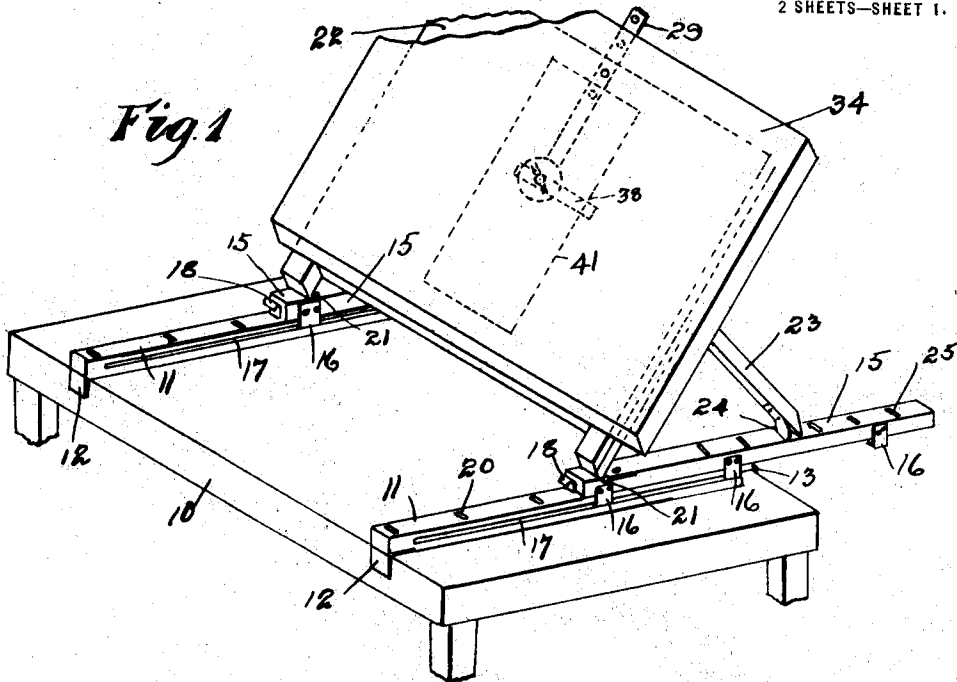
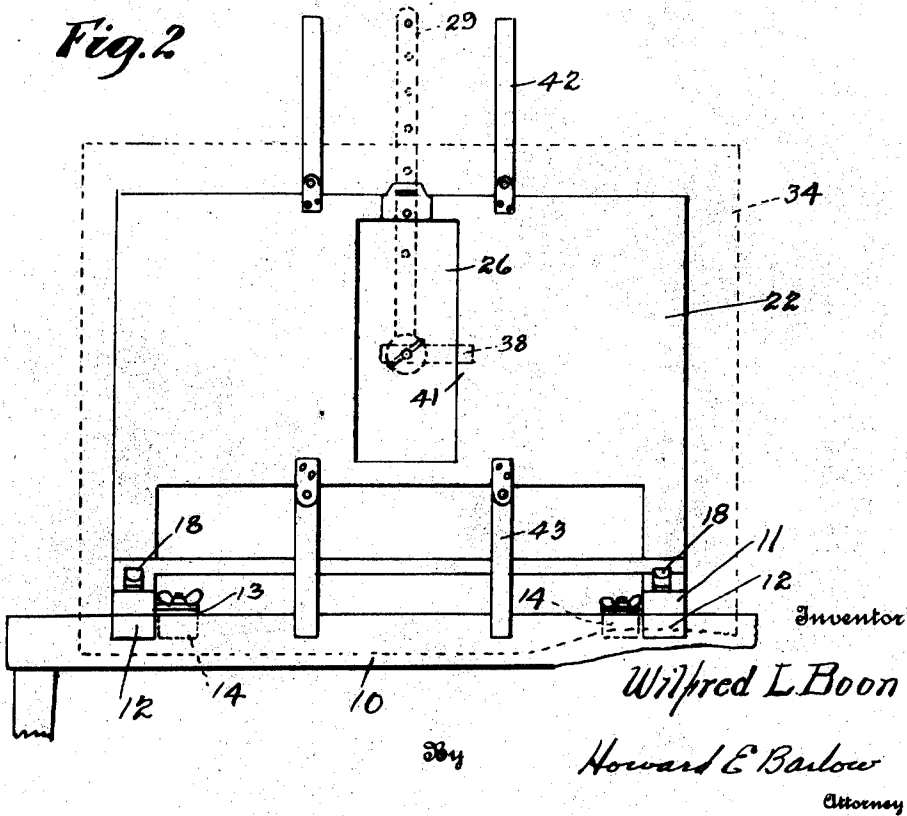


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APPLICATION FILED JULY 26, 1920.

1,401,458.

Patented Dec. 27, 1921.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

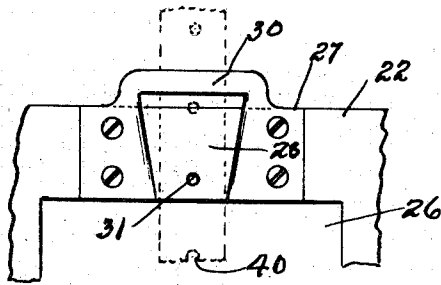


Fig. 3

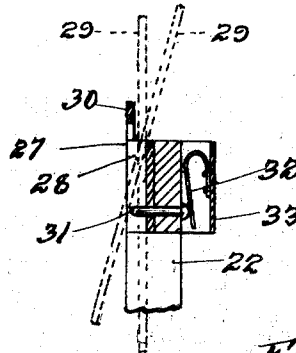


Fig. 4

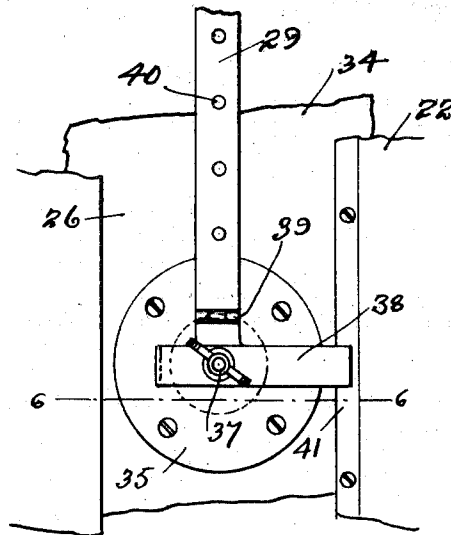


Fig. 5

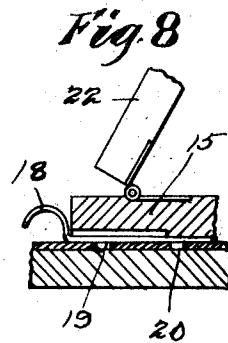


Fig. 8

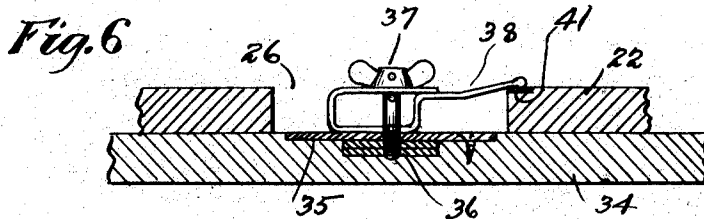


Fig. 6

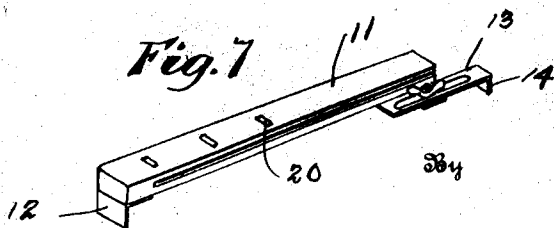


Fig. 7

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# UNITED STATES PATENT OFFICE.

WILFRED L. BOON, OF NORTH ATTLEBORO, MASSACHUSETTS.

## ADJUSTABLE DRAWING-BOARD.

1,401,458.

Specification of Letters Patent. Patented Dec. 27, 1921.

Application filed July 26, 1920. Serial No. 398,919.

*To all whom it may concern:*

Be it known that I, WILFRED L. BOON, a subject of the King of Great Britain, residing at North Attleboro, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Adjustable Drawing-Boards, of which the following is a specification.

This invention relates to an improvement in adjustable drawing boards, and has for its object to provide simple and effective means whereby a drawing board may receive universal adjustment and be readily locked in any adjusted position to facilitate working thereon.

The nature and advantages of the invention will be better understood when the following detail description is taken in connection with the accompanying drawings, the invention residing in the combination and arrangement of parts as claimed.

In the drawings forming part of this specification, like numerals of reference indicate similar parts in the several views and wherein:—

Figure 1 is a perspective view illustrating the drawing board as mounted on my improved adjustable support.

Fig. 2 is a front view of the drawing-board support.

Fig. 3 is a detail showing a front view of the means for engaging the suspending arm by which the board may be adjusted vertically on its supporting frame.

Fig. 4 is a sectional side elevation of the frame illustrating the spring pin for engaging the different holes in the board-supporting arm, whereby the board may be adjusted vertically on its frame.

Fig. 5 is a rear view showing a portion of the board and frame and the supporting arm on the board, also the spring clamp by which the board is locked to the frame to hold it in adjusted position thereon.

Fig. 6 is a sectional edge view of the board and the frame on line 6—6 of Fig. 5, showing the spring clamp by which the board is locked to the frame.

Fig. 7 is a detail showing one of the guide strips which is adapted to be fixed to the supporting table or base on which the frame is slidably mounted.

Fig. 8 is a detail in section illustrating the locking means for securing the frame in adjustable position on the guide strips.

With reference to the drawings, 10 designates the ordinary table on which my improved drawing board supporting frame may be mounted. This frame is herein shown as comprising two guide members or strips 11 adapted to rest upon the face of the table, and each strip being provided with a front lip 12 to extend down over the edge of the table, and also a rear adjustable arm 13 having a lip 14 adapted to engage the rear edge of the table and by which two lips these guide strips are firmly secured in place.

On these guide strips are mounted two slide members or strips 15, each of which is provided with a number of guide clips 16 adapted to engage and slide in longitudinally-disposed grooves 17 in the side edges of the guide strips 11.

The front edge of each slide strip 15 is provided with a spring clip 18 which has a protuberance 19 adapted to engage a corresponding hole 20 in the face of its guide strip whereby the slide strips are locked in adjusted position along the length of the guide strips.

Near the front end of each slide strip I have hinged at 21 the board-supporting member 22. To the rear side of this board-supporting member I have hinged a pair of supporting arms 23 the free end of each of which is provided with a finger 24 which fits into any of the corresponding slots 25 along the face of its slide bar, whereby this board-supporting member may be set at any desired inclination and supported in such position by the said arms 23.

The middle of this board-supporting frame 22 is cut away as at 26 to receive the clamping arm presently described. The frame at the upper edge of this cut away portion is recessed to receive a plate 27 the middle of which is offset inwardly as at 28 providing a groove for the board-suspending arm 29. A guide bar 30 is formed above this groove for guiding the arm therein.

Extending into this groove from the back of this frame is a spring pin 31 pressed forward by means of the bow spring 32 held in the housing 33 at the back of the frame.

The drawing board is preferably of the usual rectangular shape and of any desired size, and to the back of this board I have secured a metal disk 35 which is centrally threaded at 36 to receive the thumb screw 37 on which the board is pivotally mounted.

On this disk I have mounted a resilient clamping arm 38 through which this thumb screw 37 passes. To one side of this clamping arm 38 I have hinged at 39 the board-suspending arm 29, which arm is provided with a plurality of spaced-apart holes 40 adapted to be engaged by the spring pin 31 to support the board in any adjusted position vertically on the member 22, and when the board has been so adjusted it is only necessary to move the same laterally slightly which causes the clamping arm 38 to ride over the edge 41 of the board supporting member and so bind and secure the board in adjusted position thereto.

By mounting the board on the thumb screw 37 it will be seen that in addition to its vertical adjustment, when the binding arm 38 is disengaged from the member 22 that the board is then free to be rotated on this pin in the plane of its face and when so rotated to the desired position, by moving the same to one side the clamping arm 38 is caused to engage the edge of the opening 26 in the member 22 and so bind and hold the board in such position without further fastening. Therefore it will be seen that by the use of this single binding or clamping arm, the board may be held both against rotation and vertical movement. To obtain vertical adjustment it is only necessary to withdraw the clamp from engagement with the edge of the opening 26 in the member 22, then by swinging the board forward the suspending arm 29 is withdrawn from engagement with the pin 31 leaving the board free to be moved either up or down and when so vertically adjusted it is only necessary to swing it back against the member 22 and by a slight vertical movement the spring pin will enter one of the holes 40 and so suspend the board in such position after which it is locked by a lateral movement as before.

My improved drawing-board support is practical in construction and effective in its operation and by its use the board may be readily adjusted either vertically or in a circle and readily locked in any adjusted position by a single slight lateral movement.

It will also be observed that by mounting the board on the sliding ways the same may be moved back and wholly out of the way so that the table may be used for other purposes when desired.

When it is desired to use a board of larger dimensions the extension arms 42 and 43 may be swung out both from the top and bottom edges of the frame to support this larger board.

The foregoing description is directed solely toward the construction illustrated, but I desire it to be understood that I reserve the privilege of resorting to all the

mechanical changes to which the device is susceptible, the invention being defined and limited only by the terms of the appended claims.

I claim:

1. In an adjustable drawing board, a frame including a board supporting member, said member being adjustable to an inclined position on the frame, a board pivotally supported on said member to be rotated in the plane of its working surface in all positions of said member and also being shiftable on said frame, a means rendered effective and ineffective for locking the board in any position to said member when said board is shifted.

2. In an adjustable drawing board, a frame including a board supporting member adjustable to an inclined position on the frame, a board suspended on said member, means whereby the suspending means may be moved to adjust said board vertically on said member, said board also having a rotatable movement relative to said member in the plane of its working surface and further having a lateral shifting movement, a means rendered effective and ineffective for locking the board to said member in adjusted positions when laterally shifted.

3. In an adjustable drawing board, a frame including a board supporting member adjustable to an inclined position on the frame, a drawing board, an arm extending substantially parallel to said board and connected thereto, said arm being adjustably connected to said member for suspending said board thereon, said board being also pivotally connected to said arm to be rotated in a plane parallel with its working surface.

4. In an adjustable drawing board, a frame, means for suspending said board on said frame, means whereby said suspending means may be shifted to adjust said board vertically on said frame, and a spring clamping arm on said board for gripping said frame to secure the board thereto.

5. A drawing board support comprising a frame, board supporting member and a base, said member having a longitudinal adjustment relative to its supporting base, a drawing board, means for supporting said member and board on an incline, a suspending pin on said member, an adjustable suspending arm on said board having longitudinally spaced apart holes adapted to be engaged by said pin providing a step by step vertical adjustment for said board, and means for locking said board to said frame in adjusted position.

6. In an adjustable drawing board, a frame including a board supporting member adjustable to an inclined position on the frame, a drawing board, an arm extending substantially parallel to said board and con-

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5 nected thereto, said arm being adjustably connected to said member for suspending said board thereon, said board being also pivotally connected to said arm to be rotated in a plane parallel with its working surface, means for releasably securing said board to said frame against both rotary and linear movement.

10 7. In an adjustable drawing board, a frame, a drawing board, a substantially rigid arm extending substantially parallel to said drawing board and pivotally connected thereto, means whereby said arm is vertically adjustably suspended from said frame, 15 whereby the board may be adjusted vertically on the frame and rotated relative thereto, a means for maintaining the board against any movement in all adjusted positions.

20 8. In an adjustable drawing board, a frame including a board supporting member having a slot therein, a drawing board, an arm pivotally connected to said drawing board, means for adjustably suspending said 25 arm from said frame whereby the board may be vertically adjusted, said means admitting of a slight lateral shifting of the board relative to said supporting member, and a resilient clamping member adapted to be moved into and out of engagement with the 30 edge of said slot by said lateral shifting movement, whereby the board may be secured in any of adjusted positions.

35 9. In an adjustable drawing board, a frame including a board supporting member having a slot therein, a drawing board, a

suspending pin on said member and arranged above said slot, an adjustable suspending arm having one end pivotally connected to said drawing board and having a 40 longitudinal series of spaced openings in its other end adapted to be engaged by said pin, whereby the board may be adjusted vertically on said member and the arm pivoted on said pin, and a resilient spring arm connected to said drawing board adapted to engage and disengage an edge of said slot, whereby the board may be held against 45 movement in all of the adjusted positions.

10. In an adjustable drawing board support, a frame comprising a base and a board 50 supporting member, said base including a pair of spaced guide strips having an adjustable extension, the extremities of said strips and said extension being provided 55 with laterally extending lips to grip the opposite edges of a table or the like, a slide on each of said guide strips, means for adjustably maintaining said slides in various positions along the length of said guides, said 60 board supporting member extending between said slides and having one end hingedly connected to each of said slides, whereby said member may be adjusted to inclined positions on the base, and supporting legs 65 pivotally connected to said member and adapted to engage in notches along the length of said slides, whereby the board may be adjustably supported in inclined positions.

In testimony whereof I affix my signature. 70

WILFRED L. BOON.