

(No Model.)

2 Sheets—Sheet 1.

G. A. NELSON.

FOLDING BED.

No. 361,178.

Patented Apr. 12, 1887.

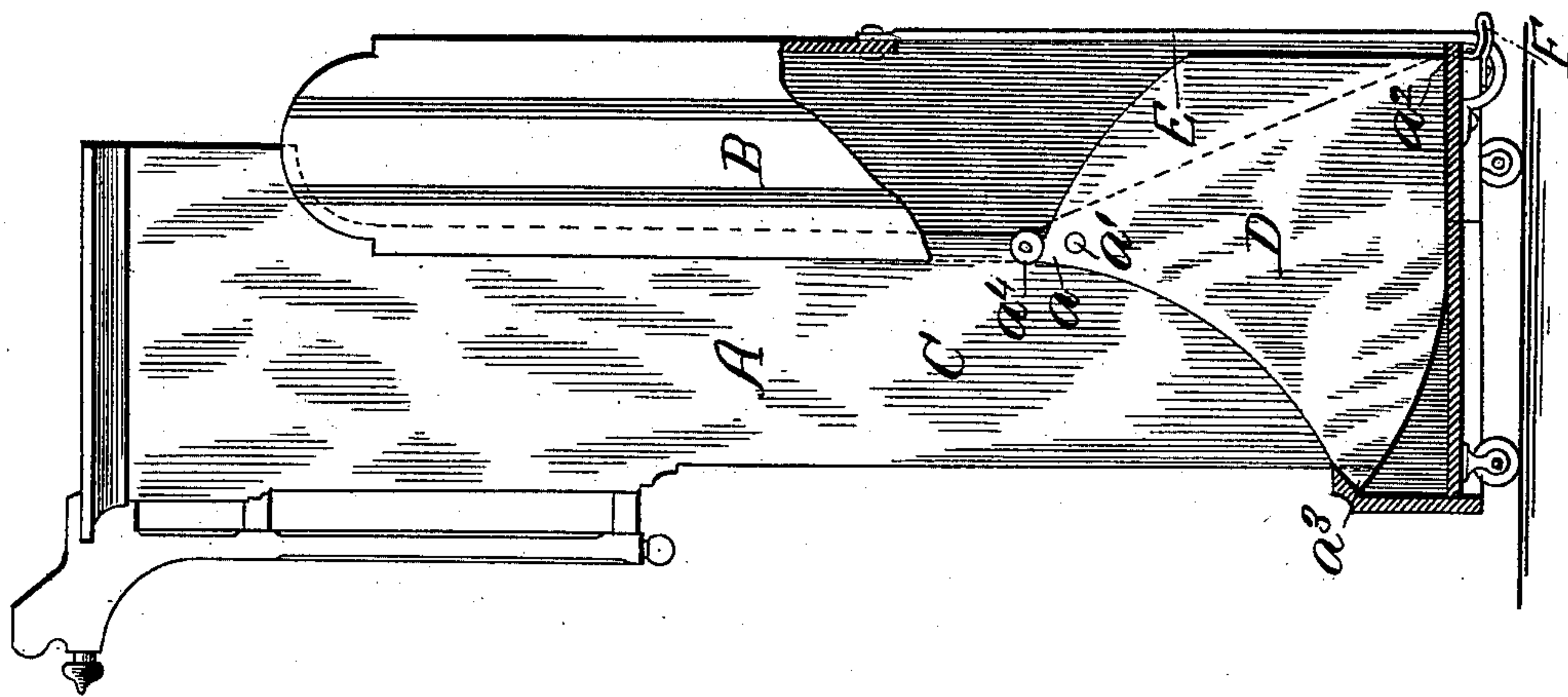


Fig. 1.

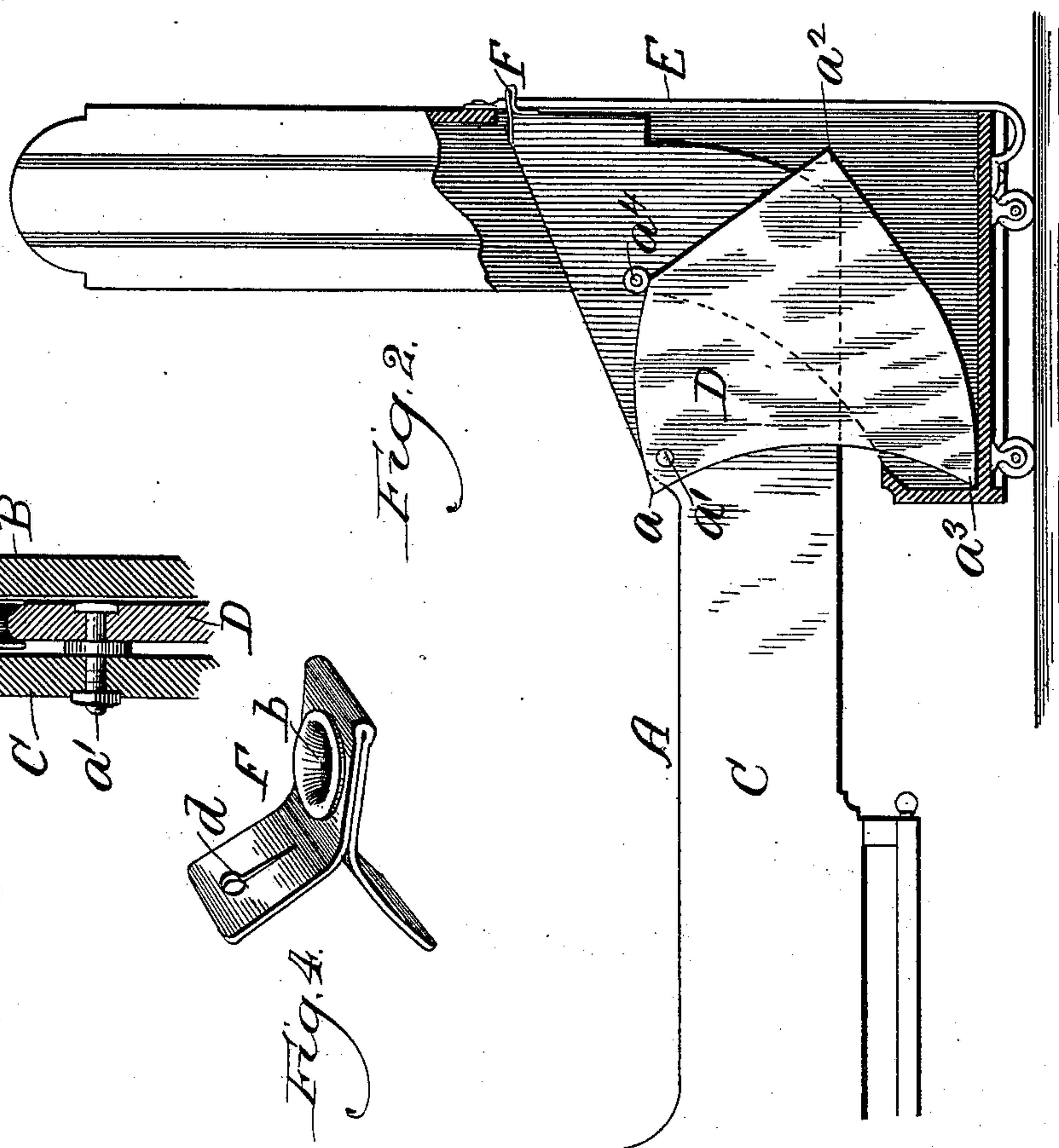


Fig. 2.

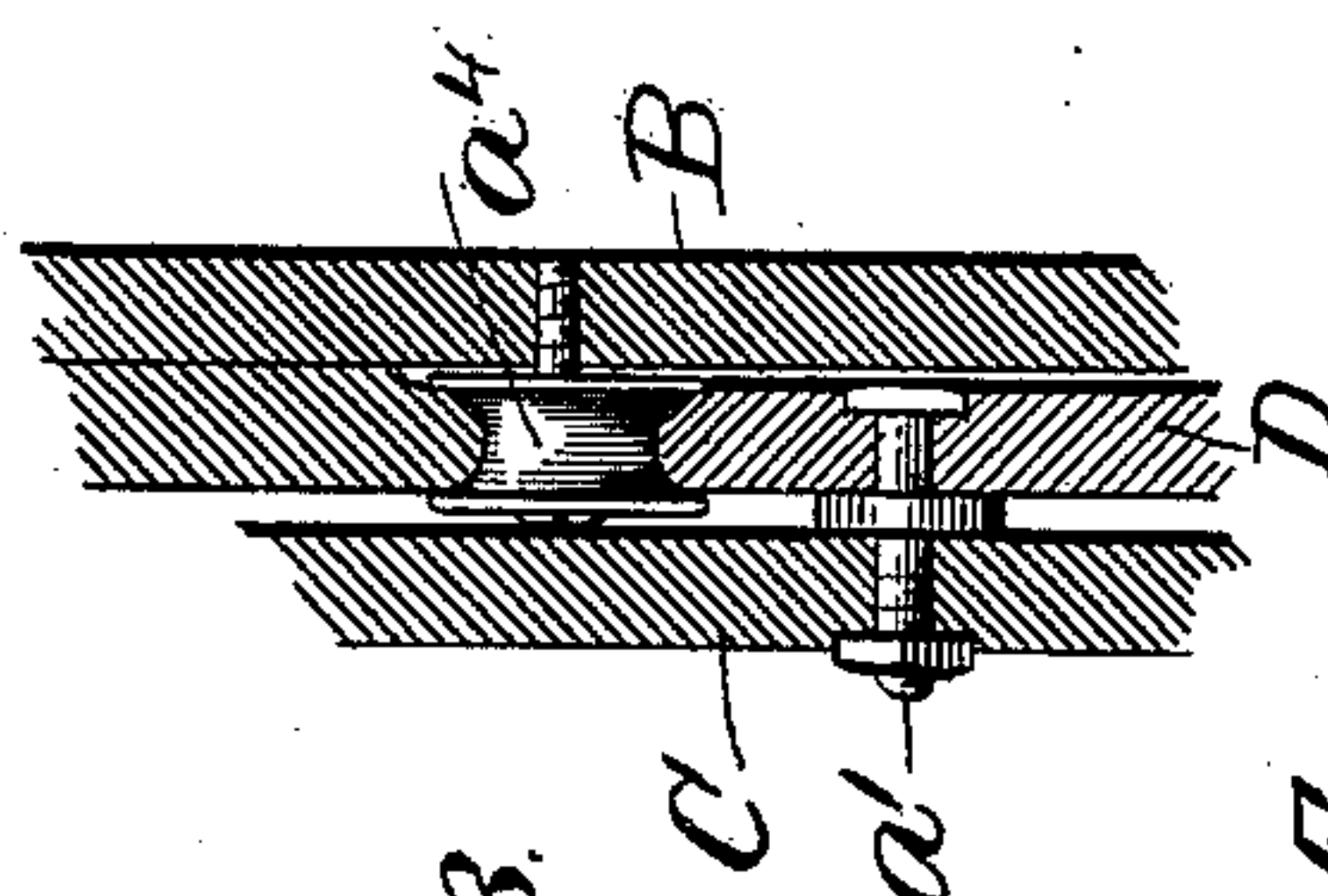


Fig. 3.

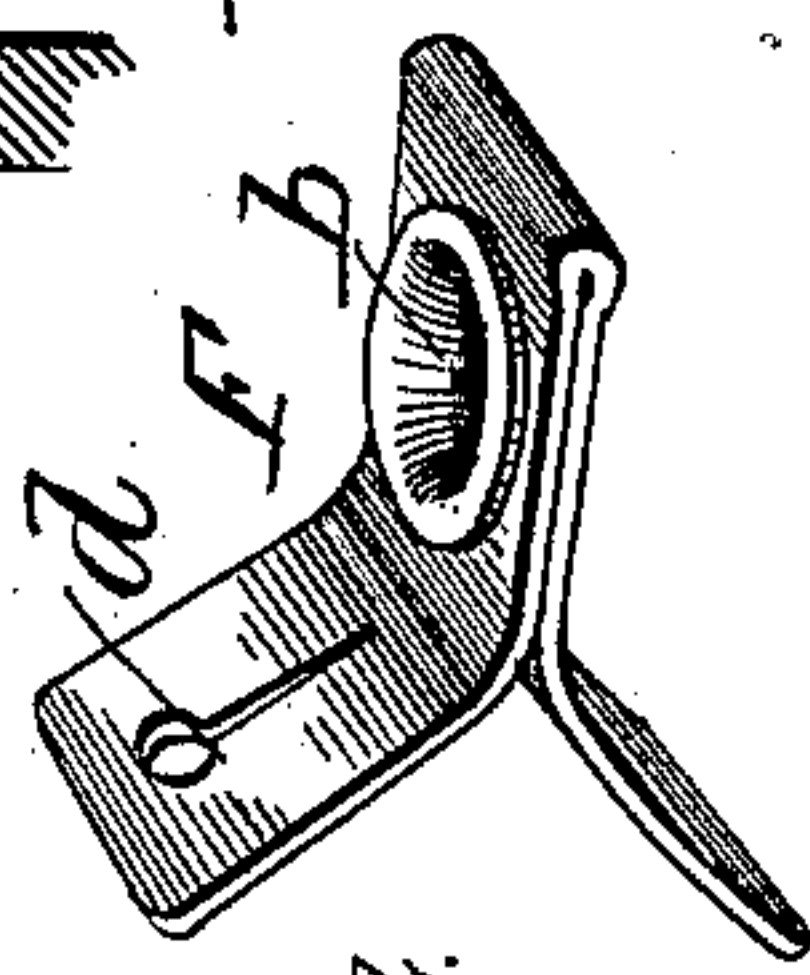


Fig. 4.

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L. W. Freeman.

Inventor:
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By L. B. Coupland & Co
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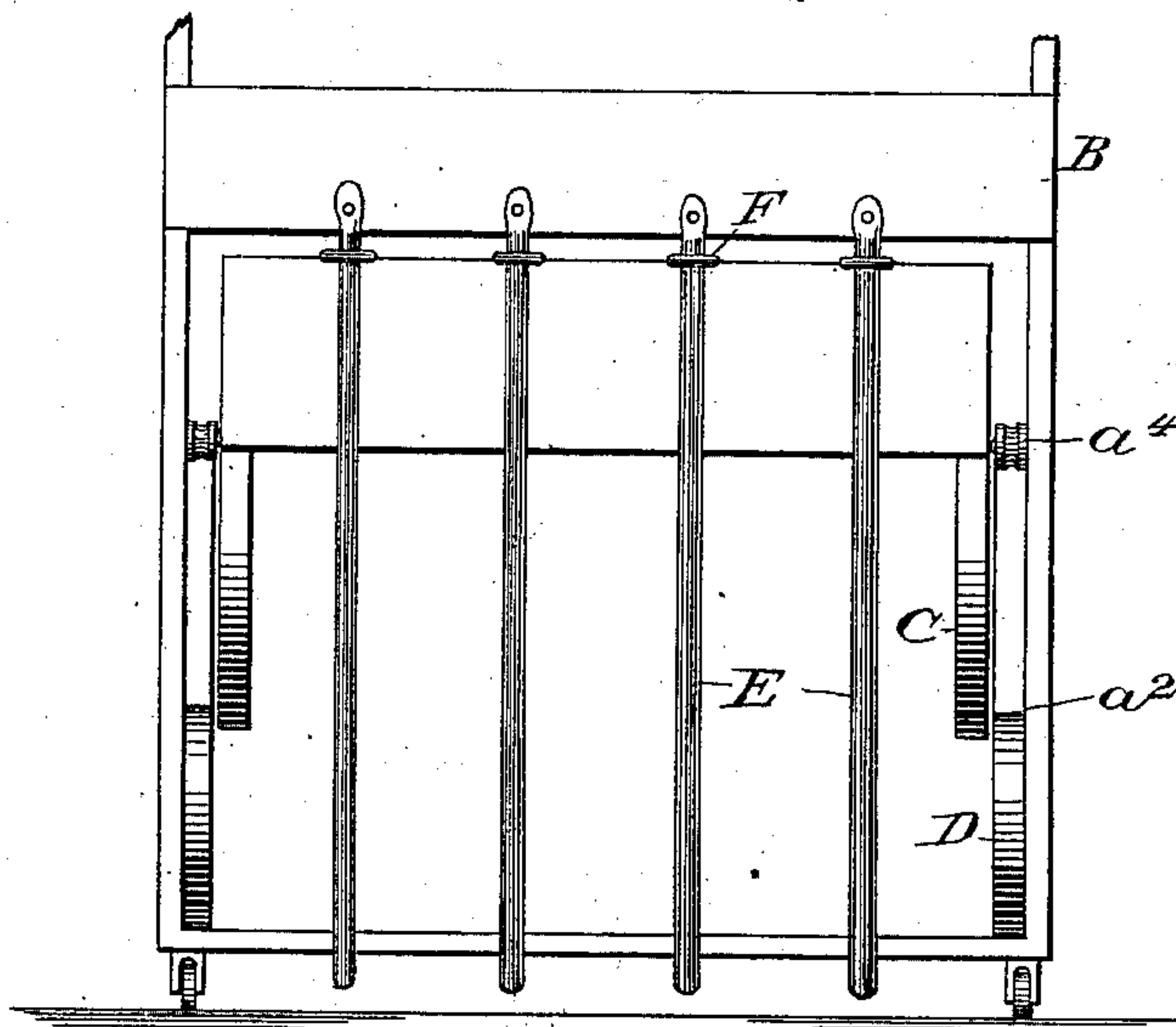
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Fig. 5.



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UNITED STATES PATENT OFFICE.

GEORGE A. NELSON, OF CHICAGO, ILLINOIS.

FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 361,178, dated April 12, 1887.

Application filed August 17, 1886. Serial No. 211,115. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. NELSON, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful
5 Improvements in Folding Beds, of which the following is a full, clear, and exact description, that will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.
10

This invention relates to improvements in that class of folding beds in which the bed proper is folded up the full length; and the same consists of certain features for connecting the bed with the wardrobe or back case,
15 whereby the former may be readily converted from one position to the other, as will be hereinafter set forth in detail, and pointed out in the claims.

20 Figure 1 is a side elevation showing the bed in an upright or folded position. Fig. 2 shows the bed in a horizontal position ready for use, parts being broken away. Fig. 3 is a section from the joining or overlapping edges of the side rails or frame of the bed and the back case, showing the relative position of the cam-rocker, attaching pivot-bolt, and a friction-roller. Fig. 4 is a view in perspective of a flexible device forming a detachable connection
25 between the head of the bed proper and the rear side of the inclosing wardrobe-case. Fig. 5 is a rear elevation.

In the drawings, A represents the bed proper, and B the wardrobe or back case.

35 D is a cam piece or rocker located between the head part of the side rails, C, and the inside of the case, which provides a support and movement for the head of the bed proper with reference to the back case. This cam-rocker is of the irregular form shown and readily conforms to the change required in adjusting or converting the bed from one position to the opposite. The upper front corner, a , of the cam-rocker is attached to the side rail of the
40 bed by means of the pivot-bolt a' , the lower part or rocking-surface of the cam-piece resting upon the inside bottom of the back case. When the bed is brought to a vertical position, the heel a^2 of the rocker comes to a bearing and rests in the lower back corner of the
45 case, as shown in Fig. 1. In the opposite or

horizontal position (see Fig. 2) the toe a^3 rests in the lower front corner, the bearing-surface of the rocker-cam being gradually changed from one extreme point to the other as the bed
55 is raised or lowered.

The grooved friction-roller a^4 is set in the front edge of the case B, the top part of the rocker-cam moving in the arc of a circle, being adapted to engage with the under side of said
60 roller. By this means the parts are retained in their proper place relative to each other and a free movement insured in converting the bed from one position to the other.

It will of course be understood that the
65 rocker-cam and friction-roller are in duplicate and arranged on both sides of the bed in the same manner as illustrated in the drawings.

The rear lower open side of the back case is spanned by a number of vertical rods, E,
70 two or more, the ends of which are rigidly secured, top and bottom, to said case.

F is a flexible riding or guiding hinge, which may be composed of leather or other suitable material, and is provided in one end with the
75 circular aperture b , (see Fig. 4,) which adapts the same to engage with the rod or rods E. The opposite double or split end of the riding hinge or connection F is provided with the elongated aperture d , which enables the two
80 parts of the split end to be buttoned onto the back or top edge of the head-board, connecting the side rails, as shown in Fig. 2, some suitable screw or similar holding device being inserted in the head-board to receive the split
85 ends of the hinge. A number of these hinges are used, corresponding in number to the rods E, and on which the same have a vertical movement, riding up and down on the same as the position of the bed is changed, being at the
90 upper end of the rods when the bed is horizontal and at the lower end when the bed is folded vertically. This arrangement provides a slightly-elastic connection between the head of the bed proper and the back or wardrobe
95 case, permitting of a free movement and at the same time holding the parts in close relation without binding or cramping.

The bed-frame may be entirely removed from the back case by simply detaching the but-
100 toned ends of the hinge or hinges E.

It will be observed that the cam rocker or

rockers provide a large and strong bearing for the movement and support of the bed, and enable the same to be adjusted with ease and facility.

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

1. In a folding bed, the combination, with the bed proper, of the cam-rockers, as described, the back case, and a friction roller or rollers journaled in said back case and so arranged as to have a rolling contact with the upper part of said rockers, substantially as and for the purpose set forth.

15 2. In a folding bed, the combination, with the bed-frame proper and the back or wardrobe case, of a cam rocker or rockers provided

with the heel a^2 and the toe-point a^3 , and pivoted at one point to said bed-frame and adapted to have a rocking movement with relation to said case, substantially as set forth.

3. In a folding bed, the combination, with the back case, of the rod or rods E, the riding-hinge F, loosely engaging with said rods and having a vertical adjustment thereon, and the bed-frame provided with the head end, one end of said riding-hinge being detachably secured to said head end, as set forth, and for the purpose specified.

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Witnesses:

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