

No. 713,260.

Patented Nov. 11, 1902.

T. G. WEYER.
SOFA BED.

(Application filed Jan. 29, 1902.)

(No Model.)

Fig. 1.

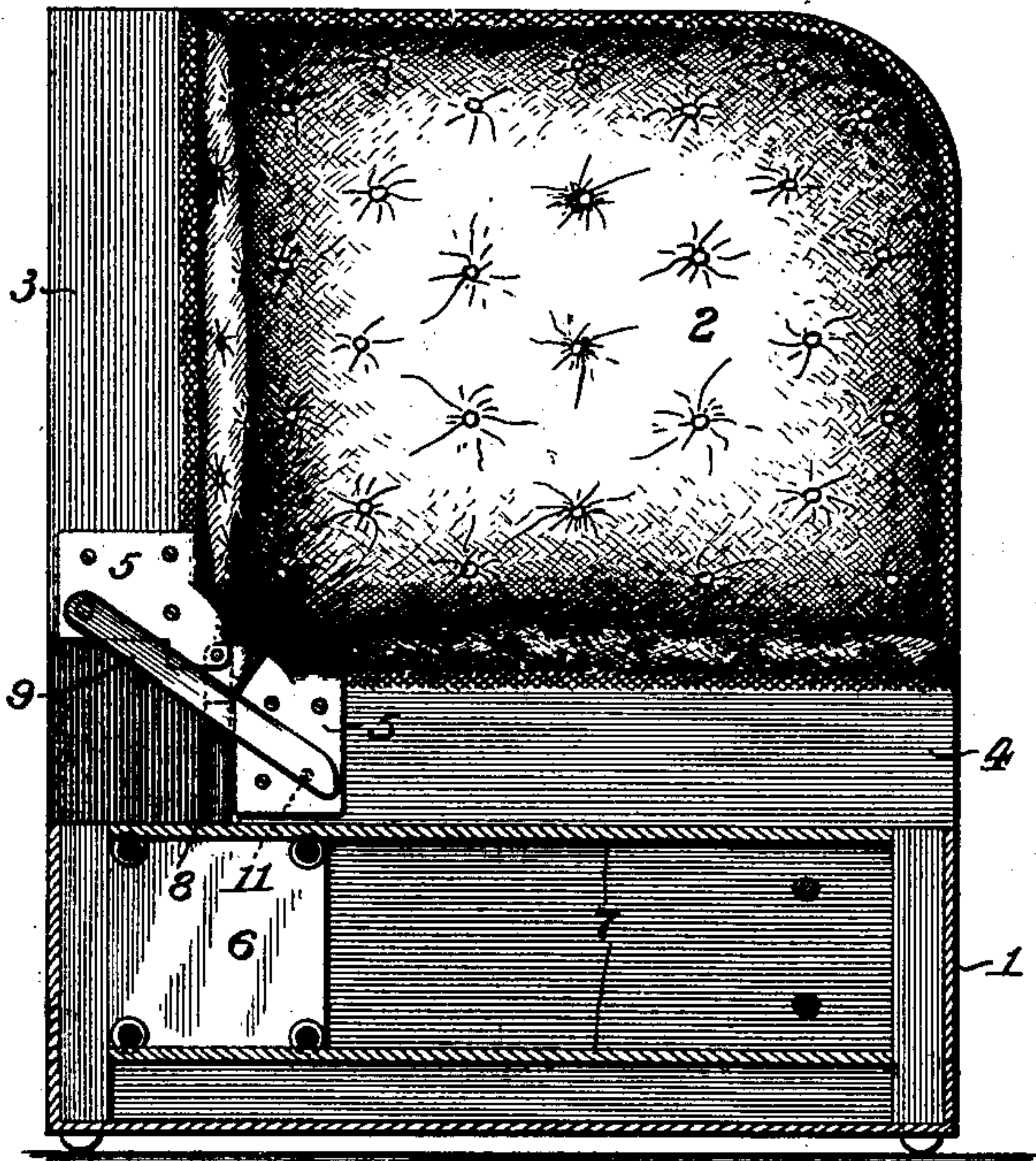


Fig. 4.

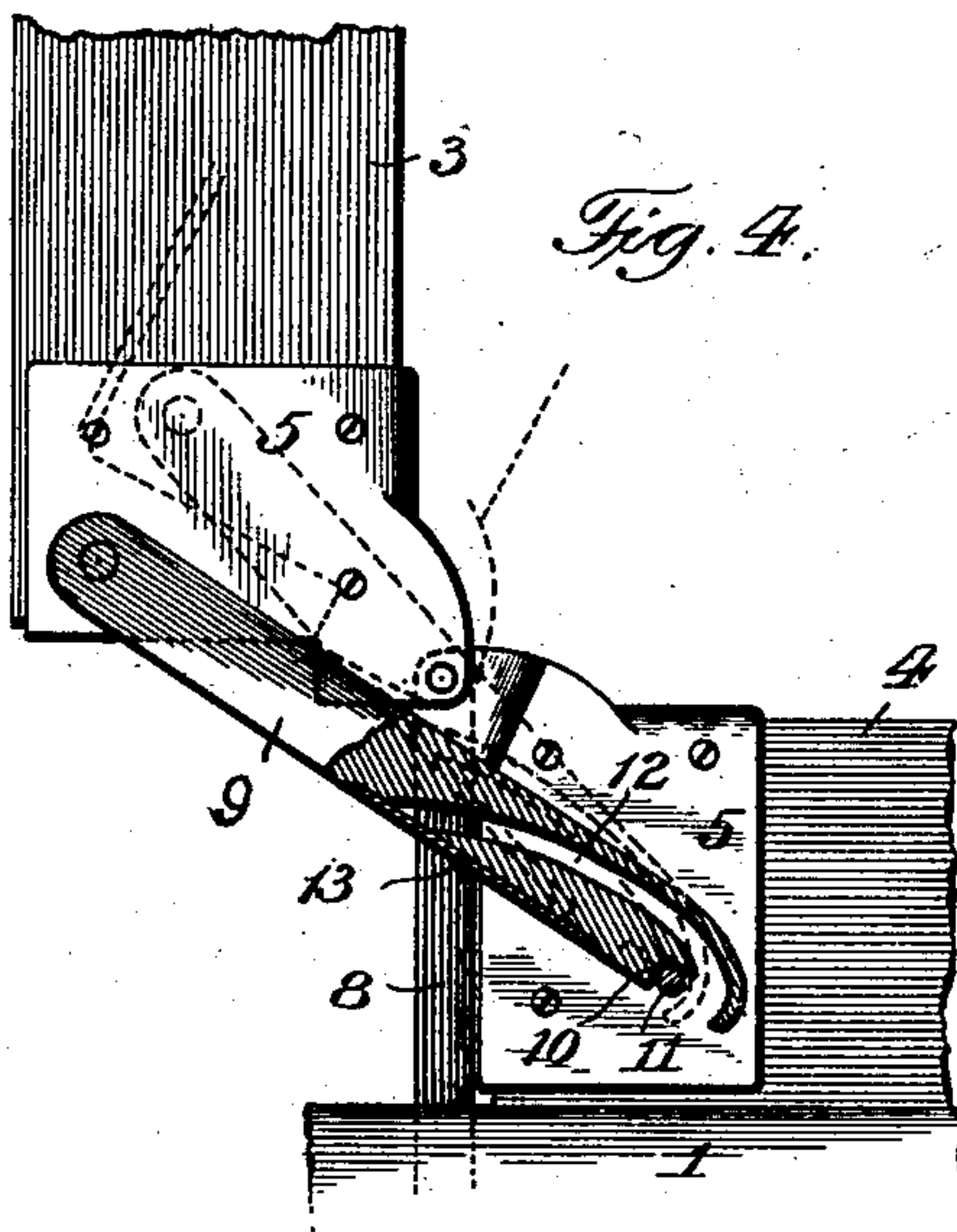


Fig. 5.

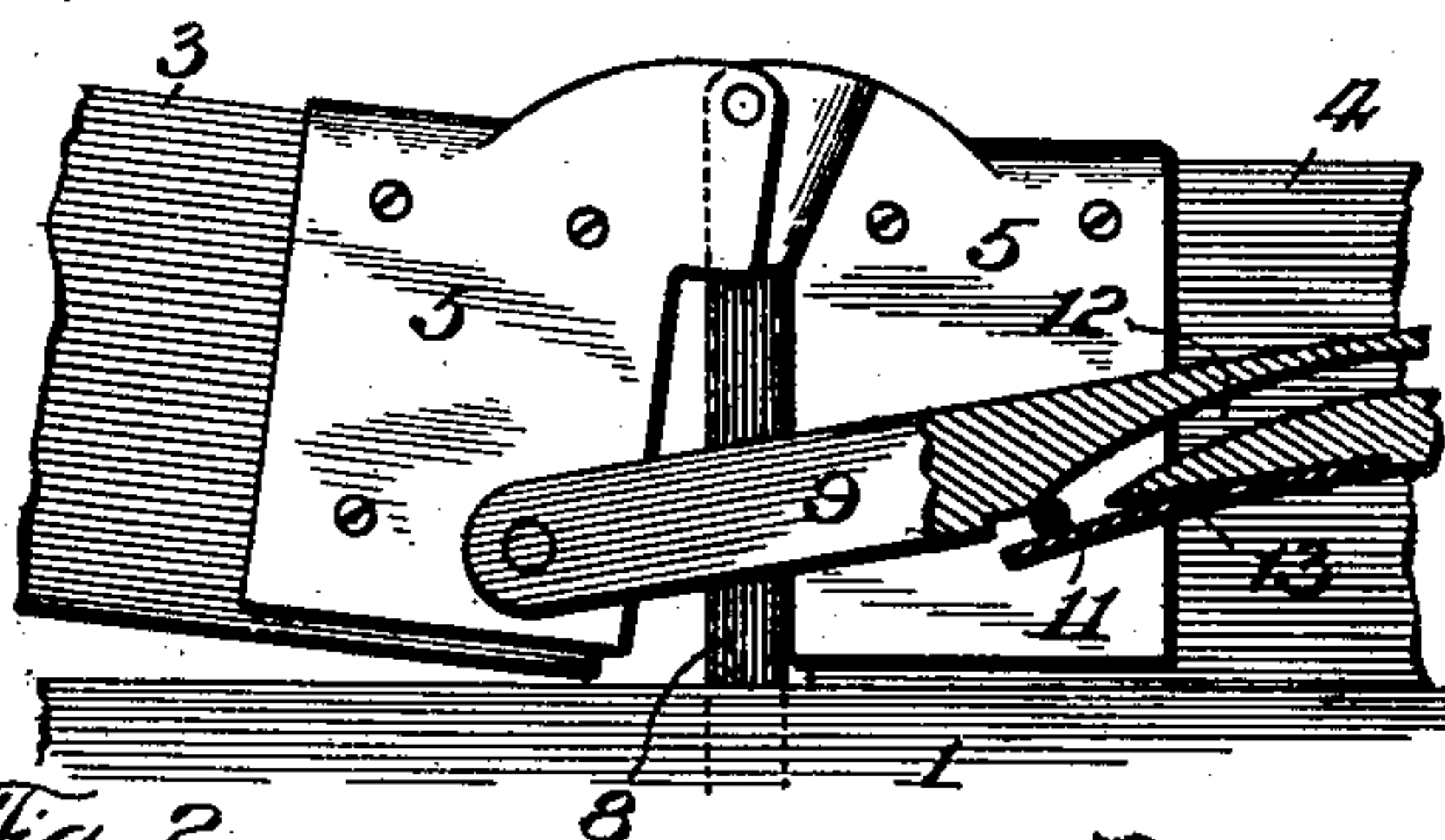


Fig. 2.

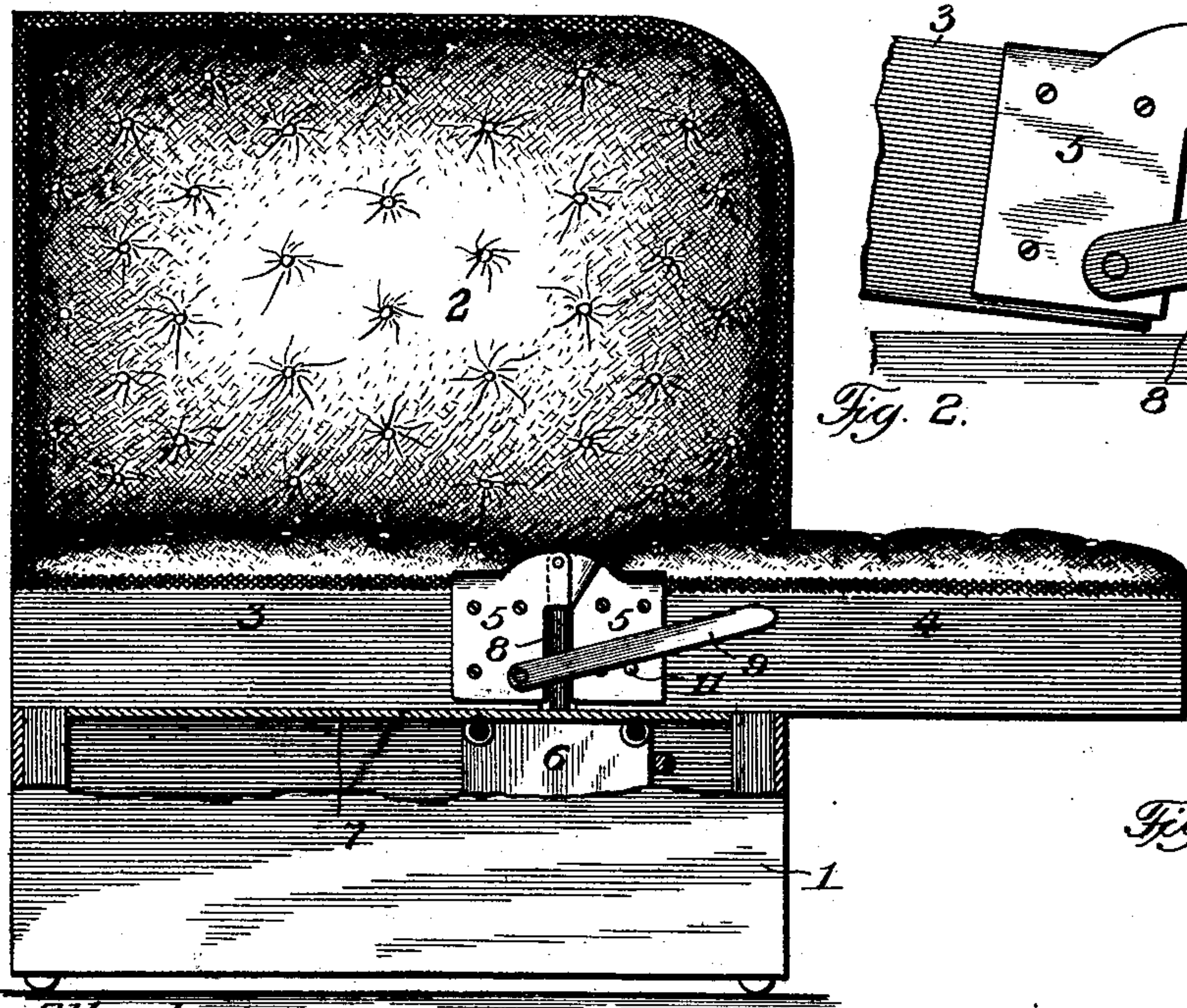
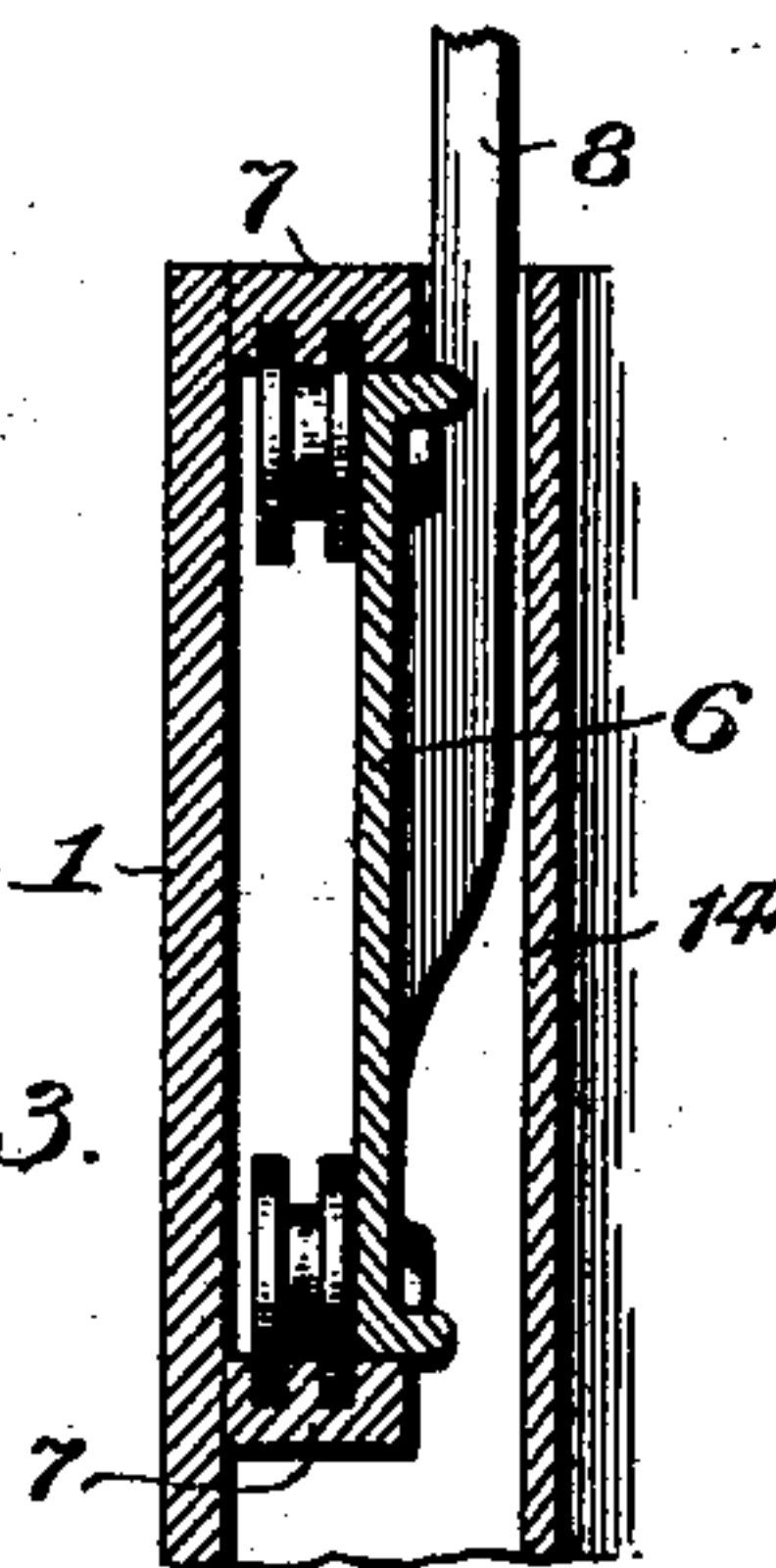


Fig. 3.



Attest:

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UNITED STATES PATENT OFFICE.

THEODORE G. WEYER, OF CHICAGO, ILLINOIS, ASSIGNOR TO S. KARPEN & BROS., A CORPORATION OF WEST VIRGINIA.

SOFA-BED.

SPECIFICATION forming part of Letters Patent No. 713,260, dated November 11, 1902.

Application filed January 29, 1902. Serial No. 91,674. (No model.)

To all whom it may concern:

Be it known that I, THEODORE G. WEYER, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sofa-Beds, of which the following is a specification.

The present invention relates to that type of folding or sofa bed in which a pair of sections hinged together longitudinally are connected to and supported by a stationary base, so as to be capable of ready adjustment to afford either a horizontal bed-surface or a seat-surface similar to the ordinary Davenport or other like sofa; and the objects of the present improvements are to provide a simple, durable, and convenient construction and arrangement of parts with which the movable sections can be spread out to form a bed without removing the supporting-base away from its ordinary position immediately against the wall of the room and which is adapted for easy and convenient manipulation without any danger to the person of the operator due to sudden movement or slipping of either movable section and with which wear of the carpet is entirely avoided in that the adjustable bed-sections are wholly supported by the base in either a folded or unfolded condition. The strain upon the hinges is reduced to a minimum and ample space provided for the storage of the bedclothes, all as will hereinafter more fully appear and be more particularly pointed out in the claims. I attain such objects by the construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a view illustrating the present invention, the adjustable bed-sections being shown in end elevation, while the supporting box-shaped base is shown in transverse section with the parts adjusted to form a sofa of the Davenport type; Fig. 2, a similar view with the parts unfolded to form a bed; Fig. 3, a detail longitudinal section showing the end construction of a bed involving the present invention; Fig. 4, a fragmentary end elevation of the adjustable bed-sections, illustrating the automatic catch in position to hold the rearward section in a raised condition; Fig. 5, a similar view illustrating such

catch in the operation of lowering such rearward bed-section.

Similar numerals of reference indicate like parts in the several views.

Referring to the drawings, 1 represents the usual box-form base of the sofa, which may be provided with fixed vertical ends 2 2 when a Davenport type of sofa is used in connection with the present invention.

3 and 4 are the adjustable bed-sections, hinged together longitudinally by means of hinge members 5 5 at the ends and upholstered in any usual and suitable manner.

6 represents transversely-sliding carriages, one at each end of the bed and which may be of any usual construction. Such carriages are arranged to move in suitable guides 7 on the end boards of the base 1.

8 represents vertical standards or extensions secured to or forming part of the carriages 6 and to the upper end of which in the present invention the adjustable bed-sections are pivotally connected by a pivot-pintle, which in my preferred construction, as shown in the drawings, is common to the hinge members 5 5 between said sections and forms a common pivot-axis for pivotal movement of the different parts in a folding or unfolding of the adjustable members aforesaid.

With the described construction, with the parts in a folded condition (illustrated in Fig. 1) to constitute a sofa, the operations to convert the same into a bed are as follows: The respective adjustable sections, with their relative position still unchanged, are drawn forward, the sliding carriage and guide-slides therefor, as heretofore described, affording means whereby such forward movement can be easily attained and also limited to the required extent, which in the present construction is just sufficient to enable the vertical or rearward adjustable member 3 to be even with the back surface of the base when lowered, as illustrated in Fig. 2, and such lowering of the vertical rearward section into a horizontal position to form a portion of the bed-surface is effected after the above-described movement of the parts is attained.

Another part of the present invention involves an automatic catch for the respective ends of the adjustable sections, so as to lock

the same in their normal folded condition, with one section at right angles to the other, as illustrated in Fig. 1, and to permit of a ready and automatic disengagement of said catches by a slight reverse pivotal movement of the rearward adjustable bed member 3. In this 9 represents a pawl or dog pivoted to the rearward adjustable member 3 and formed at its free end with a detent-notch 10, adapted for engagement with a projecting stop or pin 11 on the other adjustable member 4 to hold the rearward bed member 3 in its raised and substantially vertical position. The arrangement is such that with the member 3 in a lowered or horizontal position the straight under surface of the dog or pawl 9 rests upon the stop or pin 11, and in a movement of such member 3 into a vertical position the pawl 9 rides upon said stop or pin until its detent-notch 10 drops into engagement with said stop or pin to hold the bed member 3 in the described vertical position.

12 is a curved switching groove or guideway in the pawl or dog 9, spanning the detent-notch 10 and opening into the under surface of the dog or pawl 9 at both ends. The forward end of such guideway is open, while its rear end is normally closed by a yielding switch-tongue 13. With such construction when it is desired to again lower the adjustable member 3 to a horizontal position the upper end of the said member is swung forward by hand a short distance, as indicated in dotted lines in Fig. 4, bringing the forward end of the switching-groove 12 into position to drop by gravity over the stop or pin 11. The adjustable bed member 3 is then free to be swung backward into the desired horizontal position, the stop or pin 11 engaging in the switching-groove 12 during the independent movement of the dog or pawl 9 with relation to said stop or pin, and as the said member 3 nears a horizontal position the said pin or stud is adapted to move out of the switching-groove 12 past the yielding switch-tongue 13, as illustrated in Fig. 5, with the dog or pawl 9 resting by its under surface on top of said stop or pin, ready for a repetition of the operations previously described of again raising the said rearward bed-section 3 into a vertical position.

In the present construction the forward adjustable bed member 4 will at all times maintain a horizontal position, except when its forward end is temporarily raised to afford access to the large chamber of the base 1, in which the bedclothes, &c., are stored when not in use, and in order to prevent such bedclothes from interfering with the movements of the sliding carriages 6 the same will be usually partitioned off by transverse partitions 14 from the main chamber of the base, as illustrated in Fig. 3.

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

1. In a sofa-bed, the combination of a main

base, a pair of adjustable bed-sections one of which is slidingly connected to the main base, an independent carriage having transverse movement in said base, a pair of hinge members connecting the pair of adjustable bed-sections and the independent carriage together in a pivotal manner, and latching means carried by the bed-sections aforesaid and adapted to hold the rearward bed-section at an angular adjustment with relation to the horizontal bed-section to admit of an adjustment of the rearward bed-section after a forward-sliding movement of the bed-sections upon the main base, substantially as set forth.

2. In a sofa-bed, the combination of a main base, a pair of adjustable bed-sections one of which is slidingly connected to the main base, an independent carriage having transverse movement in said base, a pair of hinge members connecting the pair of adjustable bed-sections and the independent carriage together in a pivotal manner, and latching means carried wholly by said hinge members for holding the rearward bed-section at an angular adjustment with relation to the horizontal bed-section, substantially as set forth.

3. In a sofa-bed, the combination of a main base, a pair of adjustable bed-sections one of which is slidingly connected to the main base, a pair of independent carriages located at the respective ends of the main base and having transverse movement thereon, pairs of hinge members connecting the pair of adjustable bed-sections and the independent carriages together in a pivotal manner, and latching means for holding the rearward bed-section at an angular adjustment with relation to the horizontal bed-section, substantially as set forth.

4. In a sofa-bed, the combination of a main base, a pair of adjustable bed-sections one of which is slidingly connected to the main base, a pair of independent carriages located at the respective ends of the main base and having transverse movement thereon, pairs of hinge members connecting the pair of adjustable bed-sections and the independent carriages together in a pivotal manner, and latching means carried wholly by said hinge members for holding the rearward bed-section at an angular adjustment with relation to the horizontal bed-section, substantially as set forth.

5. In a sofa-bed, the combination of a main base, a pair of adjustable bed-sections one of which is slidingly connected to the main base, an independent carriage having transverse movement in said base and provided with a vertical standard, a pair of hinge members connecting the pair of adjustable bed-sections and the standard of the independent carriage together in a pivotal manner, and latching means for holding the rearward bed-section at an angular adjustment with relation to the horizontal bed-section, substantially as set forth.

6. In a sofa-bed, the combination of a main base, a pair of adjustable bed-sections one of

which is slidingly connected to the main base, an independent carriage having transverse movement in said base and provided with a vertical standard, a pair of hinge members 5 connecting the pair of adjustable bed-sections and the standard of the independent carriage together in a pivotal manner, and latching means carried wholly by said hinge member for holding the rearward bed-section at an angular adjustment with relation to the horizontal bed-section, substantially as set forth. 10

7. In a sofa-bed or the like, the combination of a pair of sections or members, and means for holding one section at an angular adjustment with relation to the other section, the same comprising a pin or stop on one section and a pivoted pawl or dog on the other section such pawl being provided with a detent-notch, a guideway spanning the detent-notch, 15 and a yielding switch-tongue closing the rear end of such guideway, substantially as set forth. 20

8. In a sofa-bed, the combination of a main base, a pair of adjustable bed-sections arranged thereon, and means for holding the rearward bed-section at its angular adjustment with relation to the other bed-section, 25

the same comprising a pin or stop on one section, and a pivoted pawl or dog on the other section, such pawl being provided with a detent-notch, a curved guideway spanning the detent-notch, and a yielding switch-tongue closing the rear end of said guideway, substantially as set forth. 30

9. In a sofa-bed, the combination of a main base, a carriage adapted to have a transverse movement in said base, a pair of adjustable bed-sections pivotally connected to each other and to said carriage, and means for holding the rearward bed-section at its angular adjustment with relation to the other bed-section, the same comprising a pin or stop on one section and a pivoted pawl or dog on the other section, such pawl being provided with a detent-notch, a curved guideway spanning the detent-notch, and a yielding switch-tongue closing the rear end of said guideway, substantially as set forth. 35 40 45

Signed at Chicago, Illinois, this 25th day of January, 1902.

THEODORE G. WEYER.

Witnesses:

ROBERT BURNS,
HENRY A. NOTT.