H. SCHAPER
DUAL PURPOSE SEWING MACHINE

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The invention relates to portable sewing machines that are also suitable for darning and similar work.

Sewing machines have been equipped with a special arm for carrying the material when the machine is used for darning or like mending work, the special arm extending above the machine base. This requires a machine housing of a rather complicated and costly design as well as a corresponding increase in weight which is especially disagreeable with machines of the portable type.

It is an object of the invention to provide a portable sewing machine which can readily be converted for darning and similar work while avoiding the above-mentioned disadvantages. A further object of the invention is to devise a portable suitcase-type machine that is readily applicable for sewing or darning on sleeves, trousers, stockings and other hose-shaped goods as well as for various similar work heretofore requiring the use of a heavier, arm-type machine.

In order to achieve these objects, and in accordance with the feature of the invention, the base of a sewing machine unit is displaceably linked with a hollow bottom member of a carrying case, so that the base can be raised out of the hollow of the bottom member to an overhanging position in which the base may serve as a material-carrying arm when the machine is to be used for darning or the like.

These and other objects and features will be apparent from the embodiment of the invention exemplified by the drawing in which:

Figure 1 shows a perspective view of the closed carrying case of a sewing machine.

Fig. 2 a perspective view of the upper part of the case,

Fig. 3, the same machine with the case opened and the machine set for sewing, and

Fig. 4 the same machine, opened and set for darning.

The carrying case of the illustrated machine, when closed, has the general shape and appearance of a suitcase. Its bottom portion 1 is hollow and has two side panels 2, 8 hinged thereto. Side panel 3 is subdivided by another hinge 4. When the case is closed, the side panels are held in position by a substantially U-shaped cover portion which is composed of two parts 5, 5 hinged together at 7 and equipped with a grip 8. Two lugs 9 of part 5 engage respective slots 10 of the bottom portion 1 when the casing is closed. A lock 11 in bottom portion 1 and engageable with part 6 permits locking the closed casing.

The hollow of bottom portion 1 accommodates the base portion 12 of the sewing machine unit proper. When the case is opened and set for sewing, as shown in Fig. 3, the work surface of the base portion 12 is flush with a plate 13 hinged to the bottom portion 1 at one of the short edges of that portion. The side panels then serve as a convenient extension of the working surface.

Another plate 14 is hinged to the bottom portion 1 at the other short edge. The machine base 12 is movably connected with the bottom 1 of the casing by four links 15 which are disposed at the long sides of the elongated bottom portion and form together a parallel motion device that permits lifting the machine unit while maintaining the working surface horizontal. The base portion 12 is shorter than the bottom portion 1, and the plate 13 covers the remaining space between base portion and bottom portion when the machine unit is in the normal position for sewing. When the machine is to be used for darning or other work requiring a material supporting arm, the plate 13 is first turned into the position shown in Fig. 4 and the machine unit is then lifted so that the base 12 turns on links 15 until it rests upon the plate 13 as also shown in Fig. 4. The machine is secured in this position by the plate 14 which now covers the remaining space between the other short sides of base portion and bottom portion.

The space beneath plate 13 and hence beneath the needle is now free so that the material, hoisery or other apparel to be mended can pass underneath the darning area.

If it is desired to place the machine as close as possible to the body of the operator, the machine can be placed close to the edge of the table so that the hinged part of side panel 3 drops into the position shown in Fig. 4.

It will be apparent to those skilled in the art that the invention permits of various modifications without departing from its essential features set forth in the claims annexed hereto.

I claim:

1. A portable sewing machine, comprising a carrying case having an elongated hollow bottom member and two side panels hinged to the long upper edges respectively of said member, a machine unit having a base portion normally disposed in the hollow of said member and shorter than said member, said base portion having a working surface normally substantially flush with said upper edges and spaced from one of the short edges of said member, link means interconnecting said member and said base portion to permit moving said base portion into a raised position out of said member and over said one short edge, and two
plates hinged to said bottom member at its two respective narrow edges, one of said plates normally covering the space between said base portion and said one short edge, and said other plate being movable to cover the space between the other short edge and said base portion when said unit is in said raised position so as to secure said unit in said raised position. 2.

A portable sewing machine, comprising a carrying case having an elongated hollow bottom member and lateral dropleaf panels hinged to said member at the longitudinal upper edges thereof, a machine unit having a base normally disposed in the hollow of said bottom member and having a material-supporting working area normally substantially flush with said edges, link means movably connecting said base with said bottom member to permit shifting said unit to a position in which said base is raised out of said bottom member, said area projecting over a short upper edge of said bottom member and projecting upwardly and laterally out of the range of said panels when said unit is in said position, said base having a shorter length than said hollow and being longitudinally spaced from said short upper edge of said bottom member when disposed in said hollow, and said base being longitudinally spaced from the other short upper edge of said bottom member when said base is in said raised position, and two plates hinged along said unit in said position, two edges respectively of said bottom member and being selectively movable into engagement with said base.

3. A portable sewing machine, comprising a carrying case having an elongated hollow bottom member and a plate hinged to said bottom member at one of its two short upper edges and a sewing machine unit having a base shorter than said bottom member and normally disposed in the hollow of said member and close to said one short upper edge, said base having a back portion at the side of said plate and having a material-supporting front portion at the opposite side, links pivotally secured to said base and to said bottom member at the long sides of said bottom member to permit raising said base out of said bottom member to a position where said front portion projects over the other short upper edge of said bottom member, and said plate being engageable with said back portion of said base when said base is in said raised position to then secure said base in said position.

4. A portable sewing machine, comprising a carrying case having a bottom member forming an upwardly open rectangular box structure, a sewing machine unit having a rectangular base of a length shorter than the interior length of said box structure and of a width nearly matching the interior width of said box structure, said base having a height approximately equal to the inner height of said box structure and having a top surface with a material-supporting front portion at one longitudinal end, link members disposed on the two longitudinal sides of said base and located within said box structure, said link members being pivotally joined with said box structure and with said base to permit shifting said base between normal and raised positions relative to said box structure, said raising unit being operatively accessible for general sewing work and having said base seated within said box structure when said base is in said normal position, and said base being outside said box structure and having said front portion longitudinally projecting over said box structure when in said normal position, whereby said machine unit is set for darning and hose work when said base is in said raised position. 5.

A portable sewing machine, comprising a carrying case having a hollow bottom member, a machine unit having a base with a working surface on its top, link members pivotally joined with said bottom member and said base to permit shifting said base between normal and raised positions relative to said bottom member, said base being seated within the hollow of said bottom member when in said normal position, and said base being outside said hollow and having a front portion longitudinally projecting over said bottom member when in said raised position, said carrying case comprising two drop-leaf panels hinged to the top of said case, said rear end of said bottom member and forming an extension of said working surface when said base is in said normal position, said panels being movable upwardly against said machine unit for closing said case, a removable U-shaped cover forming the front, rear and top walls of said case and being engageable with said panels when said panels are moved upwardly, said cover having positioning lugs engageable with said bottom member and being lockable with said bottom member.

6. In a portable sewing machine according to claim 5, said cover having two substantially rigid parts hinged together across the top wall along a hinge axis transverse to said bottom member.

HANS SCHAPER.

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