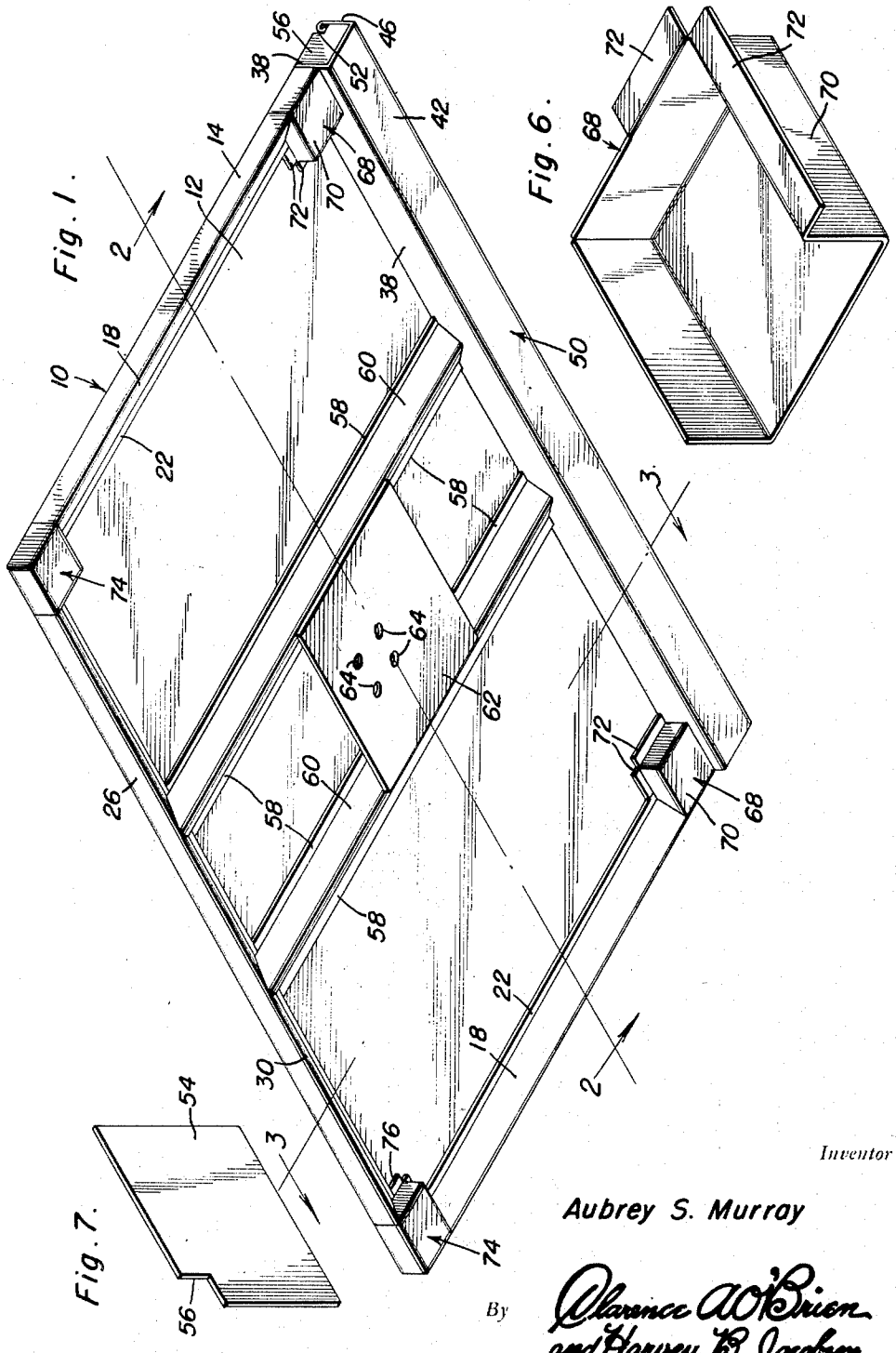
Dec. 26, 1950 A. S. MURRAY 2,535,593

METAL TABLE TOP FOR DRAFTING TABLES OR THE LIKE

Filed Feb. 28, 1949 2 Sheets-Sheet 1



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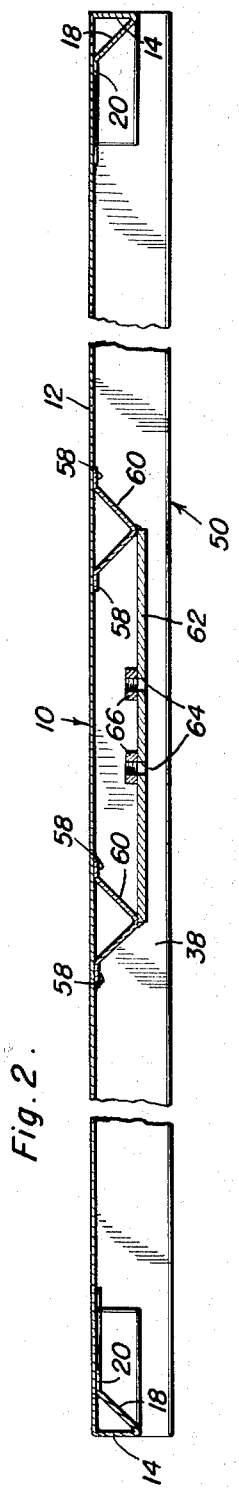


Fig. 2.

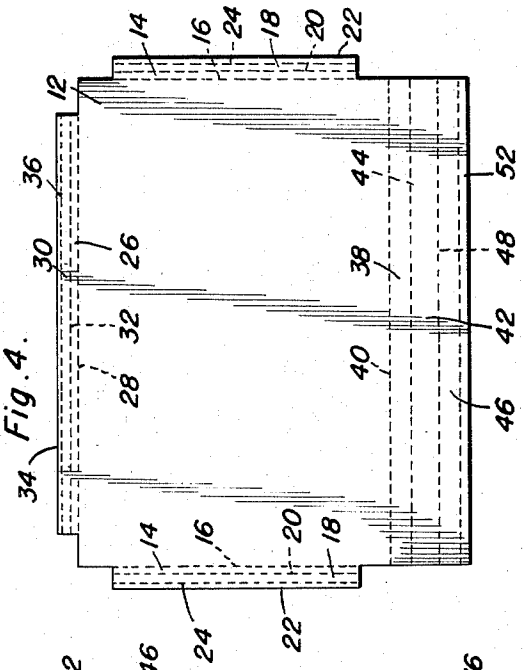


Fig. 4.

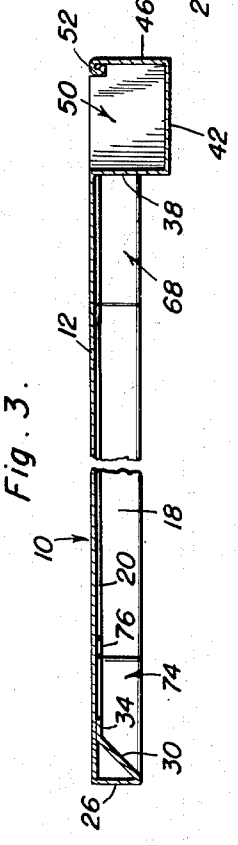


Fig. 3.

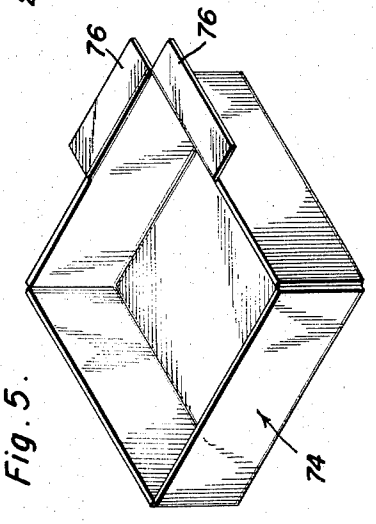


Fig. 5.

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METAL TABLE TOP FOR DRAFTING TABLES OR THE LIKE

Aubrey S. Murray, Elizabethton, Tenn.

Application February 28, 1949, Serial No. 78,734

3 Claims. (Cl. 311—106)

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This invention relates to a metal table top and more particularly to a top for a drafting table or the like.

Drafting tables of the type to which this invention relates are conventionally provided with rectangular tops made from wood and are provided along one longitudinal side edge with an instrument trough in which pencils, erasers, drafting and other instruments are held within easy reach of a user. While such table tops admirably serve their purpose, they are subject to warping, swelling and shrinking with changes in atmospheric conditions so that the execution of absolutely accurate work becomes difficult when the time involved to complete the drawing extends over a protracted period of time.

The primary object of this invention is to eliminate the swelling, shrinking and warping of a table top such as is used on a drafting table.

Another object is to equip a relatively thin table top such as a sheet metal top panel with reinforcing and stiffening members capable of holding the metal against bending and at the same time to facilitate the use of a T-square or like instrument against the end edges of the top panel.

The above and other objects may be attained by employing this invention which embodies among its features a flat rectangular sheet metal top panel, an integral flange at each end edge of said top panel, said end flanges projecting downwardly from the top panel and lying perpendicularly thereto, an integral reinforcing and stiffening flange at the lower edge of each end flange, said reinforcing and stiffening flanges extending upwardly and inwardly and contacting the top panel in spaced parallel relation to its respective end panel and an attaching flange integral with each reinforcing and stiffening flange, each attaching flange lying contiguous with and being secured to the under side of the top panel.

Other features include a side flange integral with and extending downwardly from one side edge of the top panel, said flange lying perpendicular to the top panel, and upwardly and inwardly extending reinforcing and stiffening flange integral with the lower edge of the side flange, the edge of the last named reinforcing and stiffening flange remote from the side flange lying contiguous with the top panel in spaced parallel relation to the side flange, an attaching flange integral with the last mentioned reinforcing and stiffening flange and said last mentioned attaching flange being attached to the top panel.

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Other features include a trough flange integral with and projecting downwardly from the side edge of the top panel opposite the side flange, said trough flange lying perpendicular to the top panel, a trough bottom integral with the trough flange, said trough bottom lying perpendicular to the trough flange on the side thereof remote from the top panel and a trough side flange integral with the trough bottom and lying in spaced parallel relation to the trough flange to form in conjunction with the trough flange and the trough bottom an instrument receiving trough.

Still other features include corner blocks fixed to the under side of the top panel at the corners thereof and engaging the flanges which join the top panel.

In the drawings,

Figure 1 is a perspective view of the under side of a table top embodying the features of this invention,

Figure 2 is a fragmentary enlarged longitudinal sectional view taken substantially on the line 2—2 of Figure 1,

Figure 3 is a fragmentary enlarged transverse sectional view taken substantially on the line 3—3 of Figure 1,

Figure 4 is a plan view on a reduced scale of the developed blank from which this improved table top is made,

Figure 5 is an enlarged perspective view of one type of corner block used in the production of the table top,

Figure 6 is a similar view of another type of corner block used in producing this table top, and

Figure 7 is a perspective view of one of the trough end closures.

Referring to the drawings in detail a table top designated generally by 10 comprises a rectangular top panel 12 which is preferably formed of sheet metal of suitable thickness. Formed integrally with the top panel 12 and extending along each end edge thereof is an end flange 14 which is bent along a fold line 16 to extend downwardly and lie perpendicularly with relation to the top panel 12. Each end flange 14 has formed integrally therewith a longitudinally extending reinforcing and stiffening flange 18 which is bent upwardly and inwardly along a fold line 20 so that its edge remote from the flange 14 lies against the under side of the top panel 12 in spaced parallel relation to its respective end flange 14. An attaching flange 22 is formed integrally with each reinforcing and stiffening flange 18 along the edge thereof remote from

its respective end flange 14 and each attaching flange 22 is bent along a fold line 24 which defines the outer edge of its respective reinforcing and stiffening flange 16 to lie against and parallel with the top panel 12. Each attaching flange 22 is secured to the under side of the top panel as by soldering or spot welding to securely hold the end flanges 14 in perpendicular relation to the top panel 12 and form a reinforcing and stiffening structure along each end thereof.

Formed integrally with one side edge of the top panel 12 is a side flange 26 which is bent along a fold line 28 to extend downwardly and lie perpendicularly to the top panel 12, and formed integrally with the side flange 26 on the side remote from the top panel 12 is a reinforcing and stiffening flange 30 which is bent along a fold line 32 to extend upwardly and inwardly so that its edge remote from the side flange 26 lies against the under side of the top panel 12 in spaced parallel relation to the side flange 26. An attaching flange 34 is formed integral with the reinforcing and stiffening flange 30 and is bent along fold line 36 to lie against and in parallel relation to the under side of the top panel 12. This attaching flange 34 is secured in any suitable manner, as by solder or spot welding to the under side of the top panel 12 to hold the side flange 26 perpendicular to the top panel.

Formed integrally with the top panel 12 along the side thereof remote from the side flange 26 is a trough flange 38 which is bent downwardly along fold line 40 to lie perpendicularly to the top panel and cooperate with the side flange 26 and end flanges 14 to hold the top panel flat and against warping. A trough bottom 42 is formed integrally with the trough flange 38 and is bent along fold line 44 to extend perpendicularly from the trough flange 38 on the side thereof opposite the top panel 12. A trough side flange 46 is formed integrally with the trough bottom 42 and is bent upwardly along fold line 48 to lie in spaced parallel relation to the trough flange 38. It will thus be seen that the trough flange 38, trough bottom 42 and trough side flange 46 cooperate to form a substantially rectangular trough designated generally 50 which lies along one side edge of the table 10.

An integral finishing flange 52 extends along the longitudinal side edge of the trough side flange 46 and is rolled inwardly as illustrated in Figure 3 to form a finishing bead. Opposite ends of the trough 50 are closed by end plates 54 which are notched as at 56 to accommodate the bead formed by the rolling of the flange 52.

Secured as by soldering or spot welding to the under side of the top panel 12 are the attaching flanges 58 of a pair of spaced parallel V-shaped stiffeners 60 which extend beneath the under side of the top panel 12 in spaced parallel relation to the end flanges 14, and welded or otherwise secured to the stiffeners intermediate the ends thereof is a mounting plate 62. This mounting plate 62 lies in spaced parallel relation beneath the top panel 12 and is formed at spaced intervals with openings 64 for the reception of mounting screws (not shown). In its preferred form the plate 62 has welded thereto on the side adjacent the top panel 12 suitable nuts 66, the threaded openings of which align with the openings 64, and these nuts cooperate with the aforementioned mounting screws in securing the top 10 to a suitable support.

In the preferred form of the invention a corner block designated generally 68 is mounted on the underside of the top panel 12 between each end flange 14 and the instrument trough 50 and each such block comprises a hollow rectangular body 70 carrying outwardly extending attaching flanges 72 which are spot welded or otherwise secured to the top panel 12. Similar corner blocks designated generally 74 are mounted as by attaching flanges 76 to the under side of the top panel 12 at the corners thereof remote from the trough 50 to lie against opposite ends of the side flange 26 and the ends of the end flanges 14 remote from the trough 50. These blocks 68 and 74 not only afford a suitable finish at the sides of the flanges 14 and 26, but serve as mountings for the pulleys of a conventional straight edge guiding cable such as is commonly employed on a drafting table.

In use the table top 10 is assembled substantially as illustrated in the drawings and may be connected to a pedestal or other suitable support by passing attaching screws through the support and the mounting plate 62 into the threaded openings of the nuts 66. Pulleys (not shown) may be mounted on the bottom faces of the corner blocks 68 and 74 and a conventional straight edge may be employed with the cables thereof being guided by the pulleys. The top face of the top panel 12 may be used in a conventional manner without an additional top surface or any suitable top covering may be attached thereto in any suitable manner. Obviously owing to the reinforced construction of the end flanges 14 and of the side flange 26, warping or bending of the top panel 12 will be prevented, and the stiffeners 60 not only serve to hold the center portion of the table against bending or warping, but also serve to dampen any vibrations and hence deaden any sound that might result from striking the table 10. The use of the instrument trough is obvious and since the material employed for the production of the table top is not subject to shrinking and swelling with atmospheric changes it is manifest that work of extreme accuracy may be produced on the table.

While in the foregoing there has been shown and described the preferred embodiment of this invention it is to be understood that minor changes in the details of construction, combination and arrangement of parts may be resorted to without departing from the spirit of the invention as claimed.

Having described the invention, what is claimed as new is:

1. A metal table top having a flat rectangular top panel, an integral end flange at each end edge of said top panel, an integral reinforcing and stiffening flange extending upwardly and inwardly and contacting the top panel in spaced parallel relation to its respective end flange, a pair of spaced parallel stiffeners fixed to the underside of the top panel and extending parallel to the end flanges and in spaced relation thereto, and an attaching plate fixed to the stiffeners and in spaced parallel relation to the top panel, said attaching plate adapted to be secured to the mounting means for support of the top.

2. A metal table top having a flat rectangular top panel, an integral end flange at each end edge of said top panel, an integral reinforcing and stiffening flange extending upwardly and inwardly and contacting the top panel in spaced

parallel relation to its respective end flange, a pair of spaced parallel stiffeners fixed to the underside of the top panel and extending parallel to the end flanges and in spaced relation thereto, said st ffeners being of substantially V-shaped form having attaching flanges at the longitudinal edges of the stiffeners for attachment to the underside of said top panel, and an attaching plate fixed to the vertices of said V-shaped stiffeners.

3. In a metal table top having a flat rectangular top panel and end flanges, a mounting and stiffening means comprising a pair of spaced parallel stiffeners fixed to the underside of said top panel and extending parallel to the end flanges and in spaced relation thereto, said stiffeners being of substantially V-shaped form and having attaching flanges integrally formed at the longitudinal edges of the stiffeners for attachment to the underside of said top panel, and an attaching plate fixed to the vertices of said V-shaped stiffeners.

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