

[54] **WORK TABLE FOR OPEN-ARM SEWING MACHINE**

2,305,343 12/1942 Gadbois112/217.1

[75] Inventors: **Wayne A. Devey; Kent S. Roberts,**
both of American Fork, Utah

FOREIGN PATENTS OR APPLICATIONS

1,067,288 10/1959 Germany.....112/260
1,025,990 1/1953 France112/217.1
657,270 2/1938 Germany.....112/260

[73] Assignee: **Roberts Mfg. Inc.,** American Fork, Utah

[22] Filed: **Feb. 14, 1972**

Primary Examiner—George H. Krizmanich
Attorney—Philip A. Mallinckrodt

[21] Appl. No.: **226,070**

[57] **ABSTRACT**

[52] **U.S. Cl.**108/92, 108/17, 112/217.1

An elongate table top supported by legs is adapted to receive an open-arm type of sewing machine. A second table top is mounted upon one end portion of the first or base table top at open-arm working level for raising to normal working level with respect to a received sewing machine and for lowering back down to open-arm working level. The second table top is longitudinally recessed to accommodate the open arm of the received sewing machine at both working levels.

[51] **Int. Cl.**A47b 29/00

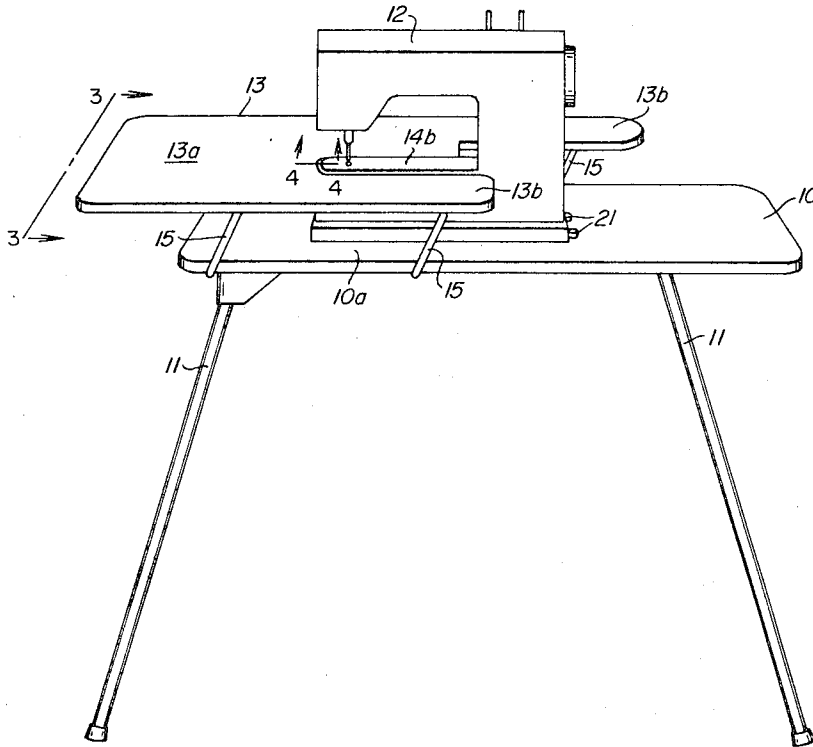
[58] **Field of Search**.....112/217.1, 258, 260,
112/63; 108/12, 17

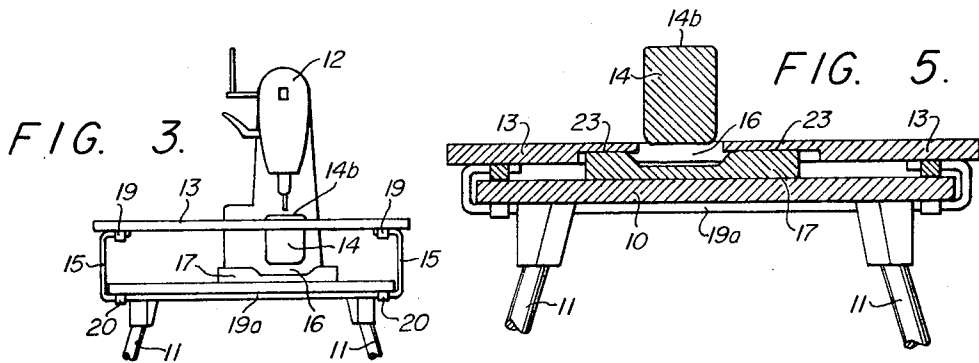
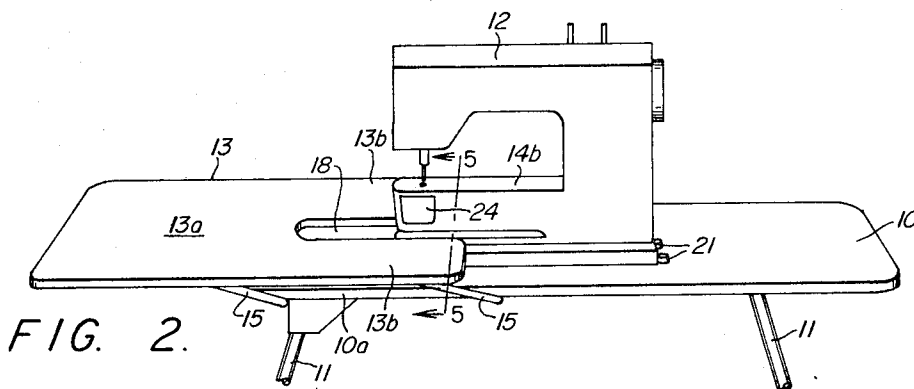
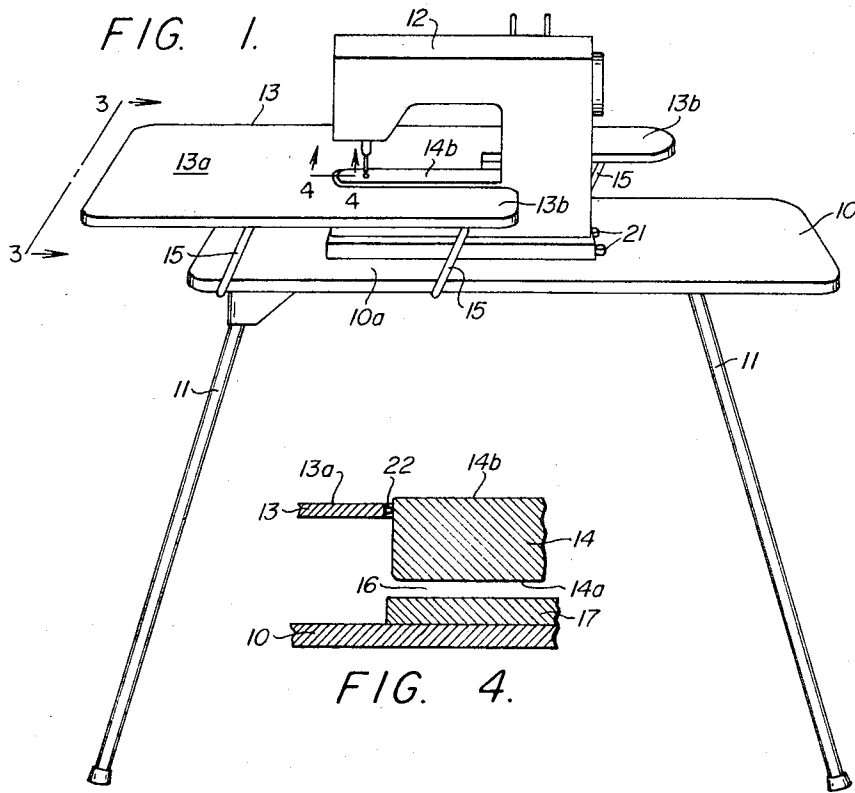
[56] **References Cited**

UNITED STATES PATENTS

3,384,037 5/1968 Blevins.....108/17
2,879,734 3/1959 Jones.....112/258

9 Claims, 5 Drawing Figures





WORK TABLE FOR OPEN-ARM SEWING MACHINE

BACKGROUND OF THE INVENTION

1. Field

The invention is in the general field of work tables, and is specifically concerned with special work tables for sewing machines.

2. State of the Art

Various special work tables for sewing machines have been developed in the past, see for example the two Blevins U.S. Pats. Nos. 3,034,841 and 3,384,037, but none have provided a convenient work area for so-called "open arm" types of sewing machines, wherein the lower bobbin portion of the machine is formed as an arm underlying the needle-holding portion of the machine and spaced from the base of the machine so as to enable such bobbin portion or "open arm" to enter sleeves of garments, socks, and other items of similar nature for convenience in the sewing thereof.

SUMMARY OF THE INVENTION

The invention provides a special work table for open arm types of sewing machines that is quickly and easily convertible from ordinary sewing position to open-arm sewing position and vice versa. Such special work table comprises an elongate table top adapted to receive an open-arm sewing machine intermediate its length and extending longitudinally therewith. A second table top, having a sewing machine open-arm-receiving slot extending longitudinally inwardly thereof from one of its ends, is mounted over one end portion of the first table top, with the opening of its slot confronting the sewing-machine-receiving area of the first table top. Means, preferably in the form of parallel motion linkage, connects the second table top with the first, so the former can be raised and lowered relative to the latter to assume, respectively, a raised work position approximately flush with the upper working surface of the open arm of a received sewing machine and a lowered work position approximately at the level of the bottom of the open arm of the received sewing machine. Abutment stop means are preferably provided on the first table top to define an end of the sewing-machine-receiving area thereon that is remote from the second table top and to thereby hold the sewing machine steady when such second table top is in its raised work position, and a cushioning bumper is advantageously provided at the inner terminus of the sewing-machine-receiving recess.

THE DRAWING

A particular construction representing the best mode presently contemplated of carrying out the invention is illustrated in the accompanying drawing, in which:

FIG. 1 represents a perspective view looking downwardly toward the front of the work table on which is positioned an open-arm sewing machine, the second, i.e. superimposed, work table top portion being shown in raised work position relative to the upper surface of the open arm of the sewing machine;

FIG. 2, a corresponding view showing the superimposed work table top lowered upon the base work table top into work position relative to the elongate opening between the open arm and the base of the sewing

machine, the lower portions of the supporting legs being broken away from convenience of illustration;

FIG. 3, a view in end elevation taken from the standpoint of the line 3—3 FIG. 1;

FIG. 4, fragmentary, longitudinal, vertical section taken along the line 4—4 of FIG. 1 and drawn to a larger scale; and

FIG. 5, a fragmentary, transverse, vertical section taken along the line of 5—5 of FIG. 2 and drawn to the larger scale of FIG. 4.

DETAILED DESCRIPTION OF ILLUSTRATED EMBODIMENT

In the presently preferred form shown, the work table of the invention comprises an elongate table top 10 supported by legs 11 of any suitable type, preferably foldable against the bottom face of the table top to provide convenient portability for the work table. Such table top 10 is adapted to receive and support an open-arm type of sewing machine 12 on its upper surface intermediate the length and width thereof and extending longitudinally therewith.

Mounted in superimposed relationship on one end portion 10a of the table top 10 is a second table top 13. The mounting is such that this second table top 13 can be raised relative to the first or base table top 10 from a lowered position resting thereon, in which its upper surface 13a is approximately at the level of the bottom surface 14a of the open arm 14 of the sewing machine 12, see FIGS. 2, 4, and 5, to a raised position in which its upper surface 13a is approximately flush with the upper, working surface 14b of such open-arm 14, see FIGS. 1 and 3. The mounting means preferably employed is parallel linkage mechanism, comprising sets of individual links 15.

In its lowered work position preferably resting on base table top 10, the second table top 13 has its working surface 13a at a convenient level relative to the elongate opening 16 between open arm 14 and the base 17 of the sewing machine. Also, because, as is illustrated in FIGS. 3 and 5, the width of end portion 10a of the first or base table top 10 approximates the width of the second table top 13, desirable stability is provided as a work table in the lowered, open-arm work position.

For accommodating open arm 14 of sewing machine 12 in both lowered and raised positions of second table top 13, such second table top is provided with an elongate slot 18, extending inwardly and longitudinally thereof from that end thereof which confronts the sewing machine.

As illustrated, it is convenient and structurally advantageous to fasten elongate reinforcing strips 19 along the longitudinal edge margins of the bottom of the panel portion of second table top 13, and to journal the upper ends of links 15 in receiving openings provided in such strips. The set of links 15 at the end of table top 10, see FIG. 3, are conveniently made integrally as a unit by correspondingly bending opposite ends of a rod of steel or other suitable material, thereby providing an intermediate portion 19a extended between bearings 20 fastened to the underside of table top 10. The links 15 of the other set are not aligned transversely of the table and are therefore made as separate pieces, each having its lower end journaled by a bearing (not shown) corresponding to the bearings 20.

In the normal use of the sewing machine 12, second table top 13 will be in the raised position shown in FIG. 1. As such, it rests and exerts a mild thrust against open arm 14 of the sewing machine. To prevent the sewing machine from sliding backwardly on first table top 10 when a user leans on second table top 13, means are provided for securing such machine in position. It is preferred, however, to leave the machine itself unattached to the work table, so it can be conveniently removed and replaced as desired. Accordingly, the securing means preferably employed are rubber bumpers 21 attached to work table 10, as by nails or screws. Also, in order to protect the front of open arm 14 of the machine from being scratched or marred by second work table top 13 in its raised work position, a rubber bumper 22, FIG. 4, or other cushioning means is advantageously attached to the edge of such second work table that defines the closed end of recess 18.

When it is desired to take advantage of the open arm feature of the sewing machine for sewing sleeves of garments, mending socks, etc., it is only necessary in this illustrated embodiment to move second table top 13 in a direction directly away from the machine until it comes to rest on the end portion 10a of first table top 10 above which it is superimposed. This movement, dictated by the parallel motion mechanism made up of the links 15, means that second work table top 13 will assume the position shown in FIG. 2, wherein only the terminal ends of its bifurcations 13b bordering slot 18 will be contiguous with the machine. In order to permit such second table top 13 to rest upon the underlying table top 10, considering the fact that the bifurcations 13b overlie longitudinal margins of base 17 of the machine, it is preferred to rabbet out portions of the undersurfaces of such bifurcations, see 23, FIG. 5, to accommodate lateral margins of such sewing machine base 17.

It can be easily realized from the showing in FIG. 3 that, in its lowered work position, second table top 13 enables easy insertion of material to be sewed into and along opening 16 between the bottom 14a of open arm 14 and base 17 of the sewing machine. Moreover, bobbin door 24 of open arm 14 has clearance for opening in both work positions of second table top 13.

Also, because first table top 10 is no wider along its end portion opposite the one end portion 10a than parallel motion mechanism 15, see FIGS. 1, 2, 4, and 5, second table top 13 can be lowered forwardly onto the upper surface of such opposite end portion 10a to place the two table tops in compact relationship when sewing machine 12 is removed and the table of the invention is not in use.

Other ways of movably attaching second table top 13 to first table top 10 can be employed to permit raising and lowering of the former relative to the latter. It is not necessary that forward movement of the second table top 13 accompany the lowering movement thereof within the generic purview of the invention. In instances of constructions that do not combine forward movement of the second table top, relative to the machine, with downward movement thereof, slot 18 should be enlarged and lengthened sufficiently to provide convenient introduction of material being worked on into and along space 16.

Whereas this invention is here illustrated and described with respect to a certain preferred form

thereof, it is to be understood that variations are possible without departing from the inventive concepts particularly pointed out in the claims.

We claim:

1. A work table for open-arm sewing machines, comprising an elongate table top having a flat continuous upper surface throughout the extent thereof and adapted to receive an open-arm sewing machine intermediate its length and extending longitudinally therewith, said elongate table top defining a sewing-machine receiving area intermediate its length and extending longitudinally therewith; means for supporting said table top in a sewing-machine-use position; a second table top mounted on the first table top and having a receiving slot confronting the sewing-machine-receiving area of the first table top and extending longitudinally inwardly of such second table top, from one end thereof, for accommodating the open arm of a sewing machine when the latter is positioned on the first table top; means mounting the second table top over an end portion of the first top, so that, in open-arm work position, said second table top rests upon and in superimposed relationship with said first table top, with its upper surface above the upper surface of said first table top and increasing the effective length of the first table top, such mounting means providing for the raising of the second table top relative to and above the first table top to approximately the same level at which the working surface of the open-arm of the received sewing machine will be positioned, said mounting means also providing for return of the second table top to its rest position upon the first table top in the said open-arm work position.

2. A work table in accordance with claim 1, wherein the mounting means provided for raising and lowering the second table comprises parallel motion mechanism connecting the second table top with the first.

3. A work table in accordance with claim 2, wherein means are provided for securing a sewing machine in its received position on the first table top.

4. A work table in accordance with claim 3, wherein the securing means comprises cushioning bumpers secured to the upper surface of the first table top at that end of the sewing-machine-receiving-area which is remote from the second table top.

5. A work table in accordance with claim 3, wherein cushioning bumper means is attached to the second table top within the open-arm-receiving slot thereof.

6. A work table in accordance with claim 2, wherein the underside of the second table top is recessed marginally of the slot for accommodating the base of the sewing machine when said second table top is in lowered position resting upon the first table top.

7. A work table in accordance with claim 1, wherein the width of the specified end portion of the underlying first table top approximates the width of the superimposed, second table top and is considerably wider than the open-arm-receiving slot in said second table top.

8. A work table in accordance with claim 7, wherein the second table top is of panel formation having reinforcing strips extending along the longitudinal edge margins of the bottom thereof; and wherein the mounting means providing for raising and lowering said second table top comprises parallel motion mechanism connecting said second table top with the first table top and journaled in said reinforcing strips.

9. A work table in accordance with claim 2, wherein the other end portion of the first table top is no wider than the parallel motion mechanism, so the latter is free to move in that direction for placing the two tables tops in compact relationship when not in use.

5

* * * * *

10

15

20

25

30

35

40

45

50

55

60

65