Dec. 19, 1961 E. W. STANTON 3,013,514

SEWING MACHINE BED EXTENSION AND ATTACHMENT BOX

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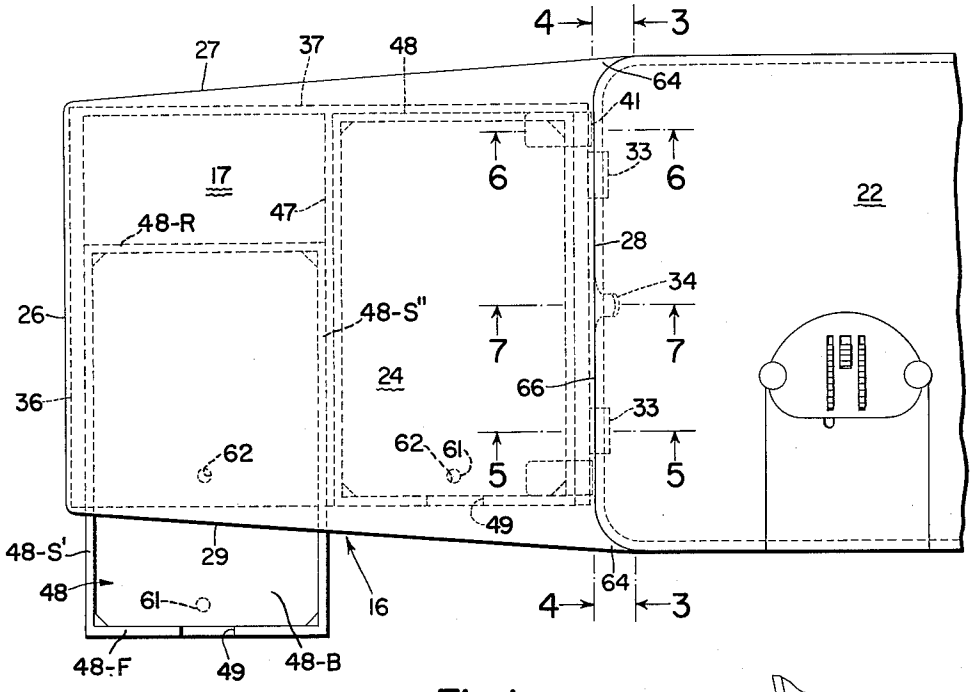


Fig. 1

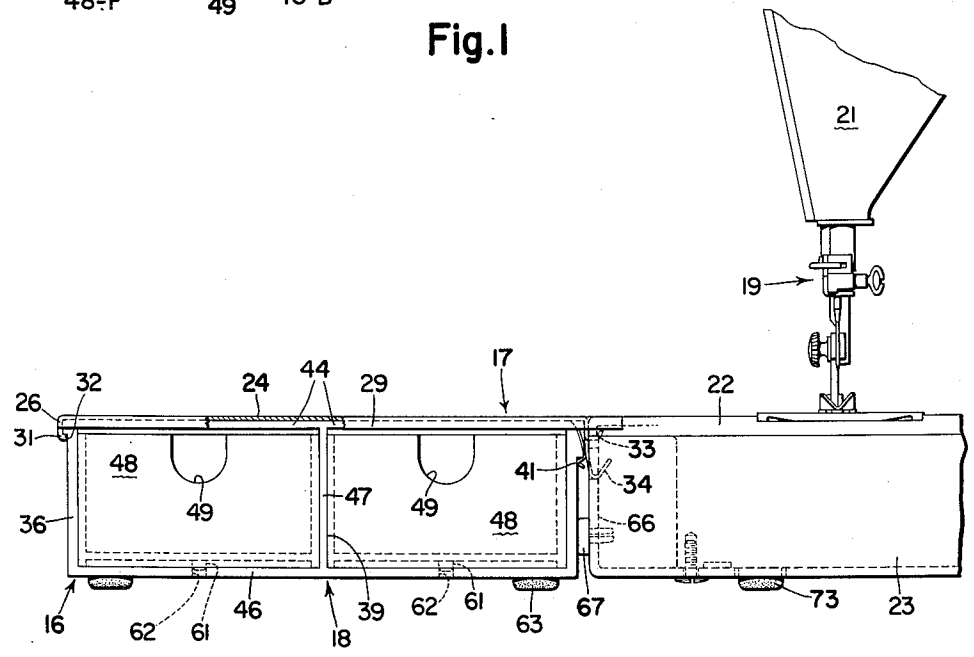


Fig. 2

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SEWING MACHINE BED EXTENSION AND ATTACHMENT BOX

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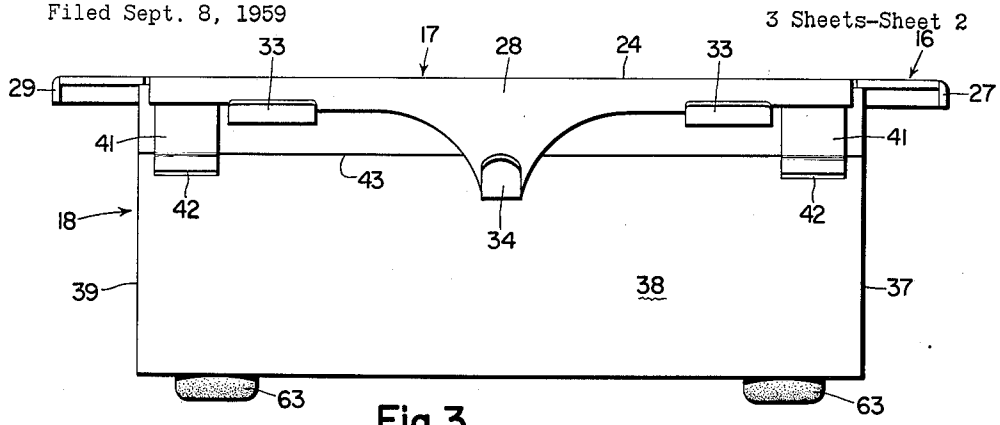


Fig.3

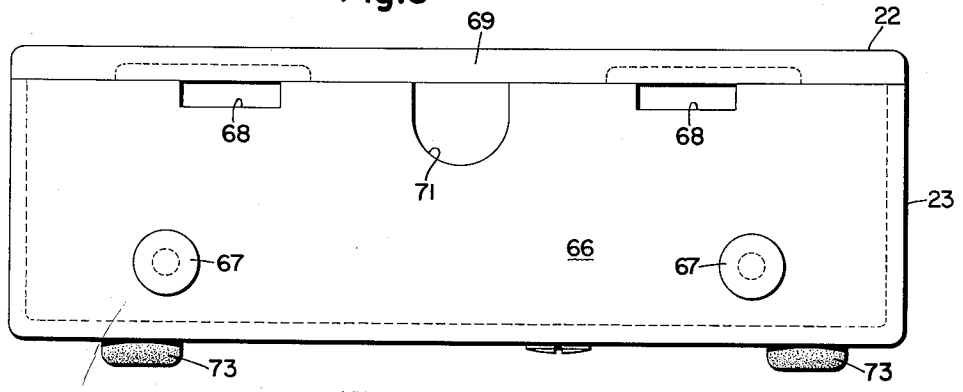


Fig.4

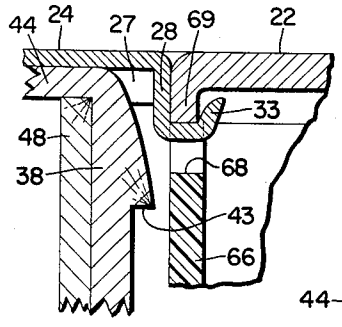


Fig.5

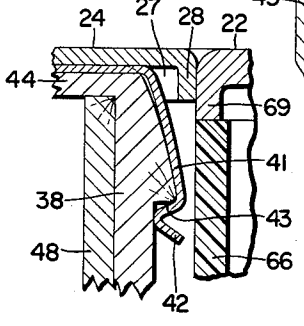


Fig.6

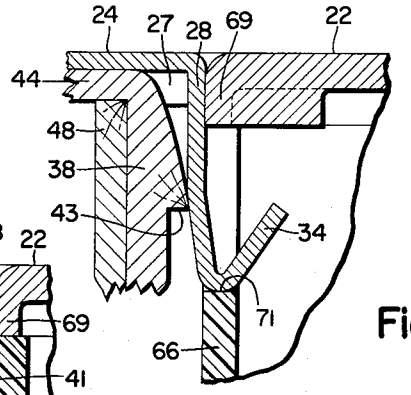


Fig.7

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SEWING MACHINE BED EXTENSION AND ATTACHMENT BOX

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Fig.8

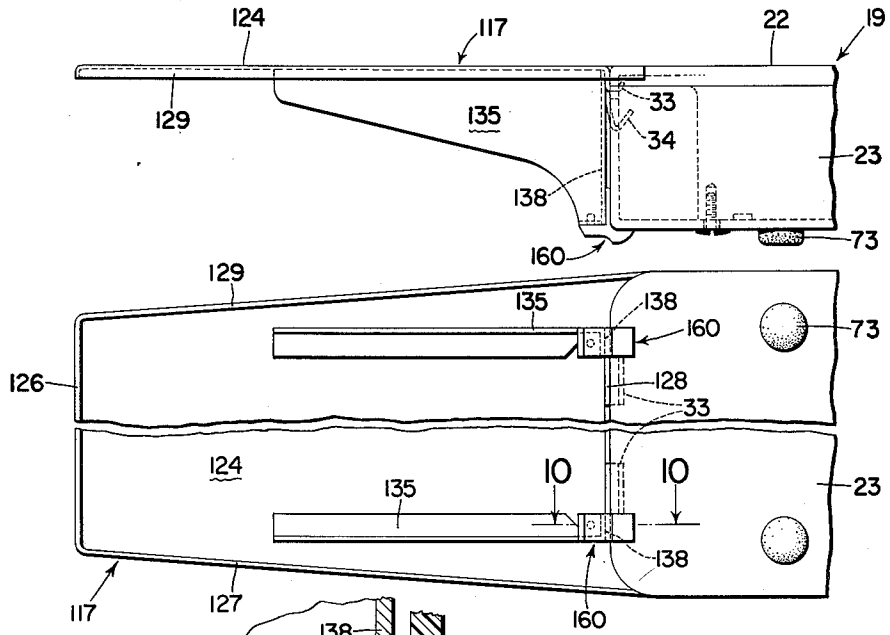


Fig.9

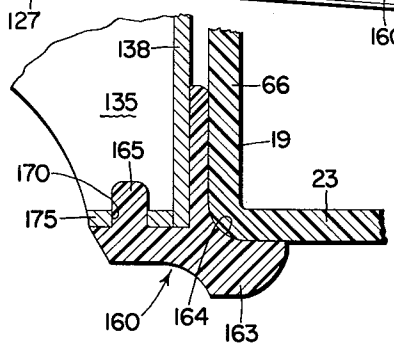


Fig.10

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United States Patent Office 3,013,514 Patented Dec. 19, 1961

3,013,514

SEWING MACHINE BED EXTENSION AND ATTACHMENT BOX

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Filed Sept. 8, 1959, Ser. No. 838,533
8 Claims. (Cl. 112—260)

This invention relates to sewing machines and more particularly to bed extensions and attachment boxes for sewing machines and specifically relates in one of its facets to a combination bed extension and attachment box, and the primary object of the present invention is to provide an improved article of this class.

Another object of the invention is to provide an improved means for connecting and disconnecting a bed extension to the main bed of the sewing machine.

A further object of the invention is to provide an improved combination bed extension and attachment box.

A still further object of the invention is to provide an improved means for securing an attachment box to a bed extension.

With the above and other objects in view, as will hereinafter appear, the invention comprises the devices, combinations and arrangements of parts hereinafter set forth and illustrated in the accompanying drawings of a preferred embodiment of the invention, from which the several features of the invention and the advantages attained thereby, will be readily understood by those skilled in the art.

In the drawings:

FIG. 1 is a plan view of a combination bed extension and attachment box embodying the present invention and showing the combination attached to a sewing machine,

FIG. 2 is an elevational view of the parts shown in FIG. 1,

FIG. 3 is an elevational view of the end of the combination bed extension and attachment box as seen along the line 3—3 of FIG. 1 when the combination is detached from the sewing machine,

FIG. 4 is an elevational view of the end of the sewing machine shown substantially along the line 4—4 of FIG. 1, the combination bed extension and attachment box being detached from the sewing machine,

FIG. 5 is a fragmentary sectional view taken on the line 5—5 of FIG. 1,

FIG. 6 is a fragmentary sectional view taken on the line 6—6 of FIG. 1,

FIG. 7 is a fragmentary sectional view taken on the line 7—7 of FIG. 1,

FIG. 8 is an elevational view of a modified form of the invention showing a bed extension without an attachment box,

FIG. 9 is a bottom view of the parts shown in FIG. 8, and

FIG. 10 is a fragmentary elevational sectional view taken on the line 10—10 of FIG. 9.

The preferred embodiment of the invention shown in FIGS. 1 to 7, inclusive, comprises a combination bed extension and attachment box indicated generally by the numeral 16 and having a bed extension 17 to which is secured an attachment box 18. The combination bed extension and attachment box 16 is secured to the left end of a sewing machine 19, which sewing machine has a head 21, a bed plate 22, and a base 23, the latter being secured to the bed plate 22 in a known manner.

The bed extension 17 has a flat top 24 provided on its four edges with turned-down rims 26, 27, 28, and 29. The lower edge of the rim 26 (FIG. 2) is provided with a turned-in lip 31 adapted to enter a groove 32

formed in an end wall 36 of the attachment box 18, the groove 32 having a horizontal projection. The rim 28, as best seen in FIGS. 3, 5, 6, and 7 is provided with a pair of spaced hooks 33—33 and with a central hook member 34. The attachment box 18, in addition to having the end wall 36, has a rear wall 37, an end wall 38, and an open front side 39. A pair of spaced latches 41—41 have their upper ends secured, by any known means as for example by welding, to the lower surface of the flat top 24. The lower end of each of the latches 41—41 is formed with a hook 42 (FIG. 6) adapted to grasp a ledge or horizontal projection 43 formed on the end 38 of the attachment box 18. The attachment box 18 also has a top 44, a bottom 46 and a partition wall 47, the partition wall 47 dividing the attachment box 18 into two compartments, each compartment being adapted slidably to receive a drawer 48. Each drawer 48—48 has an open top, a front wall 48–F, a rear wall 48–R, two side walls 48–S′ and 48–S″, and a bottom wall 48–B. Each of the front walls 48–F of the drawers 48—48 is provided with an opening 49 adapted to facilitate removing the drawer. The lower surface of each of the bottom walls 48–B of each of the drawers 48—48 carries a button 61 which enters a hole 62 formed in the bottom 46 when the drawer is closed. The lower surface of the bottom 46 carries four feet 63. The flat top 24 of the bed extension 17 is provided with a pair of opposite-hand extensions 64—64 having curved portions adapted to coincide with rounded corners formed on the bed plate 22 of the sewing machine.

The base 23 of the sewing machine 19 has an end wall 66 (FIG. 4) provided with components adapted to cooperate with elements carried by the combination bed extension and attachment box 16. For example, the end wall 66 has a pair of bumpers 67—67 adapted to be engaged by the end wall 38 of the attachment box 18. The end wall 66 also has a pair of rectangular apertures 68—68 of such size and at such locations as to receive the spaced hooks 33—33 which are adapted to engage a depending rim 69 formed on the end of the bed plate 22. The wall 66 also has a U-shaped opening 71 designed to accommodate the central hook 34. The bottom of the sewing machine base 23 is provided with a plurality of feet 73 which are similar to the feet 63 carried by the attachment box 18.

The combination bed extension and attachment box is used and assembled in the following manner. If it is desirable to disconnect the attachment box 18 from the bed extension 17, the hooks 42—42 of the latches 41—41 are sprung away from engagement with the ledge 43. When this is done, the bed extension 17 can be raised above the attachment box 18 and the lip 31 disengaged from the groove 32. In the event that it is desirable to separate the combination bed extension and attachment box 16 from the sewing machine 19, the combination bed extension and attachment box 16 is pivotally moved upwardly until the hooks 33—33 disengage the rim 69. This pivotal movement of the combination bed extension and attachment box 16 also removes the hook member 34 from the U-shaped opening 71. When the combination bed extension and attachment box 16 is connected to the sewing machine 19, the hooks 33—33 enter apertures 68—68 and engage the rim 69. At the same time, the hook member 34 enters the U-shaped opening 71 and the lower end of the hook member 34 engages the bottom of the opening 71, thereby wedging the hooks 33 against the bottom of the rim 69. Either one of the drawers 48—48 may be removed by placing the fingertip in one of the openings 49—49. If it is desirable to encase the complete sewing machine 19 in a carrying case (not shown), the combination bed extension and attachment box 16 is disconnected from the end of the sewing ma-

chine **19** and placed on the bed plate **22** to the right of the head **21** (FIG. 2) and thus between the head **21** and the standard (not shown) of the sewing machine **19**.

FIGS. 8, 9, and 10 disclose a modified form of the invention which comprises a bed extension **117** having a flat top **124** provided with four down-turned rims **126**, **127**, **128**, and **129**. The rim **128**, while not fully shown in FIGS. 8, 9, and 10, is a duplicate of the rim **28** shown in FIG. 3. In other words, the rim **128** has a pair of spaced hooks similar to hooks **33—33** and a central hook similar to hook **34**. On the other hand, the bed extension **117** does not have a pair of latches similar to the latches **41—41** shown in FIG. 3. However, the bed extension **117** is provided with a pair of substantially triangular depending flange plates **135**. The lower end of each of the flange plates **135** carries a combination resilient bumper and foot member **160** (FIG. 10). The foot portion **163** of the member **160** has an upwardly curved recess **164** adapted to receive the lower curved edge of the base **23** of the sewing machine **19**. An upper portion of the member **160** is positioned between the end wall **66** of the base **23** and a depending strut **138** formed integral with the plate **135**. A left hand portion (FIG. 10) of the member **160** has an upwardly extending plug **165** which enters a hole **170** formed in a horizontal bottom foot **175** of the plate **135**. The bed extension **117** is used in much the same manner as the bed extension **17** is used, the main difference being that an attachment box is not secured to a bed extension **117**.

Having thus set forth the nature of the invention, what I claim herein is:

1. A bed extension for a sewing machine bed plate said sewing machine having an opening below said bed plate for providing an abutment, said bed extension comprising a flat top provided with a turned-down edge, said edge having a pair of spaced hooks adapted to hook under a portion of the sewing machine bed plate, and a member fixed to and depending from said extension the depending end of said member engaging the sewing machine abutment and thereby holding said spaced hooks in place.

2. In combination, a bed extension and an attachment box secured to said bed extension, said attachment box comprising a top wall, a bottom wall having a hole therein, an end wall, a second end wall, a rear wall, and an open front; a drawer adapted loosely to enter said open front, said drawer having a bottom wall, a front wall, a rear wall, and two side walls; and a button extending below the surface of the bottom wall of said drawer, and said button registering with and being held by gravity in the hole in the bottom wall of said attachment box thereby holding said drawer in said box.

3. In combination, a bed extension having a turned-down rim, said rim at one end of said extension being provided with a turned-in hook and at the other end with a spring latch; an attachment box, said attachment box comprising a top wall, a bottom wall, an end wall provided with a horizontal projection, a second end wall provided with a horizontal projection, a rear wall, and an open front, said horizontal projections being engaged by said turned-in hook and spring latch; and a drawer adapted to enter said front, said drawer having a bottom wall, a front wall, a rear wall, and two side walls.

4. In combination, a bed extension and an attachment box, said attachment box comprising a top wall, a bottom wall having a hole therein, an end wall provided with a groove, a second end wall provided with a ledge, a rear wall, and a front having an opening; a drawer adapted loosely to enter said open front, said drawer having a bottom wall, a front wall, a rear wall, and two side walls; a button extending below the lower surface of said bottom wall of said drawer and said button registering with and being held by gravity in the said hole in the bottom wall of said attachment box thereby holding said drawer in said opening; and said bed extension having a flat top provided with a plurality of turned-down edges, one of said turned-down edges engaging said groove and the other of said turned-down edges having a spring latch engaging said ledge for securing said attachment box to said bed extension.

5. In combination, a bed extension and an attachment box, said attachment box comprising a top wall, a bottom wall having two holes therein, an end wall provided with a groove, a second end wall provided with a ledge, a rear wall, and a front having an opening; a pair of drawers adapted loosely to enter said opening, each of said drawers having a bottom wall, a front wall, a rear wall, and two side walls; a button extending below the lower surface of the bottom wall of each of said drawers and each button registering with and being held by gravity in one of said holes in the bottom wall of said attachment box thereby holding said drawers in said opening; said bed extension having a flat top provided with a first turned-down end having a turned-in lip entering the said groove on the end wall of said attachment box; and a second turned-down end rim having a pair of spaced spring latches secured to the under surface of said flat top and said latches having hooks engaging the ledge on the end wall of said attachment box.

6. In combination, a bed extension and an attachment box, said attachment box comprising a top wall, a bottom wall having two holes therein, an end wall provided with a groove, a second end wall provided with a ledge, a rear wall, a partition wall dividing the attachment box into two drawer compartments, and a front wall having an opening therein; a plurality of feet secured to the lower surface of said bottom wall; a pair of drawers adapted loosely to enter said openings, each of said drawers having a bottom wall, a front wall, a rear wall, and two side walls; a button extending below the lower surface of the bottom wall of each of said drawers, and each button registering with and being held by gravity in one of the said holes in the bottom wall of said attachment box thereby holding said drawers in said openings; a flat top for said bed extension, said flat top being provided with a first turned-down end having a turned-in lip adapted to enter the said groove on the first end wall of said attachment box; a second turned-in end rim on said flat top, said rim having a pair of spaced hooks and a centrally located hook and a pair of spaced spring latches secured to the under surface of said flat top, said latches having hooks adapted to engage the ledge on the end wall of said attachment box.

7. In combination a bed extension adapted to increase the size of the main bed of a sewing machine, support means on one end of said bed extension for securing said bed extension to the main bed of a sewing machine, first securing means located entirely on the same end of said bed extension as said support means, second securing means located entirely on the end of said bed extension remote from said support means, and an attachment box releasably secured below said bed extension by said first and second securing means.

8. The combination set forth in claim 7 wherein one of said securing means is a spring latch.

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