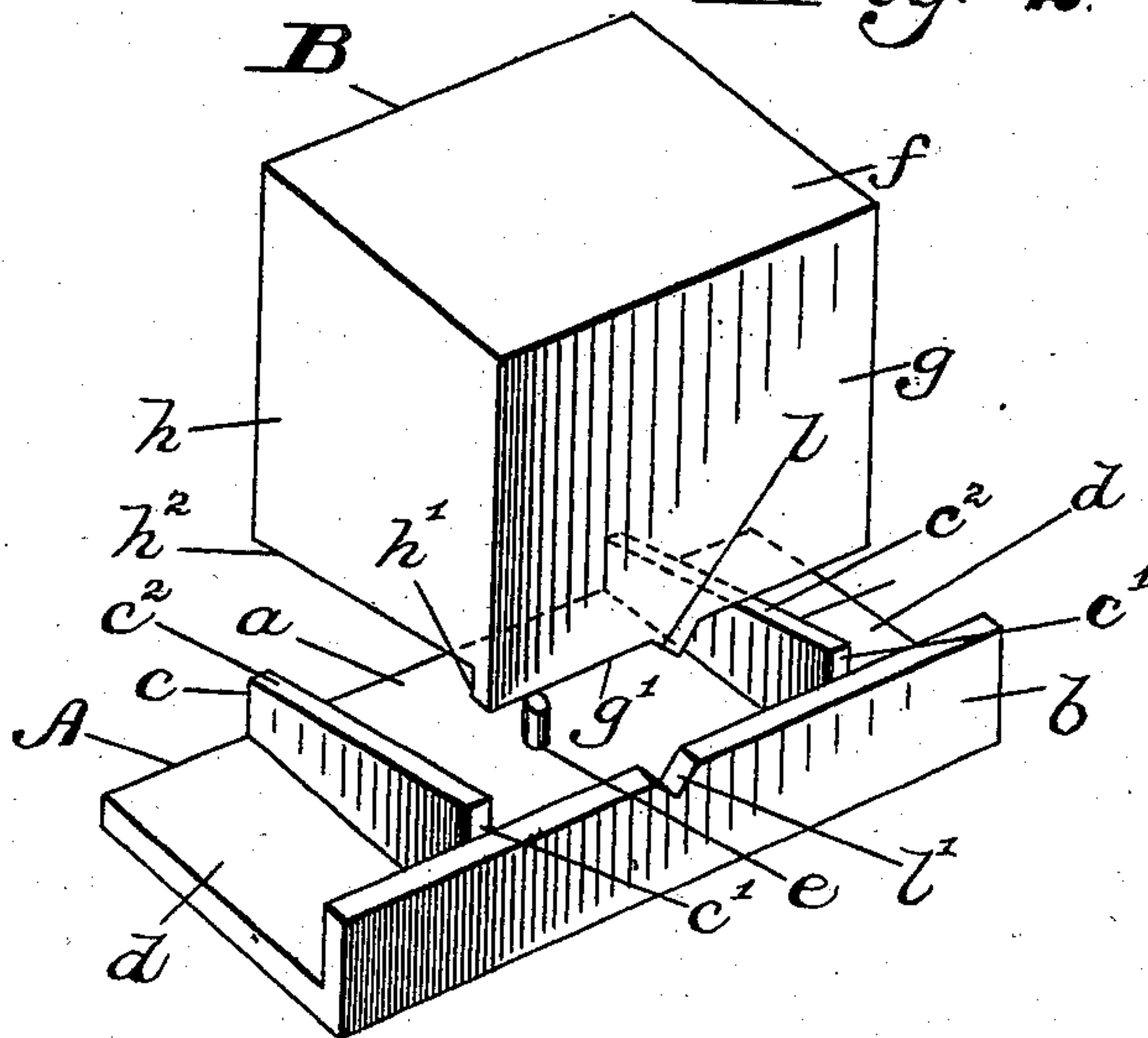
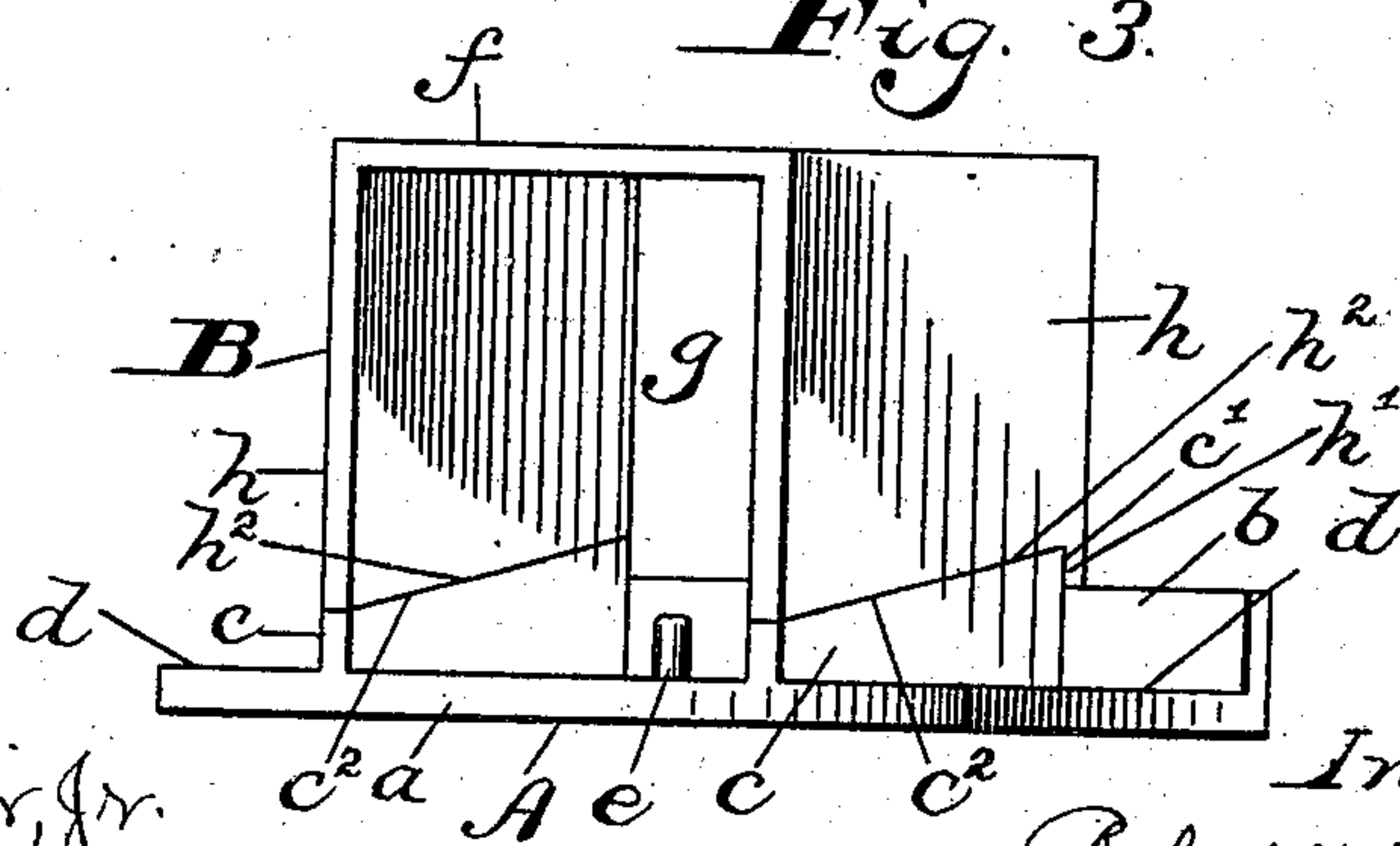


Fig. 3.



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ROBERT W. WHITEHURST, OF NORFOLK, VIRGINIA.

ANCHOR-BOX FOR JOISTS.

SPECIFICATION forming part of Letters Patent No. 725,526, dated April 14, 1903.

Application filed January 3, 1903. Serial No. 137,648. (No model.)

To all whom it may concern:

Be it known that I, ROBERT W. WHITEHURST, a citizen of the United States, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Anchor-Boxes for Joists and Girders, of which the following is a specification.

This invention relates to improvements in anchor-boxes which are embedded in the brick or stone walls of buildings for the support of the girders and joists and for the protection of the ends of the same from dampness and the ignition that otherwise might result from the proximity of a heating-flue in the wall.

The invention consists of certain constructions, arrangements, and combination of parts hereinafter fully described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of my improved anchor-box in a brick wall and supporting one end of a girder or joist. Fig. 2 is a rear perspective view of the anchor-box with the parts separated from each other and in juxtaposition. Fig. 3 is a front perspective view of the box with the parts assembled.

My improved anchor-box comprises two separable parts or sections—namely, a support A for the girder or joist and a protecting-cover B. The support A consists of a horizontal base-plate *a*, provided at its rear with an upwardly-extending flange *b* and also provided with two transverse bars *c*, connecting at their rear with said flange and at the rear forming shoulders *c'*, and said bars having their upper edges *c²* inclined downward from said high shoulders to their front ends. The location of said cross-bars *c* is such as to leave a ledge *d* at each end of the plate *a* on the outside of each bar. A stud *e* is located between the two cross-bars and projects from the upper surface of the base-plate, as illustrated in the drawings.

The cover B, before mentioned, consists of a box-like structure having a top *f*, a rear wall *g*, and two vertical side walls *h*, whose lower edges *h²* are inclined complementary to the inclined edges of the cross-bars *c*, and the cover is also provided with shoulders *h'*, which project downward and engage the

shoulders *c'* on the cross-bars. The front and bottom of said cover are open.

In the assembled condition of the anchor-box the cover B rests upon the support A, with the inclined edges *h²* of the cover resting upon the inclined edges *c²* of the cross-bars *c*, the lower edge *g'* or the rear wall abutting upon the rear flange *b*, and the down-shoulders *h'* abutting against the up-shoulders *c'*. A sidewise movement of the cover B with respect to the support A is prevented by means of a V-shaped tongue *l* on the rear of one part fitting into a corresponding recess *l'* on the other part.

In practical use the support A of my improved anchor-box is embedded in a wall, with the brickwork or stonework built about it and on the two ledges *d* and about the rear flange *b*, so that it is firmly anchored in place, and then the end of the joist or girder *m* is inserted between the two cross-bars *c* and rests on the base-plate *a*, and said joist or girder is provided with a socket *m'*, which receives the stud *e*, so as to secure the joist or girder in place and prevent any longitudinal movement of the latter with respect to its support. The cover B is then applied over the end of the joist or girder and on the support, so that the parts of the box are assembled as before described, and the brickwork or stonework of the building-wall is then continued, so as to inclose the top, rear, and two sides of said cover and hold it firmly in place on the support A.

It is to be especially observed that I have provided a two-part or sectional anchor-box, of which one part is supported on the other in such a manner—that is, by the inclined edges *h²* and *c²*—that a forward movement of the lower part (the support A, to which the girder is attached by the stud *e*) with respect to the upper part or cover B cannot be made without raising said cover. Hence when the anchor-box is in use such a movement of the support A, which might be produced by a forward pulling tension or action of the girder thereon or a rearward pulling of the cover B, which might be produced by a backward settling of the brickwork or stonework of the wall, will be effectually prevented by the weight of that portion of such wall which is upon the cover B, because any forward movement of the support A or rearward

movement of the cover B must effect a raising of said cover, as before explained, and such movement is resisted by the weight of the upper part of the wall. It is evident
 5 that any movement of the support A and cover B with respect to each other in a direction opposite to that just described is prevented by the abutting shoulders *c'* and *h'*. It is also to be observed that the end *m*² of the
 10 girder or joist is beveled on top, as indicated in dotted lines, Fig. 1, so that in the event of fire and the burning of said girder or joist the said end may clear the top of the cover B and tilt out when the girder or joist sags
 15 or breaks down, thereby preventing the building-wall from being pulled down with it.

It is obvious that the upwardly-extending flange *b* need not extend outwardly beyond the transverse bars *c*, and it is to be understood that the ledges *d* may be dispensed
 20 with, if desired.

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

25 1. An anchor-box for the support of the end of a joist or girder, comprising a base-support provided with means for engagement with the end of a girder or the like; and a cover resting on said support, abutting edges
 30 of the support and cover being correspondingly inclined, whereby a relative forward-and-backward movement between the support and cover will raise the latter.

2. An anchor-box, comprising a base-support provided with cross-bars whose upper
 35 edges are inclined; and a cover adapted to rest on said cross-bars, whereby a relative forward-and-backward movement between the support and cover will raise the latter.

40 3. An anchor-box for the purpose described, comprising a support provided with means for engagement with the end of a girder or the like and also provided with two cross-

bars whose upper edges are inclined; and an open-front cover adapted to rest on said
 45 cross-bars, the lower side edges of said cover being inclined correspondingly to said cross-bars.

4. An anchor-box for the purpose described, comprising a base-support provided with
 50 means for engagement with the end of a girder or the like and also provided with a rear upwardly-extending flange and two cross-bars which project at the rear above said flange whereby to form shoulders, and whose up-
 55 per edges incline downwardly from the rear to the front; and an open-front cover adapted to rest on said cross-bars, the lower side edges of said cover being inclined correspondingly to said bars, and said cover being pro-
 60 vided with shoulders adapted to engage the shoulders of said bars whereby to prevent a forward movement of the cover on the bars.

5. An anchor-box comprising a support provided with means for engagement with
 65 the end of a girder or the like, a rear upwardly-extending flange having a recess, and two cross-bars whose upper edges are inclined and which project at the rear above said
 70 flange whereby to form shoulders; and an open-front cover adapted to rest on said cross-bars, the lower side edges of said cover being inclined correspondingly to said cross-bars, and said cover being provided with shoulders
 75 adapted to engage the shoulders of said bars and also provided with a tongue adapted to enter the recess of said flange whereby to prevent the sidewise movement of the cover on the support.

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

ROBERT W. WHITEHURST.

Witnesses:

J. ROY COLLINS,
 J. STANLEY TRICE.