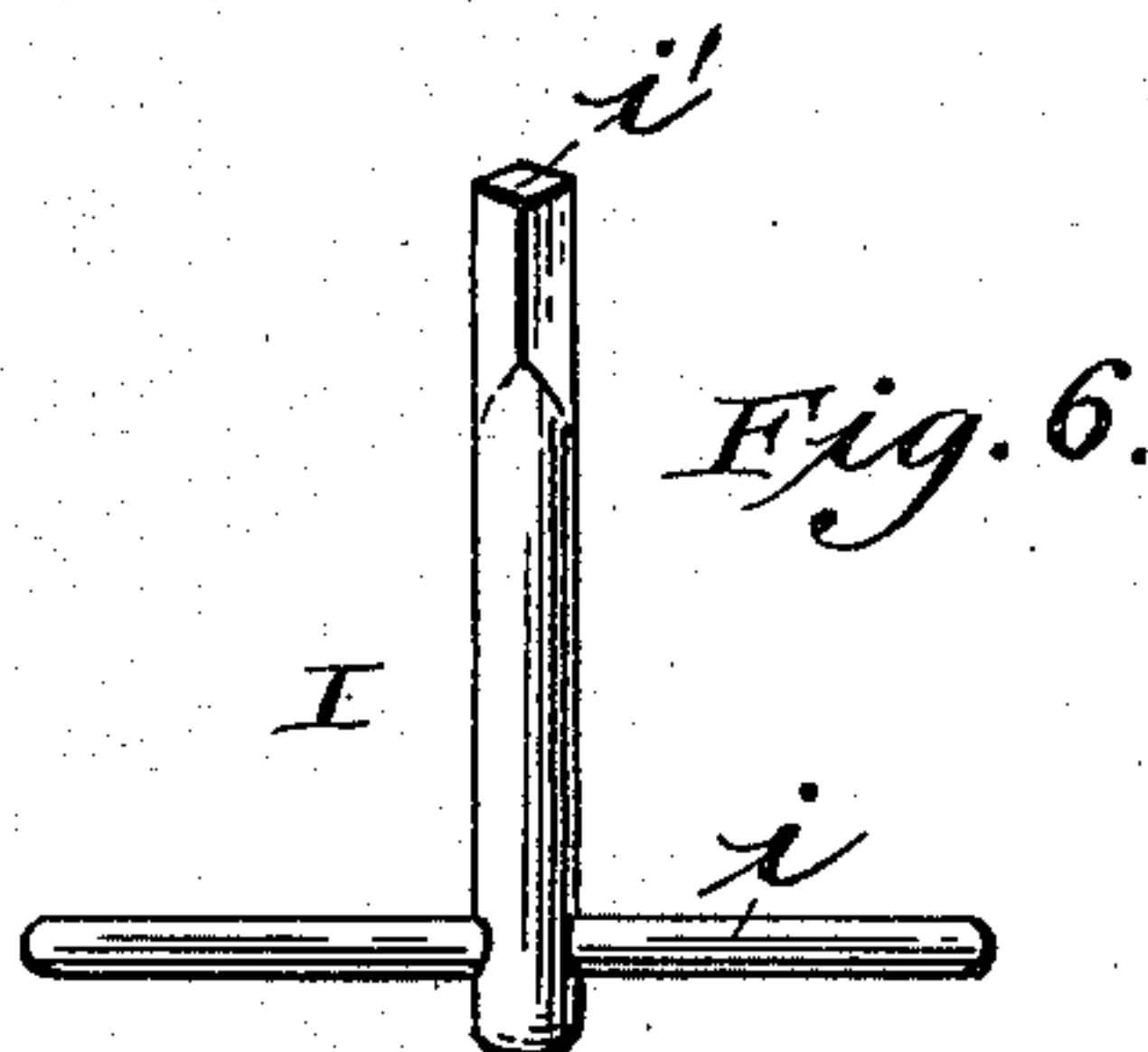
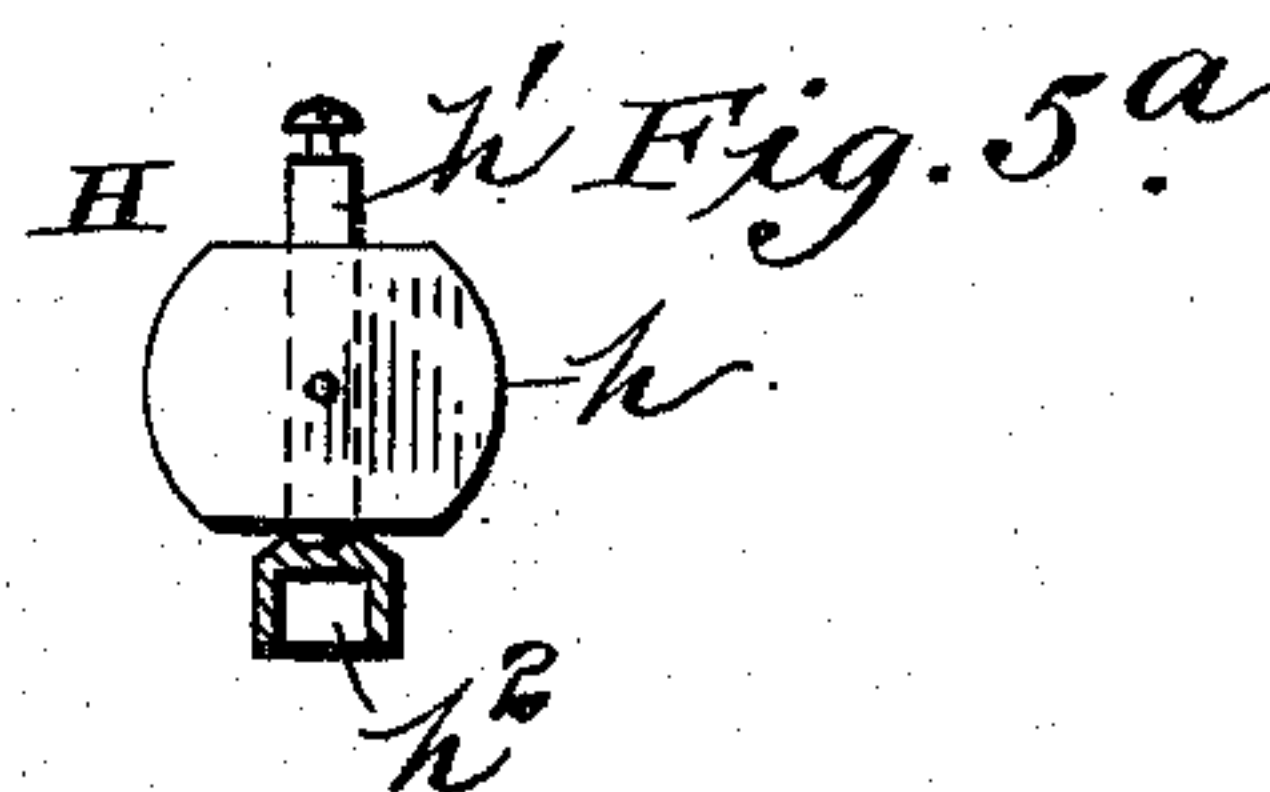
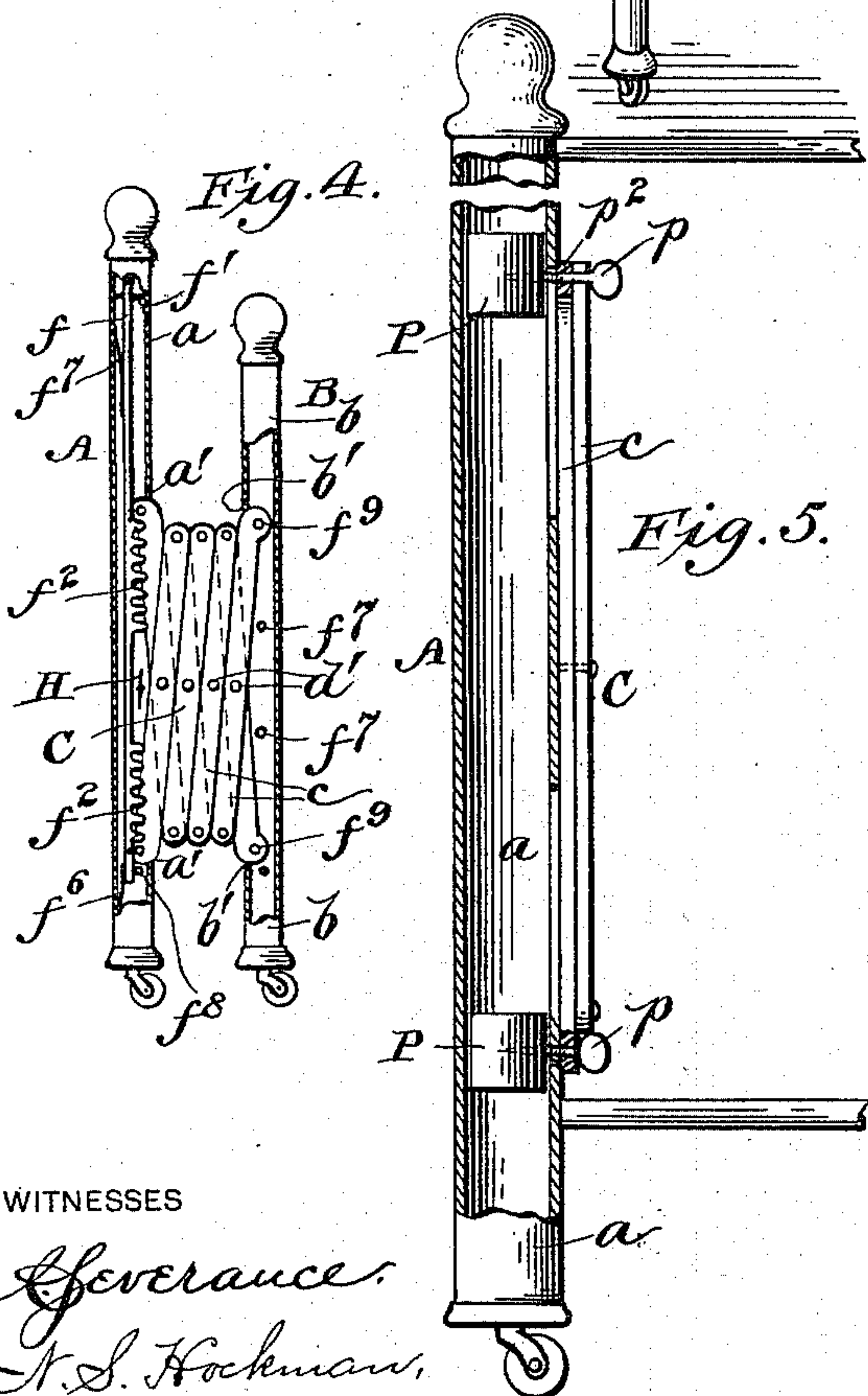


3 Sheets—Sheet 1.

No. 573,390.

Patented Dec. 15, 1896.



WITNESSES

Governance.
N. S. Hockman.

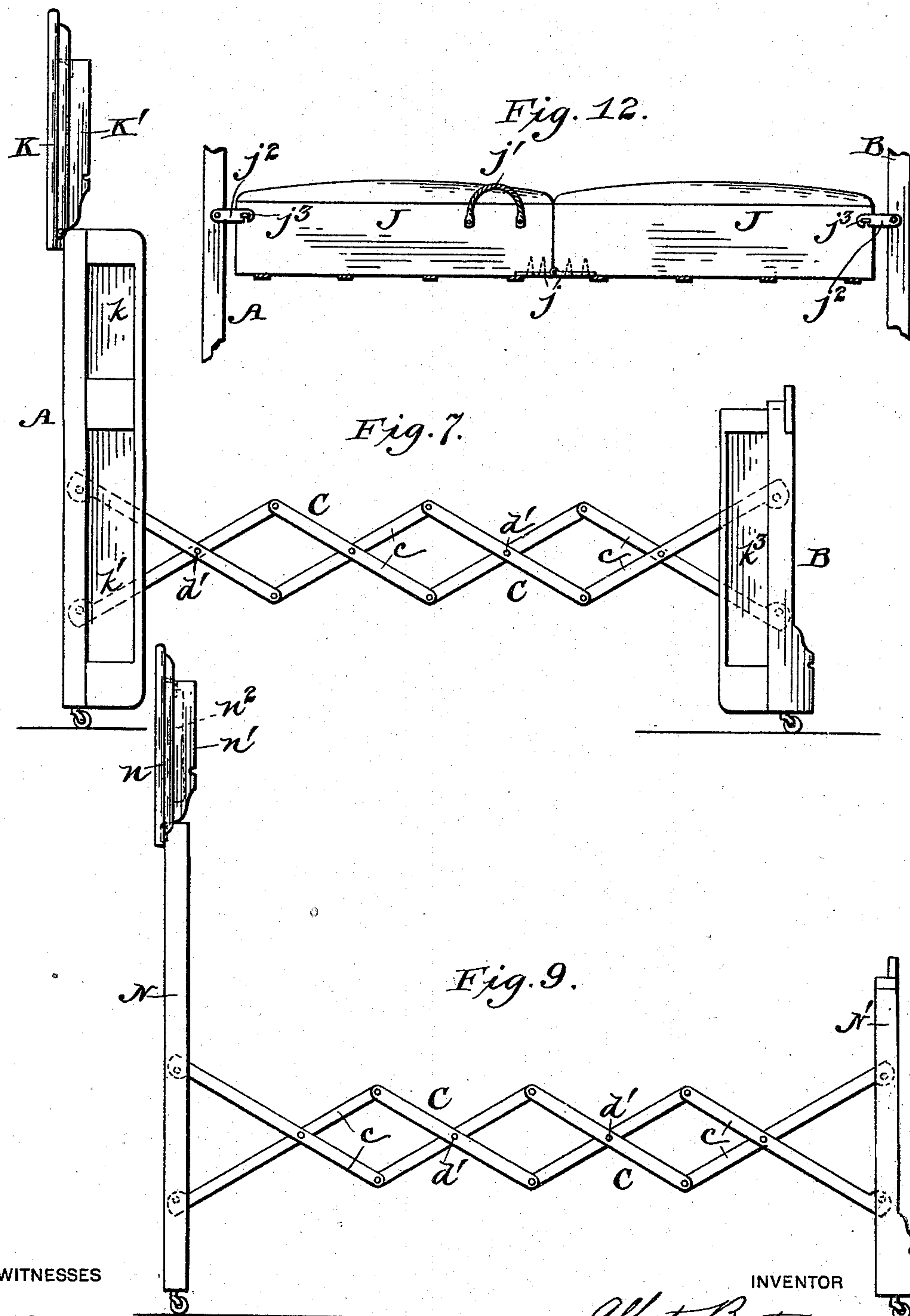
INVENTOR

Albert Butten
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3 Sheets—Sheet 3.

No. 573,390.

Patented Dec. 15, 1896.



WITNESSES

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UNITED STATES PATENT OFFICE.

ALBERT BUTZER, OF DEER PARK, WASHINGTON.

EXTENSION-BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 573,390, dated December 15, 1896.

Application filed March 6, 1896. Serial No. 582,108. (No model.)

To all whom it may concern:

Be it known that I, ALBERT BUTZER, a citizen of the United States, residing at Deer Park, in the county of Spokane and State of Washington, have invented certain new and useful Improvements in Extension-Bedsteads; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in extension-bedsteads; and it consists of certain novel constructions, combinations, and arrangements of parts, all of which will be hereinafter more particularly set forth and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 represents a perspective view of the devices embodying my invention applied to an iron bedstead, the bed being in its open position. Fig. 2 represents a detail central vertical section through one of the corner-posts. Fig. 3 represents a front elevation of one of the rack-bars. Fig. 4 represents a side elevation of the bed in its closed position, one of the head corner-posts being broken away to expose the rack. Fig. 5 represents a detail central vertical section through one of the corner-posts, showing a modified form of adjusting devices for adjusting the ends of the lazy-tongs. Fig. 5^a represents a top plan view, partly in section, of the device for throwing the rack-bar back out of its normal position. Fig. 6 represents a similar view of the key for operating the same. Fig. 7 represents a side elevation of another form of my bed in its opened position. Fig. 8 represents a side elevation of the same closed. Fig. 9 represents a side elevation of yet another form of my invention. Fig. 10 represents a front elevation of the same. Fig. 11 represents a detail central vertical section through the upper portion of the head of the construction shown in Fig. 9; and Fig. 12 represents a side elevation of my improved mattress.

A in the drawings represents the head of the bedstead; B, the foot; C, the sides, and D the spring-supporting slats or bars.

In the constructions shown in Figs. 1 to 5, inclusive, I have shown my invention applied

to an iron bedstead. The head and foot portions in this form of my invention are of any usual ornamental construction or design and are put together in the usual manner, with the exception that the corner-posts *a a b b* are each hollow and provided with a vertical slot *a' a' b' b'* in their respective inner sides. These slots are for the accommodation of the ends of the bars *c* of the lazy-tongs sides C, which will be hereinafter more particularly described. Each of the head corner-posts is provided with a rack-bar *f*, supported therein by a lateral pin *f'*, that passes loosely through the upper part of the same and prevents all vertical movement of said bar, but permits of horizontal movement back and forth. The said rack-bar *f* is approximately semicylindrical in cross-section and has the upper and lower portions of its straight vertical edges formed with rack projections *f²*. Vertical slots *f³ f³* are also formed in the wall of each of said racks to permit full play of the ends of the bars of the lazy-tongs. Cross-bars *f⁴ f⁵* are set in said rack-bar across the upper end of one of the slots *f³* and across the lower end of the other. These bars brace the rack and form firm seats, against which the notches *c'*, formed in bars *c*, rest when the lazy-tongs are fully extended. The said rack-bars are each held normally forward against an adjusting-piece H by bowed springs *f⁶ f⁶*, attached to the rear of the rack-bar and bearing with their free ends against the rear inner wall of the hollow post.

The adjusting-piece H, that is adapted when rotated to throw the rack-bars back against the action of the springs, consists of a disk *h*, mounted on a pin *h'*, that is journaled in the sides of the hollow post and provided with a squared aperture *h²* at one end. The pin *h* is rotated to operate the disk *h'* and throw the rack-bar back against the action of the springs by a key I, having an operating-handle *i* and a squared end *i'*, that is adapted to engage the recess in the end of the pin *h*. A pin *f⁸* projects across through the lower part of each post to prevent the lower end of the rack-bar swinging too far forward.

The slides C of the bed, as before explained, are formed of the ordinary construction of lazy-tongs composed of pivoted bars *c*. Each bar at each end of each side is slightly longer

than the bars composing the remainder of the side, and the head-bars are each provided with a lateral pin c^2 , that is adapted to engage the projections of the rack-bar in the post and thus hold the lazy-tongs in any adjusted position and regulate the length of the bed.

The hollow foot-posts are provided with cross-pins f^7 f^7 , against which the ends of the lazy-tongs levers rest when in their open and closed positions, respectively. The end of each lever that enters the foot-posts is provided with a cross-pin f^9 to prevent its pulling out of the post.

Brackets d are pendent from the pivots of the bars of the lazy-tongs and support the slats D, upon which the spring-mattress is supported. Each of these brackets comprises an arm extending from the pivot-point d' of each pair of levers of the lazy-tongs. Two arms extend from each pivot-pin. One of said arms is loosely mounted on the pin, but rigidly connected to one of the tongs levers, while the other is rigidly mounted on the pivot-pin, which is in turn rigidly connected to the other of said pair of lazy-tongs levers. The result of this construction is that as the levers of the tongs open and close each pair of brackets does the same. Each bracket always follows and occupies the same relative position to the lever to which it is attached. By providing two brackets to each pivot of the lazy-tongs the slats can be placed closer together than would otherwise be the case. The brackets by moving with the levers do not interfere in any manner with the folding of the bedstead. By forming the end bars of the series composing the lazy-tongs longer than the remainder of said bars a greater amount of leverage and consequential strength is secured at the ends of the sides, where it is most desired.

In Fig. 5 I have shown a modified form of adjustment for the ends of the rack-bars, consisting of sliding blocks P, mounted in said hollow head-posts and communicating with the ends of the tongs by thumb-bolts p , passing through vertical slots in the walls of the posts. Said thumb-bolts are tightened against washers p^2 , interposed between the heads of said bolts and the posts and the ends of the tongs thus held in position.

It will be observed from the above that the bed can be adjusted to any length desired at will and locked in such adjusted position by means of the rack-bars or the devices shown in Fig. 5. The folding spring-mattress shown in Fig. 12 consists of two half-mattresses J J of any well-known construction. These are hinged together by suitable hinges j , and one of said sections is provided with a handle j' , by means of which the mattress can be lifted at the middle, the two halves naturally falling together into a compact bundle, which can be stored away into any convenient corner. The head and foot portions of the bedstead are provided with pivoted catches j^2 , that are

adapted to engage suitable projecting studs j^3 on the sides of the mattress.

In the construction shown in Figs. 7 and 8 I have applied my invention to an ornamented form of folding bed, representing a wood mantel. The head portion in this case is provided with a hinged mantel-top K and hinged front K', and with side ornamental panels k , k' , and k^2 . The foot portion is provided with a panel k^3 . When the bed is closed, as shown in Fig. 8, all of the panels fit snugly together, forming a very ornamental panel. When the bed is to be used, it is first extended, the panel k^2 removed, and the top K and front K' turned up into the position shown in Fig. 7. In all other respects this form of my invention is the same as that illustrated in Figs. 1 to 5, inclusive, suitable slots being cut in the wooden end posts to accommodate the rack-bars.

Hooks M are provided on the head and foot portions of the bedstead and are adapted when the bed is extended to engage suitable eyes or studs m on the mattress-supporting slats, and thus hold the bed together.

In Figs. 9, 10, and 11 I have shown still another form of my invention, comprising an extensible bedstead adapted to be folded into another form of ornamental mantel. This form of my invention consists of head and foot portions N N' and hinged top, front, and side pieces n , n' , and n^2 , respectively. The top n is hinged to the top of the head of the bedstead and the front n' to the free edge of the top. The sides n^2 are hinged to the respective ends of the top and are each provided on each side with a headed projection n^3 . These headed projections fit into T-shaped or dovetail grooves n^4 n^5 , formed in the head portion and the front n' , respectively, and thus when the bed is closed all of said parts are held firmly together. A block D' is secured to the inner side of the front n' and fits into a suitable recess in the foot portion when the bed is closed, whereby the head and foot portions are caused to register one with the other. When the bed is opened, the top, front, and sides fit snugly against the wall, lapping over each other, as shown in dotted lines in the drawings.

With any of my forms of bedstead the bed-clothes and mattress can be stored away inside, between the foot and head portions, in a very convenient manner.

My bedstead is also very desirable in form and construction, and when closed occupies very little space and can be stored away in any convenient corner.

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

1. In an extension-bedstead, the combination of head and foot portions, sides formed of lazy-tongs; said head and foot portions being provided with vertical slots for guiding and bracing the ends of the lazy-tongs and permitting of their adjustment up and down

to lengthen or shorten the sides of the bed to different degrees, and means for locking the ends of the lazy-tongs at different points in said slots, substantially as described.

5 2. In an extension-bedstead, the combination of head and foot portions, sides formed of lazy-tongs, and rack-bars in the head and foot portions adapted to be engaged by the ends of the lazy-tongs whereby the length of
10 the sides may be adjusted at will and said sides locked in their adjusted positions, substantially as described.

3. In an extension-bedstead, the combination of head and foot portions, sides formed

of lazy-tongs, rack-bars on the head and foot 15 portions adapted to be engaged by the ends of the lazy-tongs whereby the length of the bed may be adjusted, and means for throwing said rack-bars out of engagement with the said lazy-tongs ends, whereby said lazy- 20 tongs may be extended more or less as desired, substantially as described.

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

ALBERT BUTZER.

Witnesses:

C. A. GRINNER,
RICHARD VETTE.