

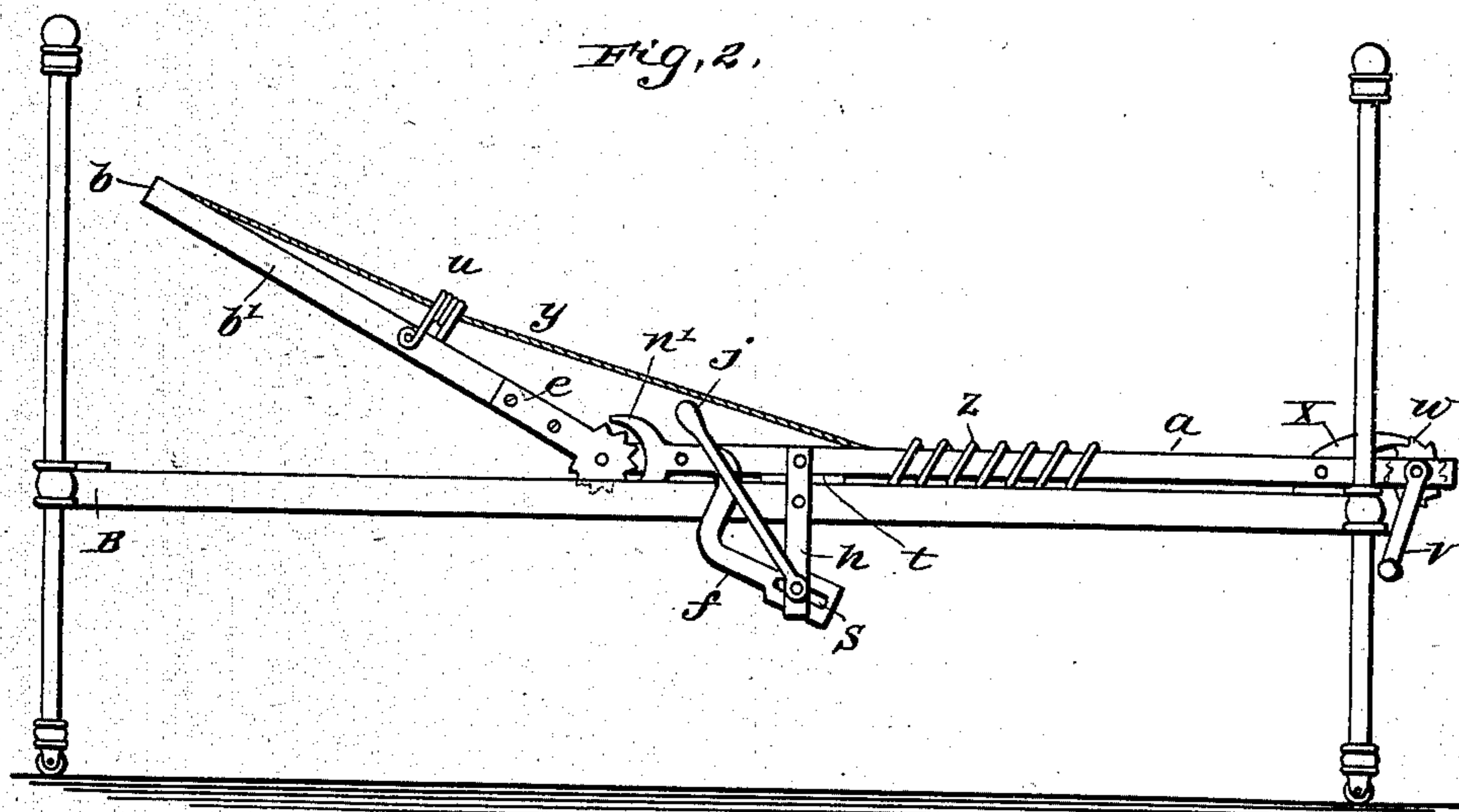
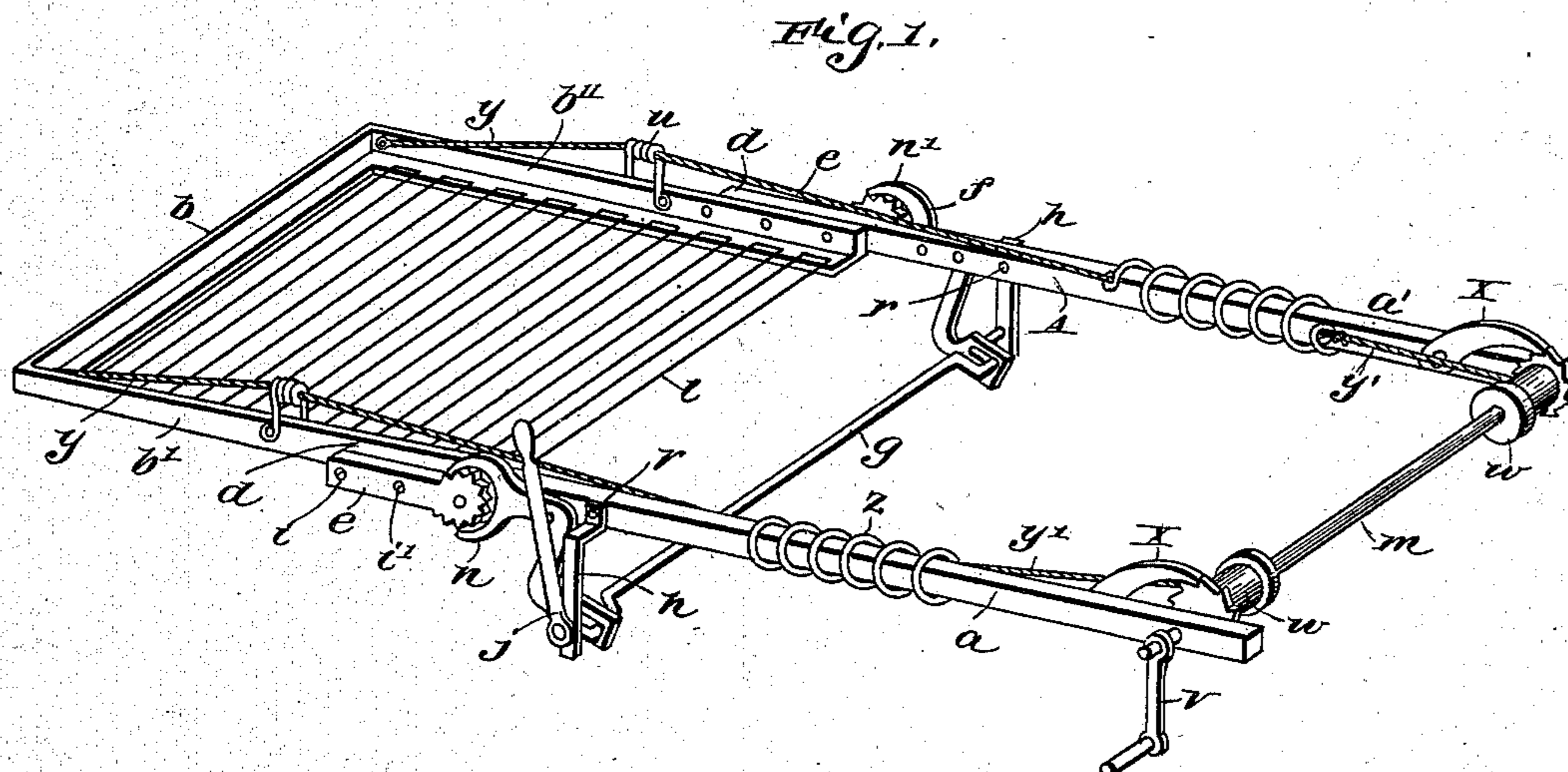
No. 723,323.

PATENTED MAR. 24, 1903.

J. D. SMOCK.
HEAD REST.

APPLICATION FILED JUNE 26, 1902.

NO MODEL.



Witnesses:

Geo. M. Davis
Sydney B. Davis.

Inventor:

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UNITED STATES PATENT OFFICE.

JASPER D. SMOCK, OF TERRE HAUTE, INDIANA, ASSIGNOR OF ONE-HALF
TO PETER PAUL MISCHLER, OF TERRE HAUTE, INDIANA.

HEAD-REST.

SPECIFICATION forming part of Letters Patent No. 723,323, dated March 24, 1903.

Application filed June 26, 1902. Serial No. 113,303. (No model.)

To all whom it may concern:

Be it known that I, JASPER D. SMOCK, a citizen of the United States, residing at Terre Haute, in the county of Vigo and State of Indiana, have invented a new and useful Head-
5 Rest, of which the following is a specification.

My invention relates to that class of head-rests whereby a means is provided for raising and supporting the head and upper portion
10 of the body of a person reclining on a bed to a sitting position; and the objects of my invention are, first, to provide a means whereby the head and upper portion of the body of an invalid or other person reclining upon a
15 bed may be easily raised from a horizontal position to a sitting position and supported in such position; second, to provide a head-rest for such purpose which can be attached to any ordinary bed-frame or other similar
20 object, and, third, to provide a head-rest which will have a lifting power, and thereby save the person reclining upon the same or the nurse at the bedside from lifting the body to an inclined or sitting position. I attain
25 these objects by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the head-rest. Fig. 2 is a side elevation of the head-
30 rest, showing the head-rest adjusted in a raised position and attached to a bed-frame.

Similar letters of reference refer to similar parts throughout the drawings.

The letter A indicates a metallic framework,
35 which consists of two side bars *a* and *a'* and a movable head-rest *b*, consisting of a metallic bar bent U shape, the extreme ends of which have movable connection with the respective forward ends of the side bars *a* and
40 *a'*, as set forth more fully hereinafter. The side bars *a* and *a'* consist of metallic bars the forward ends of which have movable connection with the movable head-rest *b* and the rear ends of which project backward behind the
45 foot-posts of a bed B or other object upon which the same are mounted. The forward ends of the bars *a* and *a'* are perforated for the purpose of receiving pivots *p*, whereby the side bars are pivotally connected with the
50 respective ends of the U-shaped movable head-rest *b*.

The movable head-rest *b* is constructed of angle-iron bent U shape, and the ends of the arms *b'* and *b''* project upon the inner side of and are pivotally connected with the side
55 bars *a* and *a'*, respectively, by means of the pivots *p*, thereby forming a hinge-like joint therewith. The movable head-rest *b* is provided with a cord, lacing, or net *l*, which is attached to the arms *b'* and *b''*, as shown in
60 Fig. 1, for the purpose of more firmly supporting a pillow placed thereon.

A metallic block *d* is bolted upon the outside of each arm of the movable head-rest, just in advance of the hinge connection, for the pur-
65 pose of supporting upon the outer side thereof a geared or toothed block *e*. The toothed block *e* consists of a metallic bar, the rear end of which is enlarged, rounded, and toothed for the purpose of engaging, by means of the teeth
70 thereon, the hereinafter-described lever *f*. The forward or straight portion of the block *e* is perforated for the purpose of receiving the bolts *i* and *i'*, whereby the blocks *d* and *e* are firmly attached to the arms *b'* and *b''* of the
75 movable head-rest *b*. The toothed portion of the blocks *e* projects backward and laps over the outside of the side bars *a* and *a'*. A metallic lever *f* is pivotally attached to the outer side of each of the side bars *a* and *a'* and consists
80 of an S-shaped bar, the forward or upper end of which is provided with two prongs or pawls *n* and *n'*, adapted to engage the teeth upon the block *e*, and the opposite or lower end of which is provided with a slot *s*, adapted to
85 receive the crank-shaft *g*, hereinafter described. A hanger *h*, consisting of a metallic bar, is mounted upon the outer side of each of the side bars *a* and *a'* by means of bolts *r*
90 and are bent, as shown in the drawings, to rest upon a block *t*, which rests upon the side rails of the bed-frame B and is adapted to support said hanger. The hangers project upward from the block *t* and support from their extreme upper ends the side bars *a* and
95 *a'*, and the opposite ends of the hangers project downward below and outside of the side rails of the bed-frame and are adapted to receive and support the ends of the crank-shaft
100 *g*. A crank-shaft *g* is supported transversely under the bed-frame B by the two hangers *h* and bent U-shaped near either end for the

purpose of serving as cranks, whereby the levers *f* are operated, through slots *s* of which the bent portions of the shaft passes. A handle *j* is attached stationary to one or both ends of the crank-shaft for the purpose of operating the same.

The extreme rear ends of the two side bars *a* and *a'* are perforated for the purpose of receiving a shaft *m*, which consists of a metallic rod provided with a crank-handle *V* upon one or both ends and with two ratchet-spools *w*, which are keyed to the shaft. A metallic pawl *x* is mounted upon the inner side of each of the two side bars *a* and *a'* and are adapted to engage and lock the ratchet-spools *w*.

A spiral spring-loop *u* is mounted about midway of each of the arms *b'* and *b''* of the movable head-rest for the purpose of supporting a cable *y*, which passes therethrough. The cables *y* are attached to the arms *b'* and *b''* near the upper ends thereof, pass through the loops *u*, and are attached at their opposite ends to the forward ends of spiral springs *z*, which are mounted upon or wound around the side bars *a* and *a'*. The springs *z* are free to move lengthwise of the side bars, and their rear ends are attached to cables *y'*; the other ends of which are attached to the ratchet-spools *w* upon the shaft *m*.

The purpose of the cables *y* and *y'* and the springs *z* is to raise the movable head-rest *b* by the tension of the springs, and the purpose of the ratchet-spools *w* upon the shaft *m* is to increase and decrease the tension of the springs *z* to suit varying loads upon the head-rest.

The usual form of bed-springs, slats, or other similar supports may be placed upon the bed-frame *B*, resting below the framework of my invention, and a mattress of any of the usual types may be laid upon the same.

To operate my invention, it is only necessary to release the prongs *n'* of the levers *f* from the teeth of the blocks *e*, when the springs *z* and cables *y* and *y'* will draw the movable head-rest *b* to an upright or inclined position, together with the mattress and upper portion of a body thereon. When the head-rest is raised sufficiently, the levers *f*

are set so that the prongs *n* will engage the teeth of the blocks *e* and lock the head-rest in such position. To lower the movable head-rest and the load thereon, the levers *f* are released from the toothed block *e*, and the weight of the load upon the movable head-rest, together with slight pressure thereon, will force the same downward to a horizontal or normal position. If the load or body to be lifted upon the head-rest is heavy, the tension of the spring is strengthened by winding the cable *y'* upon the ratchet-spool by means of the crank-handle *V*, and the tension may be lessened by the reverse action of the ratchet-spool.

The handle *j*, which operates the crank-shaft *g*, projects upward upon the outer side of the bed-frame and may be operated either by a person reclining upon the bed or by a bystander.

Having described my invention and its application, what I claim as new, and desire to secure by Letters Patent, is—

In a head-rest, the combination, with the side bars *a* and *a'*, the hangers *h* adapted to support the side bars upon the side rails of a bed-frame, the movable head-rest *b* having arms *b'* and *b''* in movable connection with the side bars *a* and *a'*, and provided with lacing *l*, the toothed blocks *e*, mounted upon the arms *b'* and *b''* and having means to engage the prongs of the lever *f*, the pronged levers *f* mounted upon the side bars *a* and *a'* and in operative connection with the crank-shaft *g*, said shaft being supported by the hangers *h* and adapted to operate the levers *f*, the spring-loops *u*, mounted upon the arms *b'* and *b''*, the cables *y* and *y'* and the springs *z*, adapted together to raise the movable head-rest, the shaft *m* and ratchet-spools, supported by the rear ends of the side bars *a* and *a'*, and the pawls *x*, adapted to lock the ratchet-spools, all substantially as described and for the purpose set forth.

In witness whereof I have hereunto set my hand.

JASPER D. SMOCK.

Witnesses:

SYDNEY B. DAVIS,
PETER P. MISCHLER.