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C. C. McLEAN ET AL
TABLE ATTACHMENT FOR BEDS

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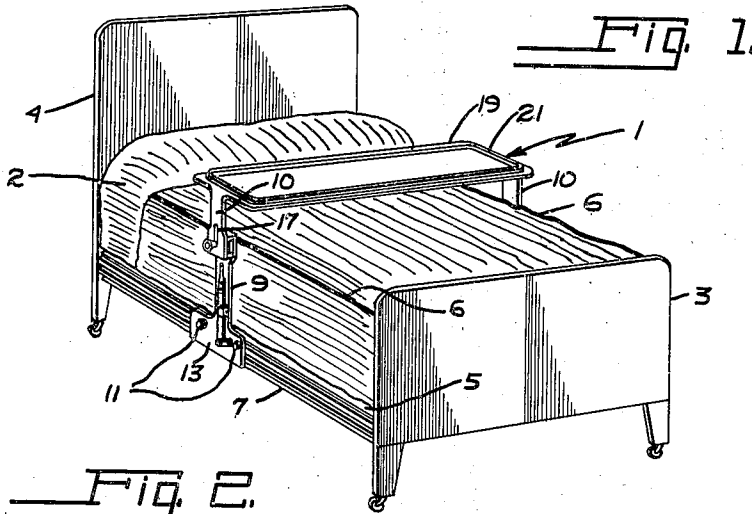


Fig. 2.

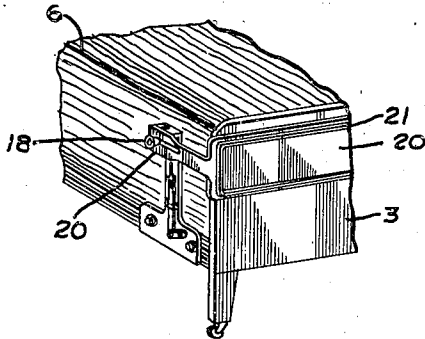


Fig. 3.

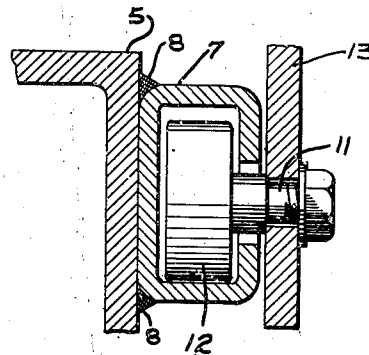
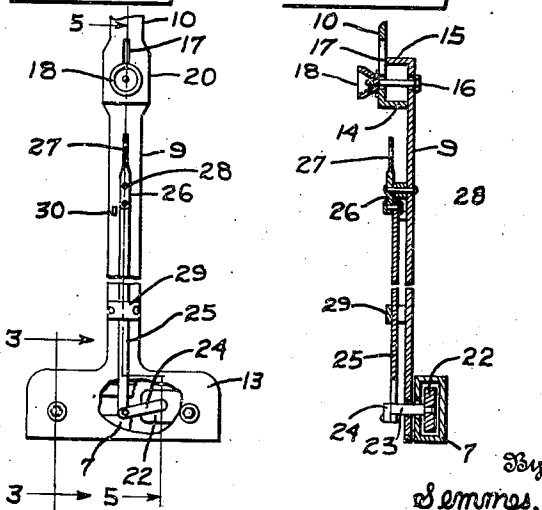


Fig. 4. Fig. 5.



Inventor

COLIN C. McLEAN
SANDER A. DAVIS

Semmes, Keegan, Robinson & Semmes
ATTORNEYS

UNITED STATES PATENT OFFICE

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TABLE ATTACHMENT FOR BEDS

Colin C. McLean and Sander A. Davis, Chicago, Ill., assignors to Hospital Furniture, Inc., Chicago, Ill., a corporation of Illinois

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1 Claim. (Cl. 311—27)

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This invention relates to a table and more particularly to a table mounted on a bed and adapted to swing out of the way when not in use.

When serving an invalid who must remain in bed, it is the general practice to place a tray over the invalid's legs to support a table-like surface. Usually the tray will be equipped with short legs which rest on the surface of the bed. This structure is quite unstable, and also traps the person in a fixed position unless someone is present to remove the table. To overcome these disadvantages it has become common, especially in hospitals, to provide tables on rollers. The tables are of sufficient height and width to pass over the bed to a position where it can be used by the invalid. A disadvantage is that a table on rollers supplies an additional piece of furniture which occupies some of the limited space available in hospital rooms.

It is an object of this invention to provide a table for use by one in bed which may be easily moved to an out of the way position.

Another object of this invention is to provide a table attached to a bed which will form a stable surface for use by one in the bed.

A further object of this invention is to provide a structure which may be easily installed on existing beds.

It is also an object of this invention to provide a table which may be moved to an out of the way position and will not interfere with one making a bed when the table is not in use.

With these and other objects in mind which, will become apparent in the following detailed description of the invention, this invention resides in a table movable along the side rails of a bed having legs pivoted to allow the table to be adjusted at either a horizontal or inclined position and to allow the table to be swung into an out of the way position when not in use.

In the drawings:

Figure 1 is a perspective view of the bed with the table in position for use.

Figure 2 is a perspective view of the foot end of the bed when the table is in storage position.

Figure 3 is a vertical cross section along the section line 3—3 in Figure 4 of the rollers and track along which the table moves.

Figure 4 is an elevation, partly broken away, of the standards supporting the table legs.

Figure 5 is a sectional view along the line 5—5 in Figure 4.

Referring to Figure 1, the table, indicated generally by 1, of this invention is shown mounted on a bed 2 having a foot board 3 and a head-

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board 4. Extending between the head and foot of the bed are side rails 5 of any conventional type. The bed shown in Figure 1 is shown in a made-up condition with the elevation of its upper surface indicated by the seam 6 of the bedspread.

Attached to the outer vertical surface of side rails 5 of the bed are tracks 7. As illustrated in the drawings, the tracks are substantially C-shaped channels having the mouth of the C opening outwardly. The tracks may be formed by any elements, such as flanged upper and lower angle irons, which will form a horizontal surface for rollers and an opening for passage of an axle for the rollers in a manner hereinafter described.

Tracks 7 are preferably welded to the side rails 5 at 8 when the bed is constructed of steel. Obviously, other means of attachment, such as screws, will be used to fasten the tracks to a wooden bed. The tracks 7 may, consequently, be attached to any conventional bed.

On each side of the bed is a standard 9 which supports the table legs 10. Attached to the lower end of the standards 9 are axles 11 on which rollers 12 rotate. Rollers 12 ride inside track 7 and serve as a support for the standards 9. In the preferred construction of this invention each standard will be equipped with two rollers to allow the table to move smoothly.

The base 13 of standards 9 is preferably widened to increase the stability of the standard. Standard 9 extends upward to a level slightly below the elevation of the surface of the bed indicated by seam 6.

Pivotaly attached to the upper end of the standards are the legs 10 of the table. As illustrated in Figure 5, arms 14 and 15, respectively, extend laterally at the lower end of legs 10 and the upper ends of standards 9. Arm 14 bears against standard 9, and arm 15 bears against leg 10 when the two parts are locked together. A bolt 16 passes through the upper part of standard 9 below arm 15 and through a slot 17 in leg 10. Bolt 16 is threaded at its outer end for the engagement of a clamping nut 18 which may be tightened to lock the leg 10 in position against standard 9. Slot 17 allows vertical adjustment of the table to the desired height. In order to increase the bearing surface of the arms 14 and 15 when table 19 is at an inclined position, it is preferred that standards 9 and legs 10 be widened as indicated at 20 in Figure 4 near the pivotal connection.

The pivotal connection of table legs 10 to standards 9 allows a table top 19, extending be-

tween the upper ends of legs 10, to be inclined at any desired position when the table is used as a writing or reading table. Table 19 is of any conventional type, but is preferably constructed with a rim 21 around its outer edge to prevent objects from spilling from the table as it moves along the length of the bed.

In order to lock the table in position and prevent movement along the side rails as the table is being used, a brake is provided. The brake consists of a block 22 of any suitable material having a high coefficient of friction, such as hard rubber, to which a pin 23 is rigidly secured. Block 22 travels within track 7 and pin 23 extends through the mouth of the C-shaped track and passes through the standard 9. A lever 24 is keyed to the pin outside the standard 9. A rod 25 is connected with the end of lever 24 remote from pin 23 of the standard 9 and extends upwardly along the standard to a position just below the pivotal connection with the table leg 10. A lever 26 having a handle 27 is linked to the upper end of rod 25 and rotates about a pin 28 rigidly attached to the standard.

When the table is in the desired position the handle 27 is raised to a vertical position which forces rod 25 downward. Rod 25 in turn rotates lever 24 about pin 23 which turns the block 22 in track 7. Block 22 has a length greater than the height of the track 7; consequently, the block bears against the upper and lower walls of the track to hold the table firmly in place. A guide bracket 29 and a stop 30 are provided to limit the movement of rod 25 and lever 26, respectively.

By locating the lever handle 27 a short distance below the surface of the bed, it is possible for the one in the bed to release the brake and move the table to the foot of the bed when it is not in use. Since the table travels on rollers in tracks which guide its movement, a slight push of the table is sufficient to send it to the foot of the bed. This is in contrast with tables constructed on rollers which roll on the floor which require the table to be guided as it is moved.

Referring to Figure 2, table 19 is shown in the storage position which it occupies when not in use. The table is rolled to the foot end of the bed, and the base of the standards 9 engages the foot of the bed to prevent the table from rolling out of the track 7. The clamping nut 18 is then loosened and the legs and top of the table are rotated about the pivot 16 until the table is in essentially a vertical position. The foot board 3 of the bed is preferably of a height allowing the table 19 to pass over it and fit snugly against the outer surface of the foot board. Foot board 3 then holds table 19 securely in an out of the way position when it is not in use. If foot board 3 is too high to allow table 19 to pass over, the table may be folded to a position inside the foot

board between the foot board and the end of the mattress. The end of the mattress will then hold the table firmly in position and prevent its moving to an inconvenient position.

As mentioned before it is desirable that the standards 9 extend upward to a point slightly below the upper surface of the bed. When the table is in the storage position illustrated in Figure 2, the standards 9 and legs 10 will be completely out of the way.

While the preferred modification of this invention has been described in detail, it is to be understood that the concept of the invention is not limited to those details, but falls within the scope of the appended claim.

We claim:

A table attachment for a bed comprising a C-shaped channel opening outwardly attached to each side of the bed in a horizontal position below the mattress on the bed, a substantially vertical standard extending upwardly from each of the channels to a level slightly below the upper surface of the mattress, a plurality of rollers spaced horizontally rotatably attached at the bottom of the standards and traveling in the channels to support the standards in a vertical position, a leg extending above the upper surface of the bed pivotally and adjustably attached to the upper end of each of the standards, a table top attached to the upper end of each of the legs extending across the bed, a brake lever extending along one of the standards to a position accessible to the occupant of the bed, and a brake block attached to the lower end of the lever adapted to frictionally engage the channel in response to movement of the brake lever, said brake allowing the rollers to move the table smoothly in a horizontal direction when released.

COLIN C. McLEAN.
SANDER A. DAVIS.

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