

No. 698,130.

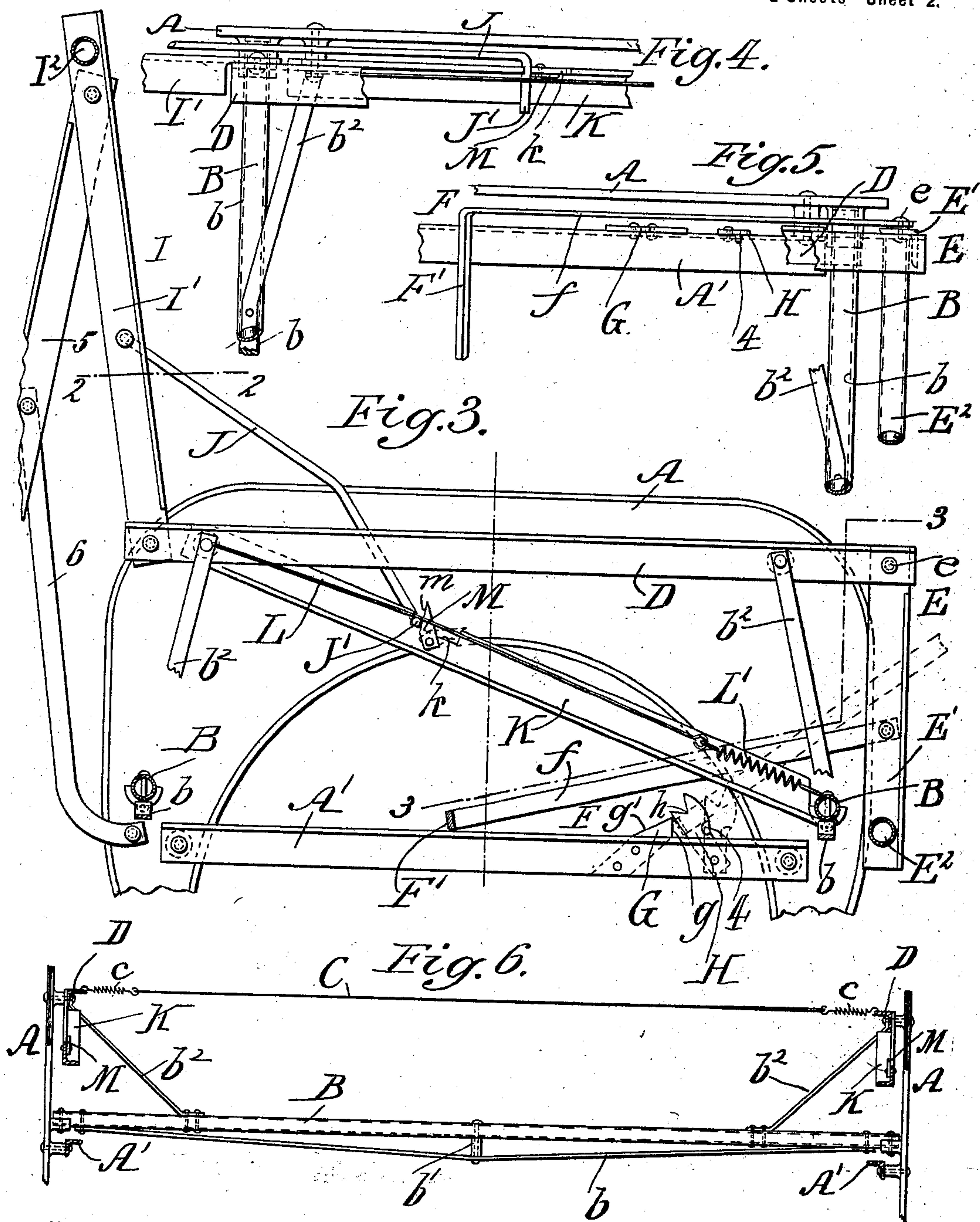
Patented Apr. 22, 1902.

R. C. ODELL.
SOFA BEDSTEAD.

(Application filed Feb. 28, 1901.)

(No Model.)

2 Sheets—Sheet 2.



WITNESSES:

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SOFA-BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 698,130, dated April 22, 1902.

Application filed February 28, 1901. Serial No. 49,242. (No model.)

To all whom it may concern:

Be it known that I, ROBERT C. ODELL, a citizen of the United States, and a resident of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Sofa-Bedsteads, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar characters of reference indicate corresponding parts.

This invention relates to sofa-bedsteads; and the object thereof is to provide a novel structure of this character which comprises few and simple parts so constructed and assembled that the device can be readily converted into its two respective forms by the expenditure of but little force, and which is durable, inexpensive, and continuously operative.

The invention will be hereinafter fully described, and specifically set forth in the annexed claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of my improved article of furniture, showing the same with its parts adjusted in position for use as a bed; Fig. 2, a cross-sectional elevation taken on the line 1 1 of Fig. 1; Fig. 3, a similar view, on an enlarged scale, showing the device in position for use as a sofa or couch; Fig. 4, a detail sectional plan view taken on the line 2 2 of Fig. 3; Fig. 5, a similar view taken on the line 3 3 of Fig. 3; Fig. 6, a longitudinal sectional elevation taken on the line 4 4 of Fig. 1.

In the practice of my invention I employ, primarily, two upright end sections A, which are composed of iron or other suitable material, are preferably mounted upon casters, as 1, and which may be of any suitable design or contour. These two said uprights A are connected by the tubular side pieces B, which are respectively braced by means of a truss-rod *b*, a strut *b'*, and braces *b*². Each upright end A is further supplied with a securely-attached angle-iron cross-piece A', whereby a strong structure is provided.

Stretched between the uprights A is a suitable wire spring C. This spring, in the construction illustrated by Figs. 1 to 6 of the

drawings, is secured by means of spiral springs *c* to angle-iron cross-pieces D, which are riveted to and offset from the inner upper portions of the end uprights A.

Hinged to the cross-pieces D by means of pivots *e* is a swinging frame E, which comprises angle-iron end pieces E' and longitudinal, preferably tubular, side pieces E². A wire spring C' is stretched across this said swinging frame to assist in supporting a mattress, as 3. (Illustrated by dotted lines, Fig. 2 of the drawings.)

Pivoted to the ends of the frame E by means of its transverse arms *f* is a depending U-shaped metallic support F, whose longitudinal portion F' normally rests by gravity upon the cross-pieces A' of the uprights A. This support engages at its longitudinal part F' against the vertical or approximately vertical edges *g* of stationary stops G when the frame E is in horizontal position and the device is used as a bed, as illustrated by Fig. 2 of the drawings. The said stop G is also provided with an inclined upper surface *g'*, over which the support F is adapted to ride, as will be hereinafter described.

Pivoted to each cross-piece A' is a dog H, their swinging motion being limited by means of the stops G and studs 4. These dogs are respectively supplied with a mouth *h* for engagement with the support F when the device is being operated.

Hinged to the cross-pieces D, opposite the frame E, is swinging back I, which comprises the end pieces I' and the tubular side pieces I². This back frame has a wire spring C² stretched between its two end pieces to be used alternately as the sofa-back and as a side extension of the bed. Said swinging back I is provided with supporting-arms J, which are pivoted at their outer ends to the end pieces I' of the back frame I and which have longitudinal portions J', which extend inwardly and rest upon inclined rails K, which are secured to the end uprights A, and contact with said rails is maintained by means of the wire L and the spiral spring L'. If desired, the arms J may be connected by a horizontal rod J², (shown by dotted lines J², Fig. 1 of the drawings.) To limit backward movement of the back I when the de-

vice is used as a sofa, each rail K is provided with a recess k for engagement with the parts J' of the arms J. As a means for automatically disengaging the supporting-arms from the said recesses swinging pawls M are pivoted to the rails K. These pawls are respectively supplied with an inclined surface m for the parts J' to ride over, as will be hereinafter described. The back I is further supplied with depending folding legs 5 and folding braces 6, whereby a strong structure is provided.

In the operation and use of the invention, when it is desired to convert the structure from a bed to a sofa the front frame E is lifted upwardly in direction of the arrow a , Fig. 2 of the drawings, until the longitudinal part F' of the support F engages within the mouths h of the dogs H. Then a downward throw of the frame E carries the dogs H into position illustrated by full lines, Fig. 3, of the drawings, and allows the support F to ride over the inclined surfaces g' of the stops G onto the cross-pieces A', whereby the frame E is allowed to depend in a vertical direction and the mattress bends over the same to form an upholstered front for the seat. To place the back framework I in position for use as a seat-back, it is simply necessary to lift the same until the longitudinal parts J' of the supporting-arms J engage within the recesses k of the rails K. To change the structure back into a bed, the back is pushed in a forward direction until the pawls M are in position illustrated by dotted lines, Fig. 3, of the drawings. Then a little further movement forward causes the parts J' to ride over the inclined surfaces of said pawls and contact with the upper surfaces of the rails K. Then backward movement of the frame I carries the pawls into position illustrated in Fig. 2 of the drawings and allows the frame I to assume a horizontal position. The front frame E is simply moved upwardly until the part F' of said frame engages against the edges g of the stops G, and this operation automatically throws the dogs H into position illustrated by dotted

lines, Fig. 3, of the drawings, the movement of said dogs being limited by means of the studs 4.

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

1. In a sofa-bedstead, the combination, with a main frame embodying side bars and end uprights, and a pivoted extension attached thereto, of an approximately U-shaped support swinging from said extension and embodying a horizontal part and extended arms, and a rail secured to each end upright and having respectively a stop for engaging the said support and a pawl for automatically throwing the support, substantially as shown and described.

2. In a sofa-bedstead, the combination, with a main frame embodying side bars and end uprights, and a pivoted extension attached thereto, of a U-shaped support pivoted to the said extension and having a longitudinal part, and a rail having a stop for engaging the support and a pawl for automatically throwing the support, and a wire rod and spring for maintaining frictional contact with the parts to keep them in position, and folding legs, substantially as shown and described.

3. In a sofa-bedstead, the combination, with a main frame embodying side bars and end uprights, and a pivoted extension attached thereto, of a U-shaped support pivoted to the said extension and having a longitudinal part, and a rail with a recess therein for engaging the support and a pawl for automatically throwing the support, and a wire rod and spring for maintaining frictional contact with the parts to keep them in position, and folding legs, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two witnesses.

ROBERT C. ODELL.

Witnesses:

FRANK J. DEEMER,
BELLE PATERSON.