Feb. 16, 1965 G. A. O'BRIEN 3,169,495

DRAWER AND DRAWER MOUNTING FOR SEWING MACHINE STAND

Filed Dec. 31, 1962

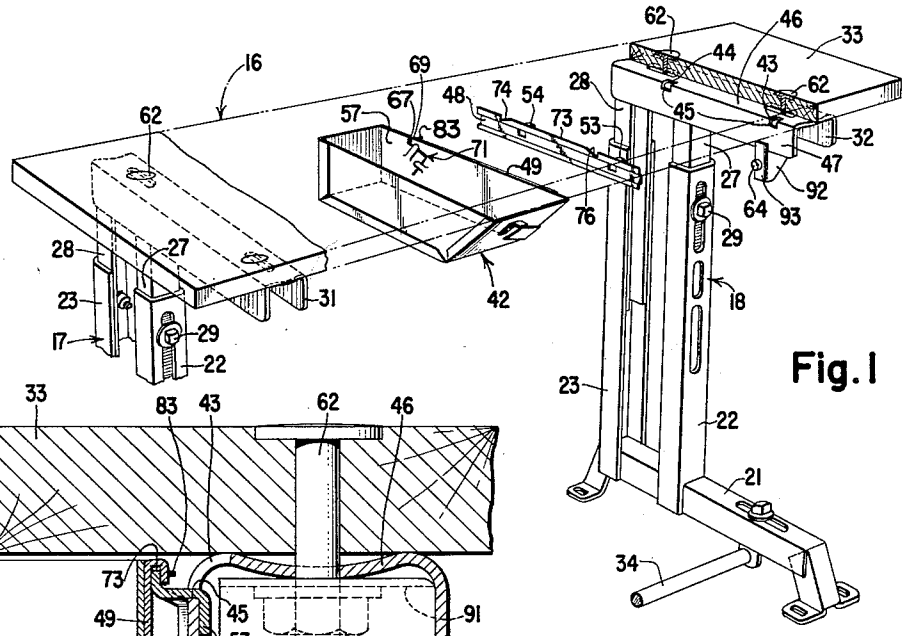


Fig. 1

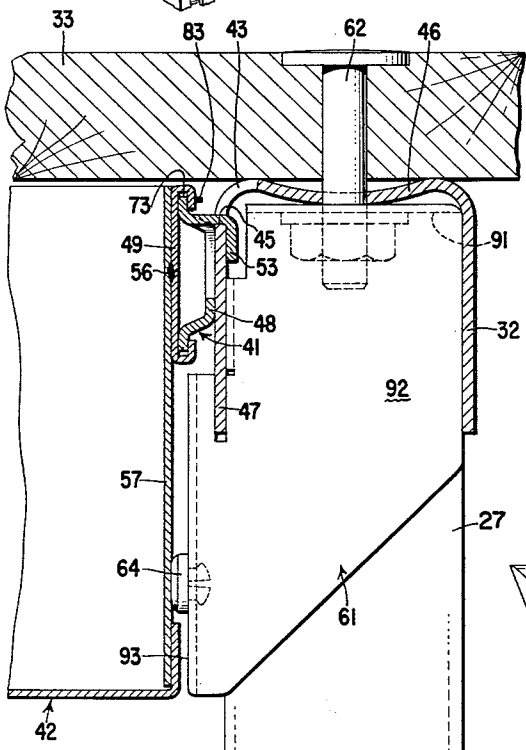


Fig. 2

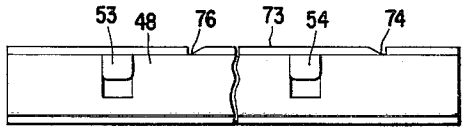


Fig. 3

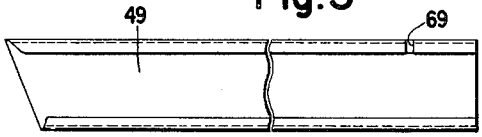


Fig. 4

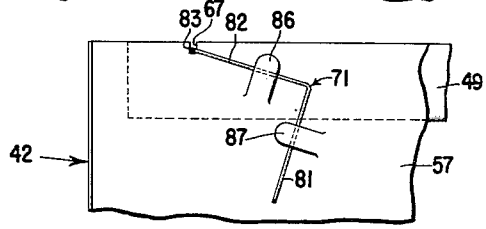


Fig. 5

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United States Patent Office 3,169,495 Patented Feb. 16, 1965

3,169,495

DRAWER AND DRAWER MOUNTING FOR SEWING MACHINE STAND

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Filed Dec. 31, 1962, Ser. No. 248,360
4 Claims. (Cl. 108—26)

This invention relates to stands designed to support sewing machines preferably of the industrial type and more particularly to an improved type of drawer and drawer mounting adapted for use with this type of stand, and an important object of the present invention is to provide an improved construction of this character.

Another object of the invention is to provide an improved drawer and drawer mounting which can be manufactured and sold as a unit and which can be mounted on many stands without the need of performing special machining operations.

A further object of the invention is to provide an improved drawer and drawer mounting which is held in place when a conventional part of the stand is in its usual place.

A still further object of the invention is to provide an improved means for limiting the inner and outer movement of a drawer.

Having in mind the above and other objects that will be evident from an understanding of this disclosure, the invention comprises the devices, combinations and arrangements of parts as illustrated in the presently preferred embodiment of the invention which is hereinafter set forth in such detail as to enable those skilled in the art readily to understand the function, operation, construction and advantages of it when read in conjunction with the accompanying drawings in which:

FIG. 1 is a fragmentary perspective view of a sewing machine stand equipped with a drawer and drawer mounting embodying the present invention, the drawer and mounting being shown in an exploded manner.

FIG. 2 is a vertical cross-sectional assembled view taken through the drawer and drawer mounting shown in FIG. 1.

FIG. 3 is a detailed view showing one part of the slide used to support the drawer.

FIG. 4 is a detailed view showing the other part of the slide used to support the drawer, and

FIG. 5 is a fragmentary side view of the drawer showing the latch spring.

The present invention is shown preferably as embodied in an industrial type sewing machine stand 16 having a left support member 17 and a right support member 18. Each support member has a horizontally extending base 21 from which rises a pair of lower legs 22 and 23 telescopically receiving a pair of upper legs 27 and 28. The legs 27 and 28 are respectively secured to the legs 22 and 23 by bolts 29. The top ends of each pair of upper legs 27 and 28 respectively support a horizontal left top rail 31 and a horizontal right top rail 32 and the top rails 31–32 carry a table top 33. The bases 21—21 are connected by a rod 34 which may carry a treadle (not shown). Under normal circumstances, a sewing machine (not shown) will be carried on the table top 33 and a transmitter (not shown), supported from the lower surface of the table top 33, will be controlled by the threadle (not shown).

A drawer mounting 41 and a drawer 42 are supported from the right rail 32 by reason of the rail 32 being provided, before the stand 16 leaves the factory, with a pair of spaced notches 43 and 44. Reference to FIG. 2 shows that the notches are L-shaped, in that a portion of each notch extends into both the top web 46 and one

flange 47 of the top rail 32. Because of this, the notches 43 and 44 are located adjacent to the top of the rail 32. Also each notch 43 and 44 provides a hook engaging edge 45. A drawer runner, having a stationary part 48 and a movable part 49, is hooked into the two notches 43 and 44 by reason of the part 48 being provided with a pair of outwardly pressed hooks 53 and 54 which are especially designed to enter the notches 43 and 44. The stationary part 48, in a known manner, slidably supports the movable part 49 and the movable part 49 is fastened by spot welding 56 to one side panel 57 of the drawer 42.

It will be noted that only one side of the drawer 42 is supported by the runner parts 48–49 and thus there may be a tendency for the unsupported side of the drawer to sag. To overcome any such possibility, a support bracket 61 may be secured to the under side of the web 46 by a bolt 62, which bolt fastens the table top 33 to the top rail 32. The lower end of the bracket 61 carries a horizontally extending non-metallic, preferably plastic, semi-spherical head support 64 positioned to be engaged by the outer face of the panel 57 of the drawer 42. Because of this arrangement, the drawer 42 can be successfully supported on one side only by the runner parts 48–49.

In order to stop the drawer 42 at its proper innermost position and at its proper outermost position, the panel 57 and the movable part 49 are respectively provided with rectangular notches 67 and 69 designed to accommodate a bent wire latch spring 71. The spring 71, by reason of the notch 69, rides on the upper edge 73 of the stationary part 48 and since this edge 73 is formed with a pair of opposite facing triangular detents 74 and 76, the part 49, and thus the drawer 42, will be stopped at its innermost position when the latch spring 71 engages the detent 74, while the drawer 42 will be stopped at its outermost position when the spring 71 engages the detent 76. The spring 71 has three arms 81, 82 and 83. The two arms 81 and 82 lie in the same plane and are held to the inside face of the panel 57 by two fingers 86 and 87 cut from the panel 57. The arm 83 extends in a direction perpendicular to the plane of the panel 57 and thereby enters the notches 67 and 69. The previously mentioned bracket 61 has a horizontally extending plate 91 which is secured by the bolt 62, a vertically extending plate 92 and a vertically extending plate 93 which is apertured to receive the shank of the head 64. The plate 93 is at an angle of ninety degrees to the plate 92, and the plate 91 is at an angle of ninety degrees to both the plates 92 and 93.

It is proposed that the top right rail 32 of all stands leaving the factory preferably will be provided with the two L-shaped notches 43 and 44, and therefore the drawer 42 and drawer mounting 41 can easily be installed by any mechanic in the following manner. The table top 33 is removed from the top rails 31 and 32. The hooks 53 and 54 of the stationary part 48 are hooked into the notches 43 and 44 so they engage the edges 45. The table top 33 is reinstalled on the top rails 31 and 32 and at the same time the bracket 61, which is held by the table top bolt 62, is installed. It will be appreciated that the act of fastening the table top 33 upon the top rails 31 and 32 will lock the runner part 48 in its hooked on position on the rail 32 and that when the drawer is subsequently mounted on the runner part 48 it too will be locked in its normal position by the table top. Then spring 71 is raised above the notch 67 sufficiently to allow the movable part 49 to slide on the stationary part 48. After the two parts 48 and 49 are at least partly engaged, the spring 71 is lowered so that it rides on the upper edge 73 of the part 48. The head 64 engages the outside surface of the panel 57 and thus prevents the drawer 42

from sagging. As the drawer 42 is moved in and out, the wire spring 71 drops in the detents 74 and 76, thus preventing the drawer from going too far inwardly or outwardly.

Having thus described the nature of the invention, what is claimed herein is:

1. A drawer and drawer mounting for use with a sewing machine stand having at least one top rail, and a table top carried by said top rail, the said drawer and drawer mounting comprising a stationary runner part, means located adjacent to the top of said top rail for removably securing said stationary runner part to said top rail, said means being so constructed and arranged that when said table top is secured to said top rail, said stationary runner part is locked against removal from its normal operating position by the presence of said table top above said sattionary runner part, a movable runner part slidably carried by said stationary runner part, and means securing said drawer to said movable runner part.

2. A drawer and drawer mounting for use with a sewing machine stand having a table top and at least one top rail for supporting said table top, said top rail being formed with a notch having a hook engaging edge located at a predetermined distance below the top of said top rail, said drawer and drawer mounting comprising a stationary runner part, a hook formed on said stationary runner part, said hook being of such length that when said table top is in place on said top rail said hook will be held in said notch by said table top, a movable runner part slidably carried by said stationary runner part, and means securing said drawer to said movable runner part.

3. A drawer and drawer mounting for use with a sewing machine stand, having a pair of top rails, and a table top carried by said top rails, the said drawer and drawer mounting comprising a stationary runner part, at least one notch having a hook engaging edge located adjacent to the top of one of said top rails, at least one hook carried by said stationary runner part, said notch and hook being located so that when said table top is secured to said top rails said hook cannot be removed from said notch, a movable runner part slidably carried by said stationary runner part, and means securing said drawer to said movable runner part.

4. A drawer and drawer mounting for use with a sewing machine stand having a pair of top rails, one of which is provided with at least one notch located adjacent to the top of said rail and a table top carried by said rails, said drawer and drawer mounting comprising a stationary runner part having at least one detent and at least one hook designed to engage the notch on said top rail, a movable runner part slidably carried by said stationary runner part, a drawer secured to said movable runner part, a support secured to one of said top rails, a non-metallic head carried by said support and engaging said drawer to assist in the support of the same, a latch spring carried by said drawer and positioned to engage the detent in said stationary rail.

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