

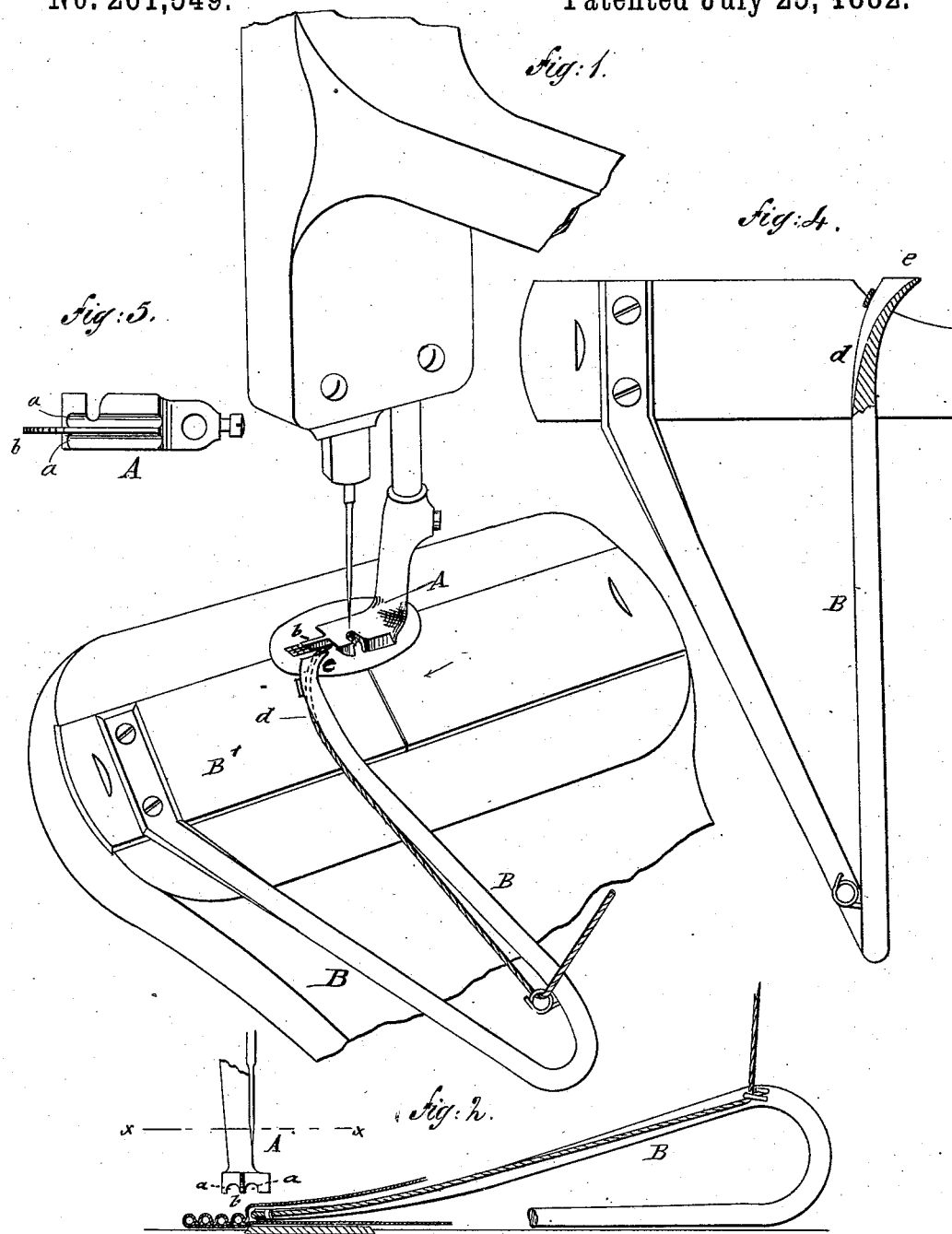
(Model.)

F. HAND

CORDER FOR SEWING MACHINES.

No. 261,549.

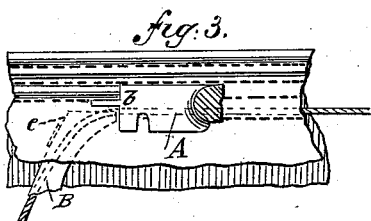
Patented July 25, 1882.



WITNESSES:

Carl Kay

Joh. W. Rosenbaum.



INVENTOR  
Frank Hand  
BY Paul Goepel.

ATTORNEY

# UNITED STATES PATENT OFFICE.

FRANK HAND, OF ELIZABETH, NEW JERSEY.

## CORDER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 261,549, dated July 25, 1882.

Application filed September 15, 1881. (Model.)

*To all whom it may concern:*

Be it known that I, FRANK HAND, of Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful  
5 Improvements in Corders for Sewing-Machines, of which the following is a specification.

This invention has reference to an improved corder for sewing-machines, by which the uniform and accurate cording of the fabric is obtained, the corder being furthermore quickly  
10 applied and removed and retained in position at the exact point where it is required to perform its work.

The invention consists in the combination,  
15 with a suitable corder-arm, of a presser-foot having parallel longitudinal grooves and a knife-like guiding-blade projecting beyond the grooves and body of the foot in line with the ridge between the grooves.

The invention consists, further, in the combination, with a suitable corder-arm, of a presser-foot having parallel grooves and a knife-like  
20 guiding-blade projecting beyond the grooves and body of the foot in line with the ridge between the grooves, said blade being curved at the end to facilitate the feeding and creasing of the cloth.

The invention consists, further, in a corder-arm, the free delivery end of which is provided  
30 with a straight grooved guide-heel, which extends parallel, or nearly so, with the feed, the groove in said heel being open at the front and tapered toward the needle, whereby said heel is adapted to guide the cloth as well as the  
35 cord.

The invention consists, further, in an acutangular corder-arm, one member of which is provided with a flat perforated butt adapted for attachment to the slide-plate and slightly  
40 inclined upward from said plate, while the other member is provided with suitable cord-guides, the attaching and delivery ends being in line with and apart from each other in the direction of the feed.

In the accompanying drawings, Figure 1 represents a perspective view of my improved corder for sewing-machines, represented in the act of cording. Fig. 2 is a front view of the  
45 corder with a part broken off. Fig. 3 is a detail horizontal section on line *x x*, Fig. 2. Fig. 4 is a plan view of the corder-arm, partly in

section, of the outer tubular end; and Fig. 5 is a detail bottom view of the presser-foot.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the presser-foot, and B the corder-arm, which together form my improved cording attachment for sewing-machines. The presser-foot A is attached, in the usual manner, by means of a  
60 socket and set-screw, to the presser-bar of the sewing-machine, but is provided at its under side with two longitudinal grooves, *a*, parallel to each other, and with a thin knife-like blade, *b*, which extends forward beyond the grooves  
65 and body of the presser-foot in line with the rib or ridge *b'* between the grooves *a*. The front edge of the presser-foot A, as well as the front end of the blade *b*, is rounded off, as shown in Figs. 1 and 5, so as to prepare the  
70 fabric and cord for an easy entrance to the grooves and render them less liable to catch as they enter the grooves. The corder-arm B is made of V shape, and attached by its flattened rear or butt end to a slide-plate, B', of  
75 the sewing-machine, extending transversely across the same, near the front end thereof. From the butt-end the corder-arm extends sidewise in a straight line away from the slide-plate, being abruptly curved at its middle portion or apex of the V and then continued in a  
80 slightly-curved line toward the presser-foot, the free end being thus at some distance back of the butt-end, as distinguished from U-shaped corder-arms heretofore in use, in which  
85 the free end is arranged vertically above the lower or butt end. The connection of the corder-arm B with the slide-plate B' has the advantage that not only the corder-arm is quickly and accurately placed in its proper  
90 relative position to the presser-foot, but it has also the advantage that it may be instantly removed when not required. The free outer end of the corder-arm, being back of the butt-end, has the advantage that the butt-end is out of  
95 the way and does not interfere in any manner with the work when the same passes through the corder, which is an essential point. The free end of the corder is located near the presser-foot, and has a curved tubular cord-  
100 guide, *d*, and a straight angular heel, *e*, which latter runs parallel, or nearly so, to and along-

side of the projecting blade of the presser-foot. The corder-arm B is further provided with one or more ring-shaped cord-guides attached at proper distances from each other, so as to take  
 5 up the cord and hold it in the proper position for the work. The body of the corder-arm B, at the curved tubular end *d*, is made gradually tapering. The heel *e*, at the delivery end of  
 10 the corder-arm, is tapered toward the needle, and has a flaring groove enlarged toward and open at its forward end, the sides of which groove assist in guiding the fabric as well as  
 the cord.

The operation of my improved corder is as  
 15 follows: The cord is passed through the guides of the corder-arm and placed into proper position in the groove of the presser-foot to the right of the projecting blade. On the descent  
 20 of the needle the stitches are formed along-side of the cord in the fabric, while the heel forms the guide and places the fabric in proper position for the needle. When one row of  
 25 cording is laid down the next row is formed in the same manner. In this case, however, the groove on the left side of the blade straddles the already stitched line of cording, and forms  
 thus, in connection with the blade, a steady and reliable guide for properly laying down the  
 30 next adjoining cord. This is continued from the right toward the left with great regularity, so that a uniform and accurate cording of the fabric is obtained. As the corder-arm extends  
 35 and is made long enough for most purposes, it is not in the way of the fabric, which can thereby be closely observed and its regularity controlled. It is obvious that the corder may be  
 adapted for attachment to the presser-foot of any sewing-machine without changing the es-  
 40 sential feature of the invention.

The corder-arm, instead of being tubular at the end, may also be made tubular throughout for guiding the cord, though I prefer to make it solid with a tubular and partly-open end, as

it is thereby stronger and more durable when 45  
 in use.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a cording attachment for sewing-machines, a presser-foot having parallel longi- 50  
 tudinal grooves and a knife-like guiding-blade projecting beyond the grooves and body of the foot in a line with the ridge between the grooves, in combination with the corder-arm, substantially as described. 55

2. In a cording attachment for sewing-machines, a presser-foot having parallel grooves and a knife-like guiding-blade projecting beyond the grooves and body of the foot in line with the ridge between the grooves, said blade 60  
 being curved at the end, in combination with a corder-arm, substantially as set forth.

3. A corder-arm having a tubular cord-guide near its delivery end and a guide-heel parallel, or nearly so, with the direction of the 65  
 feed, said guide-heel being provided with a groove which is open at the front and tapered toward the needle, whereby said heel is adapted to serve as a guide for the fabric as well as for the cord, substantially as described. 70

4. An acutangular corder-arm, whereof the attaching member is provided with a flattened perforated shank adapted to fit the slide-plate and is slightly inclined upward from said shank, and whereof the cord-delivery member 75  
 is provided with suitable cord-guides, the attaching and delivery ends of the arm being in line with and apart from each other in the direction of the feed, substantially as described.

In testimony that I claim the foregoing as 80  
 my invention I have signed my name, in presence of two witnesses, this 14th day of September, 1881.

FRANK HAND.

Witnesses:

PAUL GOEPEL,  
 CARL KARP.