March 6, 1934. G LIND 1,950,087

METHOD OF PRODUCING A TABLE TOP FOR A SEWING MACHINE OF THE DISAPPEARING TYPE

Filed June 29, 1933

Fig. 1



Fig. 2

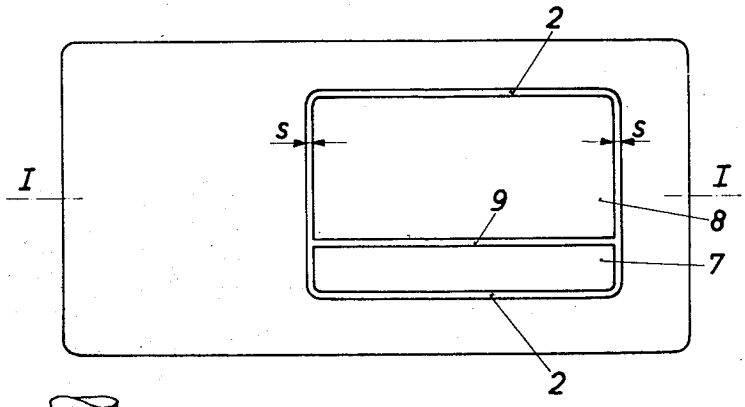


Fig. 3



Fig. 4

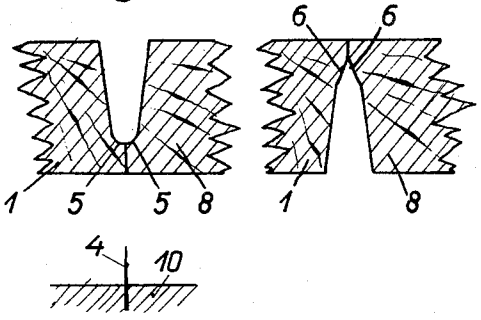
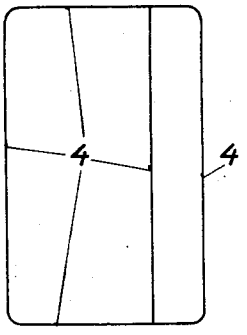


Fig. 5



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METHOD OF PRODUCING A TABLE TOP FOR A SEWING MACHINE OF THE DISAPPEARING TYPE

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10 Claims. (Cl. 144—309)

This invention relates to a method of producing a table top for a sewing machine of the disappearing type.

It is the object of this invention to produce the cover for the opening of a sewing machine having a body which is lowered into the sewing machine cabinet, in a most economical and expeditious manner and which furthermore presents a better appearance than the covers on machine table tops of the prior art.

The table top of a sewing machine as is contemplated herein has an opening in the top surface into which the upper body portion of the sewing machine is lowered, whereupon the opening is completely closed by means of a top plate in conjuction with a pivotally disposed flap.

The invention may be understood best by the following description in conjunction with the accompanying drawing wherein

Fig. 1 is a longitudinal sectional view of the table top of a sewing machine of the lowering type, along section line I—I of Fig. 2,

Fig. 2 is a bottom plan view of the table top,

Fig. 3 shows several stages in the production of the cover for a sewing machine table top with the tools employed in such production,

Fig. 4 is a sectional view of the table top showing a modified form of the finished cut between the cover and table top, and

Fig. 5 is a plan view of the stamping knife employed in the production of covers according to the instant invention.

It is known that the opening of the table top may be cut out by means of a boring milling-cutter. As shown in Fig. 1 of the drawing, this operation gives rise to a slit of a width *s* between the portion that is cut out and the table top, this slit corresponding to the field of operation of the cutter. The portion which is cut out can now be used for covering the opening by gluing a border to its edges corresponding to the width *s*, which imparts to the portion that is cut out the dimensions of the opening. This method is however costly, tedious, and inconvenient. In the case that one does not care to practice this process and prefers to discard the portion which is cut out of the table top, it is necessary to utilize new material to produce the cover, and the part which is cut out goes to waste. Both of these processes have the further disadvantage that the grains in the table top, when fully covered, are discontinuous, whereby an unpleasant appearance results.

In accordance with the invention, the opening which permits the lowering of the upper body portion of the sewing machine is produced by a combined stamping and cutting operation. Thereby, in one working step the outline of the opening is stamped upon the upper side of the table top for a depth of a few millimeters, while in another step the outline of the opening is milled from the under side of the table top to a depth extending at least as far as the cutting edge of the stamping tool previously reached. In accordance with the instant invention, it is possible that the cut-out portion of the table top which heretofore constituted waste, or which could only be used under the difficulties described above, without further processing, may be used as a covering plate for covering the opening in the table top. By means of the method according to the invention, a great number of economies are obtained and furthermore an especially pleasing appearance of the table top results, since in the covered condition, the grain of the table top runs naturally throughout its length, and is different from the results obtained heretofore in which the grain of the cover was discontinuous or entirely different from that of the table top.

The working steps in accordance with the invention consist of the following:

In the upper surface of table top 1 is stamped the outline of the cut 2 (Fig. 2), by means of a knife 4 set in a stamping plate 10, for a depth of about 5 millimeters (Figs. 1 and 3). In accordance with the invention, thereby the complete outline of opening 2, and even a sub-division of the part cut out into two parts 7 and 8 along a line 9, is cut in one stamping operation. The stamping knife has a contour as illustrated in Fig. 5. In another working step, the under surface of the table top is cut by means of a rotary milling-cutter 3 (Fig. 3) along the outline of the opening 2, and likewise along the dividing line 9. The cut effected by the milling-cutter extends at least as deep as the cut executed by the stamping tool 10, 4 on the opposite side. It is apparent that by means of these two working steps a suitable cover for the opening 2, or two cover pieces 7 and 8, are cut out. In the course of the milling operation the table top is guided in a form or mold so that the outline of the opening 2 can be followed and cut without any difficulty.

Since by the described working steps there arises at the transition surface, between the cut produced by the stamping knife and that produced by the milling-cutter, a corner 5 (Fig. 3), in a further milling operation the corner is ground to attain the form shown in Fig. 4.

Having described my invention,

I claim:

1. The method of producing a table top for a sewing machine of the disappearing type which comprises cutting out the opening in the top required for the lowering of the body of the machine by a combined stamping and milling operation.

2. The method of producing a table top for a sewing machine of the disappearing type which comprises cutting out the cover for the opening in the top required for the lowering of the upper part of the machine by only stamping and milling operations upon the table top.

3. The method of producing a table top for a sewing machine of the disappearing type which comprises cutting out the cover for the opening in the top required for the lowering of the upper part of the machine by first stamping the table top and subsequently milling the same.

4. The method of producing a table top for a sewing machine of the disappearing type which comprises stamping a cutting knife of the outline corresponding to the desired opening into one surface of the table and subsequently milling the opposite surface along said outline to a depth which meets the cut produced by the stamping operation.

5. The method of producing a table top for a sewing machine of the disappearing type which comprises stamping a cutting knife of the outline corresponding to the desired opening into the top surface of the table and subsequently milling the under surface along said outline to a depth which meets the cut produced by the stamping operation.

6. The method of producing a table top for a sewing machine of the disappearing type which comprises stamping in a single operation a cutting knife of the outline coresponding to the desired opening of a plurality of sections, into the top surface of the table, and subsequently milling the under surface along said outline to a depth which meets the cut produced by the stamping operation.

7. The method of producing a table top for a sewing machine of the disappearing type which comprises stamping in a single operation two adjacently disposed sections of different sizes with a cutting knife of the outline corresponding to the sections into the top surface of the table, subsequently milling the under surface along said outline to a depth which meets the cut produced by the stamping operation whereby the sections of different sizes are severed, with the smaller one adapted to be hingedly connected to the table top and the larger one fitted in the corresponding opening.

8. The method of producing a table top for supporting a body adapted to be lowered, which comprises cutting out the cover for the opening in the top required for the lowering of the body by a combined stamping and milling operation.

9. The method of producing a table top for supporting a body adapted to be lowered, which comprises cutting out the cover for the opening in the top required for the lowering of the body by first stamping the table top and subsequently milling the same.

10. The method of producing a table top for supporting a body adapted to be lowered, which comprises stamping a cutting knife of the outline corresponding to the desired opening into one surface of the table and subsequently milling the opposite surface along said outline to a depth which meets the cut produced by the stamping operation.

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