

No. 733,046.

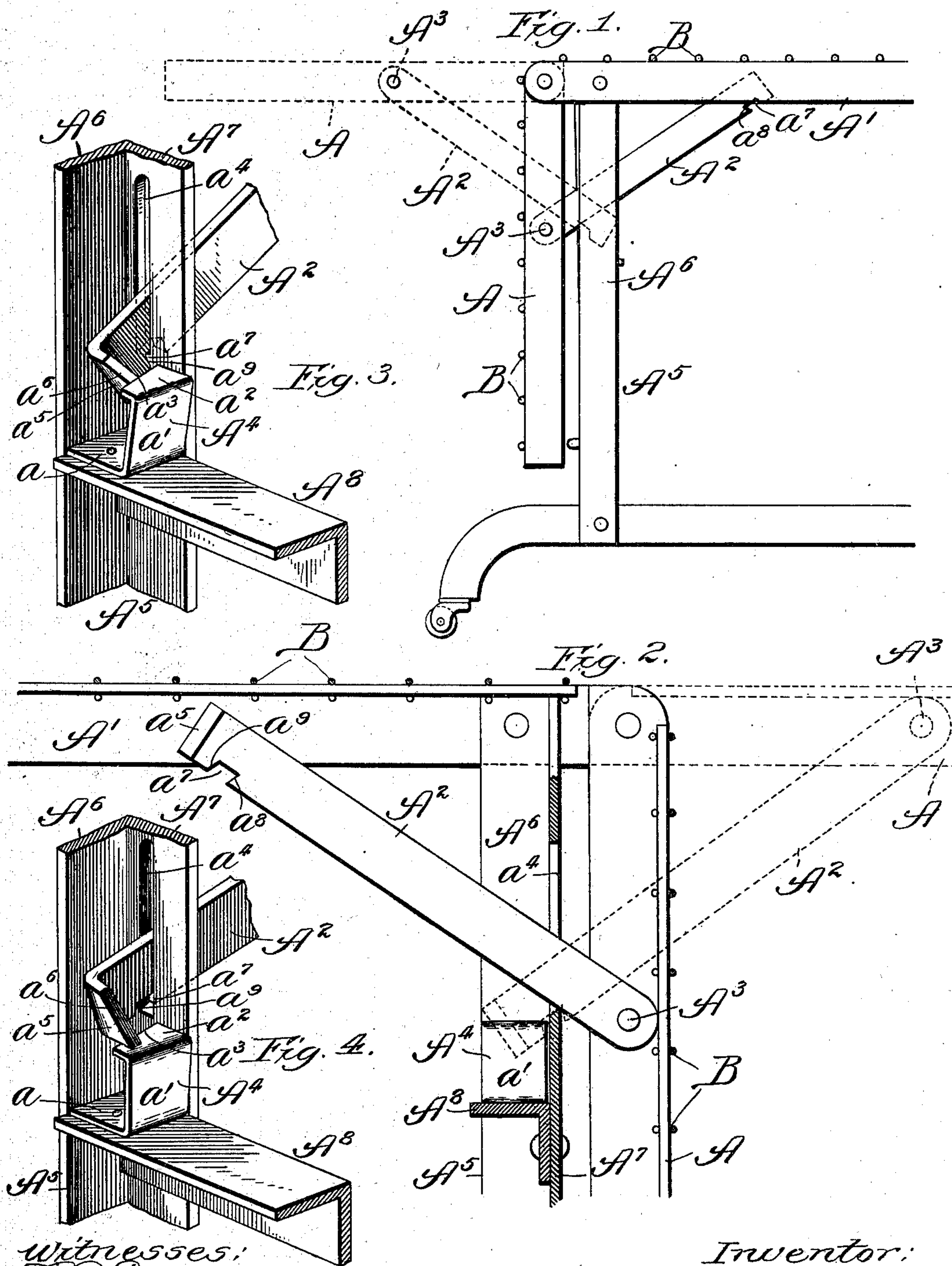
PATENTED JULY 7, 1903.

O. R. HUNT.

LEAF SUPPORT FOR ARTICLES OF FURNITURE.

APPLICATION FILED SEPT. 17, 1902. RENEWED JUNE 1, 1903.

NO MODEL.



Witnesses:

Edw. Gaylord.

Geo C. Harrison.

Inventor:

Ozello R Hunt,

By *Pymouth & Plymouth & Co.,*
Att'ys.

UNITED STATES PATENT OFFICE.

OZELLO R. HUNT, OF KENOSHA, WISCONSIN, ASSIGNOR TO THE SIMMONS MANUFACTURING COMPANY, OF KENOSHA, WISCONSIN, A CORPORATION OF WISCONSIN.

LEAF-SUPPORT FOR ARTICLES OF FURNITURE.

SPECIFICATION forming part of Letters Patent No. 733,046, dated July 7, 1903.

Application filed September 17, 1902; Renewed June 1, 1903. Serial No. 159,628. (No model.)

To all whom it may concern:

Be it known that I, OZELLO R. HUNT, a citizen of the United States, residing at Kenosha, in the county of Kenosha and State of Wisconsin, have invented a new and useful Improvement in Leaf-Supports for Articles of Furniture, of which the following is a specification.

My invention relates particularly to automatically-released supports for the folding leaves of convertible articles of furniture, such as couches and sofa-beds.

My primary object is to provide an automatically-disengaged support for a leaf movable from a horizontal position, as when the article of furniture is used as a bed, to a vertical depending position, as when said article is used as a couch.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 represents a broken view, in end elevation, of a couch equipped with my improvement; Fig. 2, a broken sectional view looking at the inner side of the end frame shown in Fig. 1, and Figs. 3 and 4 broken inner perspective views illustrating the manner in which the leaf-supports are automatically disengaged to allow the leaf to be lowered.

The invention is here shown applied to the front leaf of a sofa-bed of the type employing a vertical standing rear leaf or back (not shown) and a vertical depending front leaf.

The preferred construction is as follows: A represents the swinging front leaf of a convertible couch or sofa-bed; A', the main frame of said article of furniture; A², a leaf-supporting link connected by a pivot A³ with the leaf A; A⁴, a link-releasing cam carried by the main frame, and B a wire fabric of any suitable construction applied to the frame and leaf. The main frame has end standards (one shown) comprising front vertical members (angle-irons) A⁵, having rearwardly-turned flanges A⁶ and inturned flanges A⁷. The flanges A⁷ are connected by an angle-iron A⁸, having a downturned flange and a rearwardly-turned flange. The ends of this member fit within the angles of the vertical members A⁵, and the horizontal flange supports

the cams A⁴, (one at each end.) Each cam A⁴ comprises a base portion *a*, a substantially vertical portion *a'*, and an outturned upper portion *a''*. The portion *a''* terminates in an oblique edge *a'''*, which extends rearwardly and outwardly. The links A² lie in planes parallel with the end standards and extend through slots *a''* in the flanges A⁷. Each link terminates at its free end in an inturned cam portion *a''*, having an oblique inclined edge *a'''* crossing the edge *a'''*, assuming the leaf to be in the extended position. Adjacent to its extremity the link is provided on its lower edge with a notch *a''*, presenting a shoulder *a'''*, which serves to engage the flange A⁷ at the lower wall of the slot *a''* in the extended position of the leaf, and a surface *a''*, which serves to raise the link when the leaf is raised somewhat above a horizontal to effect a release.

The manner in which a release is effected will be understood readily from Figs. 3 and 4. When the leaf is raised somewhat above the horizontal position that is indicated in dotted lines in Figs. 1 and 2, the lower ends of the links are caused to rise, as stated, and in their movement the cam-surfaces *a'''* engage the cam-surfaces *a'''* and cause the upper portions of the members A⁴ to spring inwardly till the portions *a''* clear the portions *a''*, whereupon the members A⁴ resume their original positions and the portions *a''* ride upon the upper surfaces of the portions *a''*, so that the shoulders *a'''* are held out of engagement with the stationary shoulders at the lower walls of the slots *a''* as the leaf is lowered. Of course it will be understood that when the leaf is again raised the projections *a''* will pass beneath the projections *a''*, so that the links can drop to the locking position when the notches *a''* reach the proper position.

Changes in details of construction within the spirit of the appended claims may be made. Hence no undue limitation should be understood from the foregoing detailed description.

What I regard as new, and desire to secure by Letters Patent, is—

1. In an article of the character described, 100

the combination with a main frame provided with a shoulder, and a swinging leaf connected with said frame, of a link connected with said leaf and provided with a shoulder serving to lockingly engage said first-named shoulder and provided also with a cam, and a yielding resilient cam on the main frame opposed to said first-named cam and over which the latter rides during the release, for the purpose set forth.

2. In an article of the character described, the combination with a main frame provided with a stationary shoulder, and a swinging leaf connected with said frame, of a link connected at one end with said leaf and provided near its opposite end with a shoulder serving to lockingly engage said first-named shoulder and provided also with a lateral projection, and a yielding cam on the main frame opposed to said projection and over which the latter rides during the release, for the purpose set forth.

3. In an article of the character described, the combination with a main frame provided with a stationary shoulder, and a swinging leaf connected with said frame, of a link connected at one end with said leaf and provided near its opposite end with a shoulder serving to lockingly engage said first-named shoulder and provided also with a lateral projection, and a yielding resilient cam fixed to the main frame and opposed to said projection and which is forced aside when the leaf is raised above the horizontal and over which said projection rides when the leaf is lowered to effect a release.

4. In an article of the character described, the combination with a main frame provided with a guide and a stationary shoulder, and

a swinging leaf connected with said frame, of a link connected with said leaf and provided with a shoulder serving to lockingly engage said first-named shoulder and provided with a laterally-projecting cam, and a spring-metal cam fixed to the main frame and having a lateral projection engaging said first-named projecting cam, for the purpose set forth.

5. In an article of the character described, the combination with a main frame comprising end standards and a member connecting said end standards, and a swinging leaf connected with said main frame, of links connected with said leaf and having their free ends extending through suitable guides on said frame, said links having inturned projections, and yielding resilient cams carried by the member connecting said end standards and having outturned projections, for the purpose set forth.

6. In an article of the character described, the combination with a main frame comprising end standards and a member connecting said end standards, and a swinging leaf connected with said main frame, of links connected with said leaf and having their free ends extending through suitable guides on said frame, said links having inturned projections provided with oblique edges, and yielding resilient cams carried by the member connecting said end standards and having outturned projections provided with oblique edges engaging said first-named oblique edges, for the purpose set forth.

OZELLO R. HUNT.

In presence of—

A. C. KITTLESON,
ALBERT D. BACCI.