

Nov. 7, 1944.

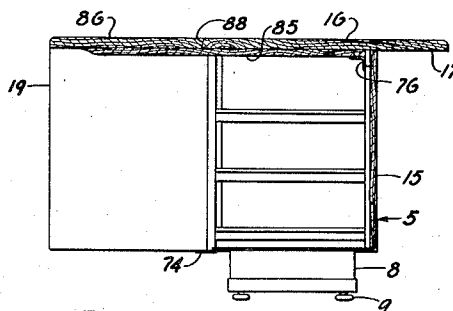
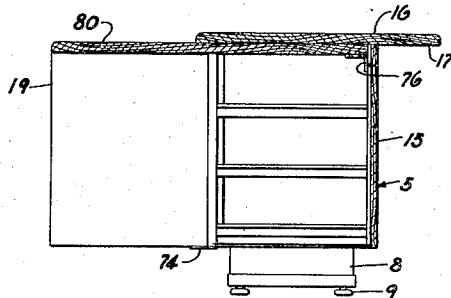
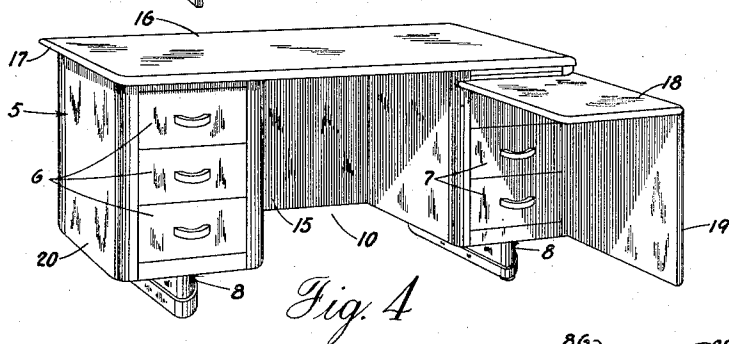
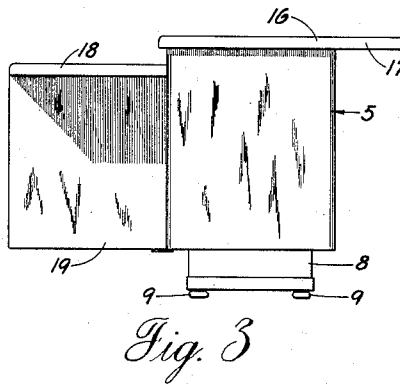
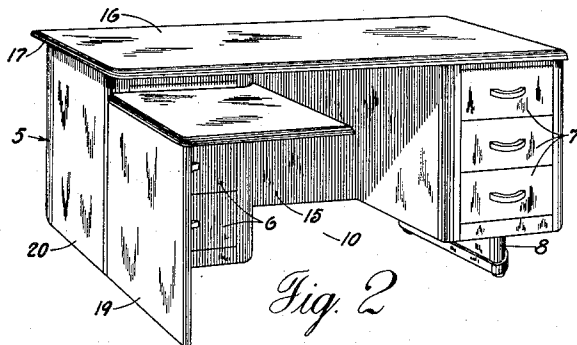
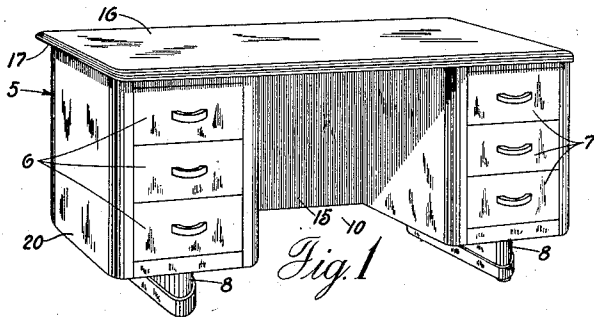
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2,362,047

DESK CONSTRUCTION

Filed Feb. 27, 1941

3 Sheets-Sheet 1



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DESK CONSTRUCTION

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3 Sheets-Sheet 2

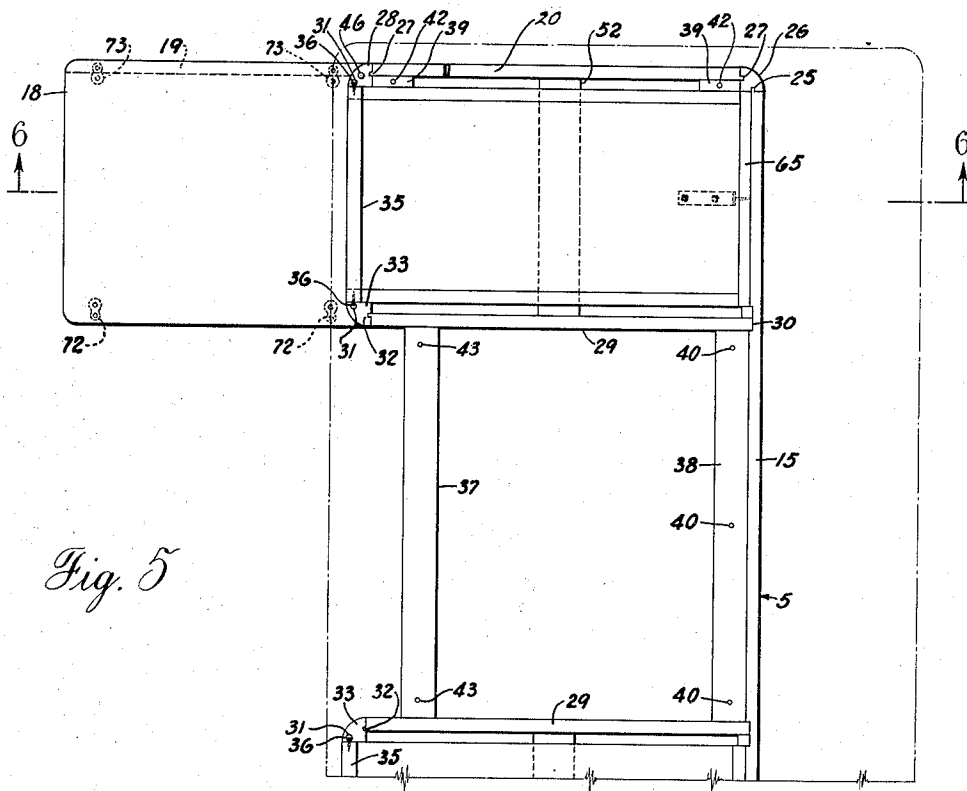


Fig. 5

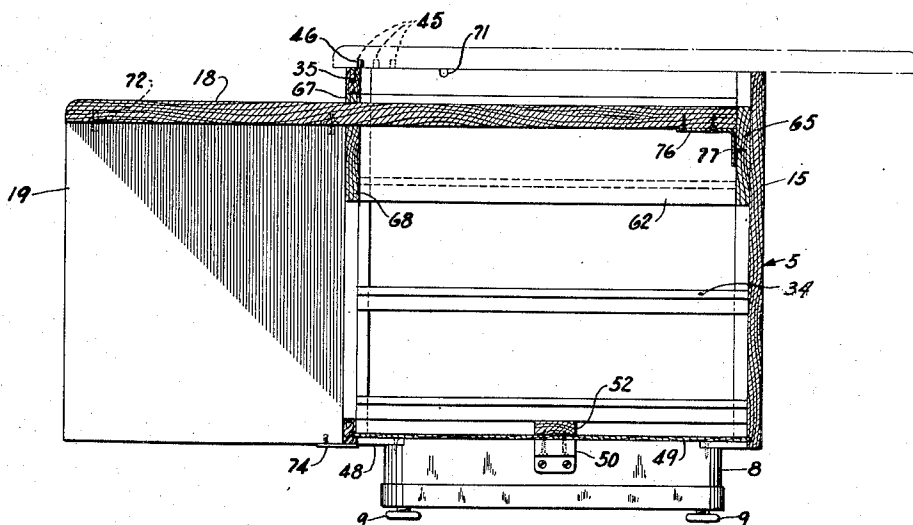


Fig. 6

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3 Sheets-Sheet 3

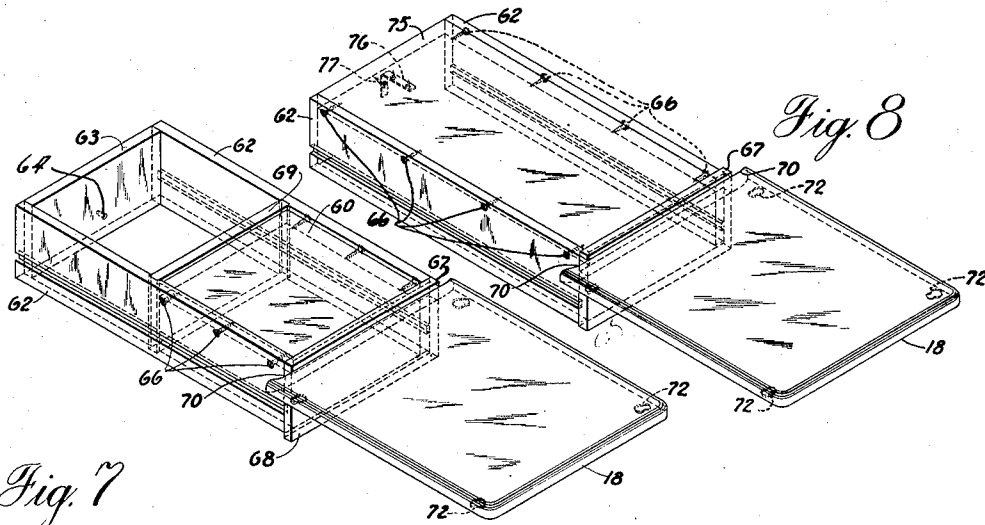


Fig. 7

Fig. 8

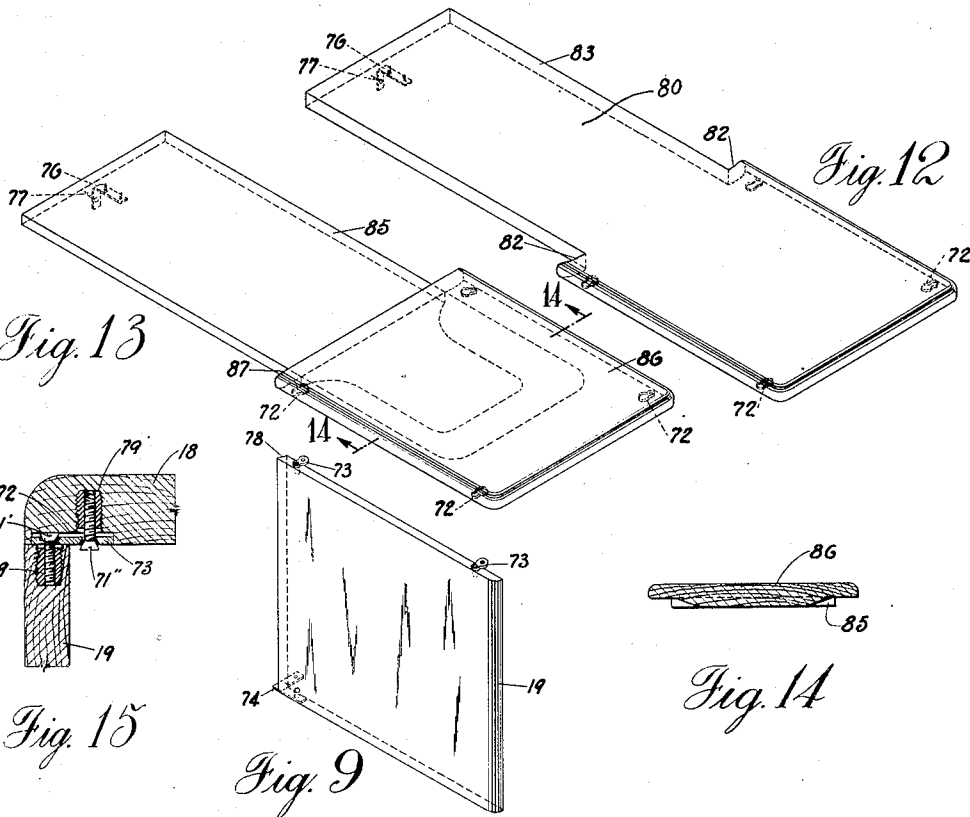


Fig. 13

Fig. 12

Fig. 15

Fig. 9

Fig. 14

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2,362,047

DESK CONSTRUCTION

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Application February 27, 1941, Serial No. 380,858

14 Claims. (Cl. 45—90)

This invention relates to desk constructions and is more particularly directed to a desk construction for use in offices wherein there is employed stenographic, clerical and executive help.

The present application is a continuation-in-part of our copending application, Serial No. 330,943, filed April 22, 1940, with certain additional modifications and improvements and is directed particularly to the combination of the desk and a detachable typewriter support for use therewith.

One of the primary objects of the present invention is to provide a desk construction in which the desk base or frame is so designed that it may receive drawers and tops especially arranged to produce a stenographic desk, a secretarial desk or an executive desk. By employing a standardized desk base it is obvious that a much needed reduction in office equipment inventory is provided in concerns employing a large number of office employees wherein departments and types of work may be shifted from time to time, requiring changes in the desks assigned to the various employees.

The present construction, broadly considered, comprises a desk frame of the type having two laterally spaced columns or sections adapted to receive drawers or the like, a closed front portion shielding the knee space between the drawer columns with the columns being provided with suitable island type supporting legs. Optionally arranged for attachment to such a desk frame, the present invention provides various arrangements of drawers and compartments whereby a side typewriter support may be provided at either side of the desk. In this manner a standard clerk's desk may be converted into a stenographic or secretarial desk by merely removing one drawer or slide and inserting the typewriter supporting stand in lieu thereof. As a result, it is necessary to carry only a limited number of such desk bases in stock and the desk can be fitted up to the required needs by the selection and optional arrangement of drawers and typewriter supports.

In connection with this latter feature the present invention provides a typewriter support which may be inserted into position in lieu of the upper drawer on either side of the desk merely by removal of the drawer and insertion of a frame member guided on the drawer slides and secured in the drawer chamber. The typewriter support is of firm and rigid construction and is so arranged that substantially no vibration can be produced when a typewriter is operated

thereon. By reason of this construction the typewriter support may be placed upon either side of the desk, depending upon personal desires or lighting facilities. Optionally, in place of removing the drawer the present invention contemplates removing the slide which may be of the conventional type provided above the desk drawers, replacing it by a typewriter supporting stand corresponding to that used when a drawer is replaced.

It is also possible by means of the present invention to provide this novel type of typewriter supporting arrangement for use in desks of the type now on the market wherein the desired features of this construction may be incorporated into equipment now in use.

It is to be understood that the desk construction of the present invention may be made either of wood or metal and in either case embodies the same general principles. However, in the case of a wood desk the construction has been designed with careful thought to the provision of smooth rounded surfaces at all points which will prevent tearing of hosiery or the like, this constituting one of the main objections to wood desks of the type now in use.

Other objects and advantages of the present invention will appear more fully from the following detailed description which, taken in conjunction with the accompanying drawings, will disclose to those skilled in the art the particular construction and operation of a preferred form of the present invention.

In the drawings:

Figure 1 is a front perspective view of a desk conventionally employed as a clerk's desk;

Figure 2 is a view corresponding to Figure 1 of the desk converted into a stenographic or secretarial type desk by the addition of a typewriter supporting stand;

Figure 3 is a side elevational view of a desk such as shown in Figure 2 with the typewriter support in position;

Figure 4 is a view corresponding to Figure 2 showing the typewriter support in an optional position on the opposite side of the desk;

Figure 5 is a top plan view of a portion of the desk frame construction with the typewriter support in place;

Figure 6 is a sectional view taken substantially on line 6—6 of Figure 5 showing the details of one form of the typewriter supporting stand;

Fig. 7 is a perspective view of one form of the typewriter supporting stand.

Fig. 8 is a corresponding view of the modified form of stand illustrated in Figs. 5 and 6.

Figure 9 is a perspective view of a courtesy shield for use with the typewriter support;

Figure 10 is a sectional view of a modified type of typewriter support employed in place of a slide at the top of the drawer column;

Figure 11 is a further modification of the construction shown in Figure 10;

Figure 12 is a perspective view of the typewriter supporting slide shown in Figure 10;

Figure 13 is a perspective view of the typewriter supporting slide shown in Figure 11;

Figure 14 is a sectional view through the slide shown in Figure 13 substantially on line 14—14 thereof; and

Figure 15 is a detail sectional view of one manner of attaching the courtesy shield to the typewriter support.

Referring now in detail to Figures 1 and 2, the clerk's type of desk shown in Figure 1 is indicated generally at 5 and includes the spaced columns for receiving the series of drawers 6 and 7 at opposite sides of the desk frame. Disposed below the drawer columns are two substantially elongated islands or supporting feet 8 which, as shown in Figure 3, have adjustable foot portions 9 for leveling the desk in the event that the floor surface is uneven.

The desk is provided intermediate the drawer columns with a knee space 10 and it will be noted that the conventional center drawer has been eliminated, thus providing clearance in the knee space 10 allowing lowering of the desk surfaces which we have found to be very desirable in that a desk 28 to 29 inches high to the working surface is much more comfortable than the conventional 30 inch desk.

In the form of desk shown in Figure 3 a junior clerk's type of desk is provided in which the top extends flush with the drawers 6 and 7 but has an appreciable overhang towards the opposite side of the desk and away from the employee, as indicated at 17. The amount of overhang is optional and the particular means for achieving the convertible top construction to change the desk from one to the other type is described in detail in our copending application. The drawers 6 and 7 are provided with handles or drawer pulls, and are preferably so designed and arranged that there is no transverse division between the individual drawers and the front panels of the drawers extend one above the other with no intermediate frame member therebetween. The two bottom drawers on one side of the desk may be combined, if desired, into a file drawer to receive the customary type of file folders. Preferably, the front of the desk has a continuous closure panel 15 for closing the front end of the knee space 10.

The desk shown in Figure 2 may be similar to that shown in Figure 1 with the exception that the upper left-hand drawer has been removed and in lieu thereof a typewriter support 18 has been provided extending outwardly from the drawer opening at a slightly lower level than the top of the desk. The typewriter support is provided with a courtesy shield 19 which extends flush with the side wall 20 of the desk substantially the full length of the typewriter support 18. With this arrangement the clerk's desk in Figure 1 is readily converted into a stenographic or secretarial type desk and the typewriter support 18, which will be hereinafter described in detail, is so designed as to prevent vibration or rattling

thereof and to hold the typewriter rigidly in position. The extending typewriter stand 18 shown in Figure 3 also illustrates the relation of the courtesy shield thereto. The purpose of this shield is to prevent drafts around the feet of the employee and also to provide a screen corresponding to that of the panel 15.

In Figure 4 the desk construction shown in Figure 2 has been modified to provide for the support of the typewriter on the opposite or right-hand side of the desk. In this case the upper right-hand drawer 7 has been removed and in place thereof a construction including the typewriter supporting board or plate 18 is provided, including the courtesy shield 19, which in this form of the invention extends along the opposite lateral edge of the stand 18 and flush with the right-hand end of the desk shown in Figure 4.

Considering now the desk construction shown in Figures 1 to 4, inclusive, the details of this construction are shown in Figures 5 and 6. A conventional desk top 16 may be provided which is indicated in dotted line and which may or may not have any overhang. The desk frame includes the forward front wall 15 which is substantially of uniform thickness entirely across the width of the desk and at its opposite ends is provided with longitudinal tongues 25 adapted to engage in a vertically extending groove formed in the corner posts 26. These corner posts are of solid quarter round construction and define the ends of the front wall of the desk, being substantially flush with the outer surface of the panel 15. Extending normally to the panel 15 at the opposite ends of the desk are the end walls 20 which are also provided at their ends with tongues 27 engaged in the corner posts 26 and also in the rear corner posts 28 which form the defining end of the opposite side walls 20. Spaced parallel to and inwardly from each of the end walls 20 and at a distance slightly greater than the width of the drawers 6 and 7 are the intermediate walls 29 which at one end are secured in the notched portion 30 on the inner face of the front wall 15 and at the opposite end are rabbeted by means of the tongue 32 into a corner post 33 extending parallel to and in lateral alignment with the corner post 28. Recessed within the lateral space defined by the walls 15, 20 and 29 is suitable hardware, such as indicated at 34, which is secured to the desk columns to provide the drawer slides or guides for supporting the drawers 6 and 7 for sliding movement into and out of the lateral space defined by the columns. This hardware may be formed either of metal or of wood, as desired.

Disposed between the corner posts 28 and 33 at the upper ends of the vertical drawer-receiving compartments are transverse bracing strips 35 which may, if desired, be permanently secured in position, or, if it is desired to remove them for the introduction of a slide or typewriter support above the top of the drawers, the transverse members 35 may be detachably secured in position by having the screws 36 only partially extending into the ends thereof with the corner posts 28 and 33 being notched as indicated at 31 to receive these screws whereby the cross members 35 are fixed in position between the corner posts and may be readily detached therefrom. Extending between the walls 29 which define the knee space is a bracing member 37 which may be glued to the walls 29 adjacent the corner posts 33 or which may be secured in position and be detachable in a manner corresponding to that provided for the bracing members 35. The member 37 may be re-

moved, if desired, and suitable hardware installed on the side walls 29 to provide a guide for a center drawer or the like.

With the construction thus far described it will be apparent that the walls 15, 20 and 29 provide solid framing members which are so secured together by rabbeting and gluing engagement as to provide a very rigid and solid desk base of rugged construction capable of being lifted and moved without any possibility of distortion. This is distinctly advantageous over constructions in which thin veneer sheathing or panelling is employed between the corner posts, which may be subject to spreading and warping and provides no substantial strength.

Extending between the walls 29 adjacent the wall 15 is a second transverse bracing strip 38 which is preferably permanently secured both to the panel 15 and to the walls 29. Suitable openings 40 are formed in the strip 38 and are adapted to receive vertically extending screw members which project through these openings and are threaded into suitable metal inserts secured to the undersurface of the top 16. Similarly, the transverse bracing strips 37 and 35 may be provided with openings 43 adapted to receive additional screws for screwing into metal inserts on the under surface of the top. In addition, we preferably provide block members 39 between the supporting hardware 34 and the end wall 21 adjacent the corner posts 26 and 28. These block members are similarly secured in position and are provided with openings 42 for receiving screws also adapted to be secured to the top through suitable metal inserts. Thus, the top is detachably secured to the desk base and tops may be readily removed by removing the screws in the openings 40, 42 and 43. Thus, any one of a number of different sizes and types of tops may be employed, and preferably dowel openings 45 are provided in the under surface of the top and arranged to be selectively positioned on the dowel pins 46 carried by the corner posts 28 and side walls 20. These dowels serve to locate the desk top in proper position and also allow the adaptation of the desk top for use as a table top over a standardized type of table base.

Considering further the construction of the desk, it will be apparent that the islands 8 are firmly secured in position by means of screws carried by a metal plate 48 extending beneath and secured to the bottom panel 49 closing the bottom of the drawer compartment. The plate 48 is secured to the bottom panel 49 and extends transversely thereof from the front to the rear of the desk. The island 8 is secured to the metal plate 48 in any suitable manner and is also braced against lateral stress by means of large blocks 50 secured to the sides of the island and also secured to the bottom 49 through a transverse plate member 52 extending across the drawer compartment below the lower end of the drawer guide hardware 34.

Considering now in detail the construction of the typewriter support, one form of such support is indicated in Figure 7 and comprises the typewriter supporting board 18 which has a reduced extending tongue portion 60 projecting between parallel arranged sides 62 corresponding to the sides of the drawer. The sides 62 are connected at their remote end by the transverse spacer 63 which in turn receives the angle screw 64 adapted to be screwed into the cleat 65 carried at the inner end of the drawer compartment at either side

of the desk. The extension 60 of the typewriter stand 18 is secured between the parallel drawer sides 62 by means of screws 66 and thus provides a closure for the drawer space. Two transversely extending members 67 and 68 are provided, extending above and below the typewriter supporting board 18 across the outer ends of the drawer guides 62. These may be secured either by gluing or screwing into position and when the typewriter support is moved into the upper drawer chamber the members 67 and 68 serve to close the drawer opening and thereby provide a flush surface from which projects the stand 18.

The use of a screw 64 screwed into the cleat 65 insures that the assembly will be drawn firmly into the inner end of the drawer compartment, thereby insuring that the rounded lips 70 at opposite lateral edges of the typewriter support 18 will be moved into firm contacting engagement with the corresponding rounded surfaces of the corner posts 28 and 33. This provides a very smooth and clean cut appearing structure with no sharp edges and with the typewriter support merging into the contour of the desk proper.

The typewriter support 18 is provided on its under surface with recessed slots 72 adapted to receive the clip members 73 secured to the upper end of the courtesy shield 19, the clip members 73 thereby forming means for securing the courtesy shield to either one of the defining edges of the typewriter support 18 and in the position shown in Figures 7 and 9 would be secured to the left-hand edge to provide a construction similar to that shown in Figure 2. The lower end of the shield 19 is provided with a longitudinally extending clip 74 whereby the lower end of the shield is adapted to be secured to the bottom end of the corner post 28. This insures vertical rigidity of the surface 18 while the screw 64 insures horizontal rigidity of the structure whereby the support 18 is held firmly in position and cannot rattle or vibrate even during the hardest use of the typewriter supported thereon.

In place of the drawer or typewriter support as found in Figure 7, it may be so formed that the board 18 extends between the sides 62 to the innermost end thereof as indicated at 75 in Figure 8. In such case the inner end of the board 18 is preferably provided with an angle member 76 rigidly secured to the under surface of the board 18 in the inner end thereof and having the vertically depending leg thereof apertured to receive a screw member 77 adapted to be screwed into a metal insert rigidly secured to the cleat 65 or to the rear base of the panel 15, whereby the board 18 is rigidly held in position. In this construction the members 67 and 68 are still provided for the purpose of closing the drawer opening and providing a flush surface therewith. It will be apparent that when the typewriter support of either Figure 7 or 8 is inserted in place of the upper left-hand drawer 7 the courtesy shield is disposed on the lateral opposite edge of the support 18 from that shown in Figure 2. In such case the clips 73 and 74 are on the reverse or opposite edges of the shield 19, thereby allowing the shield to be reversed in position, insuring that its rounded edge 78 will have smooth, flush engagement with the corner posts 28 and provide a normal continuous extension of the lateral desk wall construction.

As shown in Figure 15, the clips 73 are secured to the edges of the shield 19 by screws 71' passing through the clips into metal inserts 79 secured in the edge of the shield. The clips have aper-

tures therein through which screws 71'' extend into metal inserts 79' carried in the undersurface of the board 18. Such metal inserts are also provided on the undersurface of the top and for other locations in which it is desired that screws be inserted and replaced a number of times.

We wish it distinctly understood that the typewriter support arrangement shown in Figures 7 and 8 can be employed in desks other than those shown in Figures 1 to 4, and may be manufactured as a separate article for replacement of existing types of typewriter attachments which are not satisfactory. It should also be noted that in the typewriter support shown in Figure 7 a transverse intermediate member 69 is provided to terminate the end of the board 18. This member is provided as a stop to prevent paper, dust or foreign matter from passing over the side 62 into the lower drawer compartment. Similarly, in Figure 8 a similar transverse member could be provided at the inner end 75 of the board 18 to seal the chamber in the same manner.

Considering now Figures 10 and 12, in this form of the invention the drawer is not replaced to provide the typewriter supporting stand but in lieu thereof a slide type supporting stand is provided. In this form of the invention the transverse bracing strip 35 above the drawer column is removed as described in connection with Figure 5 and in place thereof a board such as indicated in Figure 12 is provided. This board indicated at 80 has a widened outer portion provided with curved ends 82 which fit about the rounded surface of the corner posts 28 and 33. The reduced portion of the board indicated at 83 extends inwardly along the slide guide at the top of the hardware 34 and at its inner end is provided with the angle member 76 corresponding to the angle member shown in Figure 8. This angle member, in turn, is adapted to be secured to the front panel 15 of the desk, thereby rigidly holding the board 80 in position with the end 82 flush with the corner posts, thus preventing any possible longitudinal movement of the board. Vertical movement of the board is prevented by reason of the slide being designed to fit against the under surface of the desk top 16 and the top of the drawer hardware 34. Vertical movement of the outer end of the board is prevented by the use of the courtesy shield 19 which is joined to the slide 80 in the same manner as previously described in connection with Figures 7 and 8 and at its lower end is provided with a clip 74 secured to the under surface of the corner post 28. This forms a perfectly rigid structure which will not vibrate or rattle and places the typewriter supporting surface just slightly below the desk top 16.

In the form of the invention shown in Figures 11, 13 and 14 a similar construction is provided except that the supporting board 85 is reduced at its outer end and has glued to the upper surface thereof the typewriter supporting board 86. This board is provided with a rounded inner edge 87 fitting against the rounded surface of the top 16 as indicated at 88 and extending flush with the top surface of the top 16. The board 85 is secured in position between the top 16 and the upper end of the drawer hardware in the same manner as previously described by use of the angle 76, and the tapered connection of the board 85 to the board 86 eliminates any rough corners or the like.

These optional forms shown in Figures 10 to

14, inclusive, provide a typewriter supporting stand that can be employed without removal of any of the drawers but which merely takes the place of the conventional slide above the drawers. With this type of construction the typewriter is supported above the height that is possible with the drawer supporting stand shown in Figures 7 to 9, and may be either slightly below the base of the top 16 or flush therewith.

It will be observed in all forms of the invention herein disclosed that when the typewriter attachments are positioned upon a desk there are no obstructions to the knee of a user of the typewriter since only the extensions for supporting the typewriter project outwardly of the vertical wall of the desk.

It is therefore believed apparent that with the present construction a simplified standard desk base is provided which may be readily adapted to a plurality of different types or arrangements of typewriter supports. These features are of distinct advantage and provide considerable economy in the manufacture of such desks and also in eliminating a large amount of inventory necessitated when a considerable amount of office equipment is in use.

We do not intend to limit the present invention to the specific construction herein shown and described but only so far as defined by the scope and spirit of the appended claims.

We claim:

1. A typewriter supporting attachment for a desk having a drawer space, comprising a pair of side members insertable into said space and guided for sliding movement therein, a transversely extending planar member having a portion of reduced width secured between said side members and having the remaining portion laterally overhanging said side members, transverse vertically disposed members on opposite sides of said planar member extending across the outer ends of said side members to provide a closure surface at the open end of the drawer space, and a planar shield member rigidly depending from one lateral edge of said wider portion of said planar member and out of the plane of the adjacent side member.

2. The attachment of claim 1 including means rigidly securing the lower end of said shield to said desk.

3. The attachment of claim 1 including means for optionally mounting said shield at either lateral edge of said planar member.

4. The attachment of claim 1 including means at the inner end of said attachment for rigidly securing said end to the rear end wall of said drawer space.

5. The combination, with a desk base having laterally spaced drawer compartments each arranged to receive vertically superposed sliding drawers, of a typewriter support optionally insertable in the upper drawer space of either compartment and including sides guided into said space, a transverse board secured between said sides and extending laterally the full outside width of the drawer compartment outwardly of said drawer space, and a shield member depending from one lateral edge of said board and lying in the vertical plane of the associated end of the desk base.

6. The combination, with a desk base having laterally spaced drawer compartments arranged to receive vertically superposed sliding drawers, of a typewriter support optionally insertable into the upper drawer space of either compartment and including side members guided for sliding

movement into the drawer space, means for securing the inner end of said support firmly to the rear wall of said compartment, means on said support embracing the defining vertical edges of the compartment, a vertical courtesy shield member depending from one lateral edge of said support and secured at its lower end to the lower end of said compartment to extend coplanar with the associated end of said base.

7. The combination, with a desk base having a drawer column with sliding drawers therein, of a typewriter support including parallel sides guided into position in said column in place of the uppermost drawer, an angle member on the inner end of said support, means for securing said member to the inner wall of said column, a courtesy shield secured to and depending from one lateral edge of said support, and means for securing the lower edge of said shield rigidly to the under surface of the column base.

8. The combination of claim 7 wherein said last-named means includes a metal clip rigidly secured to the bottom edge of said shield and projecting therefrom to a point under said base.

9. The combination of claim 7 wherein said shield has one lateral edge thereof contacting a vertically extending corner post of said column throughout the length of said edge.

10. The combination of claim 7 wherein said support has vertical portions lying in the plane of the drawer ends when in assembled position to close the face of said column.

11. A typewriter supporting attachment for a desk having an opening therein extending horizontally substantially from the front wall to the rear wall and below the top thereof comprising, a

member insertable into said opening and engaging said desk, said member having a portion adapted to extend beyond the rear wall of said desk, means for detachably securing one end of said member adjacent the front wall of said desk, and a shield member extending normal to said first member, said means being adapted to hold one edge of said shield member in abutting relation with a portion of said desk.

12. The combination of a desk having a top and a base having a drawer column comprising front and rear walls, there being an opening in said drawer column extending substantially from said rear wall to said front wall and below the top of said desk, of a typewriter supporting member insertible in the opening in said drawer column and in contact with said desk, means for detachably securing one end of said supporting member adjacent the front wall of said drawer column, said member having a portion extending beyond the rear wall of said drawer column, a depending shield member disposed normal to one edge of said portion of said supporting member, said means being adapted to maintain one edge of said shield member in abutment with a portion of said desk.

13. The combination of claim 12 characterized by the provision of means for detachably connecting said shield to said supporting member.

14. The combination of claim 12 characterized by the provision of means for detachably connecting said shield to said supporting member, and means detachably connecting said shield to said base.

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