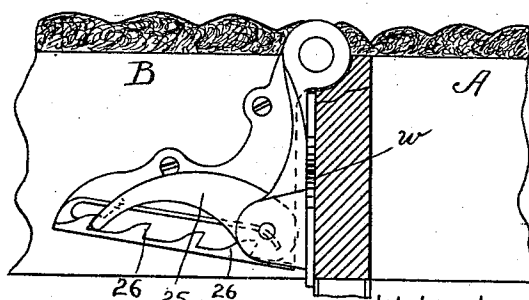
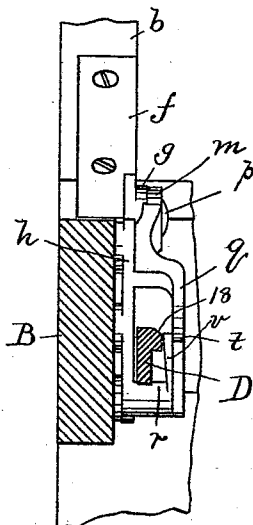
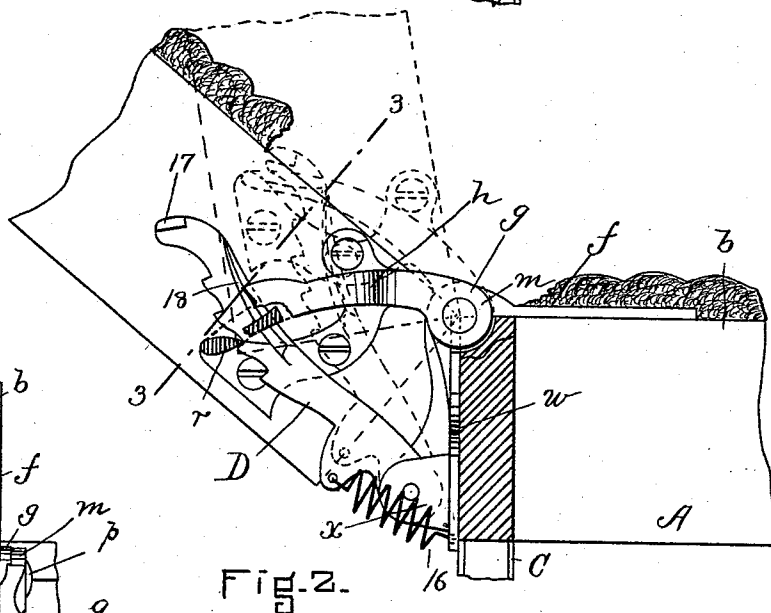
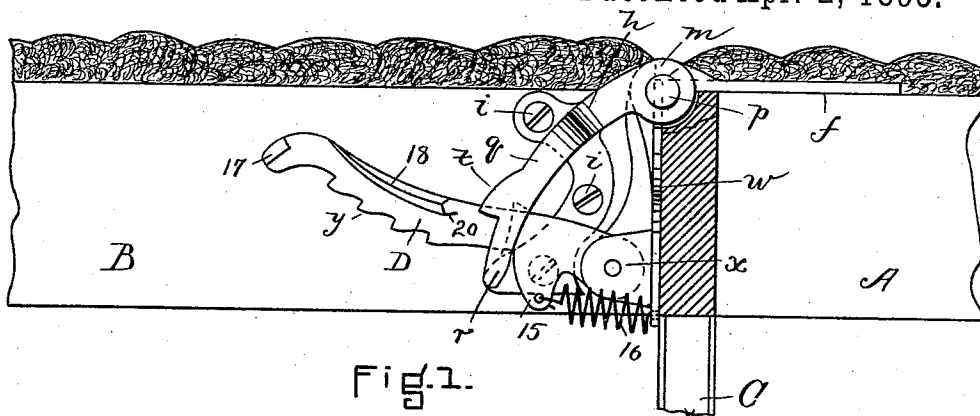


(No Model.)

E. E. PECK.
COUCH.

No. 536,701.

Patented Apr. 2, 1895.



WITNESSES.

Matthew M. Blount.
A. Durfee

25 26
Fig. 4. INVENTOR.
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UNITED STATES PATENT OFFICE.

EDMUND E. PECK, OF BROOKLYN, NEW YORK.

COUCH.

SPECIFICATION forming part of Letters Patent No. 536,701, dated April 2, 1895.

Application filed January 2, 1895. Serial No. 533,510. (No model.)

To all whom it may concern:

Be it known that I, EDMUND E. PECK, of Brooklyn, in the county of Kings, State of New York, have invented certain new and useful Improvements in Couches, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal section of a head and a portion of the body of a couch showing my improved adjusting mechanism, the main parts of the couch being represented as broken off; Fig. 2, a like view showing the couch-head in different positions; Fig. 3, a transverse section taken on line 3, 3, in Fig. 2, and Fig. 4 a sectional elevation illustrating a modification.

Like letters and numerals of reference indicate corresponding parts in the different figures of the drawings.

My invention relates especially to a mechanism for automatically adjusting, locking and releasing a couch-head, the object being particularly to provide a device wherein all necessity for forming any projection outside the upholstery of the couch to release the retaining rack is avoided.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the couch body which is of the ordinary form and construction, and B the head. These parts are arranged in the usual manner. On the top of the leg, C, and projecting over the side-bar, b, of the body I secure a hinge-leaf, f. This leaf is provided with an eye, g. It will be understood that one of these leaves is secured at each side of the couch. The companion hinge-leaf, h, is secured to the side-bar of the head, B, by means of screws, i. This leaf has a curved arm provided on its end with an eye, m, registering with the eye, g, to which it is connected by a pivot pin, p. This leaf, h, has an angular off-set, q, best shown in Fig. 3. The lower end of said off-set is connected with

the main portion of the leaf by a sharp edged arm, r. Projecting forwardly from the off-set, q, there is a stop lug, t. Adjacent said lug on the inner face of the off-set there is a cam, v.

The casting forming the leaf, f, is extended downward over the end of the couch body at w, to which it is secured. In lugs, x, on the lower end of said casting a toothed rack-bar, D, is pivoted by an end to swing vertically. This rack-bar projects behind the off-set, q, and its teeth, y, engage the edge, r, thereof. Said rack is mounted loosely on its pivot permitting slight lateral movement. A coiled pull spring, 16, connects a lug, 15, on the rack with the body of the couch and tends to draw said rack downward and laterally against the inner face of the off-set, q.

The rack at its free or outer end has a laterally projecting finger, 17, and on its side is provided with a longitudinally arranged curved cam-track, 18, which is adapted to ride the cam, v, in manner hereinafter described.

In the use of my improvement as the head of the couch is elevated the teeth of the rack click on the edge or tooth, r, of the casting and when said head is released said teeth engage the casting and are held in contact by the spring, 16, locking the head in the assumed position as shown in Fig. 2. During this movement the edge of the cam track, 18, engages the side of the cam, v, against which it is held by the tension of the spring.

To lower the head, B, it is first elevated into substantially a vertical position as indicated by dotted lines in Fig. 2, or until the finger, 17, on the rack engages the stop, t, on the casting. At this point the last tooth, y, of the rack has passed the tooth, r, on the casting and the thin or outer end of the cam track, 18, registers with the top or working face of the cam, v, over which it is drawn by the tension of the spring, 16. The head can now be lowered into horizontal position, as said cam track riding on the cam, v, holds said rack out of engagement with the tooth, r, until all the teeth, y, have been passed when the inner end, 20, of said track passes the cam, v, and the rack drops in position to engage its teeth as the head is elevated.

My device as thus constructed forms a combination of hinge for the couch head with

an automatic locking adjusting mechanism therefor which can also be automatically released. The entire mechanism is concealed by the upholstery and is so arranged that it causes no wear thereon.

I do not confine myself to employing the rack-bar in the form shown as a pawl, 25, shown in Fig. 4 may be substituted for said bar and a series of teeth, 26, may be constructed on the casting, *h*, to be engaged by said pawl without departing from the spirit of my invention, the remaining parts and the operation of the device being substantially as that described.

Having thus explained my invention, what I claim is—

1. An automatic, adjusting and locking mechanism for couch-heads which comprises a spring-tensioned rack pivotally connected to the couch body, a projection on the couch-head engaging said rack; a cam on said head; and a cam track on said rack in position to engage said cam after the rack teeth have passed said projection and hold the rack out of engagement with said projection during the lowering of the head.

2. An automatic locking mechanism for the adjustable heads of couches which comprises an off-set on the couch head; a cam on the inner face of said off-set; a tooth or projection below said cam; a pivoted spring-tensioned

rack bar arranged to click on said tooth; a cam track on said rack-bar for engaging said cam during the downward movement of the couch-head and a projection on the bar for engaging a stop on the off-set.

3. In a couch of the class described, a head hinged thereto to swing vertically; the hinge-leaf on said head being provided with an off-set; a tooth in the lower end of said off-set; a cam on the inner face of the off-set, and a stop lug in combination with a spring-pulled rack-bar pivoted to the hinge-leaf on the couch body and engaging the off-set; a projection on said bar for engaging said stop; a cam-track on the side of the bar for riding the off set cam during the downward movement of said head.

4. The combination with the couch body and head of the hinge-leaf, *f*, having the extension, *w*, secured to said body; the rack, *D*, pivoted to said extension and provided with the cam track, 18, a stop finger, 17; a spring tensioning said bar vertically and laterally; the hinge-leaf, *h*, on the head provided with the off-set, *g*, tooth, *r*, and cam, *v*, arranged to operate, substantially as specified.

EDMUND E. PECK.

Witnesses:

K. DURFEE,
O. M. SHAW.