Oct. 24, 1950 L. C. MARSAC 2,527,319

SUPPORTING MEANS FOR SEWING MACHINES

Filed July 17, 1948 2 Sheets-Sheet 1

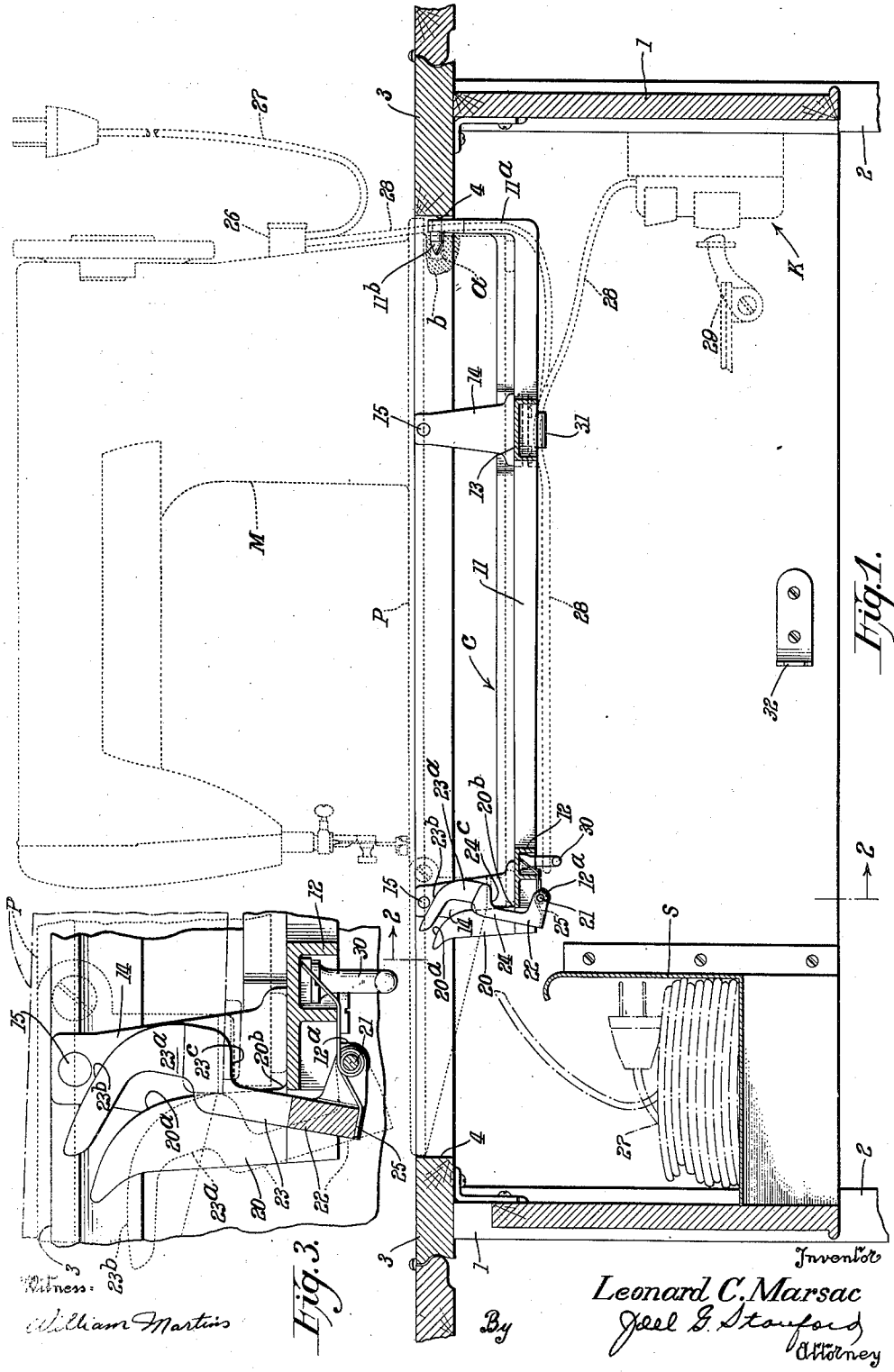


Fig. 1.

Fig. 3.

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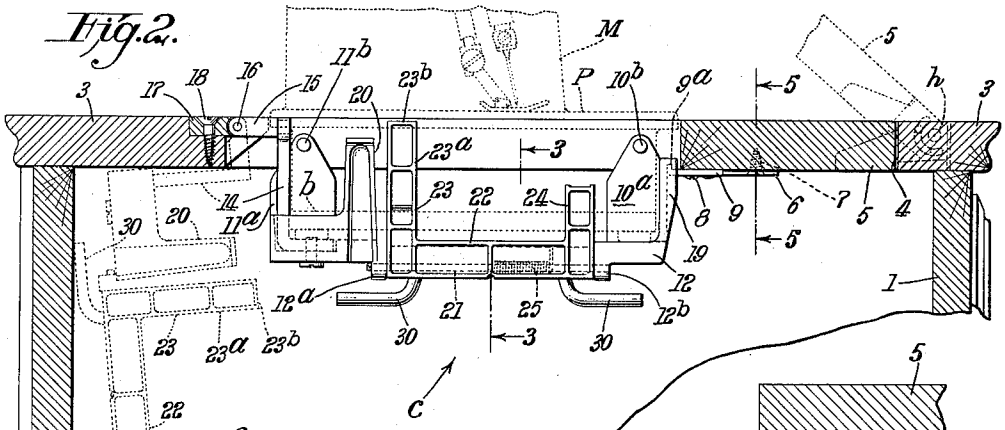
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Fig. 2.



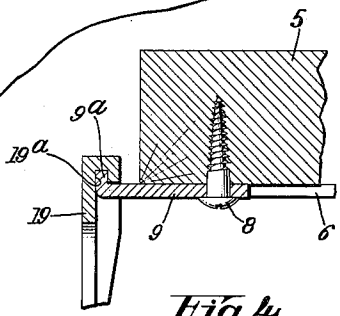


Fig. 4.

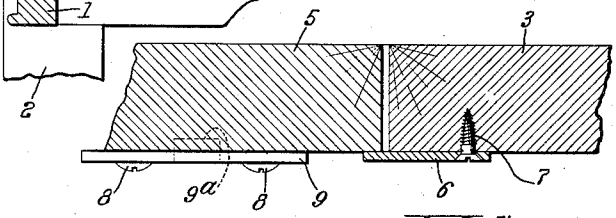
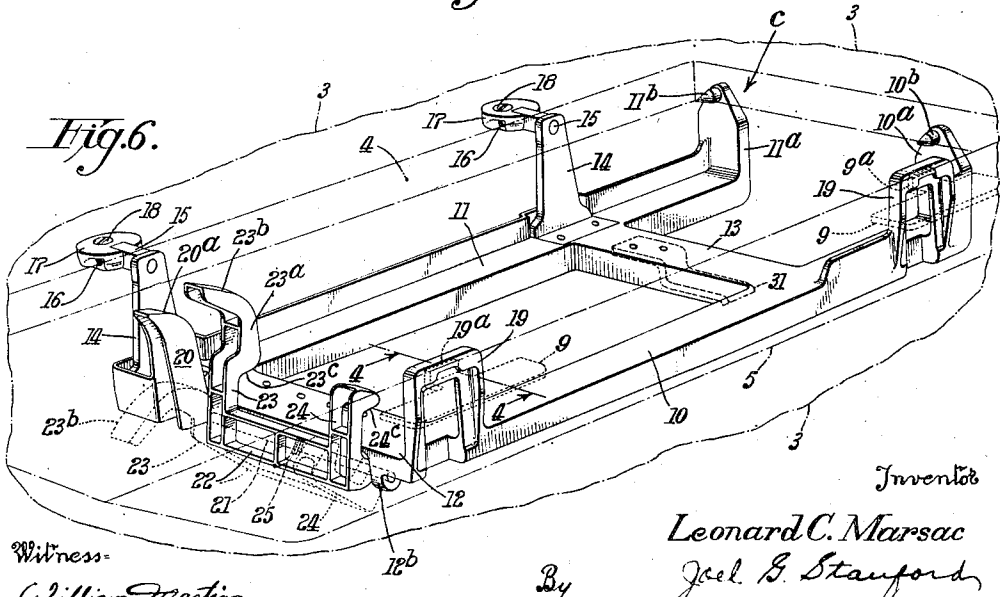


Fig. 5.

Fig. 6.



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SUPPORTING MEANS FOR SEWING MACHINES

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5 Claims. (Cl. 248—25)

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This invention relates to supporting means for sewing machines and it has as an object to provide, in combination with an improved cabinet, an improved supporting element for the machine which will not only securely maintain the machine in the cabinet but will permit ready removal of the machine from the cabinet, for use as a portable machine.

Another object of the invention is to provide improved means for holding the electric conductors both when the machine is in position for operation and when the machine is lowered into the cabinet for storage purposes.

Still another object of the invention is to provide an improved form of cradle for removably supporting the sewing machine.

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 longitudinal vertical section of the improved sewing machine cabinet and the improved sewing machine supporting cradle therein, a sewing machine being shown in dotted lines as secured in said cradle.

Fig. 2 is a transverse vertical section taken substantially on the line 2—2 of Fig. 1.

Fig. 3 is a detail vertical sectional view taken substantially on the line 3—3 of Fig. 2.

Fig. 4 is an enlarged detail sectional view on the line 4—4 of Fig. 6.

Fig. 5 is an enlarged detail sectional view on the line 5—5 of Fig. 2 showing the means for supporting a leaf-member on the top wall of the sewing machine cabinet.

Fig. 6 is a perspective view of the improved machine-supporting cradle showing, in dot-dash lines, the top of the sewing machine cabinet in which the cradle is mounted.

Referring more specifically to the drawings, the invention is disclosed as embodied in a sewing machine cabinet comprising an upper box-like portion 1, supported upon legs 2, portions only of which are shown, and a horizontally disposed top wall 3 formed with a substantially rectangular cut-out, or opening, 4. Hinged, at *h*, (Fig. 2) to the top wall 3, along the forward edge of the opening 4, is a leaf 5 which is adapted to be swung upwardly, as indicated in dotted lines in

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Fig. 2 to permit the improved cradle and a sewing machine carried thereby to be swung downwardly into storing position in the box-like portion of the cabinet. In its normal or lowered position the ends of the leaf 5 rest upon metal plates 6 secured by screws 7 to the under side of the top wall 3, (see Figs. 2, 4 and 5) thus the top of the leaf is maintained flush with the upper surface of the top wall. The leaf 5 has secured to its under side, by screws 8, plates 9, having upturned end portions 9^a which are adapted to engage portions of a sewing machine cradle, hereinafter described, to hold the cradle in a horizontal position.

Hingedly supported on the top wall 3 of the cabinet, and adapted to be swung either to the operative position shown in full lines in Figs. 1 and 2 or to the position shown in dotted lines in Fig. 2, is a machine supporting cradle C. This cradle is preferably made of lightweight cast metal and comprises a substantially rectangular frame having integrally formed parallel side rails 10 and 11 and parallel end rails 12 and 13. The rail 11 carries upstanding hinge brackets 14 carrying hinge elements 15 which are connected, by horizontal pins 16, to complemental hinged elements 17 which are recessed into the top wall 3 of the cabinet and held therein by screws 18. At one end, the rails 10 and 11 are formed with upstanding lugs 10^a and 11^a, which carry machine-engaging elements 10^b and 11^b, respectively. The elements 10^b and 11^b are shown in the form of pointed pins which are adapted to be inserted into apertures *a* formed in the base *b* of a sewing machine M shown in dotted lines in Figs. 1 and 2. The base of the sewing machine rests upon the rails 10 and 11 and when the machine is in operative position the top of the work supporting plate P is substantially flush with the upper surface of the top wall 3 of the cabinet. Projecting upwardly from the rail 10 are two lugs 19 recessed at 19^a to fit over the upturned end portions 9^a of the plates 9. (See Fig. 4.) Thus the cradle C and the parts carried thereby are supported at the rear by the hinge elements 15, 17 and at the front by the plates 9 carried by the hinged leaf 5, which leaf in turn is supported from the top wall 3 by the plates 6, as shown in Fig. 5.

At the end of the cradle remote from the lugs 10^a, 11^a, the rail 12 carries an upstanding abutment member 20 having, at its upper end, a cam surface 20^a and at its base a substantially vertical abutment surface 20^b. Pivotally mounted at the under side of the rail 12, on a rod 21 carried by

lugs 12a and 12b, is a latch device consisting of a cross member 22 and a pair of upstanding latch elements 23 and 24. The latch element 23 has an upward extension 23a formed at its upper end with a cam surface 23b similar to the cam surface 20a of the abutment member 20. A coil spring 25 surrounding the rod 21 and having one leg engaging the under side of the cross rail 12 and the other leg engaging the under side of the cross member 22 normally holds the latch device in the position shown in full lines in Figs. 1, 3 and 6.

A sewing machine is placed in the cradle C by first lowering the right end of the base of the machine upon the rails 10 and 11 adjacent the lugs 10a, 11a. The left end of the machine is then swung downwardly; the left end of the base of the machine first engaging the cam portion 23b of the latch element 23, thereby turning the entire latch device counterclockwise from the position shown in full lines in Fig. 3 to the position indicated in dotted lines in that figure. This downward movement of the machine causes the machine base to be brought into contact with the cam face 20a of the abutment member 20 which shifts the machine to the right so that the pins 10b, 11b enter the apertures *a* in the machine base *b*, see Fig. 1. As the left end of the base of the machine is brought to rest upon the cradle, the latch device is turned clockwise by the spring 25 to the position illustrated in full lines in Figs. 1, 3 and 6 in which the flat undersurfaces 23c and 24c of the latch elements 23 and 24 overlie the base of the machine and together with the pins 10b, 11b prevent relative vertical movement between the machine and the cradle. In this position of the machine the abutment surface 20b of the abutment member 20 holds the machine base against endwise movement away from the lugs 10a, 11a and thereby prevents the pins 10b, 11b from inadvertently being withdrawn from the apertures *a*.

When it is desired to remove the machine from the cradle the latch device is manually turned to the position illustrated in dotted lines in Fig. 3 and the left end of the machine is picked up, slightly shifting it to the left to free the base from the pins 10b, 11b.

As is well understood, certain types of sewing machines may be used either in cabinets, as herein disclosed, or removed from the cabinets and used as portable machines. To the end that the machine herein illustrated may be used in either of the above mentioned ways and operated from a suitable source of electric current, the machine carries a suitable electric motor (not shown), and is designed to receive an electric plug 26 to which is attached a conductor 27, adapted to be connected to a suitable electrical outlet. A second conductor 28 also has one end attached with the plug 26 and its other end is connected to a motor controller K which, as is customary, may be removably mounted in the box-like portion 1 of the cabinet and actuated from a suitable knee treadle, a portion of which is indicated at 29.

When the machine is removed from the cabinet and used as a portable machine, the controller K also is removed from the cabinet and placed on the floor for manipulation by the foot of the user. The conductor 28 is made sufficiently long to permit either of these uses of the controller.

To prevent the conductor 28 from hanging down and being exposed to view when the machine M and the controller K are mounted in the cabinet, the under side of the cradle C has secured thereto one or more cleats 30 about which the conductor 28 may be wound. A spring clamp 31 also is secured to the under side of the cradle and is adapted to frictionally hold the conductor 28 in contact with the cradle to prevent it from accidental removal from the cleats 30.

Secured within one end of the box-like portion 1 of the cabinet and underlying the opening 4 in the top wall 3, is an open-topped storage compartment S, preferably, but not necessarily made of sheet metal. Various articles, such for example as the controller K, or (as shown in dot-dash lines in Fig. 1) the conductor 27 may be stored in compartment S when the machine is not in use.

The back wall of the portion 1 of the cabinet carries an abutment member 32 against which the cradle C rests when the cradle and the machine carried thereby are lowered into the cabinet.

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

1. A supporting cradle for a sewing machine comprising a substantially rectangular frame having along one side a pair of upstanding hinge brackets; hinge members carried by said brackets; a pair of upstanding lugs at one end of said frame; a machine-engaging member carried by each of said lugs; an abutment member carried by the other end of said frame and having a cam surface to force a machine, placed in said cradle, into engagement with said machine-engaging members and an abutment surface to prevent accidental endwise movement of the machine relative to said machine-engaging members; and latch means carried by said frame and engaging the base of the machine to prevent relative movement between the machine and said abutment member.

2. A supporting cradle for a sewing machine comprising a substantially rectangular metal frame having along one side a pair of upstanding hinge brackets; hinge members carried by said brackets; a pair of upstanding lugs at one end of and formed integrally with said frame; a pin carried by each of said lugs, an abutment member carried by the other end of said frame and having a cam surface adapted to force a machine placed in said cradle into locking engagement with said pins, said abutment member also having an abutment surface engaging the machine to prevent accidental endwise movement of the machine away from said pins; and manually releasable latch means carried by said frame and engaging the base of the machine to hold the machine on said frame.

3. A supporting cradle for a sewing machine comprising a substantially rectangular metal frame having along one side a pair of upstanding hinge brackets; hinge members carried by said brackets; a pair of machine-engaging members at one end of said frame; an abutment member carried by the other end of said frame and having a cam surface to force a machine into engagement with said machine-engaging members and an abutment surface to prevent accidental endwise movement of the machine relative to said machine-engaging members; a spring-pressed latch carried by said frame and engaging the base of the machine to prevent movement of the machine away from said cradle; and cleats on the under side of said cradle and adapted to have an electric wire, connected to the machine, wrapped thereon.

4. A supporting cradle for a sewing machine

comprising a substantially rectangular cast metal frame having along one side a pair of upstanding hinge brackets; hinged members carried by said brackets; a pair of machine-engaging members carried by one end of said frame; an abutment member carried by the other end of said frame and having a cam surface to force a machine, placed in said cradle, into engagement with said machine-engaging members and an abutment surface to prevent accidental endwise movement of the machine relative to said machine-engaging members; a latch pivoted to said frame and having a cam portion engaged by the base of the machine as it is placed in the cradle, to swing said latch out of latching position; and a spring acting on said latch to shift it into machine-engaging position.

5. A cradle for supporting a sewing machine in a cabinet having a box-like portion and a flat top wall with a substantially rectangular machine-receiving opening therein and a leaf hinged to said top wall along one side of said opening and provided with a cradle-supporting member, said cradle comprising a substantially rectangular frame having at one side a pair of upstanding hinge brackets and, at its opposite side, an upstanding arm constructed and arranged to rest upon said cradle-supporting member when said leaf is in its lowermost position; hinge members carried by said brackets and constructed and arranged to engage complemental hinge members carried by said top wall; a pair of upstanding lugs at one end of said frame; a machine-engaging member carried by each of said lugs; an abutment member carried by the other end of said frame and having a cam surface to force a machine, placed in said cradle, into engagement with said machine-engaging members and an abutment surface to prevent accidental endwise movement of the machine relative to said machine-engaging members; and latch means carried by said frame and engaging the base of the machine to prevent relative movement between the machine and said abutment member.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
2,295,640	Cumfer	Sept. 15, 1942
2,318,443	West	May 4, 1943
2,371,896	Knauer	Mar. 20, 1945