Jan. 9, 1940. A. BALSTER 2,186,316

DESK

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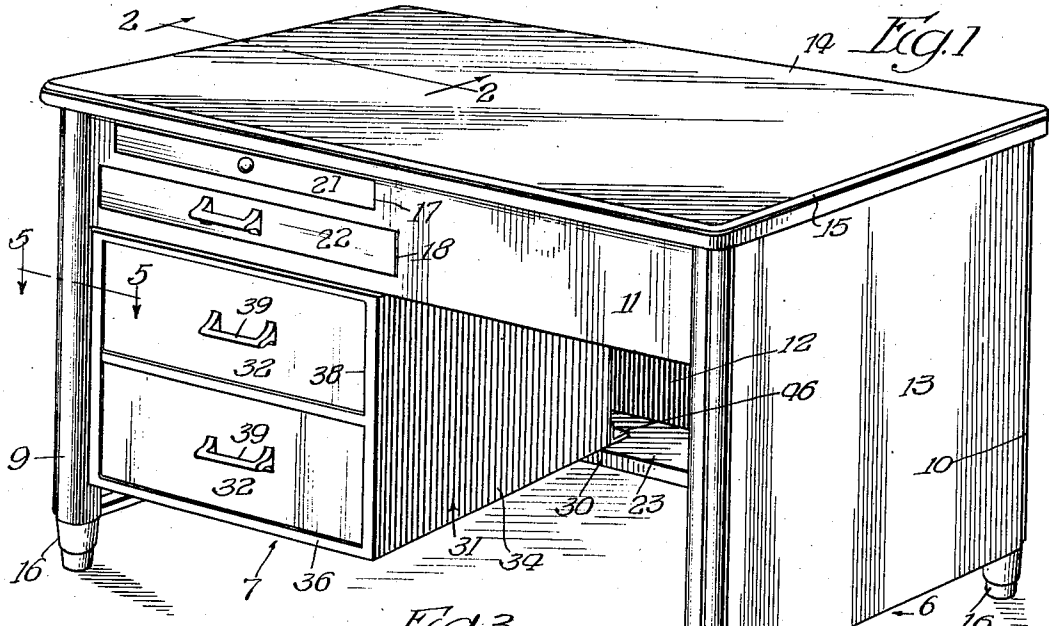

Fig. 1

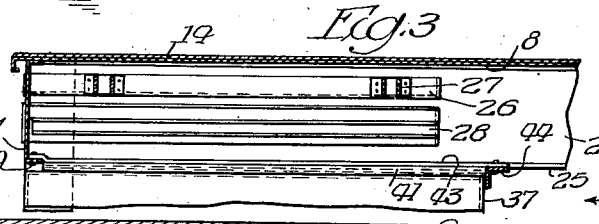

Fig. 3

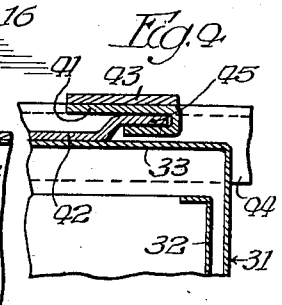

Fig. 4

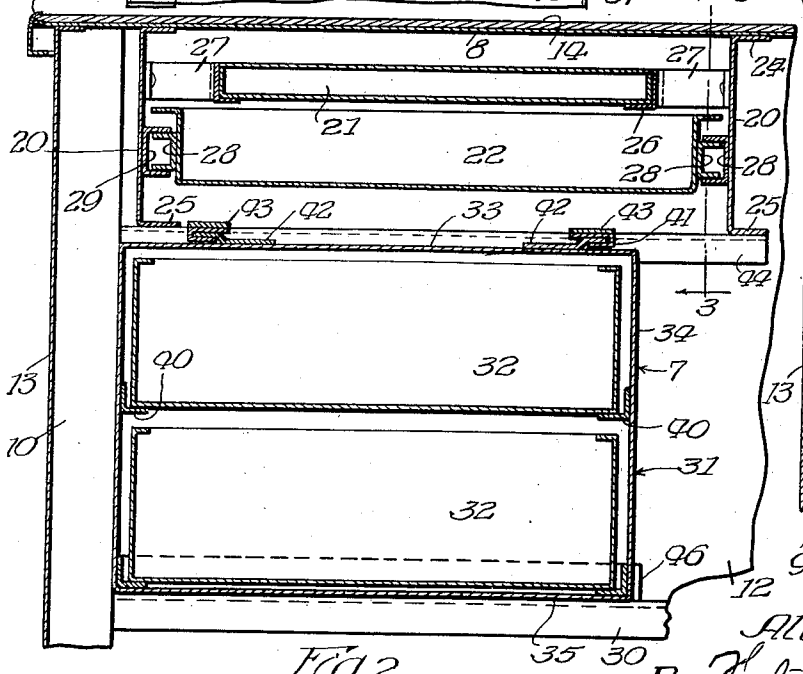

Fig. 2

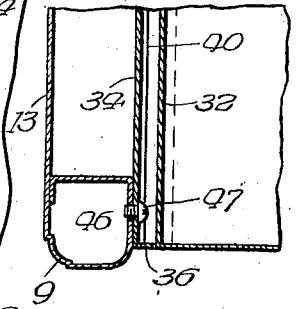

Fig. 5

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DESK

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2 Claims. (Cl. 45—6)

The present invention relates generally to desks. More particularly the invention relates to that type of desk which is adapted for use in an office or business establishment, is formed for the most part of sheet metal, and comprises a rectangular top, legs at the corners of the top for supporting the top in an elevated position with respect to the floor or supporting surface beneath the desk, and a comparatively short front wall which depends from the front margin of the top and extends between and abuts against the upper ends of the front legs.

One object of the invention is to provide a desk of this type which is an improvement upon and has certain capabilities of use and advantages over previously designed desks of the same general character by reason of the fact that it includes a drawer unit which underlies one end of the top and is supported so that it may be readily removed when it is desired to decrease the total drawer space of the desk or to transport the contents of the unit independently of the desk proper.

Another object of the invention is to provide a desk of the last mentioned character in which the drawer unit comprises a top, a pair of sides and a bottom, and is removably supported by means of a pair of laterally spaced, horizontally extending channel shaped guideways beneath the top, and a pair of laterally spaced slide bars which are secured to the top of the cabinet and fit slidably in the guideways.

A further object of the invention is to provide a desk of the type and character last mentioned which includes novel means for securing the drawer unit in its operative position and in which the channel shaped guideways which with the laterally spaced side bars on the top of the cabinet serve removably to support the unit, extend rearwardly from the short desk front wall and serve to reinforce the latter.

A still further object of the invention is to provide a desk which is generally of new and improved construction and may be manufactured at a comparatively low and reasonable cost.

Other objects of the invention and the various advantages and characteristics of the present desk will be apparent from a consideration of the following detailed description.

The invention consists in the several novel features which are hereinafter set forth and are more particularly defined by claims at the conclusion hereof.

In the drawing which accompanies and forms a part of this specification or disclosure and in which like numerals of reference denote corresponding parts throughout the several views:

Figure 1 is a perspective of a desk embodying the invention;

Figure 2 is an enlarged vertical longitudinal sectional view taken on the line 2—2 of Figure 1 and illustrating in detail the design of the removable drawer unit showing the manner in which the unit is removably suspended or supported;

Figure 3 is a vertical transverse sectional view taken on the line 3—3 of Figure 2 and illustrating in detail the manner in which the channel shaped guideways operate or serve to reinforce the desk front wall;

Figure 4 is an enlarged sectional view of one of the guideways and slide-bars; and

Figure 5 is an enlarged transverse sectional view taken on the line 5—5 of Figure 1 and showing the manner in which the drawer unit is releasably locked against sliding movement when it is in its operative position beneath the top of the desk.

The desk which is shown in the drawing constitutes the preferred embodiment of the invention. It is adapted primarily for use in an office or business establishment and comprises a desk proper 6 and a drawer unit 7.

The desk proper is substantially of standard or conventional construction and consists of a rectangular top 8, a pair of front legs 9, a pair of rear legs 10, a front wall 11, a back wall 12, and a pair of side walls 13. The top is formed of sheet metal and embodies a protective covering 14 of linoleum or like material and a marginal bead 15 for holding the protective covering in place. The front and rear legs 9 and 10 are tubular in design and underlie respectively the front and rear corners of the top. They serve to support the top of the desk in an elevated position with respect to the floor or supporting surface beneath the desk and have solid metal feet 16 at their lower ends. The front wall 11 is formed of sheet metal and depends from the front margin of the top. It extends between and abuts against the upper ends of the front legs 9 of the desk and has a pair of superposed or vertically spaced slots 17 and 18 in one end thereof. The bottom margin of the front wall 11 is spaced from the floor a sufficient distance to provide ample leg room beneath the top of the desk and embodies an integral inturned flange 19. The back wall 12 depends from the front margin of the top and extends between and is connected at its ends to the rear legs 10. As shown in Figure 1, the rear wall 12 is of such length that the

rear margin thereof terminates directly above the feet at the lower ends of the rear legs of the desk. The side walls 13 are positioned at opposite ends of the desk and extend between and are formed integrally with the front and rear legs 9 and 10. They are the same in height as the back wall 12 and are secured at their upper margins to the end margins of the top 8. In addition to the top, legs, front, side and back walls, the desk proper comprises a pair of cross-pieces 20, a pair of drawers 21 and 22 and a ledge 23. The cross-pieces 20 extend between and abut against the front wall 11 and the upper portion of the back wall 12 and are located at opposite ends of the slots 17 and 18. They are formed of sheet metal and have laterally extending flanges 24 along the top margins thereof and similarly extending flanges 25 along their bottom margins. The flanges 24 are welded or otherwise fixedly secured to the bottom face of the top 8 and the flanges 25 along the bottom margins of the cross-pieces are disposed in substantially the same horizontal plane as the flange 19. The drawer 21 fits in the slot 17 in the front wall 11 and is supported by a pair of angle type slide bars 26 so that it is slidable horizontally from a closed position beneath the top to an open position wherein it is disposed for the most part in front of the front wall 11. The slide bars 26 are located between the cross-pieces 20 and are carried by brackets 27 which, as shown in Figure 2, extend horizontally and are fixedly secured to the inner faces of the cross-pieces. The drawer 22 is disposed beneath the drawer 21 and extends through the slot 18 in the front wall 11. It is formed of sheet metal and has outwardly extending channel bars 28 along the central or intermediate portions of the sides thereof. These channel bars coact with oppositely extending channel bars 29 along the inner faces of the cross-pieces 20 to form sliding connections whereby the drawer 22 is supported so that it is slidable rectilinearly from a closed position beneath the top 8 to an open position in front of the top. The ledge 23 extends along the bottom margin of the rear wall 12 of the desk. It extends horizontally between the front portions of the lower margins of the side walls 13 and embodies a depending reinforcing flange 30 along the front margin thereof.

The drawer unit 7 is located beneath the drawers 21 and 22 and consists of a box-like cabinet 31 and a pair of drawers 32. The cabinet is formed throughout of sheet metal and consists of a top 33, a pair of sides 34, a bottom 35, a front 36, and a back 37. The top 33 is imperforate and underlies and extends rearwardly from the inturned flange 19 along the lower margin of the front wall 11 of the desk proper when the unit is in its operative position, that is, in assembled relation with the desk proper. The sides 34 are imperforate like the top 33. They extend between and are connected to the side margins of the top and bottom and are of slightly less depth than the side walls 13 of the desk proper. The bottom 35 is the same in size as the top 33 and when the unit is in its operative position, rests on the ledge 23, as shown in Figure 1. The front 36 is secured to, and extends between, the front margins of the top, side and bottom of the cabinet and embodies a pair of superposed vertically spaced rectangular openings 38. The drawers 32 extend through the rectangular openings 38 in the cabinet front 36 and have pulls 39 on the front parts thereof. They operate when the unit is in its operative position to augment the drawer space of the desk and are supported for horizontal sliding movement with respect to the cabinet by angle type slide bars 40. The latter, as shown in Figure 2, underlie the side margins of the drawer bottoms and are fixedly secured to the inner faces of the cabinet sides 34.

The drawer unit 7 is removably supported by way of a pair of laterally spaced horizontally extending channel shaped guideways 41 and a pair of laterally spaced slide bars 42. The guideways are positioned in opposed relation and underlie and are fixed to a pair of metallic strips 43. These strips extend transversely of the desk and have upstruck front ends which rest on and are fixedly secured to the inturned flange 19 along the bottom margin of the front wall 11. The rear ends of the strips 43 rest on and are riveted to an angle bar 44 which extends lengthwise of the desk and has the ends thereof secured to the flanges 25 along the bottom margins of the cross-pieces 20. The guideways 41 together with the strips 43 serve to reinforce the front wall 11 of the desk proper and prevent it from bending or becoming distorted during use of the desk. The slide bars 42 are parallelly positioned and are welded or otherwise fixedly secured to the top face of the cabinet top 33. They extend from the front 36 to the cabinet back 37 and have upwardly and outwardly extending integral flanges 45. The latter are designed to fit slidably in the channel-shaped guideways 41 and coact with the guideways to support the unit so that it may be removed from the desk proper by sliding it forwardly. When the unit is in its proper or operative position, the front 36 of the cabinet is substantially flush with the front wall 11 of the desk proper and the front portion of the outermost cabinet side laps or abuts against the adjoining front leg 9 of the desk. An angle type bar 46 is mounted on the ledge 23 and serves as a stop for limiting rearward sliding movement of the unit. This bar is so arranged that when the back 37 of the cabinet is slid rearwardly into abutting relation therewith, the cabinet front 36 is flush with the front wall 11. Screws 47 extend through the outermost cabinet side and into the adjoining front leg 9 of the desk and serve to hold the unit in place. When it is desired to remove the unit so as either to decrease the total drawer space of the desk or to transport the contents of the unit independently of the desk proper, the screws 47 are removed and the cabinet with the drawers is slid forwardly until the flanges 45 of the slide bars become disconnected from the channel shaped guideways 41. When it is desired to assemble the unit with the desk proper the unit is positioned in front of the desk and then manipulated so as to bring the rear ends of the flanges 45 of the slide bars into alignment with the front ends of the guideways 41. Thereafter the cabinet together with the drawers 32 is slid rearwards until stopped as the result of the cabinet back coming into contact or abutting relation with the angle type bar 46 on the ledge 23. Upon completion of rearward sliding movement of the unit the screws 47 are inserted into place so as to lock the unit in place. When the unit is in place, the drawers may be slid into and out of their open position and, as previously pointed out, augment or supplement the total drawer space of the desk. By including the ledge 23 and having the latter engage and support the rear end of the unit when the latter is in its operative position, the unit as a whole

is effectively supported and is maintained in rigid relation with the desk proper.

The herein described desk may be manufactured at a comparatively low and reasonable cost due to the simplicity of its design and the fact that it embodies but a small number of parts. It is extremely durable and permits its user to increase or decrease drawer space therein by use or detachment of the unit 7.

The invention is not to be understood as restricted to the details set forth, since these may be modified within the scope of the appended claims, without departing from the spirit and scope of the invention.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:

1. As a new article of manufacture, a desk comprising an elongated top, front and rear legs at the corners of the top for supporting the latter in an elevated position, a comparatively short front wall depending from the front margin of the top and extending between the upper ends of the front legs, an element fixedly secured in place and disposed behind said front wall, an independent drawer unit composed of a box-like cabinet having a drawer therein and positioned normally beneath one end of the elongated top and with the front thereof substantially flush with said front wall, and means for suspending the unit so that it may be removed from its normal position by forward sliding movement consisting of a pair of laterally spaced oppositely facing channel-shaped guideways extending between and having the ends thereof secured respectively to the front wall and said element, and a pair of laterally spaced slide bars fixedly connected to the top of the cabinet and designed and arranged to fit within and engage slidably said guideways.

2. As a new article of manufacture, a desk comprising an elongated top, front and rear legs at the front and rear corners of the top for supporting said top in an elevated position, a comparatively short front wall depending from the front margin of the top and extending between and connected to the upper portion of the front legs, an element fixedly secured in place and disposed behind said front wall, and a ledge extending between and connected to the lower portions of the rear legs, an independent drawer unit composed of a box-like cabinet and a drawer therein and positioned normally beneath one end of the top and with the front end thereof substantially flush with said front wall and the rear portion of the bottom thereof resting on the ledge, and means for suspending the unit so that it may be removed from its normal position by forward sliding movement consisting of a pair of laterally spaced oppositely facing channel-shaped guideways extending between and having the ends thereof secured respectively to the front wall and said element, and a pair of laterally spaced slide bars fixedly connected to the top of the cabinet and designed and arranged to fit within and engage slidably said guideways.

ALBERT BALSTER.