Feb. 5, 1952 M. WEINBERG 2,584,310

ADJUSTABLE ARM SUPPORT MEANS

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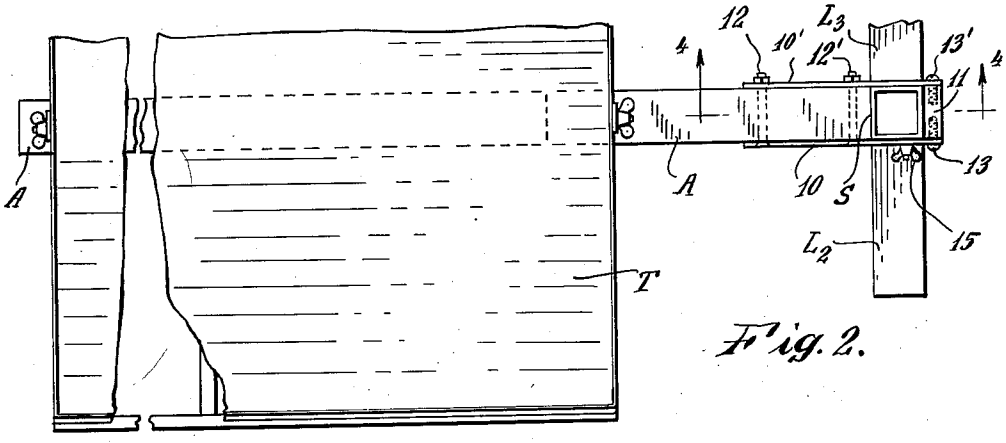


Fig. 2.

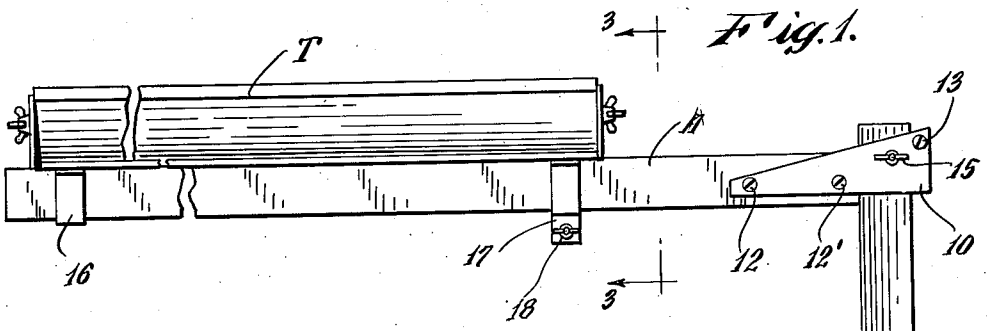
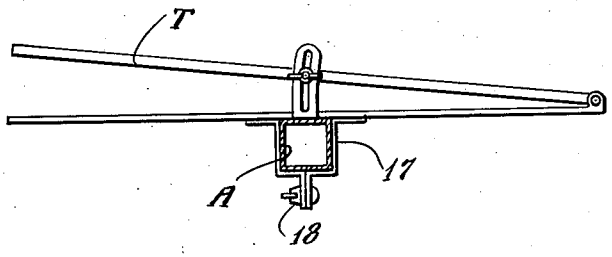


Fig. 1.

Fig. 3.



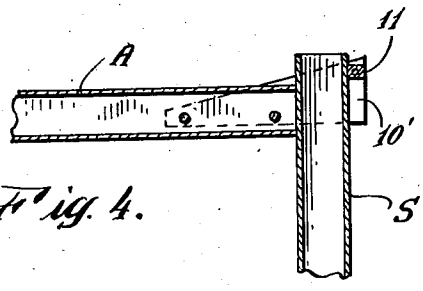
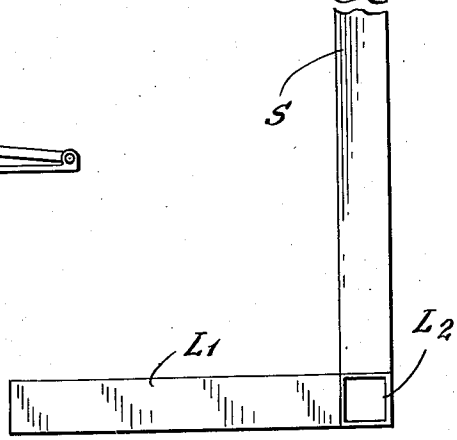


Fig. 4.



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ADJUSTABLE ARM SUPPORT MEANS

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1 Claim. (Cl. 248—12)

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This invention relates to adjustable arm support means for vertically sustained uprights or standards and has for its object the provision of such an adjustable arm support means adapted for use with substantially square section uprights and of wide utility in a plurality of different fields such as bedside tables, floor and table lamps, chemical stands, photographic enlarging apparatus, and the like devices, wherein an arm is sustained at one end in a horizontal position from a vertical standard and adjustment of the arm along the standard to a desired horizontal level is desired.

More particularly the present invention aims to provide such an adjustable arm support means which is adapted for use with substantially square sectioned metallic tubing.

A further object is to provide an improved bed-side table.

Other objects will be apparent as the invention is more fully hereinafter disclosed.

In accordance with these objects I have devised the improved adjustable arm support means adapted for use with substantially square section uprights sustained vertically which is shown in the accompanying drawing as adapted for use with one of the plurality of types of apparatus with which the invention is utilizable.

Referring to the drawings:

Fig. 1 is a side elevational view of a bed-side table provided with the improved adjustable arm support means of the present invention;

Fig. 2 is a top view of the same;

Fig. 3 is a sectional view of the same taken along plane 3—3 of Fig. 1; and

Fig. 4 is a sectional view of the same taken along plane 4—4 of Fig. 2.

As indicated in the drawings, a horizontal arm A carrying a table top T is sustained at one end in a horizontal position by vertical standard S, which is sustained at its bottom end by horizontally extending legs L_1, L_2 and L_3 resting on a base, such as a floor. Arm A and standard S each consist of substantially identical square sectioned material, preferably but not necessarily comprised of metal, and still more preferably but not necessarily comprised of square sectioned tubing comprised of light weight metal such as aluminum or magnesium or base alloys thereof.

It is desirable, in sustaining arm A upon standard S, to provide a sustaining or end-anchoring means for the arm A which may be readily moved bodily up or down along the length of standard S and securely anchored in any desired horizontal position thereto.

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In the present invention, this objective is attained by a simple structure consisting of substantially triangular shaped and plane surfaced side arms 10'—10' and substantially square sectioned cross-bar 11. Side arms 10 are secured at their small ends by threaded bolts 12—12' on opposite sides of arm A with their large ends extending beyond the end of arm A a distance approximating the width or thickness of standard S plus the width or thickness of cross-bar 11. Cross-bar 11 then is secured in bridging position between the side arms 10—10' adjacent the upper corners of said arms by means of threaded screws 13—13' engaging into threaded recesses in the opposite ends of cross-bar 11 with one of the faces of the cross-bar disposed parallel to the adjacent plane surface of the standard S and with the bar axis lying in a horizontal plane substantially above the horizontal plane of the upper face of arm end 10, thus anchoring the lower edge of the square end of arm A to and against the adjacent plane surface of standard S as the weight of arm A pivots the arm downwardly about the axis of screws 13—13'.

With this arrangement it may be seen that with a very small space gap between the square sectioned end of arm A and the adjacent plane surface of square sectioned standard S any reverse pivoting of arm A about the axis of screws 13—13' overcoming the weight of arm A, will free the lower butt edge of the end of arm A from anchoring engagement with the adjacent plane surface of standard S permitting the arm A and the anchoring means to be lifted or lowered along the vertical length of standard S to a new horizontal position whereupon a return of the arm weight the arm A is again anchored along its lower butt edge against the surface of standard S.

Normally, where the surface of standard S is not a polished surface, the pinching movement of arm A about the pivot point is sufficient to frictionally engage the lower butt edge of arm A against the surface of standard S to anchor the arm A in adjusted position thereon. However, where standard S is provided with smooth and polished surfaces it is desirable to provide a supplementary anchoring means, such as threaded wing-bolt 15 having the end thereof extending through one side-arm 10 (or 10') into contact with the adjacent face of standard S, to off-set such surface smoothness and to lock the anchoring means in each adjusted position.

Table-top T on arm A is a type of table-top which, per se, is old and well known in the art

and forms no part of the present invention except as modified as shown to adapt the same for adjustable movement along arm A. As indicated in Figs. 1 and 3, the top T is sustained in a horizontal position upon the arm A by means of clamps 16 and 17, clamp 17 being a pinch clamp actuated by wing-bolt 18.

It is believed apparent to any one skilled in the art that table-top T may be displaced by a plurality of devices and apparatus without departure from the invention.

It is also believed apparent that the particular shape of side-arms 10—10' may be widely varied without departure from the invention as long as the said side-arms are flat-sided and are secured to arm A at one end and to cross-bar 11 at the opposite end on opposite sides of standard S in substantially the same manner indicated in the drawings to form a flat-sided recess therebetween in which the standard S is engaged with arm A pivotally sustained by the cross-bar 11. This assembly prevents axial rotation of arm A in either anchored or unanchored position which is important in an arm sustaining means of this character.

Having hereinabove disclosed the invention generically and specifically and described and illustrated one specific embodiment thereof it is apparent that modifications and departures may be made therein without essential departure therefrom and all such modifications and adaptations are contemplated as may fall within the scope of the following claim.

What I claim is:

An adjustable arm support means for an arm horizontally supported on a vertically sustained standard of square cross-section, said support means comprising an arm end having a square cross-section substantially identical to that of the said standard, substantially rectangular side extensions on said arm end extending in the direction of the arm end axis, each said arm extension having an inner plane surface aligned with the outer plane surface of said arm providing a space gap therebetween approximating the width of one side of the square-sectioned standard and a length beyond the arm end substantially greater than the width of one side of the square-sectioned standard providing a recess therebetween for receiving the standard therebetween, the remote end of said arm extensions having a width substantially greater than the width of one side of the square-sectioned standard, and a square-sectioned cross-bar secured in bridging position between the two said side arms with the ends thereof abutting against the inner plane faces thereof at a point locating one side face of the cross-bar in spaced relation to the butt end at a distance approximating the width of one side of the square-sectioned standard and in parallelism with the outer face of the said standard opposite to that adjacent the butt end of the square sectioned arm end with the center axis of said cross-bar disposed in a horizontal plane substantially above the horizontal plane of the upper surface of the said arm end.

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