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ADJUSTABLE DRAFTING BOARD

Filed June 25, 1962

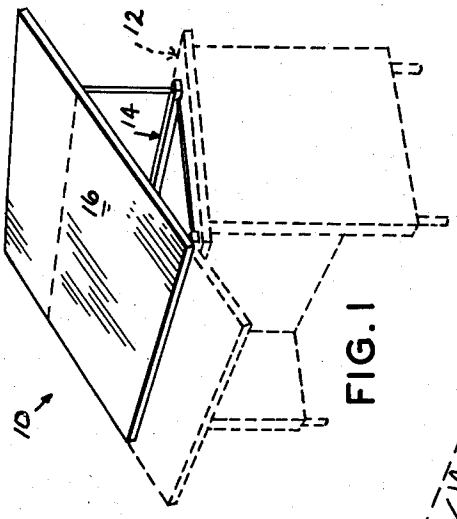


FIG. 1

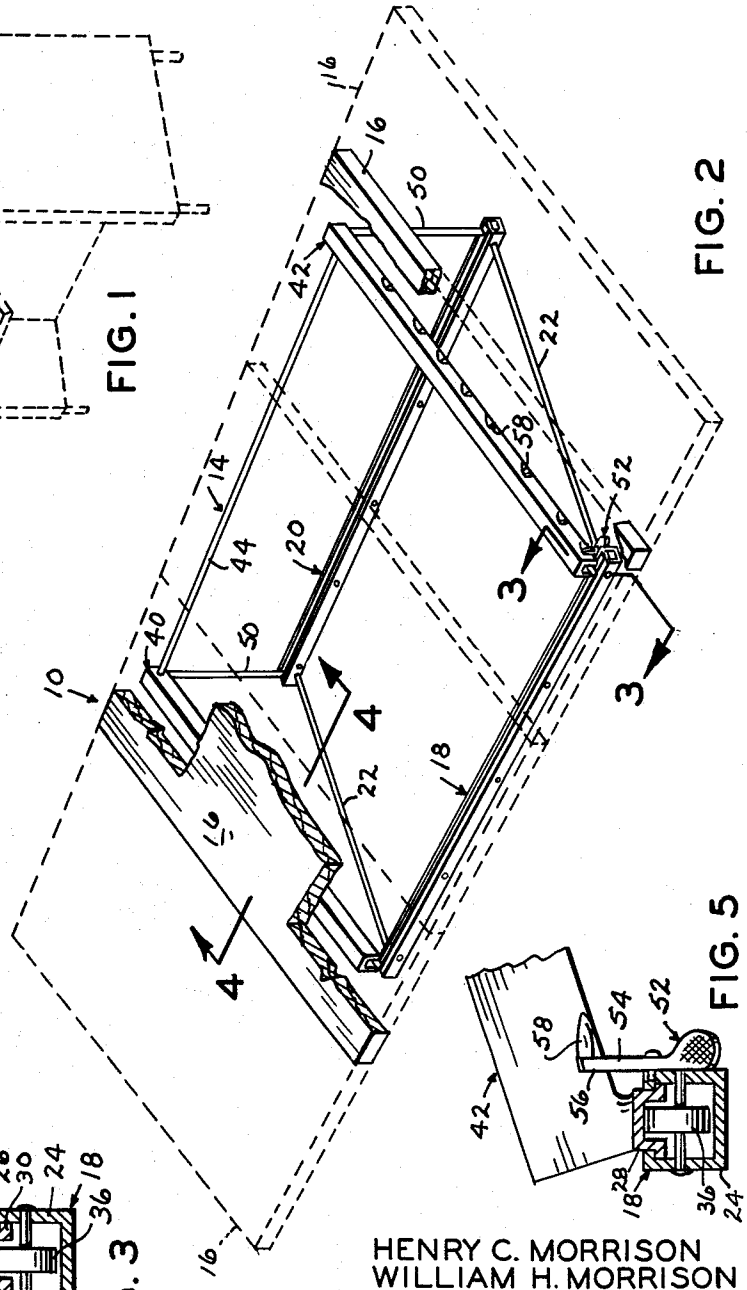


FIG. 2

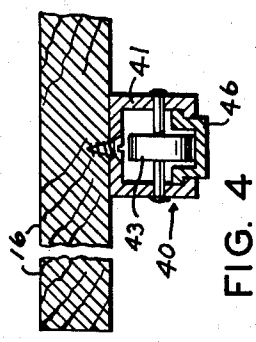


FIG. 4

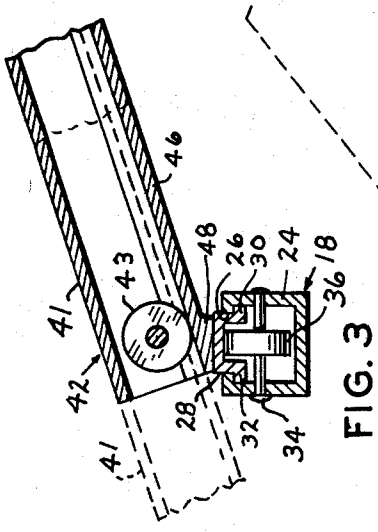


FIG. 3

FIG. 5

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ADJUSTABLE DRAFTING BOARD

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The present invention relates to drafting equipment and more particularly to an adjustable drawing board supporting frame.

For some time there has been a demand for a drawing board unit for engineers and draftsmen which permits the worker to sit in a chair and move the board toward and away from him and laterally of his position. Such an arrangement results in fewer errors and less fatigue than when using a fixed position drawing board.

The prior art reveals a number of devices which support a drawing board for vertical adjustment. However, none of the devices shown by the prior art disclose a drawing board movable toward and away from the worker and in lateral directions.

It is, therefore, the principal object of the instant invention to provide a drawing board mounting means wherein the board is positioned on an inclined plane and may be moved toward and away from the user and laterally of his position.

Another object is to provide a drawing board frame or support which may be positioned on any suitable horizontal supporting surface or mounted on its own supporting legs.

Still another object is to provide a device of this class wherein the members comprising the frame include roller equipped track means to facilitate such movements of the drawing board.

Yet another object is to provide a device of this class which is relatively simple in construction and forms, with the drawing board, a unitary drafting device which will not easily get out of working order.

A further object is to provide a device of this class wherein the selected position of the drawing board is readily locked along the inclined plane to facilitate working thereon.

The present invention accomplishes these and other objects by providing a frame having a horizontal laterally movable track means and upwardly inclined track equipped supports which mount the drawing board.

Other objects will be apparent from the following description when taken in conjunction with the accompanying single sheet of drawings, wherein:

FIGURE 1 is a perspective view of the device mounted on a table-like support, shown by dotted lines, and illustrating, by dotted lines, movement of the drawing board toward and away from the user;

FIGURE 2 is a perspective view of the device, per se, with the drawing board partly broken away for clarity and illustrating by dotted lines its movement laterally of the user;

FIGURES 3 and 4 are fragmentary vertical cross-sectional views, on an enlarged scale, taken substantially along the lines 3—3 and 4—4 of FIG. 2; and,

FIGURE 5 is a fragmentary end elevational view, on a similarly enlarged scale, illustrating the drawing board position locking device.

Like characters of reference designate like parts in those figures of the drawings in which they occur.

In the drawings:

The reference numeral 10 indicates the device, as a whole, mounted on a table-like support 12. The device 10 includes a frame 14 and a board 16 mounted thereon. The frame 14 includes a pair of elongated base members 18 and 20 horizontally connected in spaced laterally relation by braces 22. The base members 18 and 20 each comprise an open ended box-like member 24 having a longitudinally extending slot 26 in its upper wall (FIG. 3). An elongated track member 28, substantially inverted U-shape in cross section, is slidably received between the edges of the member 24 defining the slot 26. The longitudinal edges of the leg portions of the track member are each turned outwardly in right angular relation, as at 30 and 32, for slidably engaging, in underlying relation, the inwardly directed edge portions of the member 24 defining the slot 26. The member 24 is provided with a plurality of transverse axles 34 which journal a like plurality of rollers or wheels 36. The wheels are positioned so that a peripheral portion of each wheel contacts the inner surface of the bight portion of the track 28 in rollable supporting relation while the track 28 is longitudinally moved along the slot 26. A pair of supports 40 and 42 are connected at one end to opposing end portions of the track 28 in the member 18 and extend angularly upwardly therefrom and are connected at their upwardly disposed ends by a horizontal brace rod 44. The members 40 and 42 are identically formed with respect to the base members 18 and 20, each having a channel or box-like member 41 and a track 46 supported by wheels 43. The supports 40 and 42 are positioned in inverted relation, with respect to the base members 18 and 20 as shown by FIG. 4, so that the bight portion of their track 46 is positioned downwardly. As shown in FIG. 3, one end portion of the outer surface of the bight portion of the track 46 is rigidly connected, as by welding, to the upper surface of the track 28 within the member 18, as at 48. This permits the box member 41 of the supports 40 and 42 to slide along the track 46 and be supported by the wheels 43. The drawing board 16 is suitably attached to the box members 41 by screws, or the like. Vertical support rods 50, extending between respective end portions of the track 28 in the base member 20 and the upwardly disposed end portion of the respective track within the supports 40 and 42, rigidly positions the upwardly disposed end portions of the supports 40 and 42 in the selected inclined plane.

Operation

In operation the frame and drawing board are assembled as described hereinabove.

The frame is positioned by its base members 18 and 20 upon any suitable supporting surface such as the table 12. Thereafter the board and its supports 40 and 42 may be moved laterally of the user by the rolling and sliding arrangement of the tracks 28 within the box-like members 24. The board 16 and its box-like members 41 may be moved in a similar manner toward and away from the user as shown by solid and dotted lines (FIG. 1). This latter movement of the board 16 is controlled for maintaining the board in the selected position along the inclined plane by a latch means 52 connected with the member 18. The latch 52 includes a manually movable detent or arm 54 having an end portion 56 engageable with any one of a plurality of lugs 58 formed in spaced-apart relation on the adjacent outer surface of the box-like member 41.

Obviously the invention is susceptible to some change or alteration without defeating its practicability, and we therefore do not wish to be confined to the preferred embodiment shown in the drawings and described herein, further than we are limited by the scope of the appended claims.

We claim:

1. A drawing board supporting frame, including: a pair of horizontally disposed spaced-apart base members box-like in cross section and each having a longitudinally extending upwardly open slot; a first pair of tracks slid-

ably received, respectively, within the slots of said pair of base members; wheels journaled by said base members in rollable contact with said first pair of tracks; a second pair of tracks substantially U-shaped in cross section connected at one end in spaced relation to one of said first pair of tracks and extending angularly upward therefrom; a pair of board supporting members slidably engaged with said second pair of tracks, said supporting members including a pair of elongated members box-like in transverse cross section each having an elongated slot in its downwardly disposed wall slidably receiving the respective one of said second pair of tracks, a plurality of other wheels having axles transversely journaled by said elongated members in rollable supporting relation along the inner surface of the bight portion of the respective one of said second said pair of tracks; and a drawing board overlying said supporting members for movement of said board toward and away from and laterally of a user.

2. Structure as specified in claim 1 and latch means adjustably securing said drawing board and said supporting members in selected positions.

3. An adjustable drawing board support including: a

pair of horizontally disposed base members connected in parallel spaced-apart relation, said base members each including an elongated member substantially box-like in transverse cross section and having a longitudinally extending slot in its upper surface; a track slidably positioned within each said base member, each said track being substantially inverted U-shape in transverse section; a plurality of wheels, each having an axle, journaled by said base members in rollable contact with the inner surface of the bight portion of each said track; a pair of sliding supports connected at one end to the respective end portion of one said track and extending angularly upward therefrom; brace rods interconnecting the upper end portion of said supports in parallel relation above the other said base members; and a drawing board secured to the upper surface of said supports.

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