

UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN INVALID-BEDSTEADS.

Specification forming part of Letters Patent No. **169,067**, dated October 19, 1875; application filed July 17, 1875.

To all whom it may concern:

Be it known that we, THOMAS WATSON and ROBERT KELSO, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and valuable Improvement in Invalid-Bedsteads; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figures 1 and 2 of the drawings are representations of longitudinal vertical sections of our invalid-bedstead, and Fig. 3 is a plan view of the same.

This invention has relation to improvements in invalid-bedsteads, whereof the portion of the bottom nearest the head-board is capable of being adjusted at an angle to the remainder, for the purpose of holding the invalid in a reclining position; and the nature of the invention consists in combining with the frame of the bedstead and its vertically-vibrating section two or more gravitating and notched supports, pivoted to the handles, whereby the movable section is raised, which supports automatically engage with a transverse brace of the bed-frame as the said section is raised, thereby dispensing with all extraneous aid for the purpose, as will be hereinafter more fully explained and claimed.

In the illustration of my improved device I propose to show its application to an iron bedstead of the description commonly used in hospitals; but it will be evident that it may be used in connection with any description of bedstead with equally good results.

In the annexed drawings, A A' designate, respectively, the head and foot boards of an invalid-bedstead, whereof F F' are the side rails, which latter are composed of two sections, b b', hinged together at a. Section b' is rigidly secured at its rear end to foot-board A', its front end being rigidly secured to a supplementary supporting-rail, D, the front end of which is bolted or otherwise firmly at-

tached to the head-board A. Section b' and rail D are connected by brace-rods c c with the head and foot boards, thereby holding them against all displacement relative to each other, and giving them the necessary rigidity. Section b, which is thus endowed with an independent vibratory movement, is provided with operating-handles B, which project through the head-board for the purpose of allowing an attendant to raise the same while standing at the head of the bed, to which handles are pivoted vertically-vibrating and gravitating metallic supporting-standards C C. These standards are each provided with a number of spaced notches, i, upon one of their edges, and also with an operating handle, l, projecting to the front and in line with the handles of the movable section b, for a purpose hereinafter shown.

When the adjustable section b is raised through the medium of handles B the vibrating supports C C will gravitate with their notched edges against a transverse rod, o, of the head-board, and the moment the desired adjustment has been obtained will bite upon the said rod, thereby holding the said section in an inclined position.

When it becomes necessary to lower the inclined section the attendant will seize both the handles of the supports and those of the said section, and raising the latter slightly will compress the said handles, when the supporting-rods C C will become disengaged from rod o, and the adjustable section lowered to any desired extent.

The space between the side rails F F' and the head and foot boards is filled in by means of flat interlaced strips of metal H E, the adjacent ends of the former being hinged together by means of loops a', while their outer ends, as well as those of strips E, are attached to loops d, forming a component part of wire springs G', formed by coiling a wire around cylindrical rods I I', arranged at each end and at the sides of the bed, as shown in Fig. 3.

By this means my improved bedstead is provided with a spring-bottom, which is

adapted, by means of hinges a' , to bend with and conform to the movements of adjustable section b of the bed.

What we claim as new, and desire to secure by Letters Patent, is—

The combination, with the handles B, of adjustable section b , of the vertically-vibrating and gravitating supports C, having handles l , substantially as specified.

In testimony that they claim the above they have hereunto subscribed their names in the presence of two witnesses.

THOMAS WATSON.
ROBERT KELSO.

Witnesses:

GEORGE E. UPHAM,
B. H. MORSE.