C. M. LITTLEJOHN.
INVALID BEDSTEAD.


WITNESSES

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To all whom it may concern:

Be it known that I, CHARLES M. LITTLEJOHN, a citizen of the United States, and a resident of Pacolet, in the county of Spartanburg and State of South Carolina, have invented certain new and useful Improvements in Invalid-Bedsteads, and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a longitudinal vertical sectional view of my improved invalid-bedstead. Fig. 2 is a similar view showing the head-piece and the foot-piece respectively raised and lowered. Fig. 3 is a top view of the bedstead in its normal condition. Fig. 4 is a transverse sectional view, and Fig. 5 is a sectional detail view of one of the supporting springs for the foot-piece.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of bedsteads in which the head-piece may be raised and the foot-piece may be lowered to allow a person in the bed to assume a sitting position; and it contemplates certain improvements on the bed for which Letters Patent No. 317,376 were granted to me on the 5th day of May, 1885; and it consists, to that end, in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the head-board of the bed, which is provided with an upward extension, B, having downwardly-projecting lips C C upon its lower edge, clamping the upper edge of the head-board, and having downwardly-projecting cleats D, which are secured to the back of the head-board. The upper end of this extension is provided with a pulley, E, over which passes a strap, F, the lower bifurcated ends of which are secured to the underside of the hinged head-piece, being secured to the head ends of the side rails G G of the said head-piece. The head-piece is hinged at the ends of the upper edges of the side rails to the side rails H H of the central piece, and the side rails I I of the foot-piece are hinged at the head ends of their lower edges to the lower edges of the central side rails, the foot-piece swinging downward.

The foot ends of the side rails of the foot-piece are supported by means of shoulders formed by flat springs J, secured at their lower ends to the inner sides of the legs at the foot end of the bed, and sliding with their outwardly-bent ends in slots or perforations K, formed in the said legs, having rings L secured in the outer ends, serving as stops for the said ends, and preventing them from slipping entirely through the apertures or slots when drawn inward by the power of the springs.

A foot-board, M, is hinged at the foot end of the foot-piece, folding upward, and straps N N are secured to the side rails of the bed and to the foot ends of the side rails of the foot-piece, preventing the said foot-piece from being tilted too far down.

Straps O O are secured with their ends to the side rails of the central piece of the bed-bottom, and project with their free ends over the joints formed at the hinged ends of the side rails of the foot-piece, covering the gaps formed when the foot-piece is tilted down, and thus preventing any of the bedclothes from becoming caught in the said gaps when the foot-piece is again raised.

The side rails of the portions of the bed-bottom are formed with inwardly-projecting flanges P at their lower edges, and the inner faces of the said side rails are formed with equidistant vertical grooves Q. Plates or flat blocks R rest in the lower ends of these grooves, resting partly upon the flanges, and coiled springs S, of any desired construction, are secured with their lower ends to these blocks.

The ends of the cross-slats T are secured to the upper ends of these springs and slide in the grooves, and longitudinal slats U are secured to the upper ends of the side rails, covering the upper ends of the vertical grooves, preventing the ends of the slats from being forced up out of the grooves by the springs.

The head ends of the side rails of the head-piece rest upon shoulders V upon the inner sides of the legs at the head end of the bed-frame, and the upper faces of these shoulders...
are provided with rubber blocks W, which may prevent any jarring if the head-piece is lowered rather suddenly.

The strap for raising the head-piece is provided with a number of perforations X, which may fit upon a pin or bolt, Y, upon the headboard, so that the head-piece may be raised at different inclinations.

It will thus be seen that the head-piece may be raised, as desired, by the strap and adjusted at different inclinations, and the foot-piece may be allowed to be lowered by drawing the bent ends of the flat springs outward by the rings, the straps at the foot-piece preventing it from dropping too far down, so that, the foot-board being lifted up, none of the bedclothes may be caught between the upper edge of the hinged foot-board and the lower edge of the foot-board of the frame.

The straps covering the hinged ends and the gap at the foot-piece will prevent any bedclothes from sagging into the gap when the foot-piece is lowered, and thus being caught.

The slats will be cushioned by the springs, and will be prevented from being forced out of the grooves by the springs by the longitudinal slats covering the upper ends of the springs, and when it is desired to remove the slats the flat blocks at the lower ends of the grooves may be drawn out, tilting the springs, when, by tilting the slats at one end, they may be removed.

A mattress, Z, has a head-piece, A', movably attached to a central piece, B', and a foot-piece, C', is movably attached to the other edge of the central piece, so that the mattress may be raised or lowered with the head and foot pieces, and for the purpose of forming a smooth joint at the joint of the central piece and the foot-piece of the mattress a flap, D', is secured to the central piece, overlapping the inner edge of the foot-piece, and thus preventing the sheets from becoming caught in the gap formed when the foot-piece is lowered.

When the bedstead is to be used as an ordinary bedstead, the strap may be drawn out of the pulley and covered under the mattress, and the hinged foot-board may be folded down, thus removing the appearance of a sick-bed or invalid-bedstead, and for the purpose of further removing this impression the extension of the head-board may be removed, when the bedstead will assume the looks of a common bedstead.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In an invalid-bedstead, the combination of an upwardly-swinging hinged head-piece, an extension having two downwardly-projecting lips upon its lower edge, clamping the upper edge of the head-board, and downwardly-projecting cleats secured to the rear side of the head-board, and a strap passing over a pulley in the upper end of the extension, and secured at one end to the head-piece and to the head-board at the other, as and for the purpose shown and set forth.

2. In an invalid-bedstead, the combination of a downwardly-swinging hinged foot-piece with flat springs secured at their lower ends to the legs of the bed-frame, and having their upper ends bent outward to form shoulders, and sliding through slots in the legs having rings or handles at the outer ends, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

CHARLES M. LITTLEJOHN.

Witnesses:
ISAAC J. NEWBERY,
SAM LITTLEJOHN.