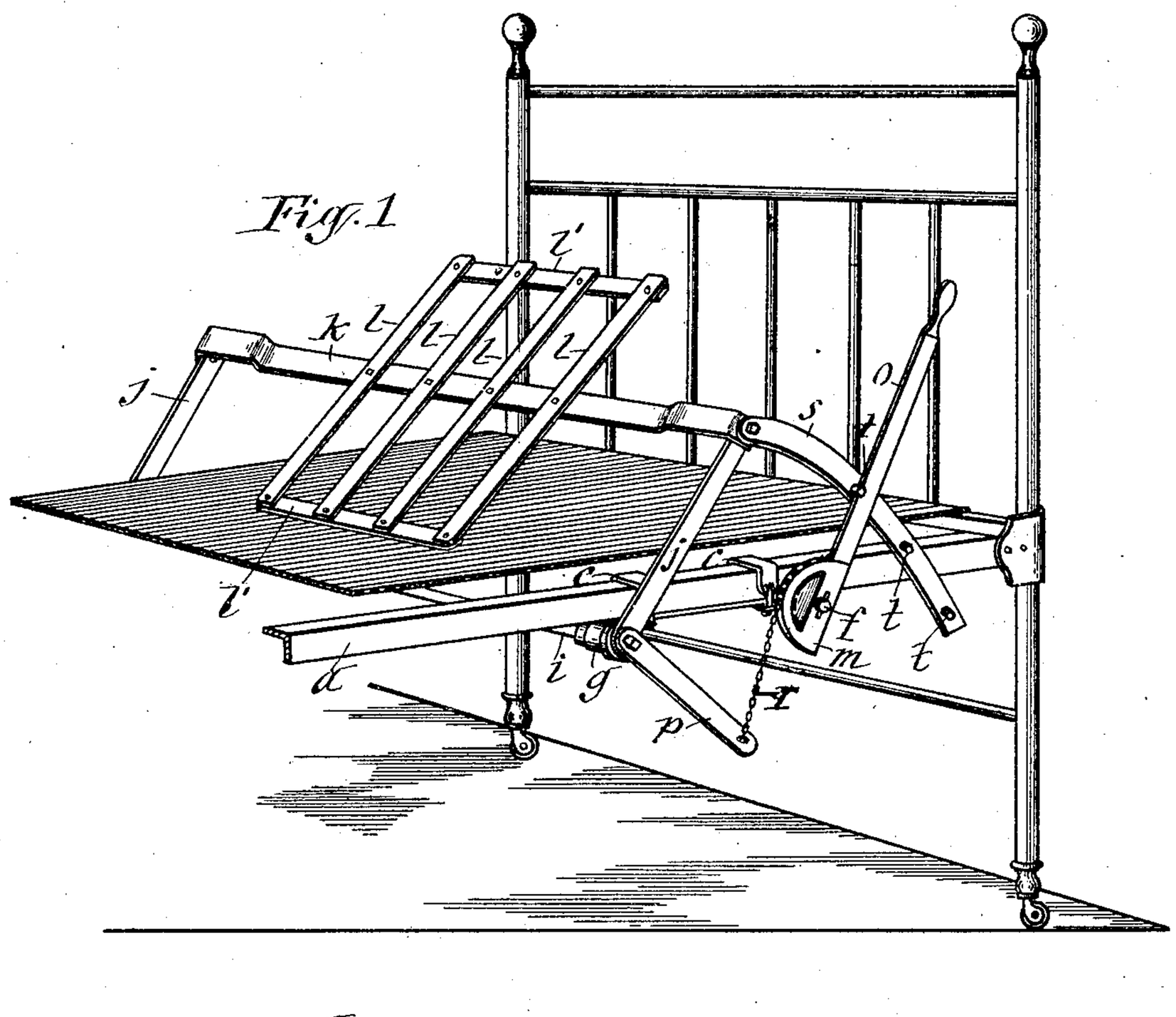
No. 836,961. PATENTED NOV. 27, 1906.

W. H. CARR.

ADJUSTABLE HEAD AND BACK REST.

APPLICATION FILED APR. 7, 1906.

Fig. 1



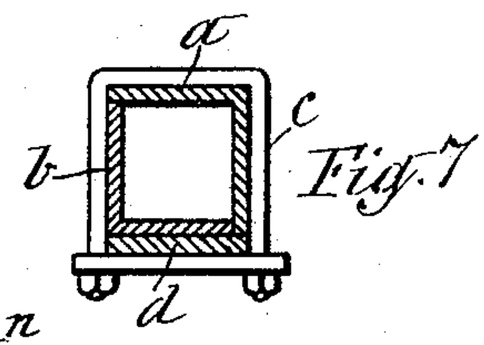


Fig. 7

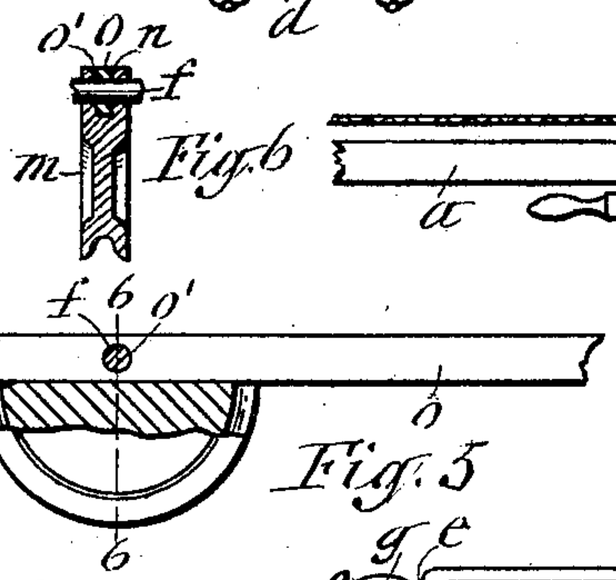


Fig. 6

Fig. 5

Fig. 2

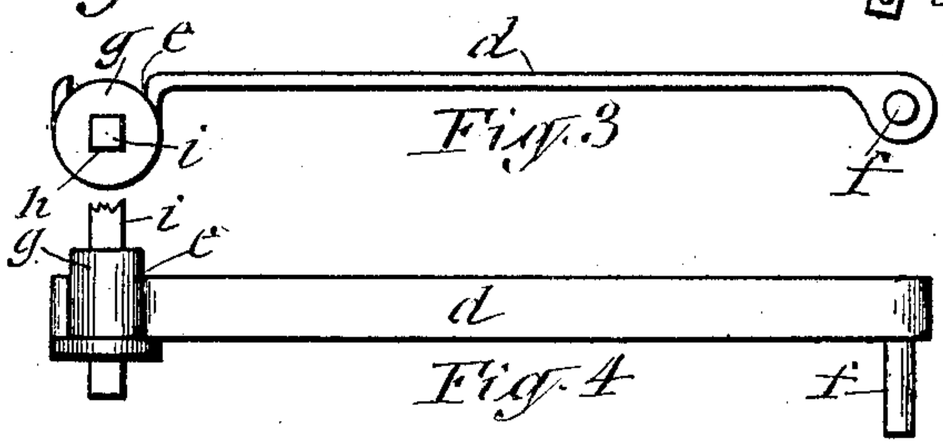


Fig. 3

Fig. 4

WITNESSES:

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ADJUSTABLE HEAD AND BACK REST.

No. 836,961. Specification of Letters Patent. Patented Nov. 27, 1906.

Application filed April 7, 1906. Serial No. 310,553.

To all whom it may concern:

Be it known that I, WILLIAM H. CARR, a citizen of the United States, and a resident of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Adjustable Head and Back Rests, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates more particularly to the adjustable head and back rest shown in the United States Letters Patent No. 813,272, granted to me March 6, 1906.

My present invention consists in an improved construction and combination of parts and auxiliary devices connected therewith, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved head and back rest supported in an inclined position. Fig. 2 is a side view of the same, resting approximately horizontal on the bed. Figs. 3 and 4 are respectively side and plan views of one of the longitudinal bars which support on the bedstead the bearings for the transverse shaft and hand-lever of the head and back rest. Fig. 5 is a fragmentary side view of the pulley and hand-lever connected thereto. Fig. 6 is a transverse section on the line 6 6 in Fig. 5, and Fig. 7 is an enlarged transverse section of one of the side rails of the bedstead with the aforesaid longitudinal bar attached thereto.

Similar letters of reference indicate corresponding parts.

a denotes one of the side rails of a metallic bedstead which may be of any desired shape and construction. Said side rails are usually formed of angle-iron, as shown in Figs. 1 and 7 of the drawings.

At a suitable distance from the head of the bedstead the side rails *a* have fastened to them bars *b*, placed reverse on the under sides of the rails to produce a square or rectangular shape in the cross-section of a portion of each side rail, as shown in Fig. 7 of the drawings. The bar *b* is secured to the rail *a* by means of clips *c c*, embracing said rail and bar and also fastening to the under side thereof a longitudinal bar *d*, which is formed at one end with a journal-bearing *e* and at the opposite end with a laterally-protruding trunnion *f*, as shown in Figs. 3 and 4 of the drawings.

In the bearing *e* of each of the two bars *d d* on opposite sides of the bedstead is journaled a roll or sleeve *g*, which is provided with a square or other polygonal axial aperture *h*, through which passes the end of a correspondingly-shaped shaft *i*, extending across the under side of the side rails *a a*. To the protruding ends of the shaft *i* are firmly secured two arms *j j*, having square or polygonal holes through which the ends of the shaft pass. To the free ends of said arms are attached the ends of a transverse bar *k*, which is a part of the frame of the head and back rest, formed of slats *l l*, fastened at or near their centers transversely to the bar *k* and tied to each other at their ends by means of slats *l' l'*, as shown in Fig. 1.

On the trunnion *f* of one of the bars *d* is pivoted a segmental pulley *m*, which is grooved in its periphery and provided with a diametric groove *n*, in which is inserted the attaching end of a hand-lever *o*, provided with an orifice *o'*, receiving through it the trunnion *f*, and thus fastening the said hand-lever to the pulley.

To the end of the shaft *i* is secured an auxiliary lever *p*, to the free end of which is attached a chain *r* or a wire cord, which is attached to the pulley *m* in a suitable manner to allow the said chain or cord to be wound on the grooved periphery of the pulley by the swinging of the hand-lever toward the head of the bedstead, which movement causes the rest-frame *k l* to be raised into an inclined position, as shown in Fig. 1. By swinging the hand-lever in the opposite direction toward the foot of the bedstead the aforesaid rest-frame is placed horizontal or flat upon the bedstead, as illustrated in Fig. 2.

To the free end of the arm *j* is firmly secured a quadrant *s*, which extends across the side of the hand-lever and has projecting from it a plurality of lugs or other suitable stops *t*, adapted to engage the hand-lever to limit the movement thereof and retain it in its required position for supporting the head and back rest in its desired angle of inclination.

The purpose of the auxiliary lever *p* is to obtain greater purchase on the arms *j j* and facilitate the operation of the hand-lever *o*.

What I claim is—

1. The combination, with a bedstead, a shaft extending across said bedstead and pivotally supported thereon, arms extending from said shaft, and a rest-frame attached to the free ends of said arms, of a hand-lever fulcrumed on the bedstead and operatively connected with the rest-frame to adjust the

same in its angle of inclination, a quadrant attached to one of the aforesaid arms and extending across the hand-lever, and stops on said quadrant for limiting the movement of the hand-lever.

2. The combination, with a bedstead, a shaft extending across the bedstead and pivotally supported thereon, arms extending from said shaft, and a rest-frame attached to the free ends of said arms, of a pulley mounted on the side rail of the bedstead, a hand-lever attached to said pulley, an auxiliary lever attached to the aforesaid transverse shaft, and a chain or cord attached to the end of the auxiliary lever and wound upon the pulley as set forth.

3. The combination, with a bedstead, a shaft extending across the bedstead and pivotally supported thereon, arms extending from said shaft, and a rest-frame attached to the free ends of said arms, of a pulley mounted on the side rail of the bedstead, a hand-lever attached to said pulley, an auxiliary lever attached to the aforesaid transverse shaft, a chain or cord attached to the end of the auxiliary lever and wound on the pulley, a quadrant attached to one of the aforesaid arms and extending across the hand-lever, and stops on the quadrant for limiting the movement of the hand-lever as set forth and shown.

4. The combination, with a bedstead, of longitudinal bars fastened to the side rails of the bedstead, pivotal bearings attached to said bars at one end thereof, a trunnion projecting from the opposite end of one of said bars, a transverse shaft mounted in the aforesaid pivotal bearings, arms attached to said transverse shaft, a rest-frame attached to the free ends of said arms, an auxiliary lever attached to the transverse shaft, a pulley mounted on the aforesaid trunnion, a chain or cord attached to the end of the auxiliary lever and wound on the said pulley, and a hand-lever attached to the pulley as set forth.

5. The combination, with a bedstead, of longitudinal bars fastened to the side rails of the bedstead, pivotal bearings on said bars at one end thereof, a trunnion projecting from the opposite end of one of said bars, rolls mounted in the pivotal bearings and provided with polygonal axial apertures, a polygonal shaft supported at its ends in said rolls, arms extending from said shaft, a rest-frame attached to the free ends of said arms, an auxiliary lever attached to the polygonal shaft, a segmental pulley pivoted on the aforesaid trunnion and provided with a diametric groove, a hand-lever having its attaching end extending longitudinally through said groove and provided with an orifice receiving through it the aforesaid trunnion, a chain or cord attached to the end of the auxiliary lever and wound upon the aforesaid pulley, a quadrant attached to the free end of one of the arms and extending across the hand-lever, and stops on the quadrant limiting the movement of the hand-lever substantially as set forth and shown.

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Witnesses:
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