

C. VALLONE.

BED BOTTOM.

APPLICATION FILED AUG. 23, 1909.

Patented Jan. 11, 1910.

946,173.

Fig. 1.

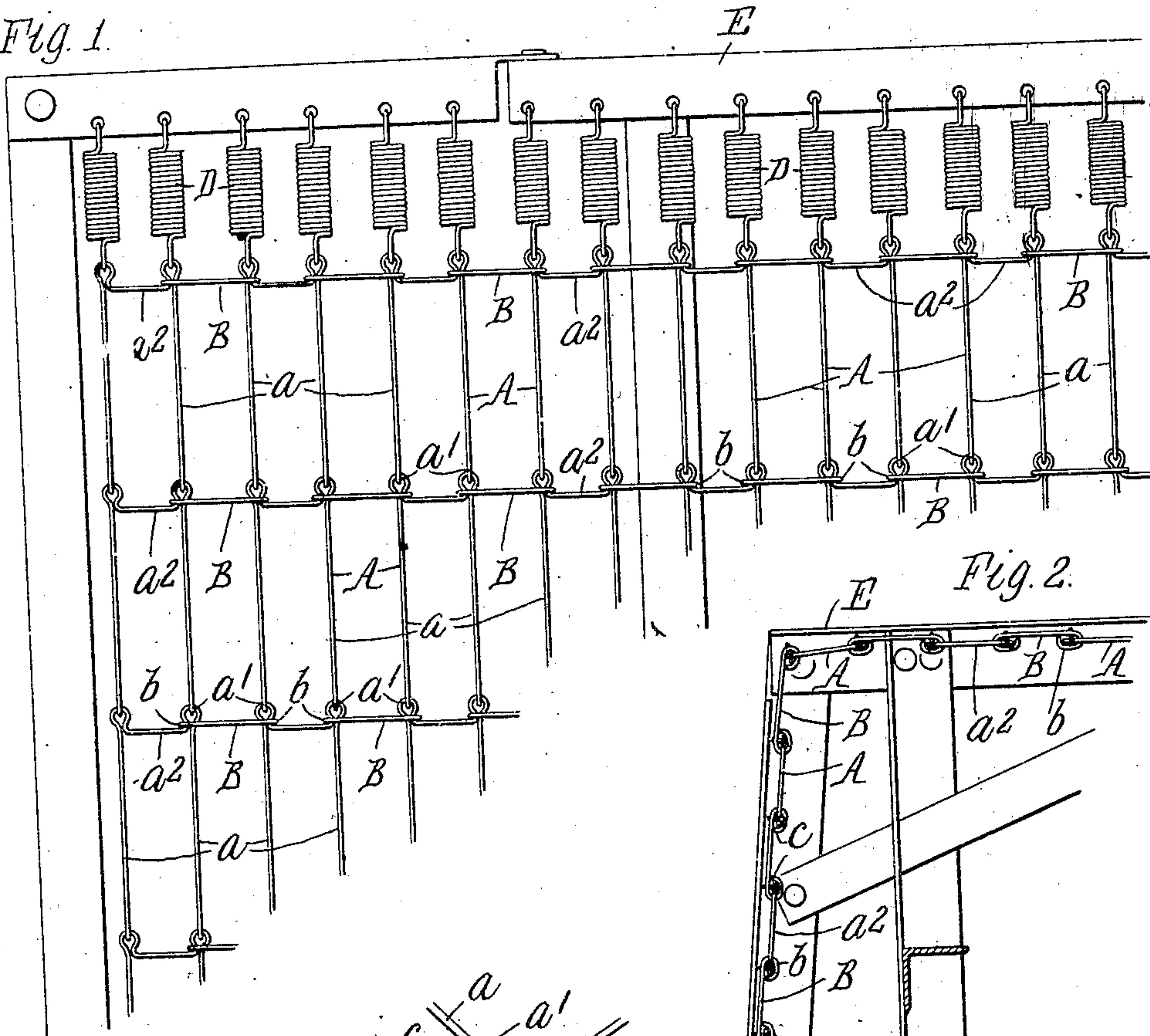


Fig. 2.

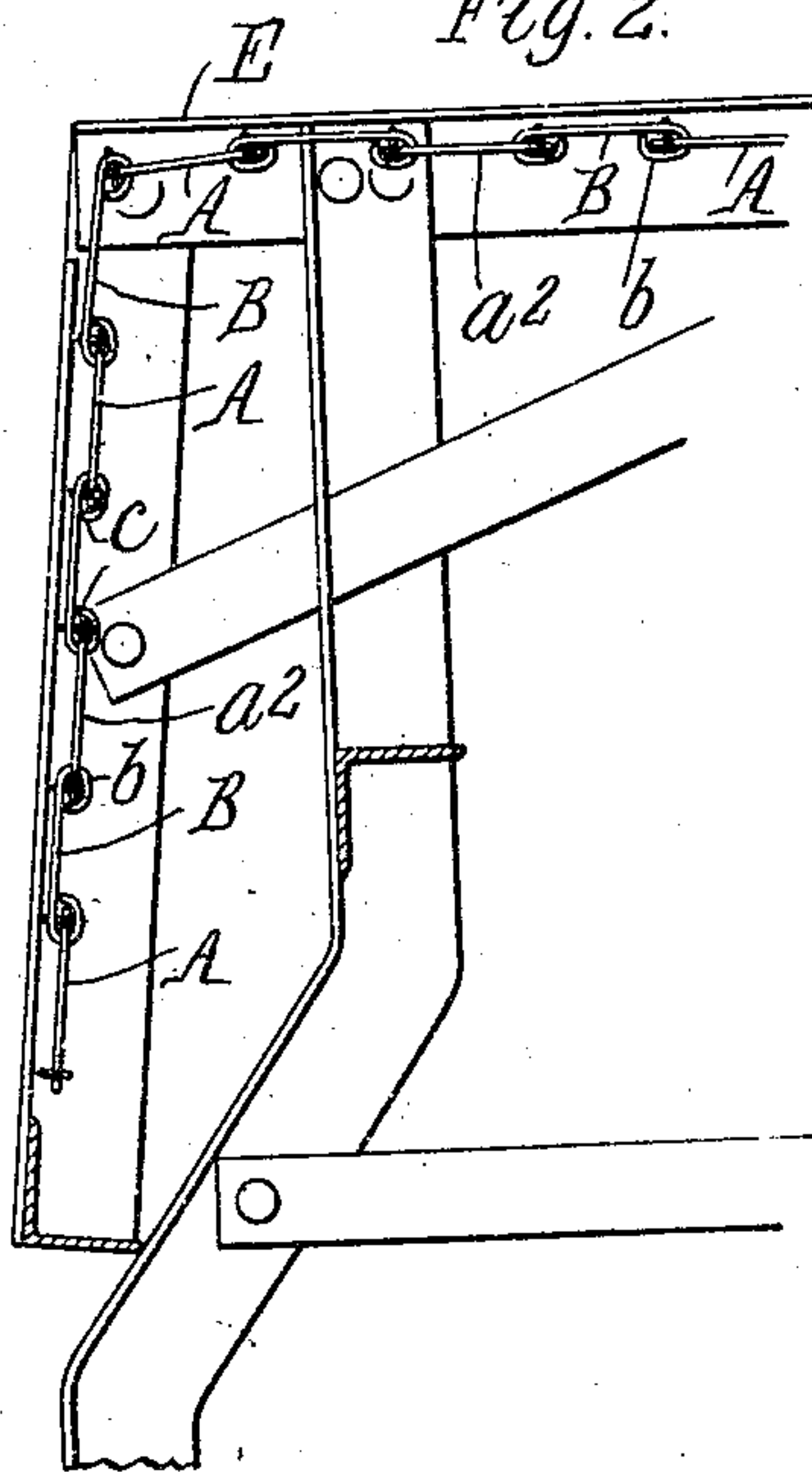


Fig. 3.

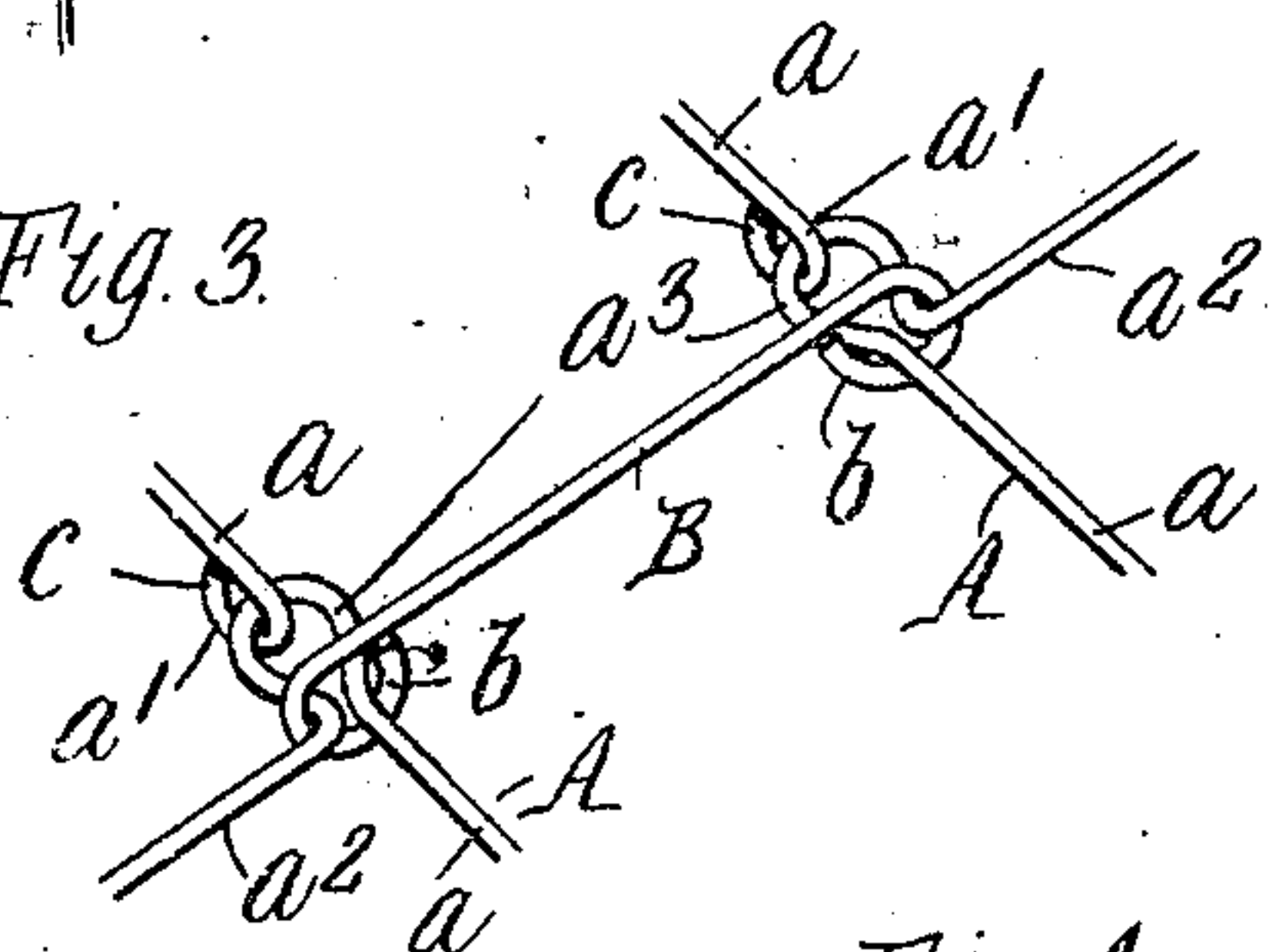


Fig. 4.

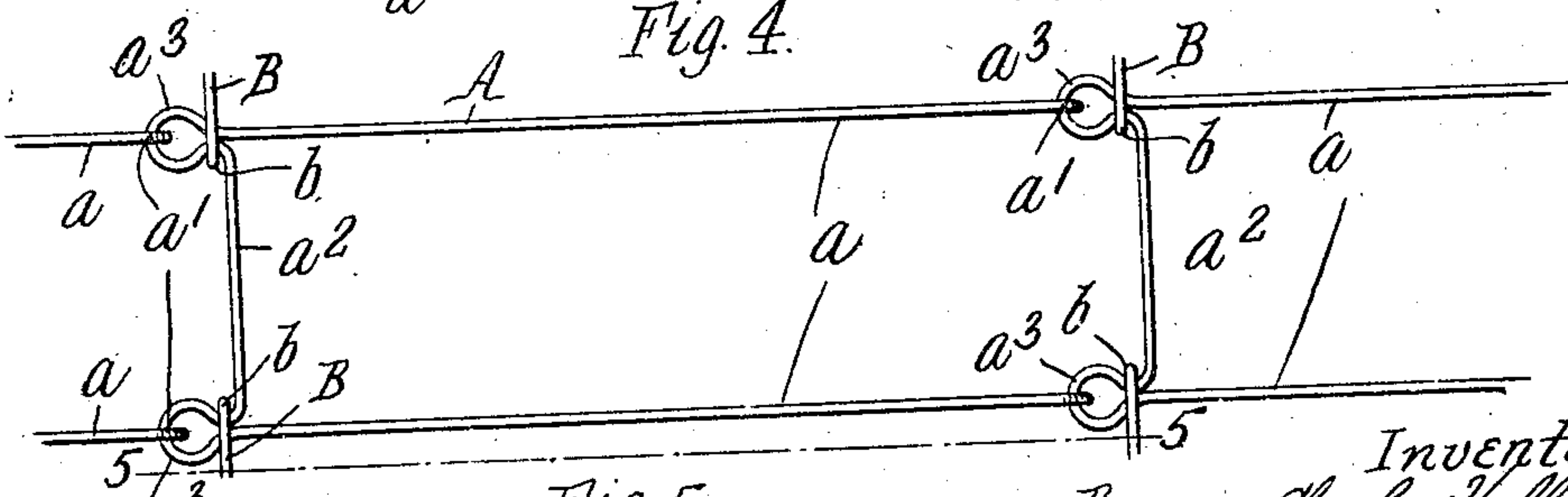
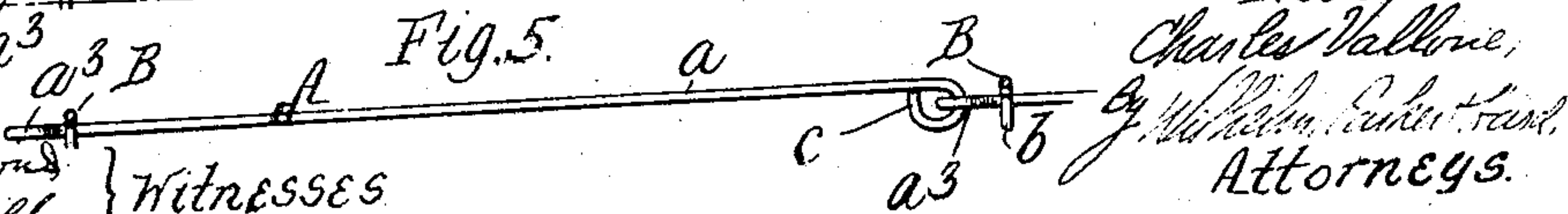


Fig. 5.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

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## BED-BOTTOM.

946,172

Specification of Letters Patent.

Patented Jan. 11, 1910.

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*To all whom it may concern:*

Be it known that I, CHARLES VALLONE, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Bed-Bottoms, of which the following is a specification.

This invention relates more particularly to flexible bed bottoms of that sort which are composed of wire links joined together in rows and attached to the opposite ends of the bottom frame by springs which permit the bottom to yield or give under the weight of a person thereon.

The primary object of the invention is to produce a desirable, comfortable and durable bed bottom of this type in which the component links are constructed, arranged and joined so as to simplify and cheapen the construction and also prevent the links from being disconnected in the use or handling of the bed or bed bottom. This is of especial importance in bed bottoms that are used on folding couches or beds, as the links are liable to be forced out of engagement when folding the bottom or when a weight is placed thereon adjacent to the folded portion, as, for instance, when a person sits on one side of the folded couch.

In the accompanying drawings: Figure 1 is a fragmentary plan of a bed bottom embodying the invention, applied to a folding couch frame. Fig. 2 is a transverse sectional elevation thereof, showing the bottom folded. Fig. 3 is a fragmentary perspective view, on an enlarged scale, showing the joints between adjacent links. Fig. 4 is a fragmentary plan of adjacent links. Fig. 5 is a sectional elevation in line 5-5, Fig. 4.

Like reference characters refer to like parts in the several figures.

The flexible bed bottom fabric is preferably composed of substantially U-shaped wire links A arranged and connected to each other in parallel rows running lengthwise of the bottom, and transverse links B which extend crosswise of the bottom and join the U-shaped links in adjacent rows.

Each link A is made by bending a wire to form parallel side bars  $a$  provided with hooks  $a'$  at the open end of the link, a cross bar  $a^2$  at the opposite or closed end of the link, and small loops which join the side and cross bars and form eyes  $a^3$  at the corners of the closed end of the link for the reception

of hooks  $a'$  of the next link A. Preferably the loops  $a^3$  are open and have reduced portions or necks, as shown, instead of being closed eyes formed by crossing the side and cross bars of the link, as this simplifies the manufacture of the links, locates the cross-bar in the same horizontal plane as the side bars and enables the links to be connected as presently described.

Each transverse link consists preferably of a straight piece of wire having its opposite ends bent to form hooks or eyes  $b$  which encircle or embrace the necks of the loops  $a^3$  of the U-links in adjoining rows. By thus joining the links with the hooks  $b$  of the straight links embracing the necks of the loops  $a^3$  of the U-links, instead of passing through the loops, the straight links and cross bars of the U-links form in effect transverse chains of straight links, and the transverse strains on the bottom are transferred directly from the cross bars of the U-links in one row to the cross bars of the U-links in the next row, which prevents the opening or spreading of the loops  $a^3$  or the bending of the side bars of the U-links. The hooks  $b$  of the straight links also cross the openings in the loops  $a^3$  and thereby prevent the hooks  $a'$  of one U-link from being forced out of the loops  $a^3$  of the next link. The hooks  $a'$  of the U-links and the hooks  $b$  of the straight links are bent around so that when closed their ends  $c$  abut against the straight bars of the links, as shown in Figs. 3 and 5, and extend substantially at right angles to the loops engaged thereby and serve as stops to prevent the disengagement of the loops from the hooks. Thus the disengagement of the parts is effectually prevented.

The flexible bottom or fabric composed of links formed and arranged as described is connected at its ends, by suitable springs D, to the end rails E of a suitable rectangular bottom frame. The bottom is shown in the drawings applied to a folding couch having end rails consisting of hinged sections, but the bottom can be used with a bottom frame or bedstead of any suitable construction, or any other article of furniture.

I claim as my invention:

1. A flexible bed bottom fabric composed of U-shaped links having hooks at their open ends and corner loops at their closed ends and arranged in rows with the hooks



of one link engaging in the loops of the next link, and links connecting said rows of U-shaped links and having end hooks which encircle the loops of the U-shaped links, substantially as set forth.

2. A flexible bed bottom fabric composed of U-shaped links having hooks at their open ends and open-sided corner loops with reduced necks at their closed ends, and arranged in rows with the hooks of one link engaged in the loops of the next link, and straight links connecting said rows of U-shaped links and having end hooks which embrace the necks of the loops of said U-shaped links and prevent the disengagement of the U-shaped links from each other, substantially as set forth.

3. The combination of a flexible bed bottom fabric composed of U-shaped links having hooks at their open ends and corner loops at their closed ends and arranged in

rows with the hooks of one link engaging in the loops of the next link, and links connecting said rows of U-shaped links and having end hooks which encircle the loops of the U-shaped links, substantially as set forth.

4. A flexible bed bottom composed of links arranged in parallel rows and connected by interlocking hooks and loops at the ends of the links, and connecting parts for said rows having hooks which encircle said loops and prevent the disengagement of said interlocked hooks and loops, substantially as set forth.

Witness my hand, this 12th day of August, 1909.

CHARLES VALLONE.

Witnesses:

E. C. HARD,

C. B. HORNBECK.