

(No Model.)

B. H. DAVIDSON.
SHUTTER HOOK.

No. 546,304.

Patented Sept. 17, 1895.

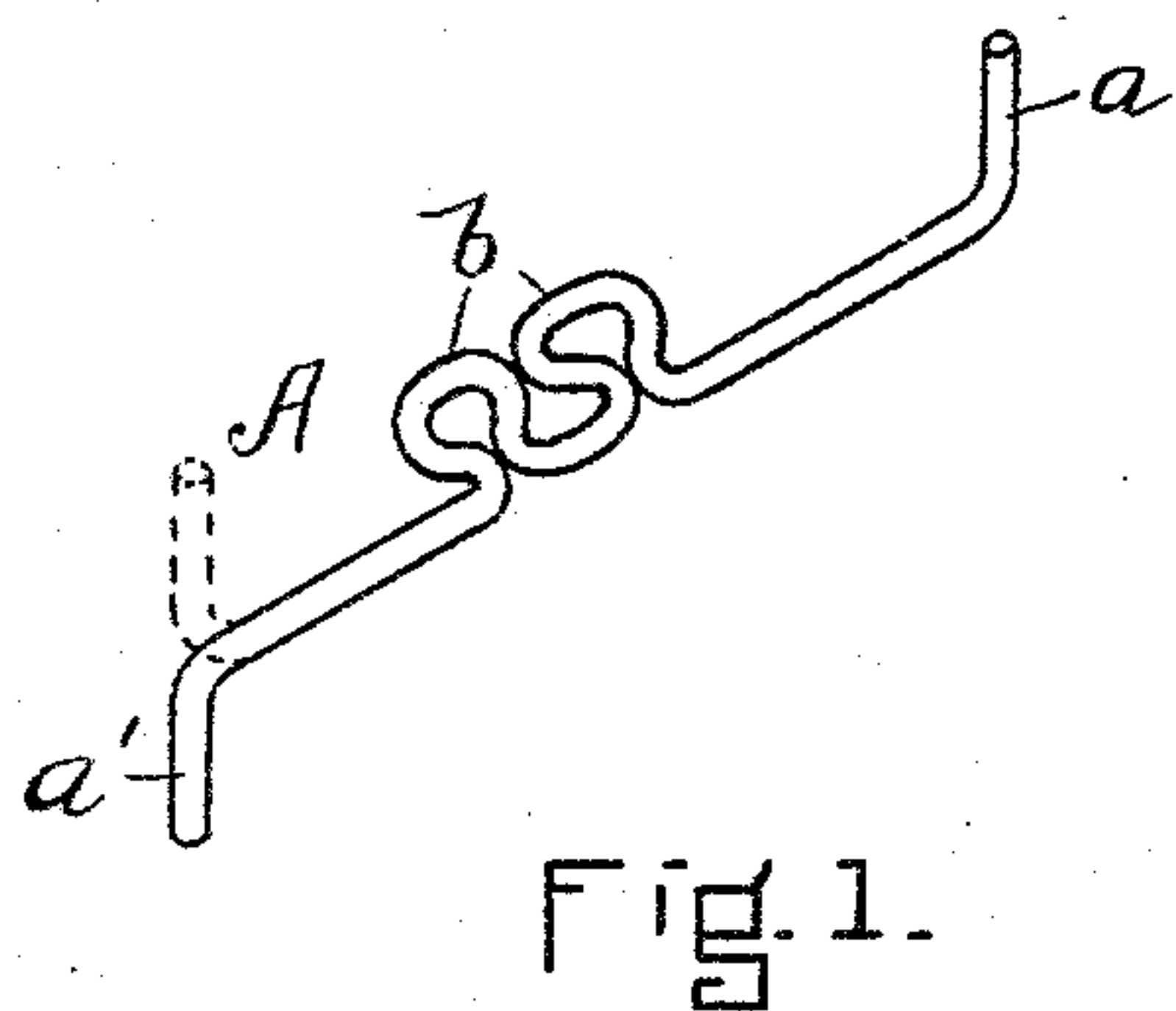


Fig. 1.

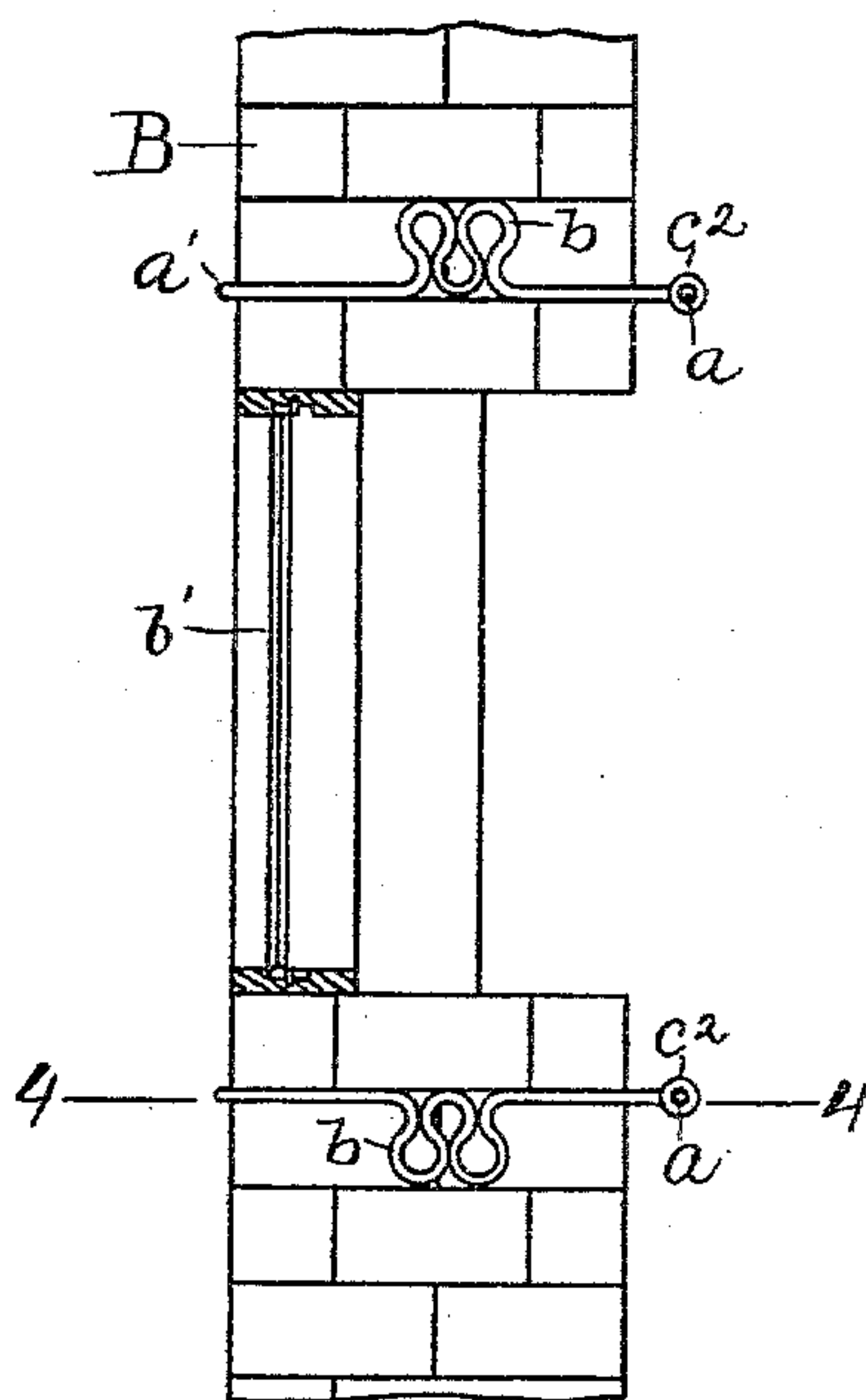


Fig. 2.

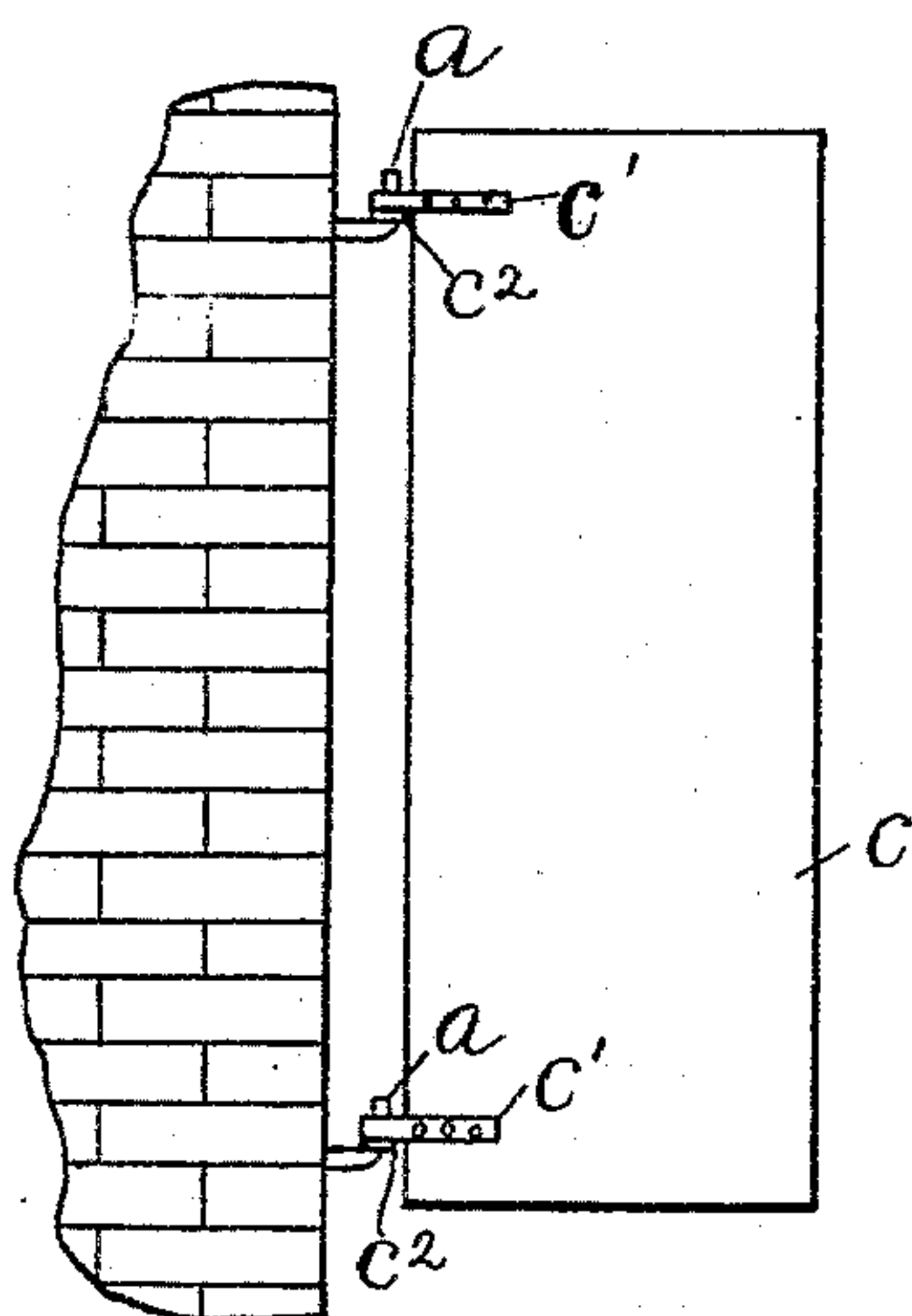


Fig. 3.

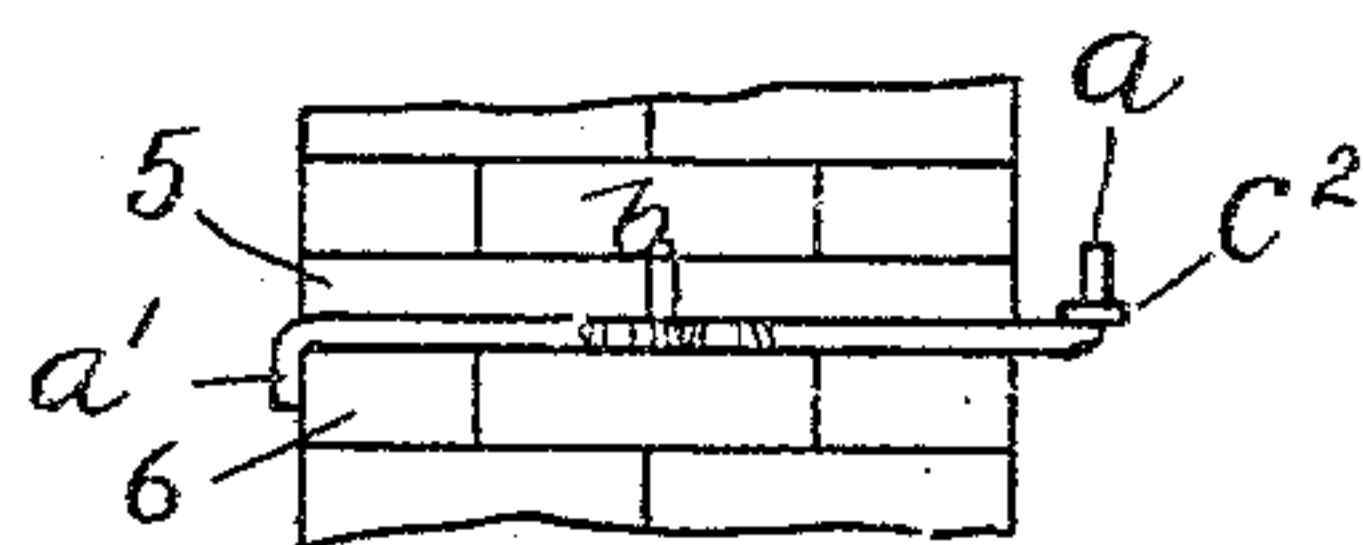


Fig. 4.

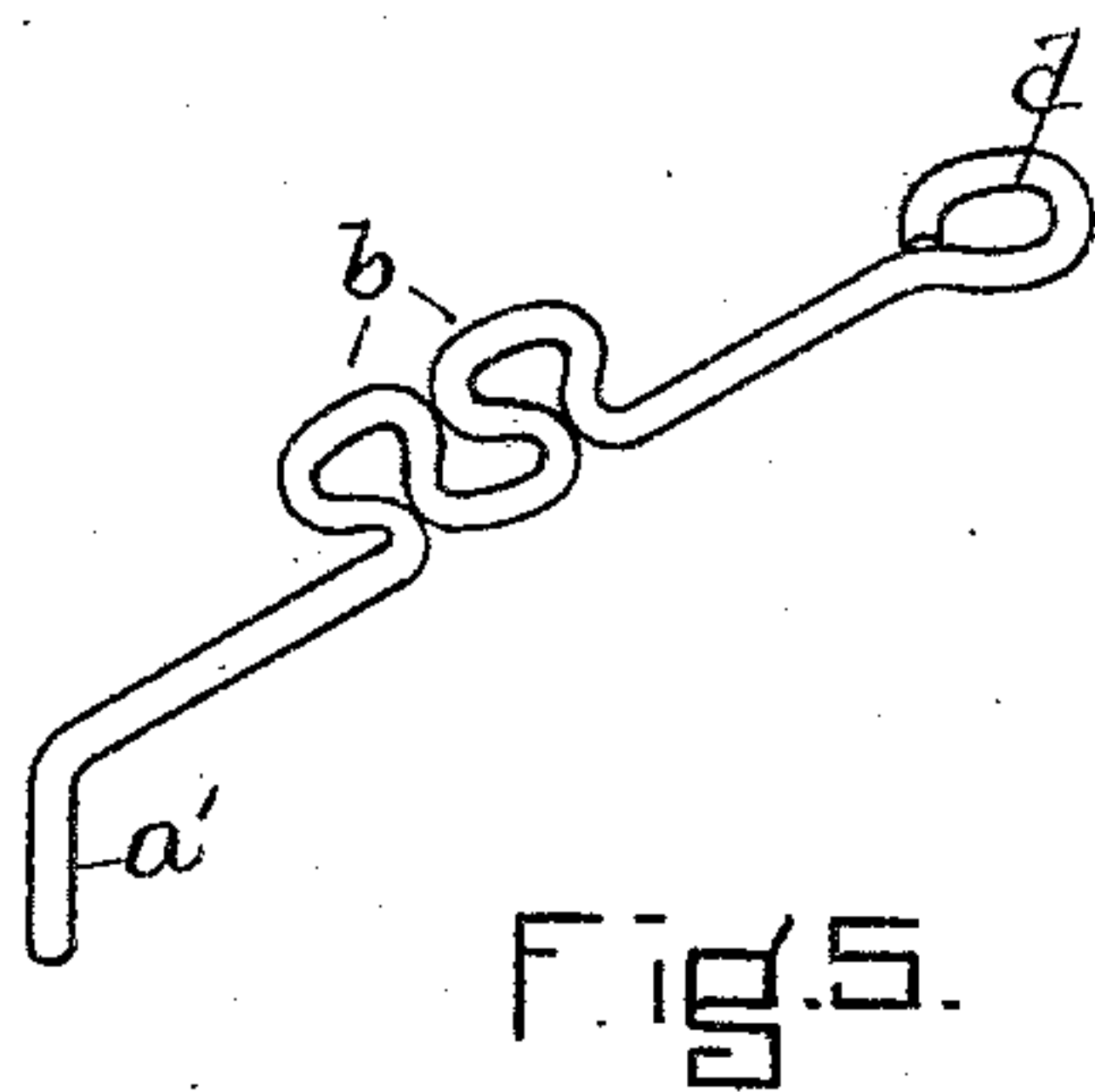


Fig. 5.

WITNESSES.
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UNITED STATES PATENT OFFICE.

BENJAMIN H. DAVIDSON, OF LYNN, MASSACHUSETTS.

SHUTTER-HOOK.

SPECIFICATION forming part of Letters Patent No. 546,304, dated September 17, 1895.

Application filed January 30, 1895. Serial No. 536,675. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN H. DAVIDSON, residing in Lynn, county of Essex, and State of Massachusetts, have invented an Improvement in Shutter Hooks or Supporting Devices, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

This invention relates to a novel construction of device for supporting the shutters of buildings, and is especially designed and adapted for use to support the fireproof shutters of brick buildings, such as now commonly constructed in large cities. As now commonly practiced, the shutters are supported at the top and bottom by means of pintles secured to or forming part of a substantially large iron casting, which is objectionable in many respects on account of the cost of the castings and also on account of the labor required in fitting the same into the wall of the building.

This invention has for its object to provide a simple, cheap, and efficient shutter-hook, which is of such size that it can be laid in the mortar between the bricks without requiring any special work of building up of the brickwork to provide for it, the said device, for the best results, being formed from a metal strip, preferably wire, which is provided at one end with an upturned portion forming a pintle for the hinge of the shutter and having at its other end a preferably downwardly-turned portion, which I prefer to designate as the "anchor projection," which in practice is fitted between two bricks, so as to prevent longitudinal or outward movement of the hook. I prefer in practice to make the hook of a round or cylindrical wire, and in order to prevent the hook when made of round or cylindrical wire from rolling or turning in what may be termed a "lateral" direction I provide the main portion of the wire connecting the end projections with a lateral extension or extensions, which form a bearing to prevent side tipping or rolling of the wire. In practice I prefer to crimp or bend the wire, as will be described, to obtain this lateral bearing.

These and other features of this invention will be pointed out in the claim at the end of this specification.

Figure 1 is a perspective view of a shutter-hook embodying this invention; Fig. 2, a horizontal sectional view of a sufficient portion of a brick building provided with a shutter-hook, (shown in Fig. 1;) Fig. 3, an end elevation of a building, showing the shutter-hooks in operative position with a shutter attached thereto; Fig. 4, a vertical section on the line 4 4, Fig. 2, to show the manner of placing the shutter-hooks between the bricks, and Fig. 5 a perspective of a modified form of shutter-hook to be referred to.

Referring to Fig. 1, A represents a complete shutter-hook embodying this invention, and which, for the best results, is made in one piece of a metal strip, preferably of a cylindrical wire, having an upturned end a , forming a pintle, and provided at its opposite end with a preferably downwardly-turned portion a' , forming a projection, which I prefer to designate as an "anchor" projection, the portion of the wire between the said turned end portions being, for the best results, provided with bends or crimps b , which extend laterally or substantially at right angles to the end portions a a' . In practice the shutter-hooks A are applied to the building B on opposite sides of the window b' , (represented in Fig. 2,) and when it is desired that the anchoring projection a' of each shutter-hook should extend downwardly and engage the rear surface or end of the bricks upon which it is laid the crimps or bends b are made rights and lefts to be applied to the right and left sides of the window, as clearly represented in Fig. 2; but while I may prefer this construction I do not desire to limit my invention in this respect, as it may be found desirable to turn the anchoring projection a' upwardly, after the manner indicated in dotted lines, Fig. 1, in which case the shutter-hooks are applicable to either the right or left side of the window.

Referring to Fig. 4, it will be noticed that the shutter-hook A therein shown lies between two layers 5 6 of bricks, and the laterally-extended portion or bend b affords a wide bearing upon the lower layer 6 of bricks, and consequently prevents the shutter-hook from turning or rotating, and the anchoring projection a' prevents the said hook from pulling out longitudinally.

Fig. 3 shows the shutter-hooks as they would appear in a building with the shutter *c* supported upon the pintles *a*, the straps or hinges *c'* of the shutter being provided with the usual eyes, which fit over the pintles *a*, and in practice I prefer before applying the hinges *c'* to the pintles *a* of the shutter-hooks to place upon each shutter-hook a small washer *c²* to prevent cutting action of the hinge *c'* upon the pintle *a*.

My improved shutter-hook may and preferably will be made by suitable machinery, (not herein shown,) so that a large number may be produced in a substantially short time and at a substantially small cost, and the wire from which the shutter-hooks are made may be of any desired or required thickness or diameter, according to the weight of shutter to be supported. By the term "shutter" I mean to include, also, blinds of any usual or suitable construction. I may prefer to provide the wire with the crimps or bends *b* to form a lateral bearing; but I do not desire to limit my invention in this respect, as it may be possible to obtain a lateral bearing by means of an additional piece of wire secured transversely to the main portion of the wire connecting the bent ends *a a'*; but I do not regard this latter construction as efficient as the construction shown in Fig. 1, for the reason that more difficulty would be experienced in laying the bricks upon the shutter-hook, and, furthermore, I do not believe that the supposed construction would give as sufficient a lateral bearing.

The advantage claimed by me for my improved shutter-hook is its simplicity, cheapness, and ease of application.

By the term "wire" I do not desire to re-

strict myself to the use of cylindrical wire, as the wire may be composed of a thin ribbon of steel of other than round form, and when so made the pintle *a* may be made cylindrical in shape or it may be left in its original form and a short sleeve with a cylindrical periphery may be fitted on it. I prefer to have the pintle *a* attached to the shutter-hook after the manner represented in Fig. 1; but an efficient shutter-hook may be made from a metal strip, in which the pintle *a* is dispensed with and is attached to the strap or hinge of the shutter, the end of the shutter-hook which projects beyond the face of the building in this latter case being provided with an opening or eye *d* for the reception of the pintle, as shown in Fig. 5. In this latter case the eye or opening *d* may be made by coiling or bending the wire in substantially a horizontal plane. In other words, the pintle *a* (shown in Fig. 1) is transferred to the hinge *c'* of the shutter and the eye of the hinge transferred to the shutter-hook.

I claim—

As an improved article of manufacture, a shutter-hook comprising a metal strip bent at one end to form an anchoring projection and constructed at its opposite end for the attachment to the shutter and having the intermediate portion constructed to form a lateral bearing, for the purpose specified.

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

BENJAMIN H. DAVIDSON.

Witnesses:

JAS. H. CHURCHILL,
J. MURPHY.