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MACHINE FOOT AND ANCHORAGE

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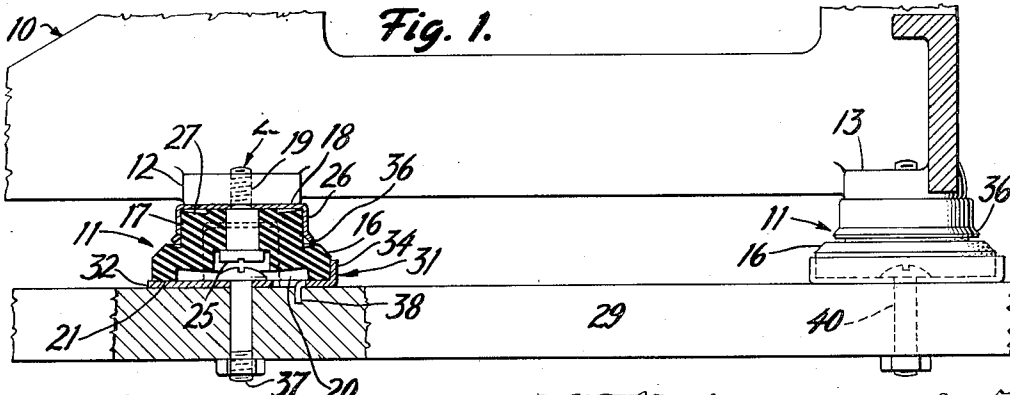


Fig. 1.

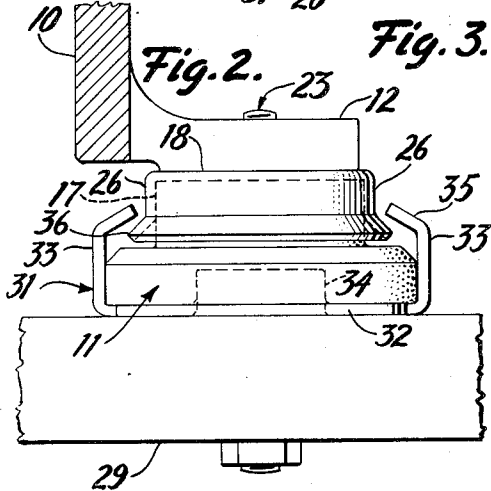


Fig. 2.

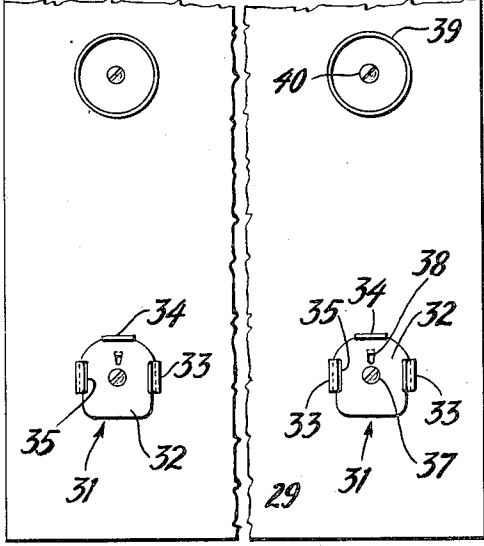


Fig. 3.

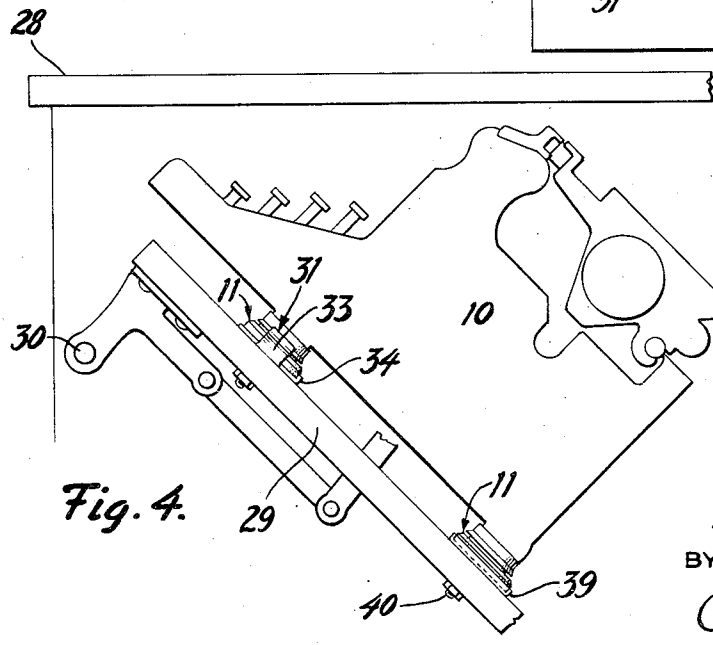


Fig. 4.

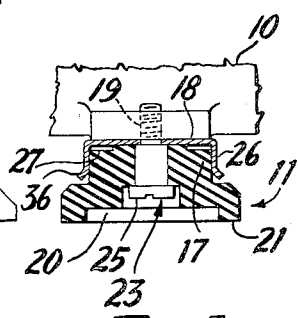


Fig. 5.

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MACHINE FOOT AND ANCHORAGE

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1 Claim. (Cl. 248—24)

1

This invention relates to sound and shock absorbing feet for typewriting and other office machines, as well as to machine anchoring devices accommodating such machines for retirement into concealment in drop leaf desks.

It is one object of the invention to provide an economically manufacturable, efficient sound deadening foot suitable for typewriting and other office machines.

It is another object of the invention to provide efficient, economically manufacturable means suitable to locate and anchor a machine on a drop leaf or a drop leaf desk.

Further it is an object of the invention to provide a combination machine-locating and anchorage-means, the use and operation of which will be easily understood by everyone, and which is rugged in structure, and will be convenient in use.

It is still a further object of the invention to provide machine anchorage means serving in efficiently effective cooperation with sound deadening machine feet to locate the machine.

Another object of the invention is to provide efficient machine locating and anchoring means which permit ready and convenient removal, as well as convenient replacement of the machine on a supporting board of the drop-leaf type.

In conjunction with all the above noted objects it is a further object to provide machine anchorage devices which do in no manner have a detrimental effect on the noise reducing service rendered by resilient machine feet.

Referring now to the drawings,

Figure 1 is a sectional side elevation showing the left side of a typewriter associated with a leaf of a desk by novel sound deadening feet and by novel typewriter anchorage and locating means,

Figure 2 shows the machine locating and anchorage means of Figure 1 and its associated typewriter foot in frontal elevation,

Figure 3 is a plan view and illustrates a drop leaf of a desk having machine anchorage and locating means attached thereto,

Figure 4 depicts schematically in side elevational aspect a typewriter lowered into a retired position in a desk, the typewriter being held by the machine anchorage means of the invention, and

Figure 5 shows the novel foot featured herein under no-load condition, that is in a state prevailing when it is lifted off a supporting surface.

In the drawings the reference numeral 10 designates a typewriter or typewriter frame. In Figure

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1, only the lower part of the right side of the frame 10 is shown. A front and a rear foot 11 are respectively secured to frame lugs 12 and 13 reaching inwardly at the bottom of each side of the frame.

5 These four feet may be all of identical structure, and each comprises a body of resilient material, such as fairly resilient rubber, having a large-expanse base portion 16 and having rising therefrom a smaller diameter upper portion 17 which

10 is covered by a cap 18 of rigid material, preferably steel. Said base 16 of the foot body has at its underside a centrally located cavity 20 leaving a widespread machine resting fringe 21. The foot

15 body, as well as its cap 18, may be of round contour, as illustrated, but other shapes may be employed to suit the aesthetic taste. The foot body 15 has a central bore or perforation to accommodate a foot securing element 23 in the form of a

20 shouldered screw. This screw has a reduced, threaded portion 19 extending through a central perforation in the cap 18, and into the respective frame lugs 12 or 13. The shoulder of the screw serves to clamp the cap 18 securely against the

25 frame lug, and a head 25 of the screw is accommodated in a central enlargement of the cavity 20, and serves to anchor the resilient foot body to the machine frame. The cap 18 includes a stiff

30 skirt 26 forming a socket having a cylindrical interior in which the cylindrical exterior of said reduced, small diameter body portion 17 fits slidingly for vertical displacement relative to the

35 skirt 26, and whereby the foot body is stabilized and reinforced horizontally. The reduced body portion 17 extends vertically into solid contact with the cap 18 in an area closely about the screw 23

40 but has an annular downward offset or recess externally of said area within said cap 18, as at 27, thereby to allow the cylindrical exterior of the reduced body portion 17 to flex upwardly inside

45 of the cap skirt 25 when the load of the machine is borne by the feet as shown in Figure 1. While relaxed, that is while not under load, the resilient foot body is in the condition shown in Figure 5 and there is an appreciable clearance above the

50 annular recess 27 in the cap 18. In Figure 1, the machine rests resiliently supported by the several foot bodies, such bodies being allowed to sag within the widespread resting fringe 21 provided for by the base cavities 20. The widespread resting fringe gives widespread contact and good

55 traction upon any supporting surface the machine may be standing. It will be observed that the skirts 26 of the several foot caps function to stabilize the machine horizontally but do not rob the foot of vertical resiliency. The feet of

the invention have thus great vibration damping and insulating effect, without sacrificing horizontal stability.

The typewriter equipped with the feet just described may be standing on any straight supporting surface, but in accordance with a further object of the invention, the described feet are also devised for novel cooperation with novel, simple machine locating and anchoring means that will facilitate retirement of the typewriter into concealed position in a drop leaf desk 28, as depicted in Figure 4. The drop leaf desk includes a tiltable machine supporting leaf 29 which for use of the machine is movable to a horizontal position about a pivot axis indicated at 30.

Said machine locating and anchoring means comprise for each of the two front feet 11, a foot-receiving pocket device 31. Each of said pocket devices comprises, a bottom or floor-panel 32, and a wall structure rising therefrom which consists of two upreaching side walls or tabs 33 and a rear wall or tab 34. Said side tabs 33 have each an inwardly reaching flange 35, see Figure 2, which overlies with some clearance an outward brim 36 formed on the foot cap. Each of said pocket devices is securable to the machine support or drop leaf 29 by a screw or bolt 37, and a tine 38 projecting downwardly from each fixture is capable of indenting the supporting leaf to prevent rotation of the fixture about the screw 37.

When the typewriter is in use it stands upon the leaf or support 29 with the front feet located in the pockets of said fixtures 31, said two front feet being confined horizontally on three sides by said walls 33, 34. During use of the machine the flanges 35 of said fixture do in no manner restrict or impede the feet from yielding vertically. However when the machine is being retired into tilted position in the desk, as shown in Figure 4, said flanges 35 in cooperation with brims 36 formed on the two caps 18 of the two front feet, and by reason of the broad foot base 16 being contacting the rear flange 34, serve to hold or anchor the machine against raising from the tiltable desk leaf 29. In effect the machine hangs securely by its front feet in the pocket devices 31 which preferably are formed of sheet steel. The said brims 36 of the foot caps are sufficiently spaced from the top of the base 16 so that under the load of the machine the brim will not be contacting. The fronts of the pocket devices are open for the purpose of placing the machine into anchored position, the machine being handled to slide the two front feet 11 from the front, rearwardly, so that the large foot bases 16 are bordered on three sides by the walls 33, 34.

It will be noted that the pocket devices will give rugged service, cannot get out of order, are easily installable, and an operator will have no

difficulty to make use thereof. No parts need to be manipulated and all that the operator needs to know is that the front feet must be located in the pockets. The machine is also readily removable without difficulty.

There may be used in addition to said anchorage devices 31 two upright cups 39, see Figure 3, wherein to locate the machine by its rear feet 11 against forward displacement out of the pocket devices 31. These locating cups 39 are not a necessity but give assurance that the machine is properly located. Screws or bolts 40 serve to hold the cups upon the desk leaf 29.

If said rear cups 39 are used in combination with the anchorage devices 11, the operator in placing the machine sees to it that the rear feet are held slightly above the cups while the front feet are slid rearwardly into the pocket devices 31. For removing the machine it is required to first lift the rear feet out of the cups and then to move the machine forwardly.

What is claimed is:

A foot body of a resilient material for use in supporting a machine resiliently, comprising, a relatively large-expanse base portion headed by a smaller diameter cylindrical upper portion, the cylindrical exterior of the smaller diameter portion being adapted to fit slidably a cylindrical interior of a socket of a foot cap of rigid material, said base portion having a shallow bottom cavity leaving a relatively narrow perimeter portion for contact upon a supporting plane, the foot body further having a vertical central bore for accommodation of a securing screw which is adapted to pass upwardly through a central perforation in the foot cap, said central bore having an enlargement above said cavity to recess the head of the securing screw, and the cylindrical smaller diameter portion of the body having at the top an annular recess leaving a raised central area around the bore for sole loading contact against the cap in the socket thereof. supporting contact against the cap in the socket thereof.

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