Dec. 8, 1925. 1,564,359

P. KLEIN

DRAFTING TABLE

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Fig. 2.

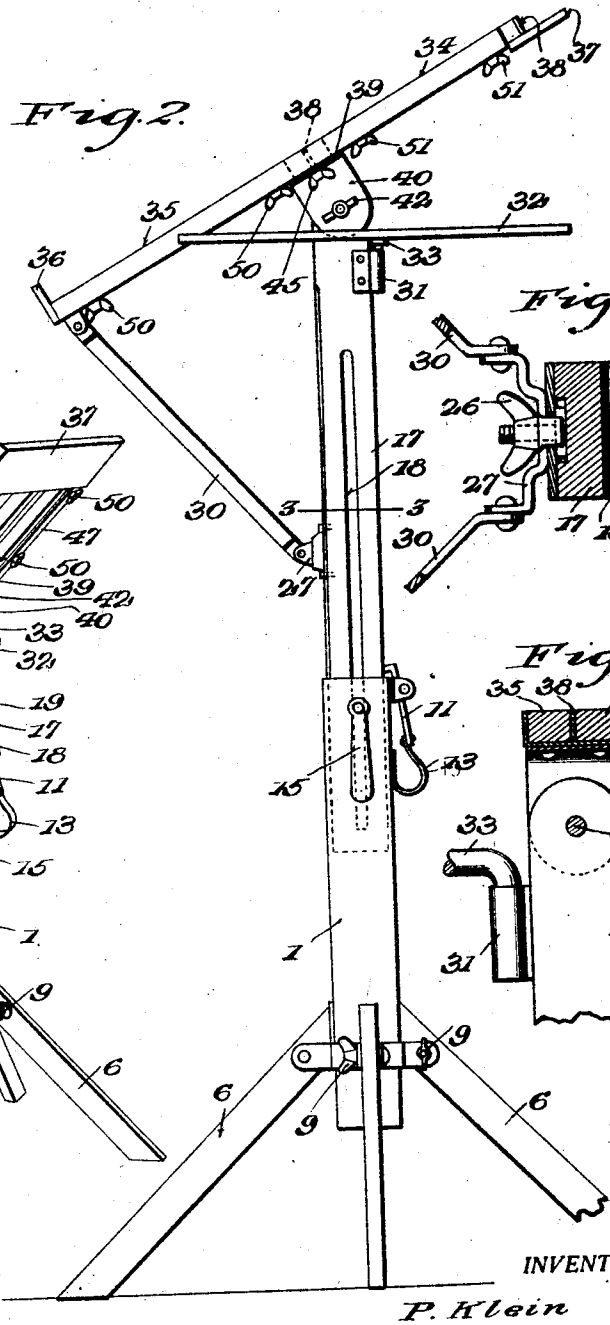


Fig. 1.

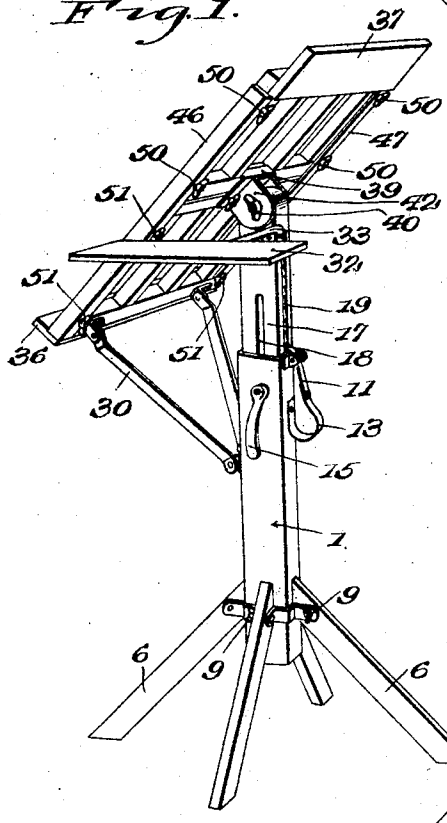


Fig. 5.

Fig. 4.

WITNESSES

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Fig. 5.

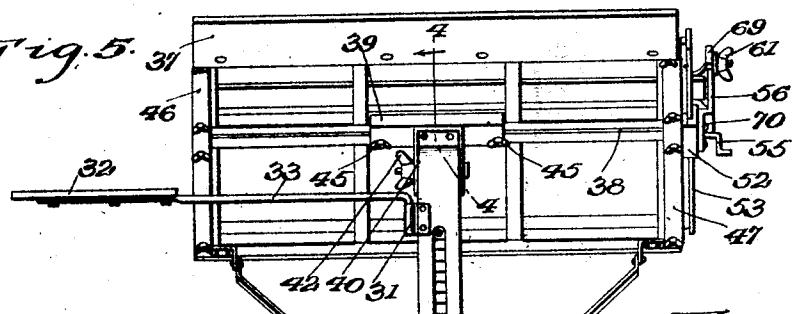


Fig. 7.

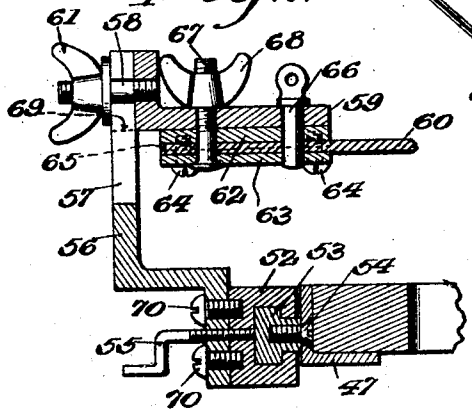


Fig. 8.

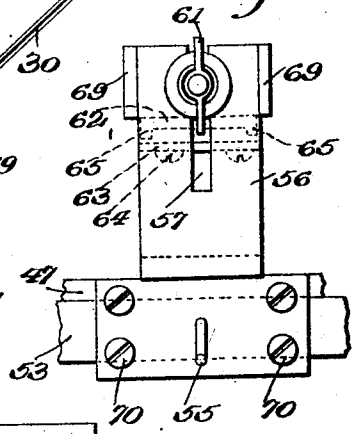
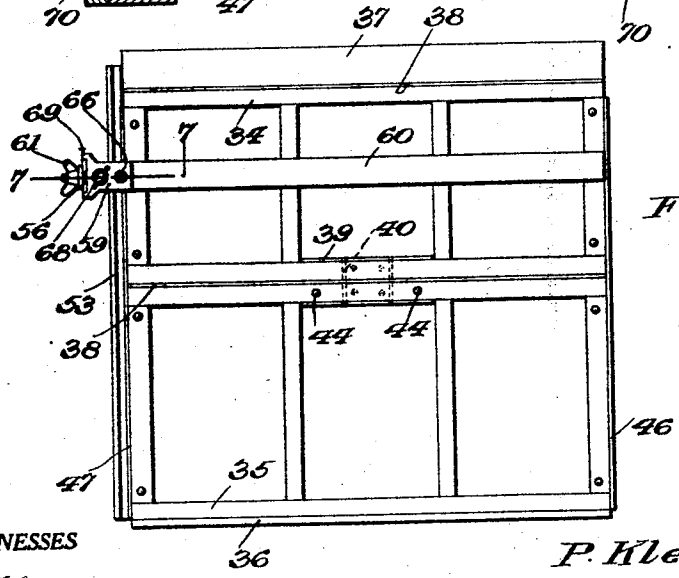


Fig. 6.



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UNITED STATES PATENT OFFICE.

PHILIP KLEIN, OF MANSFIELD, OHIO.

DRAFTING TABLE.

Original application filed November 28, 1922, Serial No. 603,840. Divided and this application filed August 31, 1923. Serial No. 660,399.

To all whom it may concern:

Be it known that I, PHILIP KLEIN, a citizen of the United States, and resident of Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Drafting Tables, of which the following is a specification.

My invention relates to improvements in drafting tables and consists of the constructions, combinations and mode of operation herein described and claimed.

An object of the invention is to provide a drafting table to be used in conjunction with the stand or pedestal of my co-pending application for Letters Patent referred to below, the combination of the two providing an entire table for students in home use.

A further object of the invention is to provide a drafting table top having a T-square so mounted on the left cleat which holds the table frames or sections together as to insure keeping it at right angles, when adjusted for that purpose, with said left side.

Another object of the invention is to provide a drafting table top which is made in sections so that it can be readily taken apart and packed in a considerably reduced space.

Other objects and advantages will appear in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view showing the drafting table top in place and a stand or pedestal.

Figure 2 is a side elevation of the structure shown in Figure 1.

Figure 3 is a cross section on the line 3—3 of Figure 2.

Figure 4 is a section on the line 4—4 of Figure 5.

Figure 5 is a detail rear elevation of the upper part of the table.

Figure 6 is a plan view of the table top showing the separable sections or frames.

Figure 7 is a section on the line 7—7 of Figure 6, showing the structure by which the T-square is mounted on the left cleat, and

Figure 8 is a detail elevation of the T-square mounting means or carriage.

This application is a division of my co-pending application for Letters Patent for drafting table filed November 28, 1922, Serial No. 603,840. This application deals with the table top and its appliances, whereas the parent application deals with the stand or pedestal upon which the table top is mounted. The two are intended to be used in combination, and when so used, constitute a drafting table which is particularly adapted for students in home use although the drafting table is by no means confined to that particular use.

The table top is composed of two main sections 34 and 35 which consist of frames made almost alike. The lower frame 35 has an upstanding edge 36 which serves as a rest for the drawing board, while the upper frame 34 has a piece 37 attached to the underside so as to furnish a resting place for pencils, erasers, and the like. The leaf 32 furnishes a convenient place to set the ink, instruments, etc. A corner bracket 31 furnishes the support for said leaf which has a rod 33 provided with a bent end to fit in the corner bracket. The upper edges of the frames 34 and 35 are bound with metal strips 38. These are nickel-plated, as are most of the metallic parts, and add to the appearance of the table.

It is not for appearance alone, however, that the binding strips 38 are added, but rather for the purpose of adding rigidity to the frames to keep the edges straight. These strips are permanently secured to the frames. A yoke 39 engages the bottom surfaces and vertical sides of adjacent stiles of the frame 34 and 35 when placed together as in Figure 6. This yoke is carried by a bearing 40, also in the nature of a yoke, which straddles the upper end of the movable pedestal 17 and has pivotal connection therewith as at 41.

This pivot consists of a bolt with a thumb screw 42 on one end. The table top may be set at any desired angle and secured in place by means of the thumb screw. The braces 30 materially aid in maintaining the adjusted angle of the table top inasmuch as they are firmly fixed in position between the lower edge of the table and the pedestal 17. The upper ends of these braces are pivoted to angle brackets 43 on the underside of the table top. The yoke 39 is a permanent part of the bearing 40. Bolts 44 are carried

by the upper stile of the lower frame 35 and are adapted to pass through the yoke (Fig. 5) where they are clamped in position by thumb screws 45.

The thumb screws 45 thus serve to hold the frames 34 and 35 of the table top upon the yoke 39. It is true that the upper frame 34 has no connection (by means of bolts and thumb screws or the like) with the yoke 39 but inasmuch as the vertical edges or stiles of the frames are bound by angle pieces 46 and 47, no possibility of the frames coming apart can ever occur. The end stiles of the respective frames carry sets of bolts 48 and 49. The ends of these bolts are intended to pass through suitable holes in the angle backings and receive thumb screws 50 and 51 (Figs. 1, 2 and 5) to hold the parts together. To take the table top apart it is necessary to unloosen and remove the thumb screws 50 and 51 as well as the thumb screws 45. If it becomes necessary to completely disassemble the table, the thumb screw 26 (Fig. 3) must also be removed so as to enable taking off the bracket 27 and entirely freeing the table top from the pedestal.

The T-square carriage comprises a block 52 which is slidable along a bar 53 permanently fastened at 54 (in a plurality of places) to the left angle binding 47. The bar 53 is T-shaped and fits in a correspondingly shaped slot in the block 52 so that the latter will not come off unless it is slid off either at the top or bottom.

A set screw 55 is adapted to hold the carriage block 52 against movement along the slide bar 53. The block 52 carries a support 56 with a slot 57 which opens at the top. A bolt 58 moves in this slot, and the bolt carries a lug 59 for the support of the T-square 60. The bolt 58 carries a thumb screw 61 by means of which the lug 59 may be tightened in place after the T-square has been brought to its proper position in respect to a drawing board which the reader may suppose to be on the table top.

The T-square 60 is fitted between plates 60 and 63 which are secured together by screws 64. The plate 62 has side flanges 65 to abut the edges of the T-square and so hold it in proper position. A pin 66 is inserted through openings in the lug 59, plates 62 and 63 and T-square 60 when it is desired to have the T-square at right angles to the left edge of the drawing table. Upon the removal of the pin, the T-square may be swung on the pivot bolt 67 which also carries a thumb screw 68 so that the T-square may be clamped in any radial position.

In order to keep the lug 59 from turning, it is provided with flanges 69 (Figs. 5 and 8) which bear on the edges of the support 56. The support 56 is affixed to the block 52 by a plurality of screws 70. Concerning the T-square, the blade is preferably made of wood as is the customary construction. The other parts illustrated in Figure 7 should be made of aluminum, although the specific material of which the parts are made has no bearing whatever on the invention.

The operation may be briefly reviewed to advantage. To raise and lower the movable standard 17 it is only necessary to unloosen the clamp lever 15 so that pressure of the tubular pedestal 1 against the sides of the pedestal 17 may be removed. The table top and movable pedestal may then be pulled up bodily. The dog 11 maintains an engagement with the rack 19 through the medium of the spring 13 and thus will hold any adjustment to which the table top may be set until such adjustment is finally fixed by tightening the clamp lever again.

In cases where the clamp lever 15 and slot 18 do not afford the desired range of adjustment, two or more of the thumb screws 9 may be unloosened so as to adjust the otherwise stationary pedestal 1 in respect to the legs 6. To adjust the angle of the table top the user must unloosen the thumb screws 42 and 26. The loosening of the former permits tilting of the table top, while the unloosening of the latter permits up or down sliding movement of the bracket 27. When the desired angle is reached, both thumb screws should be again fastened and the table top will be found perfectly rigid.

The table top is taken apart by removing the thumb screws 50 and 51 so as to permit taking the angle bindings 46 and 47 off. The thumb screws 45 and 26 are next taken off so that the frames or sections 34 and 35 of which the table top is composed, may be taken apart. The two-part pedestal may be telescoped. The legs are foldable together. Other parts such as the leaf 32 and the angle bindings are removable.

While the construction and arrangement of the improved table as herein described and claimed, is that of a generally preferred form, obviously modifications and adaptations may be made without departing from the spirit of the invention or the scope of the claims.

Having thus described the invention, what is claimed is:—

1. A table including a top composed of a pair of frames, a pedestal, a bearing by which the top is pivotally mounted on the pedestal, a yoke forming part of said bearing and including flanges to engage adjacent stiles of the frames, bolts carried by one of the frames and adapted to pass through the yoke, thumb screws on the bolts to clamp the yoke to the frames in the center of the top, and means at the ends of the frames to secure them together there.

2. A table including a top composed of a

pair of frames, angle irons fitted along the side edges of the frames to bind them together, a slide bar permanently affixed to one of the angle irons, a carriage including a block slidable along said bar, clamp means carried by said carriage to fix the adjustments of the block along the bar, a lug, means for adjusting the lug in respect to the carriage and perpendicularly of the block, a T-square blade, means including a pair of clamp plates for holding the blade, clamping means by which the plates are pivotally mounted on the lug, and a removable pin holding the blade at right angles to the side of the table when in position but permitting radial movement of the blade on said clamping means when removed.

3. A table including a top composed of a pair of rectangular frames of which adjacent longitudinal stiles are placed together, angle pieces fitted along the short ends of the frames to hold the frames in place, means including bolts and thumb screws by which the angle pieces are secured to said short frame ends, binding means to rigidify said longitudinal stiles, and clamping means to hold the adjacent longitudinal stiles together in the middle.

PHILIP KLEIN.