

M. THOMSON.

COUCH.

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979,049.

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Fig. 1.

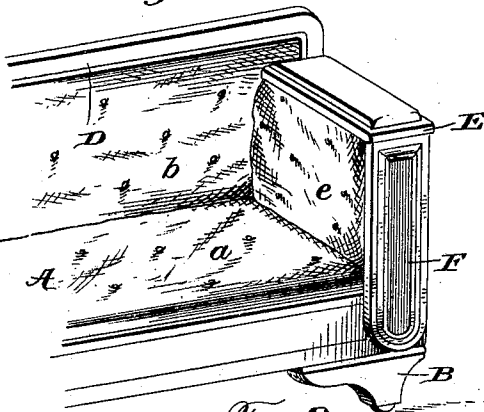


Fig. 2.

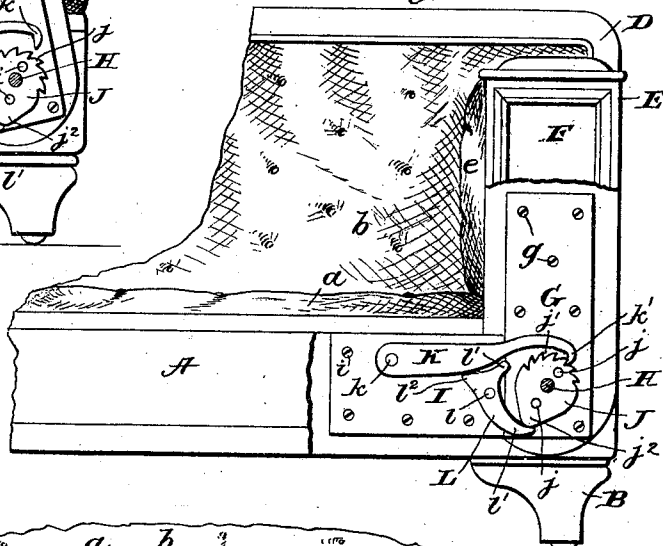


Fig. 4.

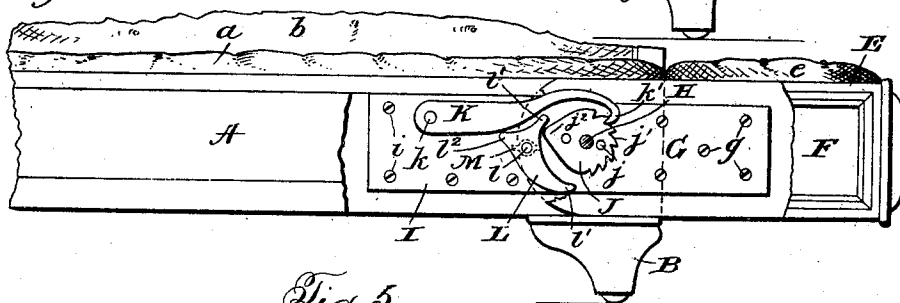
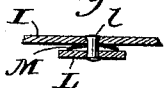


Fig. 5.



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To all whom it may concern:

Be it known that I, MAITLAND THOMSON, a subject of Great Britain, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Couches, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to improvements in couches and has for its primary object the provision of a couch having an adjustable arm, although, as will be obvious to those skilled in the art, the invention is capable of use in connection with adjustable backs of chairs or the back, head or foot sections of sofas, cots, beds and the like.

The invention embraces improved means adapted to be automatically controlled by a simple manipulation of the adjustable arm or section to release or secure the same at the will of the user, conveniently by moving the adjustable section in one direction to disengage the retaining devices, and a movement in a contrary direction to reengage the same.

A convenient and practical embodiment of the invention is constituted by a couch having the usual seat portion, an adjustable arm or end section, and my improved retaining means adapted in one position to fasten the arm in angular relation to the seat and in another position to permit the arm to swing downwardly into the plane of the seat and constitute an extension of the same.

The improved retaining means comprises a simple, easily operable, and efficient mechanism, including an engaging portion on one of the couch sections provided with a projecting portion or cam, a dog on the other section of the couch adapted to interlock with said engaging portion, and a trip positioned between the dog and the said projecting portion or cam adapted to be alternately shifted in opposite directions by the latter to disengage or facilitate engagement of the dog.

In the accompanying drawings forming part hereof, I have illustrated the aforesaid convenient embodiment of the invention and the novel details in the construction and arrangement of the parts of the same will be clear upon an inspection of said drawings in connection with the specific description hereinafter contained.

In the drawings: Figure 1 is a perspective view of a fragmentary portion of the couch showing the arm in raised position, Fig. 2 is a similar view, portions of the frame being broken away to show the retaining mechanism, Fig. 3 is a view similar to Fig. 2 illustrating the manner of manipulating the arm of the couch to disengage the retaining means, Fig. 4 is an elevation showing the parts as illustrated, in Figs. 2 and 3, with the arm lowered into the plane of the seat of the couch to constitute an extension thereof, and, Fig. 5 is a detail sectional view through the trip showing the spring for holding it in its different positions.

Referring more specifically to the drawings wherein like reference characters designate corresponding parts in the several views, A represents the seat of a couch and B the supporting leg therefor, said couch being provided with a back D, the seat and back being upholstered, as at *a, b*.

E represents the end of the couch, upholstered as at *e*, provided with a decorative panel F at the front edge thereof and overlying the seat portion to hide the retaining mechanism therebehind. To the inner side of the panel F is secured, through the medium of screws *g*, a metal plate G, pivoted through the medium of a pivot pin H to the end portion of the seat A, the latter being provided with a similar plate I fastened to the front of the seat by means of screws *i*. Concentrically of the pivot H and rigidly fastened to the plate G of the arm portion of the couch, by means of rivets *j*, is a substantially circular disk J, the periphery of which is toothed, as at *j'*. A dog K is pivotally mounted at *k* to the plate I on the seat and is substantially elongated whereby to present its point *k'* for engagement with any of the teeth *j'* just referred to. The dog is hung freely upon its pivot so that it will at all times operate under force of gravity to engage the teeth of the disk J.

Arranged intermediate of the disk J and the dog K and pivoted at *l* to the plate I on the seat portion, is a trip L, the same having oppositely arranged arms or extensions *l'* and an intermediate extension *l''*, the latter being arranged to engage the under edge of the dog *k* and the former to be alternately engaged by a projecting portion or cam *j''* on the disk J, a spring friction block M being disposed between the plate I

on the seat and the rear face of the trip L to hold the same in the different positions to which it is adjusted.

The foregoing being the structural characteristics of the device, the operation thereof may be set forth as follows:—The parts being arranged in the adjusted position illustrated in the first two figures of the drawings with the arm of the couch raised and retained in place by the engagement of the dog K with the toothed periphery of the disk J, it will be observed that prior to lowering the arm, the dog must be disengaged from the disk. To accomplish this, the arm of the couch is swung inwardly slightly from its vertical position, as indicated in Fig. 3, which causes the cam or projection j^2 of the disk J to engage the lower arm or extension l' of the trip L and force the same inwardly in the direction of the arrow around the pivot l' , correspondingly elevating the intermediate or heel portion l^2 of the trip against the dog K, thus lifting the latter out of engagement with the disk J. The parts will be retained in this position until their position is subsequently forcibly altered. The arm may now be lowered into the horizontal position shown in Fig. 4, the cam or projection j^2 having in this movement engaged the upper arm or extension l' and shifted the trip L in a reverse direction to lower the intermediate portion l^2 away from engagement with the dog K, permitting the latter to fall downwardly into engagement with the teeth j' of the disk J. When it is again desired to elevate the arm of the couch, the dog will simply ride over the teeth j' and retain the arm in any of its adjusted positions, dependent upon the corresponding engagement of the dog with the teeth.

It is to be understood that while I have herein specifically disclosed one embodiment of the invention, the invention is capable of embodiment in forms and devices other than that shown and described.

I claim:—

1. The combination with a seat, of an arm pivotally associated therewith, and retaining means for the arm comprising an engaging device on the arm, a dog on the seat adapted to interlock with said engaging device, a trip arranged adjacent to the dog adapted to engage the same to retract it from its interlocking position, said trip having oppositely arranged portions, means pivoting the trip on the seat, and a device movable with the arm for engaging said portions to rock the trip in opposite directions and correspondingly engage and disengage the dog, substantially as described.

2. The combination with a seat, of an arm pivotally associated therewith, and retaining means for the arm comprising a toothed engaging device secured to the arm, a gravity dog pivoted to the seat adapted to interlock with said engaging device, a trip arranged beneath the dog adapted to lift it from its interlocking position, said trip having oppositely projecting extensions, means pivoting the trip on the seat, and a projection on the arm movable therewith arranged to alternately engage said extensions to rock the trip and correspondingly engage and disengage the dog, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

MAITLAND THOMSON.

Witnesses:

PHILIP LEROY,
S. REEVY.