

(No Model.)

2 Sheets—Sheet 1.

I. CHORLTON & G. L. SCOTT.
BED FRAME.

No. 407,165.

Patented July 16, 1889.

Fig. 1.

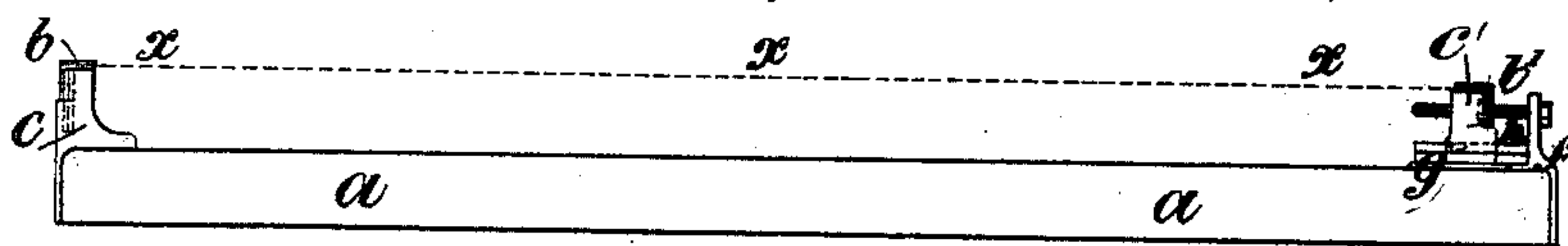


Fig. 2.

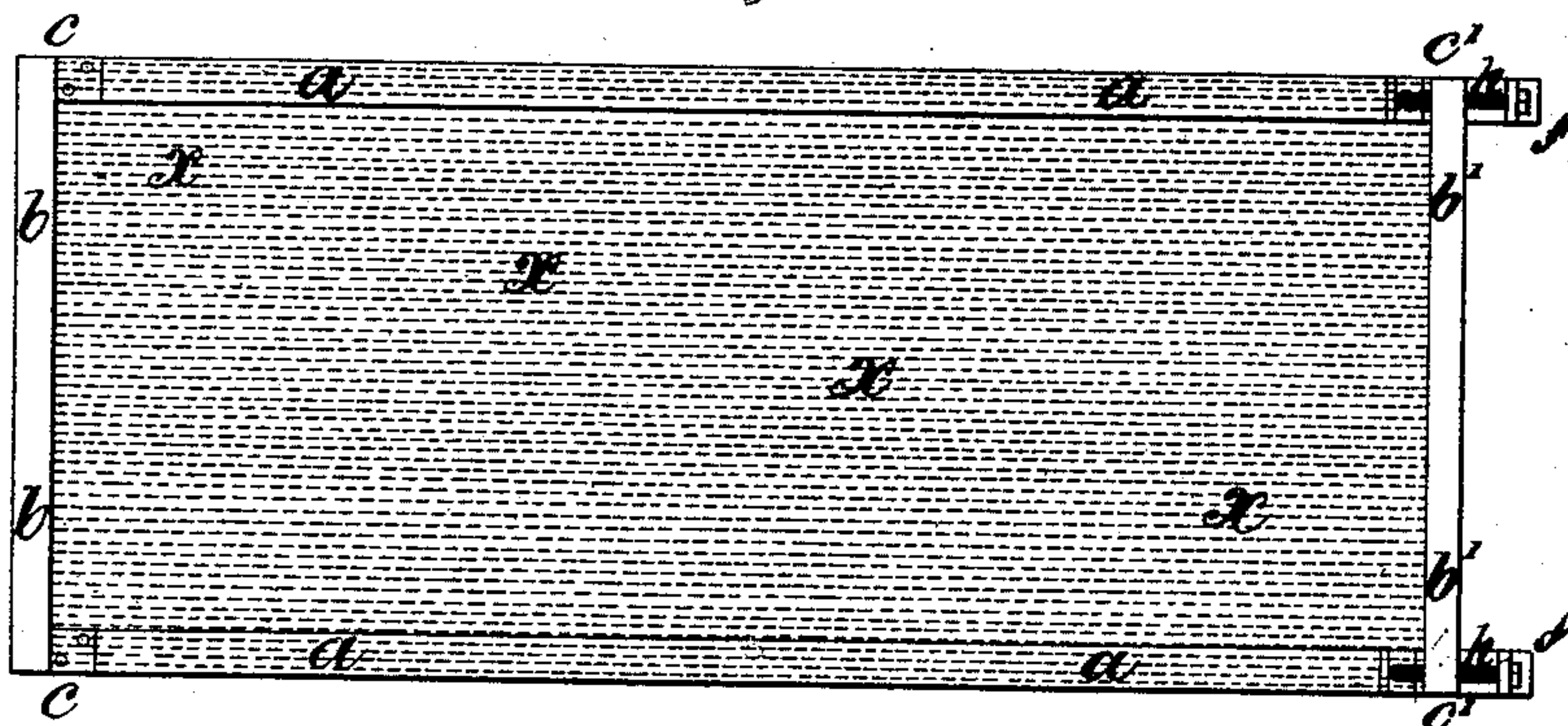


Fig. 3.

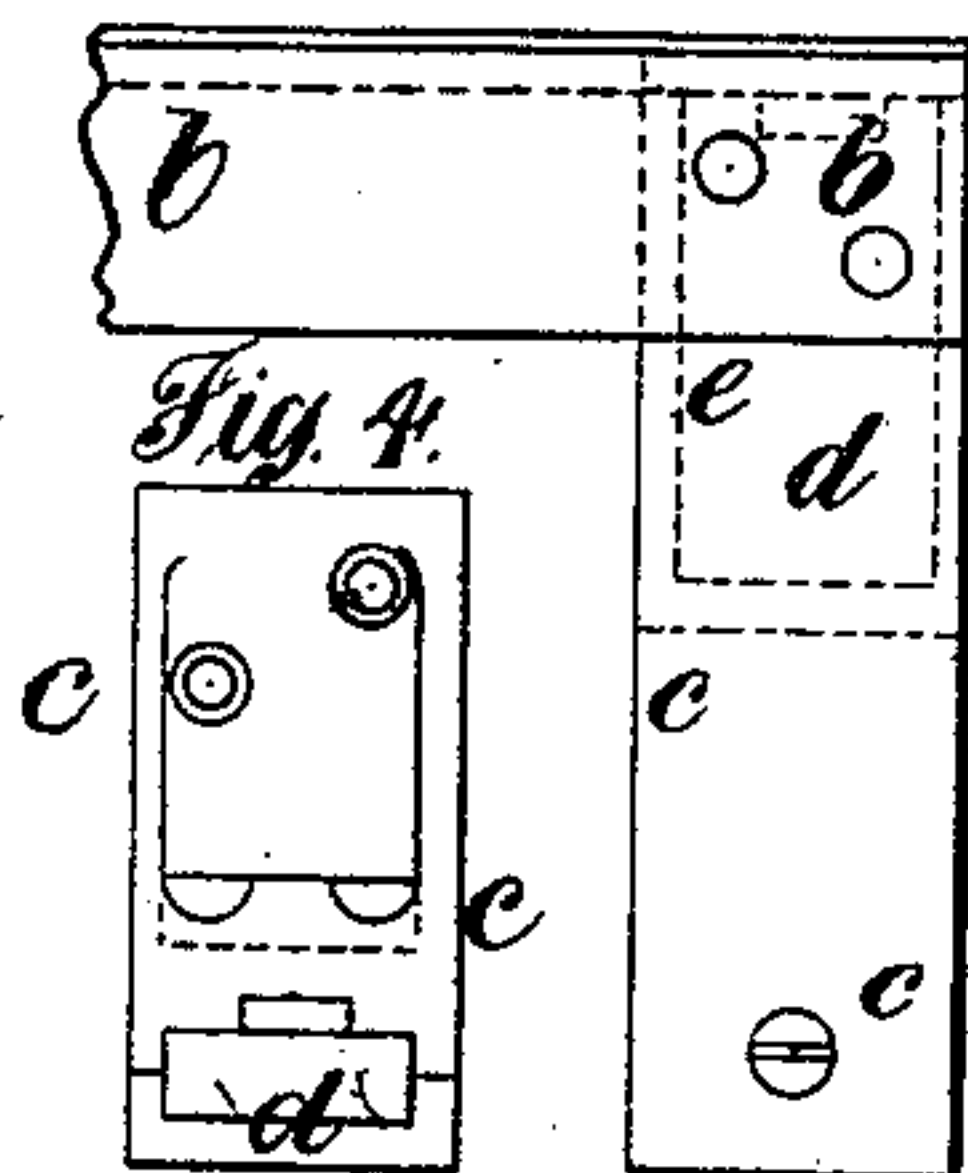


Fig. 5.

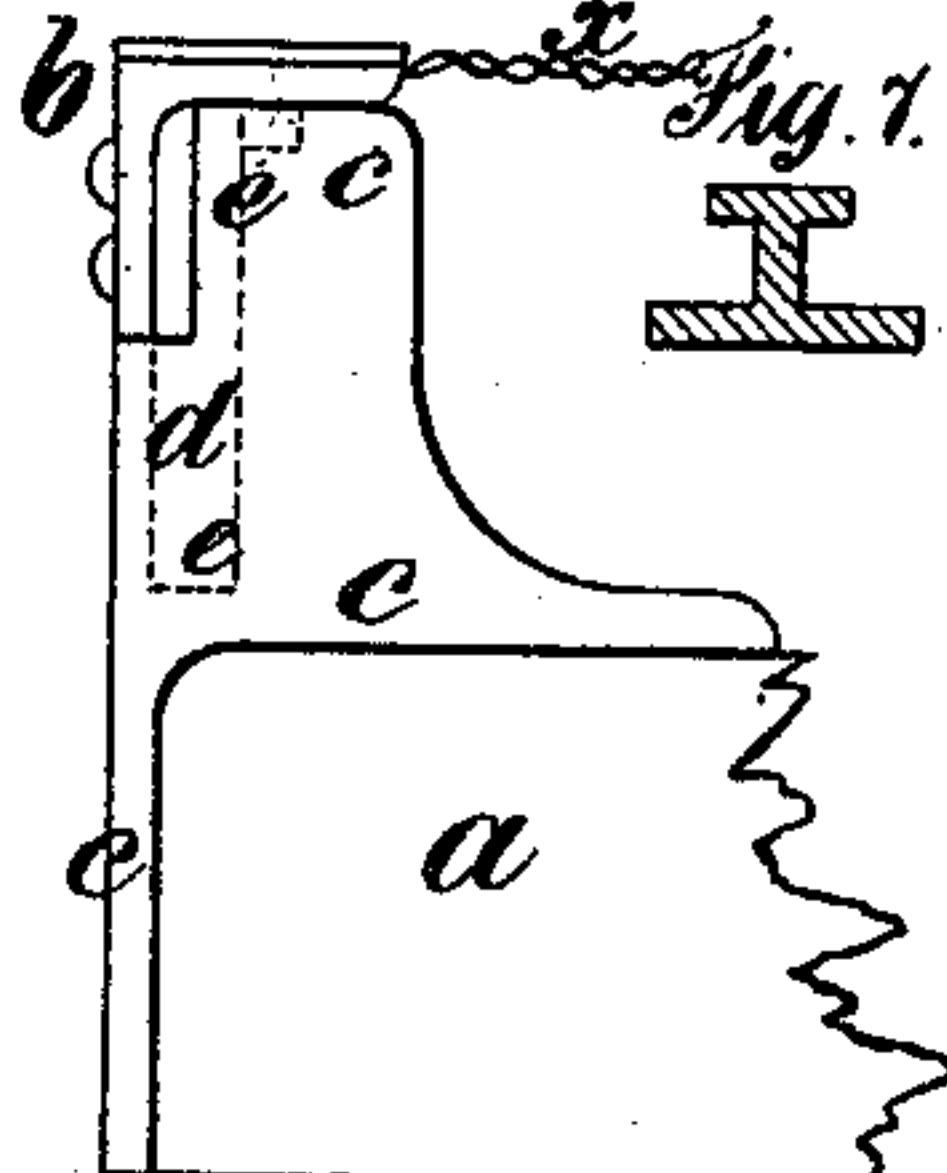
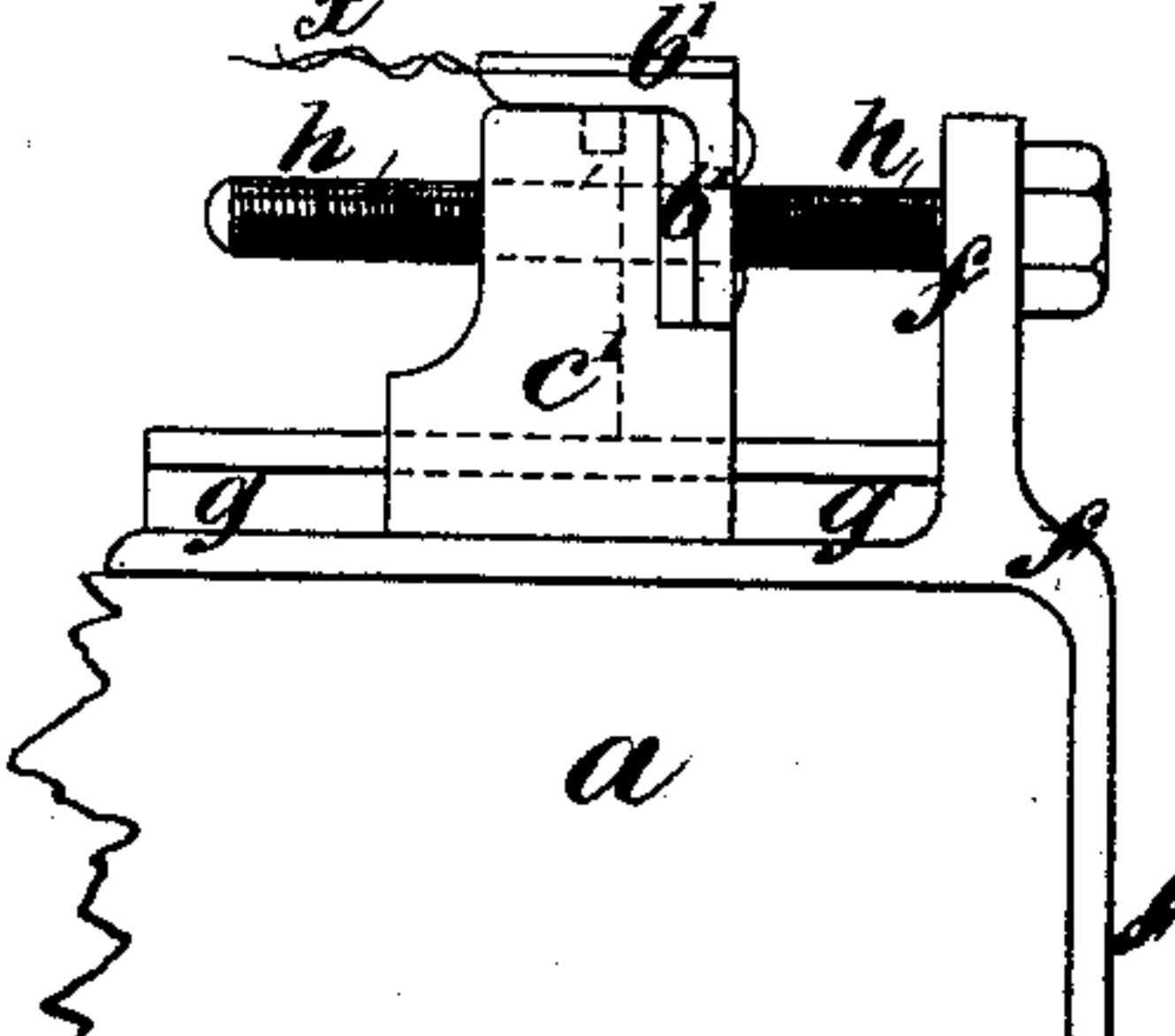


Fig. 6.



Witnesses

E. R. Brown
C. L. Richards

INVENTORS.

I. Chorlton & G. L. Scott

By their attorneys

Richardson

(No Model.)

2 Sheets—Sheet 2.

I. CHORLTON & G. L. SCOTT.
BED FRAME.

No. 407,165.

Patented July 16, 1889.

Fig. 8.

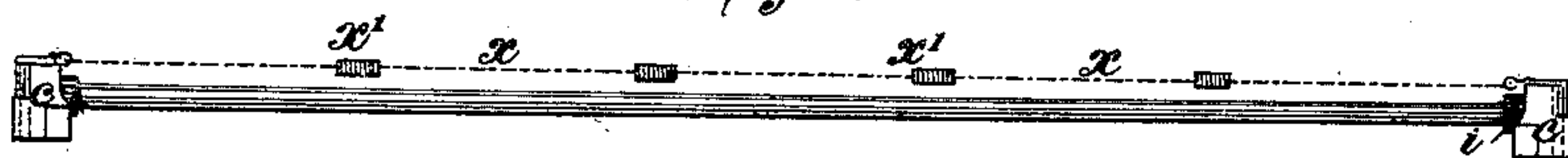


Fig. 9.

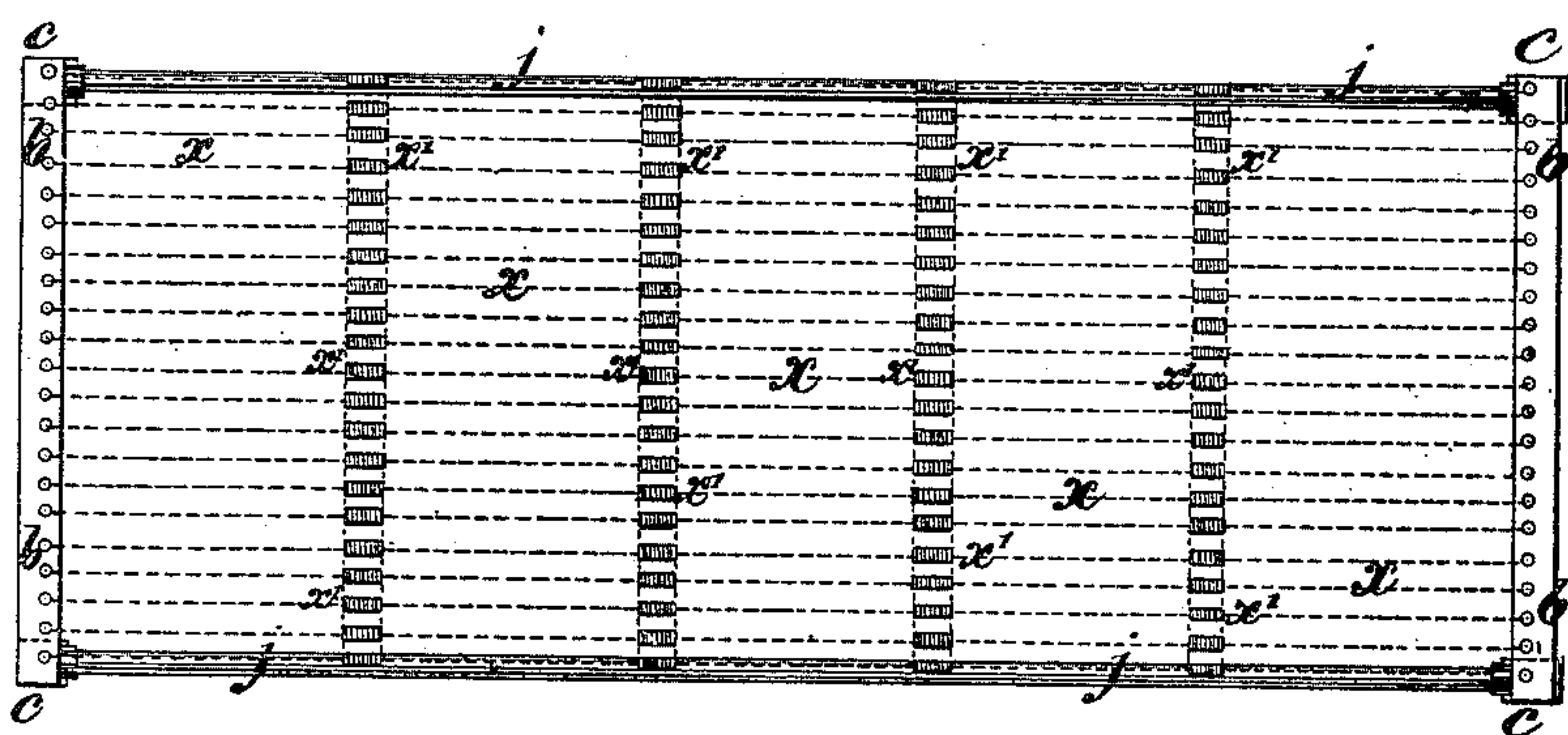


Fig. 10.

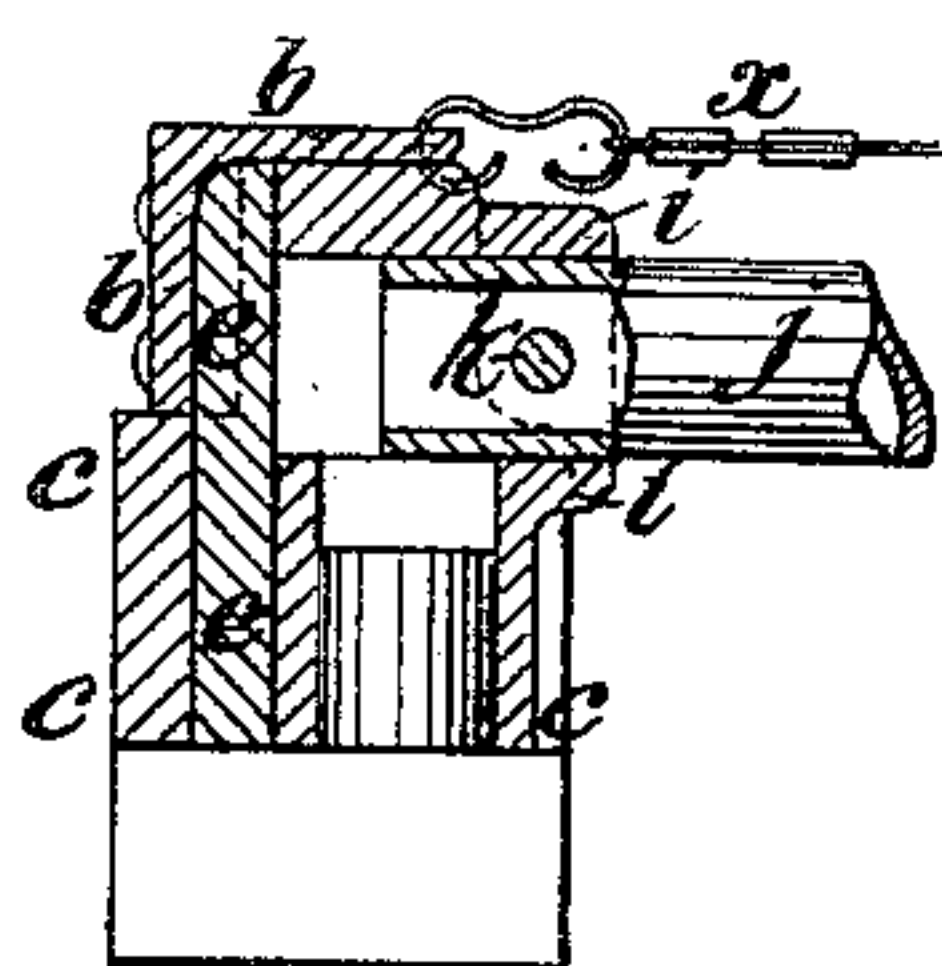


Fig. 11.

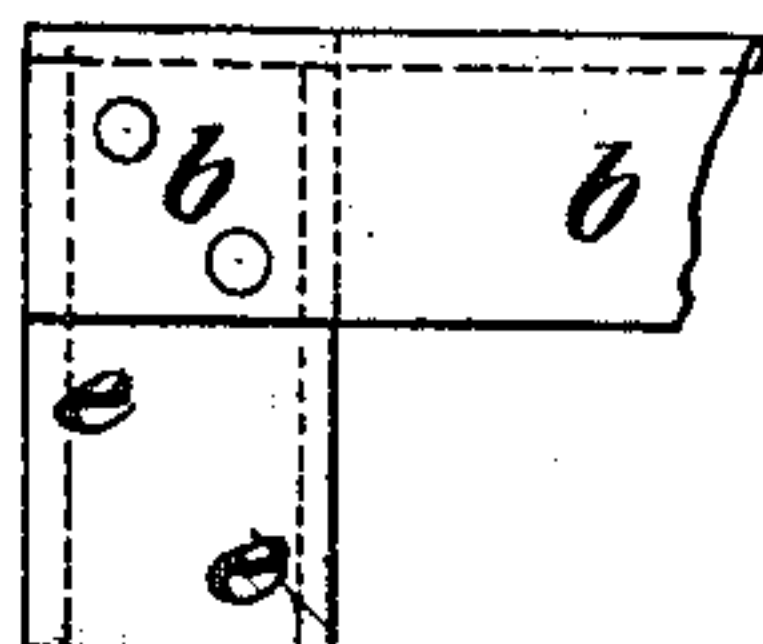


Fig. 12.



Fig. 13.

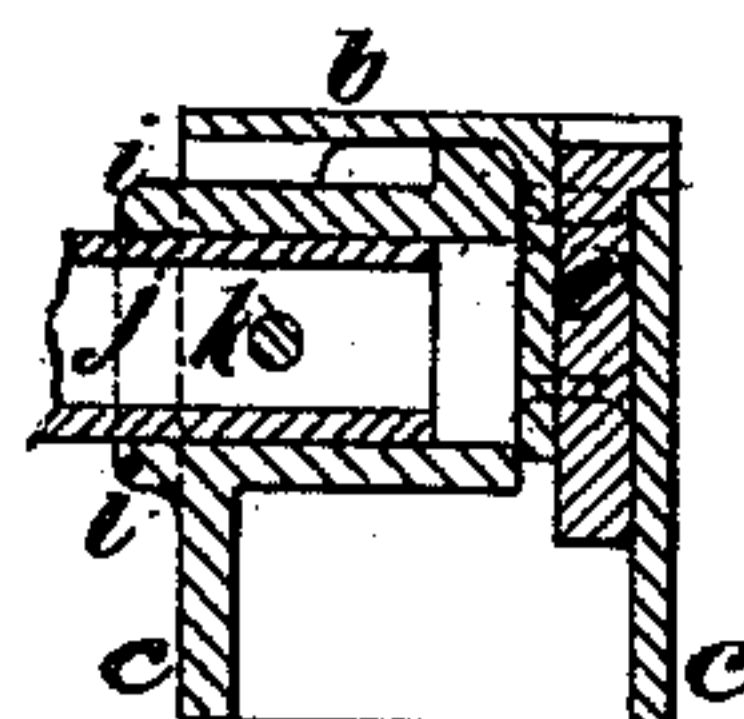


Fig. 14.

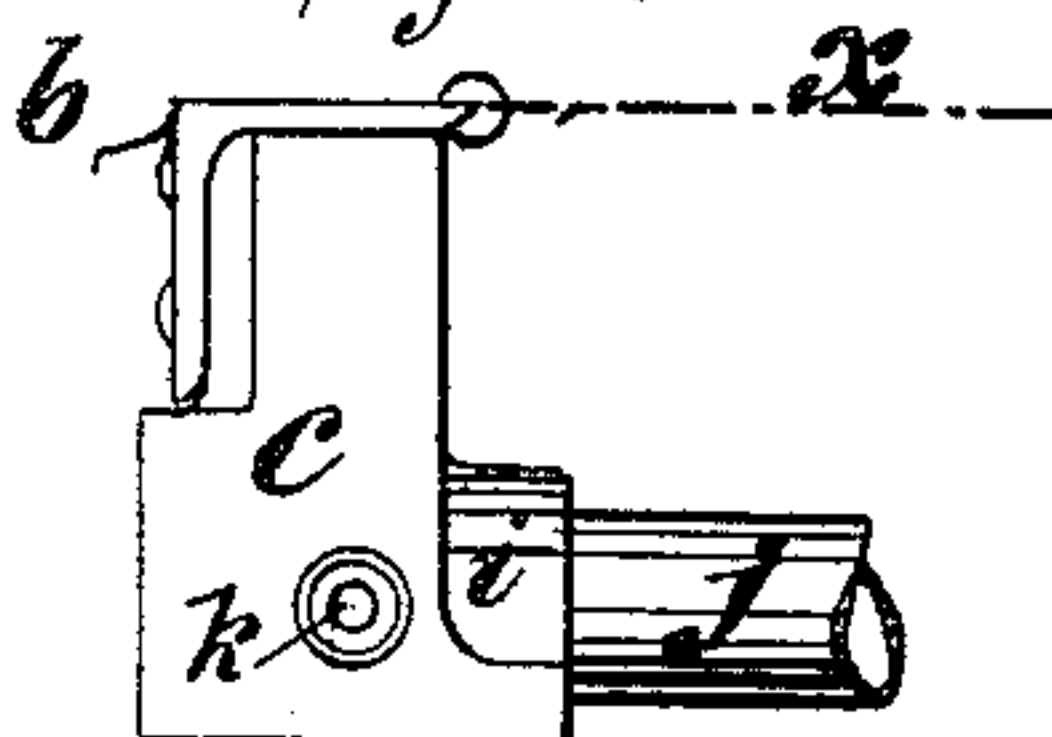


Fig. 15.

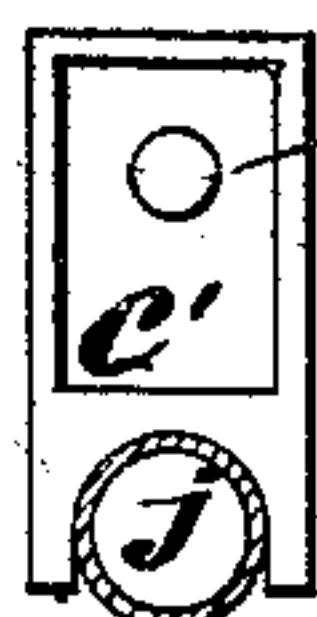
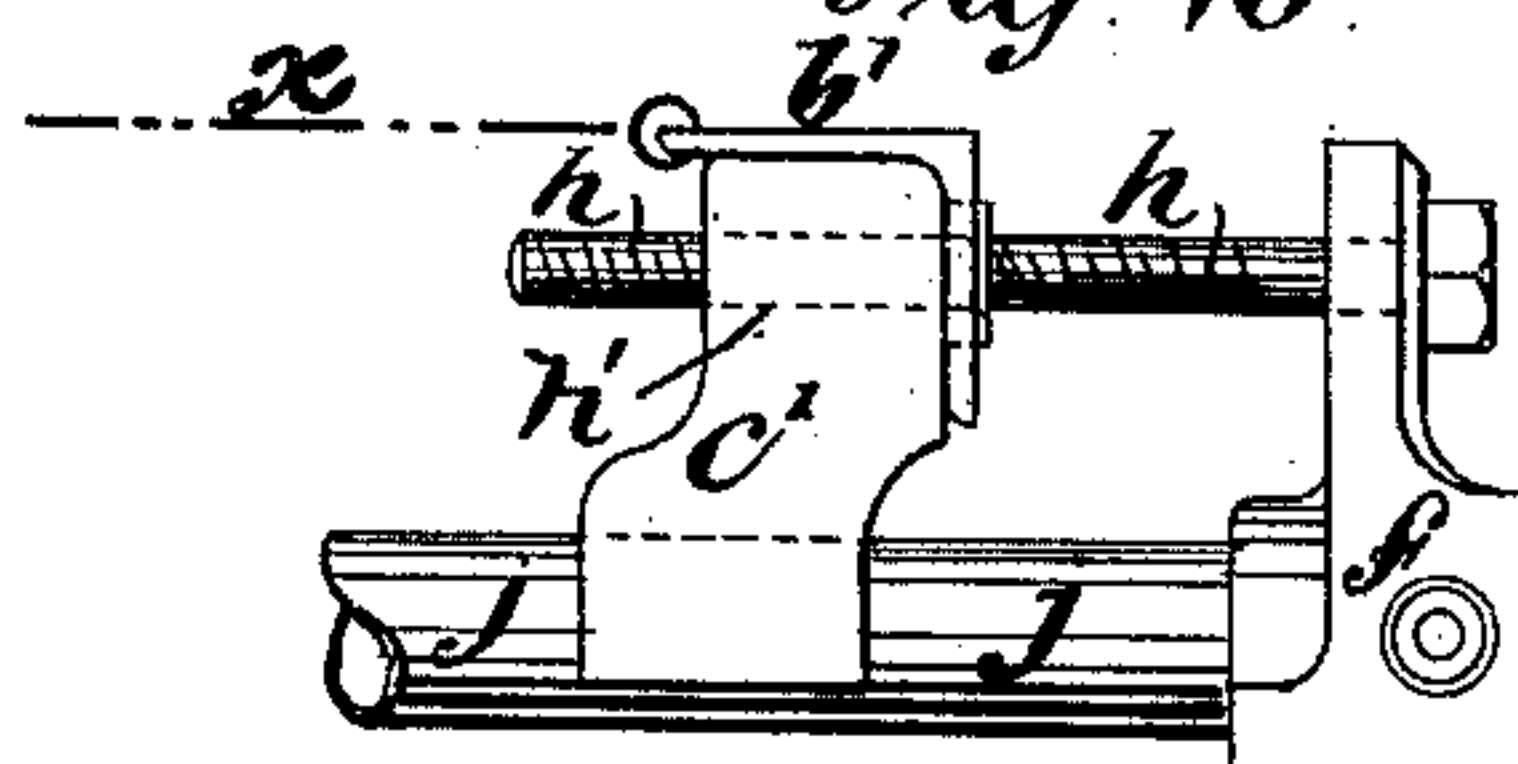


Fig. 16.



Witnesses
E. R. Brown
S. L. Richards

INVENTORS
I. Chorlton & G. L. Scott
By their Attorneys

UNITED STATES PATENT OFFICE.

ISAAC CHORLTON AND GEORGE L. SCOTT, OF MANCHESTER, COUNTY OF LANCASTER, ENGLAND.

BED-FRAME.

SPECIFICATION forming part of Letters Patent No. 407,165, dated July 16, 1889.

Application filed October 24, 1888. Serial No. 288,997. (No model.) Patented in England August 17, 1885, No. 9,748.

To all whom it may concern:

Be it known that we, ISAAC CHORLTON and GEORGE LAMB SCOTT, subjects of the Queen of Great Britain and Ireland, and residing at Manchester, county of Lancaster, England, have invented certain Improvements in Bed-Bottom Frames, (for which we obtained a patent in Great Britain, No. 9,748, dated August 17, 1885,) of which the following is a specification.

Our invention relates to the class of mattresses in which an elastic material—such as woven wire or chain and springs—is attached to and stretched upon a rectangular frame, and has for its principal objects to simplify the construction, to facilitate the putting together and taking apart of the frame, and to reduce the number of separate parts requiring to be put together after the mattress has been taken to pieces for transport. To constitute the frame, we employ two side rails and two end cross-bars, which, when placed in position across the ends of the said rails, are secured by interlocking parts only, without requiring bolts or screws to secure the parts together. Upon the ends of the said rails we secure brackets, which project above the rails and carry cross-bars. Each bracket is formed with a recess to receive a tongue, which is formed upon or attached to the cross-bar. This tongue fits between cheeks in the said recess, the lower part of which forms a mortise or socket adapted to receive the tongue, or the parts are otherwise so shaped as that when the tongue or part upon the cross-bar is fitted to the bracket the parts will be locked or held together with sufficient security when the aforesaid elastic material or mattress surface is strained, and the rectangular form of the frame will be retained without the use of separate bolts or fastenings. The frame when taken to pieces for transport consists of only four pieces in addition to the elastic material. In some cases we may make one of the end cross-bars adjustable.

And in order that our said invention may be properly understood, we will now proceed more particularly to describe the same with reference to the annexed two sheets of drawings.

Figure 1, Sheet 1, of the said drawings is a side view, and Fig. 2, a plan, of a mattress-frame, the side members *a* of which are of wood and the ends *b b'* of angle iron or steel. Supporting-brackets *c* are fixed at one end of the frame and the angle-iron *b* is secured to the brackets *c* by the means more clearly shown in the enlarged views, Figs. 3, 4, and 5. Each bracket *c* is socketed at *d*, so as to receive a tongue *e*, which is riveted to the angle-iron end *b*. The tongues *e*, thus secured to the angle-iron, are dropped into the sockets in their respective brackets *c*, which thus carry the angle-iron end and sustain it against the pull of the mattress surface *x*. The other end of the frame is provided with means for straining the woven-wire or other mattress surface *x*, which is clamped, hooked, or otherwise secured to the angle-irons *b b'*. As shown more clearly at Fig. 6, the brackets *c'*, which carry the tongued angle-iron end *b'*, slide upon brackets *f*, which are secured to the wooden sides of the frame. The limb *g* of each bracket *f* is of a section, (shown at Fig. 7,) and the bracket *c'* is formed to fit the said section. A screw *h* passes through a snug on the bracket *f* and engages with the bracket *c'* by means of the screw-threaded perforation *h'*, so that by turning the screw the bracket *c'* can be advanced so as to put the required strain upon the mattress *x*. A screw and sliding bracket is provided at each side of the frame. The remaining figures in Sheet 2 illustrate the application of our invention to a frame the sides of which are composed of iron tubing instead of wood.

Fig. 8 is a side elevation, and Fig. 9 a plan, of such a frame, while Figs. 10 to 16 are detail views of the means for connecting the respective members. The ends of the tubular sides *j* are inserted into paps *i*, cast on the brackets *c*, and are held in position by means of a transverse pin *k*, which is driven or screwed through both pap and tube. The tongues *e*, riveted on the angle-iron ends *b*, are inserted in the sockets *d* in the brackets *c*, and the mattress *x*, which in the example is intended to be made of lengths of chain connected by springs *x'*, as shown in the plan view, Fig. 9, is hooked or otherwise secured to the angle-iron ends *b*.

The rows of springs x' are or may be tied or linked to the tubular sides of the frame.

Fig. 13 illustrates the application of the locking-tongue e to the outside of the angle-iron end b , instead of to the inside, as described with reference to the foregoing figures. When so applied, the bracket c is slightly modified in form, as is apparent from the drawings, the socket or recess being made larger to receive the vertical web of the angle-iron.

In Figs. 8 to 13 no movable straining end is shown applied, but it will be obvious that the said means for straining the mattress might be employed in conjunction with mattress-frames having tubular sides, as shown. As an example, we will refer to Figs. 14, 15, and 16, which are detail views of parts of such a mattress-frame having an adjustable end bar b' . Fig. 14 shows the fixed end b and bracket c . In Fig. 16 a bracket f is secured to the end of the tubular side. Another bracket c' is formed saddle-fashion at the foot, so as to sit and slide upon the tubular side j , as clearly shown at Fig. 15, which is a view at right angles to Fig. 16. The adjustable end b' is carried by these sliding brackets. A screw h from the fixed bracket f engages with the sliding bracket c' , which is tapped to receive it, so that by turning the screws h the brackets c' and end b' can be pulled toward the head of the frame, straining the mattress-surface x to any required extent.

It will be evident that we may dispense with the straining-screws and sliding brackets,

described with reference to Figs. 1, 2, 6, and 7 of the drawings, and suspend the mattress x between fixed brackets c , as in Figs. 8 and 9. We may apply feet or supports to the tubular-sided frame. These supports may be of wood formed with a plug or projection which enters the brackets c .

No claim is made herein to the construction shown in Figs. 6 and 7 of the drawings, such construction being claimed in another application filed by us October 24, 1888, Serial No. 288,998.

What we claim is—

1. In a mattress-frame, the combination, with the sides, and the corner-brackets c , carried thereby, and having sockets open at their upper ends, of the end angle-irons b , provided with the tongues e , adapted to fit said sockets, substantially as set forth.

2. In a mattress-frame, the combination, with the sides, and the corner-brackets c , carried thereby, and having sockets open at their upper ends, of the end angle-iron b , provided with tongues e , adapted to fit said sockets, an opposing end piece b' , a flexible mattress-bottom connected with said end pieces, and means for moving end piece b' to strain said bottom, substantially as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

ISAAC CHORLTON.
GEORGE L. SCOTT.

Witnesses:

DAVID FULTON,
J. ENTWISLE.