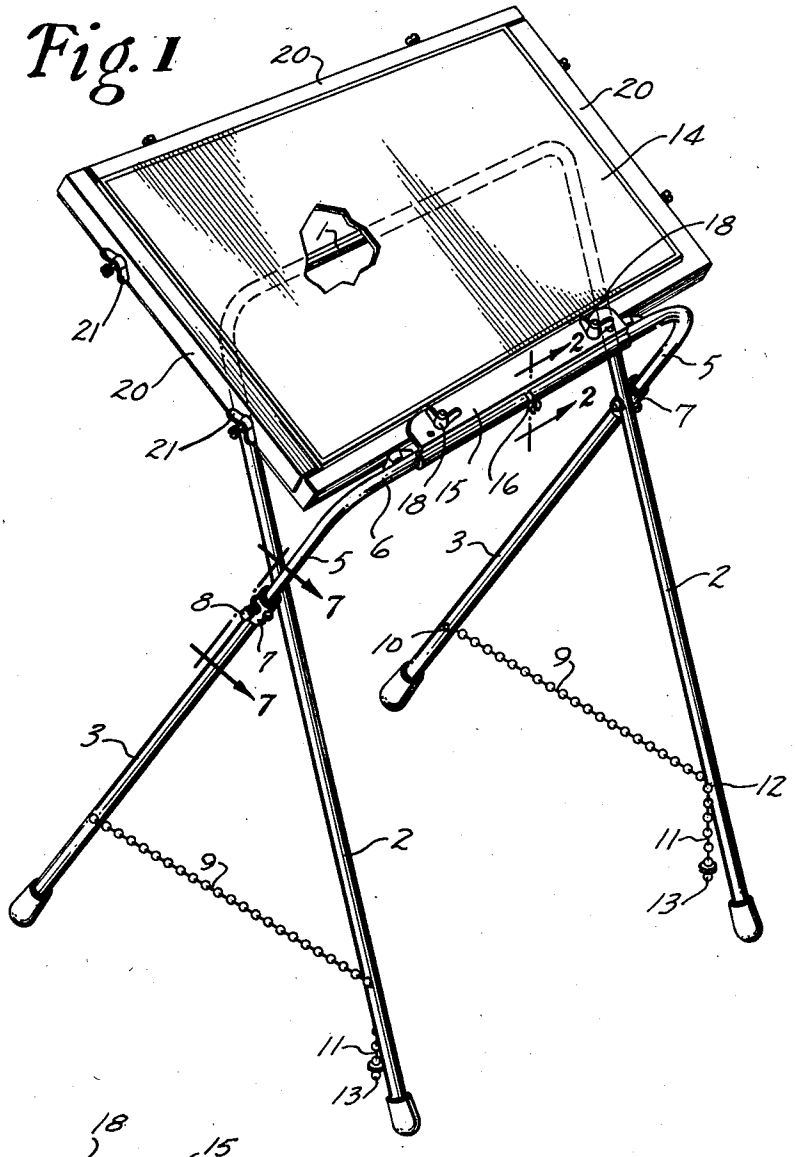
June 3, 1958 H. W. CLARK 2,837,391

ADJUSTABLE SLANT DRAWING BOARD STAND

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Fig. 1



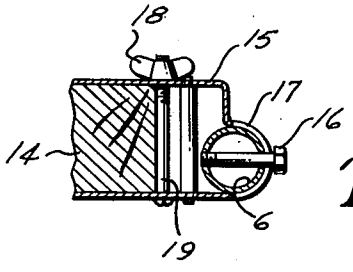


Fig. 2

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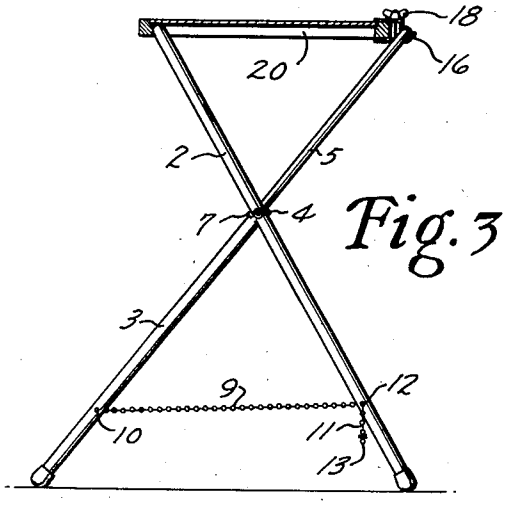


Fig. 3

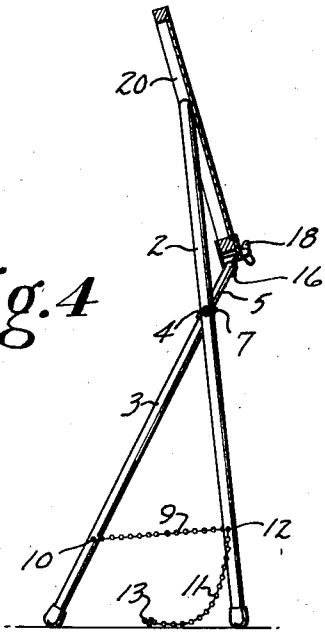


Fig. 4

Fig. 6

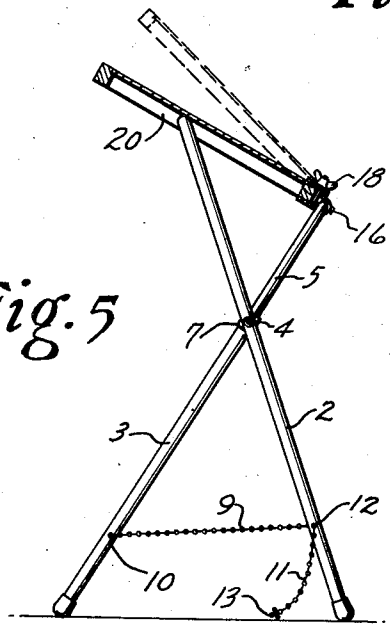
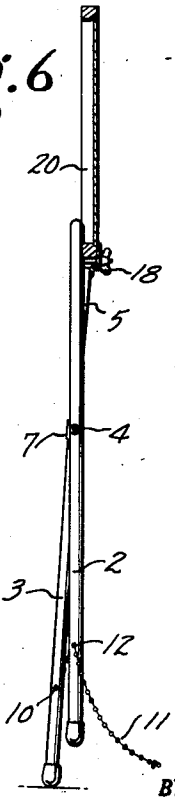


Fig. 5



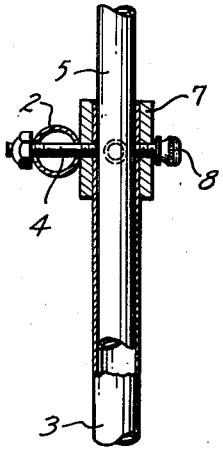


Fig. 7

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ADJUSTABLE SLANT DRAWING BOARD STAND

Homer W. Clark, Seattle, Wash.

Application October 10, 1955, Serial No. 539,306

4 Claims. (Cl. 311—38)

The present application relates to a folding drawing board stand which can be adjusted readily to support the drawing board in different slanting positions according to the changing desires of an artist.

A principal object is to provide such an adjustable slant drawing board stand which can be adjusted quickly to support a drawing board in various slanting positions, but will enable the slant of the drawing board to be changed temporarily without adjustment of the stand.

In providing such an adjustable drawing board stand it is an object to support the drawing board stably in all adjusted positions of the stand so that it will support the drawing board firmly despite reasonable pressures of drawing or painting which may be exerted on it.

Another object is to provide such a stand which can be adjusted not only to vary the angle, but also to alter the height of the drawing board within a considerable range.

For storage purposes it is an object to provide such an adjustable drawing board stand which can be folded into a compact, flat package, either by itself or with a drawing board attached to it.

The preferred type of drawing board stand shown in the accompanying drawings incorporates adjustable cross-legged supporting structure, the legs of which are pivoted to enable their angles to be changed. Generally the closer together the lower ends of the legs are held, the higher the drawing board will be positioned, and adjustable tie means are provided to limit spreading of the lower ends of the legs. A cross member permanently interconnects a leg of one pivoted pair with the corresponding leg of the other pivoted pair at a location spaced a substantial distance from the axis of the pivot and serves as a drawing board rest. Independent legs are pivoted to such interconnected legs, and movement of the independent legs relative to the interconnected legs in the two pairs is coordinated by a U-shaped yoke telescopically connected with such independent legs. This yoke carries drawing board edge gripping means operable to support an edge on the drawing board from the yoke. The slant of the drawing board is adjusted by varying the telescoping relationship between the yoke and the independent legs and by changing the angle between the crossed legs.

Figure 1 is a top perspective view of the stand supporting a drawing board.

Figure 2 is a detail sectional view through a portion of the stand taken on line 2—2 of Figure 1.

Figure 3 is a side elevation of the stand showing the drawing board in section and disposed in horizontal position. Figures 4, 5 and 6 are similar views but showing the stand and drawing board in different adjusted positions.

Figure 7 is a detail view taken on line 7—7 of Figure 1, parts being broken away to disclose internal construction.

The drawing board stand is of the folding, cross-legged type, and includes two pairs of crossed legs. The stand

preferably is made of metal tubular material which may be of aluminum, stainless steel or similar material.

A connecting tubular member 1 interconnects in permanent fashion the corresponding legs 2 of the pairs of crossed legs. The other legs 3 of the crossed pairs are constructed independently of each other and each leg 3 is pivotally connected to the other leg 2 of its cross-legged pair by the pivot rod 4. As shown best in Figure 6, the length of each leg 3 between its lower end and pivot 4 is considerably greater than the length of that portion of each leg 2 between such pivot and its lower end.

Preferably the upper end of each leg 3 terminates at a location adjacent to pivot 4, which end is open. With this end is telescopingly engaged one end element 5 of a U-shaped yoke, including the crossbar 6 which interconnects the end elements 5 extending perpendicular to such crossbar. The end portions 5 may, for example, slide within the upper ends of the legs 3, which are reinforced by an encircling collar 7 to which the pivot 4 may be threadedly connected as shown in Figure 7. The telescoping members 3 and 5 can be held in any desired adjusted position by a set screw 8 having a thumb screw type of head which may be turned easily by hand, such as a knurled head as shown or a wing head.

The spread of the lower portions of the legs 2 and 3 can be limited to any desired degree by a tie member adjustable in effective length, such as a chain 9, which has one end 10 fixed to one leg, such as the leg 3, and its other end portion 11 extending through an aperture in the other leg, 12, which may be of a shape to enable an intermediate portion of the chain to be caught readily in it. An appropriate stop, such as the washer 13, secured to the end of the chain will prevent this end from being pulled through the aperture 12.

On this stand the drawing board 14 of any suitable construction can be mounted. While enabling the stand and board to be adjusted to vary the slant of the stand, it is desirable for the board to be anchored to the stand so that it cannot inadvertently fall off the stand. For this purpose board edge gripping means may be utilized in the form of a channel-shaped socket 15 carried by the crossbar 6 of the yoke. This socket can be secured to the yoke by a bolt 16 screwed into the crossbar 6, as shown in Figure 2, and which passes through an arcuate slot 17 in the web portion of the socket 15.

The flanges of the channel-shaped socket 15 should be spaced apart a slightly greater distance than the thickness of the drawing board edge. The edge can then be slipped readily into the socket, whereupon the flanges of the socket channel can be pinched into firm gripping engagement with the edge of the drawing board by tightening wing nuts 18 of clamping bolts 19. Two of such bolts, located respectively near opposite ends of the channel socket, should be sufficient. Engagement of the bolt 16 in the slot 17 permits swinging of the drawing board and its socket through an adequate angle relative to the cross member 6 of the yoke interconnecting legs 3.

While the stand described can be utilized to support a drawing board for different purposes, it is particularly useful for water color work. In fact, the drawing board 14 shown is peculiarly suitable for such work because it includes movable marginal angle members 20 which can be tightened against the edges of the board by wing nuts 21 for the purpose of clamping the edges of paper on which the drawing is to be made so that it can be drawn tight by being moistened to shrink it.

In normal use the drawing board stand might be employed at the slant shown in Figures 1 and 5. In this position the yoke 5, 6 is withdrawn a substantial distance from the interior of the legs 3, but its cross member 6 is considerably lower than the interconnecting member 1 which joins the other legs 2. The back of the draw-

ing board will then bear on this crossbar, but it will not be secured to the crossbar. If the artist wishes temporarily to increase the slant of the drawing board, therefore, he may merely grasp its upper edge and swing it into the broken line position illustrated in Figure 5, for example. While the channel socket 15 will prevent the board from falling off the stand, it will not prevent the board from being swung freely in this fashion.

If it should be desired to hold the board for a substantial period of time at an increased slant, the yoke holding set screws 8 may be loosened and its end portions 5 may be slid into the hollow legs 3 until the projection is reduced to the degree shown in Figure 4, for example. If the spread of the legs 2 and 3 is then reduced by shortening the tie chains 9, as indicated in Figure 4, the slope of the legs 2 will be increased greatly so that when resting against the cross member 1 the drawing board may be almost in an upright position as shown in Figure 4. The reason for the legs 3 between the pivot 4 and their lower ends being longer than the portion of legs 2 between such pivot and their lower ends will be apparent from Figure 4. Despite the substantially upright position of legs 2, the legs 3 extend a substantial distance rearward to brace the stand against the force of a rearward push on the board 20. Moreover, the pivot 4 is located approximately beneath the center of the board so that it is stably supported.

Alternatively, if it is desired to reduce the slant of the drawing board, the set screws 8 will be loosened and the end portions 5 will be pulled outwardly to lengthen the projecting portion of the yoke. This movement may be continued until the projection of the yoke actually is greater than the length of the legs 2 above pivot 4. At the same time, the length of tie chains 9 may be increased as indicated in Figure 3, but by adjustment of the yoke and the chains 9, the board may actually be lowered into horizontal position. Even in this position the height of the board may be varied to some extent by changing the spacing of the lower ends of the legs.

When it is desired to store the drawing board and stand, its pivoted legs may be folded together as shown in Figure 6, and the drawing board 20 either may be removed from the clamping socket 15 by loosening the wing nuts 18, or it may be swung into a position substantially coplanar with the legs 2 and 3 as shown in Figure 6. In this condition the stand is very compact for storage.

I claim as my invention:

1. An adjustable drawing board stand comprising two pairs of crossed legs, corresponding legs of said pairs being adjustable in effective length, pivot means connecting the crossed legs of each pair at fixed locations, said leg pairs being spaced apart lengthwise of their pivot axes, a drawing board, anchoring means secured to said drawing board and tiltably carried by two corresponding legs, one of each of said pairs of crossed legs, a drawing board rest carried by the other two corresponding legs, one of each of said pairs of crossed legs, and slidably engageable with various portions of said drawing board between opposite edges thereof, and adjustable means securing said legs in a selected angular relationship to establish and maintain any selected spacing of various possible spacings between said drawing board anchoring means and said drawing board rest to support said drawing board in a desired tilted position.

2. An adjustable drawing board stand comprising a drawing board, a channel socket of a length substantially

equal to the length of an edge of said drawing board and having such board edge received therein, clamping means carried by said channel socket and clamping the edge of said drawing board received therein, two pairs of pivotal crossed legs spaced lengthwise of their pivot axes, corresponding legs of said pairs being adjustable in effective length, means tiltably mounting said channel socket on two corresponding legs, one of each of said pairs of crossed legs, and a drawing board rest carried by the other two corresponding legs, one of each of said pairs of crossed legs, and slidably engaging the back of said drawing board at a location intermediately between its edge received in said channel socket and the opposite edge of said drawing board.

3. An adjustable drawing board stand comprising a cross member constituting a drawing board rest, two legs rigidly interconnected by said cross member, two independent legs, pivots connecting said independent legs to said interconnected legs for relative swinging of said two independent legs relative to said interconnected legs about the same axis, said independent legs between their lower ends and said pivots being substantially longer than the portions of said interconnected legs between their lower ends and said pivots, a U-shaped yoke having its opposite end portions telescopically engaged with the upper ends of said independent legs, a drawing board slidably engaging said drawing board rest, a channel socket having an edge of said drawing board received therein, clamping means carried by said channel socket and clamping the edge of said drawing board received therein, means tiltably mounting said channel socket on the central portion of said yoke, and adjustable means securing said interconnected legs and said independent legs in selected angular relationship to establish and maintain any selected spacing of various possible spacings between said channel socket and said drawing board rest to support said drawing board in a desired tilted position.

4. An adjustable drawing board stand comprising two pairs of crossed legs, corresponding straight legs of said pairs being telescopically adjustable in effective length while being maintained straight, pivot means connecting the crossed legs of each pair at fixed locations, said leg pairs being spaced apart lengthwise of their pivot axes, a drawing board, anchoring means secured to said drawing board and tiltably carried by two corresponding legs, one of each of said pairs of crossed legs, and a drawing board rest carried by the other two corresponding legs, one of each of said pairs of crossed legs, and slidably engageable with various portions of said drawing board between opposite edges thereof, to support said drawing board in a desired tilted position.

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