April 16, 1940.

C. D. LOWRY

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DRAWING BOARD

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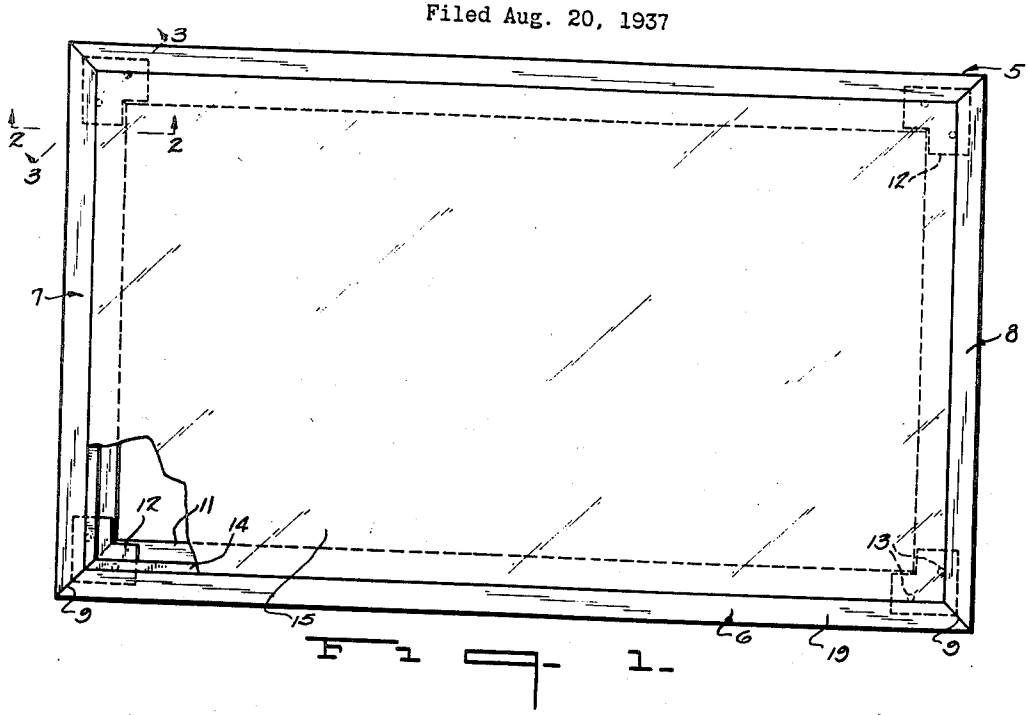



Fig. 1.

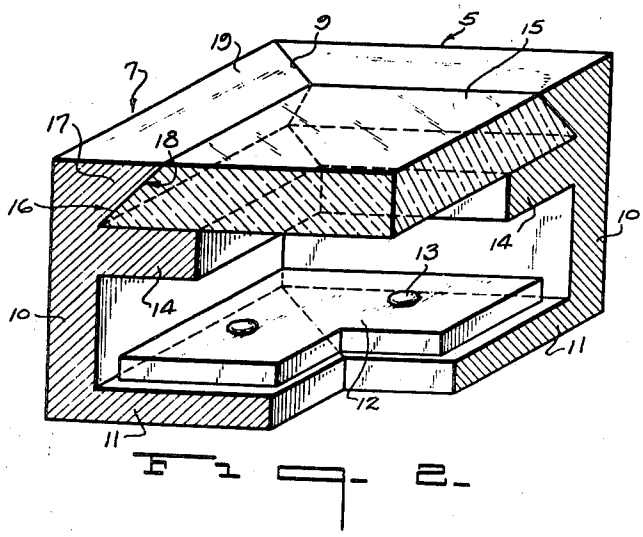



Fig. 2.

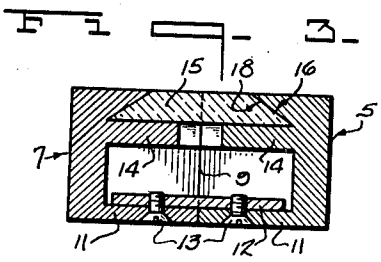



Fig. 3.

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## DRAWING BOARD

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3 Claims. (Cl. 45—131)

The present invention relates to improvements in drawing boards.

Heretofore, it has been customary to make drawing boards, and especially the tops thereof, of wood but the use of drawing boards has always been open to certain objections, among which may be mentioned the tendency of the board to warp and become out of alignment; the wearing of the edges of the board which renders it no longer accurate; the marking of the face of the board with numerous thumb tack holes; and the inadvisability of washing the board due to its liability to warp and deteriorate. It is the aim of this invention to provide a drawing board of novel construction which will effectively overcome all of the objectionable features heretofore encountered in wooden drawing boards as well as possessing various other advantages not found in wooden drawing boards.

Other objects and advantages of the invention will become more apparent during the course of the following description, when taken in connection with the accompanying drawing.

In the drawing, wherein like numerals are employed to designate like parts throughout the same:

Fig. 1 is a plan view, partially broken away, of a drawing board constructed in accordance with the invention;

Fig. 2 is a detail sectional view taken substantially on line 2—2 of Fig. 1; and

Fig. 3 is a detail sectional view taken substantially on line 3—3 of Fig. 1.

With reference to the drawing, the drawing board is shown as being of rectangular formation and comprising a supporting frame including the parallel side members 5 and 6 and the end members 7 and 8; said side and end members consisting of metal sections mitered at their adjacent ends as indicated at 9. The side and end members of the supporting frame are of the same construction and are preferably formed of extruded metal such as for example aluminum of relatively heavy gauge whereby to provide a frame of rigid, durable construction.

Each of the frame members 5, 6, 7 and 8 comprises a vertical side wall 10 formed at its lower end with an inwardly directed horizontal base flange 11. The base flanges of the frame members are also mitered at their adjacent ends and are secured together by angle plates 12 receiving screws, or the like 13 which pass through the said base flanges. The vertical side wall 10 of each frame member is provided adjacent its upper end with an inwardly directed horizontal ledge 14 and supported upon the said ledges is the top 15 of the board which consists of a sheet or plate of glass or other vitreous material and preferably though not necessarily transparent. Also, if desired, the top 15 may be formed of a suitable, preferably transparent, plastic material.

The upper end portion of the side wall 10 of each frame member, above the respective ledge 14, has its inner face undercut as indicated at 16 to provide an overhanging shoulder 17 which cooperates with the ledge 14 to provide a substantially V-shaped groove. The edges of the glass top 15 are beveled as indicated at 18 and are adapted to snugly fit within the undercut portions or grooves 16, the overhanging shoulder 17 serving to effectively prevent accidental displacement of the said top. The thickness of the glass top 15 is such that the upper surface thereof will be flush with the upper edges 19 of the side walls 10 of the frame members.

From the above, it will be seen that the drawing board herein provided is of all metal-glass construction and that no wood whatever is used in the making thereof. The board is not only of rigid, durable construction but is relatively inexpensive to make since, inasmuch as the frame members 5, 6, 7 and 8 are identical, only a single die and a single extruding operation are required. The mitering of the ends of the frame members and the securing of said members together by the angle plates 12, makes for a very rigid construction which will not warp or become out of alignment. Also, the beveling of the edges of the glass top 15 and the fitting of these beveled edges into the undercut portions 16 holds the glass firmly in the frame, with its upper face on the same plane as the upper edges 19 of the frame members so that there will be no interference between the said top and frame members. Furthermore, this construction eliminates the necessity of drilling holes in the glass top and the use of additional securing means. Should the glass top become broken, it can be easily replaced by simply removing the screws 13 to disconnect the frame members.

The board is of such construction that it will give perfect permanent precision in the use of T-squares and triangles since all danger of warpage and misalignment is eliminated. Moreover, the glass top can be washed as often as desired without any danger of its deterioration or warpage. The extruded metal frame members are of relatively heavy gauge and the edges thereof will not only assure accurate positioning of the T-square but will not become worn through con-

tinued use. The hard smooth surface of the glass top imparts an increased bite of the paper, making possible the use of a sharper pencil point while still retaining the same freedom of a soft loose pencil. Another feature of this drawing board is that by the use of what is known as "Scotch tape" for holding the edges of the paper to the board, the use of thumb tacks is eliminated, as a result of which marking of the face of the board will be obviated.

The glass top 15 further permits the temporary mounting of water colored paper on the board by merely wetting the surface of the paper which makes it adhere smoothly to the glass top or in making a permanent stretch of the water color paper on the glass surface. In either case, the technique of water coloring is greatly simplified, making it practical to run very wet washes and frequent cleaning with a sponge without any danger of saturating the board beneath or without any warping or deterioration so common an objection against the conventional wooden board. The glass top may also be used without fear of staining or discoloration while the air brush or tooth brush splattering method for stencil work in general may be freely used without fear of paint or ink ruining the board.

When making a tracing on the board, the mere tipping of the board to permit light from beneath will greatly simplify the work. Another possibility is the placing of a light underneath the board when it is desired to work at night or under artificial lighting conditions. The perfect diffusing of the light by the tracing paper should cause a minimum of eye strain under these working conditions.

A further use to which this drawing board can be put is in the illustration of illuminated store fronts and for similar purposes. Thus, a draftsman would be enabled to lay out a colored drawing on the glass top and when finished could place a light behind the board which would illustrate to a prospective buyer what his proposed store front would look like when illuminated at night.

It is to be understood that the form of the invention herewith shown and described is to be taken as the preferred embodiment of the same, and that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

I claim:

1. A drawing board, comprising a frame formed of metal sections secured together, each of said metal sections including a vertical side wall provided at its lower end with a base flange and adjacent its upper end with an inwardly directed horizontal ledge, the inner face of the vertical side wall above said ledge being undercut to provide an overhanging shoulder, means for securing the base flanges of adjacent metal sections together, and a top of vitreous material supported upon said ledges and having beveled edges fitting beneath said overhanging shoulders and secured in place thereby, the upper surface of said top being flush with the upper edges of the side walls of said metal sections.

2. A drawing board comprising a frame formed of sections secured together, each of said sections including a vertical side wall provided at its lower end with a base flange and adjacent its upper end with an inwardly directed horizontal ledge, the inner face of the vertical side wall above said ledge being undercut to provide an overhanging shoulder, means for securing the base flanges of adjacent sections together, and a top of vitreous material supported upon said ledges and having beveled edges fitting beneath said overhanging shoulders and secured in place thereby.

3. A drawing board comprising a frame formed of sections, each of said sections including a vertical side wall provided at its lower end with a base and adjacent its upper end with an inwardly directed horizontal ledge, the inner face of the vertical side wall above said ledge being undercut to provide an overhanging shoulder, means for securing the adjacent sections together, and a top of vitreous material supported upon said ledges and having beveled edges fitting beneath said overhanging shoulders and secured in place thereby.

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