

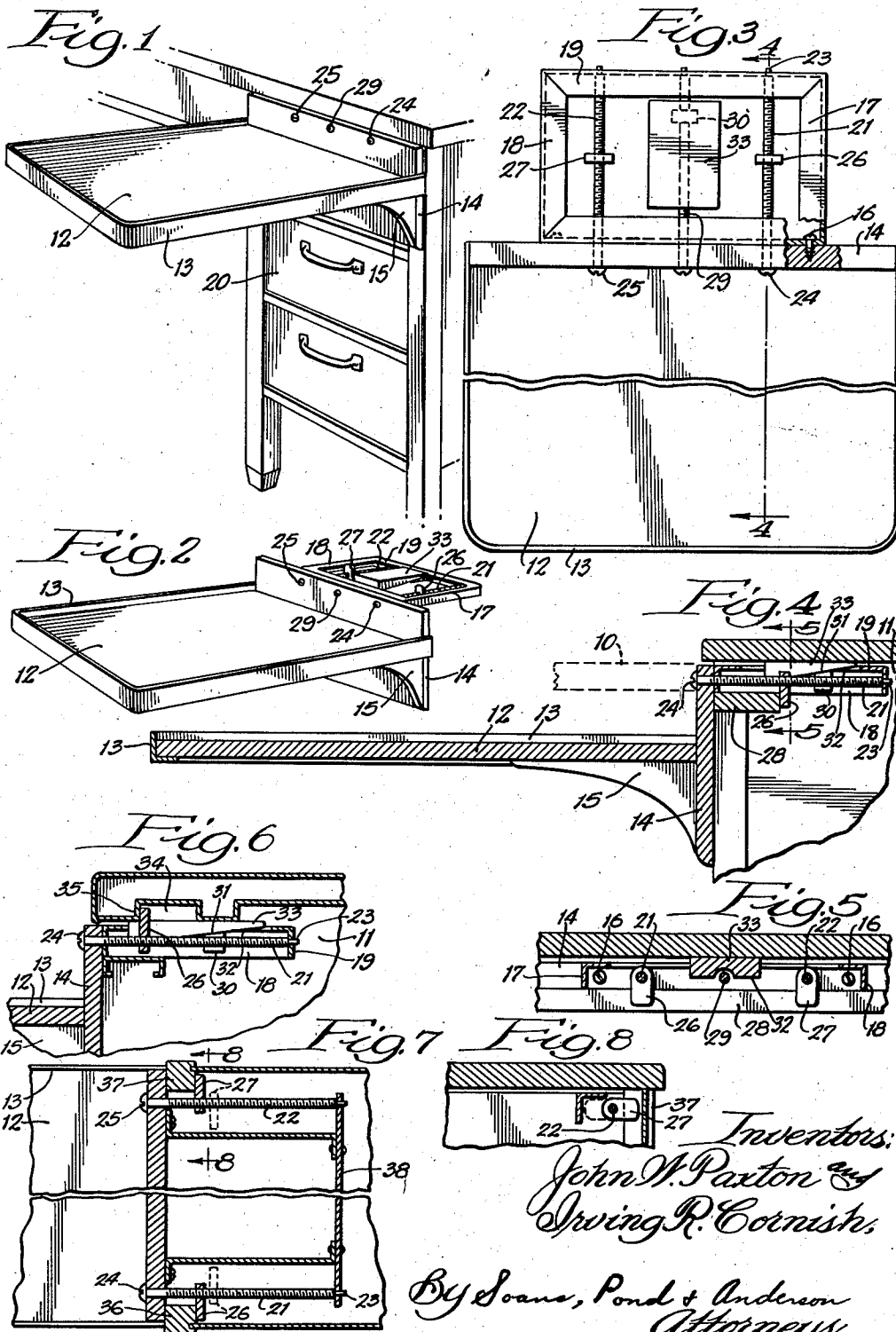
May 28, 1946.

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2,401,181

TYPEWRITER SUPPORT

Filed Nov. 27, 1941



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UNITED STATES PATENT OFFICE

2,401,181

TYPEWRITER SUPPORT

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Application November 27, 1941, Serial No. 420,683

10 Claims. (Cl. 311-17)

Our invention relates to improvements in supports. It relates particularly to means for supporting in convenient operating position such office appliances as are normally used by a person when seated. For example, typewriters, calculating machines, dictaphones, etc. It has been found that the average individual, when seated in a chair at normal height, requires for writing purposes a desk having its supporting surface elevated from the floor a distance of about thirty inches, whereas, when operating a machine such as a typewriter or comptometer, the table or other support on which the appliance is located should be at an elevation of about twenty-six inches. That is to say, an appliance support should be about four inches lower than the top of an ordinary desk.

The purpose of our invention is to provide a device in the form of an attachment to an ordinary office desk whereby an appliance of the character described may be supported at the front of such desk, at the proper height. A further object is to provide such an arrangement which can be applied to an ordinary desk without any need to employ a mechanic to apply the attachment. Further objects in general are to provide means for safely and securely locking and clamping the support in proper position on the desk whereby vibration caused by the operation of the appliance will not have any adverse effect upon the stability or rigidity of the support or the appliance which is mounted thereon.

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

Fig. 1 is a fragmentary perspective view of the front of a desk to which our attachment has been applied;

Fig. 2 is a perspective view of said attachment before applying the same to the desk;

Fig. 3 is a plan view of said attachment;

Fig. 4 is a section taken on the line 4-4 of Fig. 3;

Fig. 5 is a section taken on the line 5-5 of Fig. 4;

Fig. 6 is a section similar to Fig. 4, but showing a modified form of clamping arrangement;

Fig. 7 is a fragmentary sectional plan of a desk equipped with a further modified form of locking or clamping arrangement; and

Fig. 8 is a section taken on the line 8-8 of Fig. 7.

Referring to the drawing, it will be observed that the desk illustrated is of the type which normally is equipped with a horizontally sliding

panel serving as a writing shelf, and indicated in dotted lines at 10 in Fig. 4. When said shelf 10 is to be used, it is extended in the position shown in Fig. 4, and, when it is not in use, the custom is to slide the same rearwardly into a horizontal inwardly extending recess in the desk. Said writing shelf 10 is, however, too high for any extensive use as a support for an appliance of the character referred to.

According to our invention, the writing shelf or panel 10 is drawn out of the recess 11 in which it is normally located, and discarded. The recess 11 from which panel 10 has been removed is then made use of in order to enable our improved support to be attached or applied to the desk.

The attachment comprises a horizontal shelf 12, the upper supporting surface of which is of sufficient area to accommodate the largest appliance which it is designed to support, and preferably the outer margin of the shelf is made with a rim 13 which prevents the appliance or other objects from sliding or rolling thereon or therefrom. As shown best in Figs. 2 and 4, the shelf part 12 is carried cantilever fashion by a vertical back plate 14, braces 15 serving to reinforce the structure. Behind the back plate 14, and extending along the upper margin thereof, there is rigidly secured by any suitable means, for example screws 16 (see Fig. 3), a rectangular frame comprising side pieces 17 and 18 and a rear piece 19, said frame being conveniently constructed of angle iron. The vertical cross section of the horizontal frame composed of the members 17, 18 and 19 is of course rectangular and the frame is of such dimensions that it will slip freely into the recess 11 through the opening in the front of desk 20 into the position from which the panel 10 has been removed. However, we find it advisable to provide means for locking and clamping the said extension frame, composed of members 17, 18 and 19, into said recess 11.

Said locking or clamping arrangements preferably include means not only for holding or drawing the back plate 14 tightly against the front surface of the desk, but also, in certain instances, it may be desirable to provide means for exerting vertical pressure upon said extension frame, within the recess, so as to prevent chattering or other undesirable effects due to the necessity of making the extension frame of less vertical cross section than the opening in the front of the desk, in order to permit easy insertion thereof without mechanical fitting. However, depending upon conditions, a single form

of clamping or locking arrangement may conceivably be employed.

Considering now the means for drawing the attachment inwardly, which, for convenience, may be called the "locking arrangement," it will be seen by examination of Fig. 3 that mounted within the extension are a pair of axially horizontal screws 21 and 22 having their inner ends reduced in diameter and journaled in the vertical angle of the back member 19, as shown at 23, whereas the front ends of said screws extend outwardly through the back plate 14 and are provided with co-operating heads 24 and 25. Upon the screws 21 and 22 there are threaded cooperating lugs or turnbuckles 26 and 27, as shown best in Figs. 4 and 5. Said lugs or turnbuckles 26 and 27 are narrow enough so that when they are rotated into a position where the major dimension of the lug is horizontal, it is wholly accommodated within the cross section of the extension thereof and does not interfere with the insertion of said extension into recess 11. However, when the extension has been inserted, the lugs 26 and 27 are then turned into the position shown in Fig. 5. The screws 21 and 22 are operated by turning heads 24 and 25, and the lugs 26 and 27, which are not permitted to revolve, are thus caused to travel outwardly along the screws 21 and 22. Said lugs 26 and 27 are of such length that, in the position shown in Figs. 4 and 5, their lower ends will engage against the shoulder formed by the rear face of the frame bar 28, which forms the lower wall or side of the front part of the recess 11. Ordinarily, of course, the recess 11 is entirely open at the bottom, inwardly of frame bar 28, so that there is no difficulty in accommodating the depending lower ends of the lugs 26 and 27.

Turning now to the vertical pressure applying means, it will be seen by an examination of Figs. 3, 4 and 5 that, in addition to the screws 21 and 22, there is located within the extension a similar central screw 29 upon which there is threaded a nut or screw block 30 which is not adapted to rotate with the screw, but will be caused to advance inwardly or outwardly when the said screw 29 is turned. Said nut or block 30 is provided with an inclined upper surface as shown at 31, which cooperates with a correspondingly inclined lower surface 32 of a tapered wedge block or slide 33. Said wedge block 33 is of sufficient area that it will engage parts of the under surface of the top wall or side of the recess 11 and will be forced against the same tightly when the screw 29 is operated to draw the screw block 30 outwardly. This arrangement thus serves to apply vertical pressure downwardly upon the extension when the latter is located within the recess.

In Fig. 6, I have shown an arrangement particularly usable in connection with steel desks. In that modified form of the device, the lugs or turnbuckles 26 and 27 and their actuating means may be made substantially the same as in the previous described form. However, in the arrangement shown in Fig. 6, the upper wall of the recess 11 is made with a rectangular enlargement 34 and thus forms a shoulder 35 serving as an abutment for cooperating with the upstanding ends of the said lugs or turnbuckles.

In the arrangement shown in Figs. 7 and 8, the lugs or turnbuckles are arranged to cooperate with the vertically extending corner members 36 and 37. With this arrangement, the screws 21 and 22 are more widely spaced than is shown

in Fig. 3, their inner ends being journaled in the ends of the back member 38 of the extension.

It will be observed that, in all three types of device illustrated herein, the lugs or turnbuckles are rotated into non-interfering position when it is desired to insert the extension into the recess, and, when the extension has been so inserted, the turnbuckles are turned so as to bring their operative ends outside of the normal boundaries of the extension so as to enable said lugs to engage and clamp against the inwardly facing shoulder in the recess.

We claim:

1. Means for supporting an office appliance at less than normal desk height upon a desk of normal height provided with a recess normally adapted to house a horizontal writing panel and having an opening in the front of the desk communicating with said recess and through which said panel may be arranged to slide, comprising a member adapted to extend outwardly and horizontally from the front of the desk and having a portion for supporting an appliance at a level lower than the bottom of said opening, a vertically extending back member secured to the inner end of said member and extending upwardly therefrom, a horizontally extending extension member connected to the back of said back member adjacent the upper edge of the latter and arranged to be inserted through said opening into said recess, the desk having inwardly and outwardly facing portions adjacent said recess and opening, said back member being engageable with an outwardly facing portion of the desk to limit insertion of said extension into said recess, a horizontally extending screw member positioned in said extension and operable from the front of said back member, and means actuated by said screw member and engageable with an inwardly facing portion of the desk adjacent said recess for cooperating with said back member to lock the appliance supporting means in place on the desk.

2. Means for supporting an office appliance at less than normal desk height upon a desk of normal height provided with a recess normally adapted to house a horizontal writing panel, said recess, at a point behind the front, being larger in cross section than the opening in the front so as to provide a rearwardly facing abutment, and there being an opening in the front of the desk communicating with said recess and through which said panel may be arranged to slide, comprising a member adapted to extend outwardly and horizontally from the front of the desk and having a portion for supporting an appliance at a level lower than the bottom of said opening, a vertically extending back member secured to the inner end of said member and extending upwardly therefrom, a horizontally extending extension member connected to the back of said back member adjacent the upper edge of the latter and arranged to be inserted through said opening into said recess, said back member being engageable with a portion of the front of the desk to limit insertion of said extension into said recess, a horizontally extending screw member positioned in said extension and operable from the front of said back member and a lug threaded on said screw and rotatable thereon into such position that the lug will engage said rearwardly facing abutment when said screw is operated.

3. Means for supporting an office appliance at less than normal desk height upon a writing desk of normal height provided with a horizontally and

inwardly extending recess in the front of the desk, the desk having outwardly and inwardly facing surface portions adjacent said recess, said recess being normally adapted to house a horizontal panel which is arranged to slide outwardly from a housed position in said recess to a writing shelf position, comprising a member adapted to extend outwardly and horizontally from said desk front and having an appliance-supporting surface at lower than normal desk height level, a part rigid with said member and insertable into said recess, means engageable with said outwardly facing desk portion for limiting insertion of said part into said recess, and adjustable locking means carried by said extension for engaging an interior portion of the desk for locking said extension in said recess, said adjustable means embodying an element operable from the exterior of the front of the desk for adjusting said locking means.

4. Means for supporting an office appliance at less than normal desk height upon a writing desk of normal height provided with a horizontally and inwardly extending recess in the front of the desk, the desk having outwardly and inwardly facing surface portions adjacent said recess, said recess being normally adapted to house a horizontal panel which is arranged to slide outwardly from a housed position in said recess to a writing shelf position, comprising a member adapted to extend outwardly and horizontally from said desk front and having an appliance-supporting surface at lower than normal desk height level, a part rigid with said member and insertable into said recess, means engageable with said outwardly facing desk portion for limiting insertion of said part into said recess, and screw actuated clamping means for locking said part in said recess, said clamping means embodying an element which is adjustable from an inoperative position substantially within the thickness of said part, in which inoperative position said part and clamping means are insertable into said recess, to an operative position projecting from said part for engagement with said inwardly facing surface portion of the desk.

5. Means for supporting an office appliance at less than normal desk height upon a writing desk of normal height provided with a horizontally and inwardly extending recess in the front of the desk, the desk having outwardly and inwardly facing surface portions adjacent said recess, said recess being normally adapted to house a horizontal panel which is arranged to slide outwardly from a housed position in said recess to a writing shelf position, comprising a member adapted to extend outwardly and horizontally from said desk front and having an appliance-supporting surface at a level lower than the bottom of said recess, a part rigid with said member and insertable into said recess, and means for locking said part in said recess comprising relatively adjustable means for engaging said outwardly and inwardly facing surface portions and screw actuated means for applying vertical pressure to a wall of said recess to lock said part against vertical movement in the recess.

6. Means for supporting an office appliance at less than normal desk height upon a writing desk of normal height provided with a horizontally and inwardly extending recess in the front of the desk, the desk having outwardly and inwardly facing surface portions adjacent said recess, said recess being normally adapted to house a horizontal panel which is arranged to slide outwardly

from a housed position in said recess to a writing shelf position, comprising a member adapted to extend outwardly and horizontally from the front of the desk and having a portion for supporting an appliance at a level which is lower than the bottom of said recess, a vertically extending back member secured to the inner end of said appliance supporting portion and extending upwardly therefrom, a horizontally extending part rigidly connected to said back member adjacent the upper edge thereof and adapted to be inserted into said recess, and relatively adjustable means for engaging said outwardly and inwardly facing surface portions to lock said part in substantially fixed position in said recess to thereby maintain said appliance-supporting portion in fixed, operative position on a desk.

7. An office appliance supporting shelf structure adapted to be attached to a desk in the place of a member which is slidable inwardly and outwardly in a recess in the desk, such desk having outwardly, inwardly, upwardly and downwardly facing surface portions adjacent said recess, said structure embodying a shelf part which is adapted to project outwardly from the desk, a mounting part rigid with said shelf part which is insertable into a desk recess normally occupied by a slidable member as aforesaid, said mounting part having horizontally spaced portions respectively adapted to engage upwardly and downwardly facing surface portions of the desk adjacent said recess, an abutment carried by the structure for engaging said outwardly facing surface portion to limit insertion of said mounting part into said recess, and adjustable means carried by said mounting part within its thickness and insertable with said part into said recess, said adjustable means being movable from the said position wholly within the thickness of said part, to a projecting position relative thereto, for engaging said inwardly facing surface portion of the desk to lock said extension in said recess, said adjustable means including actuating means accessible on an exposed portion of the appliance when said mounting part is inserted in the desk recess for effecting adjustment of said locking means into cooperative relation to said inside desk portion.

8. An office appliance supporting shelf structure adapted to be attached to a desk in the place of a member which is slidable inwardly and outwardly in a recess in the desk, said desk having outwardly and inwardly facing surface portions adjacent said recess, said structure embodying a shelf part which is adapted to project outwardly from the desk, a mounting part rigid with said shelf part and insertable into a desk recess normally occupied by a slidable member as aforesaid, an abutment for engaging said outwardly facing surface portion to limit insertion of said mounting part in said recess, and adjustable means carried by said mounting part within its thickness and insertable with said part into said recess, said adjustable means being movable from the said position wholly within the thickness of said part, to a projecting position relative thereto for engaging said inwardly facing surface portion of the desk to lock said part in said recess, said adjustable means including actuating means accessible on an exposed portion of the appliance when said part is inserted in the desk recess for effecting adjustment of said locking means into operative relation to said inwardly facing surface portion.

9. A device for use on a desk having a space

for a slidable part and provided with a member extending across the top of said space adjacent the entrance thereto, and having a rearwardly facing surface, the device comprising a shelf member, a mounting part rigidly connected to said shelf member, said part being of reduced width relative to the width of said shelf member and extending rearwardly relative to the latter, said part being adapted to be inserted into said desk space, the device having rearwardly facing shoulders on opposite sides thereof for engaging the front of the desk, said rearwardly extending part having an underside portion adapted to rest on the lower wall of said entrance, and means for locking the device in place on the desk comprising a member projecting upwardly from said rearwardly extending part for engaging said rearwardly facing surface of said member which extends across the top of said space.

10. An attachment for supporting an office appliance on a desk having in its front an opening normally receiving a slidable desk part, the desk structure having parts which provide inwardly and outwardly facing abutments adjacent said opening, the attachment comprising a shelf member, and inner and outer means carried by said shelf member clampingly engageable respectively with said inwardly and outwardly facing abutments to secure the shelf member in fixed position on the desk, and means accessible outside of the desk for adjusting said inner clamping means relative to said outer clamping means for effecting said clamping engagement.

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