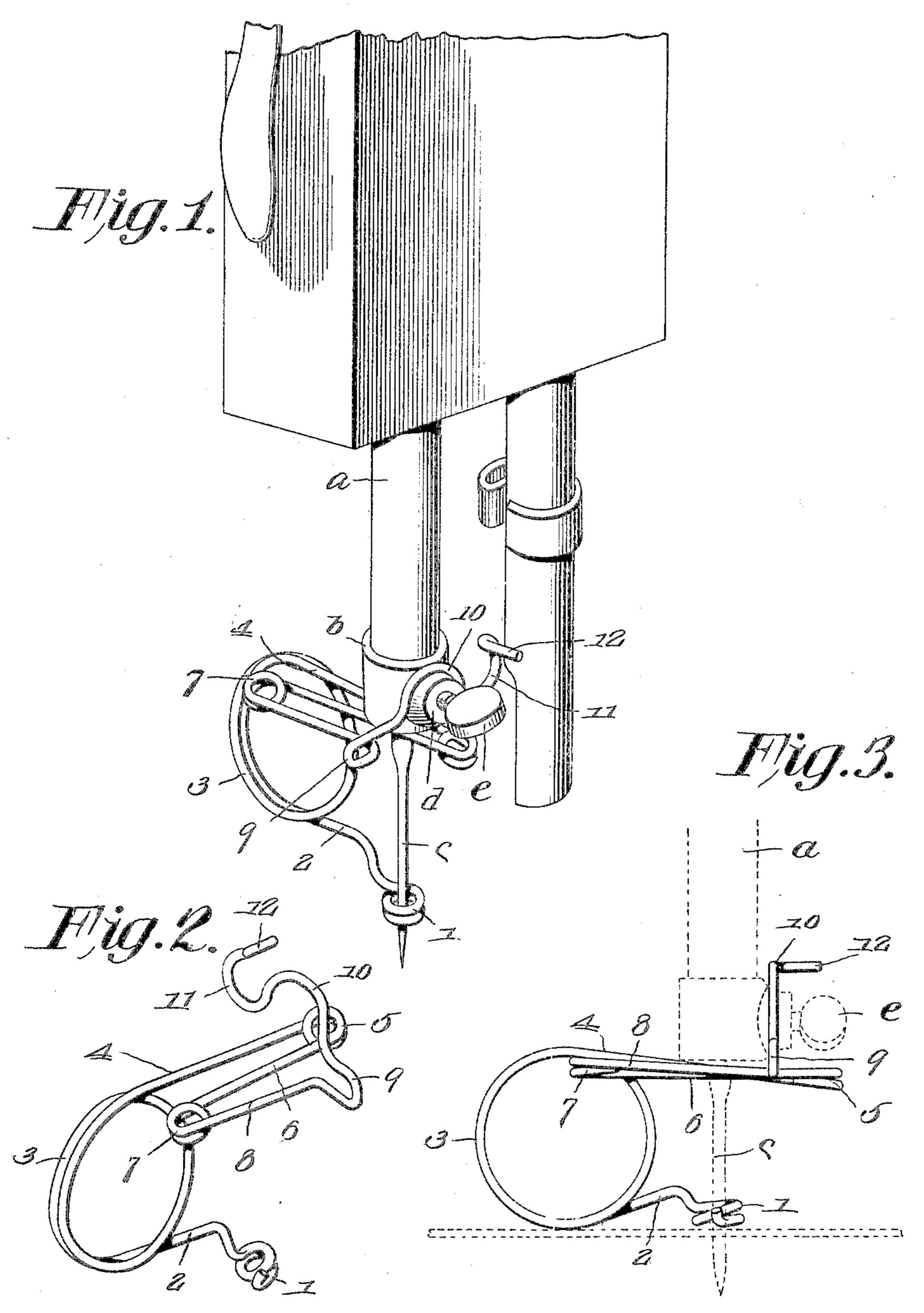
## B. JOHNSON.

EMBROIDERING ATTACHMENT FOR SEWING MACHINES.

APPLICATION FILED NOV. 29, 1904.



Billie Tollison,

Witnesses

by Caraca Hetorneus

## UNITED STATES PATENT OFFICE.

BILLIE JOHNSON, OF TEMPLE, TEXAS.

## ENBROIDERING ATTACHNENT FOR SEMING-WACHINES.

SPECIFICATION forming part of Letters Patent No. 794,021, dated July 4, 1905.

Application filed November 29, 1904. Serial No. 234,740.

To all whom it may concern:

Be it known that I, Billie Johnson, a citizen of the United States, residing at Temple, in the county of Bell and State of Texas, have invented a new and useful Embroidering Attachment for Sewing-Machines, of which the following is a specification.

This invention relates to devices of that class employed in place of the usual presser-foot when sewing-machines are used for embroidery or fancy work of various character.

One object of the invention is to provide a device of the most simple and economical construction that may be readily applied to domestic sewing-machines of various type, the attachment being made of a single piece of wire bent into proper form and of such nature as to permit ready attachment by bending in one direction or the other to suit varying conditions and to permit its attachment to machines that differ somewhat in construction and size.

With this and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a perspective view of an embroidering attachment constructed in accordance with the invention, showing the same in position on the end of the needle-bar. Fig. 2 is a similar view of the same detached. Fig. 3 is a view look
40 ing from the front of the sewing-machine, showing the operation of the device.

Similar characters of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

In manufacturing embroidery or fancy work of different character on sewing-machines it is usual to remove the presser-foot and to employ a yieldable presser-foot, which moves with the needle-bar and needle and is elevated at each upstroke of the needle to an extent

sufficient to allow the operator to see the work and then properly guide the fabric in accordance with the desired pattern.

The attachment in the present instance is formed of a single strip of metal, preferably 55 round wire. One end of the wire is bent to form a loop 1 for the passage of the needle. This loop is formed of more than one coil, and the terminal is bent upward, so that there will be no sharp point in contact with the 60 work. From the loop the wire is bent upward and outward, forming an arm 2, and thence is bent to form a spring-coil 3. From the top of the coil the wire is extended on a tangential line, forming an arm 4, which ter- 65 minates at a coil 5, the wire being thence bent to form an arm 6, disposed in parallel relation to the arm 4, and at the end of the arm 6 is a coil 7, practically in alinement with the vertical center of the coil 3. From 70 the coil 7 the wire is bent to form an arm 8, that is parallel with the arms 4 and 6. At the end of the arm 8 the wire is bent at a right angle and thence curved upward to form a loop 9. The wire is thence turned 75 upward, forming a curved loop 10, and thence a coil 11, finally terminating in an outwardlyprojecting end 12, which forms a convenient finger-hold for attaching and removing the device from the machine.

A majority of sewing-machines employed for domestic use are provided with needlebars, such as a, at the lower ends of which are recessed heads b for the reception of the upper end of the needle c. At one side of 85 the head is a boss d, having a threaded opening for the passage of a thumb-screw e or other suitable screw, by which the needle is clamped and held within the recess.

In using the device forming the subject of 90 the present invention on an ordinary sewing-machine the ordinary presser-foot is removed, and then, the point of the needle being above the work-plate, the attachment is held in the right hand facing the sewing-machine in 95 the usual manner and moved to the left of the machine until the upper portion of the needle is received between the two arms 4 and 6. The point of the needle is then inserted through the lower loop 1, and then the

attachment is moved up until the three arms 4, 6, and 8 or the arms 4 and 6 only, as the case may be, come into contact with the bottom of the needle-bar. The attachment is then grasped in the left hand and turned slightly toward the right, so that the loop 11 may be grasped and raised over the thumbscrew e and the loop 10 placed over the boss d. This affords all the support necessary for maintaining the device in proper position, and the attachment may then be used in the usual manner.

The operation of these devices is well understood, the loop 1 forming a yieldable 15 presser-foot, which remains in engagement with the fabric for a sufficient length of time to permit the completion of the shuttle-loop and then rising with the needle until it is fully clear of the fabric in order to permit inzo spection of the work as it progresses and the shifting of the position of the fabric, as dictated by the pattern. Should the needle be long, the arm 2 may be bent slightly downward by spreading the coil 3, or the arm may 25 be moved in the opposite direction, if necessary, and the upper portions 9, 10, 11, and 12 of the attachment being formed of a simple piece of round wire may be readily bent by the fingers in order to permit the attachment 30 of the device to machines of slightly-different construction or where there are slight variations in the size of the lower end of the needle - bar, the boss, and the needle - locking screw.

The loop 1 may be conveniently threaded by passing the thread inward between the

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coils of the loop, as will be readily understood.

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Having thus described the invention, what is claimed is—

1. A yieldable presser - foot attachment formed of a single piece of metal having at its lower end a coiled eye for the passage of the sewing-needle, the upper portion of said piece of metal being bent to form a plurality 45 of spaced arms arranged to bear against the bottom of the needle-bar, and open at one end to permit the lateral introduction of the shank or body portion of the needle, an intermediate portion of the piece of metal being bent to 50 form a spring-loop.

2. A yieldable presser - foot attachment formed of a single piece of wire coiled at one end to form an eye, the coils overlapping and the end of the wire being bent upward, the 55 wire being thence bent to form a spring-coil and being bent above the coil to form a plurality of arms disposed in parallel relation, thereby to form an extended bearing for contact with the lower end of the needle-bar, the 60 upper portion of the wire being bent at a right angle to said parallel bars to form a loop for engaging a boss or projection on said needle-bar and the extreme end of the wire projecting to form a finger-piece.

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

BILLIE JOHNSON.

Witnesses:

JNO. H. KOHUT, W. C. RYLANDER.