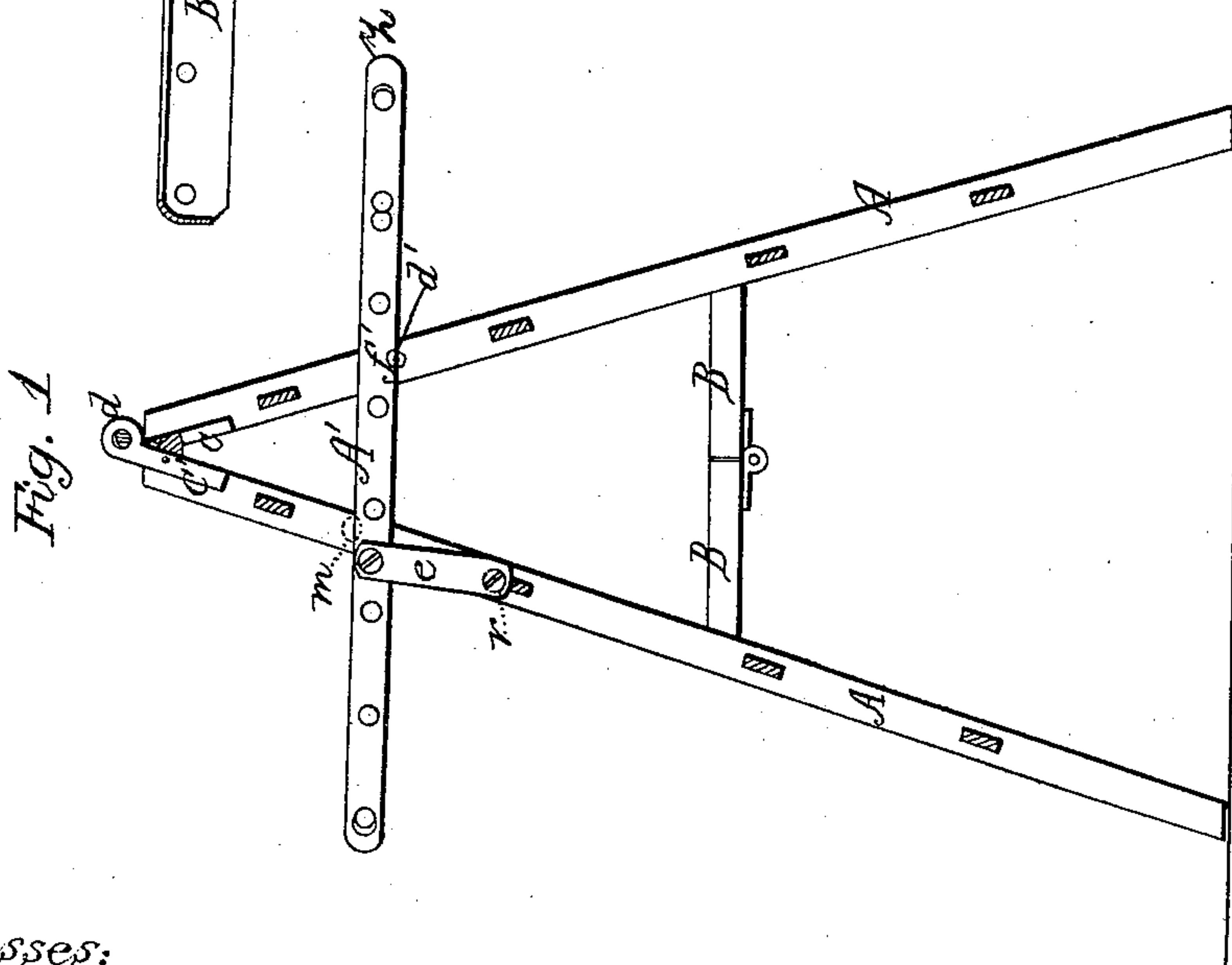
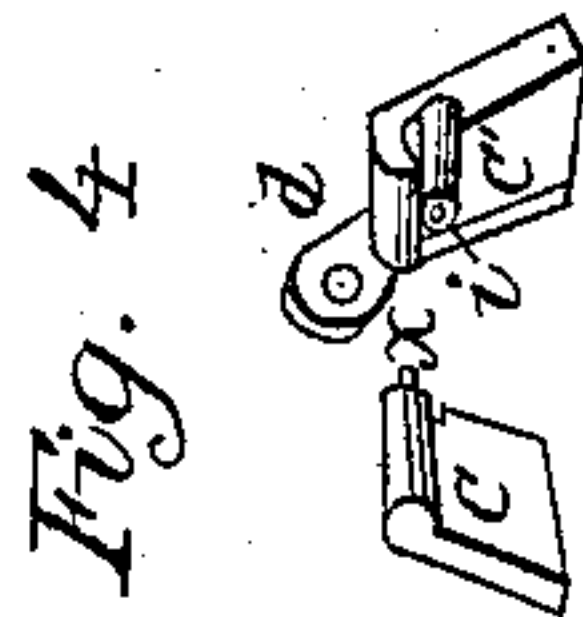
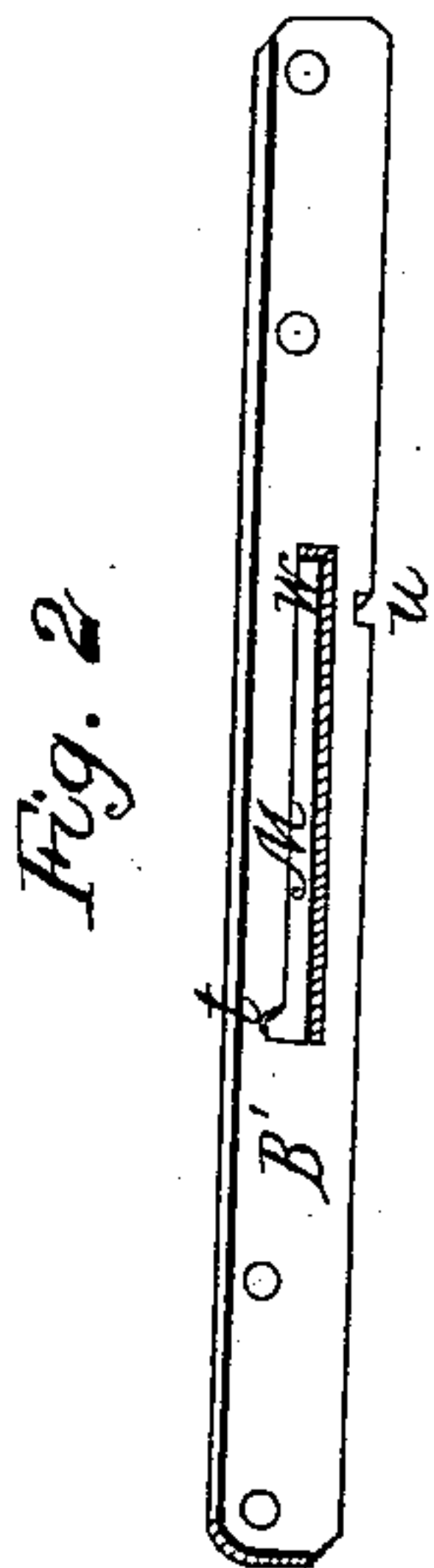
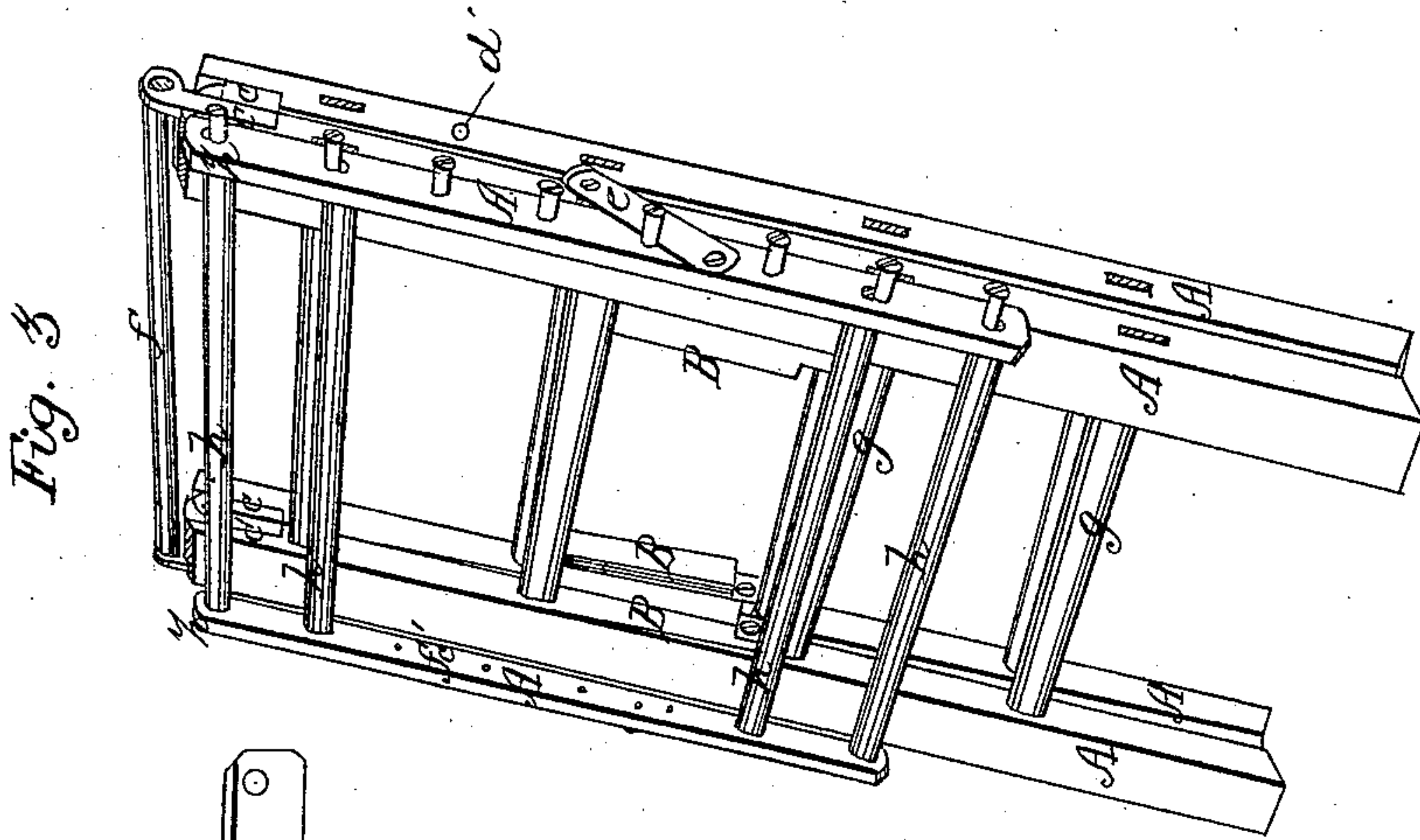


I. A. Coons,
Clothes Frame,

Nº 67, 270,

Patented July 30, 1867.



Witnesses:
H. P. Peck
A. S. Peck

Inventor:
I. A. Coons

United States Patent Office.

ISRAEL A. COONS, OF MIDDLETOWN, OHIO.

Letters Patent No. 67,270, dated July 30, 1867.

IMPROVED CLOTHES-DRIER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ISRAEL A. COONS, of Middletown, in Butler county, in the State of Ohio, have invented a new and useful improvement in Clothes-Racks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 represents an edge view of my clothes-rack as standing expanded for use.

Figure 2 represents a modified construction of one of the adjustable arms.

Figure 3 represents the entire structure folded together; and

Figure 4 represents the fastenings by which the ladders are connected, and the support for the upper cross-bar.

My invention consists in the construction and arrangement of the adjustable folding-frame and the fastenings, whereby greater economy in the manufacture, as well as compactness in folding the rack for transportation, is attained, as will be herein fully set forth.

In the accompanying drawings, which are made a part of this specification, A A denote the four uprights of the ladders, which are connected at their top ends by the fastenings represented in fig. 4; and also by the folding hinged arms B B, as represented in the figs. 1 and 3 of the drawings. These arms B B serve the double purpose of retaining the ladders from being opened or spread apart beyond a fixed extent, and also from being accidentally overturned by moving their feet inwardly. The top fastenings consist of the castings C and C', the latter having a projecting stud, *d*, which is provided with a suitable hole to receive the ends of the top cross-bar *f*. A pivot, *x*, is cast on the piece C, which will enter the small hole in the ear *z*, connected or cast with the piece C', when the shoulder of the piece C is in its place under the curved flange *n* of the casting C'. The ladders A A are constructed with any desired number of cross-bars *g g*, upon which clothes may be hung for drying. A' B' denote two forms of construction for the side bars or rails of the adjustable folding frame. This frame is provided with four cross-bars *h h*, and the frame is connected to the two rails of one of the ladders by the flat pivoted links *e e*, as represented in the drawings. And when it is desired to fold the rack together, that end of the frame A' marked Z, and which is supported in its notch *f'* upon pin *d'*, will be raised up and turned in the arc of a circle above the cross-bar *f*, when the links *e e* will reverse their positions by turning upon their lower pivots *r*; and together with the adjustable frame will be folded upon the two uprights A A, to which they are connected, as seen in fig. 3. And then by raising the hinged ends of the arms B B, the uprights A A, with the entire ladders of which they form a part, may also be folded in the most compact manner, as represented. Instead of using the rails A' of the adjustable frames, and the connecting-links *e e*, these frames may be made with rails, represented in fig. 2, which have slots M and notches *t u* formed to connect and hold the adjustable frames in proper relation to the ladders. To substitute the pieces B' for the pieces A', in forming the adjustable frames, a pin, *m*, represented in dotted lines in fig. 1, will be inserted, which will occupy the notch *t* of slot M, while the notch *u* will rest upon the pin *d'*; and such will be the position of the adjustable frame, when the rack is expanded for use.

The operation of folding the rack together, when constructed by the use of rails B', will be as follows: That end of the adjustable frame which will rest upon the pins *d'* will be elevated and turned upon pin *m* so as to pass over the top cross-bar *f*, when the notch *t* will be detached from pin *m*, and the adjustable frame will slide downwards until the end of the slot M, marked W, reaches pin *m*, when the frame will rest against the ladder, to which it is connected by means of slot M and pin *m*. The notch *u* and pin *d'* may be made of corresponding angular form, and the notch *t* may be of sufficient depth so as to serve not only as supports for the adjustable frame, but also as the means of keeping the two ladders from being accidentally moved towards each other, or spread apart at their feet, when in use. And this capability would render the use of the hinged arms B unnecessary. Moreover, this modification, in constructing the adjustable frame, (which is capable of being compactly folded upon the ladders for transportation and when not in actual use,) greatly economizes the cost of the rack, as it dispenses with the use of the links, screws, and hinges.

The castings represented in fig. 4, by means of which the upper ends of the ladders are connected, are not

indispensable to the structure, as a means of connection merely, but they serve the purpose also of supporting an additional cross-bar, *f*, which gives finish and comeliness to the structure.

In raising the adjustable frame constructed with the slotted rail *B'*, it will be seen that when the cross-bar, at the lower end, strikes against the two uprights *A A* of the ladder, the notch *t* will be detached from pin *m*, when the frame will descend and occupy the position represented in fig. 3, as above described. It is apparent that my improved adjustable frame, in either of its modified constructions, is capable of successful operation and use when applied to a stand differently constructed and connected from that represented in the drawings.

Having fully described my improvement in clothes-racks, what I claim therein, and desire to secure by Letters Patent, is—

1. The adjustable folding frame *A' B'*, connected with the stand on uprights *A A* by means of the links *e e* or slots *M*, when constructed, arranged, and operating in the manner and for the purpose described.

2. The fastenings represented in fig. 4, in combination with uprights *A A*, arms *B B*, or their equivalents, folding frame *A' B'*, when the several parts are arranged, combined, and operate together substantially as and for the purpose described.

In testimony whereof I have hereto set my hand this 19th day of April, 1867.

I. A. COONS.

Witnesses:

H. P. K. PECK,

A. L. PECK.