A. R. HYATT.

COUCH.

APPLICATION FILED JULY 19, 1915.

1,270,737. Patented June 25, 1918.

Fig. 1.

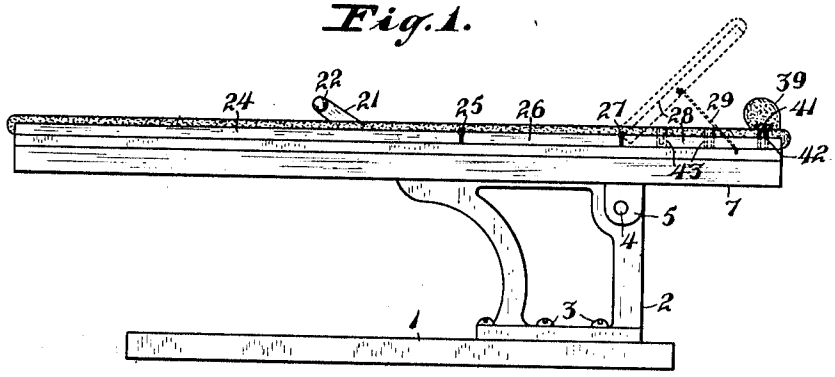


Fig. 2.

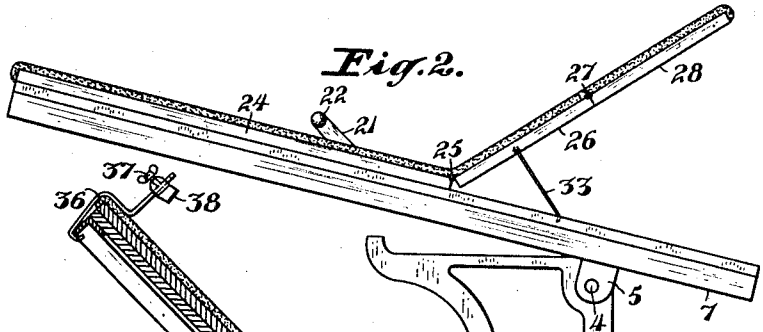


Fig. 3.

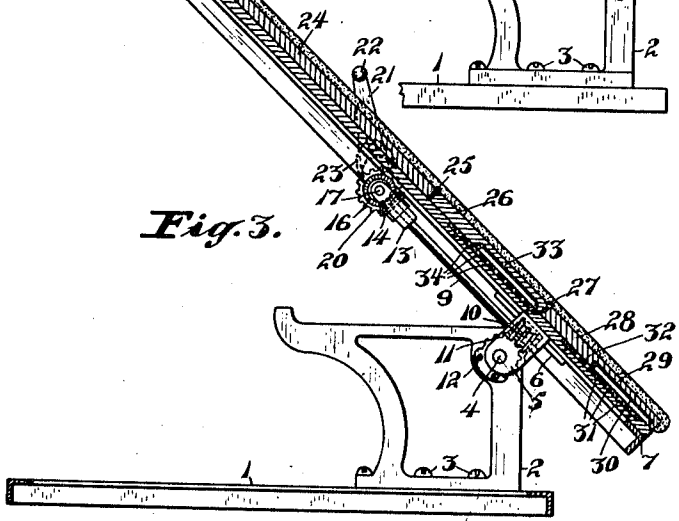


Fig. 4.

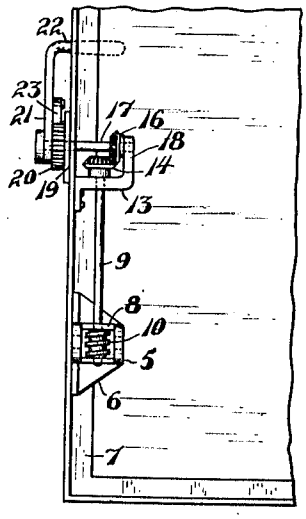
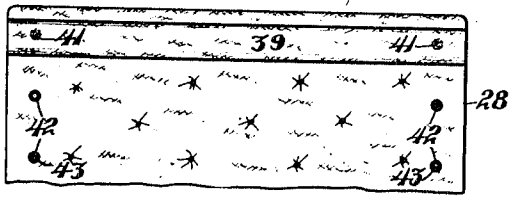


Fig. 5.



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UNITED STATES PATENT OFFICE.

ALBERT R. HYATT, OF OLDS, IOWA.

COUCH.

1,270,737. Specification of Letters Patent. Patented June 25, 1918.

Application filed July 19, 1915. Serial No. 40,618.

To all whom it may concern:

Be it known that I, ALBERT R. HYATT, a citizen of the United States, residing at Olds, in the county of Henry and State of Iowa, have invented new and useful Improvements in Couches, of which the following is a specification.

The present invention relates to improvements in that class of couches which can be tilted by the occupant to any desired angle, and which are especially useful in the treatment of certain abdominal ailments. The invention is an improvement upon the couch for which Letters Patent No. 1,099,092 were granted to me June 2nd, 1914. The object of the invention is to provide a couch the form of which can be changed in several different ways, to greatly simplify the construction thereof, and to render it easier of manipulation.

In the accompanying drawing, Figure 1 is a side view of the couch in a horizontal position, showing also in dotted lines the head rest elevated; Fig. 2 is a similar view showing also the back rest elevated and the body of the couch also slightly elevated in the opposite direction; Fig. 3 is a longitudinal sectional view showing the couch greatly elevated at the foot; Fig. 4 is a broken bottom plan view of one side of the couch; Fig. 5 is a broken plan view of an end of the couch.

Referring to the drawing, 1 indicates a suitable base adapted to rest upon the floor and upon which side pieces 2 are secured by screws 3. Secured to said side pieces is a shaft 4 upon which are rotatable pairs of bearing plates 5, depending from plates 6 secured to the under side of the lower body section 7 of a couch. Connecting one pair of said bearing plates are plates 8 through which extends a longitudinal shaft 9 carrying, between said plates 8, a worm 10, which meshes with a worm segment 11, fixedly secured, as shown at 12, upon the adjacent side piece 2. Said shaft also passes through a bracket 13, and there is secured on the end of said shaft projecting through said bracket a miter gear 14 meshing with a miter gear 16, on a transverse shaft 17, having one bearing in the end of a bent portion 18 of said bracket and passing through the vertical member of an angle iron 19 forming part of the lower couch section. To the end of said shaft so projecting through said vertical member is secured a toothed wheel 20 and on the end of said shaft is loosely mounted a lever 21 having a handle 22 extending over the edge of the couch. To said lever 21 is pivoted at its middle a double-acting pawl 23 so that it can engage the toothed wheel in either direction of movement of the lever.

The occupant of the couch can raise or lower the couch from an elevated position by causing one point or the other of the pawl to engage the toothed wheel and moving the lever in the proper direction.

By reason of the engagement of the worm wheel with the worm segment being non-reversible, the couch will always remain in any position to which it has been elevated without the need of any additional means for holding it in said position.

To the foot portion of the couch body is secured an upper body section 24, to which is pivoted, as shown at 25, an upper back section 26, to the free end of which is pivoted, as shown at 27, a head rest 28. Said head rest may be supported in a raised position, as shown in dotted lines in Fig. 1, by means of a rod 29, normally contained by frictional contact in a recess 30 in the head rest, of which one end is pivoted to the under side of the head rest and the other end can engage any one of a series of sockets 31 in a longitudinal socket piece 32 in a recess in the body.

In the same manner the back rest and head rest can be supported in a raised position, as shown in Fig. 2, by means of a similar rod 33 pivoted to the back rest, the free end of which can engage any one of a series of sockets in a socket piece 34 in the couch body.

With certain abdominal and other troubles it is desirable that the patient should rest with his feet greatly elevated, and for this purpose there are provided clamps 36 secured to the foot of the couch, upon which are secured, by thumb screws 37, straps 38 by which the body of the patient can be suspended.

A roll or pillow 39 many be secured adjustably for tall or short persons, as may be required, in any one of a longitudinal series of positions by means of pins 41 depending from terminal portions of the roll and engaging any pair of two longitudinal series of holes 42, through the upholstery of the couch and also of sockets 43 in the head rest.

It will thus be seen that the couch may be used in a great variety of positions, either straight and entirely horizontal, as shown in Fig. 1, or tilted slightly, or greatly tilted, as shown in Fig. 3, or with the head rest tilted, as shown in dotted lines in Fig. 1, or with the back rest also tilted, and in both of these latter positions with the lower portion of the couch either horizontal or raised, the latter position being shown in Fig. 2.

I claim:—

Means for enabling an occupant of a couch to vary its inclination comprising an upright, on which the couch is pivotally supported, a fixed worm segment around its pivotal axis as center, a longitudinally extending shaft carried by the couch body, a worm on said shaft engaging said segment, an arm pivoted about a transverse axis below the couch and extending above the couch into a position convenient to be reciprocated by a hand of an occupant thereof, and an operative connection between said arm and the shaft, whereby the reciprocation of the arm rotates the shaft.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ALBERT R. HYATT.

Witnesses:
F. M. WRIGHT,
D. B. RICHARDS.