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HOSPITAL FURNITURE

Filed Feb. 26, 1926

Fig. 1.

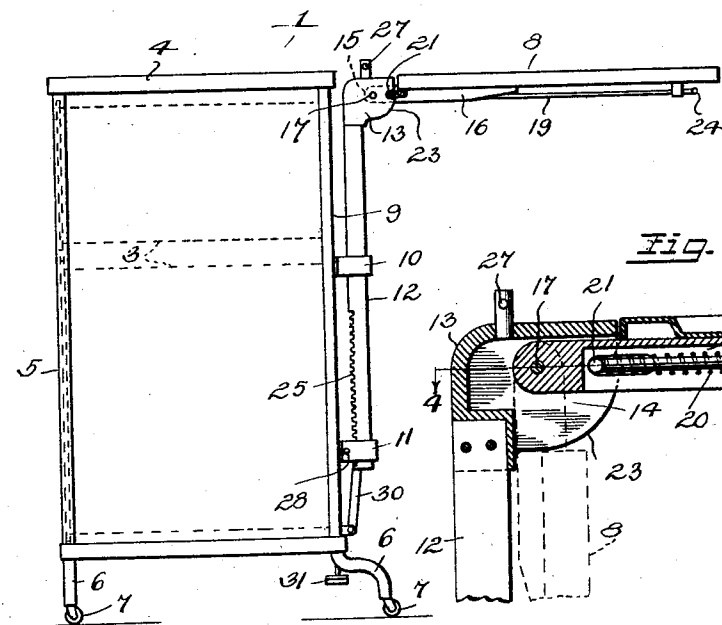


Fig. 3.

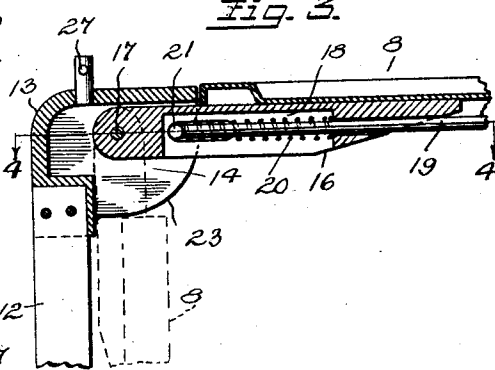


Fig. 2.

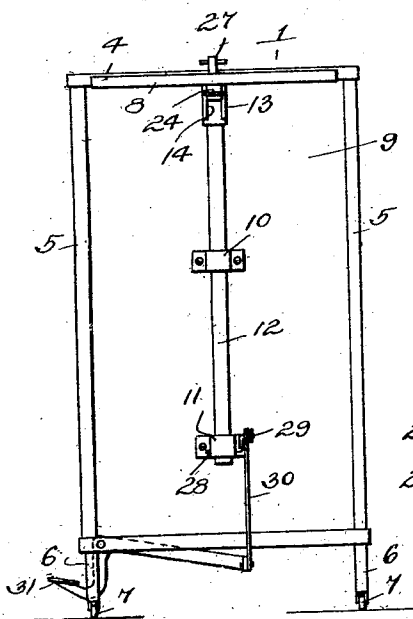


Fig. 4.

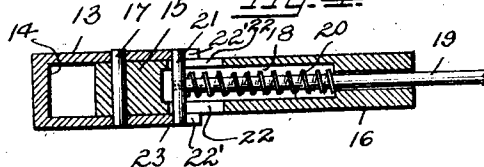


Fig. 5.

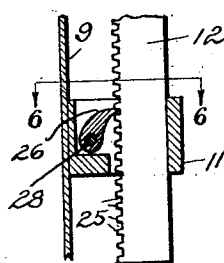
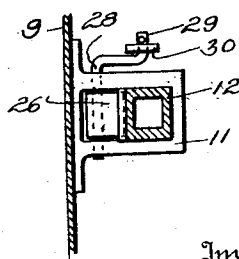


Fig. 6.



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HOSPITAL FURNITURE.

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This invention relates to improvements in hospital furniture, and has for its primary object the provision of a bed side table, particularly adapted for use in hospitals, with which is combined an adjustable and collapsible shelf structure, which latter is of such form and mounting that when not in active use the same may occupy a folded or collapsed position lying parallel and adjacent to one side of the table, and when in an active position may be extended so as to provide a support permitting of the placing of articles, such as food trays and the like, thereon.

Another object of the invention resides in the provision of a hospital table with which is combined a foldable shelf structure, and wherein the supporting means for the shelf structure includes a non-rotatable vertical standard slidably supported within fixed guides carried by the side of the table, and wherein the standard is provided with a plurality of ratchet teeth cooperative with a pivoted locking detent which serves to maintain the standard locked automatically in any of its elevated positions of adjustment, so that the shelf or ledge carried in connection with the standard may be positioned at any desired elevation necessary to suit the convenience of the patient, and to adapt the shelf structure either to project over the bed of a reclining patient, or to permit of the lowering of the same for use when the patient is occupying a chair or, in other words, to maintain the shelf structure in any desired horizontal plane of adjustment.

A further object resides in the provision of a foot operated releasing means by which the detent may be removed from engagement with the teeth of the shelf supporting standard so as to allow the latter to be lowered to assume a folded or inactive position.

A further object rests in providing the upper end of the standard with a bifurcated head to which is pivotally connected one end of the supporting shelf, in order that when the shelf is lowered the same will lie closely adjacent and parallel to the side of the table upon which it is mounted and when raised the shelf will be swung to assume a position perpendicular to the table, novel locking and releasing means being provided for maintaining the shelf in its extended or active position wherein the shelf lies in a horizon-

tal plane substantially at right angles to the table.

Other objects of the invention reside in the provision of a table of this character wherein the shelf structure may be raised, lowered and adjusted with convenience and facility, and wherein the locking mechanism is of a positive and automatic character, devoid of set screws and the like to the end of assuring the retention of the shelf structure in any desired position of adjustment.

With these and other objects in view, as will appear as the description proceeds, the invention consists in the novel features of construction, combinations of elements and arrangements of parts hereinafter to be fully described and pointed out in the appended claims.

In the accompanying drawing:

Figure 1 is a front elevation of the combined shelf and table comprising the present invention,

Figure 2 is a side elevation thereof,

Figure 3 is an enlarged vertical sectional view taken through the shelf and the connection therewith with the supporting standard,

Figure 4 is a horizontal sectional view on the line 4-4 of Figure 3,

Figure 5 is a vertical sectional view disclosing the means for maintaining the supporting standard in various vertical positions of adjustment,

Figure 6 is a detail sectional view on the line 6-6 of Figure 5.

Referring more particular to the drawings the numeral 1 designates the improved table comprising the present invention. In the present instance this table is formed from sheet metal and includes a cabinet body for the accommodation of drawers or the like. The top 4 of the table being of plane formation for the accommodation of articles deposited thereon and, in this instance, the corner posts 5 of the table are extended to provide depending legs 6 having their lower ends provided with rollers or the like 7.

In combination with this table there is provided an improved adjustable shelf structure 8 which, as shown in Figure 1, is capable of assuming, when actively positioned, a horizontal plane for the accommodation of food trays, books or other materials which may be placed thereon. This

shelf structure, however, when not in use is adapted to be folded so as to lie parallel and closely adjacent to one of the side walls 9 of the table, in order that the latter will occupy but a minimum of storage space and may be positioned within convenient reach of an associated bed.

To mount the shelf structure the wall 9 is provided at vertically spaced intervals with a pair of guide brackets, the upper of which being designated by the numeral 10 and the lower by the numeral 11. Slidably received within these brackets is a vertical standard 12, and in this instance of square and hollow formation so as to be light in weight, possess adequate mechanical strength and to be non-rotatably received within the brackets 10 and 11.

The upper end of the standard 12 is provided with a head 13 formed with a socket 14 for the reception of a tongue 15 formed with the supporting frame 16 of the shelf 8. The tongue 15 is apertured for the reception of a pivot pin 17, which extends transversely through the walls of the socket 14. The axis of this pin is disposed horizontally, so that the shelf may be swung in a vertical plane from its inactive to active positions and vice versa.

In order to lock the shelf in its raised or active position the tongue or extension 15 is provided with a bore 18 for the slidable reception of a locking rod 19. This rod is surrounded by means of a spring 20, arranged in the bore 18 and engaged with the rod so as to force the latter in the direction of the head 13. The outer end of the rod 19 is formed with offset studs 21, which are slidably positioned within slots 22 formed in the supporting member 16, the end portions of the studs 21 are arranged to be received within open sided recesses 22' provided in the arcuate walls 23 of the head 13, the said walls 23 being struck about an arc whose center is the axis of the pin 17. It will be seen that as the shelf is raised the studs 21 will move over the walls 23 until the shelf has assumed a substantially horizontal position, where the studs 21 register substantially with the recesses 22'. When this registration occurs the spring 20 acts to force the studs into said recesses so as to lock the shelf against pivotal movement about the pin 17. To release the shelf from this locked position, the outer end of the rod 19 is provided with an offset portion 24, arranged adjacent to the outer and under edge of the shelf 8. Manifestly, by grasping the offset portion 24 and sliding the rod outwardly, the studs 21 may, against the resistance of the spring 20, be removed from said recesses so as to allow the shelf to swing downwardly. It will be observed, however, that this manual release is only necessary when the shelf is to be moved to an inactive

or folded position, since when raising the shelf to an active position the operation is automatic, due to the inclusion of the spring 20. This is a very desirable feature when it is considered that a nurse frequently is supporting a food tray in one hand when operating the shelf and does not have to deposit the food tray upon some other object or support in order to fasten the shelf structure in its horizontal or elevated position.

It is also necessary in a table of this character to provide for the vertical adjustment of the shelf structure. The present invention accomplishes this in a very simple yet effective manner. As shown in Figure 5 the lower end of the standard is provided with a plurality of ratchet teeth 25, and the lower bracket 11 has pivoted thereto a pawl or detent 26 positioned to engage gravitationally the teeth 25 so as to prevent normally downward movement of the standard. The head of the standard is provided with a handle 27 for convenience in manual grasping, and it will be understood that by applying lifting forces to said standard, through the handle 27, the said standard may be elevated throughout an appreciable range of vertical adjustment. Also, due to the pawl 26 it will be manifest that the standard will be locked automatically in any of its vertical positions of adjustment as the standard is being raised, since the cooperation between the pawl 26 and the teeth 25 is such as to secure this feature. Thus when a nurse desires to deposit, for instance, a food tray on the supporting shelf, and assuming the latter is in its collapsed or folded position, the nurse may with one hand elevate the standard by grasping the handle 27 and lifting the standard. When the desired elevation has been reached the standard is locked in such position. This, then, frees the hand and permits the operator to grasp the outer end of the shelf structure so as to swing the latter about its pivot 17. When the shelf has been raised to assume a true horizontal plane the studs 21 are brought into registration with the recesses 22' and the shelf is locked automatically in its horizontal position. It will be observed that by this construction the operator has employed but one hand in carrying out the adjustment, since the other hand may be used in carrying an object independent of the shelf.

To release the detent from its locking position in engagement with the standard 12, the pivot 28 upon which said pawl is mounted is provided with a depending crank 29 with which is connected a link 30 having connection with a foot pedal 31 pivotally carried in connection with the side of the table. In collapsing the shelf structure the rod 19 is moved outwardly so as to force the studs 21 out of the recesses 22' so as to allow the shelf structure 8 to swing about

its pivotal axis 17, until said shelf structure is positioned adjacent and parallel the side wall 9 of the table. The pedal 31 may then be pressed by the foot of the operator so as to release the detent or pawl 26, thus allowing the shelf structure to be lowered to assume its inactive position.

In view of the foregoing it will be seen that the present invention provides a simple and improved horizontal table wherein is provided an associated shelf structure by which a lateral extension is provided for the table permitting of many uses in a sick room. The construction has the advantage of being positive in carrying out its several functions and extremely convenient to operate. While the preferred form of the invention has been specifically described and illustrated, it will be understood, nevertheless, that departures from the disclosures may be made without departing from the spirit of the invention as set forth in the pending claims.

What is claimed is:

1. An apparatus of the class described, of a column carried by a wall, a head fixed to the upper end of said column and formed with an arcuate wall having an open ended horizontal slot, a shelf, an extension on said shelf pivoted to said head, a spring pressed

latch bar mounted to slide within a bore in said extension, and provided with a cross-pin adapted to lie against said arcuate wall when the shelf is swung on its pivotal connection to a folded position, and to be received within said horizontal slot when said shelf is raised to its elevated position.

2. An apparatus of the class described, the combination with a supporting wall, of a column adjustably mounted with respect to a wall, a head fixed to the upper end of said column formed to include a pair of arcuately shaped walls having horizontally positioned open ended slots formed therein, a shelf, an extension on said shelf pivotally mounted between said walls, said pivot constitutes the axis from which the arc of said walls is struck, a spring pressed latch bar mounted to slide within a bore in said extension, and provided with a cross-pin having its end portions engaging with said arcuate walls when said shelf occupies a folded position, and arranged to enter said horizontal slot when said shelf is in its elevated position.

In testimony whereof we affix our signatures.

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