Aug. 3, 1954 E. E. WOLLER 2,685,487

ADJUSTABLE VERTICALLY CANTILEVER TABLE

Original Filed Aug. 24, 1949 3 Sheets-Sheet 1

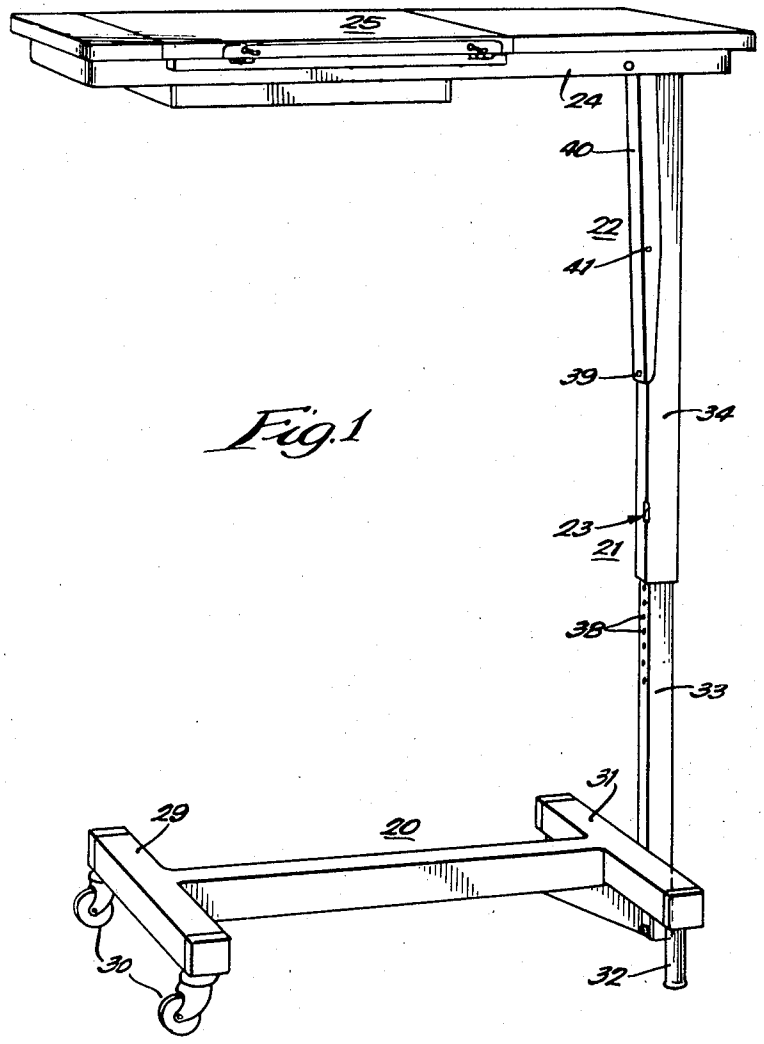

Fig. 1

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Fig. 2

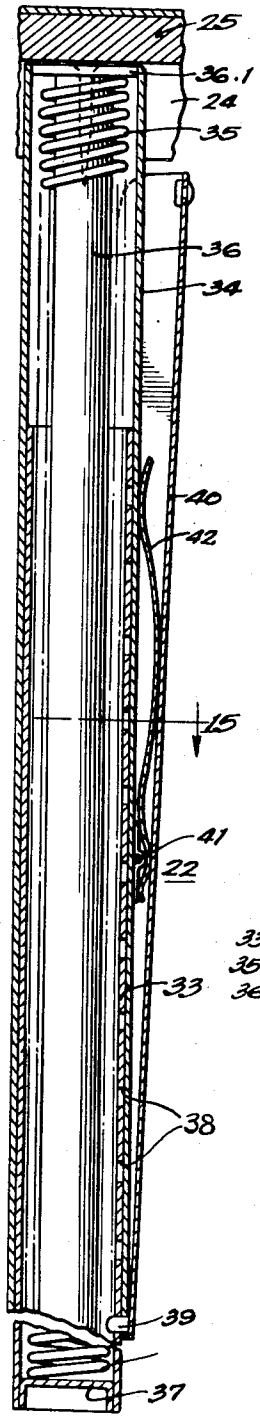


Fig. 7

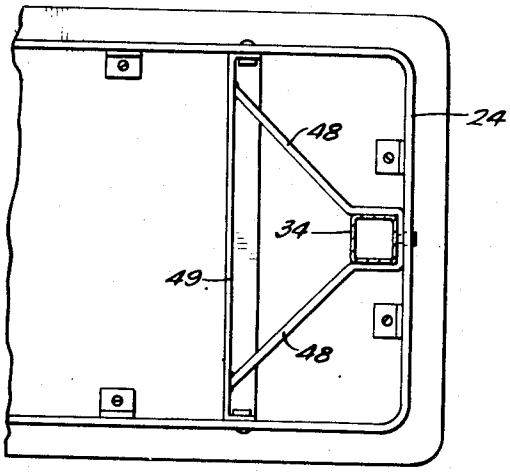


Fig. 3

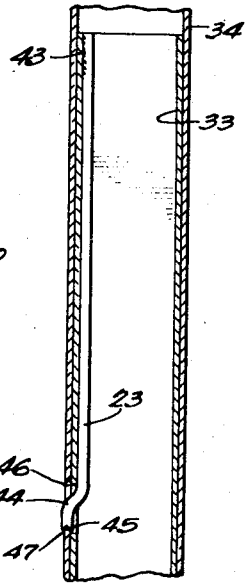


Fig. 4

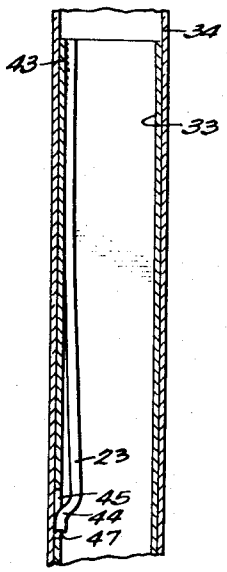
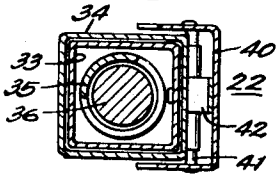


Fig. 5



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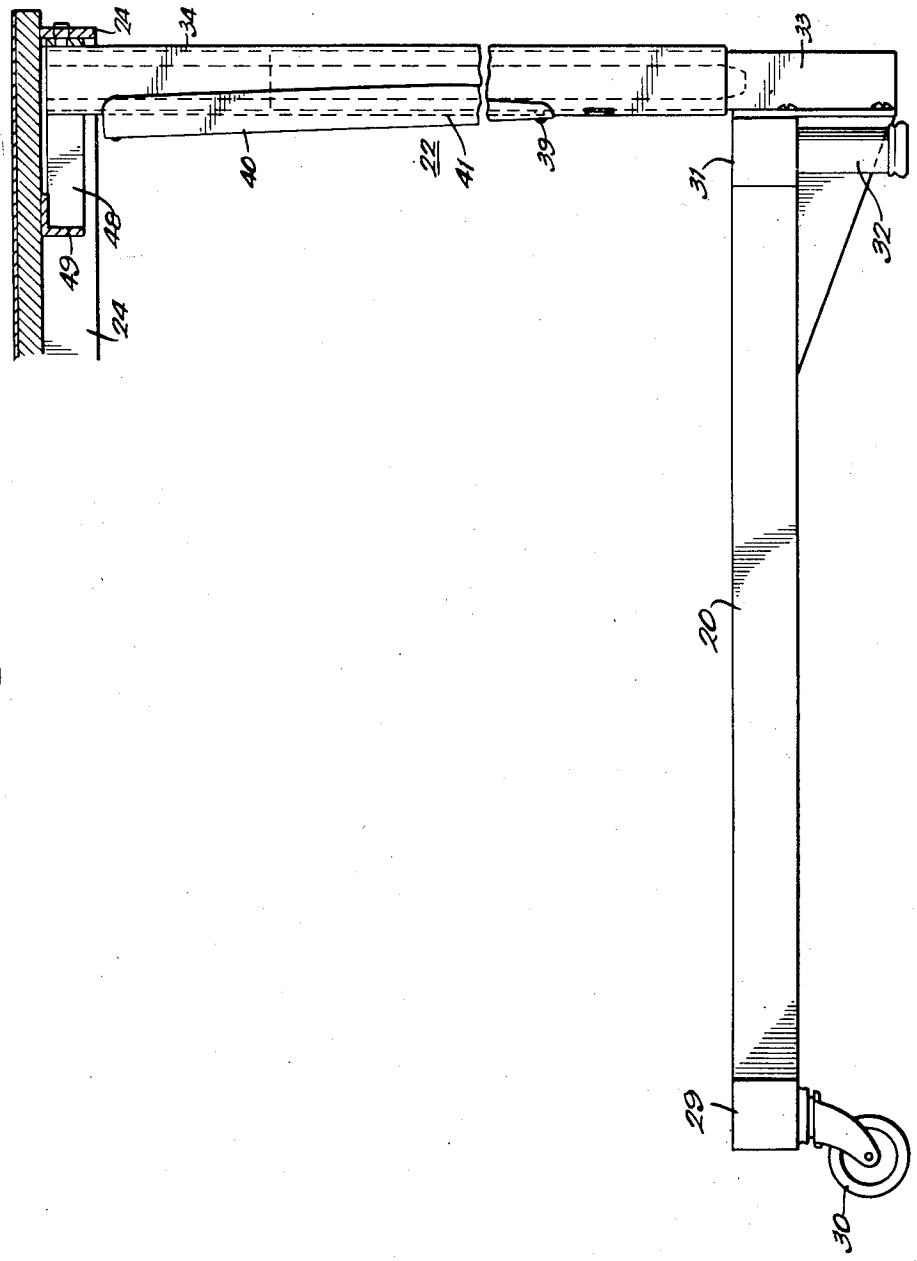

Fig. 6

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UNITED STATES PATENT OFFICE

2,685,487

ADJUSTABLE VERTICALLY CANTILEVER TABLE

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Original application August 24, 1949, Serial No. 112,075. Divided and this application November 3, 1953, Serial No. 389,995

3 Claims. (Cl. 311—40)

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The main objects of this invention are to provide an improved support assembly particularly suitable for portable table structures; to provide an improved form and convenient arrangement of means for adjusting the height of said support assembly; to provide improved safety latch means automatically limiting the height of said support assembly; and to provide an improved table which is simple in its overall construction, easily movable from place to place, and being particularly adapted for use as an over-the-bed table.

In the accompanying drawings:

Figure 1 is a perspective view of an improved over-bed table constructed in accordance with this invention, showing the table top elevated and in a horizontal position;

Figure 2 is an enlarged, fragmentary sectional view in elevation of the extensible standard and its height adjusting means whereby the table top is positioned at various elevations above the floor;

Figures 3 and 4 are fragmentary sectional views in elevation of the extensible standard showing the form and action of the safety latch which limits the telescopic extension of said standard;

Figure 5 is a transverse sectional detail taken along the line 5—5 of Figure 2;

Figure 6 is a side view in elevation, and partially in cross-section of the table support assembly; and

Figure 7 is a detailed plan view illustrating a bracket and brace assembly which connects the table top support to one of the telescoping parts of the supporting standard.

An improved over-bed table constructed in accordance with this invention comprises, a base 20 movable over the floor and mounting an extensible standard 21 which is equipped with height-adjusting means 22 and a safety latch 23 and which supports a frame 24 mounting a table top 25. The structural details of the table top 25 shown in the drawings have been described and claimed in my copending application, Serial No. 112,075, filed August 24, 1949, and entitled "Overbed Table," and reference is invited to that application for a description of that improvement. The present application is a division of the aforementioned application, Serial No. 112,075.

The base 20, as herein shown, is in the form of an I made up of square tubing. The transverse part 29 is provided with casters 30, whereas the transverse part 31 is provided with posts 32. The posts 32 normally tend to resist a too-easy movement of the table across the floor. However, a slight elevation of the posts 32 from

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the floor permits easy movement of the table across the floor on the casters 30.

As best seen in Fig. 2, the standard 21 comprises inner and outer telescopic members 33 and 34, respectively secured to the base 20 and the table-support frame 24. Within these members is arranged a counterbalancing spring 35 embracing a dowel 36 which is connected to the member 34 by a pommel 36.1 and which extends practically the full length of the outer member 34.

The members 33 and 34, as herein shown, are composed of square tubing. The former has a plug 37 secured in the base thereof to support the spring 35. A series of apertures 38 are arranged in one side of the member 33 to be engaged by a stud 39 on the height-adjusting means 22 for securing the table 25 in a desired elevation above the floor.

The height-adjusting means 22 comprises a lever 40 of channel-shaped form, fitting over the upper end of the outer standard member 34 and pivoted thereto at 41 so that a spring 42 normally urges the stud 39, extending through an opening in the tubular member 34, to engage any of the apertures 38 for positioning the table top 25 at varying heights above the floor.

The upper or power end of the channel-plate lever 40 terminates just below the table support frame 24, as best seen in Fig. 6. It is thus in convenient position to be grasped by the hand either of one before whom the table is arranged for use, or of an attendant, for readily retracting the stud 39 to permit a vertical adjustment of the table top 25.

The safety latch 23 is in the form of a rod welded at 43 (Figs. 3 and 4) to the inner face of the inner standard member 33 near the upper end thereof, preferably so as to nest the rod along one corner of the rectangular standard member 33. The lower end of the rod is bent to form a detent 44. When slots 45 and 46 (see Fig. 3), formed in the respective standard members 33 and 34, come into registry, the detent 44 is urged outwardly by the resiliency of the rod to engage an edge 47 of the member 34, formed by the slot 46, and thereby prevent any further relative extension of the members 33 and 34.

The table-support frame 24 may comprise a flat metal strip formed into a rectangle, as most clearly shown in Fig. 1. It is anchored to the upper standard member 34, as most clearly shown in Fig. 7, by a U-shaped bracket 48 and a cross brace 49.

To alter the elevation of the table top 25, the upper end of the channel plate lever 40 is pressed

against the standard member **34**. This retracts the stud **39** from engagement with an aperture **38** and thereupon any pressure on the table top results in a change in the elevation of the table top above the floor.

The lower limit of positioning the table top **25** above the floor is the abutment of the end of the outer standard member **33** against the base **20**, as shown in Fig. 6. The upper limit of elevation of the table top **25** above the floor is determined by the engagement of the detent **44**, on the rod **23**, with the edge **47** of the member **34** forming the slot **46**, as clearly shown in Fig. 3.

Although this table is intended primarily for use as an over-the-bed table, it will be obvious that it can be used for one sitting in a chair.

Variations and modifications in the details of structure and arrangement of the parts may be resorted to within the spirit and coverage of the appended claims.

I claim:

1. A table of the class described comprising, a base, a table top, a pair of telescopically arranged members connected at their ends to said base and table top respectively, a compression spring interposed between said members to counterbalance the weight of said table top, a channel-shaped plate hinged on and embracing the one said member which is connected to said table top with the upper end of said plate adjacent said table top, the other said member having a series of apertures formed therein, a stud on said plate extending through said one member for engagement with said apertures for regulating the height of said table above said base, and a spring normally urging said plate to engage said stud with said apertures.

2. A table of the class described comprising, a base, a table top, a pair of telescopically arranged members connected at their ends to said base and table top respectively, yielding means interposed between said members to counterbalance the weight of said table top, a plate hinged to the one said member which is connected to said table top with the upper end of said plate adjacent said table top, the other said member having a series of apertures formed therein, a stud on said plate extending through said one member for engagement with said apertures for regulating the height of said table above said base, a spring normally urging said plate to engage said stud with said apertures, a shoulder on one of said members, and a spring-actuated pawl on the other said member positioned to engage said shoulder when said members have reached a predetermined telescopic extension.

3. A table of the calss described comprising, a base, a table top, a pair of tubular members of rectangular cross-section telescopically arranged, one of said members being secured to said base and the other said member being secured to said table top, a spring interposed between said members to counterbalance the weight of said table top, manually actuated means for locking said members in various relatively extensible positions, said members each being formed with a slot relatively positioned so that said slots come into registry when said members are in a substantially extended position, and a rod secured to the inner face of the inner of said members and having the lower end thereof offset outwardly to extend through said registering slots and engage said outer member so as to limit further relative extension of said members.

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