

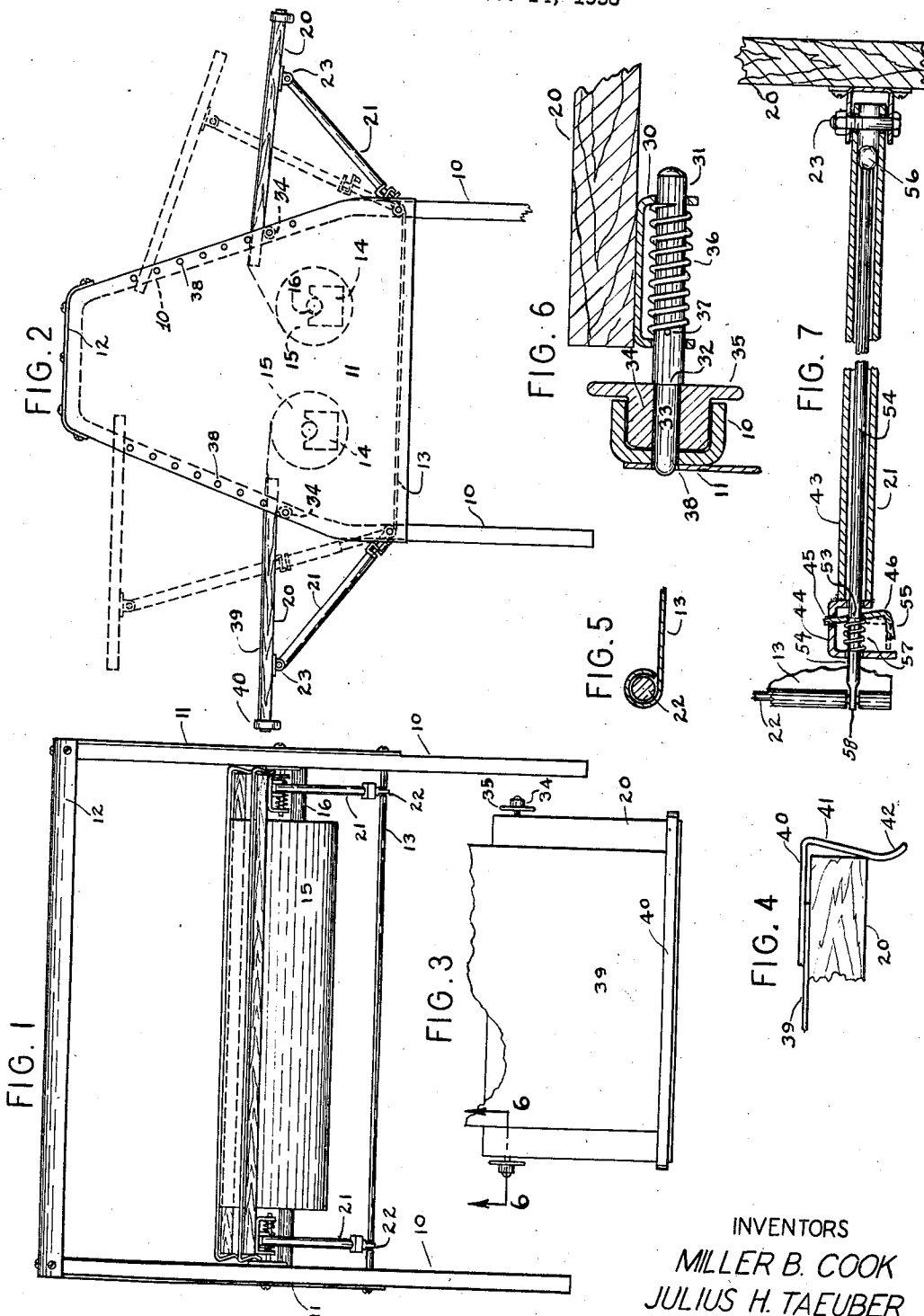
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DRAWING STAND

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DRAWING STAND

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1 Claim. (Cl. 45—131)

The present invention is an improvement over a copending application, issued October 10, 1939, Number 2,175,503 to Miller B. Cook, and relates to drawing tables suitable for nurseries, drawing schools, art schools, studios, drafting rooms and the like, and has for its object, providing one or two adjustable drawing boards per unit having means for supplying paper therefor from a roll or rolls positioned within the stand.

An object of the present invention is to provide a simple, easily manufactured, light and efficient stand.

A further object of the present invention is to provide a stand which may be equipped with one or two drawing boards, and wherein when two boards are provided, they may be used simultaneously or alternately without interfering one with the other.

A still further object of the present invention is to provide a drawing table having a roll of paper for each individual board and means whereby the paper is not cut free from the roll until after it has been used and a fresh surface moved on the board; and whereby the paper between the board and roll will not interfere with the movement of the board.

The principal object of the present invention is to provide simple and efficient means for adjusting and locking the board or boards at any desired angle and height.

To these and other useful ends, our invention consists of parts, combinations of parts, or their equivalents and mode of operation, as herein-after described, and claimed and shown in the accompanying drawing in which:

Fig. 1 is a front elevation of the preferred form of our improved drawing stand.

Fig. 2 is an end elevation of the stand as illustrated in Figure 1.

Fig. 3 is a top view of one of the drawing boards having thereon a strip of paper.

Fig. 4 is a fragmentary front view of the board and the paper holding means.

Fig. 5 is a fragmentary vertical section of the shelf as illustrated by dotted lines in Figure 2.

Fig. 6 is a fragmentary section taken on line 6—6 of Figure 3 including fractions of one of the end members.

Fig. 7 is a detail transverse section of the adjustable table supporting links.

As thus illustrated, our invention consists of two end members 10—10 each formed preferably from a U-shaped channel as illustrated in Figure 6. We provide sheet metal panels 11 which are preferably shaped as shown and spot

welded or otherwise secured to members 10, thus to improve the appearance and strengthen the stand and form unitary end members. These members are detachably secured together by means of a sheet metal plate 12, and a suitable shelf 13.

We provide holding brackets 14—14 which are secured to members 11 as illustrated by dotted lines in Figure 1 on which the rolls of paper 15—15 may be supported and easily removed and replaced preferably by means of round wood bars 16.

It will be understood that the form of stand shown in Figure 2 is optional. We may elect to use but one side of this stand, leaving the other side vertical and close it with a panel which may extend from member 12 to the bottom edges of members 11. We may also elect to place drawers or shelves in the rear, sides, or front of the table. It will be understood that the upper front edges of the end members may be extended vertically or at a different angle from that shown.

We provide novel means for supporting and adjusting the drawing boards 20—20. The outer ends are supported by means of assembly links 21—21; these links are preferably pivoted to member 13 by means of rods 22, member 13 being cut-away as clearly illustrated in Figure 7 for the reception of the lower end of the links. The upper end of the links are pivotally secured to boards 20 as at 23.

We provide roller supports and holding means for the inner end of the board as follows: A bracket 30 is provided which is secured to the board 20 as clearly indicated in Figure 6 having a slidably mounted pin 31. This pin is reduced in diameter to thereby form an offset as at 32, the reduced end 33 being adapted to rotatably carry a roller 34. Roller 34 is provided with a flange 35. Pin 31 is provided with a spring 36 and a cotter pin 37 whereby roller 34 is yieldingly held in the position shown in Figure 6.

We provide a suitable number of registering apertures 38 in members 10 and 11 whereby when the roller is held in the channel as illustrated, the protruding end of member 33 will extend through these apertures. Thus it will be seen that the upper end of the board may be securely held in any desired position.

To release the board, all that is necessary is to press inward on flanges 35 with sufficient pressure to overcome the pressure of springs 36, thus to cause member 33 to disengage apertures 38 and when this is done, the roller will then be free to move upward and downward in the channel and

the board may thus be moved and locked to any desired position.

The lowest orifices are positioned whereby the board may be placed and held in a horizontal position as illustrated on the left of Figure 2. The highest possible position of the board is illustrated on the left of Figure 2 by dotted lines. Intermediate positions are illustrated on the right of Figure 2.

We provide one or more paper holding strips 40 having members which extend downwardly and inwardly as at 41. Members 41 are curved outwardly as at 42. Thus when the paper 39 is drawn over the board, this holding strip is placed over the board in the position as shown in Figures 3 and 4. The angle portions 41 will act to hold the strip snugly against the paper.

We may use two of the holding strips one for the position shown in Figure 3 and another for holding the paper snugly on the inner end of the board.

Members 21 comprise means whereby they may conveniently be extended in length so as to hold the boards at any desired height or angle in the following manner:

A tube 43 is provided with an aperture for the reception of bolt 23. A bracket 44 is secured to the lower end of tube 43 having an aperture as at 45 through which the end of clip 46 protrudes. Thus clip 46 is pivoted as at 45.

Member 46 is provided with an aperture as at 53 for the free but snug reception of rod 54. Opening 53 is slightly extended transversely whereby the flattened end 56 of rod 54 may be removed from the assembly. This, however, is impossible when the assembly is secured to board 20 and shelf 13. Thus the outer end of the board cannot be lifted high enough to disengage the rod 54 from tube 43.

Member 46 is provided with an L extension 55 which is of a length which, when in contact with member 44, rod 56 will be free to move through aperture 53.

We provide spring 57 adapted to force member 46 into the position shown in Figure 7 thus to lock the rod or hold it from moving into tube 43 or in other words, providing means to support the weight of board 20 and the link assembly. This link assembly is shown in practically its shortest adjustment. The lower end of rod 54 is flattened as at 58 so as to provide room for an aperture for the free reception of rod 22.

When the board 20 is in its lowest position as illustrated on the left side of Figure 2, member 56 will rest against bolt 23. The inner end of board 20 may, as already described, be raised and

lowered and if it is desired to change the angle of the board as provided for by link assembly 21, all that is necessary is to lift on the board because member 46 acts as a one way clutch and when it is desired to lower the outer end of the board, rod 54 may be released by counteracting the pressure of spring 57.

Clearly the board may be conveniently raised or lowered either at its front or rear so as to be held in any one of the positions shown in Figure 2 or at any intermediate position.

It will be seen that we have provided a drawing stand wherein the drawing board may be moved to any desired position by simply disengaging member 33 or by simply lifting the outer end of the board or by disengaging member 46.

It will be noted that our improved stand is particularly adapted for use in a nursery or in class rooms because any child can safely move the board to any desired position.

Clearly many minor detail changes may be made in the various parts of our improved drawing stand without departing from the spirit and scope of the present invention as recited in the appended claim.

Having thus shown and described our invention, we claim:

A drafting table of the class described comprising in combination, end members having supporting legs, means for securing said end members in spaced relation forming a unitary stand, a drawing board the front and rear of which are separately adjustably mounted on the front of said stand as to height, the adjustable mounting for the rear of said board comprising guideways on said end members and projections on the board adapted to be slidably engaged by said guideways, said projections having spring actuated means for automatically locking said projections to said guideways, means for manually disengaging said projections whereby the rear end of said board may be raised or lowered to any desired position, the adjustable means for the front of said board comprising two pairs of telescoped links, the upper end of each pair of links being pivotally mounted on the board on opposite sides thereof and the lower ends being pivotally mounted on said stand a considerable distance below the lower end of said guideways, said pairs of links each having automatic spring actuated locking means adapted to prevent them from collapsing and means whereby said locking means may be manually disengaged.

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