

July 4, 1944.

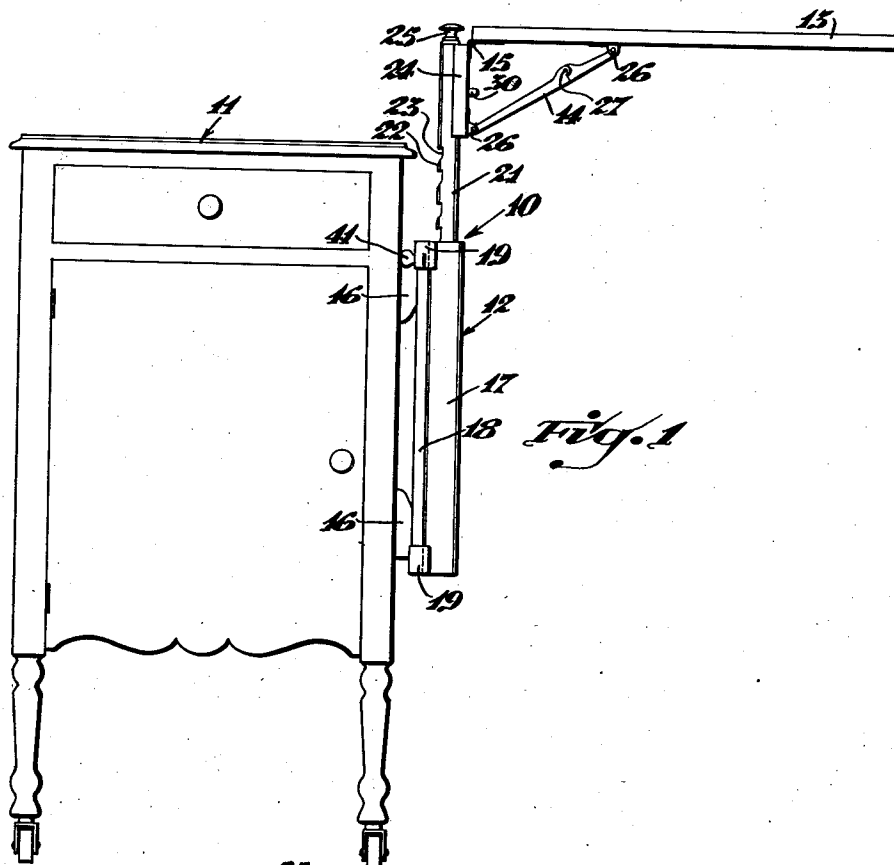
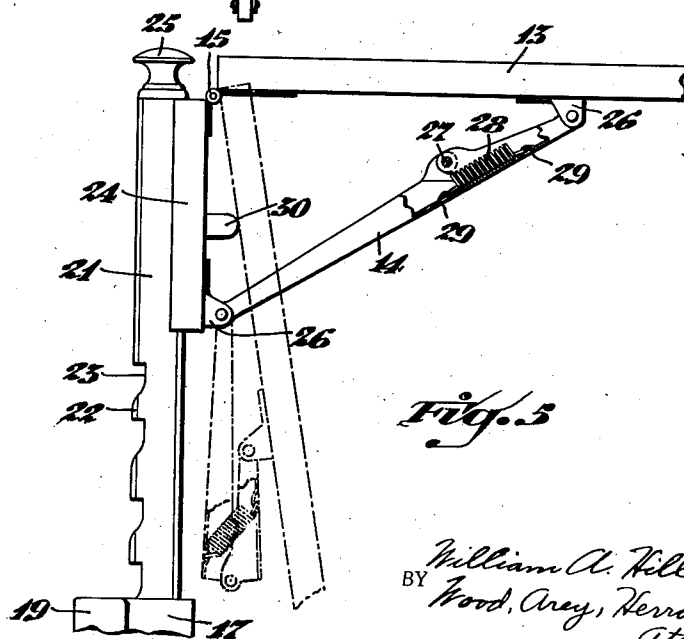
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2,352,837

OVERBED TABLE ATTACHMENT

Filed Jan. 16, 1943

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

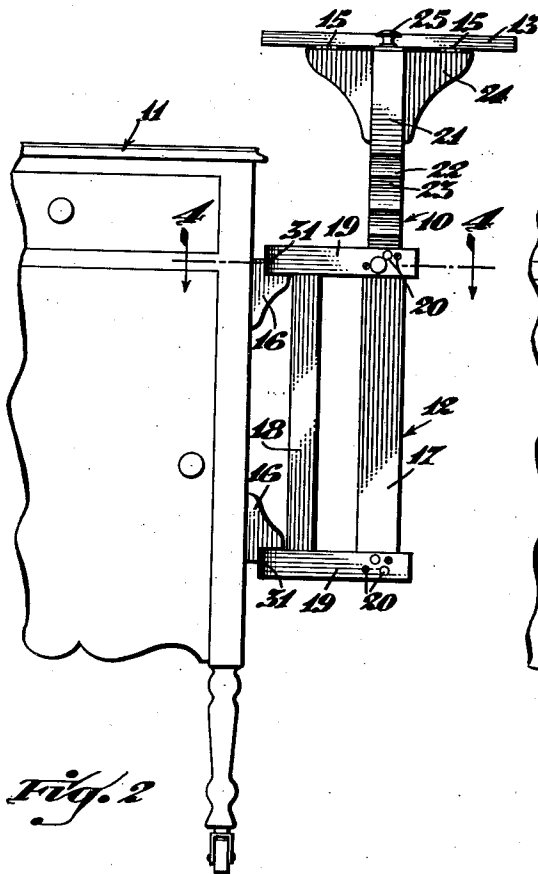


Fig. 2

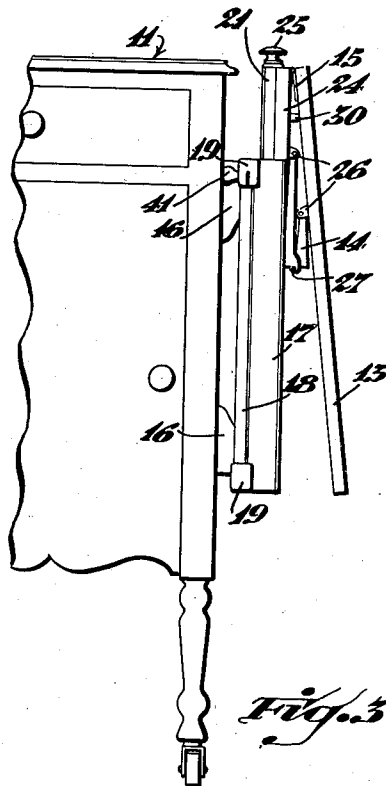


Fig. 3

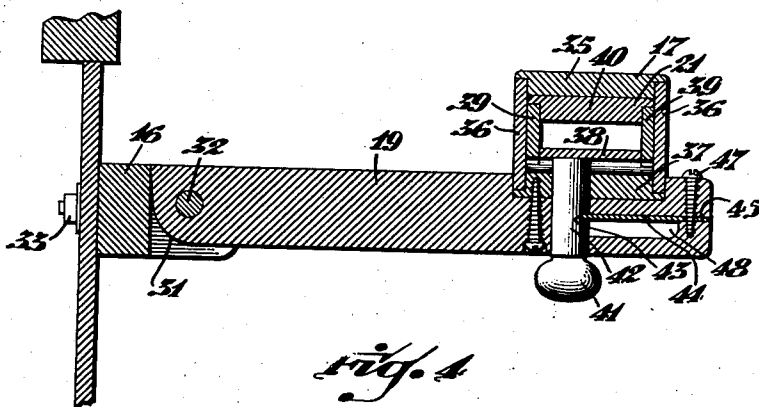


Fig. 4

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UNITED STATES PATENT OFFICE

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OVER-BED TABLE ATTACHMENT

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3 Claims. (Cl. 311—40)

This invention relates to an overbed table attachment adapted to be used as an adjunct to a bedside table or other similar article of furniture for hospital use. The invention is particularly concerned with an attachment in which the top is foldable to a vertical position when not in use and adjustable to any height desired.

Attachments of the type of the invention are frequently furnished as an integral part of a hospital bedside table or cabinet. However, the attachment forms a separable unit in and of itself and may be utilized in conjunction with other conventional articles of furniture used in hospitals and similar places. The invention resides entirely in the construction of the attachment itself and the article of furniture to which it is attached forms no part of it. For convenience, a conventional hospital bedside table will be considered as representative of the class of articles of furniture with which the attachment may be used.

One of the objects of the invention has been to provide an overbed table attachment which is fashioned almost entirely from parts formed of wood or composition materials. In the preferred embodiment which will be hereinafter described it will be noted that there is almost a complete absence of parts made from metal and other similar materials having priority status at the present time.

Another object of the invention has been to provide an overbed attachment in which the vertical elevating and lowering means have been so constructed and arranged as to provide an operation which is very smooth and even and at the same time practically noiseless.

Another object has been the provision of a structure of the type contemplated in which there is little or no friction between the moving parts so that there is no necessity for oiling or other care of the apparatus.

Another object has been the provision of improved means for adjusting and maintaining the table top in a preselected horizontal position, the means employed being simple in construction yet very convenient and secure in operation.

Other objects and advantages will be apparent from the further and more detailed description of the invention when considered in conjunction with the drawings in which:

Figure 1 is a front elevation of a conventional hospital bedside table, having an overbed table attachment of the preferred type of the invention attached thereto.

Figure 2 is a similar view illustrating the table

in operative position with the support elements extended laterally and the top in horizontal position.

Figure 3 is another view similar to Figure 1 but showing the table top lowered to vertical position and the support elements folded inwardly toward the bedside table.

Figure 4 is a sectional view along the line 4—4, Figure 2, illustrating particularly the construction of the vertical adjustment means.

Figure 5 is an enlarged fragmentary view of the upper section of the overbed table shown in the same position as in Figure 1 and being partially broken away to illustrate particularly the construction of the top support means and the manner in which it functions in sustaining the top and lowering it to vertical position.

Considering now a further and more detailed description of the construction of the invention, an overbed table attachment illustrating the preferred embodiment is indicated at 10, Figure 1. A hospital bedside table is indicated at 11. Since the construction of this latter table forms no part of the invention, its construction will not be described in detail.

In operative position the attachment comprises generally a gate 12 and a horizontal or top portion 13 joined and supported by the elevating arm 14 and connected thereto by the hinges 15. Brackets 16 are secured to the gate 12 and these in turn may be attached to the bedside table 11.

The gate includes vertical post members 17 and 18 joined together at their ends by horizontal rail members 19. The vertical post member 17 is hollow as will be later described in more detail and the rail members 19 are joined to it by screws and dowel pins indicated generally at 20. This gate is supported in recesses in the brackets 16 (see Figure 4) by pins 32 journaled in the horizontal surfaces of these recesses.

A vertically adjustable elevating post 21 may be approximately the same height as the vertical post member 17 and has its lower end positioned in the hollow opening therein. This post 17 is of generally rectangular construction in cross section and has formed in a side edge thereof a rack comprised of a plurality of teeth 22 and notches 23. The inner surface of the latter may be substantially flat as illustrated. A brace 24 is affixed to the upper end of the post 21 and is connected by hinges 15 to the table top 13. A hand knob 25 is positioned on the extreme upper edge surface of the elevating post 21. The table top 13 is further affixed to the brace 24 by means of the elevating arm 14. This arm is secured to the

brace 24 by means of pins inserted through both ends thereof, the pins being secured to brackets 26 affixed to the brace and to the underside of the top. The elevating arm is in two sections pivoted on the pin 27 which is journaled in one end of each section of the arm. The arm is of hollow channel construction and a spring 28 extending across the pivoting pin 27 is secured at its ends to tangs 29 on the bottom surface of the arm. This spring functions under tension to hold the two sections of the arm in rigid position with respect to each other when the top is in horizontal position. When the top is lowered to vertical position the tension is released and the arm sections assume the position shown in the dotted lines in Figure 5. When the table top is in vertical position, also as illustrated in Figure 5, a stop element 30 holds the top 13 away from the vertical member 12 and prevents the depending end from catching on the upper edge of the vertical post member 17 of the gate.

The vertical adjustment means for the post 21 are illustrated in Figure 4. As shown, the upper rail element 19 of the gate has one corner 31 somewhat rounded to provide clearance and permit the gate to swing in one direction on the pin 32. As previously stated, the rail members 19 rest in recesses in the brackets 16. These brackets may be joined to the bedside table 11 by bolts 33. The vertical post member 17 of the gate is generally square in section and may be formed in four sections, including the front or face section 37, the side sections 36 and the back section 35 (Figure 4). The elevating post 21 is fitted into the hollow defined by these sections and may itself be of sectional construction, the elements including a face section 38, side sections 39 and a rear section 40. All of the various sections, both in the elevating post 21 and the gate post member 18, may be set in recesses in adjoining members as shown and secured by gluing or dowel pins (not shown). The base of the hand knob 25 acts as a cap for the hollow vertical elevating post 21 and conceals the opening therein.

The elevation adjustment means or ratchet comprises a knob 41 and a rod section 42. A groove 43 is formed in the latter at a central point for the reception of an end of the spring 44. This spring is preferably of flexible plastic material and has its other end secured in a slot 45 in the outer edge of the upper rail 19 of the gate. One or more screws 47 maintain it firmly in position. The spring is adapted to be flexed across the aperture 48 as outward pressure is exerted on the knob 41 of the elevation adjustment means 26. As this pressure is exerted the end of the rod section 42 becomes disengaged from the notch 23 where it would normally be held by the spring 44 and the vertical elevation post 21 is released, and by gravity normally will drop into the hollow in the gate post member 17 until it reaches a point illustrated in Figure 3 where further downward progress is halted by the abutment of the brace 24 on the upper surface of the member 19. Through proper adjustment of the elevating means a very smooth and even action can be obtained as during the elevating operation (which is manual) the contact edge of the rod section 42 of the elevating means 26 tends to slide over the tapered upper surfaces

of the teeth 22 (see Figures 1 and 5) with little or no friction and resulting noise. In lowering, the operator conventionally grasps the knob 25 with one hand and then disengaging the contact edge of the elevating means by pulling outwardly on the knob 41 manually lowers the elevating post 21 to the position desired whereupon the knob 41 is released and the contact edge again engages the notch selected. As best illustrated in Figure 3, when the post is completely lowered and the gate swung toward the bedside table the entire structure is quite unobtrusive.

As will be apparent from the foregoing description, the invention completely dispenses with all heavy metal parts and there is little possibility of wear or breakage in the operative parts necessitating upkeep and repair.

Having fully described my invention, I claim:

1. In an overbed table attachment a swingable gate having a hollow vertical post, an elevating post slidable in said gate post and supporting a table top at the upper end thereof, said elevating post having a rack formed in a side edge thereof and elevation adjustment means cooperating with said rack in supporting said elevating post in a preselected vertical position, said elevation adjustment means comprising a blunt pointed rod inserted through an opening in the gate post, and spring means normally actuating said rod against said rack, said spring means engaging the rod at a point intermediate its ends.

2. An overbed table attachment entirely formed from wood or similar materials and comprising a swingable gate, said gate including a hollow post, an elevating post positioned in said hollow post and contained thereby, means for manually raising and lowering said elevating post, a top supported by said elevating post, a rack of teeth and notches formed in a side edge of said elevating post, a blunt pointed rod supported by the gate and movable into and out of said hollow post for engaging the notches in the rack, spring means supported by the gate for engaging the rod at an intermediate point and actuating it toward the notches and means for manually disengaging the rod during a raising or lowering operation.

3. An overbed attachment for a table comprising a frame member, means for pivotally attaching the frame member to a table, said frame member including a vertical hollow post and a horizontal rail member secured to said post, an elevating post positioned in said hollow post and contained thereby, a table top supported by said elevating post, a rack of teeth and notches positioned on a side edge of the elevating post, said teeth having inclined edges and said notches having substantially flat faces, a blunt pointed pawl supported in the horizontal rail member of the frame and movable into and out of the hollow post through an aperture therein, a flat resilient spring member supported in the horizontal rail member interiorly thereof, said spring member engaging the pawl at a point intermediate its ends and normally actuating the point of the pawl into engagement with the notches on the rack, and means at the reverse end of the pawl for disengaging its point from the notches to permit lowering of the elevating post.

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