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ADJUSTABLE TABLE STRUCTURE

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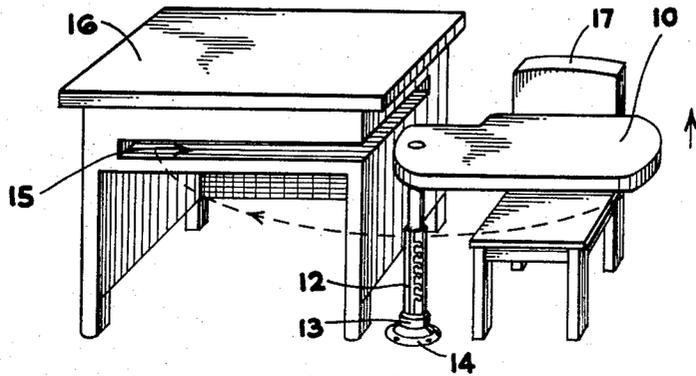


FIG. 1

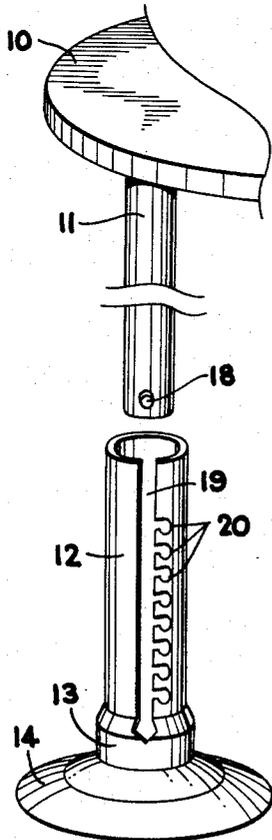


FIG. 2

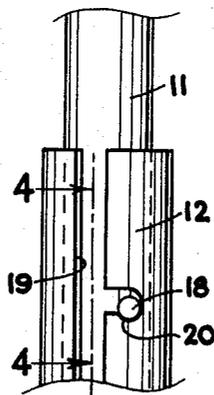


FIG. 3

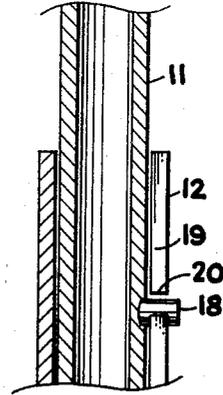


FIG. 4

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ADJUSTABLE TABLE STRUCTURE

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1 Claim. (Cl. 108—144)

This invention relates generally to means incorporating table structures and more particularly, to an improved adjustable table structure primarily for use in supporting a patient's arm during medical treatment thereof.

In the normal practice of running blood tests or drawing blood from a patient, the patient is seated in a chair and his arm is held extended either by a nurse or of his own volition. After blood has been drawn, the patient in some instances may have a dizzy spell and slump forward or fall from the chair. In other instances, it is sometimes difficult for the doctor to locate the vein for properly drawing blood or making other tests when the patient is required to hold his own arm extended.

With the foregoing considerations in mind, it is a primary object of this invention to provide an improved adjustable table structure of unique design to facilitate medical treatment of a patient's arm while the patient is seated in a chair.

More particularly, it is an object to provide an adjustable table structure in which the overall height of the table surface may easily be selected to accommodate any one particular patient and serve to support his arm or arms in a convenient position for treatment.

Another important object is to provide a table structure upon which a patient may rest his arm or arms while seated and in which the weight of the patient's arm on the table structure serves to lock the table in a position in front of the patient's chair to prevent him from falling from the chair should he experience a dizzy spell.

Still another object is to provide a table structure meeting the foregoing objects which may be readily swung to an out-of-the-way position when not in use. This feature also provides easy access for the patient to his chair prior to treatment.

Briefly, these and many other objects and advantages of this invention are attained by providing an elongated table top together with a novel supporting means therefor.

The supporting means are secured between one end portion of the table top and the floor such that the remaining portion of the table top is cantilevered in a horizontal direction. With this arrangement, the table may be positioned in front of a patient's chair without interfering in any way with the patient's legs.

The supporting means itself includes cooperating telescoping members enabling adjustment of the overall height of the table as well as enabling horizontal swinging movement of the table so that it may be swung free of the front of the patient's chair or swung to an out-of-the-way position when not in use.

A better understanding of the invention will be had by now referring to a preferred embodiment thereof as illustrated in the accompanying drawings, in which:

FIGURE 1 is a perspective view illustrating one manner in which the table structure of this invention may be used;

FIGURE 2 is an enlarged fragmentary perspective exploded view of the supporting means for the table top;

FIGURE 3 is a fragmentary elevational view illustrating the supporting means in a selected position for supporting the table top at a given height; and,

FIGURE 4, is a cross-section taken generally in the direction of the arrows 4—4 of FIGURE 3.

Referring first to FIGURE 1, the table structure includes an elongated table top 10 together with a supporting means comprising first and second members or tubes 11 and 12 arranged to telescope together. The member

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11 is secured under one end portion of the table top 10 as shown so that the remaining portion of the table top is cantilevered in a horizontal direction.

The lower end of the second member 12 includes an enlarged diameter portion 13 secured to a base 14 which may be bolted to the floor.

As will become clearer as the description proceeds, the enlarged diameter portion 13 enables rotation of the first member 11 within the second member 12 when the table top 10 is adjusted to its lowest position so that the table top 10 may be swung in a horizontal plane as indicated by the dashed line and arrow. In this respect, the table top 10 can thus be swung through 180° into a slot 15 in a doctor's desk 16 so that it will assume an out-of-the-way position when not in use. When it is desired to use the table however, it may be swung out to the solid line position shown in FIGURE 1 to extend transversely in front of a patient's chair 17.

Thus, in the operation of the table structure, the table top 10 will normally be stored within the slot 15 of the desk 16. A patient may then easily be seated in the chair 17 without interference from the table. The doctor will then swing the table top 10 from the slot 15 to extend transversely across the front of the patient. The height of the table top 10 is then adjusted by telescoping the first member 11 with respect to the second member 12 and locking the same in a selected vertical position. When so locked, the elongated table top 10 will be immobile and will prevent the patient who is seated in the chair 17 from slumping forward or falling from the chair. Further, the table top 10 serves as a supporting surface for a patient's arm and because of its adjustability in a vertical direction, the patient's arm may be positioned in the most favorable location for the particular medical treatment to be carried out, such as drawing blood or conducting a blood test.

The manner in which the raising and lowering of the table top 10 takes place will best be understood by now referring to FIGURES 2, 3 and 4. Referring first to FIGURE 2, it will be noted that the lower end of the first supporting member 11 includes a lateral projection 18. Further, the second member 12 includes an elongated vertical slot 19. Communicating in common with this slot are a plurality of bayonet type openings 20 extending laterally in the wall of the member 12 as shown.

With the foregoing arrangement, the first member or tube 11 may be telescopically received within the second member or tube 12 with the projection 18 sliding in the slot 19. Further, the slot 18 may then be passed into any selected one of the bayonet type openings 20 by a slight rotation of the table top 10 and member 11 when the lateral projection 18 is juxtaposed the selected opening.

As illustrated best in FIGURES 3 and 4, when the projection 18 is received within one of the bayonet openings, the opening itself is so oriented that its right hand end as viewed in FIGURE 3 is lower than the entrance portion to the opening so that the projection 18 will drop down slightly in the openings. As a consequence of this arrangement, the weight of the table top as well as the weight of the patient's arm on the table top will securely hold the projection 18 in the bayonet opening 20 and the table will be locked from inadvertent rotation which might tend to remove the projection 18 from the bayonet opening.

On the other hand, when it is desired to move the table or adjust it to a new height, it is a simple matter for the doctor to lift up slightly on the table top 10 to free the projection 18 from the lower end of the bayonet slot 20 and then rotate it slightly so that the projection 18 is received within the elongated vertical slot 19. The first member 11 is then free to telescope up and down with

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respect to the second member 12, so that any one of the other bayonet slots may be selected.

When it is desired to rotate or swing the table top 10 to an out of the way position, the projection 18 is positioned in the slot 19 and the first member 11 then fully telescoped downwardly within the member 12 until the projection 18 is received within the enlarged diameter portion 13 of the lower member 12. With the projection 18 free of the slot 19 in the enlarged diameter lower portion, the member 11 and table top 10 may easily be rotated or swung to an out-of-the-way position.

From the foregoing description, it will thus be evident that the present invention has provided a greatly improved adjustable table structure. The construction is rugged, simple, reliable in operation, and relatively economical to manufacture. Further, when the structure is assembled as illustrated in FIGURE 1, it greatly facilitates medical treatment of patient's arms and avoids possible injuries resulting from the patient fainting or falling from the chair 17.

While only one particular embodiment of the invention has been set forth and described, it will be understood by those skilled in the art that various changes and modifications falling clearly within the scope and spirit of the invention can be effected. The adjustable table top is therefore not to be thought of as limited to the exact construction shown merely for illustrative purposes.

What is claimed is:

An adjustable table structure for supporting a patient's arm at a desired level during medical treatment thereof comprising, in combination: an elongated table top; and supporting means secured to one end portion of said top so that the remaining portion of said top is cantilevered in an horizontal direction, said supporting means including: a first member secured to and extending downwardly from said one end portion and having a lateral projection; and a second member telescopically receiving said first member and having its lower end secured in a sta-

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tionary position, said second member have a plurality of bayonet type openings periodically vertically spaced in its side communicating with a common vertical slot so that said projection may be received in any one of said openings, the weight of said table top and force exerted by said patient's arm tending to force said projection further into that particular bayonet opening within which it is positioned so that said telescoping members are locked in a selected relationship to hold said table top stationary, said elongated slot in said second member opening out into an enlarged area at its lower end to accommodate said projection when said first member is fully telescoped in said second member so that said table top and first member may be rotated when said table top is in its lowermost position to enable swinging of said top in an horizontal plane to an out of the way position.

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