



# UNITED STATES PATENT OFFICE.

WILLIAM WILSON, OF CINCINNATI, OHIO.

## IMPROVEMENT IN CORDERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **146,736**, dated January 20, 1874; application filed October 27, 1873.

To all whom it may concern:

Be it known that I, WILLIAM WILSON, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Corder for Sewing-Machines, of which the following is a specification:

This attachment is designed to enable a comparatively unskilled operator to cord either a single or a double fabric with absolute accuracy, the material being automatically guided to its work.

Figure 1 is a perspective view of my corder attached to a machine, and in the act of cording a double thickness of goods. Fig. 2 is a perspective view of the corder detached. Fig. 3 is a perspective view of the same inverted. Fig. 4 is an enlarged plan of the operative portion of corder inverted. Fig. 5 is a section, showing the method of cording a double thickness of cloth. Fig. 6 is a similar section, representing the mode of cording a single thickness of cloth. Fig. 7 is a section at the line Y Y, Fig. 6, the cloth being removed from the corder.

Of the above illustrations, Figs. 4, 5, 6, and 7 are drawn on an enlarged scale.

A, B, C, D, and E may represent, respectively, the cloth-plate, guide-head, presser-bar, needle-bar, and needle of a sewing-machine. G is an elastic U-shaped blade or "goose-neck," of spring brass or steel, whose upper limb, *g*, terminates in a depressed horizontal portion, *g'*, which takes the place of, and discharges the functions of, the presser-foot, as well as those hereinafter recited. The said limb has a suitable lug, H, and screw I, by which it is attached to the bar C, in place of the presser-foot. The portion *g'* is prolonged on its receiving side into a tongue or guide, J, that extends parallel with the feed, and whose under side is grooved at *j* throughout its length, the same being one of a series of parallel grooves, of which two grooves, *j j'*, are to the right, and the remaining grooves, *j'' j''' j''''*, are to the left, of the needle-hole K. Of these, the groove *j'* is made shallower than the others, in order to compress the forming tuck, and the right and left series of grooves are separated by an interval, F, to properly separate the tucks in seaming on single goods.

The grooves *j'' j'''* are carried vertically upward in front to form notches L L'. From the horizontal portion *g'* the limb *g* bends upward, and thence extends horizontally to the middle of the blade, where it bends downward, and, returning under and parallel to the upper limb, gradually tapers to its far extremity, where it terminates in a curving tubular cord-guide, M''', the same being one of a series, M M' M'', with which the blade is provided.

The operation of my improved corder is as follows: Whether for single or double cording, the cloth is first folded with the cord inside it, the left edge of the tongue J serving as a guide for the folded edge of the goods. If it be now desired to cord on double goods, the corded tuck is introduced in the groove *j*, whose edges, straddling the formed tuck, hold the goods effectually to their proper course.

For cording in single thickness, the goods are entered as before; but in the subsequent passages the tucks pass, as they are formed, one by one, leftward, so as to occupy the grooves *j'' j''' j''''* to the left of the needle, said grooves and the notches L L' serving to hold the cloth to its proper course without drawing upon the advancing end of the upper fly, and thus perform the same service for the operation of single cording that the groove *j* does for the double cording.

The grooves or corrugations on the left side of the needle hold the cloth so effectually to its course as to supersede the necessity of guiding.

I have described the corder as adapted to a "Singer" sewing-machine, and have shown means for its attachment to the presser-foot bar used in that machine; but it may obviously be attached to presser-foot bars of other machines by proper appliances, or may be attached to the cloth-plate by means of a movable member carried under the presser-foot, and rising and falling therewith. The goose-neck may be of spring-wire, if desired.

I claim as new and of my invention—

1. A sewing-machine corder whose presser-foot has guide-grooves on both sides of the middle hole, for optional single or double thicknesses, as explained.

2. The corder provided on its under surface, and to right of needle-hole, with the grooved tongue or prolongation J j, substantially as and for the purpose set forth.

3. The corder provided on its under surface, and to left of needle-hole, with the notched grooves j'' j''', substantially as and for the purpose set forth.

4. The interval F between the needle-hole

and the nearest groove to the left of it, as and for the object designated.

In testimony of which invention I hereunto set my hand.

WILLIAM WILSON.

Attest:

GEO. H. KNIGHT,  
JAMES H. LAYMAN.