March 11, 1952 J. R. JONES ET AL 2,588,844

INSERTABLE PLATFORM FOR DESKS

Filed May 7, 1949 2 SHEETS—SHEET 1

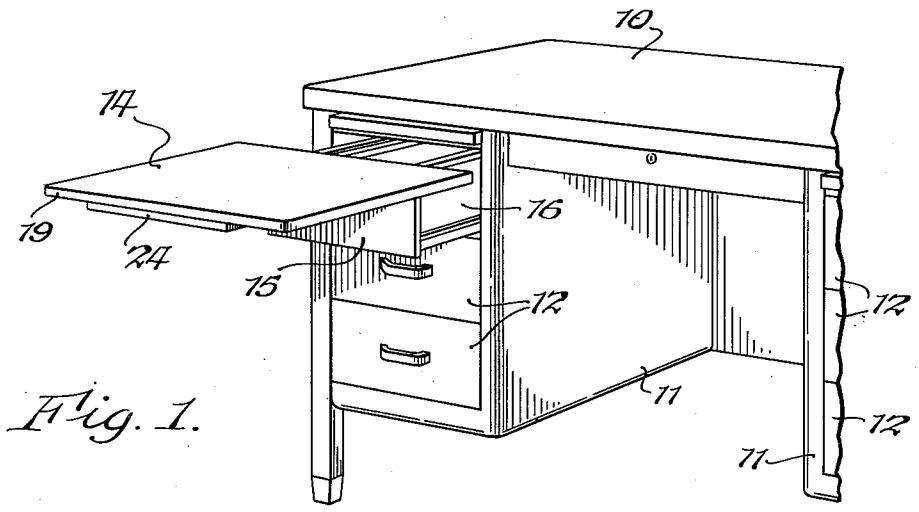


Fig. 1.

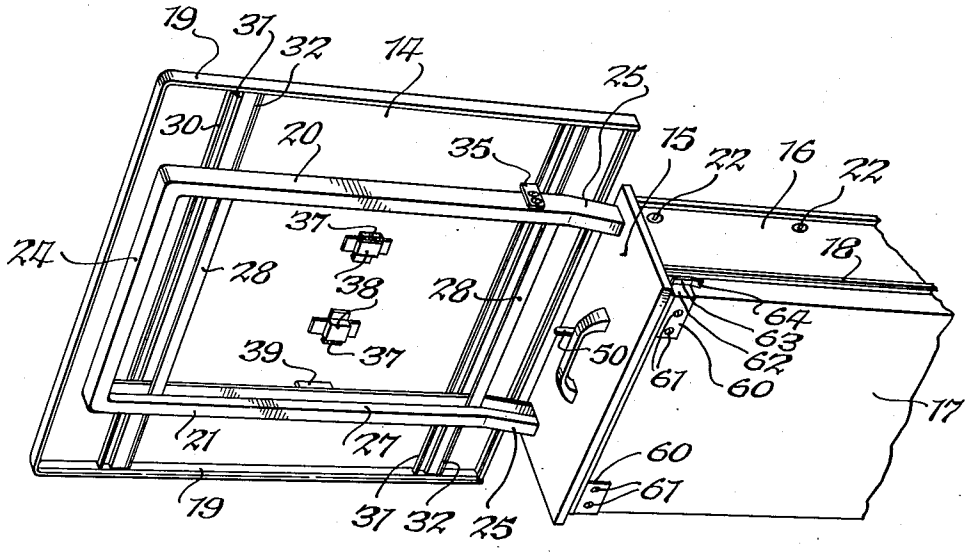


Fig. 2.

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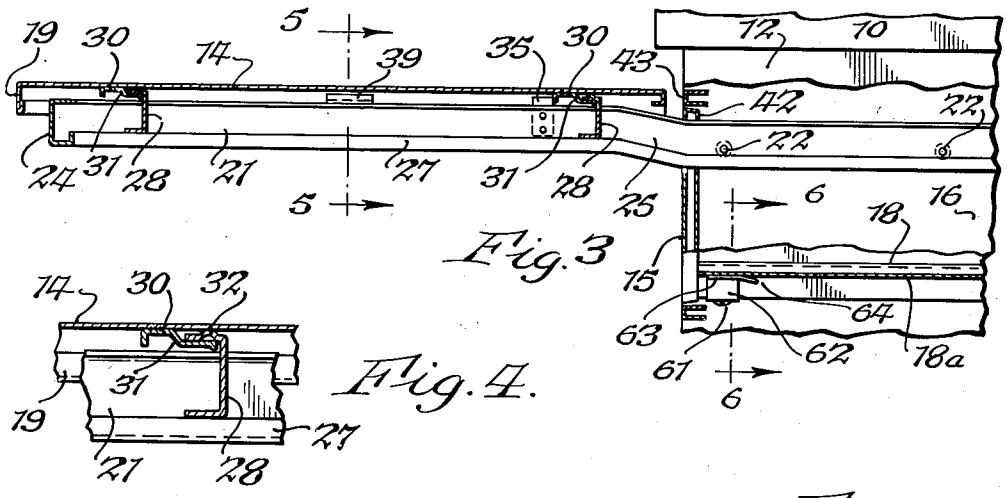


Fig. 3

Fig. 4.

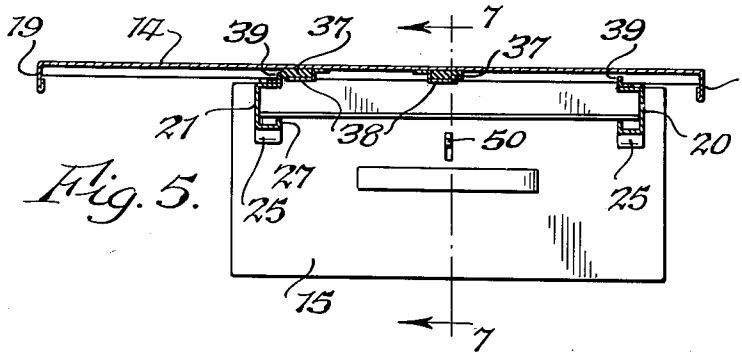


Fig. 5.

Fig. 6.

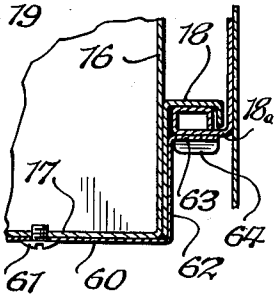


Fig. 7.

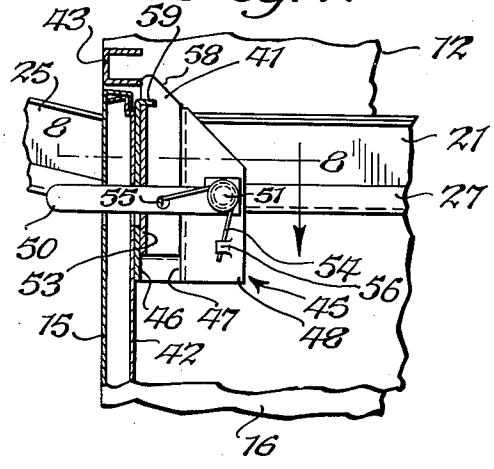
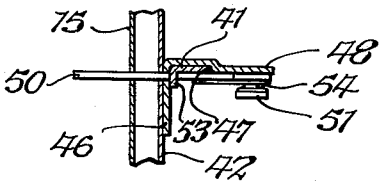


Fig. 8.



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Patented Mar. 11, 1952

2,588,844

UNITED STATES PATENT OFFICE

2,588,844

INSERTABLE PLATFORM FOR DESKS

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Application May 7, 1949, Serial No. 92,054

10 Claims. (Cl. 311—17)

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This invention relates to improvements in the mounting of auxiliary platforms on desks of the usual type for supporting typewriters or other machines on such platforms at a side of the desk to enable persons sitting at the desk to operate such machines, and more particularly to improvements in which the platform is mounted on a drawer which may be inserted into a drawer space of a desk.

One of the objects of this invention is to provide rigid and secure supporting means for a platform of this type.

Another object is to provide a construction in which a platform for supporting a machine on an insert drawer is movable transversely of the insert drawer.

It is also an object of this invention to provide means of improved construction for rigidly holding the insert drawer against shifting while the machine is in use.

Other objects and advantages will be apparent from the following description of one embodiment of the invention and the novel features will be particularly pointed out hereinafter in connection with the appended claims.

In the accompanying drawings:

Fig. 1 is a fragmentary perspective view of a desk provided with a platform mounted in accordance with this invention and showing the insert desk drawer partly inserted in the desk.

Fig. 2 is a fragmentary, perspective view showing the underneath portion of the platform and insert drawer and of the means for supporting the platform from the drawer.

Fig. 3 is a longitudinal, central, sectional elevation of the platform and showing portions of the desk and insert drawer.

Fig. 4 is a fragmentary, longitudinal sectional elevation thereof, showing on an enlarged scale, the slidable connection between the platform and the supporting means therefor.

Fig. 5 is a fragmentary sectional elevation thereof, on line 5—5, Fig. 3.

Fig. 6 is a fragmentary, enlarged sectional elevation thereof, on line 6—6, Fig. 3.

Fig. 7 is a fragmentary, longitudinal, sectional elevation thereof, on line 7—7, Fig. 5.

Fig. 8 is a fragmentary, sectional plan view thereof, on line 8—8, Fig. 7.

10 represents a desk of any suitable or desired construction having pedestals 11 housing a series of drawers 12. The upper drawer of one of the pedestals, in the construction illustrated, is removed and replaced by an insert drawer on which a platform 14 for a typewriter or other machine

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is mounted. This insert drawer, except as hereinafter specified, may be similar in construction to the drawers 12, and includes a front 15, sides 16 and bottom 17. The sides of the insert drawer may be provided with suitable slide rails 18 or the like cooperating with similar fixed slide rails 18a provided within the desk pedestal for sliding the drawer into and out of the pedestal.

The platform 14 may be of any suitable or desired construction, that shown being made of sheet metal and having downwardly extending flanges 19 at the edges thereof. In order to support this platform 14 beyond the front 15 of the insert drawer, this drawer is provided with a pair of arms 20, 21 which are rigidly secured to the sides of the drawer and extend through apertures in the drawer front 15 to a considerable distance beyond said front. Any suitable means may be provided for mounting these arms on the inner faces of the sides of the drawer, such for example, as bolts 22, Figs. 2 and 3, although, if desired, the arms may be welded or otherwise secured to the drawer sides. The arms are made of sufficient strength and rigidity to support the weight of the platform and a machine mounted thereon, and for this purpose the arms are preferably made of metal of substantially U or channel shape and the outer or front ends of the arms may be connected by means of a cross piece 24 to form a rigid supporting structure for the platform.

If desired, the arms may be provided at the portions thereof adjacent to the outer face of the drawer front 15 with upwardly inclined portions 25, so that the platform 14 may be supported to the desired extent above the upper edge of the drawer front 15. The arms may also be provided on the sides thereof facing each other with upwardly extending flanges 27.

In order to support the platform 14 for sidewise movement with reference to the arms 20 and 21, cooperating guide parts or members are arranged on these arms and on the platform 14. In the particular construction shown by way of example, the arms 20 and 21 are provided with stationary guide rails 28 which extend transversely of and are secured to the arms 20 and 21. These stationary guide rails may be of channel shape as clearly shown in Figs. 2, 3 and 4, and the lower legs or flanges of these channels may rest upon the upwardly extending flanges 27 of the arms. The upper flanges of the stationary guide rails 28 extend above the upper edges of the arms 21 and 22 and the ends of the guide rails 28 may abut against and be secured to the

inner surfaces of the arms 20 and 21. If desired, the ends of the stationary guide rails may be slotted to receive the upper flanges of the arms 20 and 21. Any other suitable means may be employed for securing the stationary guide rails 28 to the arms 20 and 21.

The platform 14 is provided on its undersurface with guide rails or members 30 formed to cooperate with the stationary guide rails 28. The guide rails 30 of the platform 14 include portions which may be welded or otherwise secured to the undersurface of the platform 14 and downwardly offset portions 31 which extend in spaced relation to the lower surface of the platform 14 and are adapted to engage the undersurfaces of the upper flanges of the stationary guide rails 28. The upper flanges of the stationary guide rails 28 may be provided with longitudinally extending beads 32 on which the lower surface of the platform 14 may bear. By means of this construction in which the upper flanges of the stationary guide rails 28 extend into the spaces between the offset portions 31 and the platform, this platform is held against vertical movement relatively to the arms 20 and 21. This construction, however, permits the platform to move laterally of the arms 20 and 21.

The upper flanges of the stationary guide rails 28 both extend in the same direction from the upright webs thereof, for example, outwardly with reference to the insert drawer, so that the platform 14 may be moved into operative relation to the stationary guide rails by first placing the platform on the stationary upper flanges of the stationary guide rails 28, with the guide rails 30 of the platform in spaced relation to the stationary guide rails. The platform may then be moved toward the front panel of the insert drawer so that the lower projections 31 extend under the upper flanges of the stationary guide rails 28. After the guide rails have been placed into operative relation to each other, stops are employed for holding them in such relation and preventing movement of the platform in a direction away from the insert drawer front. For this purpose in the construction shown, stop members are provided which are in the form of a pair of upwardly extending small plates 35 secured to the arms 20 and 21 and which have their upper ends arranged in close proximity to the outer portions of the guide rails 30. Consequently, movement of the platform away from the insert drawer, which would result in the guide rails moving out of engagement with each other, is prevented by these stop members. Stop means of any other type for preventing forward movement of the platform 14 relatively to the drawer insert may be provided.

Suitable stop means are also provided for limiting the transverse sliding movement of the platform 14 relatively to the arms 20 and 21, and in the construction shown for this purpose, a pair of resilient pads 37 are mounted on the lower face of the platform. These pads may be held in place in any suitable manner, for example, by means of clips 38 which are welded or otherwise secured to the lower face of the platform and which have recesses or sockets into which the resilient pads extend and which grip the same. The ends of the pads extending beyond the clips 38 may engage stop members 39 secured to and extending upwardly from the arms 20 and 21. Stop means of other construction may be provided, if desired.

Means are also provided for locking the insert drawer to the desk pedestal to prevent outward movement of the same during the use of a typewriter or other machine supported on the platform 14. In the construction shown for this purpose, a locking bolt or latch 41 is provided which is slidably mounted on an inner panel 42 of the drawer front 15. This locking bolt is guided for vertical movement and when in its upper position as shown in Fig. 7, the bar engages the inner edge of a cross member 43 of the desk pedestal which is arranged immediately above the insert drawer and secured to the pedestal.

The locking bolt or latch is suitably mounted on the drawer front 15 by means of a bracket 45 which is preferably made of a single piece of metal having a flange 46 which may be welded or secured to the inner panel 42 of the drawer front 15, and a flange or arm extending into the interior of the insert drawer and having a recessed or grooved portion 47 in which the locking bar 41 is slidably arranged. This bracket terminates beyond the grooved portion in an extension 48.

The movement of the locking bolt 41 is controlled by means of a lever 50 mounted on a pivot pin 51 on the extension 48 of the bracket, and this lever extends through an aperture in a flange 53 of the locking bolt or latch 41 and outwardly through registering slots in the drawer front 15, the panel 42 thereof and the flange 46 of the bracket. The lever 50 is biased by means of a spring 54, extending about the pivot pin 51. One end of the spring extends through an aperture 55 of the lever, and the other end engages a lug 56 formed on the forward extension 48 of the bracket 45. The spring, consequently, urges the lever 50 into an upper position shown in Fig. 7, in which the locking bolt or latch 41 is in its upper position in engagement with the inner edge of the cross member 43 of the desk pedestal. The locking bolt is provided at its upper end with a beveled face 58 so that when the insert drawer is inserted into its innermost position in the desk pedestal, the beveled face 58 engaging the cross member 43 forces the locking bolt downwardly against the action of the spring and after the locking bolt has passed the cross member 43 it is again moved upwardly into locking position as shown in Fig. 7, by means of the spring 54. When it is desired to remove the insert drawer from the desk pedestal, the outer end of the lever 50 is moved downwardly to move the locking bolt or latch out of engagement with the cross member 43. The bolt 41 is held in operative position to its supporting bracket and within the groove therein by the lever 50 and by a turned-over upper end portion 59 of the flange 46, as shown in Fig. 7.

The latch or lock mechanism for holding the insert drawer in the desk is of strong and rigid construction, so as to securely prevent outward movement of the insert drawer during the operation of a machine mounted on the platform. This mechanism also consists of few parts and is easily produced in quantities.

It is very desirable, when a machine mounted on the platform 14 is in use, to prevent vibrations or lost motion of the platform relatively to the desk, and for this purpose, in the particular construction illustrated, a spring member is mounted on the insert drawer, which yieldingly engages the slide rail 18a of the desk when the insert drawer is in its operative position. In the particular construction illustrated for this purpose, see particularly Figs. 3 and 6, this spring is of angle-shape, having a lower leg 60 secured to

the bottom of the insert drawer by means of screws, bolts, or the like. The spring member has an upwardly extending leg 62 provided at its upper end with a laterally extending flange 63 formed to engage the lower surface of the stationary slide rail 18a of the desk. The flange preferably has a downwardly extending inclined lip 64 to facilitate engagement of the slide rail 18a by the spring member when the insert drawer is moved into its final position within the desk pedestal. By means of this construction, when the insert drawer is in its operative position in the desk pedestal, the stationary slide rail 18a is gripped between the slide rail 18 of the insert drawer and the flange 64 of the spring member so that a snug fit is produced between the insert drawer and the desk, whereby both downward and upward movement of the insert drawer relatively to the desk is prevented.

The construction described provides a secure and firm mounting of the machine supporting platform on a desk in such a manner that there is no lost motion or looseness between the insert drawer and the desk which might cause rattling or objectionable noises, or vibrations of a machine supported on the platform. The spring member is mounted in close proximity to the drawer front, so that the spring member does not become operative until the insert drawer is moved into its final position in the drawer space and is then held in this position by the latch or locking bolt 41. Consequently, the spring does not interfere with the free sliding of the insert drawer in the drawer space until the same is almost in its final position, at which time a small additional force is necessary to move the insert drawer into its final position in which the spring member engages the slide rail 18a and the locking bolt or latch is in operative or locking position. The construction has the further advantage that the platform may be moved crosswise of the insert drawer toward and from the operator of the machine so that during normal use of the machine the platform 14 need not extend beyond the side of the desk. The platform, however, may be slid away from the operator to provide ready access to the drawers 12 of the pedestal which are located below the insert drawer, or to position the machine in convenient relation to the operator. By providing lateral adjustment of the platform relatively to the drawer, the platform may be made wider than was heretofore practical, without interfering with adjacent desks or requiring more floor space, thus affording more room on the platform for copyholders and other articles.

It will be understood that various changes in the details, materials, and arrangements of parts which have been herein described and illustrated in order to explain the nature of the invention, may be made by those skilled in the art within the principle and scope of the invention, as expressed in the appended claims.

We claim as our invention:

1. In a unit for supporting a typewriter or other machine on a desk, including a drawer insertable into a drawer space of a desk, that improvement which includes a pair of arms secured to said drawer and extending forwardly therefrom, a machine supporting platform supported on said arms, a pair of guide rails rigidly secured to said arms and extending crosswise thereof, parts on said platform cooperating with said guide rails and which guide said platform for movement transversely of said arms, and cooperating stop members on said arms and said platform to limit the extent to which said platform may move crosswise of said arms.

2. In a unit for supporting a typewriter or other machine on a desk, including an insert drawer slidable into a drawer space of a desk, that improvement which includes a pair of arms secured to said insert drawer and extending forwardly therefrom, a machine supporting platform, a pair of guide rails rigidly secured to and extending crosswise of said arms and having portions extending above said arms on which said platform is slidable transversely of said arms, parts on said platform and cooperating with said guide rails for holding said platform against vertical movement relatively to said guide rails, and cooperating stop members on said arms and said platform for limiting the extent to which said platform may slide relatively to said arms crosswise of said arms.

3. A machine supporting unit according to claim 2, characterized in that said guide rails are of channel shape in cross section and each has a substantially horizontal leg extending above the upper surfaces of said arms, said platform being slidable on said legs, and in which the parts on the platform are in the form of guide rails mounted on the lower surface of said platform and having portions thereof extending into engagement with the lower surfaces of said legs for holding said platform against vertical movement relatively to said guide rails.

4. A machine supporting unit according to claim 2, characterized in that said guide rails are of channel shape in cross section and each has a substantially horizontal leg extending above the upper surfaces of said arms, said platform being slidable on said legs, said parts on the platform being in the form of guide rails mounted on the lower surface of said platform and having portions thereof extending into engagement with the lower surfaces of said legs for holding said platform against vertical movement relatively to said guide rails, and stop members on said arms engaging said guide rails of said platform for holding the same in engagement with said guide rails of said arms.

5. In a unit for supporting a typewriter or other machine on a desk, including an insert drawer slidable into a drawer space of a desk, that improvement which includes a pair of arms secured to said insert drawer and extending forwardly therefrom, a machine supporting platform mounted on the portions of said arms which extend beyond said insert drawer, said desk having slide rails in said drawer space, slide rails on the slides of said drawer and formed to slide upon the upper surfaces of said slide rails of said desk, and spring members secured to said insert drawer in position to engage lower surfaces of said slide rails of said desk when said insert drawer is fully inserted into said drawer space, to yieldingly grip said slide rails of said desk between said slide rails of said insert drawer and said spring members, to oppose movement and vibrations of said platform.

6. A construction according to claim 5, in which said spring members are secured to the bottom of the insert drawer and have parts extending upwardly into engagement with said slide rails of the desk.

7. A construction according to claim 5, in which said spring members are secured to said insert drawer adjacent to the front thereof and engage the slide rail of the desk only when said

insert drawer is moved into its final position in said drawer space.

8. In a unit for supporting a typewriter or other machine on a desk, including an insert drawer slidable into a drawer space of a desk, that improvement which includes a pair of arms secured to said insert drawer and extending forwardly therefrom, a machine supporting platform mounted on the portions of said arms which extend beyond said insert drawer, said desk having slide rails in said drawer space, slide rails on the sides of said drawer and formed to slide upon the upper surfaces of said slide rails of said desk, spring members secured to said insert drawer in position to engage lower surfaces of said slide rails of said desk when said insert drawer is fully inserted into said drawer space, to yieldingly grip said slide rails of said desk between said slide rails of said insert drawer and said spring members, to oppose movement and vibrations of said platform, and releasable locking means for holding said insert drawer in its innermost position in said drawer space to prevent disengagement of said spring members from said slide rail of the desk.

9. A construction according to claim 8, in which said locking means comprise a latch member mounted on said insert drawer and yieldingly urged into engagement with a part of said desk when said insert drawer is in its innermost position in said drawer space.

10. In a unit for supporting a typewriter or other machine on a desk, including a drawer insertable into a drawer space of a desk, that improvement which includes a pair of arms rigidly secured to said drawer and extending forwardly therefrom, a machine supporting platform supported on said arms, a pair of guide rails rigidly secured to said arms and extending crosswise thereof and on which said platform rests, a pair of guide rails rigidly secured on said platform and cooperating with said guide rails of said arms to permit movement of said platform transversely of said arms, portions of said guide rails of said platform extending under portions of said guide rails of said arms to prevent upward movement of said platform relatively to said arms, and stop means for limiting the transverse movement of said platform relatively to said arms.

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