

H. COTS.  
DRAFTSMAN'S TABLE.  
APPLICATION FILED FEB. 3, 1910.

976,639.

Patented Nov. 22, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

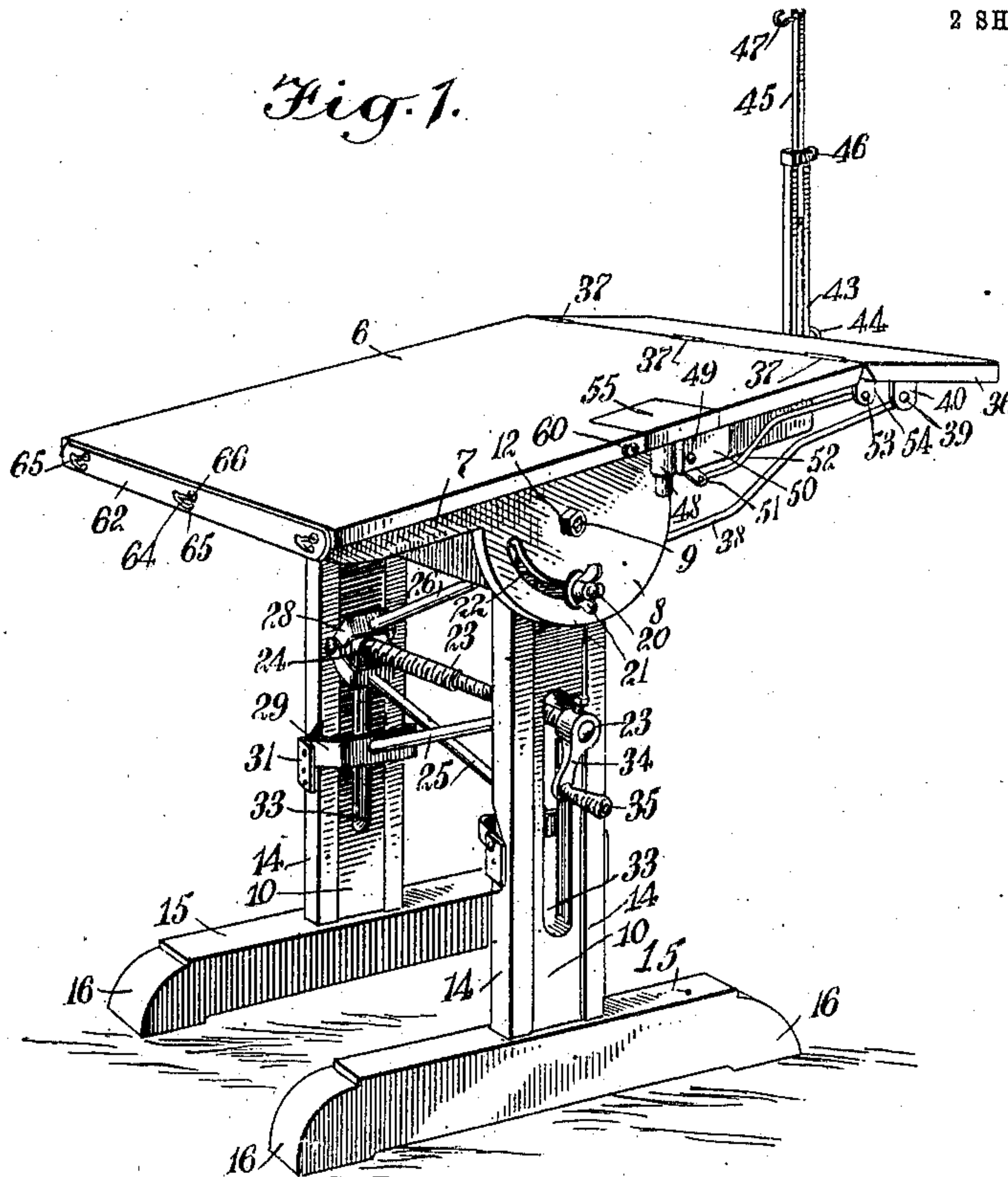
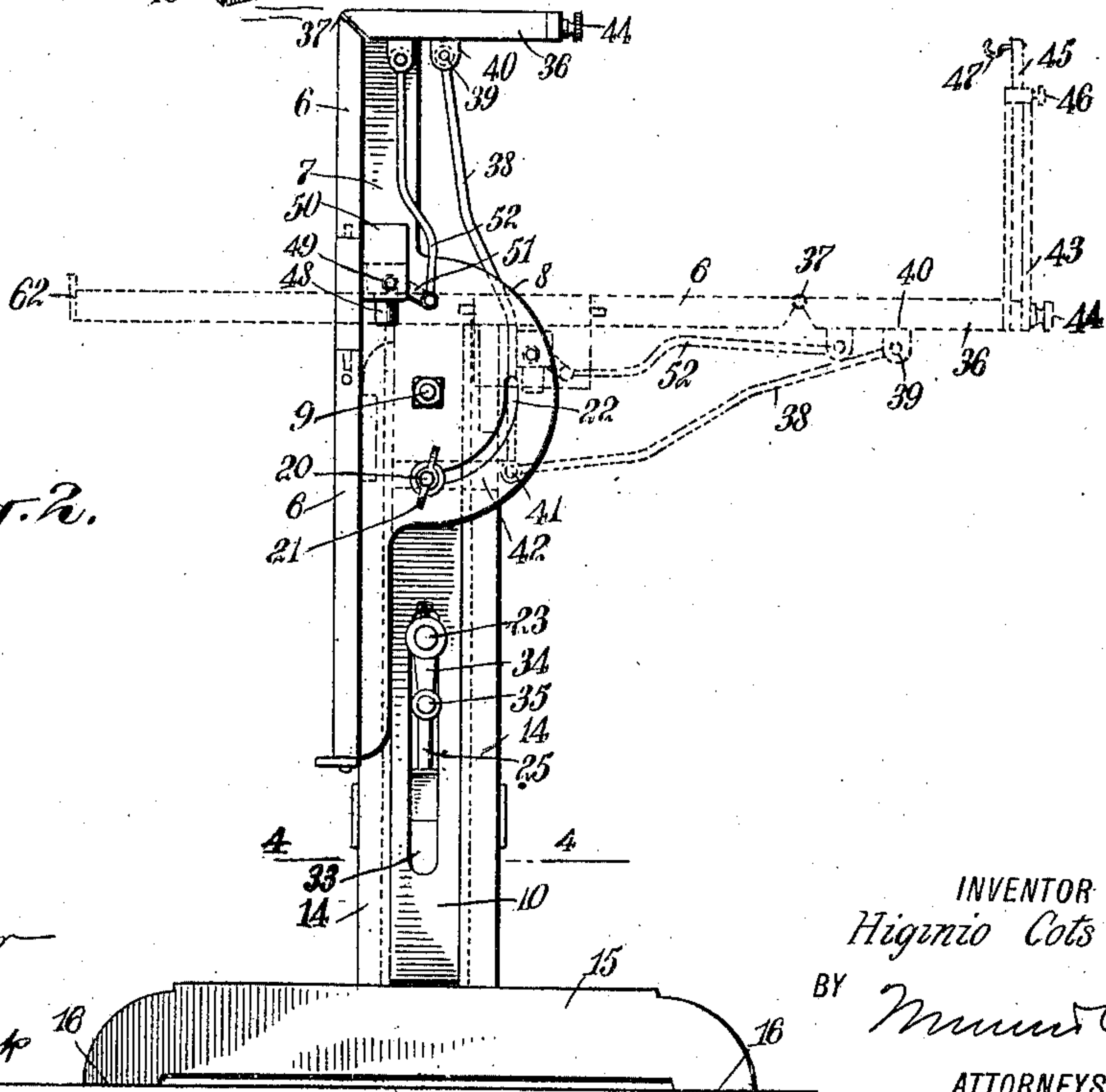


Fig. 2.



WITNESSES:

*Geo. W. Taylor*  
*E. M. Muddock*

INVENTOR

*Higinio Cots*

BY

*Munroe*

ATTORNEYS





# UNITED STATES PATENT OFFICE.

HIGINIO COTS, OF SAN JOSE, COSTA RICA.

DRAFTSMAN'S TABLE.

976,639.

Specification of Letters Patent.

Patented Nov. 22, 1910.

Application filed February 3, 1910. Serial No. 541,720.

*To all whom it may concern:*

Be it known that I, HIGINIO COTS, a subject of the King of Spain, and a resident of San Jose, Costa Rica, have invented a new and Improved Draftsman's Table, of which the following is a full, clear, and exact description.

Among the principal objects which the present invention has in view are: to provide a construction whereby the body of the table may be readily adjusted to various inclinations while maintaining in horizontal position a display shelf and structural elements connected therewith; to provide a receptacle for holding ink conveniently located on the tilting platform, and means for preserving the vertical disposition of the receptacle; to provide means for elevating the table and locking the same in adjusted position; and to provide a structure which is simple, efficient, firm and durable.

One embodiment of the present invention is disclosed in the structure illustrated in the accompanying drawings, in which like characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a perspective view of a table constructed in conformity with the present invention; Fig. 2 is a side elevation of the same, showing in full lines the table in a vertical position and in dotted lines the table in a horizontal position; Fig. 3 is a front elevation of the table, showing the same in an elevated and horizontal position; Fig. 4 is a cross section of one of the standard legs of the table, taken on the line 4—4 in Fig. 2; and Fig. 5 is an enlarged fragmentary view in plan, showing the details of construction of the ink receptacle and cover therefor.

One of the principal uses to which tables constructed as herein described and shown are put, is to serve as an easel or drawing table for use in copying from still life models, or from suspended flat copy.

The table proper consists of a board 6, fixedly mounted on the sides of which, and near the ends thereof, are battens 7, 7. Extended from the under side of the battens 7 are circular disks 8, 8 in which are formed perforations to receive short shafts 9, 9 and to form bearings therefor. It is upon the short shafts 9, 9 that the board 6 is rotated. The shafts 9, 9 are extended through perforations in leg extensions 10, 10, and are provided at the ends which rest inside the said extensions, with clip ears 11, 11. The said

shafts 9, 9 are extended through the disks 8, 8, and at the outside thereof are engaged by screw nuts 12, 12. The leg extensions 10, 10 are provided with elongated tongues 13, 13, which fit within grooves formed on the inner sides of stationary leg posts 14, 14. The leg posts 14, 14 are fixedly attached to spread bolsters 15, 15, at the ends of which are formed feet 16, 16. The posts 14, 14 are connected and cross braced at the top by framing plates 17 and 18. The plate 18 is square edged, as shown particularly in Fig. 3 of the drawings. The front leg posts 14, 14 are rounded at 19, 19 and extended a little above the junction with the plate 17, which is mortised into the said leg posts. It is between the leg posts 14, as stated, that the leg extensions 10, 10 are adjusted.

One of the extensions 10, 10 is provided with a bolt 20, having a screw thread formed on the end thereof to receive a wing nut 21. The bolt 20 is extended outward from the extension 10 on which it is mounted, and through a slot 22 formed in the disk 8 and concentric with the shaft 9 therein. As stated, the board 6 may be tilted to any desired angle, pivoting on the shafts 9, 9. This is permitted when the wing nut 21 is slack. When the desired inclination is attained the wing nut is tightened, jamming the disk 8 between the extension 10 and the washer usually provided under the nut 21.

To elevate the table there is provided a shaft 23, having screw threads formed thereon from the center line outward. On each side of the center line the thread is oppositely pitched. This forms two sections of the said shaft. On each of the sections is mounted a nut 24, having provided therein a screw thread adapted to engage the screw thread on the section of the shaft 23 to which it is applied. The nuts 24, 24 are pivotally engaged by rods 25, 25 and 26, 26. The pivotal mounting for the said rods with the said nuts is formed by bolts 27, which are passed through the said nuts and through thills 28, 28 fixedly secured to the ends of the said shafts. The pivot mounting thus formed permits the said rods to swing on the said nuts.

The rods 25, 25 are provided at the lower ends thereof with yokes 29, 29, which straddle the leg posts 14, 14 and are pivotally connected by means of bolts 30, 30 with brackets 31, 31 secured to the outer sides of the said leg posts. The mounting of the brack-



ets 31 on the leg posts 14 is fixed, therefore, as the ends of the rods 25, 25 and the nuts 24, 24 connected therewith are drawn together, the nuts 24, 24 are elevated, also elevating the shaft 23 connected therewith.

The rods 26, 26 are pivotally mounted at 32, 32 in the clip ears 11, 11 mounted on the shafts 9, 9. When the nuts 24, 24 are drawn together, as stated, the vertical extension of the rods 26, 26 is elongated, thus elevating the shafts 9, 9 and parts connected therewith. It is to provide for the greater travel of the extensions 10, 10 that the same are provided with slots 33, 33.

The shaft 23 has fixedly mounted on the end thereof a crank 34, the handle 35 whereof is grasped by the operator to rotate the shaft 23 to raise and lower the board 6.

It is obvious that the solidity of the table is insured, and that the travel thereof is guided by the mounting of the extensions 10 within the leg posts 14, 14. The shaft 23 is suspended in the nuts 24, 24 only, and is raised and lowered as the said nuts are raised and lowered by the contracting or spreading of the same. It is equally obvious that the shaft 23 may be rotated easily, and left in any position desired without locking, the mechanical arrangement of the nuts 24, 24 with the shaft 23 and the rods 25, 25 and 26, 26 being such that the construction is held firmly against relaxation or depression of the table by reason of weight or pressure applied thereon.

As shown in the drawings, in Figs. 2 and 3, the board 6 may be disposed in a vertical and a horizontal position, the slot 22 accommodating this movement about the bolt 20. It is obvious that the table may be arrested in all intermediate positions between the said vertical and horizontal. The shelf 36 is, however, maintained in a constantly horizontal position during the various angular dispositions of the said board. The shelf 36 and board are joined by hinges 37, 37. The shelf is supported in its position extended from the said hinges by a rod 38. The rod 38 is pivotally mounted at 39 in ear clips 40 fixedly mounted upon the under side of the shelf 36. The rod 38 is likewise pivotally mounted at 41 in bracket bearings 42 extended from the side of one of the extensions 10. The relation of the pivot 39 to the center of the hinges 37 corresponds to the relation between the pivot 41 and the center of the shaft 9. Relatively speaking, the shaft 9 and pivot 41 are to the hinges 37 and pivot 39, fixed points. The connecting members between the shaft 9 and the hinges 37 on the one side, and the rod 38 between the pivot 41 and the pivot 39 on the other side, are non-extensible, therefore, as the table is rotated about the shaft 9, carrying the shelf 36 therewith, the vertical extension of the hinge 37 and the pivot 39 remain

relatively the same, thereby preserving the horizontal extension of the said shelf 36.

Mounted upon the outer edge of the shelf 36 is a slotted standard 43. The standard 43 is secured to the shelf 36 by means of a milled nut 44. Slidably mounted between the vertical members of the standard 43 is an extension 45. The extension 45 is fixed in extended position by means of a set screw 46, which is extended through the head of the standard 43 and impinges upon the extension 45. The extension 45 is provided at the upper end thereof with a hook 47, which permits the suspension of flat copy or other articles therefrom. As the shelf 36 is at all times maintained in a horizontal position irrespective of the inclination of the board 6, so the standard 43 and extension 45 thereof are at all times preserved in a vertical position irrespective of the inclination at which the board 6 is set.

It is also necessary that the ink well or receptacle should be maintained in a vertical position, and for this purpose I have provided a casing 48. The casing 48 is formed of metal or other suitable material, and is pivotally mounted at 49 in bracket plates 50. The casing 48 is constructed in any suitable form to contain the ink or ink well therein. The casing is provided with a bracket extension 51 to which is pivotally connected a connecting rod 52. The connecting rod 52 is pivotally mounted at 53 to clip ears 54. The clip ears 54 are fixedly secured to the shelf 36 and at a distance from the line of the rotary center of the hinges 37, equaling the distance between the pivot 49 of the casing 48 and the pivotal connection of the bracket 51 with the rod 52. This arrangement of the pivots as illustrated in the drawings in Figs. 1 and 2, preserves at all times the vertical disposition of the casing 48.

The casing 48 is mounted in a recess formed in the top of the board 6, as shown in Fig. 1 of the drawings. The recess is covered by a flush plate 55. The plate 55 is pivotally mounted on dowels 56, and is supported on its inner edge by a latch head 57, which slides into a recess 58 provided in the said plate. The latch head 57 is mounted on the end of a stem 59, at the outer end of which is formed a button 60. The stem 59 is encompassed by a spiral spring 61, so arranged and disposed that the stem 59 is extended by seating the latch in the holding side of the recess 58, thereby preserving the locked position of the plate 55. The casing 48 and the ink receptacle carried thereby, are disposed sufficiently far below the plate 55 to swing independently thereof. When the plate 55 is closed, the paper which is spread upon the board 6 may, if desired, be extended across the recess carried by the said plate.



Mounted on the lower edge of the board 6 is a scale rule 62. The rule 62 is provided with scale markings 63, and with two or more angular slots 64, 64. The slots 64 are provided at the divergent ends and at the junction of the said slots with rounded recesses 65, 65, adapted to hold in relatively fixed position the guide bolts 66, 66. By the formation of the slots 64, 64, and the disposition of the same as shown in Fig. 3 of the drawings, it is obvious that the rule 62 may be shifted on the bolts 66, 66 to elevate or depress the upper and marked edge 63 of the rule 62 with relation to the edge of the board 6. When the bolts 66 are placed in the lower recesses 65 the rule is raised above the surface of the board 6. When the middle recess 65 is engaged by the said bolt 66 the edge of the rule is flush with the surface of the board. When the upper recess 65 is engaged by the bolt 66 the marked edge of the rule is below the surface of the board. For mechanical drawings it is obvious that this rule may be utilized to advantage both in the raised and lowered position.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A draftsman's table comprising an extensible stand and drawing board pivotally mounted on said stand and shelf pivotally connected with said board in parallel relation to the pivotal mounting of said board; an ink well receptacle pivotally mounted on said board mid-way between the front and rear end thereof; a connecting rod uniting said shelf and said receptacle, said rod be-

ing pivotally connected to the said shelf and receptacle equidistant from the pivotal mounting of each to maintain the parallelity of said shelf and receptacle; and a rod pivotally connecting said shelf and said stand to maintain constant, the angular relation of said shelf and said stand.

2. A draftsman's table comprising an extensible stand and drawing board pivotally mounted on said stand and shelf pivotally connected with said board in parallel relation to the pivotal mounting of said board; an ink well receptacle pivotally mounted on said board mid-way between the front and rear end thereof; a connecting rod uniting said shelf and said receptacle, said rod being pivotally connected to the said shelf and receptacle equidistant from the pivotal mounting of each to maintain the parallelity of said shelf and receptacle, a rod pivotally connecting said shelf and said stand to maintain constant, the angular relation of said shelf and said stand; and a vertically adjustable rack for said board attached to the front end thereof adapted to be raised to support articles on said board when the same is disposed in an inclined position and to be lowered below the surface of said board.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HIGINIO COTS.

Witnesses:

SAMUEL T. LEE,  
ED. M. EVANS.