

Feb. 26, 1963

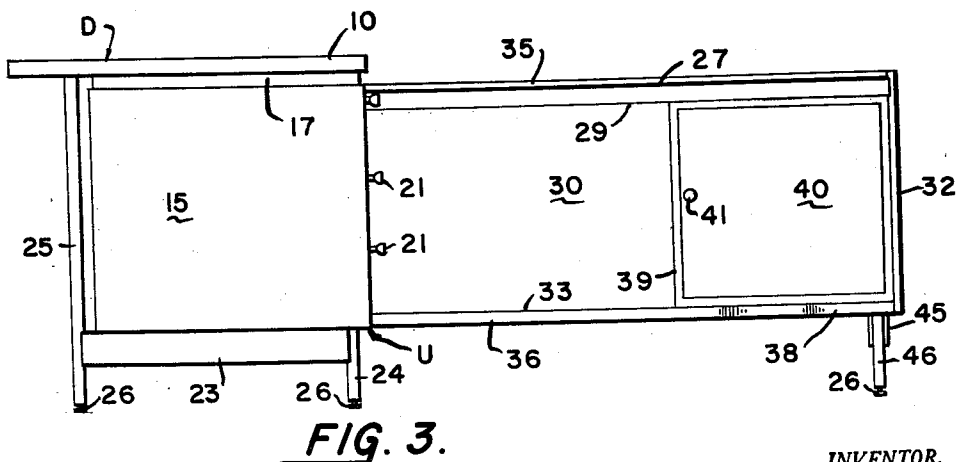
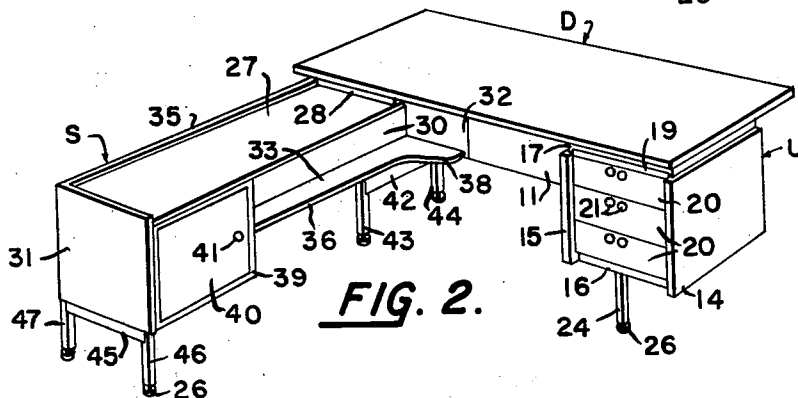
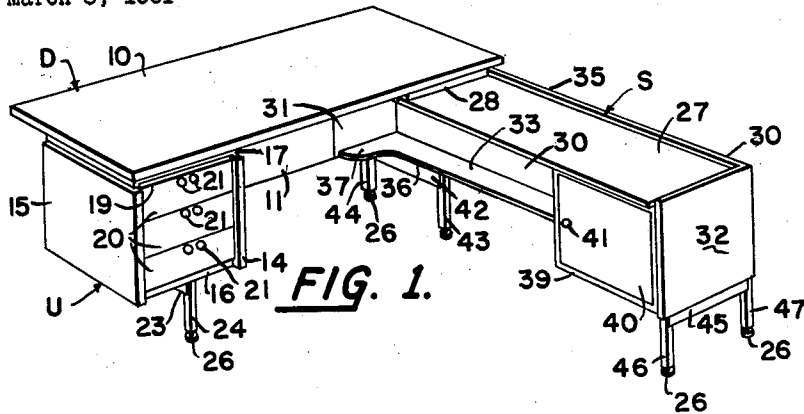
C. U. DEATON

3,079,207

BI-LEVEL DESK

Filed March 8, 1961

3 Sheets-Sheet 1



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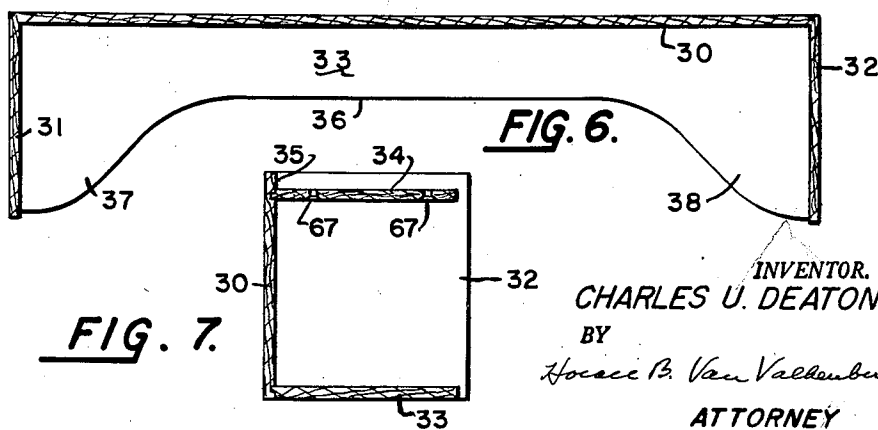
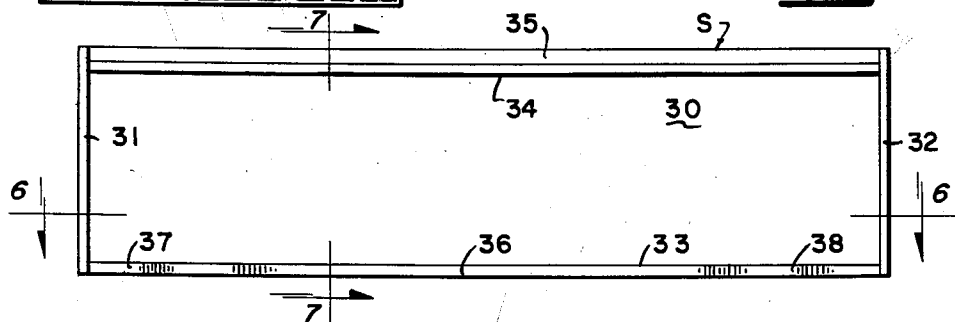
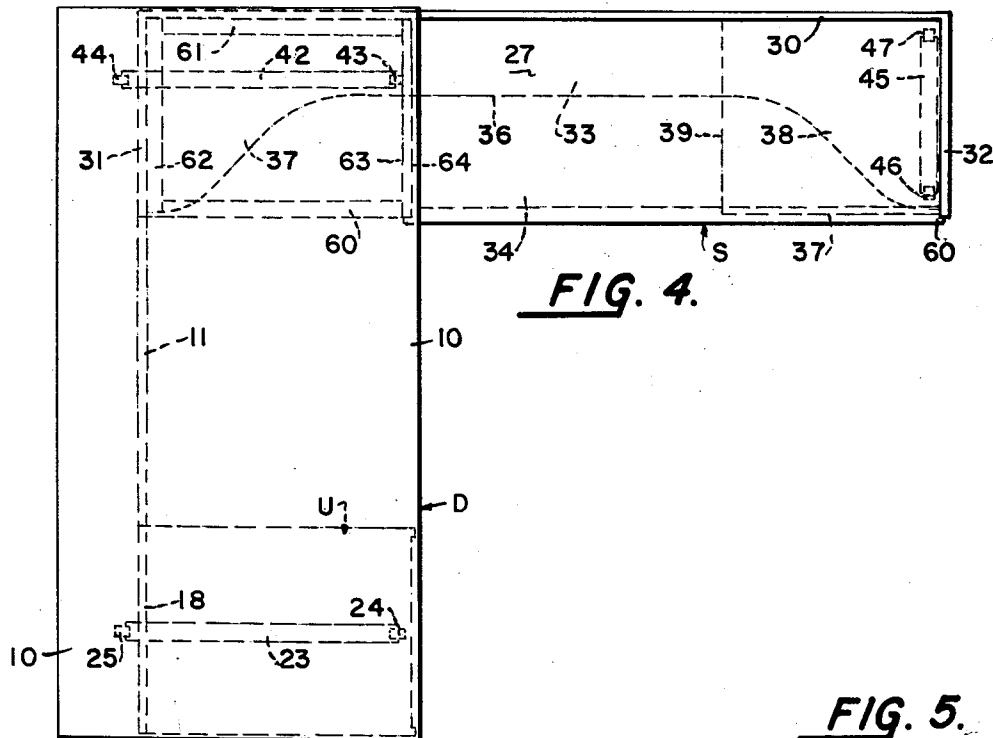
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BI-LEVEL DESK

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3 Sheets-Sheet 2



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BI-LEVEL DESK

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3 Sheets-Sheet 3

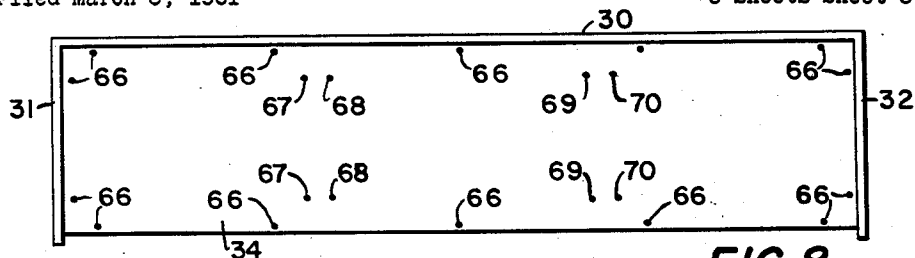


FIG. 8.

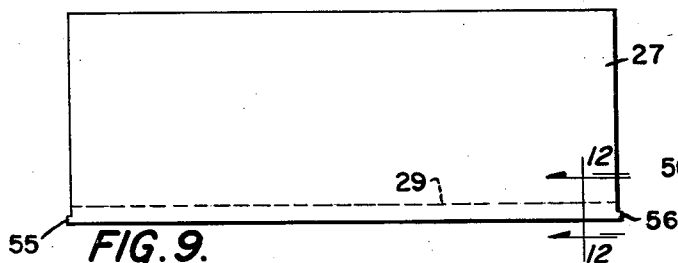


FIG. 9.

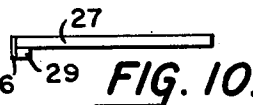


FIG. 10.

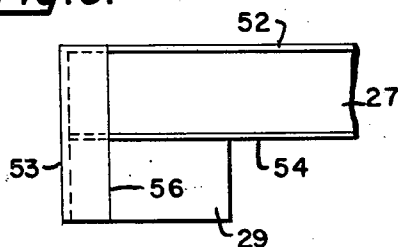


FIG. 11.

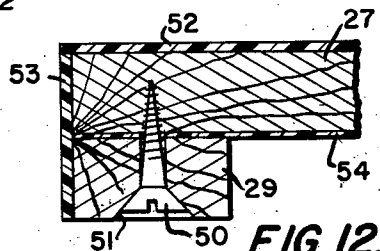


FIG. 12.

FIG. 13.

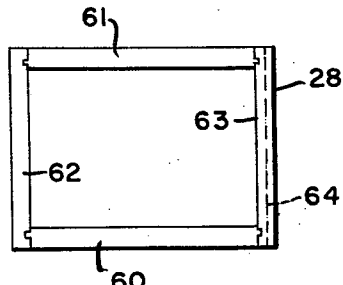


FIG. 14.

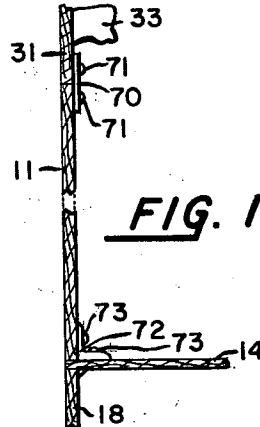
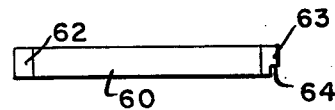


FIG. 15.

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3,079,207

BI-LEVEL DESK

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18 Claims. (Cl. 312—195)

This invention relates to a bi-level desk, and more particularly to a desk having a side case which may alternatively be attached at either side thereof.

Although previous desks and side case arrangements have been provided in which a side case could be attached at either side of the desk, each such desk and side case arrangement had certain disadvantages. In some arrangements, it is necessary to provide four entirely separate units, i.e., a desk having a drawer unit on the right side and adapted to have a side case attached to the left side thereof, a desk having a drawer unit on the left side and adapted to have a side case attached to the right side thereof, a side case adapted to be attached to the right side of a desk, and a side case adapted to be attached to the left side of a desk. With these four units, two different desk and side case arrangements are possible, but the cost of manufacture is unduly great because it is necessary to manufacture four entirely different units. A desk and side case has also been devised in which the side case can be moved from one side of a desk to the other; however, this desk and side case is not completely reversible since the drawer unit always remains on the same side of the desk. Thus, the side case can either be attached to the side of the desk opposite the drawer unit, or to the end of the desk adjacent the drawer unit. Therefore, when the side case is attached to the side of the desk opposite the drawer unit, it extends rearwardly from the desk considerably further than when attached to the end adjacent the drawer unit. This difference in the effective length of the desk and side case is often undesirable in office arrangements. Also, when the side case is attached to the end of the desk adjacent the drawer unit, the area of the side case at the end of the desk is relatively inaccessible to anyone sitting at the desk, and hence cannot be fully utilized. Furthermore, when the desk drawers are open, an additional area of the side case is virtually unusable.

Among the objects of this invention are to provide a novel desk and side case arrangement; to provide such a desk and side case arrangement which are reversible; to provide a side case which has an interchangeable top, so that the side case may be used at either side of the desk; to provide a desk and side case arrangement wherein the side case is interchangeable with the drawer unit of the desk; to provide a side case which forms a bi-level desk, with the desk top higher than the top of the side case; to provide such a side case, the top of which is provided with a paper rail; to provide a novel desk and side case arrangement which is suitable for offices having various furniture arrangements; to provide a reversible desk and side case arrangement for which only one desk unit and one side case unit need be manufactured, thereby reducing the cost thereof; to provide a novel desk and side case arrangement which may be easily and quickly assembled; and to provide a desk and side case arrangement which is pleasing in appearance and effective in use.

Additional objects and the novel features of this invention will become apparent from the description which follows, taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a perspective view of a desk and side case arrangement of this invention in which the side case is attached at the right side of the desk and the drawer unit is mounted at the left side;

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FIG. 2 is a perspective view, similar to FIG. 1, but with the side case attached at the left side of the desk and the drawer unit mounted on the right side;

FIG. 3 is an end elevation, on an enlarged scale, of the desk and side case arrangement of FIG. 1;

FIG. 4 is a top plan view of the desk and side case arrangement as shown in FIG. 3;

FIG. 5 is a front elevation of the side case with the storage unit, legs, spacer and top removed;

FIG. 6 is a horizontal section, looking downwardly and taken along line 6—6 of FIG. 5;

FIG. 7 is a vertical section taken along line 7—7 of FIG. 5, with certain screw holes enlarged for clarity of illustration;

FIG. 8 is a top plan view of the side case as shown in FIG. 5;

FIG. 9 is a top plan view of a top for the side case;

FIG. 10 is an end elevation of the top of FIG. 9;

FIG. 11 is an enlarged, fragmentary end elevation of the front portion of the corner of the top of FIG. 10;

FIG. 12 is an enlarged fragmentary cross section of the corner of the top of FIG. 10, taken along line 12—12 of FIG. 9;

FIG. 13 is a top plan view of the spacer for the side case of FIG. 8;

FIG. 14 is a side elevation of the spacer of FIG. 13; and

FIG. 15 is a fragmentary, condensed horizontal section showing the brackets used to join the side case and drawer unit to a skirt on the desk.

In accordance with this invention, an arrangement comprises a desk D and a side case S adapted to be attached to the right side of the desk D at right angles thereto and a drawer unit U at the left side of the desk, as shown in FIG. 1, or with the side case S attached at the left side of the desk and the drawer unit U at the right side of the desk, as shown in FIG. 2. The desk and side case arrangement may serve as either a secretarial desk or an executive desk and may be made of a solid wood, such as walnut or oak, with a protective plastic coating, such as "Textolite." Other types of woods or veneer may be used, or the desk and side case may be made from metal, such as steel with an enamel finish, if desired. The desk D includes a top 10 and a skirt 11 extending between the drawer unit U and side case S to form a back for the desk, with the rear ends of the drawer unit and side case, as in FIGS. 1 and 2 and shown in dotted lines in FIG. 4.

The drawer unit U comprises spaced side panels 14 and 15, which are interconnected by a bottom panel 16 and a top panel 17, as well as a rear panel 18 of FIGS. 4 and 15. These panels may be fastened together with suitable wood screws and triangular glue blocks at strategic points along the adjoining edges thereof. Top panel 17 also conveniently provides space for a conventional slidable shelf 19, while the side panels 14 and 15 may be provided with conventional guides or tracks for slidably supporting drawers 20, each of which may be opened and closed by a handle 21. The drawer unit U is conveniently secured to the underside of top 10 by means of wood screws which extend up through top panel 17 and into desk top 10. The side panel 14 or 15 of the drawer unit, which is toward the center of the desk, is attached to the end of skirt 11, in a manner to be described later. The drawer unit U and corresponding end of the desk is supported by a bar 23 extending centrally beneath the bottom panel 16 of the drawer unit, as in FIG. 3, and connected between a short leg 24 and a long leg 25, the former extending up to and attached to the underside of bottom panel 16 and the latter being spaced from the back of the drawer unit and extending up to and at-

tached to the bottom of desk top 10, as in FIG. 3. Leg 25 is removably secured to the underside of desk top 10, as by being attached by screws or bolts and a bracket, or in any other suitable manner. Each leg has an adjustable foot 26 to compensate for any irregularities in the floor on which the desk is placed, so that it may be leveled.

As in FIGS. 1 and 2, a top 27 fits onto the side case S, between the edge of desk D and the remote end of the side case, while a spacer 28 is placed beneath the top 10 of the desk and is disposed at one side of top 27. The preferred constructions of side case top 27 and spacer 28, the former having a special overhanging front edge or lip 29, as in FIG. 3, are described below. In general, top 27 and spacer 28 are interchangeable between the positions shown in FIGS. 1 and 2, for which suitable provision, as described below, is made.

As in FIGS. 5-7, the side case S comprises a back panel 30 having end panels 31 and 32 attached thereto, as by wood screws and glue blocks. A lower shelf 33 extends between end panels 31 and 32, abutting back panel 30, and is secured thereto by glue blocks or wood screws, or both. An upper shelf or ledge 34, on which top 27 and spacer 28 are placed, also extends between end panels 31 and 32 and abuts back 30, being spaced above and parallel to shelf 33 but spaced from the upper edges of the back and end panels a short distance, so that back 30 will form a paper rail 35, which prevents papers placed on the top of the side case from sliding off at the back. Ledge 34 also may be secured to the end panels and back panels with glue blocks and wood screws.

As in FIGS. 4 and 6, shelf 33 is provided with a recess 36 along the center, which provides a knee hole so that a secretary or other person sitting at the desk may place her legs under the top of the side case when writing or performing other work thereon, with sufficiently wide end sections 37 and 38 upon one of which a storage unit 39 may rest at the end opposite the desk D. The storage unit conveniently has a height equal to the spacing between shelf 33 and ledge 34, so that it fits between them and rests upon end section 37 or 38. Thus, as in FIGS. 1 and 3, when the side case S is attached to the right side of desk D, the storage unit 39 rests on end section 38 of shelf 33, while when the side case S is attached to the left side of desk D, as in FIG. 2, storage case 39 rests on end section 37 of shelf 33. Storage unit 39 is thus rectangular in shape and may be provided with one or more drawers and shelves on the inside, as well as with a door 40 having a handle 41, and may be used as a file cabinet, to house a typewriter, or for any other storage purpose for which it is needed. If desired, various types of storage units may be manufactured, all having the same exterior dimensions, so that a purchaser may choose the storage unit most suitable for the use intended. Removable bolts or screws may extend upwardly through section 37 or 38 and into the bottom of storage unit 39, to hold the latter in place, while additional screws may extend upwardly through the top of the storage unit 39 into ledge 34 for the same purpose.

The side case is supported at the end under desk D by a bar 42 connected between a short leg 43 and a long leg 44, which are conveniently identical to bar 23 and legs 24 and 25, respectively, to provide a substantially identical appearance at each end, when viewed from the rear, i.e., looking toward the legs 25 and 44. Leg 44 is bolted to a bracket, or otherwise suitably removably secured, to the underside of desk top 10 and leg 43 is secured similarly to the underside of shelf 33. The opposite end of the side case is supported by a bar 45 extending between a pair of legs 46 and 47, each of which is bolted to a bracket, or otherwise suitably secured, to the underside of shelf 33. Each of legs 46 and 47 is also conveniently provided with an adjustable foot 26, so that the side case can be leveled on an uneven floor.

As in FIGS. 9 to 12, the overhanging front edge or

depending lip 29 of top 27 is conveniently formed by a strip of wood secured to the underside of the top by means of a plurality of longitudinally spaced wood screws 50, each extending upwardly through a hole 51 into the underside of top 27, as in FIG. 12. Each hole 51 conveniently is countersunk, as shown, to receive the head of screw 50, so that the screws will not project downwardly beyond the lower surface of the lip. Lip 29 covers the front edge of ledge 34, with the rear edge of strip 29 abutting the front edge of ledge 34, so that the ledge does not require a finished surface, and also provides a smooth, attractive front surface for the top of the side case. As in FIGS. 11 and 12, top 27 may be covered with a clear plastic coating 52, such as "Textolite," which protects the surface of the wood but permits the grain to show through, although other types of layers may be utilized and other types of finishes, particularly if the parts are formed of metal rather than wood. A similar plastic layer 53 is provided along the front edge of top 27 and lip 29, while a backing sheet 54 of plastic may be provided across the bottom of top 27. Layer 54 need not be as thick as layers 52 and 53 since it is on the underside of top 27 and does not receive as much abuse or hard wear. Shoulders 55 and 56 extend laterally at each end of the forward edge of top 27, as in FIG. 9, to engage the corner of spacer 28 and the corner of end panel 32 or 31, respectively, when side case S is mounted at the right side of the desk, as in FIG. 1, or at the left side of the desk as in FIG. 2. As in FIG. 11, plastic layer 53 preferably extends around each shoulder 55 and 56. Conveniently, a plastic layer may be provided on all of the exposed wood surfaces of both the desk and the side case, thereby providing a lustrous wood finish which is protected from mars, dents and scratches. The top 27 is considerably shorter than the side case S and thus reduces proportionally the cost of providing a finished surface for the top of the side case. Also, if the top of the side case were finished across, as on ledge 34, the custom of drilling holes through the top of the side case top to attach the same to the desk would destroy the finished surface and render the side case unusable for attachment at the opposite side of the desk, due to the necessary reversal, end to end, of the side case. In addition, the side case S can be completed by the manufacturer and any color or finish desired by the purchaser can be provided on the top 27, without the necessity of disassembling the side case.

Spacer 28 is rectangular in shape and may be a solid block, but for reduction in weight, is conveniently a rectangular frame, as in FIGS. 13 and 14, formed by bars 60 and 61, interchangeably front and back, depending on the installation of the side case S, and side bars 62 and 63. The bars are conveniently attached together by glue or similar adhesive, at tongue and groove joints, as shown, or other suitable means, such as inside corner brackets and screws, may be used to secure the bars together. One side bar 63 as in FIG. 14, is provided with a notch or groove 64 along the lower outer edge, to interfit with the adjacent edge of top 27, since the thickness of spacer 28 should be equal to the height of paper rail 35, while the thickness of top 27 should be less. As will be evident, spacer 28 fills the space between the underside of top 10 and the upper surface of ledge 34 beneath the desk top, but is generally hidden under top 10 of the desk and therefore does not require a plastic coating or layer.

Normally, it is desirable to secure top 27 and spacer 28 in fixed position to ledge 34. As in FIG. 8, ledge 34 is conveniently provided with a plurality of holes 66 around the peripheral edge and two sets of four holes each, such as holes 67 and 68 in one set and holes 69 and 70 in the other set, with the centerline of the two sets being spaced a distance from each end of ledge 34 corresponding to the length of spacer 28, for inserting screws from beneath to secure the spacer and top to the side case ledge 34. Each of these holes may be countersunk on the underside, as shown on an exaggerated scale in FIG. 7, for re-

ceiving the head of the corresponding screw. When the side case is to be mounted on the right side of the desk, in the position of FIGS. 1 and 4, top 27 is secured to ledge 34 by screws extending through holes 66 adjacent end panel 32 and the first three holes 66 from that end along the front and back edges of the ledges. Also, screws are inserted through the holes 68, 69 and 70 to engage the underside of top 27 to secure it to the ledge. Spacer 28 is similarly attached to ledge 34, but by screws extending upwardly through holes 67 and the remaining holes 66. Of course, it may be desired to secure desk top 10, through spacer 28, to the side case. In that event, holes may be drilled through spacer 28 corresponding to the position of holes 67 and the holes 66 between holes 67 and panel 31 which will, of course, also correspond to the position of holes 70 and the holes 66 between holes 70 and panel 32. Relatively long screws can be used, which will extend up through ledge 34 and through spacer 28, into the underside of desk top 10. In the event the side case S is to be attached to the left side of the desk, as in FIG. 2, top 27 is fastened to ledge 34 by screws which extend upwardly through holes 67, 68 and 69 and the holes 66 between holes 69 and end panel 31, while spacer 28 is secured to ledge 34 by screws extending upwardly through the holes 70 and the holes 66 between holes 70 and end panel 32.

It will usually be found convenient to assemble side case S before attaching it to one side of desk D, since the side case will support one end of the desk. The side case may be laid on its back, if desired, so that screws may more easily be inserted in the holes in ledge 34 to secure top 27 thereto, as well as spacer 28, unless longer screws are to be used to extend through the spacer into the underside of the desk top. The legs may also be attached to shelf 33 when the side case is in this position. Next, the side case may be set in upright position on its legs, spacer 28 positioned on ledge 34, if not already attached, and storage unit 39 mounted on end section 37 or 38 of shelf 33, depending upon which side of the desk the side case is to be attached. Next, the drawer unit U may be attached to the underside of desk top 10, as by screws attaching brackets to the sides of the top of the drawer unit and the underside of the desk top. This may be accomplished by turning the desk top upside down and setting the drawer unit in place upon it. Then legs 24 and 25 can be bolted or screwed to the bottom of the drawer unit and the underside of the desk top, respectively. The desk may then be turned upright and placed so that the free end of top 10 rests on spacer 23 and, if spacer 28 has not already been attached, the long screws inserted through the holes in ledge 34 and spacer 28, then turned into the bottom of desk top 10. Such long screws prevent relative movement between desk D and side case S. Finally, skirt 11 is attached between the drawer unit U and the panel 31 or 32 of side case S. For the latter purpose, as in FIG. 15, a pair of vertically spaced metal plates 70 may be used to connect skirt 11 to side case S, as to panel 31. Each plate 70 has a pair of spaced holes for receiving screws 71, which extend into end panel 31 and skirt 11, respectively. The other end of skirt 11 may be attached to one side of the drawer unit U, such as side panel 14, by a pair of vertically spaced angle brackets 72 having holes for screws 73, extending into skirt 11 and side panel 14, respectively. In actual practice, it may be desired to use only one or more than two vertically spaced plates 70 and brackets 72, as well as to place them at corresponding vertical positions, so that the same screw holes in skirt 11 may be used for either. Shelf 33, as well as providing a support for the storage unit, may be used for additional storage space, the end sections under the desk top being used to store relatively wide articles and the portion adjacent recess 36 being used to store relatively narrow articles. Although the desk has been described as being made of wood, it will be understood that it may be made of steel or other suitable metals or

materials, and other fastening means may be utilized, which will be readily apparent to those skilled in the art.

From the foregoing, it will be evident that a desk and side case constructed in accordance with this invention fulfill to a marked degree the requirements and objects hereinbefore set forth. The novel desk and side case are reversible, so that the side case may be mounted either at the right side of the desk, as in FIG. 1, or at the left side of the desk, as in FIG. 2. Also, the side case is provided with a novel interchangeable top and spacer, so that it may be alternatively mounted at either the right or left side of the desk without any addition or substitution of parts. It is readily apparent that the drawer unit U may be mounted at either side of desk D, so that side case S may be attached at the opposite side of the desk. The shorter, separate finished top also reduces the cost of the top finish for the side case, as well as permitting end to end reversal of the side case. Because of the construction of the desk and side case, they may be used in offices having various furniture arrangements since the side case and drawer unit may be readily switched from one side of the desk to the other. Also, it is necessary to manufacture two units only, i.e., the desk and side case, and these two units may be used for a setup in which the side case is attached to either side of the desk. The entire desk may be shipped in several easily packaged and transportable sections, i.e., the desk top, the drawer unit, the skirt, the side case, the top for the side case, the spacer, the storage unit and the leg assemblies. These may all be assembled together in a manner of minutes by wood screws which extend through or into holes previously drilled at the factory. Therefore, the presence of skilled labor to assemble the desk is not necessary, since it is merely a matter of attaching the sections together with wood screws. Finally, an attractive bi-level desk is provided, in which the desk top is at a higher level than the side case top, with a paper rail around the top of the side case.

Although a preferred embodiment of this invention has been illustrated and described, it will be understood that various changes and variations may be made, without departing from the spirit and scope of this invention.

What is claimed is:

1. A side case for a desk having a top and means for supporting said top at either side thereof, said side case comprising a pair of spaced end panels; a horizontal ledge extending between said end panels; means for supporting said side case with said desk top overlying one end thereof; a rectangular top on said ledge and extending from one said end panel to a position corresponding to said desk top; and a rectangular spacer abutting the end of said side case top and extending along the remaining portion of said ledge, said side case being adapted to be positioned at right angles to said desk so that said spacer extends under and supports one end of the top of said desk and said spacer and said side case top being interchangeable so that said side case may alternatively be attached to the opposite side of said desk.

2. A side case as set forth in claim 1, including a vertical back panel extending between said end panels and abutting a longitudinal edge of said ledge.

3. A side case as set forth in claim 2, in which said ledge is spaced downwardly from the upper edge of said end panels and back panel to provide a paper rail around said side case top.

4. A side case as set forth in claim 3, in which said spacer extends upwardly above said side case top to the upper edge of the adjacent end panel and said back panel, so that the end thereof abutting said end of said side case top forms a side of said paper rail, said desk top being supported above said side case top and thereby forming a bi-level desk.

5. A side case as set forth in claim 4, in which said spacer is an open rectangular frame.

6. A side case as set forth in claim 5, wherein said ledge is provided with a plurality of spaced holes adja-

cent the peripheral edge thereof and adapted to receive screws for securing said side case top and said spacer to said ledge; a pair of holes spaced inwardly from each said end panel a distance slightly less than the length of said spacer and adapted to receive screws for securing the inner end of said spacer to said ledge, when mounted at the corresponding end of said ledge; and a pair of holes spaced from each end panel a distance slightly less than the length of said side case top and adapted to receive screws for securing said side case top to said ledge.

7. A side case as set forth in claim 6, wherein the front edge of said side case top is provided with an overhang overlying the forward edge of said ledge; and a laterally extending shoulder at each end of said overhang, one said shoulder engaging a corner of said spacer and the other shoulder engaging the edge of said one end panel.

8. A side case as set forth in claim 7, wherein said overhang is formed by a strip attached to the underside of said side case top and abutting the front edge of said ledge, said strip extending laterally to form the lower portions of said shoulders.

9. A side case as set forth in claim 8, including a horizontal shelf spaced below said ledge and extending between said end panels, said shelf being narrower at the center than at the ends to form a knee-space under said side case top; and a storage unit adapted to be mounted on the wider portion at either end of said shelf.

10. In combination, a desk including a top, a drawer unit attached to and supporting one side of said desk top and alternatively attachable to and supporting the other side of said top; and a side case positioned at right angles to said desk and extending under and supporting the opposite side of said desk top from said drawer unit, said side case including front and rear spaced end panels, a horizontal ledge extending between said end panels, legs supporting said side case, a rectangular top extending from said rear end panel along a portion of said ledge, and a rectangular spacer extending from said front end panel along the remaining portion of said ledge and abutting the forward end of said rectangular top.

11. The combination set forth in claim 10, wherein said case includes a vertical back panel extending between said end panels of said side case and abutting the rear edge of said ledge.

12. The combination set forth in claim 11, in which said ledge is spaced below the upper edge of said end panels and back panel to form a paper rail around said side case top.

13. The combination set forth in claim 12, in which said spacer extends upwardly above said side case top

to the upper edge of the adjacent end panel and said back panel, so that the end of said spacer abuts an end of said side case top also forms a paper rail, said desk top being supported above said side case top to form a bi-level desk.

14. The combination set forth in claim 13, in which said spacer comprises an open rectangular frame.

15. The combination set forth in claim 14, wherein said ledge is provided with a plurality of spaced holes adjacent the peripheral edge thereof and adapted to receive screws for securing said side case top and said spacer to said ledge, a pair of holes spaced laterally from each of said end panels a distance slightly less than the length of said spacer and adapted to receive screws for securing an end of said spacer to said ledge, and a pair of holes spaced laterally from each of said end panels a distance slightly less than the length of said side case top and adapted to receive screws for securing said side case top to said ledge, whereby said spacer and said side case top may be interchanged and said side case mounted at either side of said desk.

16. The combination set forth in claim 15, including an overhang on said side case top extending forwardly of said ledge; a laterally extending shoulder at each end of said overhang, one said shoulder engaging the corner of said spacer and the other said shoulder engaging the edge of said one end panel; and a groove at one said end of said spacer receiving the end of said side case top.

17. The combination set forth in claim 16, including a strip attached to the underside of said case top and abutting the front edge of said ledge; and a layer of plastic on said top and said overhang and extending around each said shoulder.

18. The combination set forth in claim 17, including a horizontal shelf spaced below said ledge and extending between said end panels, said shelf being narrower at the center than at the ends to form a knee-hole under said side case; and a storage unit adapted to be mounted on a wider portion of said shelf.

References Cited in the file of this patent

UNITED STATES PATENTS

1,585,102	Langdon	May 18, 1926
1,606,103	Schimmel	Nov. 9, 1926
2,362,047	Center	Nov. 7, 1944
2,755,155	Luss	July 17, 1956
2,821,450	Knoll	Jan. 28, 1958
2,928,703	Paulsen	Mar. 15, 1960
2,973,232	Knoll	Feb. 28, 1961
2,988,413	Bergen	June 13, 1961