

(No Model.)

J. Q. A. SARGENT.

HEAD REST FOR BEDS.

No. 305,761.

Patented Sept. 30, 1884.

Fig. 2

Fig. 1.

Fig. 3.

Witnesses.

Wm. S. Bell
Geo. W. M. Given.

J. Q. A. SARGENT,
Inventor,

per
Brown Bros.
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN Q. A. SARGENT, OF MANCHESTER, NEW HAMPSHIRE.

HEAD-REST FOR BEDS.

SPECIFICATION forming part of Letters Patent No. 305,761, dated September 30, 1884.

Application filed August 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN Q. A. SARGENT, of Manchester, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Head-Rests for Bedsteads, &c., of which the following is a full, clear, and exact description.

As well known, bedsteads, such as the "Crosby invalid bedstead," so called, and others, as well as lounges, sofas, &c., are oftentimes provided with a head-rest that is capable of adjustment as to height within given limits and at the will or desire of the occupant. This adjustment of the head-rest, as is obvious, it is desirable should be obtained with an easy and quiet movement, and when made it should be most secure against accidental displacement, and, furthermore, it should be accomplished in such a way as to permit the head-rest to be placed and secured within the range of its movement for adjustment at any angle of inclination desired.

The present invention relates to mechanism for adjusting the head-rest as above stated; and it consists in the construction and the combination of parts hereinafter particularly described, and then pointed out in the claims.

In the accompanying plate of drawings, Figure 1 is a plan view with the head-rest elevated and partially broken away. Fig. 2 is a longitudinal vertical section on line 2 2, Fig. 1. Fig. 3 is a transverse section on line 3 3, Fig. 2.

In the drawings, B represents two similar curved and parallel side bars joined near one end by a cross-bar, E, and at the other end, F, each pivoted to a side piece, D, of two parallel side pieces, D D, joined together by cross pieces or bars S. A sheet of canvas, A, or other suitable flexible material stretches from and is attached to the curved side bars, B, making with said bars the head-rest proper, and this head-rest and the frame which carries it, and which consists of the parallel side pieces, D D, and cross-piece S, all as described, are placed and supported at one end of the bedstead, the head-rest and frame being both along the length of the bedstead, and the free and unhinged end T of the rest at the head of the bedstead.

O O are two rods, each pivoted at one end to a curved side bar of the head-rest described

and between the free and hinged ends of the head-rest, and at the other end to a common transverse rod, N. This rod or shaft N carries two similar pinion gear-wheels, L, each engaging with a similar but separate and horizontal parallel toothed rack-bar, H, which are fastened to the carrying-frame for the head-rest in any suitable manner, and extending along the length thereof. This rod N at one end passes loosely through a screw-nut, R, and at that end, as also at the other end, it enters into a longitudinal and horizontal groove, *a*, of the parallel side bars before referred to. The screw-nut engages with a longitudinal and horizontal screw rod or shaft, Q, which turns freely in suitable bearings of the carrying-frame for the head-rest, and is shouldered, as at *f*, to keep it, when it is turned in its bearings, from moving lengthwise through the same. The screw-shaft at its end *g* suitably projects toward the head-board of the bedstead, and said end is adapted to receive a crank-handle for convenience in turning it.

With mechanism connecting the screw-nut R with the head-rest and with the screw-shaft, arranged to turn as above fully described, it is plain that the turning of the screw-shaft in either direction will cause the screw-nut to travel along its length, and thereby, as a consequence, and as the case may be, raise or lower the head-rest, which, in raising or lowering, swings upon its pivot-connection with its carrying-frame. In this travel of the screw-nut R its shaft N rolls by its gear-wheels L along the length of the toothed rack-bars, and also passes along the length of the guiding-grooves *a* therefor in the side rails of the rest-carrying frame.

Wheels rolling upon smooth surfaces or guiding-ways may be substituted for the gear-wheels L and toothed rack-bars. Again, the guiding-grooves, with the projecting of the shaft therein, may be dispensed with and a single connection of the head-rest with the screw-nut be used, instead of a double one, as has been described.

The several parts combined and arranged together as herein described and shown are, however, deemed to be most advantageous, and it is obvious that by them, as well, also, by the changes thereof indicated, but to a greater degree of certainty by them combined

- as aforesaid, the adjustment of the head-rest can be and is made with a perfectly easy and quiet movement, and, when obtained, absolutely secure against any accidental movement or change, not only during the time the change of position of the head-rest is being made by turning the screw-shaft, but the instant said turning of the screw-shaft ceases, and so long thereafter as may be desired.
- 10 The head-rest proper may be of other forms and constructions than that herein particularly described, this invention consisting only of the mechanism for operating the head-rest and holding it in its adjusted position.
- 15 Having thus described my invention, what I claim is—
1. The combination, with an adjustable head-rest for bedsteads and its supporting or carrying frame, of a screw-rod, Q, screw-nut 20 R, a shaft, N, links connecting the shaft and the head-rest, gear-wheels L L, and stationary rack-bars H H, substantially as described.

2. The combination, with an adjustable head-rest for bedsteads and its supporting or carrying frame, of a screw-rod, Q, screw-nut 25 R, shaft N, links O O, connecting the shaft and head-rest, gear-wheels L L, and stationary rack-bars H H, substantially as described.

3. The combination, with an adjustable head-rest for bedsteads and its supporting or carrying frame provided with guiding-grooves 30 a, of a screw-rod, Q, screw-nut R, shaft N, links O O, connecting the shaft and head-rest, gear-wheels L L, and stationary rack-bars H H, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses. 35

J. Q. A. SARGENT.

Witnesses:

EDWIN W. BROWN,
WM. S. BELLWS.