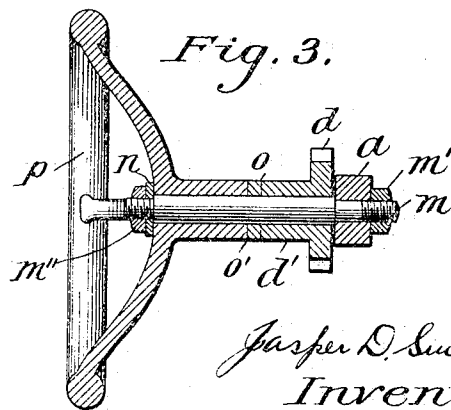
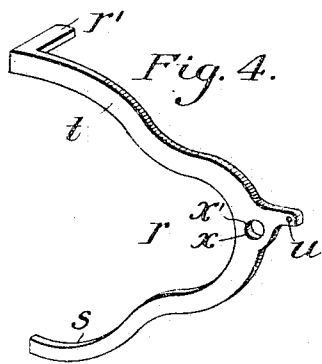
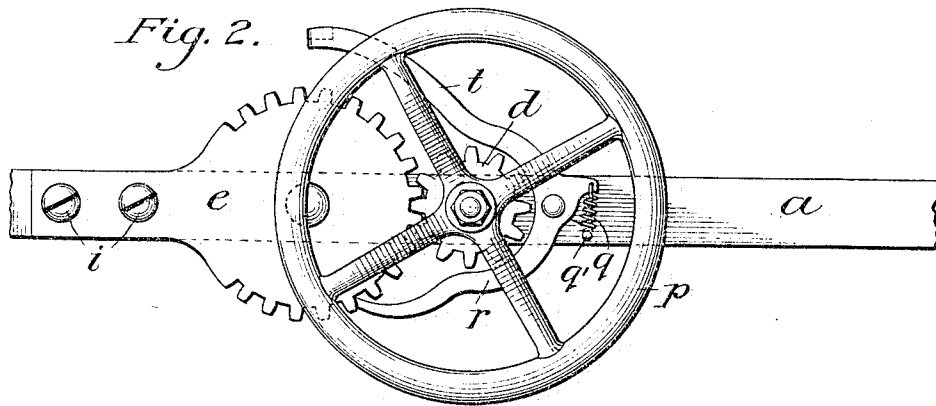
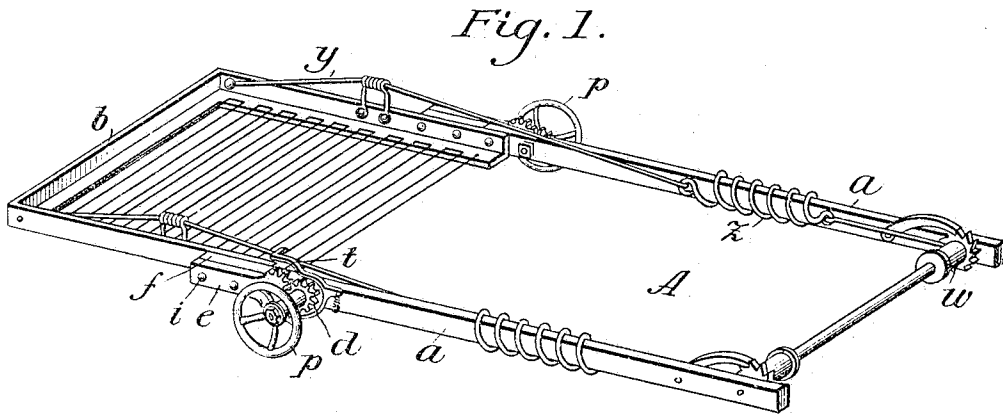


No. 769,415.

PATENTED SEPT. 6, 1904.

J. D. SMOCK.  
ATTACHMENT FOR HEAD RESTS.  
APPLICATION FILED SEPT. 13, 1903.

NO MODEL.



Witnesses:

Syd. B. Davis,

Geo. W. Davis,

Jasper D. Smock,  
Inventor:

# UNITED STATES PATENT OFFICE.

JASPER D. SMOCK, OF TERRE HAUTE, INDIANA.

## ATTACHMENT FOR HEAD-RESTS.

SPECIFICATION forming part of Letters Patent No. 769,415, dated September 6, 1904.

Application filed September 12, 1903. Serial No. 172,926. (No model.)

*To all whom it may concern:*

Be it known that I, JASPER D. SMOCK, a citizen of the United States, and a resident of Terre Haute, in the county of Vigo and State of Indiana, have invented a new and useful Improvement in Attachments for Head-Rests, of which the following is a specification.

My invention relates to an attachment for head-rests whereby a means is provided for raising and supporting the head-rest and the upper portion of the body of one reclining thereon, and the purpose of my attachment for such head-rests is to enable the patient or person reclining on the head-rest to raise or lower the head-rest to any desired position.

My attachment is applicable to various forms of head-rests, and particularly to the form of head-rest described in the Letters Patent No. 723,323, "Head-rest," granted to me by the United States March 24, 1903.

The objects of my invention are, first, to provide an attachment for head-rests whereby the person reclining on the head-rest can release the mechanism which holds the head-rest stationary and easily raise or lower the movable portion of the head-rest to any desired position without outside assistance; second, to provide such an attachment whereby the patient can raise or lower the head-rest with a smooth and easy motion without jarring himself, and, third, to provide such an attachment which may be attached to any of the various forms of head-rests and which will be inexpensive, substantial, and safe. These objects I attain by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 illustrates the frame of a head-rest of the type shown in the patent mentioned above with my attachment mounted thereon. Fig. 2 is a detail side view of my attachment. Fig. 3 is a sectional view of the small gear, hand-wheel, shaft, &c. Fig. 4 is a detail of the lever-pawl.

Similar letters of reference refer to similar parts throughout the several views.

For the purpose of explanation, Fig. 1 shows the frame A of a head-rest consisting of the two side bars *a* and *a'* and the movable head-rest *b* in hinge-like connection with each

other and provided with the cable *y*, one end of which is attached to the movable head-rest and the other end with the ratchet-spool *w*, said cables being provided with the tension-springs *z*. A block *f* is firmly fastened upon the outside of each of the arms of the head-rest *b* just in advance of the hinge-like connection, equal in thickness to the side bars *a* and *a'*.

The letter *e* indicates a geared or toothed block, which consists of a metallic bar, the rear end of which is enlarged, rounded, and toothed for the purpose of engaging the teeth of the hereinafter-described gear *d*. The geared or toothed block *e* is firmly attached to the outside of the block *f* by means of the bolts *i*, and the toothed portion of the toothed block *e* projects backward and laps over the outside of the side bars *a* and *a'*, with the center of the rounded portion of the block *e* in line with the center of the hinge-like connection of the frame A.

A small gear *d* is movably attached to the outside of the side bar *a* and in mesh with the teeth of the toothed block *e*. The gear *d* is provided with an elongated hub *d'*, the outer end of which is provided with two or more notches *o* for the purpose of receiving the projecting teeth or points *o'* upon the hereinafter-described hub of the hand-wheel *p*, thereby forming a clutch-like union of the gear and hand-wheel.

The letter *m* indicates a shaft, which, as shown in Fig. 3, consists of a bearing portion which extends throughout the hubs of the gear *d* and the hand-wheel *p* and a smaller threaded portion upon either end, thereby forming a shoulder at each end of the bearing portion. The inner end of the shaft *m* passes through the side bar *a*, and a nut *m'* upon the threads of said end binds the corresponding shoulder of the shaft firmly against the outside of the side bar, and a nut *m''* upon the outer end of the shaft binds a washer *n* against the shoulder of the shaft at that end.

The letter *p* indicates a hand-wheel which is provided with an elongated hub similar to the hub of the gear *d*. The extreme end of the elongated hub of *p* is provided with two or more projecting teeth or points *o'*, adapted to

engage the notches *o* of the hub of the gear *d*, thereby uniting the gear and hand-wheel firmly together.

The gear *d* and hand-wheel *p* are placed upon the shaft *m* and movably confined between the outer side of the side bar *a* and the washer *n* upon the extreme end of the shaft *m*. The hubs of *d* and *p* being thus connected, the gear *d* is revolved by means of the hand-wheel *p* and in turn revolves the toothed portion of the toothed block *e* by means of the teeth meshing therewith, thereby causing the movable portion of the head-rest *b* to rise or lower.

The letter *r* indicates a lever-pawl, which, as shown in detail in Fig. 4, consists of a pawl-arm *s*, extending below the gear *d* and to the lower teeth of the toothed block *e*, with which it engages, the central portion perforated at *x* for the purpose of receiving a bolt *x'*, whereby the lever-pawl is movably attached to the side bar *a* immediately behind the gear *d*, the lever-arm *t*, which passes over the gear *d* and to a point above the center of the toothed block *e*, where it is bent horizontally and at right angles to itself for the purpose of forming a handle *r'*, and a projecting lug *u*, which extends backward from the lever-arm *t* and above the central bolt *x'* for the purpose of receiving the upper end of a spiral spring *q*, the lower end of which is held by a bolt or screw-head *q'*, projecting from the lower edge of the side bar *a*. The spring *q* pulls downward upon the lug *u*, thereby holding the extreme end of the pawl in mesh with the teeth of the toothed block *e*, and thereby locking the same in any desired position.

To operate my attachment, it is only necessary for the patient reclining upon the head-rest to release the pawl from the teeth of the toothed block *e* by pressing down upon the handle *r'*, when the head-rest may be lowered or raised by turning the hand-wheel to the left or right, respectively. In raising the head-rest the function of the attachment is to give the cable *g* and its tension-spring *z* an impetus or start, which then assists in rais-

ing the load, thereby greatly lessening the labor of turning the hand-wheel to the right, and in lowering the head-rest the weight of the patient assists in turning the hand-wheel to the left. Hence the necessary labor exerted in operating the attachment is reduced to a minimum.

My attachment may be applied to one or both sides of the head-rest, as may seem most advantageous.

The advantages of my head-rest over other similar devices used for operating head-rests of this nature lie in the compactness of the mechanism and the better appearance incident thereto, the greater ease of manipulation afforded thereby, and the avoidance of all sudden and uneven jars or jolts in the movement of a head-rest.

I am aware that the form of head-rests utilized herein for the purpose of illustration is not new, and I therefore make no claim therefor, but confine my claim to the new and useful attachment described, and

What I claim, and desire to secure by Letters Patent is—

In an attachment for head-rest, the combination with the frame of a head-rest, of the block *f* attached to the arm *b* of the movable part of the head-rest, the toothed block *e* mounted upon the block *f*, the gear *d* provided with a clutch-hub and movably mounted upon the side bar of the head-rest, the hand-wheel *p* mounted upon the shaft *m* and provided with a clutch-hub whereby it is caused to act in union with the gear *d*, the nut *m'*, the washer *n* and the nut *m''*, the lever-pawl *r* mounted upon the side bar of the head-rest, the handle *r'* and the spring *v*, all substantially as described and shown and for the purpose set forth.

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

JASPER D. SMOCK.

Witnesses:

J. S. JORDAN,  
N. F. OSBORNE.