No. 634,212. Patented Oct. 3, 1899.

C. H. GRAWITZ.

COUCH.

(Application filed Feb. 24, 1899.)

(No Model.)

Fig. 1

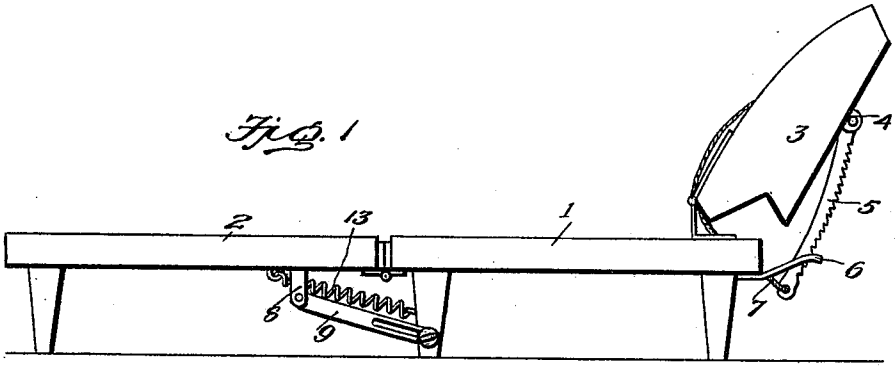


Fig. 2.

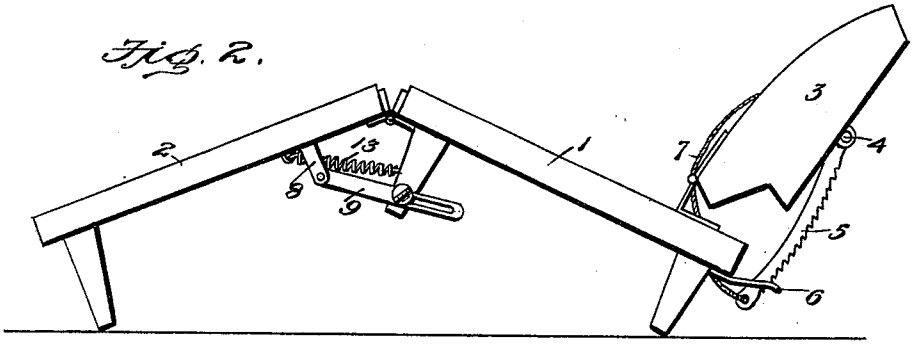


Fig. 3.



Fig. 4.

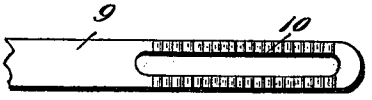
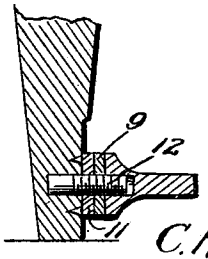


Fig. 5.



Witnesses

Inventor

C. H. Grawitz.

By A. B. Williamson & Co

Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHRISTIAN H. GRAWITZ, OF EASTON, PENNSYLVANIA.

COUCH.

SPECIFICATION forming part of Letters Patent No. 634,212, dated October 3, 1899.

Application filed February 24, 1899. Serial No. 706,719. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN H. GRAWITZ, a citizen of the United States, residing at Easton, in the county of Northampton and State of Pennsylvania, have invented certain new and useful Improvements in Couches; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention has relation to cots, and more particularly to that class known as "invalid couches;" and the object of the invention is to obtain a wide range of adjustment, whereby the invalid may be changed to many comfortable positions.

With this object in view the invention consists in certain features of construction and combination of parts which will be hereinafter fully described and claimed.

In the drawings, Figure 1 is a side elevation of my couch, showing the leg and seat sections in a horizontal position. Fig. 2 is a similar view showing them inclined. Fig. 3 is a view of the clamp-washer. Fig. 4 is a view of the inner side of the slotted bar; and Fig. 5 is a view taken through one of the legs of the seat-section, the clamp-washer, slotted bar, and thumb-nut.

In the drawings, 1 denotes the seat-section, 2 the leg-rest section, and 3 the back-section, these sections being hinged together, as illustrated.

4 denotes a bracket secured to the back of the back-rest section, and this bracket supports a pivoted rack-bar 5, which engages with a slotted catch-plate 6, secured to the rear end of the seat-section.

7 denotes a cord or rope by means of which the rack-bar may be freed from its catch and the back be adjusted to the desired inclination, and in order to enable the patient or occupant of the cot to incline his limbs by arching his knees and support them in this inclined position without strain I have provided means whereby the invalid, without any fatigue to himself, may incline in opposite directions the seat and leg-rest sections, as shown in Fig. 2, and lock these sections in such adjustment. The means which I employ for accomplishing this result I will now proceed to describe.

8 denotes a bracket secured to the under edge of the leg-rest section and having pivoted thereto a slotted arm 9, the inner face of which is preferably serrated, as shown at 10. This serrated face engages with the serrated face of a washer 11, located upon a screw 12 and having prongs which embed themselves in the leg and prevent the washer from turning. A thumb-nut is screwed upon the end of the screw and clamps the slotted bar to the washer and holds the leg-rest and seat sections in the desired adjustment.

A person lying in a perfectly horizontal position would experience considerable difficulty in adjusting the seat and leg-rest sections to the position shown in Fig. 2, and in order to overcome this I have provided a spring or springs 13, one end of which is connected to the leg-rest section and the other end to the seat-section, the energy being exerted to elevate the abutting ends of the leg and seat sections, and thereby incline these sections in opposite directions. To secure this inclined position, all that is necessary is for the occupant of the couch to loosen the thumb-nut and slip the serrated face of the bar from the serrated face of the washer. The spring will now exert its energy and draw the leg and seat sections up into position, as shown in Fig. 2, in which position the parts may be locked by clamping the thumb-nut.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of the device will be readily understood without requiring an extended explanation.

The couch is simple, strong, and may be made at small cost, so as to be within the reach of all classes.

It will of course be understood that various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a couch, the combination with the seat and leg-rest sections hinged together, one of said sections provided with a bracket having a slotted bar pivoted thereto, means for ad-

justably clamping the slotted bar to the other section, and a spring connecting the two sections and exerting its energy to elevate the abutting ends of said sections, substantially as and for the purpose set forth.

2. In a couch, the combination with the leg and seat sections hinged together, a bracket carried by one section, a slotted bar pivoted to said bracket and having serrations on its inner face, a screw-stud carried by the other section, a washer mounted on said screw-stud against rotation, and provided with a serrated face to engage the serrated face of the slotted bar, and a thumb-nut screwed upon said screw-stud for clamping the parts together, substantially as and for the purpose set forth.

3. In a couch, the combination with the leg and seat sections hinged together, a bracket carried by one section, a slotted bar pivoted to said bracket and having serrations on its inner face, a screw-stud carried by the other section, a washer mounted on said screw-stud against rotation, and provided with a serrated face to engage the serrated face of the slotted bar, a thumb-nut screwed upon said screw-stud for clamping the parts together, and a spring connecting the leg and seat sections, substantially as and for the purpose set forth.

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

CHRISTIAN H. GRAWITZ.

Witnesses:
CHAS. B. BRUNNER,
HARRY W. HERMAN.