June 17, 1969 J. E. MACK 3,450,071

DRAWING BOARD ATTACHMENT

Filed Sept. 28, 1967

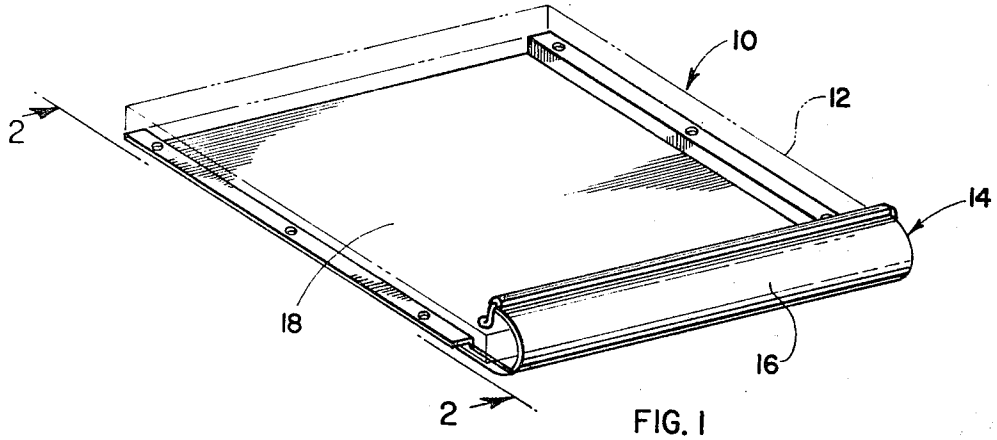


FIG. 1

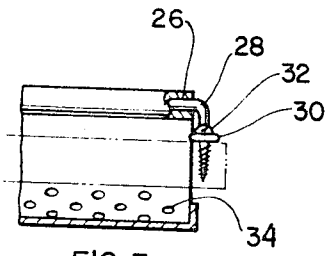


FIG. 3

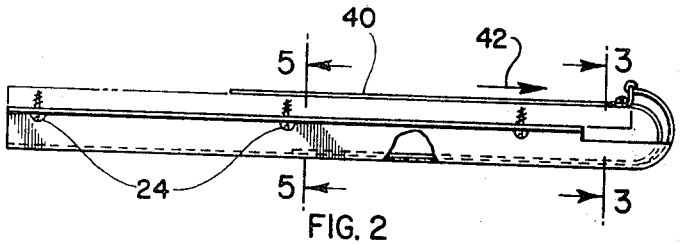


FIG. 2

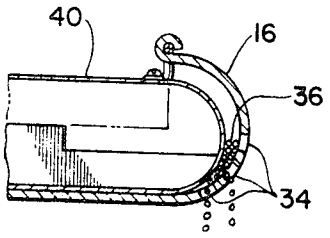


FIG. 4

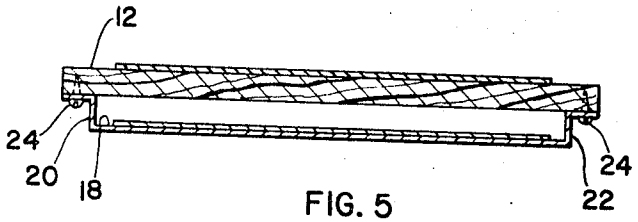


FIG. 5

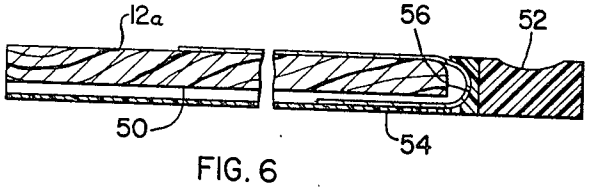


FIG. 6

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United States Patent Office 3,450,071
Patented June 17, 1969

3,450,071

DRAWING BOARD ATTACHMENT

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Filed Sept. 28, 1967, Ser. No. 671,283
Int. Cl. B43l 5/00
U.S. Cl. 108—50 2 Claims

ABSTRACT OF THE DISCLOSURE

This invention relates to drawing board, and more particularly to apparatus designed for the purpose of protecting the paper against wrinkles and creases by curling the paper through approximately 180° as it is slid off the surface of the board.

Heretofore it has been known that a draftsman would slide the paper over the drawing board edge nearest him and then carefully avoid pressing against the edge so he wouldn't crease the paper. This is an annoying inconvenience for the draftsman because it doesn't allow him to work comfortably or with 100% efficiency.

It is the general object of this invention to avoid and overcome the foregoing difficulties that confront a draftsman by the addition of this invention to his drawing board.

The aforesaid object of the invention, and other objects which will become apparent as the description proceeds, are achieved by providing in a drawing board apparatus the combination of a drawing board having a large flat working surface and means mounted to the board so as to extend adjacent one end of the board to receive a piece of paper moved off the flat surface of the board at said one end and curling a paper without creasing or wrinkling through a path of approximately 180° to direct a paper so formed in substantially spaced parallel relation to said flat surface of the board.

In the drawings:

FIG. 1 is a perspective view of a preferred embodiment of the invention;

FIG. 2 is an enlarged vertical cross-section taken on line 2—2 of FIG. 1.

FIG. 3 is a broken-away enlarged vertical cross-section taken on line 3—3 of FIG. 2;

FIG. 4 is a broken-away enlarged vertical cross-section showing the curved paper guide plate and the holes therethrough;

FIG. 5 is a vertical cross-sectional taken on line 5—5 of FIG. 2; and

FIG. 6 is a vertical cross-section through a modified form of a novel drafting board.

Now with specific reference to the form of the invention illustrated in the drawings, the numeral **10** indicates generally the improved drawing board of the invention which comprises a large, rectangularly-shaped drawing board **12**, normally made of wood or other suitable material, and this board may be of a conventional size mounted to a desk, table, or other support for all type drawing applications. The standard board **12** is modified by a one-piece paper guide plate **14**, which is illustrated in mounted position to the board in FIG. 1 of the drawings. Essentially, the guide plate **14** comprises a curved end portion **16** which defines a substantially semi-circular shape and extends into a flat bottom tray portion **18**. The edges or sides of the tray portion **18** are bent to form L-shaped flanges **20** and **22**, as best illustrated in FIG. 5 of the drawings. The plate **14** is actually mounted to the bottom of the board by a plurality of screws **24** passing through respective flanges **20** and **22** and into the board, all as best seen in FIG. 5 of the drawings.

The semi-circularly curved portion **16** of the guide plate **14** may terminate in an end curled back on itself and which may also extend around a rod **26** which eliminates sharp edges, and also strengthens the plate **14**. The ends of rod **26** are curved downwardly at **28** and have end loops **30** therein which are secured to the board **12** by appropriate screws **32** as best shown in FIGS. 3 and 4 of the drawings, but such rod may be eliminated, if desired.

Thus, it should be understood that the curved portion **16** of plate **14** will normally be positioned on the side, or end of the drawing board towards which the paper placed on the drawing board for drawing, etc., is to be pushed or slid for storage of the paper without wrinkling or creasing thereof. FIG. 2 illustrates a piece of paper **40** which has been slid to the right in the direction of arrow **42** so that the end of the paper came into engagement with curved portion **16** of plate **14** and was curled through approximately a 180° angle by the semi-circular portion **16** and then extended in flat relationship onto the bottom surface **18** of plate **14**, all as shown clearly in FIG. 2 of the drawings. Naturally, when a paper of sufficient length is pushed on through it will extend out the open end from the flat portion or bed **18** of plate **14**. But in any instance, the paper will not be wrinkled or creased because of the large diameter in the curved portion **16** causing the curling without crinkling, wrinkling, or creasing of the paper. Preferably, the curled edge of the curved portion **16** of plate **14** should be positioned so as to extend approximately one-eighth inch above the top flat drawing surface of board **12**, and this is best indicated in FIG. 3 of the drawings.

In order to facilitate disposal of eraser crumbs utilizing the apparatus of the invention, a plurality of holes **34** ranged in staggered relationship around the bottom portion of the curved area **16** of plate **14** are cut through plate **14** so that erasure crumbs **36**, as best seen in FIG. 4 of the drawings can drop therethrough, all as indicated.

Thus, it should be understood that the curved portion **16** of plate **14** protects the part of the paper in contact with the edge of the drawing board from contact with the draftsman's elbows, or other equipment, thus allowing the paper to be uncreased and unwrinkled as it moves laterally across the surface of the drawing board and is curled by the curved portion. Also, the draftsman utilizing this type of board is now able to work more comfortably and more efficiently because there is no worry of creasing the paper against the edge of the drawing board.

FIG. 6 shows a drafting board **12*a*** that is provided with a recess **50** in the center portion of its lower surface and extending to the front edge thereof, as it frequently is desirable to attach a tray **52** to the board **12*a***, such tray is shown provided with an attaching plate **54** secured thereto or formed therewith. Such tray usually extends the width of the board. The tray or means **52** includes an arcuate surface **56** that is positioned immediately adjacent but spaced from the front edge of the board. Thus paper can be slid from the board to engage the arcuate surface **56** and be guided around into the recess **50**. The tray **52** may be made in any desired manner but it preferably in molded from plastic material and is attached to the board **12*a*** to provide a paper receiving slot therebetween. Of course, portions of the tray **52** may be omitted and just the portion of the tray providing the arcuate surface **56** be formed and attached to the board for proper guiding action.

While in accordance with the patent stautes only one preferred embodiment of the invention has been illustrated and described, it is to be understood that the invention is not limited thereto or thereby.

What is claimed is:

1. In a drawing board apparatus, the combination of

(1) a drawing board having a large flat working surface, and

(2) means mounted to the board so as to extend adjacent one end of the board to receive a piece of paper moved off the flat surface of the board at said one end and curl a paper without creasing or wrinkling through a path of approximately 180° to direct a paper so formed in substantially spaced parallel relation to said flat surface of the board, said means being a curved paper guide plate mounted on opposite sides of said board and extending above the plane of said flat working surface at said one end of the board, the guide plate curves through approximately 180° and then has a large flat surface mounted in spaced relation to the bottom of the board and substantially parallel to the large flat working surface thereof, and the guide plate having a plurality of holes therethrough spaced across the width thereof and around most of the curved portion thereof to allow eraser crumbs collecting on a paper curled by said guide plate to pass through the holes.

2. A drawing board apparatus according to claim 1 where the end of the guide plate is substantially tubular and a mounting rod extends through the tubular end and the ends of the rod are affixed to the board, and the drawing board being flat on both top and bottom surfaces and rectangular in shape and the large flat surface of the guide plate is of substantially the same size and shape as the board.

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