

(No Model.)

W. J. WILLIAMS.
FOLDABLE TABLE ATTACHMENT FOR BEDS.

No. 598,968.

Patented Feb. 15, 1898.

Fig. 1.

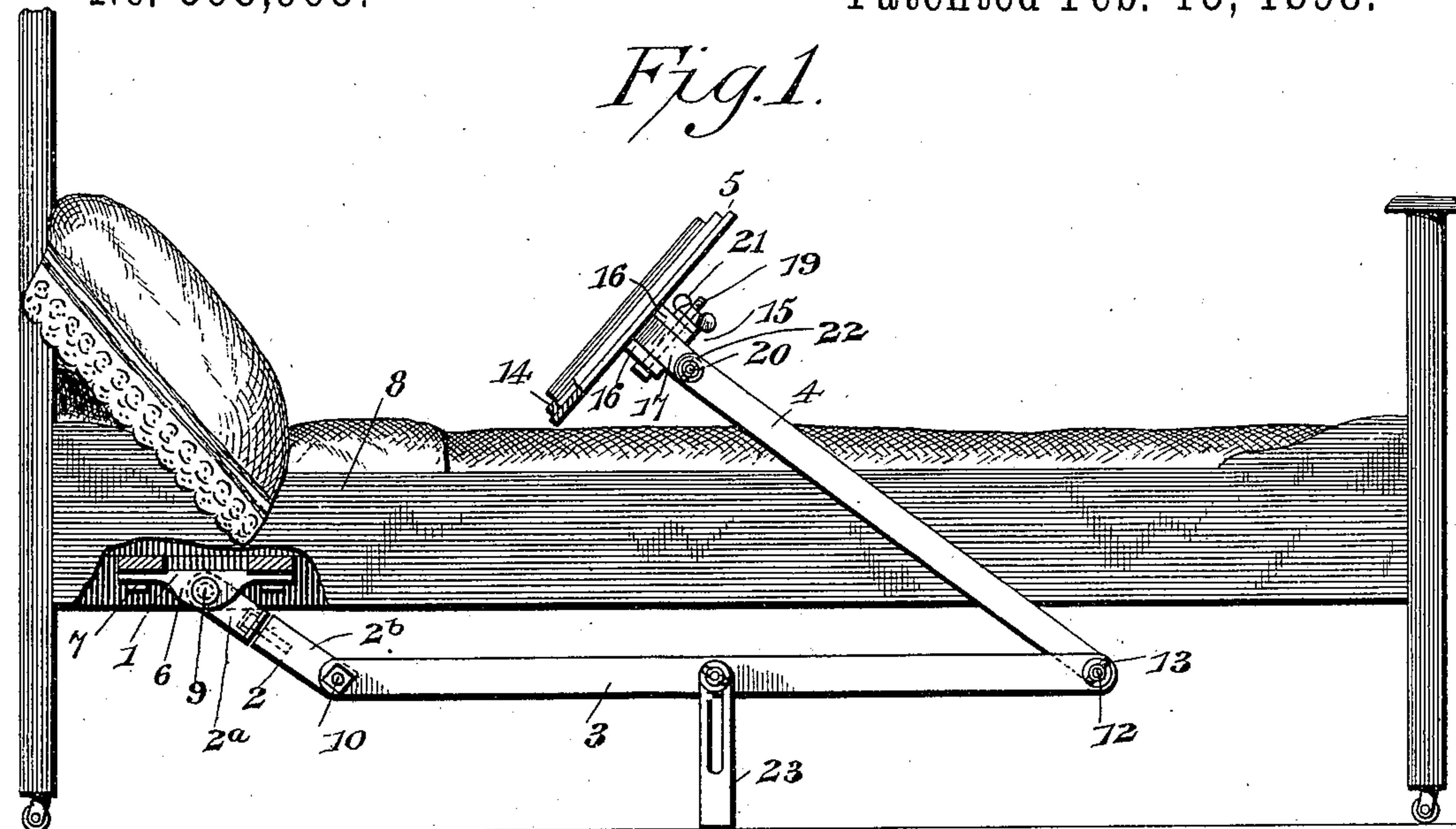


Fig. 2.

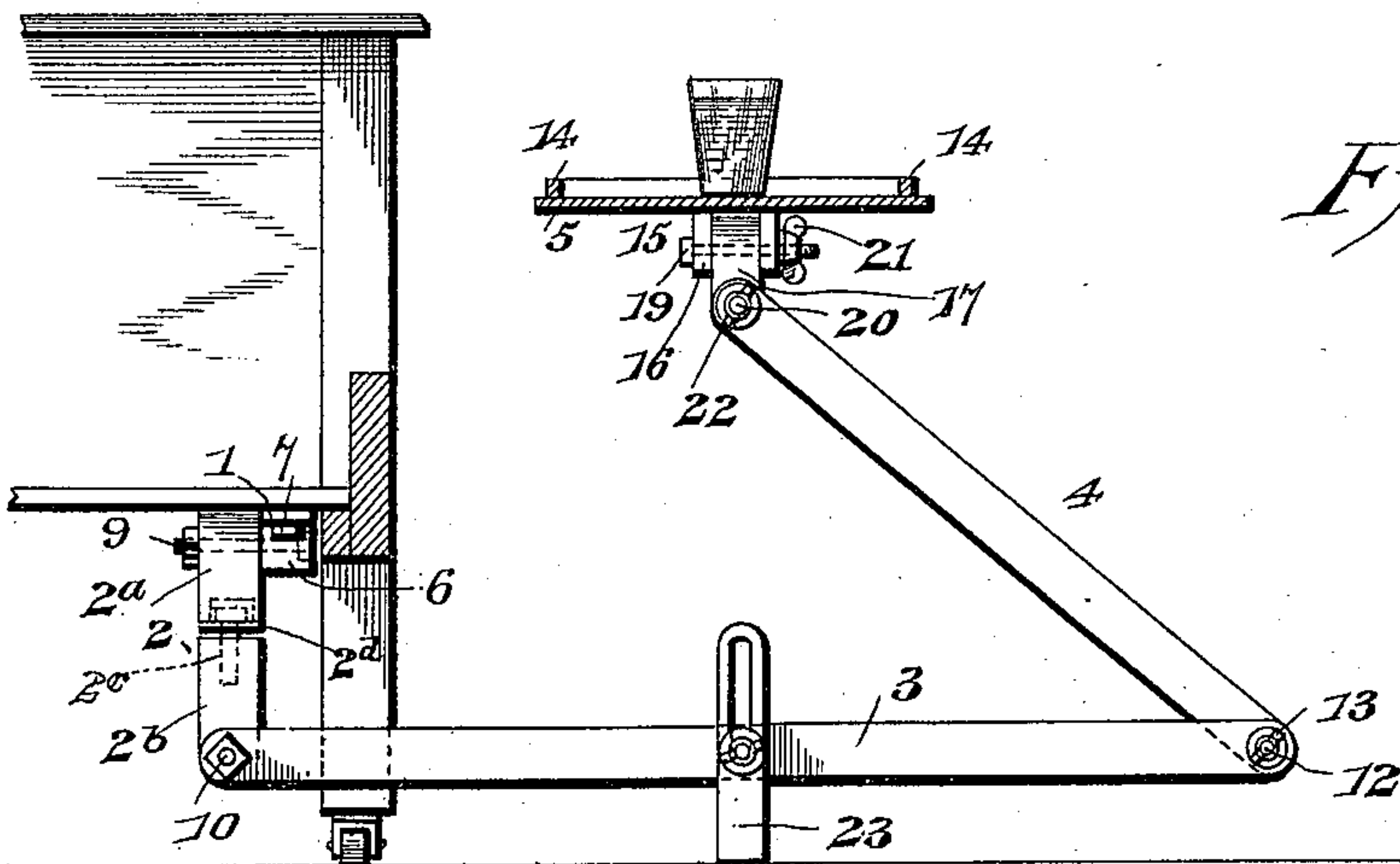
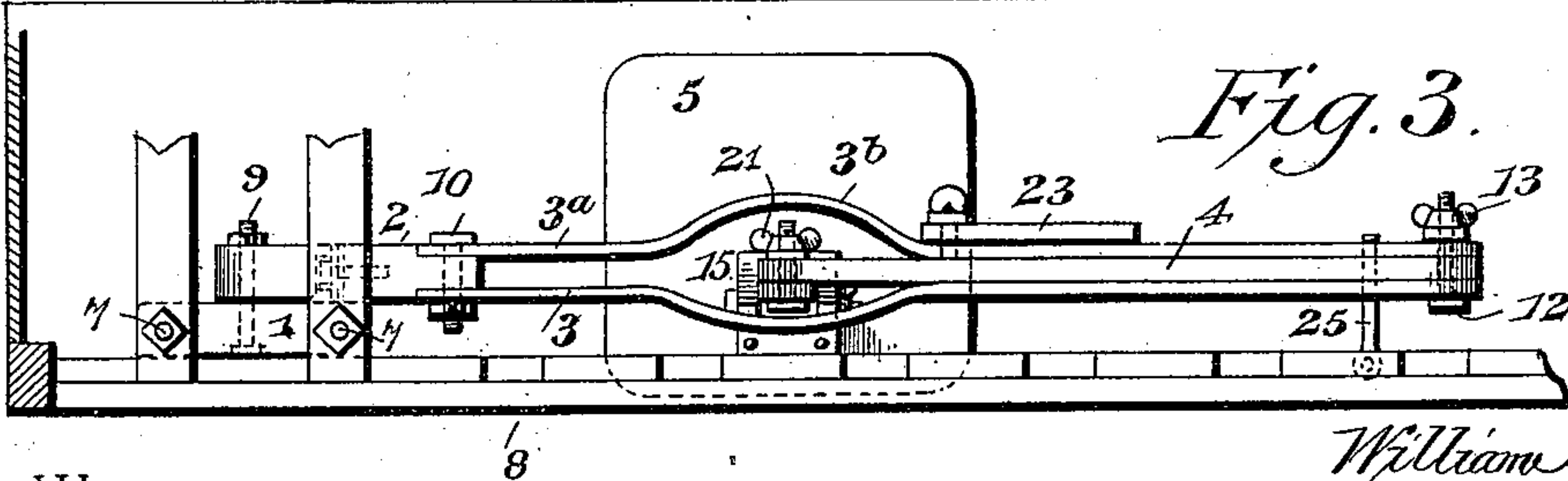


Fig. 3.



Witnesses

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FOLDABLE TABLE ATTACHMENT FOR BEDS.

SPECIFICATION forming part of Letters Patent No. 598,968, dated February 15, 1898.

Application filed September 27, 1897. Serial No. 653,170. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JOHN WILLIAMS, a citizen of the United States, residing at Portsmouth, in the county of Norfolk and State of Virginia, have invented a new and useful Foldable Table Attachment for Beds, of which the following is a specification.

My invention relates to a foldable table attachment for beds; and the object that I have in view is to provide an improved device adapted to be folded in compact relation to and beneath a bed or to be adjusted to a position convenient to a person lying in bed for reading and other purposes.

A further object of the invention is to provide an improved attachment which may be adjusted to a variety of positions, according to the requirements of the invalid—such as furnishing a support for medicines, &c., during the night or as a table for the reception of a meal-tray, and for any and all purposes for which such a table may be employed.

A further object of the invention is to provide an improved attachment which shall be simple in construction, easily adjusted, folded or unfolded, and which may be applied quickly and readily either to the side rail or to the slats of a bedstead.

With these ends in view the invention consists of a swiveled hanger, a bracket or plate adapted to be fastened to a bedstead and having the swiveled hanger attached thereto, a swinging carrying-arm connected to the hanger, a standard attached to the carrying-arm, and a table connected by a universal joint to the standard, said table and standard being foldable with the carrying-arm and the hanger; and the invention further consists in the novel construction and combination of parts, which will be hereinafter fully described and claimed.

To enable others skilled in the art to which the invention relates to understand the construction and operation thereof, I have illustrated the preferred embodiment of the invention in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a side elevation, partly in section, of my foldable table attachment applied to a bedstead. Fig. 2 is a view taken transversely through a part of a bedstead, showing my table attachment adjusted to stand

outwardly from the bedstead. Fig. 3 is a sectional plan view illustrating the table attachment in its folded position beneath the bedstead.

Like numerals of reference denote like and corresponding parts in each of the several figures of the drawings.

My table attachment consists of a bracket-plate 1, a swiveled hanger 2, a carrying-arm 3, a standard 4, and a table 5, the detail construction of which I will now proceed to describe.

The bracket-plate 1 is constructed for application in either of two ways to a bedstead—first, as a flat plate with a depending lug 6 and apertures for the passage of bolts 7 for the purpose of attaching said bracket-plate to the under side of two adjacent slats of a bedstead 8, substantially as indicated by Figs. 1 and 3 of the drawings, or said bracket-plate may be constructed for application directly against the inner side or face of one of the bed-rails.

I have not deemed it necessary to illustrate a construction of the bracket-plate for application to the side rail of a bedstead, because it is evident that a skilled mechanic can vary the form of the plate to enable it to be applied in the manner just described.

The swiveled hanger 2 is made in sections, which are connected together in a manner to permit of the lower section turning in a horizontal plane on the upper section. In the drawings the hanger is shown as consisting of two block-like sections or members 2^a and 2^b, arranged substantially in alinement with each other and coupled together by a swiveled bolt 2^c. (Indicated by dotted lines in Figs. 1 and 2.) I prefer to attach the lower end of the swiveled bolt 2^c to the lower section 2^b of the hanger, and the upper end of this swiveled bolt is headed and fitted in a socket in the member 2^a, said headed end of the bolt being retained in place by a plate 2^d, which is fastened to the section 2^a, over the socket therein. This hanger is attached at its upper end to the bracket-plate 1 by a transverse pivotal bolt 9, said bolt passing through the member 2^a of the hanger and suitably secured in the bracket-plate 1. The bolt occupies a horizontal position with relation to the swiveled hanger, and the hanger is thus

adapted to swing in a vertical plane in the folding and unfolding movements of the table attachment.

The carrying-arm 3 occupies substantially a horizontal position when the table attachment is folded and unfolded. This carrying-arm may consist of a single bar or length of wood or metal; but I prefer to make the carrying-arm in two pieces, (indicated at 3^a in Fig. 3 of the drawings.) The carrying-arm is attached at one end to the member 2^b of the swiveled hanger by a bolt 10, which passes through the members 3 3^a of the carrying-arm and the lower member 2^b of the hanger. The bolt 10 serves to pivotally attach the carrying-arm to the hanger, and it is arranged in a plane parallel to that of the bolt 9, which attaches the hanger to the bracket-plate. When the carrying-arm is made of two divided sections 3 3^a, I prefer to deflect or bow the sections 3 3^a laterally with respect to each other at points intermediate of the length of said sections of the carrying-arm. These bowed or deflected parts of the members of the carrying-arm are indicated at 3^b in Fig. 3, and said bowed parts 3^b serve to receive between themselves the universal joint, which connects the table 5 to the standard 4 when said standard and table are folded in compact relation to the carrying-arm 3 for the purpose of adjusting the attachment beneath the bedstead.

The standard 4 has its lower end fitted between the members of the divided or sectional carrying-arm 3, and said standard and the sectional carrying-arm are pivotally and adjustably connected together by means of a bolt 12, which passes through the carrying-arm and said standard 4 and is provided with a winged nut 13, adapted to be tightened on the bolt and clamp the standard 4 firmly between the divided members of the carrying-arm. This standard 4 may be raised to any desired height convenient to the occupant of the bed, and said standard may be raised to a vertical position or to the inclined position shown by Figs. 1 and 2.

The table 5 may consist simply of a flat structure, with a ledge or bead 14 around the margin thereof; but the detail construction of the table is not material, and the same may be varied or modified at the pleasure of the skilled mechanic. This table is connected to the standard by a universal joint 15. The detail construction of the universal joint is not material; but I prefer to employ a joint consisting of lugs 16, which are rigidly attached to the bottom of the table 5 at the center or at one side of the center, a carrier-block 17, fitted between said lugs 16 and against one face of the standard 4, at the free extremity thereof, and clamping-bolts 19 and 20, which attach the carrier-block 17 to the lugs 16 and the carrier-block to the standard 4, respectively. The bolt 19 to attach the carrier-block to the table-lugs is provided with a winged adjusting-nut 21, which may be tightened to clamp the carrier-block firmly

between the lugs 16 and thus hold said carrier-block in rigid relation to the table 5. The bolt 20 is also provided with a winged nut 22, by which the carrier-block may be clamped rigidly to the standard 4 at any desired position.

The described construction of the universal joint, with the bolts arranged in planes substantially at right angles to each other, enables the table 5 to be adjusted on the standard 4 either to a horizontal position or to a vertically-inclined position, substantially as represented by Figs. 2 and 1, respectively, and said universal joint also provides for the turning of the table 5 laterally against the carrying-arm 3 after the standard 4 shall have been adjusted between the members 3 3^a of the carrying-arm in the act of folding the table attachment to occupy a compact position beneath the bedstead.

Under some conditions of service of the table attachment it is desirable to provide a means for bracing the carrying-arm against the weight of the table and the load thereon. I have provided for these conditions by the employment of an adjustable leg 23 and a clamping device for adjustably attaching said leg 23 to the carrying-arm 3 at a point between the attachment 10 of the carrying-arm to the swiveled hanger 2 and the attachment 12 of the standard 4 to said carrying-arm. As shown by the drawings, this adjustable standard consists of a slotted leg applied laterally against one side of the carrying-arm 3, to which it is adjustably fastened by a bolt having a nut which constitutes the clamp for the attachment of the slotted standard to the carrying-arm. It is evident that the standard may be adjustably fastened to the carrying-arm to permit the latter to be raised or lowered with relation to the side rail of the bedstead, according to the adjustment of the standard 4 and the height of the table 5 thereon, or said standard may be folded alongside of the carrying-arm in compact relation thereto when the table attachment is to be folded together and thrust beneath the bedstead.

The operation of the invention may be described as follows: Assuming that the table attachment occupies the folded position shown by Fig. 3, the operator grasps the horizontal carrying-arm 3 and lowers it, with the standard and the table 5, to a position beneath the side rail of the bedstead, after which the carrying-arm is turned to adjust the member 2^b at an angle to the member 2^a of the swiveled hanger, thus projecting the carrying-arm to a position outside of the bed-rail and at an angle thereto. The standard 4 may now be raised to the inclined position shown by Fig. 1, and the table 5 may be canted or tilted to serve as a support for a book or other article in an inclined position in front of the occupant of the bed, the several bolts 12, 20, and 19 being tightened to hold the standard 4 and the table 5 to their adjusted positions. If de-

sired, the leg 23 may be brought into service to rest upon the floor and to support the carrying-arm 3 at a point between the attachment of said arm to the hanger and the attachment of the standard 4 to the carrying-arm. The position of the table attachment shown in Fig. 1 provides a very convenient support for a book, magazine, or other publication in front of the occupant of the bed; but said table may be adjusted to a horizontal position in close relation to the bed by turning the carrier-block 17 on the bolt 20 and subsequently tightening the nut 22 to hold said carrier-block and the table in their adjusted positions. To adapt the table attachment for service during the night-time for holding medicine, water, or nourishment in a position convenient to the reach of an invalid, the swiveled hanger 2 may be adjusted on the vertical bolt to project the carrying-arm 3 to a position substantially at right angles to the length of the bed-rail, after which the standard 4 may be turned to the inclined position and the table 5 adjusted to the horizontal position. (Indicated by Fig. 2 of the drawings.) The table is thus arranged in a convenient position adjacent to the headboard of the bedstead, but at a short distance therefrom, so as to be out of the way. The standard or leg 23 is raised to accommodate itself to the vertical position of the swiveled hanger and the lowered position of the carrying-arm. In order to fold the table attachment out of the way and beneath the bedstead, the bolts 12, 19, and 20 are loosened to permit the standard 4 to be folded to a position between and parallel to the members 3^a of the carrying-arm, and in this position of the standard the universal joint between the standard and the table lies within the laterally-bowed portions 3^b of the divided carrying-arm, the table resting laterally and closely against said carrying-arm. The standard or leg 23 may now be turned to a position alongside of the carrying-arm, and the device may then be turned by proper adjustment of the swiveled hanger to a position beneath the bedstead, within the line of the side rail thereof, substantially as shown by Fig. 3. The table attachment is thus compactly folded beneath and within the bedstead, and it is held in such folded position by any suitable form of catch. One style of catch may consist of a hook, substantially as indicated at 25 in Fig. 3. Although I have explained that the several working parts of my improved table attachment are pivotally connected together and held in their adjusted positions by means of bolts and clamping-nuts, I do not desire to strictly limit myself to the employment of these specific devices for rigidly holding the parts in their adjusted positions, as I am aware that spring-catches or other mechanical equivalents may be used as the means for fastening the parts together; nor do I strictly limit myself to the precise details of

construction and the form and proportion of parts herein shown and described as the preferred embodiment of the invention.

Having thus described my invention, what I claim is—

1. In a foldable table attachment for beds, a sectional hanger having its members pivoted together, in combination with a carrying-arm pivoted to one member of said hanger, a standard attached to the carrying-arm and foldable therewith and with the hanger beneath a bedstead, and a table connected by a universal joint with the standard to be foldable therewith against the carrying-arm, substantially as described.

2. In a foldable table attachment for bedsteads, the combination with a bracket, and a swiveled hanger pivoted thereto, of a sectional carrying-arm pivoted to said hanger and having its parallel members bowed or deflected laterally at points intermediate of their length, a standard clamped to the carrying-arm, a table, and a joint which connects the table to said arm and arranged to be received in the space of the bowed or deflected parts of the carrying-arm, substantially as described.

3. In a foldable table attachment for bedsteads, the combination with a bracket-plate, of a sectional hanger pivoted to the bracket-plate and having its alined members swiveled together, a horizontal carrying-arm adjustably connected to one member of said swiveled hanger, and a table-carrying standard attached to said carrying-arm and foldable therewith and with the swiveled hanger, substantially as and for the purposes described.

4. The combination with a bracket-plate, of a swiveled hanger, a horizontal carrying-arm pivoted thereto, a standard adjustably attached to the free end of said carrying-arm, a table supported by said standard, and an adjustable leg clamped to the carrying-arm at a point between its attachment to the swiveled hanger and the attachment of the standard to said arm, substantially as and for the purposes described.

5. In a foldable table attachment for beds, the combination of a bracket-plate, a sectional hanger pivoted by a horizontal bolt to said bracket-plate and having its members connected together by a pivot-bolt which lies at right angles to the bolt which attaches the hanger to the bracket-plate, a horizontal carrying-arm pivoted to the opposite end of the hanger, a standard fitted adjustably to the outer end of said arm, a table, and an adjustable connection between the table and the standard, substantially as described.

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

WILLIAM JOHN WILLIAMS.

Witnesses:

N. LEVY,

C. H. GRAHAM.