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2,688,295

SEWING MACHINE

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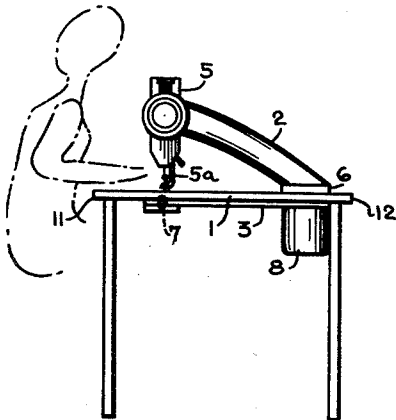


Fig 1

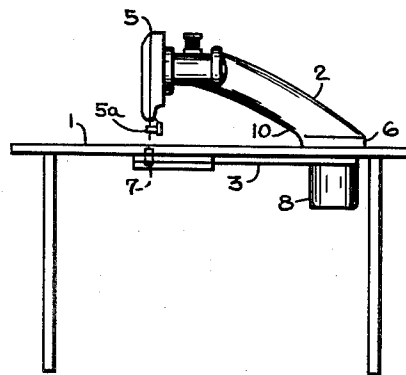


Fig 2

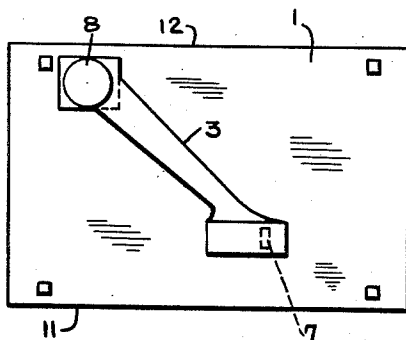


Fig 4

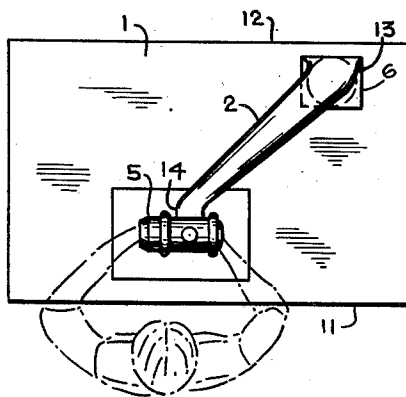


Fig 3

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SEWING MACHINE

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1 Claim. (Cl. 112-258)

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The invention relates to improvements in sewing machines.

The main operating parts of a sewing machine, namely the work head and the drive mechanism for the bobbin are connected by two arms of which one extends above and the other one below the work support, for instance a table; these two arms form with a vertical stand a U-shaped structure, the arms representing the two shanks and the stand its web portion. This U-shaped structure extends with customary sewing machines substantially at a right angle to the transverse traveling direction of the goods to be sewed and through a vertical plane which runs parallel to the front or rear edge of the supporting table.

The disadvantages of this conventional construction of sewing machines are considerable.

The stand extending relative to the front and rear sides of the rectangular machine support in the same vertical plane as the working head forms an awkward obstruction to the free passage of the goods; the efforts of the machine operators to shift the goods around this stand are well known. If the goods collide with this vertical stand a deviation is caused from their straight advance through the machine, which greatly impairs the accuracy of the work and means a loss of time; the working rate is accordingly greatly reduced.

It is the primary object of the invention to eliminate these essential shortcomings of the art.

A further object of the invention is the arrangement of the above recited main parts of a sewing machine in such a manner that essentially the total upper surface of the work support or table is free for the passage of the goods to be sewed and the work is in no way restricted by their size or shape.

In conformity with the recited objects, the upper arm or the upper and lower arms extend diagonally across the work support, such as a table.

A base plate located upon the right hand rear corner portion of the rectangular working table supports the upper arm; the working head supported by the end portion of the diagonally extending upper arm is located above the front portion of the table within easy reach of the operator.

The invention is by way of example illustrated

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in the accompanying drawing without, however, restricting its general concept thereof to the shown embodiment.

In the drawing

Fig. 1 is a side view of the machine;

Fig. 2 is a front view thereof; and

Figs. 3 and 4 are plan views from above and below.

The upper arm 2 of the machine is supported by a base plate 6; this base plate, see Figs. 2 and 3, is located in the right hand rear corner portion of the supporting table 1 and in the vicinity of its rear edge 12 at the furthest point from the operator 4 sitting in front of the table 1. The upper arm 2 extends diagonally from this rear corner portion of the table 1 over its surface towards the front edge 11, where the operator sits. The working head 5 is attached to the end of arm 2.

The upper arm 2 may be arcuated, as apparent from Fig. 2; moreover, its end transits with an inwardly rounded portion 10 into the base plate; this arm supports in the usual manner the gears transmitting the movement from motor 8 to the needle bar 5a.

The lower arm 3, which supports the gears for the actuation of the bobbin 7, extends underneath table 1 in the same diagonal or transversal direction as the upper arm 2. This lower arm may be equally shaped as the upper arm.

The two front and rear end portions of arm 2 are bent-off to form short pieces 13, 14 extending substantially at a right angle to the table edges 11, 12.

The end of the upper arm 2 connected to the base plate 6 may be shaped in any convenient manner to facilitate the passage of the goods during their advance through the machine.

Since certain changes may be made in the above article and different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

Having thus described the invention, what I claim as new and desire to be secured by Letters Patent, is as follows:

In a sewing machine, a rectangular work support having a front edge and a rear edge, said

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two edges extending parallel to each other, a working head and means to support said working head above the front edge of said work support, said means including a base plate mounted upon a rear corner portion of said work support and an arm rising in an upward direction from the front edge of said work support, whereby essentially the entire upper surface of said work support is rendered available for the passage of the goods to be sewed, means including an arm located underneath said work support to operate said working head, the end portion of said upper arm being bent-off in a perpendicular di-

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rection to the front and the rear edge of said work support and extending at a right angle to said edges.

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