

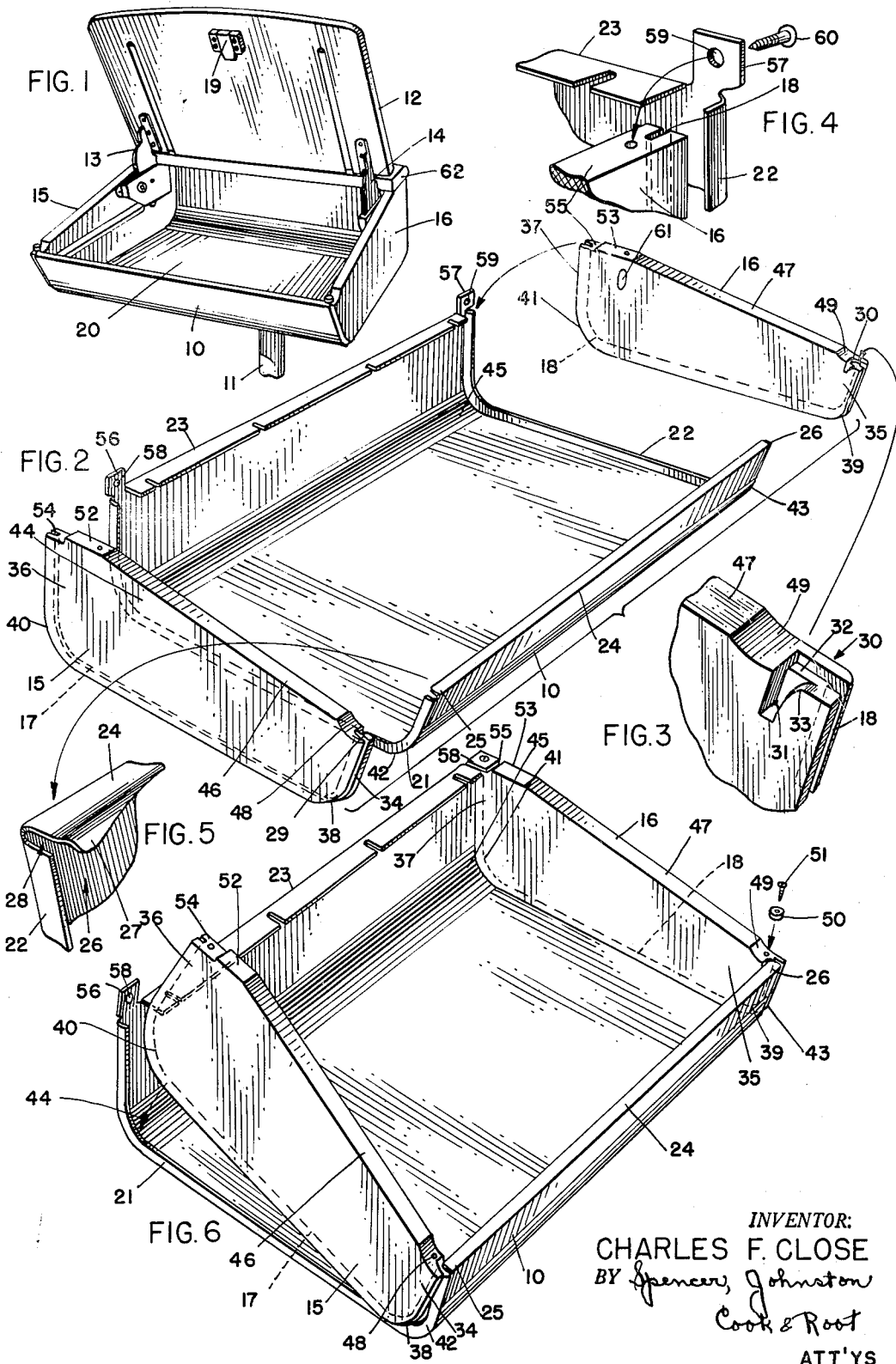
Dec. 27, 1955

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2,728,480

DESK BOX

Filed Nov. 15, 1952



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2,728,480

DESK BOX

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Application November 15, 1952, Serial No. 320,677

2 Claims. (Cl. 220—4)

This invention relates to a new and improved desk unit and more particularly to a desk unit having parts so interrelated and designed that assembly of the desk unit is simple and yet of rigid construction.

My desk unit may be described generally as being fashioned of a curved underportion of metal with two side arms or wings slottedly mounted upon the housing and a partially hinged cover parallel in part and sloping in part to conform to the contour of the wings.

One object of my invention is to provide a desk unit that may be readily assembled with a minimum use of screws or nuts and bolts and the attendant problem of aligning the various parts of conventional designs one with respect to the other.

Another object is to provide a desk unit quickly assembled and yet sturdy in its unit form.

Another object of my invention is to provide a desk unit having no sharp edges, which is of attractive design and which may be easily cleaned.

Other objects and advantages of my improved desk will be seen from the following description in conjunction with the attached drawing wherein:

Fig. 1 is a perspective view of the desk completely assembled;

Fig. 2 is an enlarged exploded view of the desk housing with the side members aligned in their position of assembly;

Fig. 3 is a further enlarged fragmentary perspective view showing the construction of one end of the side member;

Fig. 4 is an enlarged fragmentary perspective view showing the construction of the opposite end of the side member and the relationship of that end to the housing;

Fig. 5 is an enlarged fragmentary perspective view showing the construction of the front of the housing; and

Fig. 6 is a perspective view of the housing with the side members in process of assembly.

More specifically, my desk unit includes a metal housing having two wooden wings or side members adapted to be interlocked on the housing. Each wing is grooved along its side and bottom edges for mounting upon a flange that is an integral part of the housing. Two tabs in the housing are designed to engage one end of each wing so that when the wing is positioned upon the housing flange and the tab fastened by screw means to the wings, a storage chamber, commonly referred to as a book box, is formed as well as a support means for the top of the desk. The wooden side members each has a level surface and a slanting surface running the length of a desk cover portion that is hingedly mounted on the side members. The construction is such that a level shelf and a slanting top surface area are provided. The shelf serves as a support for pencils and pens and the slanting surface area, conforming to the angle of the slope of the side members serves as a writing or working surface. Affixed to the under surface of the desk cover is a levelling mechanism whereby the cover may be positioned upon the front edge of the housing so as to lie in

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a plane that is parallel to the pencil supporting shelf. A continuous parallel working surface lying in the same plane is thus formed.

My desk, assembled as shown in Fig. 1, is comprised of a curved metal housing 10, a pedestal support 11, a cover or working surface 12, hinges 13 and 14, wings or side members 15 and 16 and the levelling mechanism 19. The wings or side members 15 and 16 each contain continuous grooves 17 and 18. Flanges 21 and 22 circumscribe the entire periphery of opposite sides of the metal housing 10. As can be seen from this assembled unit the housing 10 cooperates with the side members 15 and 16 to form a storage chamber indicated at 20 that may be suitably used for the storage of supplies and equipment.

The housing 10 is bent rearwardly at its front edge to form a front flange 23. The rear edge is also bent forwardly so as to form rear flange 24 and has no sharp edges that might be injurious to an occupant of the desk. The flange 24 terminates at its opposite ends in locking structures 25 and 26. As illustrated in Fig. 5, each locking structure 25, 26 consists of an inwardly and downwardly bent projection 27. The flange 24 terminates just in front of opening 28 formed between flange 24 and the side flange 22. Cut-out sections or rabbets 29 and 30 are provided at the upper ends of side members 15 and 16 to permit interlocking of the sides of said cut-out portions with the locking structures 25 and 26. In this construction slot 31 shown in Figure 3 along with the tongue-like projection 33 of the side of slot 31 are adapted for association with the locking structures 25 and 26. The end of projection 27 will lie within the upper part of the slot 31 and tongue 33 of slot 31 abuts the underside of the transverse portion of the projection 27 and the flange 24. One end of the flange 24 rests on the ledge 32.

Each side member 15, 16 tapers so that the rear ends 34 and 35, respectively, of the side members 15 and 16 are not as wide as the front ends 36 and 37. Each side member is curved at its under portion at the corners as at 38 and 39, 40 and 41 corresponding to the curved portions 42, 43, 44 and 45 of the sheet metal housing. The plane of these curves are co-extensive throughout the length of the housing. The difference in the width of the front and rear end of each side member is due to the sloping portion 46 of side member 15 and sloping portion 47 of side member 16 terminating at the foremost end of each in the curved portion 48 and 49 and the cut-out portions 29 and 30 heretofore described. A rubber washer 50, as shown in Fig. 6, is fastened to each curved portion 48, 49 by screw means 51 so as to form a cushioning bumper for the cover 12 when the desk unit is closed.

The slope 46 and 47 of each side member terminates in level portions 52 and 53. The level area terminates in recesses or depressions 54 and 55 designed to accommodate tabs 56 and 57 of the housing. Tabs 56, 57 are provided with openings 58 and 59, respectively, to receive screws 60 for fastening the tabs to the side members as illustrated in Fig. 4.

The method of mounting the sides can be seen from Fig. 6. In the process of assembly, the sides 15, 16 are tilted to permit the projection 27 to engage the side of slot 31 (Fig. 3). The sides 15 and 16 are pressed or hammered downwardly with grooves 17, 18 aligned and interlocked in a close press fit over flanges 21, 22. When the sides 15 and 16 are so located upon the housing, the tabs 56 and 57 are bent down into the conforming depressions 54 and 55 and fastened by screw means through the openings 58 and 59 of the tabs. An opening 61 as shown in Fig. 2 is provided for affixing each side 15, 16 by screw or bolt means to the undersurface of stationary part 62 of the cover that forms the pencil support. The remainder of the desk unit is then completed by adding

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the hinges 13, 14, the top 12, the levelling element 19 and the bumpers 50.

It can be seen from the inter-relationship of the grooves and rabbets of the side members with the continuous flange and locking structure of the housing that an effective assembly of the desk unit may be readily accomplished. The structure thus contains no outward fastening means and the assembled unit becomes almost unitary in character. Alignment of parts for assembly purposes is at a minimum and consequently disassembly through wear and tear is almost impossible. The unit has no sharp edges and presents an attractive desk particularly suitable for school children. The invention makes it possible effectively to combine stamped metal sections with attractive wooden sides and thereby also to utilize to a greater extent wooden materials which are often more readily available than metals.

The invention is hereby claimed as follows:

1. A desk unit comprising a generally U-shaped housing member having a bottom portion and upwardly extending front and rear portions, an inwardly projecting flange extending throughout the length of the combined bottom, front and rear portions of said housing at each side thereof, a forwardly extending flange along the upper edge of said rear portion having an integral downturned projection at each end thereof, a rearwardly extending flange along the upper edge of said front portion and a separate tab adjacent each end thereof, a side member to close each side of said housing, each side member having a bottom and end edges conforming to the contour of said housing, a groove extending along said bottom and end edges to receive the corresponding inwardly projecting flange, a recess at the rear upper corner of each side member having a closed outer side and shaped to receive an associated downturned projection on said forwardly extending flange, a cut-away portion at the

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front upper corner of each side member in the upper edge thereof to receive one of said tabs; means to secure said tabs to said side members, and a cover hingedly mounted on said housing.

2. A desk unit comprising a generally U-shaped housing member having a bottom portion and upwardly extending front and rear portions, said rear portion being of less height than said front portion, an inwardly projecting flange extending throughout the length of the combined bottom, front and rear portions of said housing at each side thereof, a forwardly extending flange along the upper edge of said rear portion having an integral downturned projection at each end thereof, a rearwardly extending flange along the upper edge of said front portion and a separate tab adjacent each end thereof, a side member to close each side of said housing, each side member having a bottom and end edges conforming to the contour of said housing and an upper edge sloping rearwardly and downwardly, a groove extending along said bottom and end edges to receive the corresponding inwardly projecting flange, a recess at the rear upper corner of each side member having a closed outer side and shaped to receive an associated downturned projection on said forwardly extending flange, a cut-away portion at the front upper corner of each side member in the upper edge thereof to receive one of said tabs, means to secure said tabs to said side members, and a cover hingedly mounted on said housing.

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