

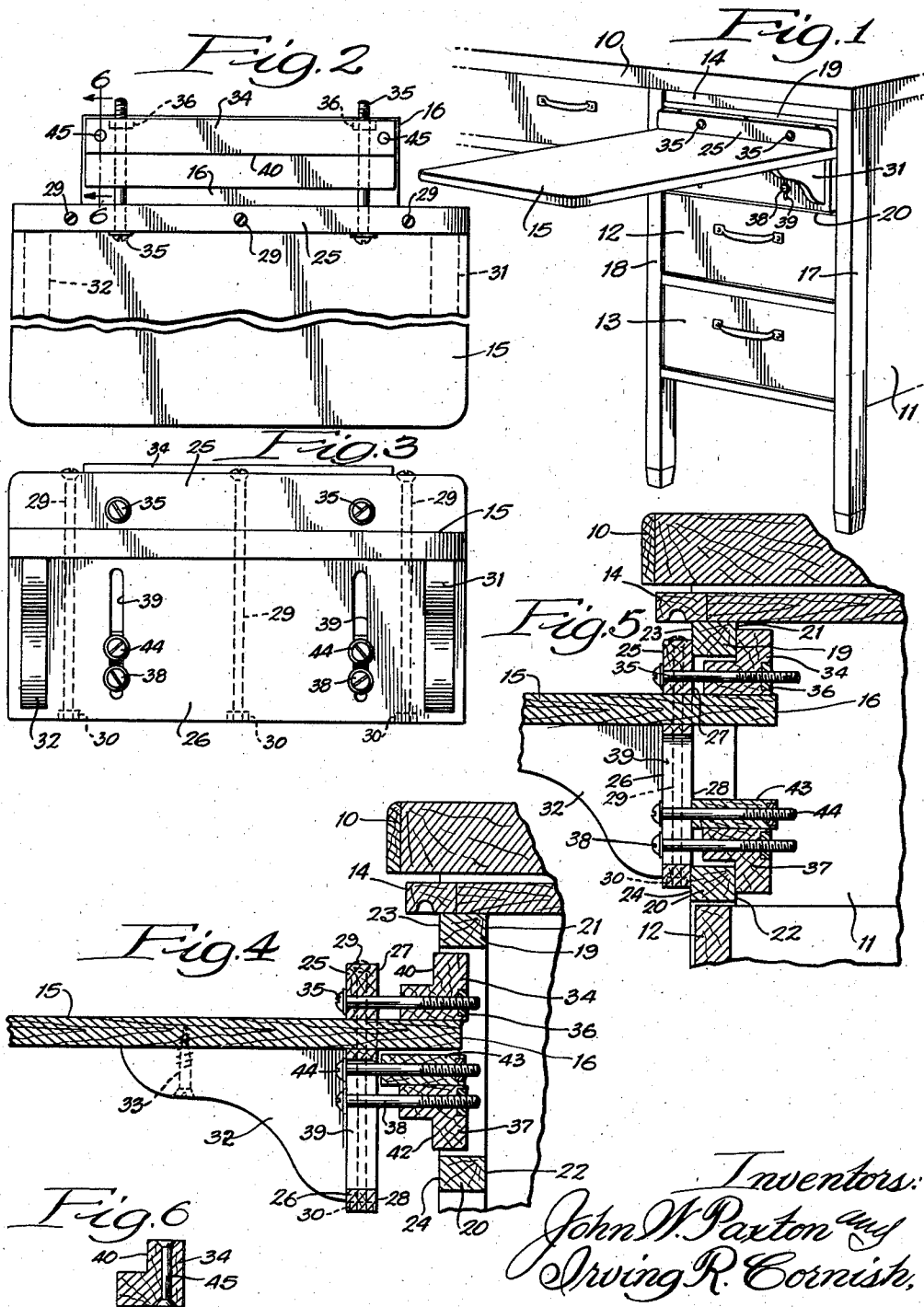
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DESK ATTACHMENT

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DESK ATTACHMENT

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6 Claims. (Cl. 311-17)

Our invention relates to improvements in desk attachments and relates particularly to means for utilizing an ordinary office desk as a support for an appliance such as a typewriter, calculating machine, dictaphone, etc., at a height which is convenient for the operator.

The purpose of the invention is to provide an improved arrangement of the character mentioned, which can be attached or applied to an ordinary office desk without any need to employ a skilled mechanic in order to make the application. A further object is to provide convenient and efficient means for safely and securely clamping the attachment to the desk in such manner that strain or vibration caused by the weight or by the operation of the appliance will not affect the stability or rigidity of the support, or the appliance which is supported thereby.

In the drawing accompanying this application, and which shows certain preferred embodiments of the invention:

Fig. 1 is a fragmentary perspective view of an ordinary office desk to which the improved attachment has been applied;

Fig. 2 is a shortened plan view of the attachment itself;

Fig. 3 is a front elevation of the attachment;

Fig. 4 is a vertical section taken through the appliance and a portion of the desk to which it is being applied, showing the manner in which the parts are arranged at the beginning of the act of application;

Fig. 5 is a section similar to Fig. 4, showing the parts in the position which they occupy after the attachment has been securely locked in its operating position; and

Fig. 6 is a section taken on the line 6-6 of Fig. 2.

Referring to the drawing, it will be seen that the desk designated as a whole 10 is of the conventional type having the usual side pedestal 11 with accommodation for three drawers. The two lower drawers 12 and 13 are not affected by the application of the attachment and may be used in the usual way when the attachment is in place. The same thing is true of the writing slide 14.

Preferably, the main shelf or supporting element is made in the form of a single horizontally arranged board, preferably of the same width as the top drawer which, in order to permit the application of the attachment, should be removed from the desk. This board member 15 is made long enough to extend forwardly a sufficient distance to provide the necessary shelf room and,

when in place, its inner end 16 extends horizontally inwardly into the recess formed by the removal of the top drawer.

It will be observed that the entrance to the drawer opening, as is usual in desks of wooden construction, is rectangular, the vertical sides of the entrance to which opening are formed by the posts 17 and 18 of the pedestal, while the upper and lower sides of the drawer entrance opening take the form of horizontal rectangular wooden bars 19 and 20 located at the top and bottom of the entrance opening respectively.

The rear faces 21 and 22 and the front faces 23 and 24 of said frame bars 19 and 20 serve as abutments which are engaged by cooperating shoulders on parts carried by the shelf member 15 and adapted to be drawn together so that the bars 19 and 20 will be clamped respectively between upper and lower pairs of said clamping parts.

The clamping parts which carry the shoulders referred to preferably take the form of a pair of fixed members and a pair of relatively movable members. The fixed members in the present instance comprise a horizontally extending wooden bar or slat 25 extending across the top of the shelf member 15 and a somewhat deeper or wider slat or board 26 located on the under side of the shelf member 15, and preferably extending immediately below the upper slat 25. The combined width of the slats 25 and 26 and the thickness of the shelf member 15 is in excess of the vertical dimension of the entrance to the drawer opening, so that, when the attachment is in place, the upper slat 25 will have a shoulder 27 which contacts with the abutment 23, and the lower edge of the slat 26 will have a shoulder 28 which will at the same time contact with the front abutment 24 of the lower cross bar 20. Said slats 25 and 26 may be conveniently secured to the shelf member 15 by long clamping bolts, for example 29, extending vertically through all three of the aforementioned elements, as indicated best in Figs. 4 and 5. The nuts 30 of said bolts are preferably seated in square apertures in the bottom edge of the member 26, so that the said bolts may be tightened conveniently.

In order to strengthen the shelf structure as a whole, the sides of the attachment are reinforced or braced by means of wooden angle bracket members 31 and 32 glued to the under side of the shelf member 15 and to the front face of the slat 26. If desired, wooden screws such as shown at 33 may also be employed to

further enhance the rigidity and strength of the structure.

Describing the adjustable and relatively movable clamp members, it will be seen that the inner extension 16 of the shelf member 15 constitutes a guide or support for a clamping bar 34 which is L-shaped in cross section and is capable of being drawn towards the slat 25 by means of an adjusting screw 35 which extends horizontally through the upstanding slat 25 and the sliding clamp bar 34. The inner end of the said screw is provided with a nut which is recessed into the rear face of the clamping bar 34, as shown at 36. This enables the screw to be conveniently operated from the front of the structure whenever it is desired to draw the clamping bar 34 outwardly.

Vertically below the L-shaped clamping member 34, there is located a similarly shaped lower clamping bar 37, in this case, however, reversed or turned upside down as compared with the clamping bar 34. This clamping bar 37 is equipped with clamping screws and bolts 33 similar to the clamping screws 35, but the front portions of said screws are arranged to slide in slots 39 so as to enable the bar 37 and its associated clamping screws 38 to be moved vertically relative to the lower slat 26 of the shelf structure. This is to enable the bar 37 to be temporarily moved upwardly into inoperative position, as shown in Fig. 4, in order to permit the structure to be installed in its proper position. It will be observed that, in the position shown in Fig. 4, the total vertical distance between the upper and lower edges respectively of the clamping bars 34 and 37 is somewhat less than the vertical dimension of the entrance to the drawer opening, so that the inner extension 16 and its associated clamping bars can be inserted through the rectangular entrance to the drawer opening. After said insertion has been effected, the entire structure is then moved upwardly so that the shoulder 27 is in engagement with the abutment 23 on the front of the top cross bar 19, and the lower shoulder 28 of slat 26 is in engagement with the front abutment 24 of the lower cross bar 20. In this position, the upper flange of the top clamp bar 34 overlaps the rear face or abutment 21 of bar 19 and, when the bolt 35 is tightened, the said rear abutment 21 is engaged by the front face or shoulder 40 of clamping bar 34. After the bolts 35 have been properly tightened, as shown in Fig. 5, the lower clamping bar 37 is slid downwardly until the rear face or abutment 22 of the lower cross bar 20 is overlapped by the lower depending flange of the clamping bar 37, and the clamping bolts 38 are then tightened so as to draw the shoulder 42 of said clamping bar 37 into engagement with the rear face or abutment 22 of the lower cross bar 20.

In view of the fact that the pull or force applied to the cross bars 34 and 37 is offset relative to the line of contact between the clamping parts and the bars respectively, it is advisable to provide guides for preventing any rocking tendency of the clamp bars and to compel them to move horizontally under the influence of the clamping bolts. In the case of the upper bar 34, this guiding effect is provided by the upper surface of the shelf extension 16. In the case of the lower clamping bar 37, such guide effect may be supplied by the auxiliary guide slat 43, which takes the form of a horizontal bar which is capable of being clamped in any de-

sired vertical position on the back of the slat 26 by means of horizontal clamping bolts 44 which extend through the guide slat 43 from the front of the structure and through the slots 39 previously referred to. It is manifest that, when the structure is being secured in position, before tightening the bolts 44, the slat 43 is slid downwardly until its lower face is in contact with the upper face of the clamping bar 37. Then the bolts 44 are tightened, so that, when the final clamping of the lower clamping bolts 41 is effected, the bar 37 will be properly supported and guided, and any improper rocking movement thereof will be prevented.

If desired, the L-bars 34 and 37, which are subjected to considerable stress by the clamping bolts, may be reinforced in any suitable manner, for example by rivets 45 (see Fig. 6).

In view of the fact that the described arrangement may be modified in various ways to suit individual taste or different conditions, the scope of the invention should be determined by reference to the appended claims.

We claim:

1. A desk attachment comprising a shelf having a pair of normally stationary, vertically spaced, upper and lower shoulders, and upper and lower clamping members spaced from said upper and lower shoulders respectively and adapted to cooperate therewith to clamp desk parts therebetween, and means for adjusting said clamping members toward said shoulders.

2. A shelf attachment for a desk having a drawer opening, two opposite sides of the entrance to which opening are each provided with an inwardly facing abutment and an outwardly facing abutment, the attachment comprising a normally horizontal member having upwardly and downwardly extending shoulders respectively engageable with said outwardly facing abutments, a pair of clamping members respectively engageable with said inwardly facing abutments, and means horizontally adjustably connecting said clamping members respectively with said shoulders and operative to effect adjustments of said clamping members toward said shoulders to thereby draw the latter into shelf supporting engagement with said outwardly facing abutments.

3. A shelf attachment for a desk having a drawer opening, two opposite sides of the entrance to which opening are each provided with an inwardly facing abutment and an outwardly facing abutment, the attachment comprising a normally horizontal member having upwardly and downwardly extending shoulders respectively engageable with said outwardly facing abutments, a pair of clamping members respectively engageable with said inwardly facing abutments, and means horizontally adjustably connecting said clamping members respectively with said shoulders and operative to effect adjustments of said clamping members toward said shoulders to thereby draw the latter into shelf supporting engagement with said outwardly facing abutments, one of said clamping members being also vertically adjustably mounted on its cooperating shoulder to permit vertical movement of said clamping member into cooperative relationship to one of said inwardly facing abutments after horizontal passage of the clamping members through the entrance to said drawer opening.

4. A device for use on a desk having a drawer space with a member extending across the top of the entrance to the space, the device including

a supporting board having an end portion of reduced width forming a tongue which is adapted to be inserted into said entrance, a part on the under side of the tongue for resting on the lower wall of the entrance, a part on the upper side of the tongue engageable with the under side of said member in said entrance, the tongue and said parts serving to occupy said entrance and to aid in supporting the board, and a latch block on the upper side of the tongue for engaging the rear side of the member to latch the board in place.

5. A device for use on a desk having a drawer space with a member extending across the top of the entrance to the space, the device including a supporting board having a tongue of reduced width adapted to be inserted into said entrance, a transversely disposed strip on the upper side of the tongue adapted to engage in the entrance of said space and bear upwardly against the under side of said member, a transversely disposed strip on the under side of the tongue adapted to engage in the entrance of said space and rest on the lower wall of the entrance, and one or more latch blocks on the upper side of the tongue for cooperating

with the rear side of said member to latch the board in supporting position.

6. An attachment for supporting an office appliance on a desk having in its front an opening normally designed to slidably receive an ordinary drawer, two opposite sides of the entrance to which opening are each provided with an inwardly facing abutment and the front of which desk is provided with a pair of spaced outwardly facing abutments, comprising a horizontal shelf member provided with spaced shoulder parts, a pair of spaced hook members mounted on said shelf member, one of said hook members being mounted so as to be movable away from the other after insertion into said opening, thereby to enable said hook members to be respectively engaged with said inwardly facing abutments, and means for adjusting said shelf member and said hook members toward each other to thereby clamp the attachment on said inwardly and outwardly facing abutments.

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