

# W. Woolley, Invalid Bedstead,

N<sup>o</sup> 2,567.

Fig. 1. Patented Apr. 16, 1842.

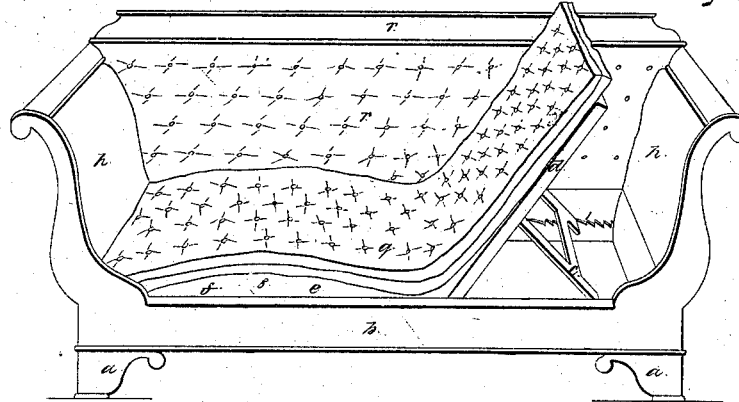


Fig. 7.



Fig. 6.



Fig. 1.

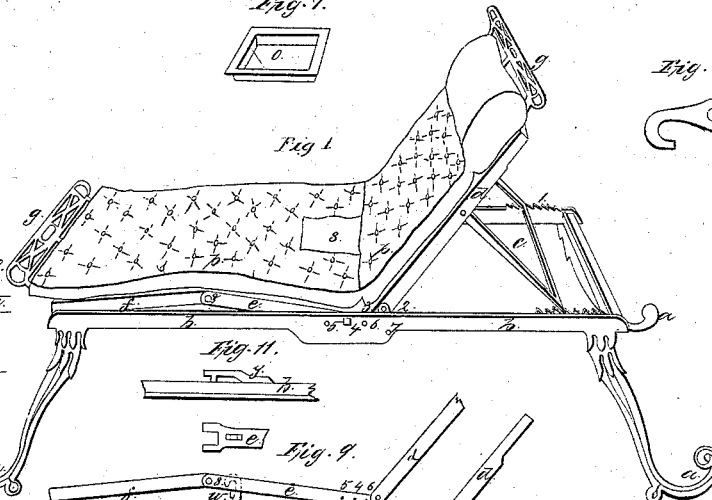


Fig. 8.

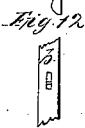
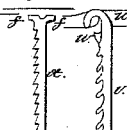


Fig. 12.

Fig. 11.

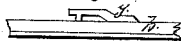


Fig. 9.

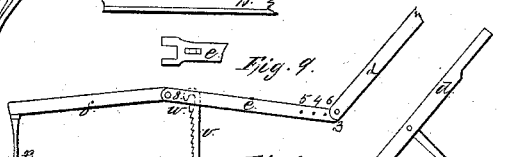


Fig. 3.

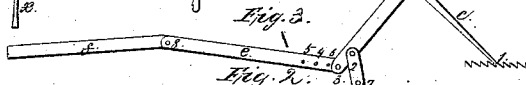


Fig. 2.

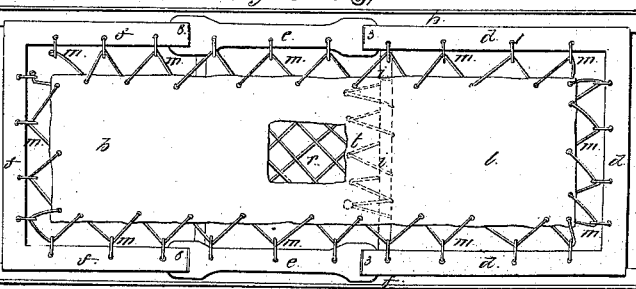
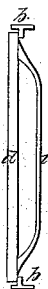


Fig. 5.



Witnesses:  
John H. Chambers  
W. H. Correll

Inventor:  
William Woolley

# UNITED STATES PATENT OFFICE.

WILLIAMS WOOLLEY, OF NEW YORK, N. Y.

## IMPROVEMENT IN BEDSTEADS FOR THE SICK.

Specification forming part of Letters Patent No. 2,567, dated April 16, 1842.

*To all whom it may concern:*

Be it known that I, WILLIAMS WOOLLEY, manufacturer of bedsteads for invalids, of the city, county, and State of New York, have invented, made, and applied to use certain new and useful Improvements in the Construction of Bedsteads for Sick and Disabled Persons, which improvements are similar in some parts of their general character to those heretofore made by me, for which Letters Patent of the United States were issued to me on the 30th of August, 1834, and improvements added thereto on the 22d of February, 1838; but these improvements differ essentially from those above patented, and I therefore seek Letters Patent of the United States for the same; and that the said improvements and the mode of constructing and using the same are fully and substantially set forth and shown in the following description and in the drawings annexed to and making part of this specification, wherein—

Figure 1 is a perspective representation of a metal bedstead as in use fitted to accommodate a person invalided by sickness or a fracture of the lower limbs. Fig. 2 is a plan of the same, and Fig. 3 a section of the movable parts employed, showing their connection and operation. Fig. 4 is a perspective representation of a sofa-bedstead so fitted that it embodies all the advantages of an invalid-bedstead and has the means to accommodate the attendant or nurse clear of the patient, and is yet an elegant piece of furniture when not in use.

The other detached figures are separately explained, and the same letters and numbers as marks of reference apply to the same parts in all the several figures.

*aa* are the legs, and *bb* the frame, of a metal bedstead, which may generally be best made in cast-iron and the legs made to slide in dovetailed housings, the sides of the frames *b* being formed by one vertical rib having a horizontal flange within it, as shown in section at *b b* in Fig. 5. At 1 this flange has a few ratchet-teeth cast in the metal of the flange to receive the outer ends and corners of the lifting-frame *c*. This is jointed to the head-frame *d*, as shown in Figs. 1 and 3, in which is also shown the short joint-lever 2, attached at the

upper end to the frame *d* and at the lower end to the inside of the side frames *b* at 7.

At 3 the head-frame *d* is jointed to the middle frame *e*, and this is jointed at 8 to the foot-frame *f*.

At 4 the middle frame *e* is secured to the side frames *b* by a bolt, which serves both as a connection and a pivot, and may go through any one of the holes shown at 5 and 6, and there are corresponding holes 5 and 6 in the frames *b*, into which the bolt can be shifted to give the frames *d*, *e*, and *f* more or less angle of inclination, as the state of the patient may require.

At *g*, Fig. 1, are metal frames on the outer ends of the frames *d* and *f*, serving the purposes of a head-board and foot-board, and so far corresponding with the fixed ends *h* of the sofa, Fig. 4, except that by the head and foot frames extending beyond the length of the main frame that frame can be made shorter and yet retain competent means of accommodation to the length of the patient.

At *i* is a cross-frame on the under side of the frame *d*, which is shown in Fig. 5 and by dotted lines in Fig. 2, where cords *t* are also shown by dotted lines as going through rings in the under side of the sacking bottom *l*, to hold the sacking in the same lines with the frames *d* and *e* when the head-frame is lifted. This bar *i* and a similar bar on the frame *e* are slightly curved downward, to be clear of the sacking and yet keep the frame in place. The sacking bottom *l* is to be retained and tightened in place by cords going through eyelet-holes in the sacking and through eyes in the shifting-hooks *m*. (Shown detached in Fig. 6.) This mode of fitting allows of shifting the sacking for any needful purpose by slacking without unlacing the cords.

At *r*, Fig. 2, is a hole in the sacking to receive a flanged metal bed-pan *o*, (shown detached in Fig. 7,) and in Fig. 1 the mattress *p* is shown with a movable piece *s*, corresponding with the position of the opening *r*, Fig. 2. The sacking at the opening *r* has rings beneath to receive cords that are to keep the mattress from sagging down, and yet be easily removed for placing in the bed-pan.

In Fig. 4 the back *r* of the sofa is fitted and made to turn down to a horizontal position

for the purpose of receiving the upper part of the mattress *q*, the mattress being made double for this purpose. This arrangement allows the attending nurse to lie down alongside the patient as effectually separated as if in a different bed, or the patient may be moved into the back of the sofa while the bed is shifted.

Fig. 8 represents a drop-lever and rack *v* on each side of the frame *e*, and working at top into a double mortise *u* on the frame *e*, which stops on a button-shoulder *w* on the lever *v*, to set the frame, as shown in Fig. 9, for a broken thigh, the rack-teeth of the lever *v* going through a bracket-mortise in the main frame, as shown in Fig. 11. When this is required, the lower bolt at 7 in the lever 2 is to be removed to allow of the frame assuming the proper position. Fig. 10 shows a similar drop-lever and sack *x* to be fitted beneath the middle part of the end of the foot frame *f* and go through a double mortise, as shown in Fig. 12, in the fixed frame *b*. The top of this lever has either a hollow to receive a head, or is set between two small ribs on the lower side of the frame *b*, (see Fig. 10,) or both may be used, as shown, to prevent any lateral motion, and the use of this lever is to set the lower part of the foot-frame *f* to any required height.

When it is wished to use straw mattresses, (as is frequently the case in hospitals,) I intend to cast the movable frames *d*, *e*, and *f* with bars across flush with the top to use with such mattresses instead of sacking bottoms, as this will effect the required purpose at a cheaper cost in making the bedstead.

The method of using these bedsteads will

be obvious. Whenever required for a sick or disabled patient, the needful form of the sacking-frames is to be first considered, and the bolt at 4, Figs. 1, 3, and 9, is to be put through such a hole as will, when the head-frame is raised to give the angle for the back, also allow the frames *e* and *f* to be set at any required position for the lower limbs.

I do not claim to have invented a metal bedstead, nor do I claim to have invented any of the parts described herein taken separately, as all have been previously used for other or similar purposes; but

I do claim as follows:

1. The combination of the rack-frame *c*, the head-frame *d*, the drop-lever 2, the frame *e*, and the bolts at 4 5 6 7, in the construction of metal bedsteads for the use of sick or disabled persons, as such combination and construction are herein described and set forth, including any merely mechanical variations which shall be substantially the same in the means employed and the effects produced.

2. The mode of attaching and combining the drop and rack lever *v* with the frame *e*, for the purpose of setting that frame to any angle or elevation required by the necessities of the patient, substantially as such mode of attaching and combining the same is hereinbefore set forth.

In witness whereof I have hereunto set my hand in the city of New York this 5th day of October, 1841.

WILLIAMS WOOLLEY.

Witnesses:

JOHN W. CHAMBERS,  
W. TERRELL.