

J. J. SMITH.
BEDSTEAD FASTENING.

No. 24,361.

Patented June 7. 1859.

Fig. 1.

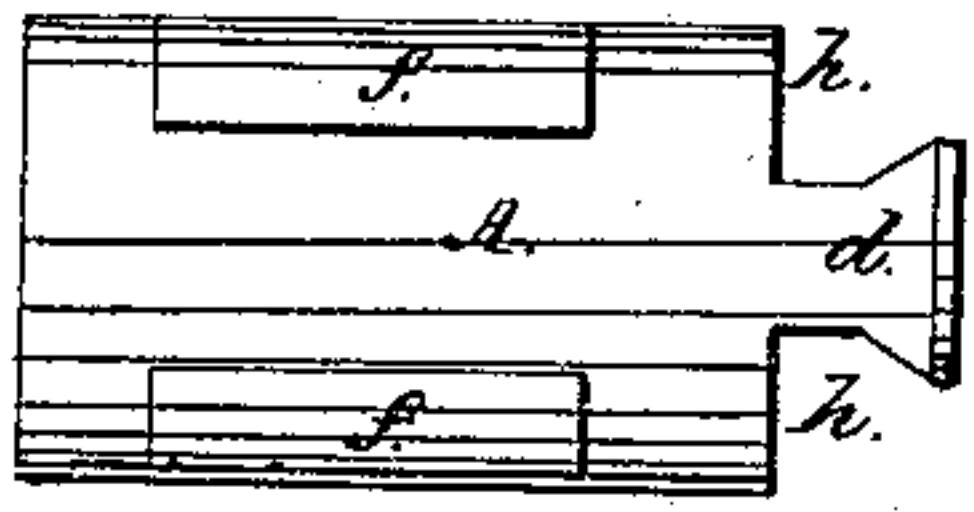


Fig. 6.

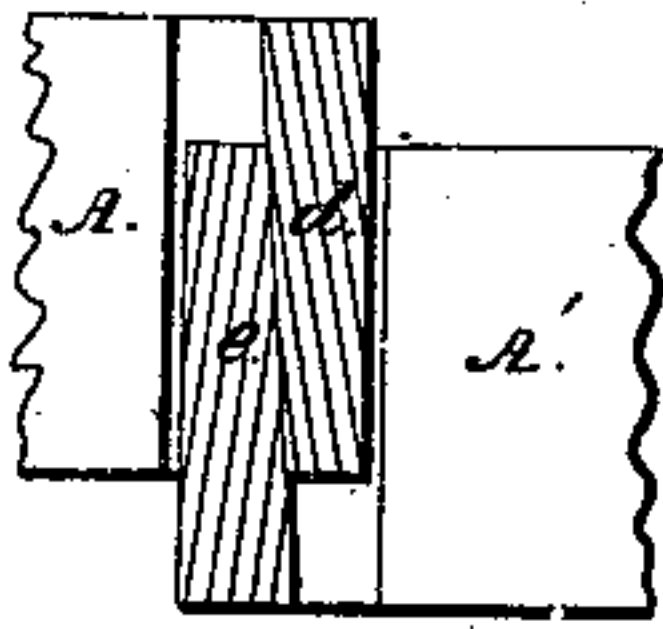


Fig. 2.

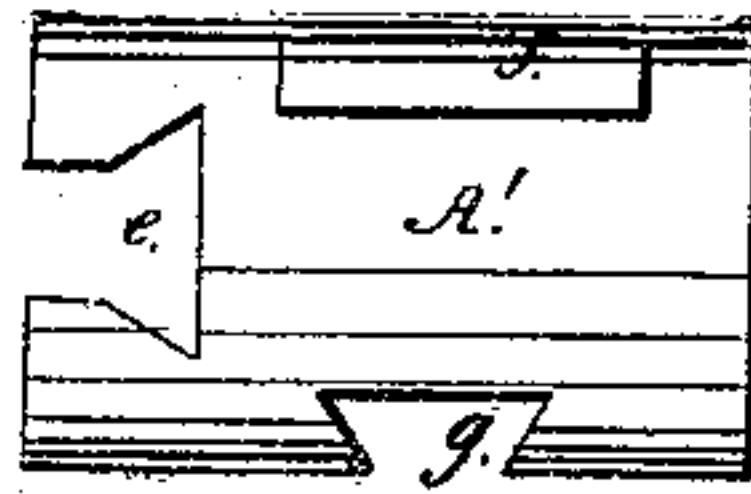


Fig. 3.

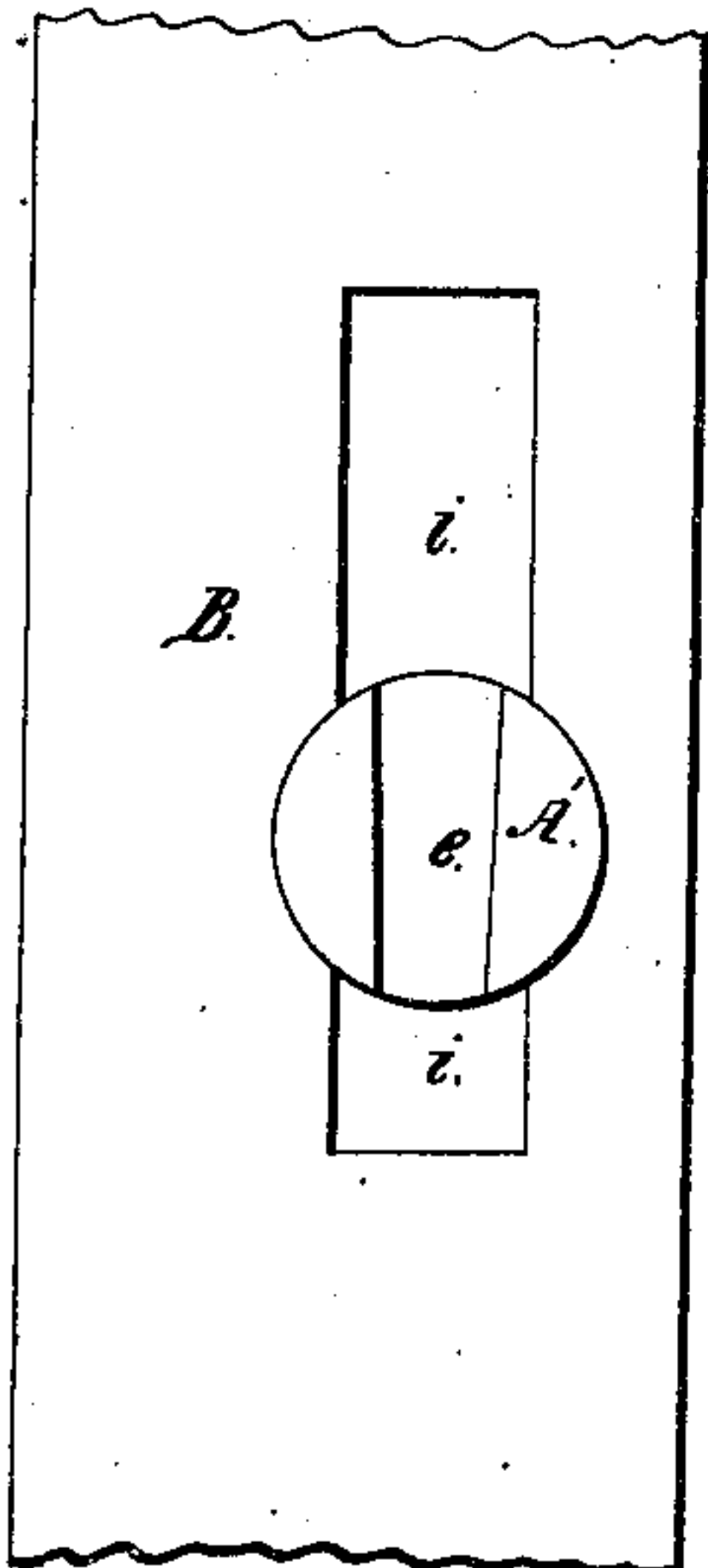


Fig. 4.

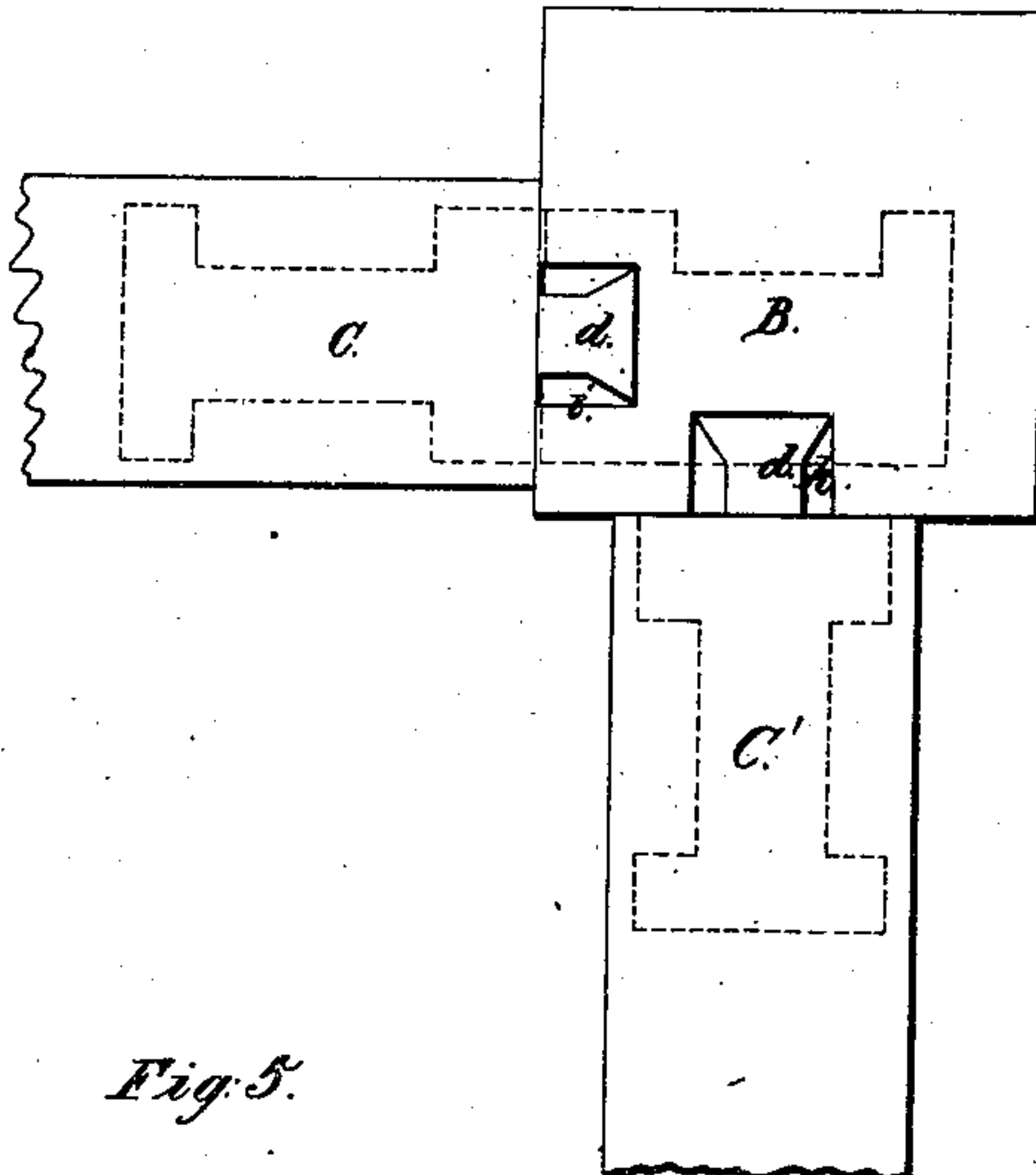
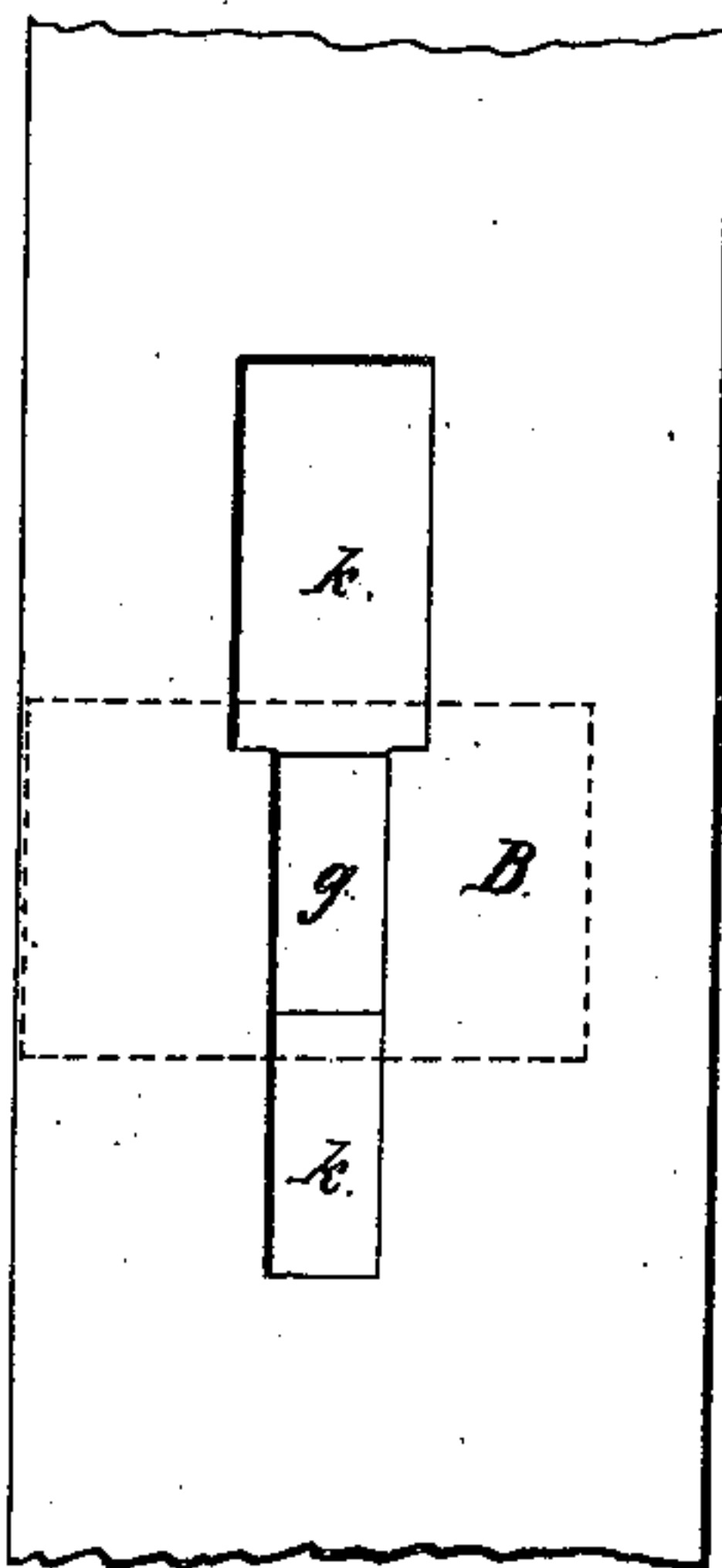


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

JACOB J. SMITH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND
I. HENRY PUGH, OF SAME PLACE.

PLUG BEDSTEAD-FASTENING.

Specification of Letters Patent No. 24,361, dated June 7, 1859.

To all whom it may concern:

Be it known that I, JACOB J. SMITH, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Plug-Fastenings for Bedsteads; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figures 1, and 2, represent the two distinct parts of the improved fastening, as prepared for insertion into the rail and post of the bedstead; Figs. 3, and 5, two approximating sides of the post, showing the application thereto of one part of the said fastening; and Fig. 4, a transverse section of the said post, with the rails applied thereto—like letters, in the several figures, indicating the same parts.

My invention consists in making both the rail and post parts of a bedstead fastening, in the plug form, and with a wedge-shaped dovetail tenon and an inclined groove, adapted to draw the two plugs toward each other as the one is pressed downward in connecting it with the other, as hereinafter described, so that the said device shall admit of being readily and accurately applied to the rail and post, respectively, by simply driving or screwing each plug into a hole bored therein for the purpose; thereby producing in the same, what may properly be called a double-plug fastening. And my invention also consists in making the post plug, of such a fastening, with an inclined dovetail groove across in one of its sides, so as to adapt it also for receiving therein, through a mortise in the same side of the post, the wedge shaped dovetail tenon of the rail plug, that it may operate therein in the same manner as it does in the end groove before specified—thus rendering the one post-plug adequate to the purposes of holding both rails fast to the one post, as hereinafter described; whereby I am enabled to dispense with the objectionable plate and its retaining screws, heretofore required as one part of a plug fastening; and also to produce a cheaper, more easily applicable, durable and effective fastening for bedsteads.

In the drawings, A, and A', represent the two distinct parts of the said double-plug fastening; B, a section of the post of a bed-

stead; and C, and C', sections of the two approximating rails. I make both of the plugs (A and A') of cast iron, and usually in the cylindrical form (as shown in Figs. 1 and 2), the one (A), having, at its outer end, a wedge shaped, dovetail tenon (*d*) which is adapted to fit into a correspondingly inclined dovetail groove *e*, cast in the outer end of the other plug (A')—the sides of the dovetails being inclined (as indicated in the diagram Fig. 6) so as to draw the plugs (A, and A') together, endwise, as the tenon of A, is pressed downward in the groove of A', in adjusting the two together. In the two opposite sides of the plug (A), and on one side of the plug (A') a recess is made, into each of which is fitted a piece of hard, dry wood, *f*, so that it shall fill out the said recesses to flush or correspond with the general external form or shape of the plugs at these parts. Across in the opposite side of the plug (A') an inclined, dovetail groove, *g*, is made, which also corresponds with the wedge shaped dovetail tenon (*d*) of the plug (A). Both of the said plugs (A and A') are applied by driving them into simple auger holes, bored in the respective posts and rails of the bedstead—first applying glue plentifully to the surfaces of the wooden parts (*f—f*)—the plug (A) being driven into the end of the rail (C, or C') until its shoulders *h, h*, are brought down flush therewith; and the other plug (A'), into the post (B) until its grooved end is about a sixteenth of an inch, or less, below the surface of the post, so that when connected, the post-plug (A') may continually draw the end of the rail against the post, as the former is pressed downward therein—a square mortise, *i*, being made to extend above and below the outer end of the plug, in the post, and of a sufficient width and depth to admit of the tenon (*d*) being inserted and operated in the said inclined, dovetail groove (*e*), as before described.

At the side, of the post, which is opposite the side-groove (*g*)—(when the plug (A') is so constructed and inserted), there is a mortise, *k*, made, for the purpose of admitting the tenon (*d*) of a like plug (A), for securing the rail (C') to the post (B), without inserting another plug—if so desired—and this mortise (*k*) is made narrower at and below the groove (*g*) so as to afford additional support to the edges of the said

groove (*g*). The relative positions of the plugs in the bedstead are clearly indicated by the dotted lines in Fig. 4.

It will be manifest, in the operation of this fastening, that when the plug (*A'*) is constructed with the side groove (*g*), it will answer for holding one end of both the rails (*C* and *C'*), and thus will save or dispense with four plugs in each bedstead, and at the same time make a most secure fastening—but, nevertheless, two of the said plugs (*A'*) may be used, one for each rail, if so preferred; and that, in either case, the simply inserting the wedge-shaped dovetail tenon (*d*) of the rail-plug (*A*) into the inclined dovetail groove (*e*, or *g*) of the post plug (*A'*) and letting the weight of the rail operate, their tendency will be to become more and more closely and firmly connected together, as desired, because of the inclined positions of the dovetail faces of the two parts, *d*, and *g*.

It is not intended to confine the construction of this double-plug fastening to the particular mode shown of securing each of its two parts (*A* and *A'*) in the rail and post, as in some cases it is intended to cast a screw thread around the cylindrical part which enters the post or rail and screw them into the same, instead of making them with recesses for the reception of the wood pieces (*f—f*) as described; and in making them in the first described mode, it is not intended to confine the plugs to the cylindrical form, as they may be made of an angular, or of an oval shape, in their transverse section, and thus as well admit of being fastened by the wooden pieces (*f—f*)—although the cylindrical form is preferred, because it does not require the receiving hole to be either squared or made oval.

I am aware that a single plug, driven into a rail and secured therein as herein described, has before been used in combination with a flat plate, (fastened to the post by wood-screws), the same being connected together by a dovetail tenon and mortise so as to serve as a bedstead fastening; but the plate in such fastening soon becomes loose on the wood, both from use and the usual

shrinking of the wood, and is consequently not durable or reliable. Whereas, by making the fastening so that each of its two distinct parts (*A* and *A'*) can be inserted permanently into the wood of the bedstead—by driving or screwing; as described, and the same being also adapted for being afterward connected together in the manner described, the usual objectionable plate, before specified, is entirely dispensed with and a more simple, easily applied, durable and effective fastening is produced.

I therefore do not claim the employment of a single plug secured in a hole made in the end of a bedstead rail by means of the glued pieces of wood (*f—f*), or by screwing the said plug into the rail so as to produce a dovetail fastening by combination of the same with a plate fastened to the side of the post of a bedstead; but,

Having herein fully described the construction and mode of operation of my improved fastening, and pointed out its utility, what I claim as new therein and of my invention, and desire to secure by Letters Patent, is—

1. A double plug fastening, for bedsteads, consisting of the two distinct parts (*A* and *A'*) so constructed as to be adapted for being driven or screwed into the post and rail, respectively, and also fitted with a wedge-shaped dovetail tenon (*d*) and a corresponding groove (*e*) operating together so as to cause the end of the rail to be drawn tightly against the post, in the downward pressure of the said rail, after they are connected together—all substantially in the manner and for the purpose set forth and described.

2. I also claim making the post plug (*A'*) with the inclined dovetail groove (*g*), across in one side of the same, so as to operate in combination with the wedge-shaped tenon (*e*) on the rail plug (*A*), substantially in the manner and for the purpose set forth and described.

JACOB J. SMITH.

Witnesses:

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