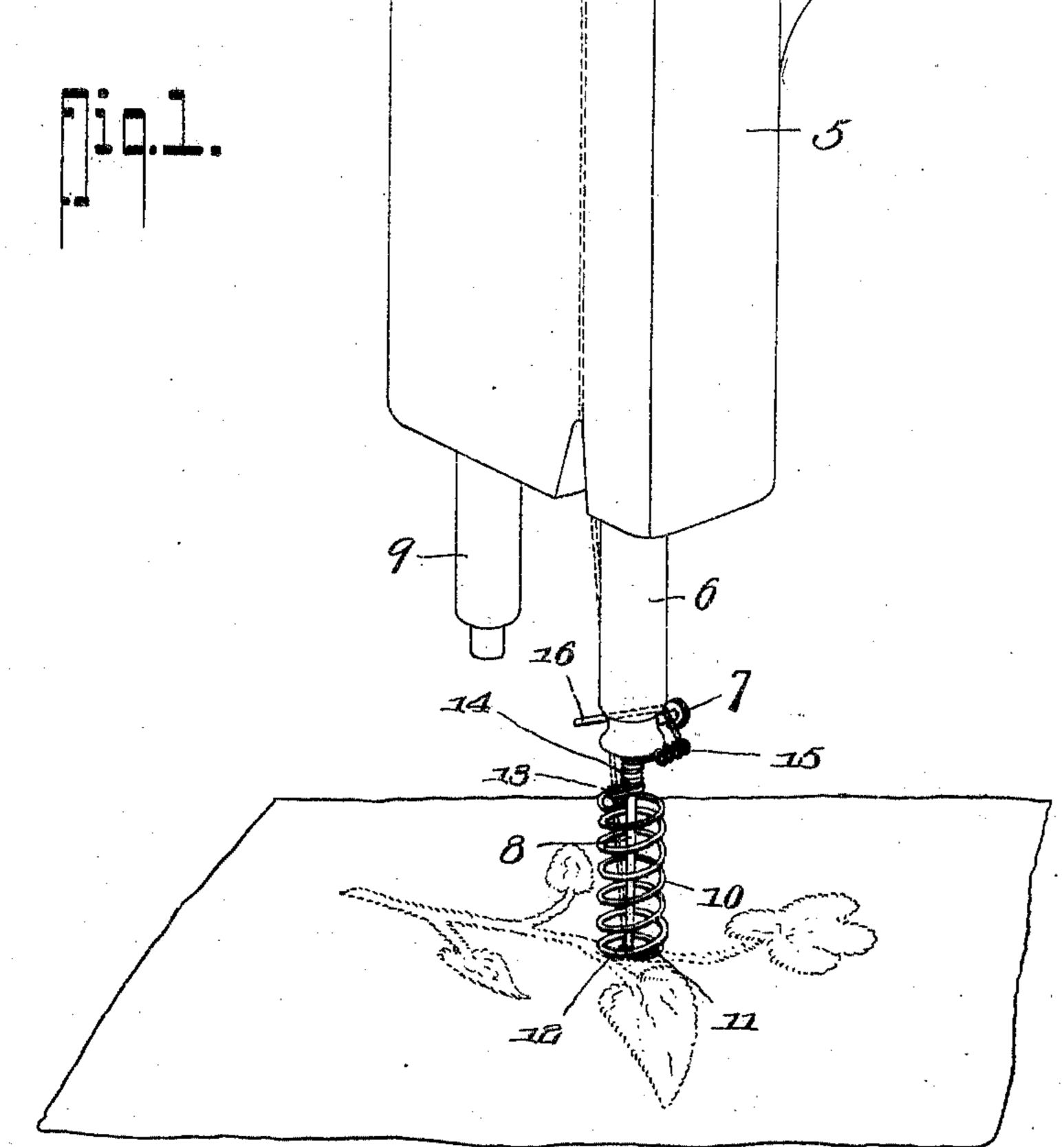
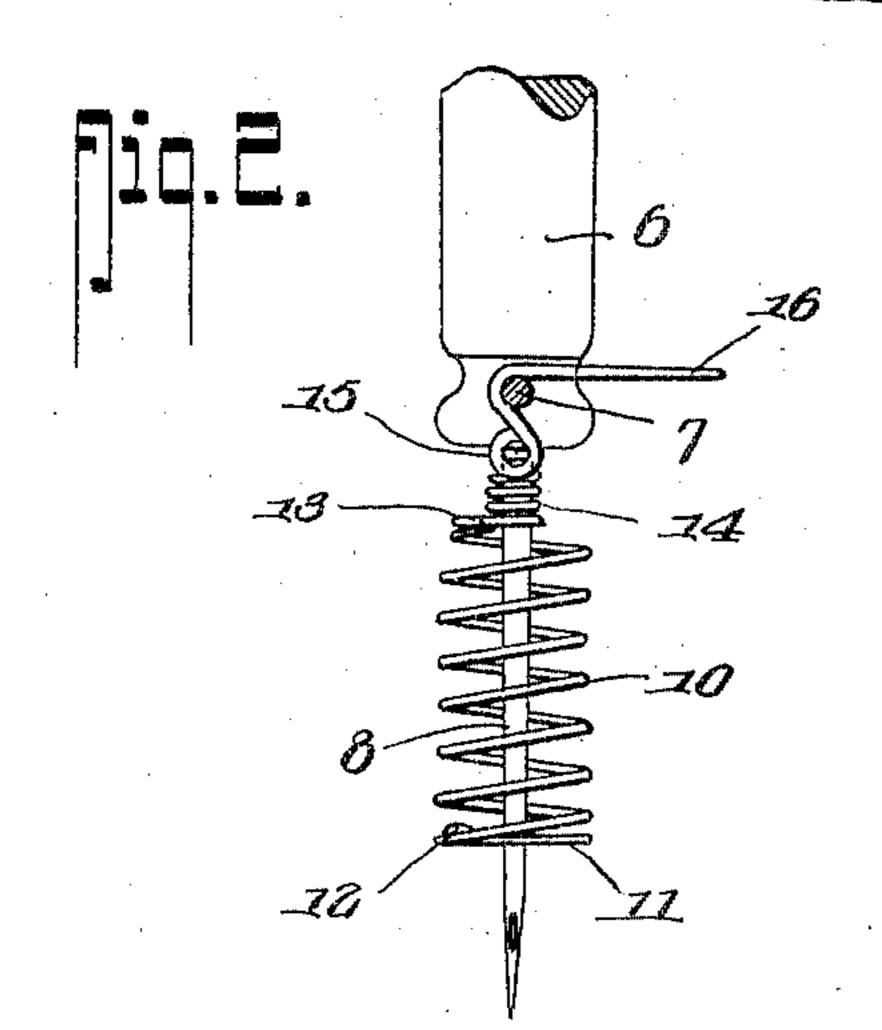
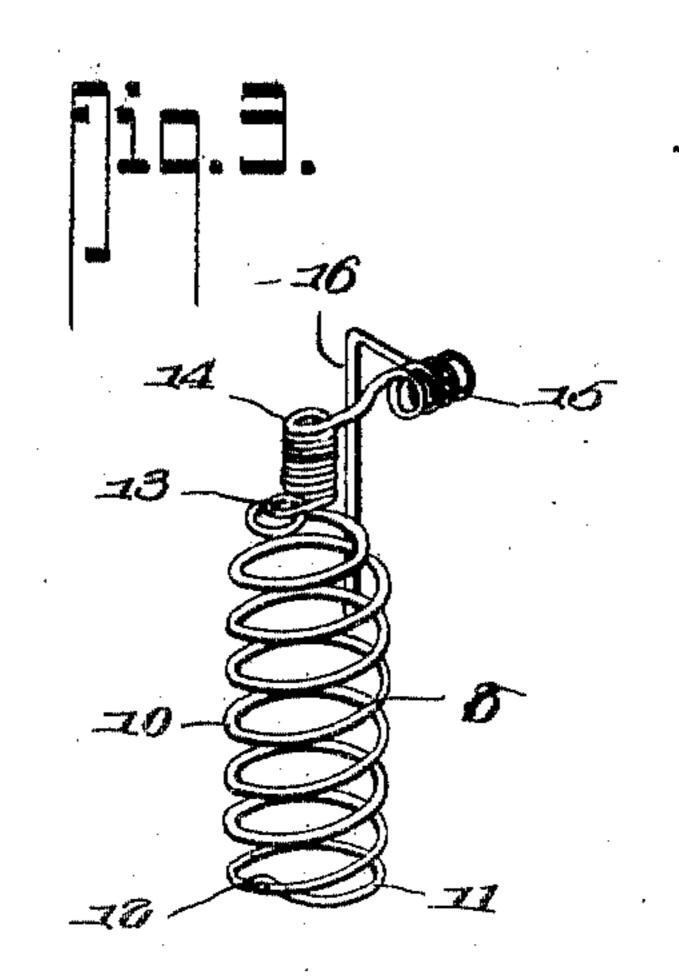
M. E. TYNES.

## EMBROIDERING ATTACHMENT FOR SEWING MACHINES. APPLICATION FILED JULY 25, 1904.







Witnesses

Minor E. Tyroes, Inventor by 1000

## United States Patent Office.

MINOR EUGENE TYNES, OF GLOSTER, MISSISSIPPI.

## EMBROIDERING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 780,245, dated January 17, 1905.

Application filed July 25, 1904. Serial No. 218,065.

To all whom it may concern:

Be it known that I, MINOR EUGENE TYNES, a citizen of the United States, residing at Gloster, in the county of Amite and State of Mis-5 sissippi, have invented a new and useful Embroidering Attachment for Sewing-Machines, of which the following is a specification.

This invention relates to an improved embroidery attachment for sewing-machines, and 10 has for its object to provide a simple, inexpensive, and durable device of this character capable of being readily attached to the needle-bar of the machine and by means of which fancy stitching or embroidery-work may be 15 performed in an effective manner.

A further object of the invention is to provide improved means for retaining the attachment in position on the needle-bar and means for guiding the thread to the eye of the needle.

A still further object is to improve this class of devices so as to add to their utility and durability, as well as to reduce the cost of manufacture.

The invention consists in the construction 25 and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended, it being understood that various changes in the form, 30 proportions, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention.

In the accompanying drawings, forming a 35 part of this specification, Figure 1 is a perspective view of a portion of a sewing-machine head, showing the ordinary presser-foot removed and my improved attachment in position on the needle-bar. Fig. 2 is a side ele-40 vation of a portion of the needle-bar and needle, showing the manner of attaching the device. Fig. 3 is a detail perspective view of the device detached.

Similar numerals of reference indicate cor-45 responding parts in all the figures of the drawings.

The numeral 5 designates the head of a sewing-machine, which is constructed in the ordinary manner and may be of any desired type 5° or style inasmuch as the present invention |

may be applied to all kinds of sewing-machines. The head 5 is provided with the usual needle-bar 6, having a clamping-screw 7 to hold a needle 8, said head also including the usual presser-bar 9, to which a presser- 55

foot is removably attached.

The improved attachment consists of a spring-coil 10, having the lower terminal 11 closed by disposing the end thereof over a portion of the same, as indicated at 12, so as 60 to avoid catching into the goods or material operated upon while stitching or embroidering. The upper portion of the coil is reduced, and the wire of which the latter is formed is bent to form a horizontally-disposed loop or 65 eye 13, designed to receive the thread and guide the same to the eye of the needle 8. The wire is then twisted to form a second coil 14, the diameter of which is less than that of the coil 10 and the convolutions thereof ar- 70 ranged close together, as shown, so as to snugly fit the upper portion of the needle and properly position the attachment on the needle-bar 6. The end of the wire after the coil 14 is formed is bent at right angles and then 75 coiled to form a spring 15, the terminal portion of which is bent rearwardly and downward to form a hook 16, adapted to engage the clamping-screw 7 on the needle-bar.

In applying the attachment the point of the 80 needle is inserted through the coil 10 and the device forced upwardly until the reduced coil 14 engages the upper portion of the needle. The hook 16 is then placed over the shank of the clamping-screw, which causes the device 85 to assume the position shown in Fig. 2 of the drawings. The spring-coil 10 holds the work upon the bed-plate of the machine until the needle has been sufficiently elevated to clear the goods or material operated upon, after 90 which the coil moves upwardly with the needle, thereby releasing the pressure on the work and permitting the same to be readily manipulated or fed forward by the feed-bar of the sewing-machine.

The reduced coil 14 not only forms a socket for the upper end of the needle, but also centers the needle with respect to the coil, while the loop or eye 13 forms a guide for the thread and prevents the latter from catching in the 100

convolutions of the coil and twisting or otherwise tangling the thread.

The device may be readily detached when its use is not desired and an ordinary presser5 foot attached to the presser-bar 9 to arrange the machine for service for ordinary stitching.

Having thus described the invention, what

is claimed is—

An embroidering attachment for sewingnachines consisting of a spring-coil formed of a single piece of wire the upper end of which is bent inwardly to form a horizontally-disposed thread-receiving eye and thence laterally in the same horizontal plane with the

thread-receiving eye to form a second coil of 15 less diameter than the first coil and adapted to receive the sewing-machine needle, the end of the wire forming the second coil being bent laterally to form a coil-spring provided with a terminal hook adapted to engage the needle-20 bar of the machine.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

MINOR EUGENE TYNES.

Witnesses:

S. A. Oneal, W. H. Christmas.