

(No Model.)

M. RITTBERGER.
BEDSTEAD AND COUCH.

No. 513,419.

Patented Jan. 23, 1894.

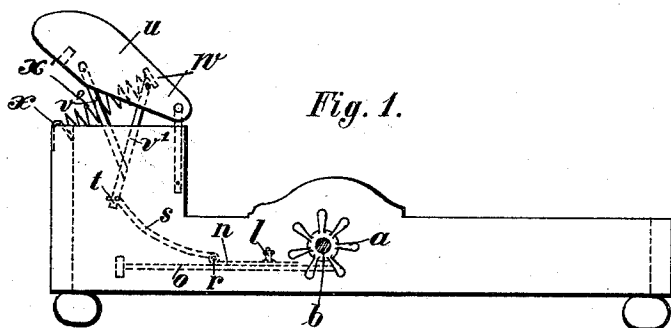


Fig. 1.

Fig. 2.

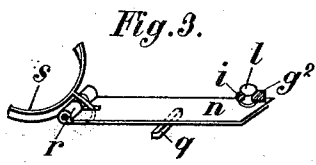
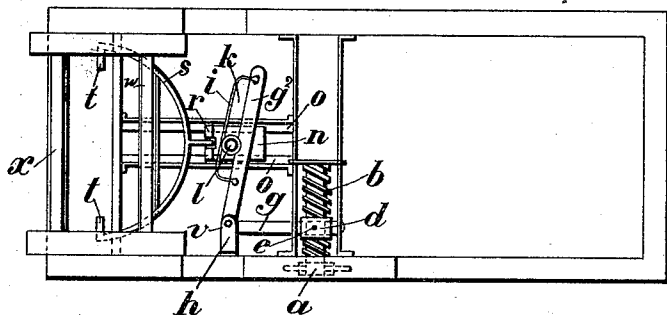


Fig. 3.

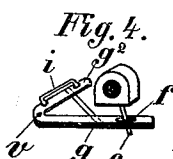


Fig. 4.

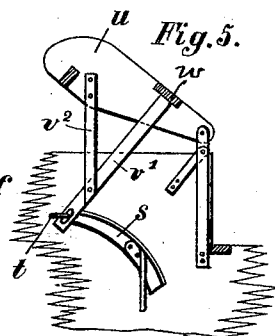


Fig. 5.

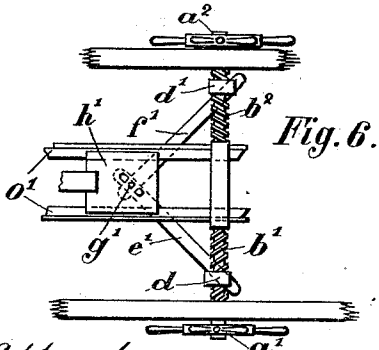


Fig. 6.

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UNITED STATES PATENT OFFICE.

MAX RITTBERGER, OF POTSDAM, GERMANY.

BEDSTEAD AND COUCH.

SPECIFICATION forming part of Letters Patent No. 513,419, dated January 23, 1894.

Application filed December 4, 1890. Serial No. 373,626. (No model.) Patented in England August 9, 1890, No. 12,450.

To all whom it may concern:

Be it known that I, MAX RITTBERGER, merchant, of Potsdam, in the Kingdom of Prussia and German Empire, have invented new and useful Improvements in and Connected with Bedsteads and Couches, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has been patented in Great Britain under No. 12,450, dated August 9, 1890.

This invention relates to bedsteads and couches with adjustable head-rests and it has for its object to enable the occupant of the bed or couch to adjust the position of his head and the upper part of his body without the assistance of a third party.

I will describe my invention with reference to the accompanying drawings, in which—

Figure 1 is an elevation of a couch having these improvements applied thereto. Fig. 2 is a plan of Fig. 1. Figs. 3, 4 and 5 are details. Fig. 6 is a plan of part of a bedstead or spring mattress also with these improvements applied thereto.

Referring to Figs. 1, 2, 3, 4 and 5, it will be seen that on one side of the couch I arrange a hand wheel *a*, which is by preference suitably covered and protected. This wheel is mounted upon a rotary shaft in suitable bearings and provided with a double screw thread *b*. On the screwed part of the shaft there is mounted a nut *d* in the lower side of which there is fixed a pin or stud *e* the lower end of which engages in a slot *f* formed in one limb of a bell-crank-lever *g* (Fig. 4). The bell-crank-lever is pivoted at *v* to the bracket or fixing *h* so as to turn thereon. The other limb *g*² of the bell-crank-lever has a slot formed thereon or connected therewith as shown at *k* where the slot is formed by means of a metal rod *i* bent twice at right angles and secured to the limb *g*² of the bell-crank-lever.

Within the slot *k* there is a friction roller *l* mounted on a stud fixed to the carriage *n* which is capable of sliding on the angle-iron rails *o* and which may have affixed to its under side the stop *q* to prevent lateral or vertical motion.

Upon the end of the carriage farther from *l* or nearer to the head of the couch, there is a hinge-joint *r* to which the bow-lever *s* is connected. This bow-lever has its limbs made in the shape of a compound curve as

shown in Figs. 1 and 5 and engages by means of the pivot *t t* upon each of its ends with the levers *v*¹ and *v*² secured to the movable head-rest or support.

Between the cross-piece *w* of the head-rest *u* and the head board *x* of the couch frame there are strong spiral-springs *x'* which keep the head rest normally raised and the position of the rest is adjusted by the operation of the devices described.

The apparatus is operated by turning the hand wheel *a* which causes the nut *d* to slide in one or the other direction on the screwed shaft *b* and thus alters the position of the bell-crank-lever *g* through the pin *e*. The carriage *n* is consequently also moved and its motion is communicated through the bow-lever *s* to the head-rest which is thereby raised or lowered.

When the apparatus is applied to a bedstead, the modification represented in Fig. 6 may be employed. In this case two hand-wheels *a'* are mounted one on each end of the rotary shaft which has formed on its right and left hand screw threads respectively as shown at *b'* and *b*². Upon each of these screwed parts there is mounted a nut *d'* having a pin or pivot engaging in the levers *e'* and *f'* respectively. In the opposite ends of these levers there are slots both of which engage with the stud or pin *g'* and the carriage *h'*.

The arrangement and operation of the other parts is as hereinbefore described with reference to Figs. 1 to 5 inclusive.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. In combination a movable head rest, springs supporting the same in a raised position, a hand wheel, a sliding carriage operated thereby and a bow connection between said carriage and head rest for adjusting the same, substantially as described.

2. In combination with the movable head rest, a hand wheel, a threaded shaft, a nut movable thereon, a lever operated thereby, a sliding carriage and a bow connection between said sliding carriage and the head rest, substantially as described.

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

MAX RITTBERGER.

Witnesses:

PAUL FISCHER,
WILHELM SCHWICHTAL.