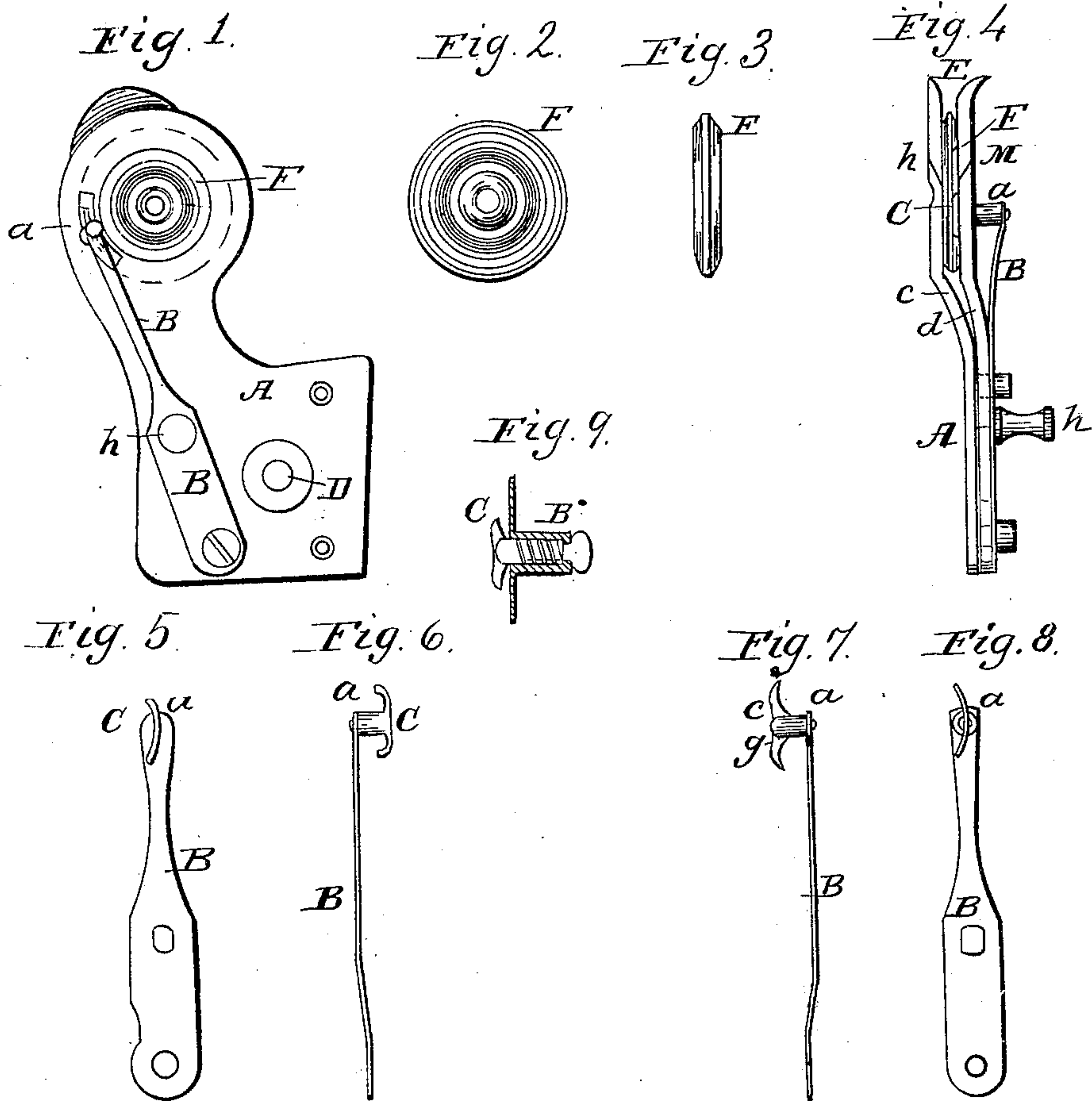


P. RODIER.

Loop Check for Sewing Machines.

No. 59,659.

Patented Nov. 13, 1866.



Witnesses:
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UNITED STATES PATENT OFFICE.

PETER RODIER, OF SPRINGFIELD, MASSACHUSETTS.

IMPROVEMENT IN LOOP-CHECKS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 59,659, dated November 13, 1866; antedated November 5, 1866.

To all whom it may concern:

Be it known that I, PETER RODIER, of Springfield, Hampden county, Commonwealth of Massachusetts, have invented an Improvement in Sewing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to letters of reference marked thereon.

My invention consists in an improvement in those machines using a spool confined between two plates, as shown in the drawings; and consists of an arrangement by which the thread is checked and prevented from taking a double stitch, or becoming entangled and breaking, as I will more fully describe after showing its construction.

In the drawings, Figure 1 is a side view of a part of the sewing-machine, showing my invention. Fig. 2 shows the wheel or bobbin on which the thread is wound. Fig. 3 is an edge view of the same. Fig. 4 is an edge view of Fig. 1. Figs. 5 and 6 show one form of my invention removed from its connection with the other parts. Figs. 7 and 8 show another form of the same, and Fig. 9 still another.

In construction it consists in attaching to the ordinary plate A a spring, B, to which is attached, at the end *a*, the piece C. This plate A is formed in two parts, *c d*, which are attached together by screws at D, and at the other end, at E, are spread out so as to hold the bobbin F, on which the thread is wound. On this bobbin the part C fits and is held by the spring B, the tension of which may be varied by means of the set-screw *h*. This part C is formed so as to fit down upon the bobbin accurately.

In this description I have confined myself to the parts as represented in Figs. 5, 6, 7, and 8, the only difference between which is that in Figs. 5 and 6 the piece C is firmly and rigidly secured to the spring B, while in Figs. 7 and 8 it hangs on a pivot, *g*, so as to more readily conform to the movements of the bobbin. Fig. 9 shows a more compact arrangement, in which a spiral spring is used to keep the part C down upon the bobbin.

The operation of this invention I will now describe.

The machines to which this improvement can be adapted use two threads, an example

of which is shown in the patent of S. C. Blodget, September 7, 1858, one thread being wound around the bobbin F, while the other is brought down in a loop at the side *m* by the needle. As this loop is brought down by the needle a hook carries it (the thread) back behind the bobbin and at the side *m* for the purpose of forming the stitch.

In the ordinary machine the spring B is used but with only a small pointed projection at *a*, which is used to keep the bobbin on one side of the holder, (the side *n*), so that the loop may strike on the side *m* and not in the thread-opening of the bobbin, as would otherwise be the case; and with this arrangement the loop is constantly slipping off the bobbin or flying out at the side *m*, so that the hook comes around and takes the same loop twice, thus entangling and breaking the thread.

Now, to prevent this slipping off and consequent breakage or tangling of the thread is the whole object of this invention, and this is accomplished by the piece C, which is curved on its inside face, as shown in the drawings, and bears on the spool at the two points X Y, while a space is left for the thread at U, and it is confined in this space by the pressure of the spring keeping the points X Y against the spool, thus keeping the thread in place and preventing it from slipping off.

In practice I usually prefer the device represented in Fig. 9, as there is no liability to catch and bend or break the spring, as is the case with the modifications represented in the other views.

The advantage of this arrangement can be readily seen, as this entangling and breakage of the thread is the principal difficulty in the way of the introduction of the machine to which this invention applies.

Now, having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The loop or thread-check C, constructed as described, when combined with and operated by a spring, B or B', and used in combination with the parts of a sewing-machine, substantially as and for the purpose herein set forth.

PETER RODIER.

Witnesses:

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