

D. C. LEE.
EMBROIDERING ATTACHMENT FOR SEWING MACHINES.
APPLICATION FILED JAN. 2, 1906.

939,603.

Patented Nov. 9, 1909.

Fig. 1.

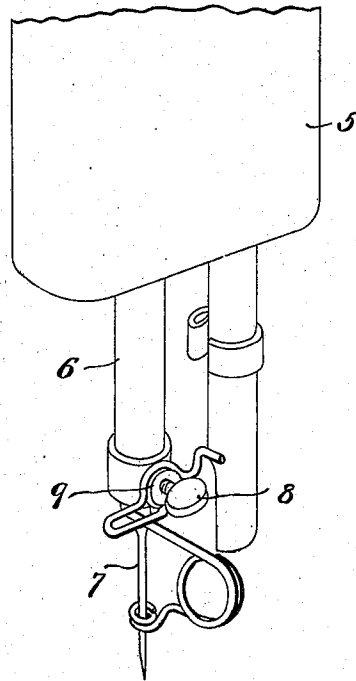


Fig. 2.

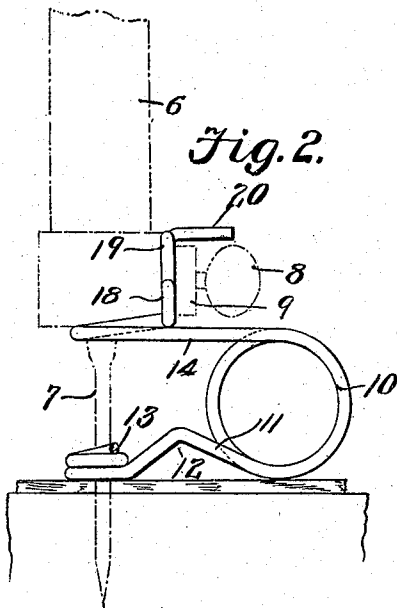
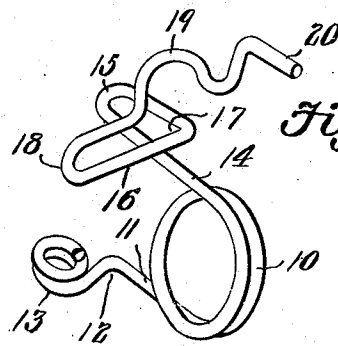


Fig. 3.



WITNESSES:

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EMBROIDERING ATTACHMENT FOR SEWING-MACHINES.

939,603.

Specification of Letters Patent.

Patented Nov. 9, 1909.

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To all whom it may concern:

Be it known that I, DAVID C. LEE, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Embroidering Attachment for Sewing-Machines, of which the following is a specification.

This invention relates to embroidering attachments for sewing machines and has for its object to provide a simple, inexpensive and efficient device of this character designed to take the place of the usual presser foot when embroidering or making fancy work of various kinds.

A further object of the invention is to provide a yieldable presser foot which may be quickly attached to or detached from the needle bar and which offers practically no obstruction to the vision, thereby enabling the operator to see the work as the same is fed to the machine.

A still further object is to form the presser foot from a single piece of metal an intermediate portion of which is bent to form a spring coil having one end thereof extended to produce a closed loop adapted to receive the shank of the needle while the opposite end of the coil terminates in an eye disposed in alinement with the closed loop and adapted to receive the point or eye of the needle whereby the presser foot is locked against accidental lateral displacement.

With these and other objects in view, the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described and illustrated in the accompanying drawings and pointed out in the claim hereto appended, it being understood that various changes in form, proportions and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

In the accompanying drawings forming a part of this specification: Figure 1 is a perspective view of an embroidering attachment constructed in accordance with my invention showing the same in position on the end of a needle bar. Fig. 2 is a side elevation, showing the operation of the device. Fig. 3 is a perspective view of the device detached.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The attachment is shown as applied to a sewing machine of the ordinary construction in which 5 designates the head, 6 the needle bar and 7 the needle, the latter being clamped within a recess in the head of the bar 6, as by a set screw 8 engaging a threaded opening in the boss or projection 9.

The improved device is preferably formed of a single piece of spring wire or other suitable material an intermediate portion of which is bent to form a spring coil 10 one horizontal arm 11 of which is offset at 12 and terminates in a terminal coil or eye 13 adapted to receive the point or eye of the needle. The opposite horizontal arm 14 of the coil 10 is extended laterally and bent upon itself at 15 and thence extended at right angles to said arm to produce an angularly disposed arm 16 which forms a closed loop 17 adapted to bear against the head of the needle bar and accommodate the shank of the needle, as shown. The wire is then bent upon itself at 18 and the end thereof disposed above and in vertical alinement, with the arm 16 and thence curved upwardly to form a single wall loop 19 adapted to engage and clamp the boss 9, said wire after the loop 19 is formed being bent laterally to form a terminal finger piece 20 for convenience in engaging and disengaging the loop 19 from the boss 9. It will here be noted that the superposed loops 17 and 19 are disposed at right angles to each other so that the lower loop 17 will bear flat against the base of the needle bar while the upper loop 19 engages said bar at the boss or projection 9. The eye 13 and loop 17 are disposed in vertical alinement, as shown, whereby when the device is properly positioned on the needle bar the same will be effectually prevented from wobbling or moving laterally of the needle, but will permit the latter to move vertically within the eye 13 when the needle bar is reciprocated.

It will be observed that the loop 17 being flat and substantially rectangular in shape forms an extensive bearing surface for engagement with the head of the needle bar and serves to receive the downward pressure of said needle bar. By having the spring coil 10 of the yieldable pressure foot extending laterally beneath the boss 9 and disposed on the same side of the needle bar with said boss it presents practically no obstruction to the line of vision and enables the operator to readily see and detect any false

stitches in the work as the latter is fed to the machine. It will also be observed that the arm 16 by engagement with the arm 14 of the spring coil 10 will tend to limit the upward movement of said coil and thus assist in retaining the same in position on the needle bar.

From the foregoing description, it will be seen that there is provided an exceedingly simple and durable device admirably adapted for the attainment of the ends in view.

I claim:—

An embroidering attachment for sewing machines formed from a single piece of resilient wire bent to form an intermediate coil 10 and two laterally extending arms 11 and 14, the terminal of the arm 11 being formed into a needle receiving eye 13 and its intermediate portion formed into an upstanding

angular offset 12 to permit the coil and eye to rest upon the bed plate of a machine, and the terminal of the arm 14 being formed into a needle encircling loop 15 that bears against the under side of the needle bar, thence bent upward at right angles to the plane of the loop 15 and formed into a loop 18 that projects across the arm 14, the upper member of the loop 18 being provided with a bend 19 to engage with a boss on a needle bar, and its terminal being formed into a finger hold 20.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

DAVID C. LEE.

Witnesses:

J. G. PENN,
F. GREULICH.