

No. 767,173.

PATENTED AUG. 9, 1904.

R. W. SCOTT.
SEWING MACHINE FOR OVERSEAMING AND FINISHING THE EDGES
OF FABRICS.

APPLICATION FILED MAY 20, 1902.

NO MODEL.

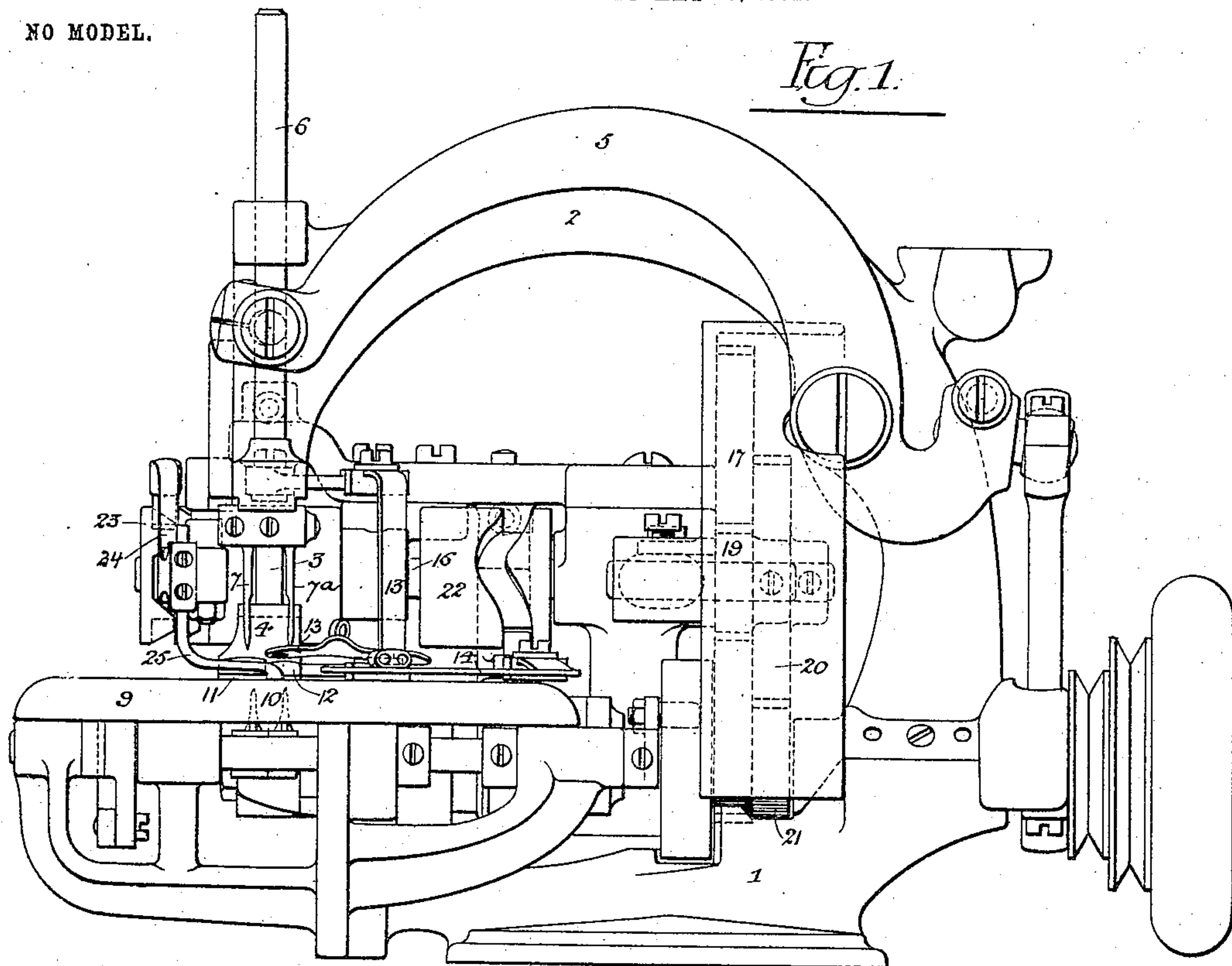


Fig. 3.

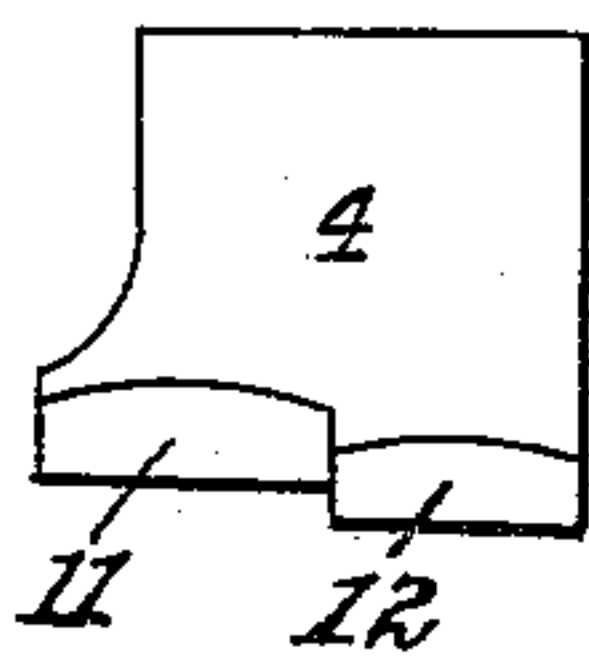
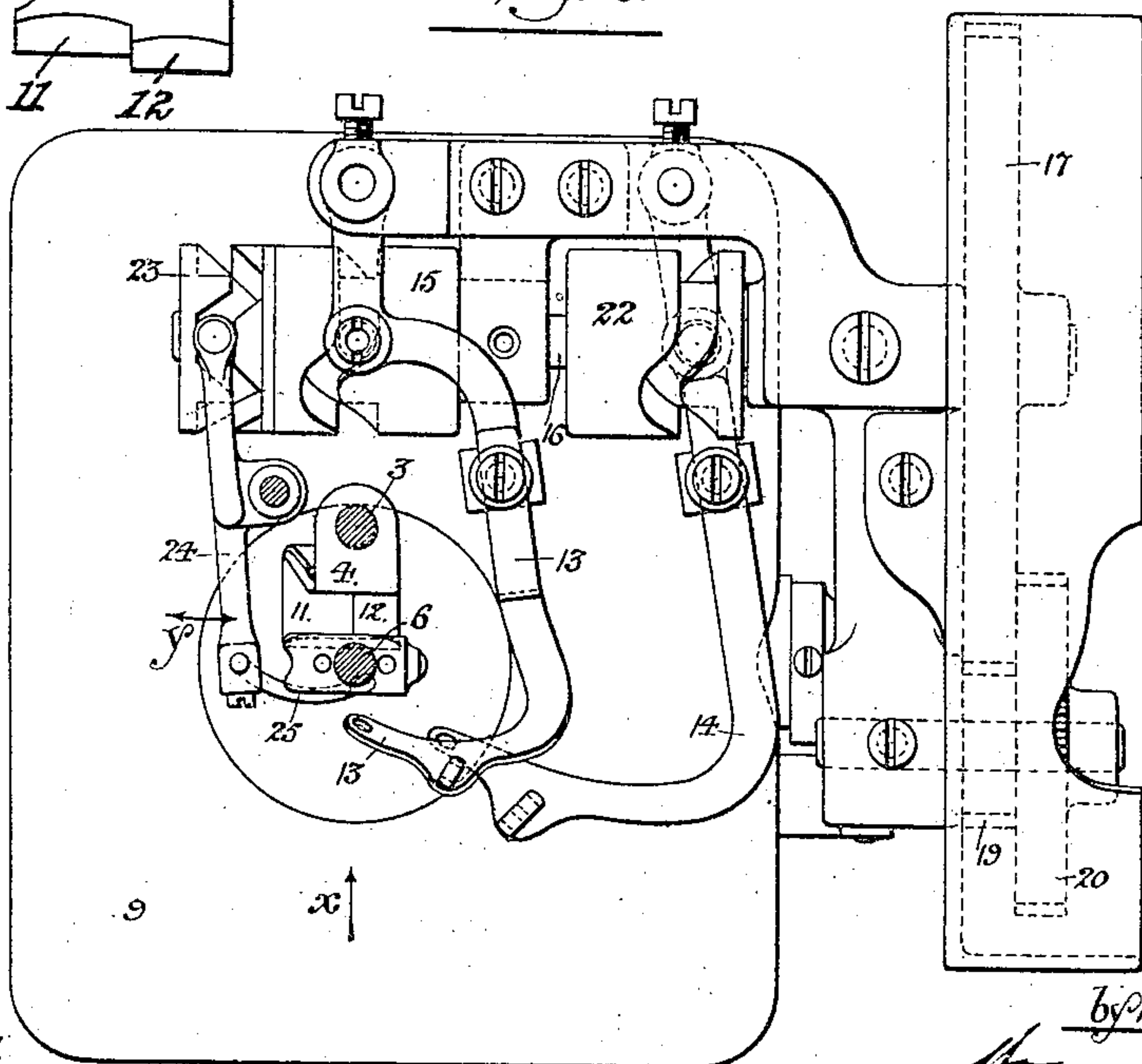


Fig. 2.



Witnesses:

F. E. Bechtold

Herman C. McKim

Inventor:
Robert W. Scott,

by his Attorneys:
Howson & Howson

UNITED STATES PATENT OFFICE.

ROBERT W. SCOTT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO LOUIS N. D. WILLIAMS, OF ASHBOURNE, PENNSYLVANIA.

SEWING-MACHINE FOR OVERSEAMING AND FINISHING EDGES OF FABRICS.

SPECIFICATION forming part of Letters Patent No. 767,173, dated August 9, 1904.

Application filed May 20, 1902. Serial No. 108,197. (No model.)

To all whom it may concern:

Be it known that I, ROBERT W. SCOTT, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Sewing-Machines for Overseaming and Finishing the Edges of Fabrics, of which the following is a specification.

My invention consists of certain attachments to an ordinary sewing-machine whereby an overedge-stitch can be formed upon the work without the necessity of imparting transverse movement either to the needle mechanism or feeding devices and whereby also "projecting" stitches may be attached to the edge of the work and secured thereto by the same stitches which form the overedge finish.

In the accompanying drawings, Figure 1 is a side view of an ordinary form of sewing-machine with my improved attachment applied thereto. Fig. 2 is a sectional plan view of part of the machine, and Fig. 3 is an enlarged front view of the presser-foot.

1 represents the main frame of the machine; 2, the fixed arm; 3, the presser-bar carried thereby; 4, the presser-foot; 5, the vibrating arm; 6, the needle-bar reciprocated thereby; 7 and 7^a, two needles fixedly mounted at the lower end of said bar, so as to partake of its vertical reciprocating motion; 9, the work-table or plate of the machine, and 10 the vibrating hooks beneath said work-table for engaging with the needle-threads and forming the same into stitches.

The machine is provided with the feeding devices common to machines of this class for imparting to the work forward motion—that is to say, motion in the direction of the arrow *x*, Fig. 2—and the presser-foot 4 is split—that is to say, it has a raised portion 11, under which the edge of the work passes, and a depressed portion 12, (see Fig. 3,) under which passes the chain of stitches formed by the inner needle 7^a, the shoulder at the junction of the two portions of the presser-foot serving as a guide for the edge of the work and preventing the same from engaging with the inner needle. Hence in the absence of any other

means for controlling the work the outermost needle, 7, would form a row of stitches some distance inward from the edge of the work and the innermost needle, 7^a, would form a row of stitches beyond the edge of the work. In connection with the machine, however, is employed a lever 13 for controlling one or more yarns or threads, whereby projecting stitches are formed on the edge of the fabric, this lever being vibrated so that the thread or threads controlled thereby will be caused to engage first with the stitches formed by the needle 7 and then with the stitches formed by the needle 7^a, thus forming a series of bars extending from one row of stitches to the other. Another lever 14 serves as a guide for a festooning-thread, the vibration of this lever causing the thread controlled thereby to be engaged at intervals by the line of stitches formed by the needle 7^a and between its points of engagement with said line of stitches to form loops projecting beyond the same. The lever 13 is vibrated by means of a cam 15, secured to a shaft 16, which is mounted in suitable bearings at the rear of the work-table 9 and is rotated by means of spur-gears 17, 19, 20, and 21 from the main shaft of the machine. The lever 14 is vibrated by means of a cam 22 on the shaft 16, as shown in Fig. 2. By a proper formation of the cams 15 and 22 any desired number of bars may be formed for each of the projecting festoons. On the end of the shaft 16 is another cam 23, which acts upon a lever 24, mounted on a fixed portion of the machine, so as to be free to vibrate thereon, this lever 24 being provided at its forward end with a finger 25, whose lower end bears upon the work-table immediately in front of the needles 7 and 7^a, as shown in Figs. 1 and 2.

When the machine is in operation, vibrating movement in the direction of the arrow *y* is imparted to the lever 24, this movement bearing such relation to the finger 25 that the downwardly-bent end of the latter will alternately occupy a position between the two needles and outwardly beyond the needle 7 and when in the latter position will pull the edge

of the work away from said needle 7, so as to
cause the latter to form a stitch beyond the
edge of the work, the result being that some
of the stitches formed by said needle 7 will
5 engage with the work just inside the edge of
the same, while others will be formed outside
of said edge, the stitches therefore inclosing
the edge of the work and forming a finish
thereon which will prevent unraveling of the
10 same if it is a cut edge, the machine being
therefore especially available for finishing the
cut edges of knitted fabrics, as the overedge-
stitches formed by the needles 7 will prevent
the pulling out of the threads constituting the
15 stitches at the edge of the work. These over-
edge-stitches will also permit the threads
forming the barring-stitches to be pulled out
to the extreme edge of the work, thereby pre-
venting said barring-stitches from overlap-
20 ping the work when such result is desired.

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

1. The combination of the sewing mechan-
ism of the machine having as elements a pair
25 of spaced needles, a guide for the edge of the
work, a finger operating in advance of the
presser-foot, means for moving said finger so
that it directs the edge of the work alternately
between the two needles and outside of the
30 outer needle, a guide for directing a thread so
as to cause it to be engaged first by the stitches
formed by one needle and then by the stitches
formed by the other needle, and a second
guide for directing a thread so that it will be

engaged by the stitches formed by the inner 35
needle only, substantially as specified.

2. The combination of the sewing mechan-
ism of the machine having as elements a pair
of spaced needles, a finger for engaging the
edge of the work so as to direct it alternately 40
between the two needles and outside of the
outer needle, means for moving said finger,
and a guide for directing a barring-thread so
as to cause it to be engaged first by the stitches
formed by one needle and then by the stitches 45
formed by the other needle of the machine,
substantially as specified.

3. The combination of the sewing mechan-
ism of the machine having as elements a pair
of spaced needles and a presser-foot having 50
its lower face in different horizontal planes
providing at the junction of the two a guide
for the edge of the work, a finger operating
in advance of said presser-foot, means for
moving said finger so that it directs the edge 55
of the work alternately between the two nee-
dles and outside of the outer needle, and a
guide for directing a thread so as to cause it
to be engaged first by the stitches formed by
one needle and then by the stitches formed 60
by the other needle, substantially as specified.

In testimony whereof I have signed my name
to this specification in the presence of two sub-
scribing witnesses.

ROBERT W. SCOTT.

Witnesses:

F. E. BECHTOLD,
JOS. H. KLEIN.