

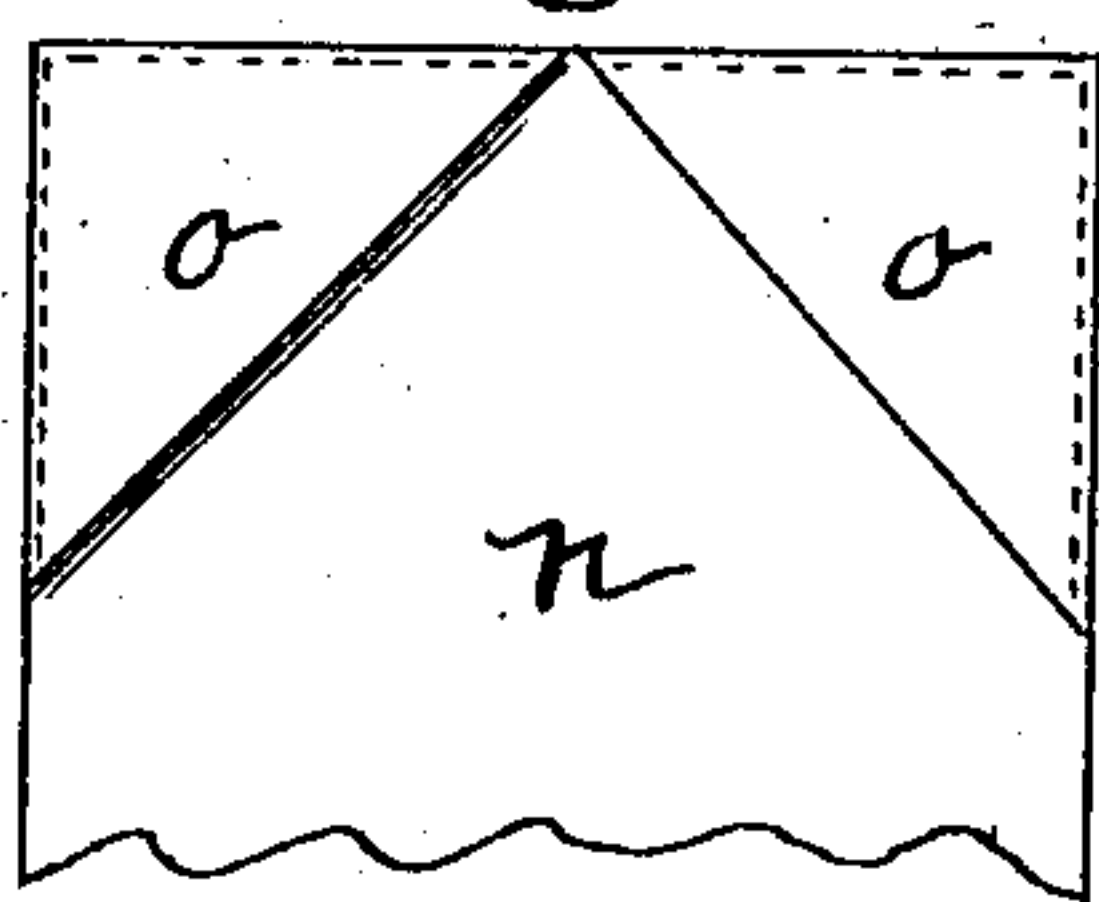
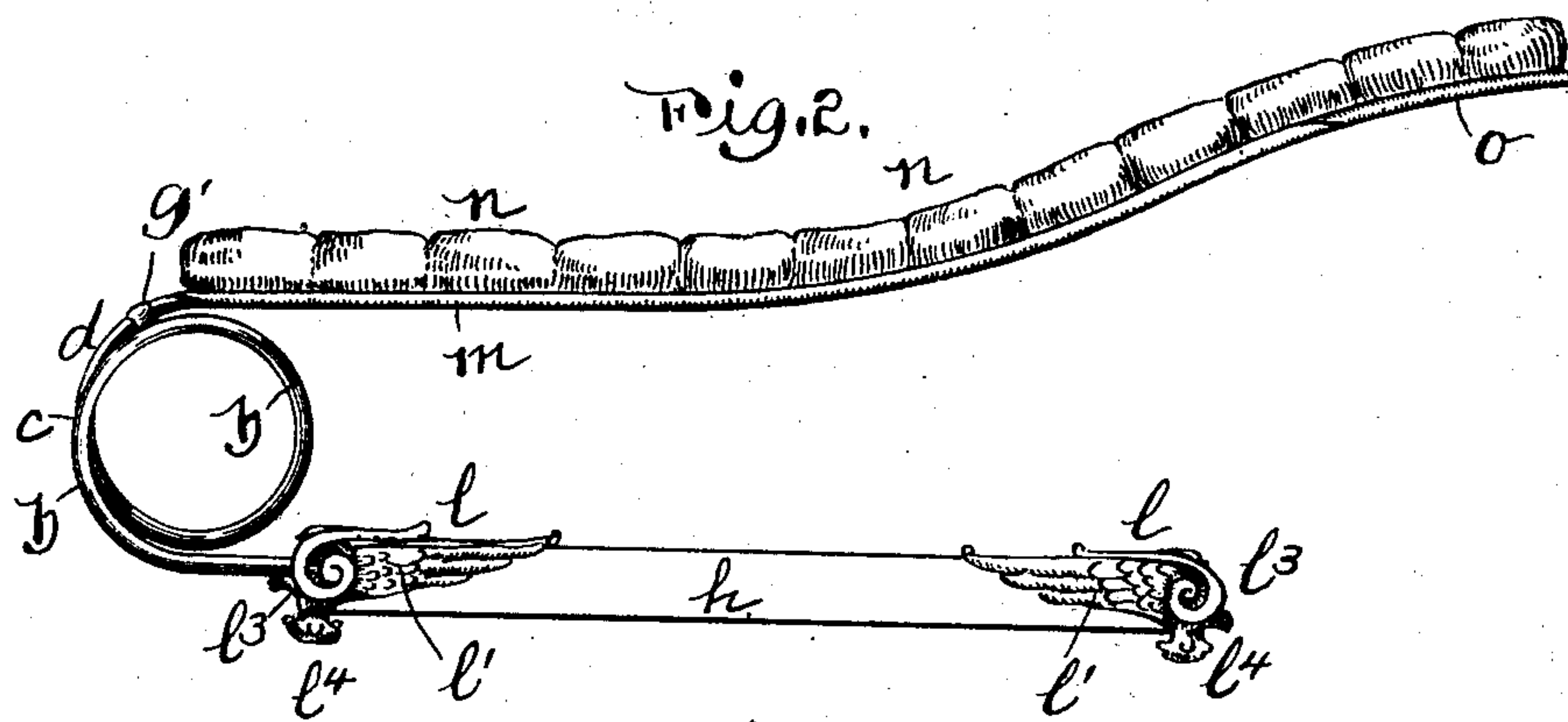
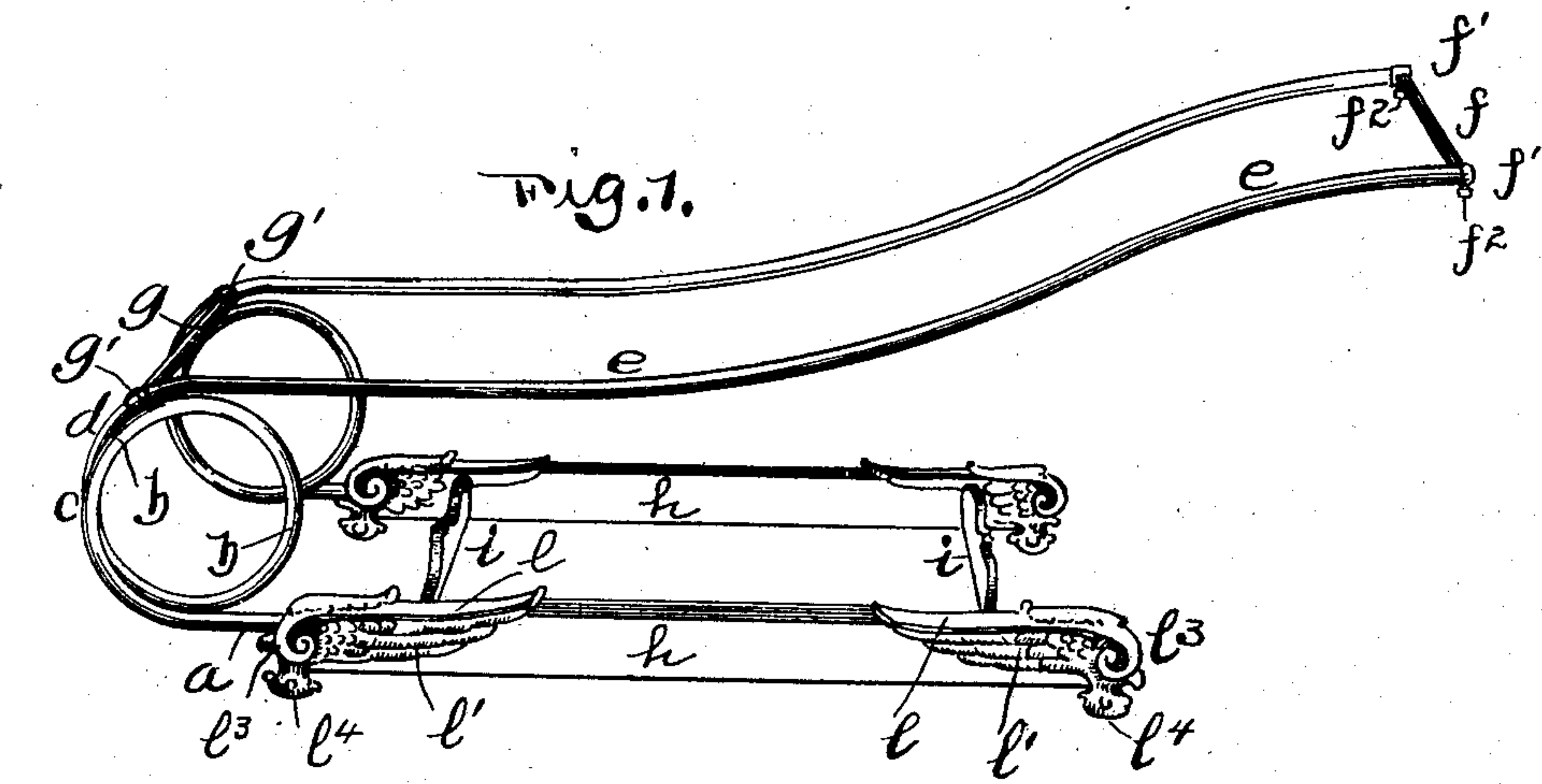
No. 753,815.

PATENTED MAR. 1, 1904.

A. E. WHITE & W. MILLER.  
RECLINING COT OR LOUNGE.

APPLICATION FILED MAR. 18, 1903.

NO MODEL.



Witnesses  
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Fig. 4.  
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ATTYS



# UNITED STATES PATENT OFFICE.

ARTHUR E. WHITE AND WEBB MILLER, OF CHICAGO, ILLINOIS; SAID MILLER ASSIGNOR OF ONE-HALF OF HIS RIGHT TO SAID WHITE.

## RECLINING COT OR LOUNGE.

SPECIFICATION forming part of Letters Patent No. 753,815, dated March 1, 1904.

Application filed March 18, 1903. Serial No. 148,385. (No model.)

*To all whom it may concern:*

Be it known that we, ARTHUR E. WHITE and WEBB MILLER, citizens of the United States, both residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Reclining Cots or Lounges, of which the following is a specification.

This invention relates to that type of reclining cots or lounges in which a base, usually consisting of two side rails united one to the other by cross or tie pieces, has attached thereto at one end of each side rail a spring in the shape of a coil and which is extended to overlie the base and furnish a side rail for the attachment of canvas or other backing, on which the mattress is laid and supported.

The special features of the present invention pertain to the construction of the base as regards the connection of the side rails of the base by the cross ties or pieces so as to make a rigid base; and a further object of the invention relates to the manner of securing the spring for each side rail of the mattress-frame to its end of the base-rail and to the special manner of retaining the mattress on the side rails of its supporting-frame.

The invention consists in the features of construction and combinations of parts hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of the base and the frame which carries the mattress; Fig. 2, a side elevation of the base and the mattress-supporting frame or arms with the mattress in position; Fig. 3, a cross-section of the base, showing the manner of connecting the cross ties or pieces with the side rails of the base; Fig. 4, a detail in section, showing the manner of attaching the spring end of each side rail of the mattress-frame to the end of the side rail of the base; and Fig. 5, a detail showing the corner-pockets at the head end of the mattress for detachably connecting the mattress to the side rails of its frame or support.

The yieldable or spring frame which carries the mattress is composed of two side rails or arms. Each side rail or arm of the mattress frame or support has an end *a*, which is

straight and extending from which is a coil *b*, which is turned a little more than a complete circle and is located as to its coil portion inside of the inner face of the attached end *a*. The coil *b* at or about its horizontal center line, as at the point *c*, is enlarged in the diameter of its circle and continues as a curved end *d*, uniting the side rail or bar *e* of the frame or support for the mattress with the coil *b*, so that the side rail or bar *e* will have a yield or spring thereto from the resiliency of the coil *b*, which gives and takes with the application of pressure or weight to the side rail or bar and with the release of the pressure or weight on the side rail or bar, the spring action being a uniform one, extending over the entire circle of the coil *b* from its start to its finish.

Each side of the cot or lounge has an attaching end *a*, a coil *b*, and a side rail or bar *e*, with the peculiarities just described, and these side arms or rails are spaced the required distance apart for the width of the cot or lounge by the spacing apart of the side rails of the base.

The head end of the mattress support or frame has the ends of the side rails or arms *e* united one to the other by a cross-rod *f*, the ends of which are entered into sockets *f'*, slipped onto the ends of the side rails or arms and locked in place by side screws *f''* or otherwise, rigidly uniting or connecting the head end of the side rails or arms one to the other. The foot end of the side rails or arms are joined one to the other by a connecting-rod *g*, the ends of which are entered into sockets *g'*, one on each side rail or arm and adjustable thereon and when adjusted held in position by set-screws *g''* or otherwise, rigidly tying or uniting the two side rails or arms one to the other at the foot end.

The base is formed of two side rails *h*, preferably of wood, and the two side rails are united one to the other by cross ties or pieces *i*, preferably of metal, each cross tie or piece having at each end a screw-threaded stem *j*, on the end of which is entered a nut *j'*, which is countersunk into the outer face of the rail and by which the side rails of the base



are drawn tightly against the end face of the cross tie or piece, and in order to insure greater rigidity and to hold the cross ties or pieces from edgewise turning each cross tie or piece *i*, at each end thereof, has points or projections *h*, which are forced into the body of the side rails when the side rails are drawn to place against the ends of the cross ties or pieces. This construction and mode of uniting the side rails of the base to the cross ties or pieces is very simple, but at the same time great strength and rigidity are assured, as the side rails have a firm bearing against the ends of the cross ties or pieces, and the cross ties or pieces are held against turning by the points or projections which enter into the body of each side rail. Each side rail, at each end thereof, has a cap or guard, made of metal and so formed as to have a top *l*, which lies against the upper face of the side rail, an outer side flange or plate *l'*, which fits against the outer frame of the side rail, and an inner bolt or flange *l''*, which fits against the inner side of the side rail when the guard or protector is in place on the end of the side rail, and at the outer end of the guard or protector is an end plate or head *l'''*, terminating in a foot *l''''*, which forms a rest for the base on the floor or other support. The attaching end *a* of each spring side rail or arm is entered through a hole in the end plate or head *l'''* and projects into the end of the side rail of the base, by which arrangement a solid and firm connection and attachment is obtained between the base and the frame or support carrying the mattress for each side piece or arm of the mattress frame or support.

A canvas or other covering *m* is stitched or otherwise secured to the side rails or arms of the mattress frame or support and to the cross-rods *f* and *g* at the head and foot ends of the frame or support, and this canvas or other covering furnishes a support for the mattress proper, which mattress *n* can be of any suitable and well-known form of construction for mattresses adapted for use on a spring cot or lounge. The mattress should by preference be detachably connected with the frame or support, and for this purpose each corner at the head end of the mattress is provided with pockets *o*, into which the corners of the frame or support at the head end thereof can be entered when the mattress is laid onto the canvas or onto its frame or support.

The side rails or arms, with the spring for each, are preferably made of a round rod of steel or of any other suitable material which will furnish through the coil *b* the necessary elasticity to give a rising-and-falling movement to the frame or support, and the arrangement of the coils and of the side rails or arms is one which will give an easy and pleasant rising-and-falling movement to the occupant of the cot or lounge, for which purpose

the balance furnished by the coil of the side rails or arms is one which yields readily to pressure or weight and at the same time will not have a jerky rising-and-falling movement. The several parts can be readily taken apart for shipment or storing away, it only being necessary to remove the ends *a* of the side rails or arms from the ends of the base-rails, when they can be placed close together side by side, and to take down the base by detaching the nuts *j'* and removing the cross ties or pieces, when the side rails *h* and the cross ties or pieces *i* can be placed together side by side, making it possible to pack the cot or lounge in a very small space. The parts are readily assembled to set up the cot or lounge, it only being necessary to enter the cross ties or pieces into the side rails of the base and secure them in place by the nuts *j'* and to enter the connecting ends *a* of the side frame or arms into the ends of the guards or protectors and the end of the base-rail, which assembles the parts for the reception of the mattress, and the mattress is placed in position by entering the head end of the frame or support into the pockets *o* of the mattress.

In use the occupant of the cot or lounge by a slight movement of the body or otherwise can cause the frame or support carrying the mattress to rise and fall under the action of the spring of the coils *b*, and the rising-and-falling movement will be continual and uniform, owing to the fact that the coils *b* have a continuous yield over their entire length and not a yield at some one point only.

The cross ties or pieces *f* and *g* constitute, in fact, end rails or bars for the mattress-supporting carrier or frame, and these end bars are adjustable forward and backward on the side rails or bars, by which arrangement the center of counterbalance or of gravity can be changed in its relation to the coils *b* so as to properly carry the mattress and the occupant when on the cot or lounge in such a manner as to have a counterbalance that will result in an easy rising-and-falling movement of the carrier frame or support, the mattress, and the occupant. This feature adds greatly to the restfulness of the cot or lounge and is obtained by reason of having the coils *b* yield for the entire circle from the start to the finish and not at unequal points.

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

1. In a cot or lounge, a base consisting of two side rails, cross-ties or end pieces, each cross-tie or end piece having at each end a threaded stem, a nut on each stem and countersunk into the outer face of the side rail, and a perforated guard or protector on the end of each side rail, in combination with a carrier-frame for the mattress consisting of two supports, each support comprising a lower horizontal end, passing through the perforation in the guard or protector into the end of



the base-rail, a coil continuing from the lower end and a side rail continuing from the coil and having an upward inclination, and a covering extending from side rail to side rail of the mattress-frame and from the cross-ties or end pieces at each end of the mattress-frame, substantially as described.

2. In a cot or lounge, a base consisting of two side rails, cross-ties or end pieces, each cross-tie or end piece having at each end a threaded stem, a nut on each stem and countersunk into the outer face of the side rail, and a perforated guard or protector on the end of each side rail, in combination with a mattress-carrying frame consisting of two side supports, each side support comprising a lower horizontal end passing through the perforated guard or protector into the end of the base-rail, a side rail, connected with the entering end and extending in reverse relation thereto, a covering extending from side rail to side rail of the mattress-frame and fixedly attached to the frame-rails, and a mattress having the head-end corners thereof detachably connected to the corners of the head end of the mattress-frame and having its body and foot end loose on the covering and frame, substantially as described.

3. In a cot or lounge, a base consisting of two side rails, cross-ties each cross-tie having at each end a stem inserted into one of the side rails, a perforated guard or protector on the

end of each side rail each guard or protector being provided with a base or foot downwardly extending therefrom, a mattress-carrying frame consisting of two side supports each side support provided with a backwardly-extending end passing through one of the perforated guards or protectors into the end of the base-rail and further provided with backwardly-extending side rails connected with the entering ends, substantially as described.

4. In a cot or lounge in combination with a mattress-carrying frame, a base or support consisting of two side rails connected together by cross-rails each of the cross-rails provided with a screw-threaded stem passing through the side rail, a nut on each stem countersunk into the outer face of the side rail, guards or protectors one on each end of each rail the forward guards or protectors being provided with holes in their front faces for the passing of the mattress-carrying frame therethrough, each guard or protector being provided with feet downwardly extending therefrom and further provided with an exterior plate, a top and an interior flange forming a protection and support for the entire end of the base-rail, substantially as described.

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