

M. ACKERMAN.
EMBROIDERING ATTACHMENT FOR SEWING MACHINES.
APPLICATION FILED AUG. 4, 1910.

983,193.

Patented Jan. 31, 1911.

Fig. 1.

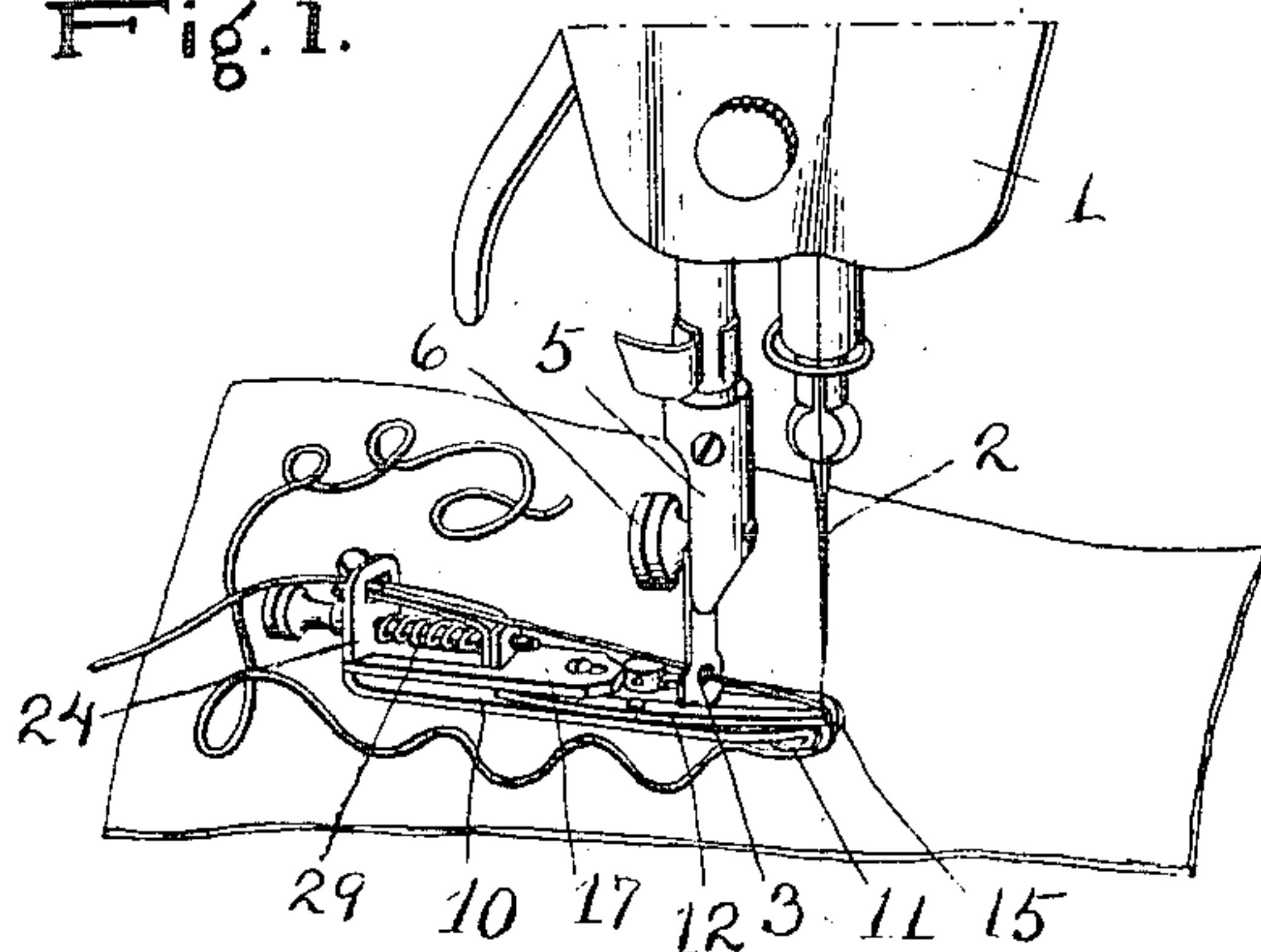


Fig. 8.

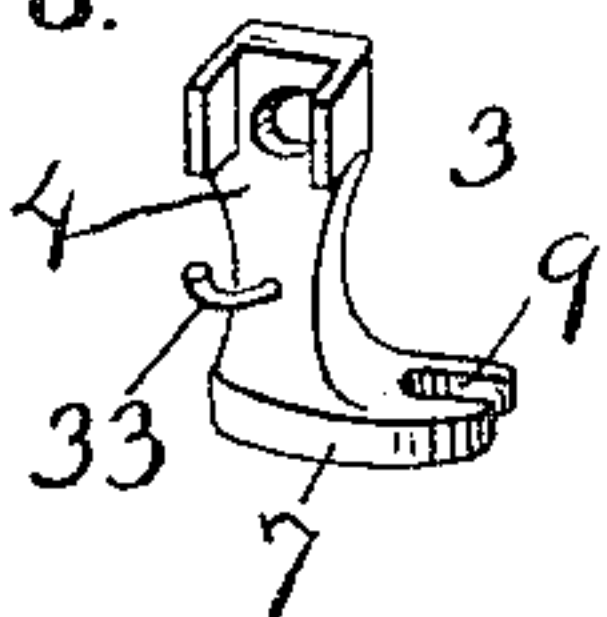


Fig. 2.

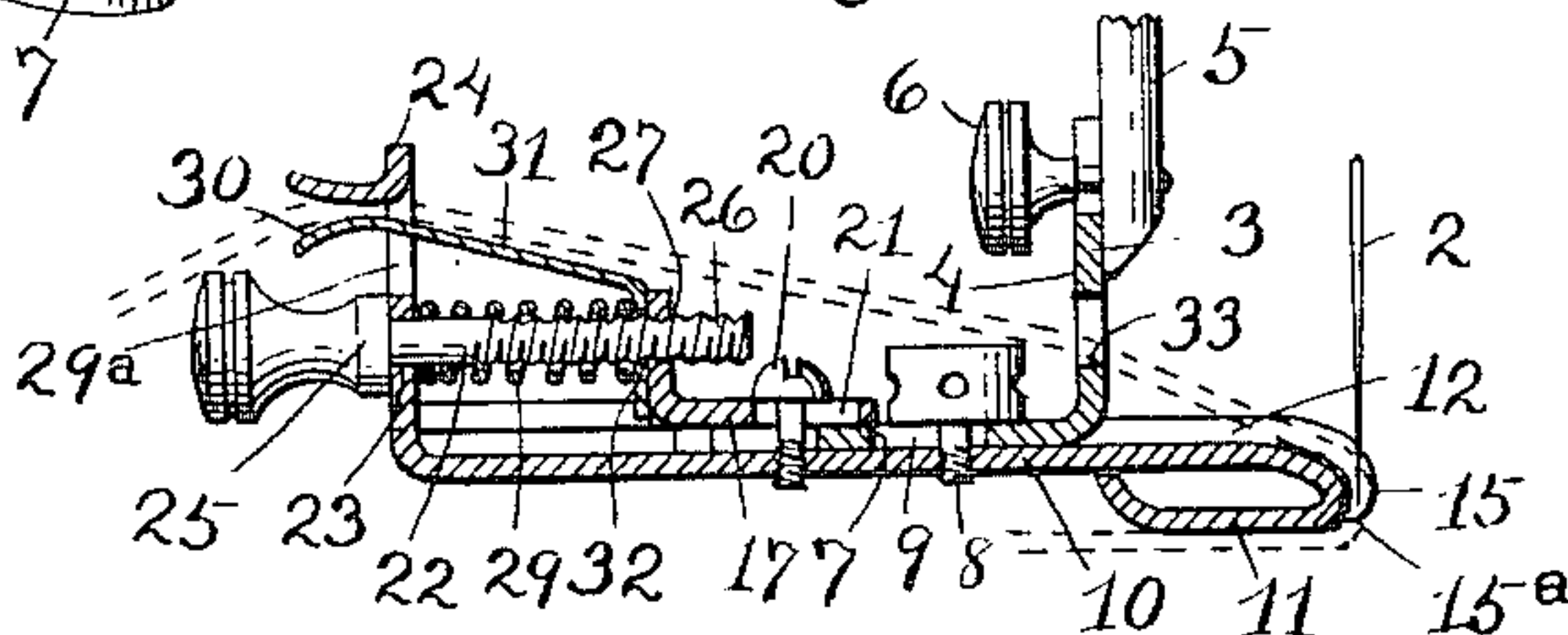


Fig. 7.

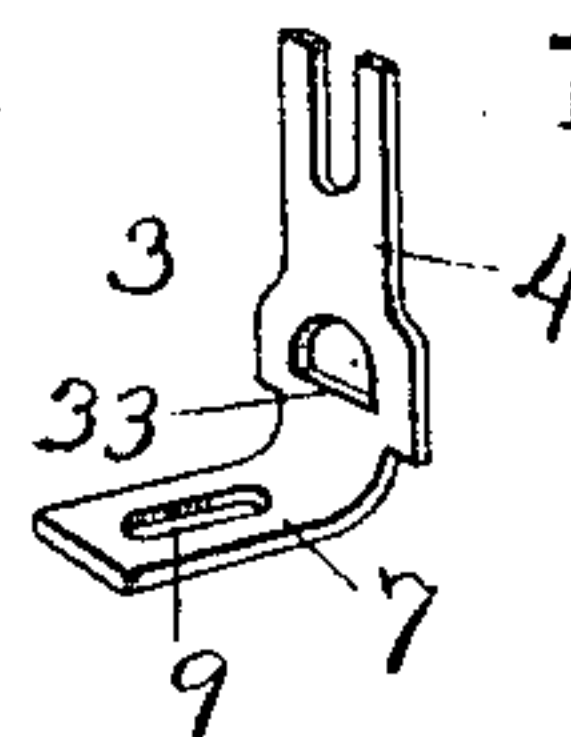


Fig. 3.

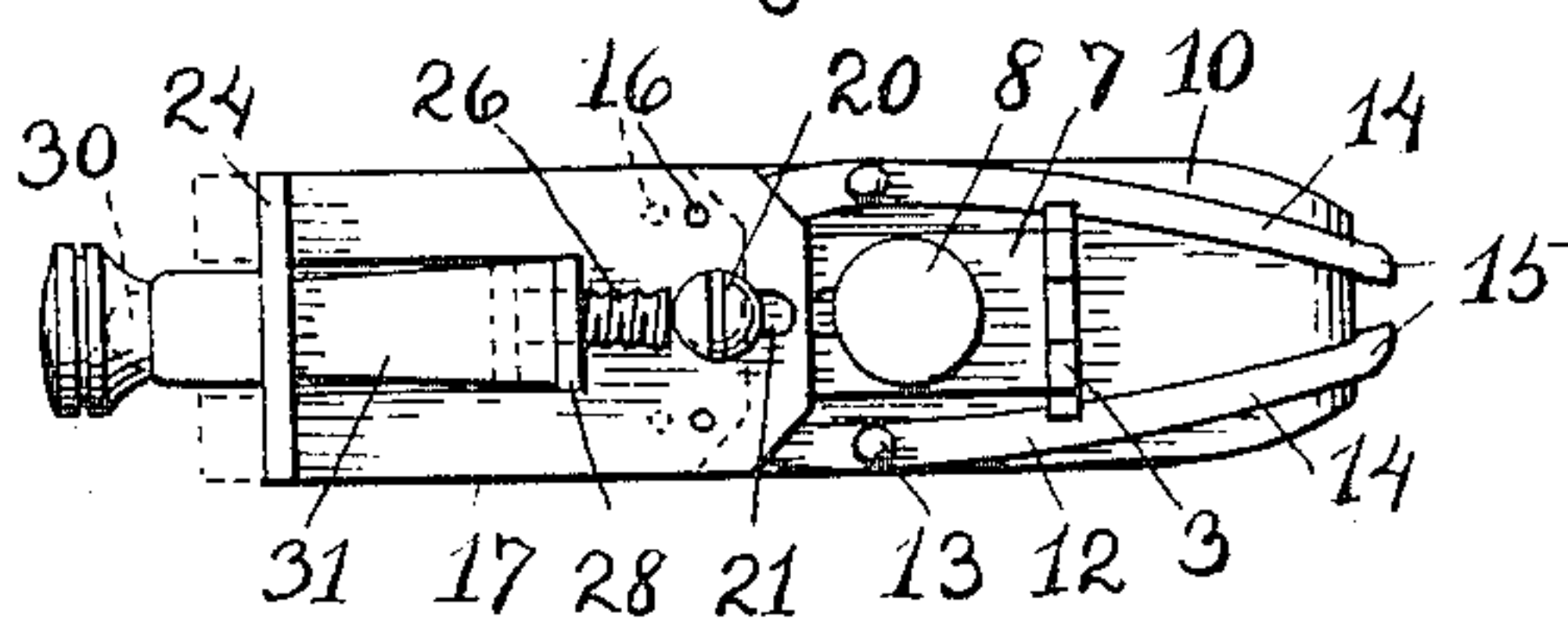


Fig. 4.

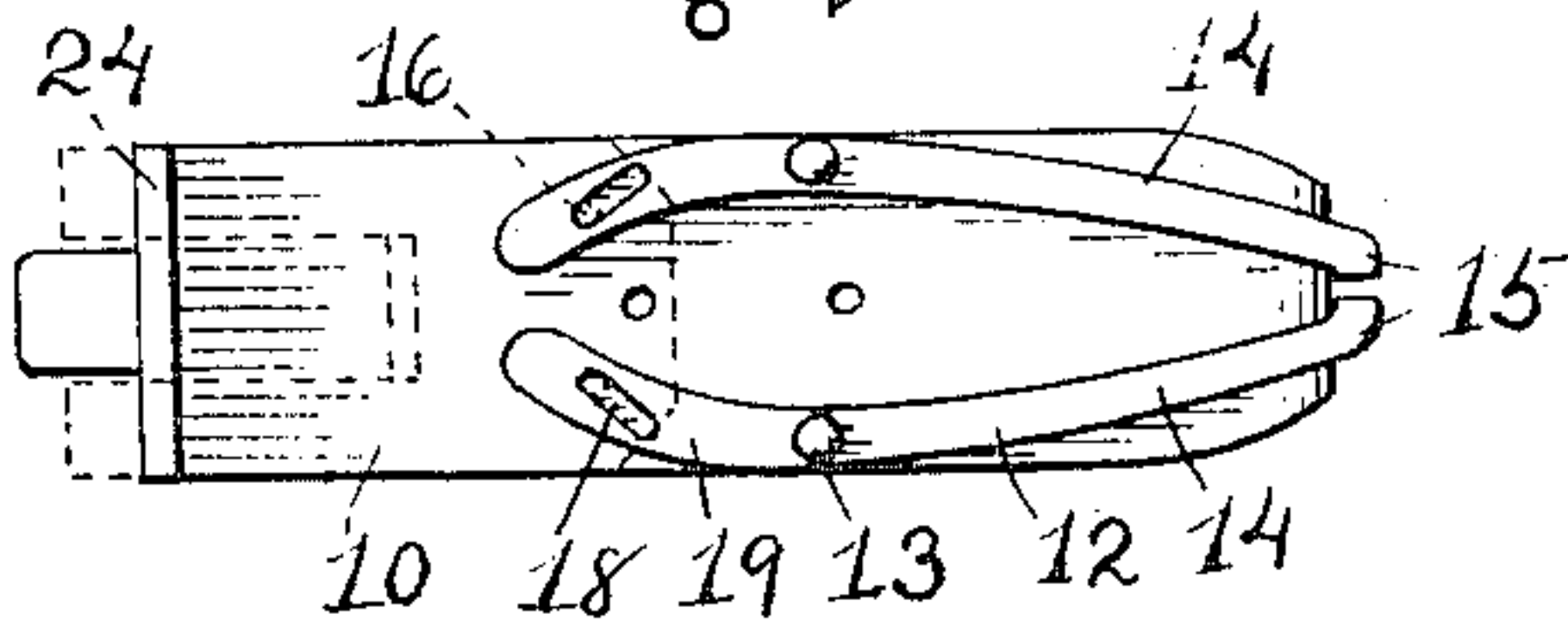


Fig. 5.

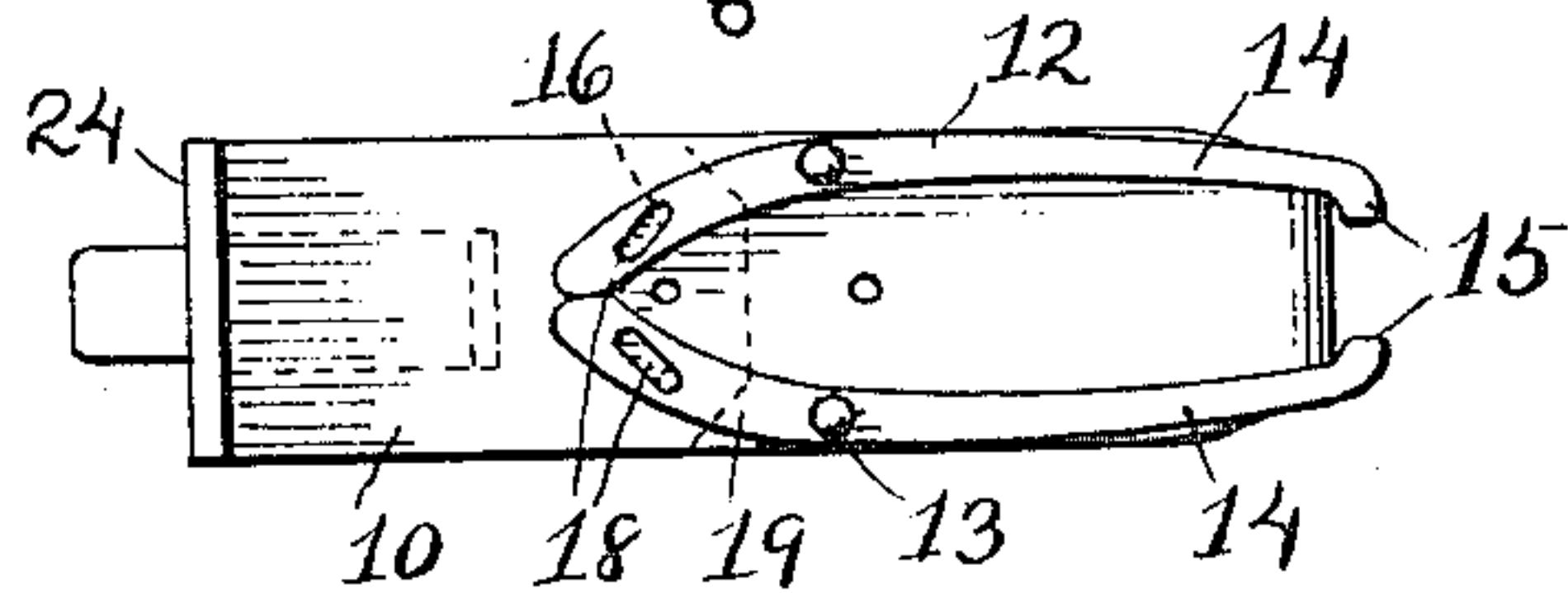
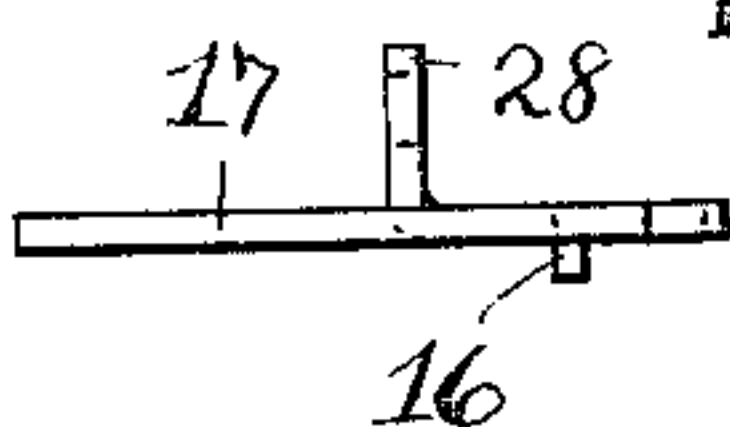


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

MAURICE ACKERMAN, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR OF THIRTY ONE-HUNDREDTHS TO HYMEN GOLDMAN AND THIRTY ONE-HUNDREDTHS TO SAM KOITLEN.

EMBROIDERING ATTACHMENT FOR SEWING-MACHINES.

983,193.

Specification of Letters Patent.

Patented Jan. 31, 1911.

Application filed August 4, 1910. Serial No. 575,595.

To all whom it may concern:

Be it known that I, MAURICE ACKERMAN, a citizen of the Dominion of Canada, resident of Washington, in the District of Columbia, have made a certain new and useful Invention in Embroidering Attachments for Sewing-Machines; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view of the invention as applied. Fig. 2 is a central longitudinal section of the invention showing the tape in dotted lines. Fig. 3 is a plan view of the invention showing the slide plate adjusted to the limit of its movement in dotted lines. Fig. 4 is a plan view of the invention showing the slide plate in dotted lines the adjusting screw for the levers being removed. Fig. 5 is a similar view with the levers adjusted to the limit of their movement. Fig. 6 is a detail side view of the slide plate. Fig. 7 is a detail perspective view of the presser foot. Fig. 8 is a similar view of another form of presser foot.

The invention has relation to sewing machine attachments designed for the stitching of an embroidery strip or tape to the surface of cloth to form any desired pattern or design thereupon, and having special relation to a simple device for the purpose easily applied to the machine, which will cause the needle to penetrate the embroidery tape in such a way as to entirely hide the stitches.

Other objects and advantages will hereinafter appear.

The invention consists in the novel construction and combinations of parts as hereinafter set forth.

In the accompanying drawings illustrating the invention, the numeral 1 designates the head of a sewing machine and 2 the needle thereof, 3 representing a presser foot having a short upright arm 4 having securing connection with the presser foot stem 5 of the machine by means of a horizontal screw 6. The form of this presser foot

will vary with the different styles and makes of sewing machines.

My attachment has a horizontal body 10 having connection with the horizontal arm 7 of the presser foot by means of a short vertical screw 8 engaging a slot 9 of the horizontal arm of the presser foot. This body 10 has at one end an enlargement 11 projecting downward below the level of said body and located at its rounded free end just to one side of the point of the needle.

12, 12 are horizontal levers, each lever being independently fulcrumed at 13 intermediately of its length to said body, and having arms 14, 14, converging toward their free ends which are approximated and somewhat enlarged as shown at 15, 15, to form downward projecting rounded guide fingers for the embroidery tape, said fingers cooperating with the rounded end of the body to guide the embroidery tape therearound. These guide fingers are capable of adjustment toward or away from each other to accommodate embroidery tape of varying widths, the adjustment being accomplished by means of downwardly projecting lugs or pins 16, 16, mounted on a slide piece 17 working upon said body, said lugs or pins working in cam slots 18, 18 in the arms 19, 19 of said levers and acting to draw the guide fingers together or to separate the same to the degree required for the width of embroidery tape used. The slide piece 17 is adjustably clamped to the body 10 to secure the adjustment of the guide fingers by means of a short vertical screw 20 engaging a slot 21 of the slide piece. For the purpose of moving the pins in the cam slots to adjust the guide fingers a horizontal stem 22 is provided having engagement with a perforation 23 of an upturned right-angle end 24 of the body 10, the head 25 of said stem having bearing against the right-angle end 24, and the threaded end 26 of said stem having engagement with a threaded perforation 27 of an upturned lug 28 of the slide piece. A coiled spring 29 surrounds the stem 22 and has bearing at its ends against the parts 24 and 28. The right-angle end 24 of the body is provided with a slot 29^a, a spring lip 30 forming a part of a spring arm 31 engaging said slot forming

a guide and means for exerting a yielding pressure upon the entering tape, the spring arm 31 having a perforation 32 through which the horizontal adjusting screw or stem 24 passes, the coiled spring 29 exerting a yielding pressure against the perforated end of this spring arm to hold it yieldably in position with the spring lip thereof exerting pressure upon the entering tape. This tape enters the attachment through the slot 29^a of the upturned end of the body, being pressed upward against the upper wall of the slot by the spring lip, the tape passing downward over the spring arm and over a guide bearing 33 of the presser foot between the guide fingers 15, 15, over and around the enlarged free end 11 of the body, when the tape takes a course backward or reverse from its direction in feeding to the attachment around the rounded free end of the body 10 between the guide fingers and under said body in operative engagement with the feeding means of the sewing machine (not shown).

The needle 2 works between the guide fingers 15, 15, and penetrates between the upper and lower surfaces and longitudinally of the tape which is drawn taut around the rounded free end of the body by the feeding means of the sewing machine acting in cooperation with the spring lip and the upper wall of the slot 29, which as before stated exerts a yielding pressure upon the entering tape.

In order to prevent the cloth from getting caught beneath the guide fingers 15, 15, and to hold said fingers down at all times, I provide them with hook ends 15^a, 15^a, which engage beneath the rounded free end of the body 10.

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

1. An embroidering attachment for sewing machines, having in combination a body provided with a rounded end, levers having each an independent fulcrum connection with said body and being each provided at its free end with a downwardly extending rounded guide finger located adjacent to and cooperating with the rounded end of said body to guide the embroidery tape therearound, and means for adjusting said levers and the guide fingers thereof.

2. An embroidering attachment for sewing machines, having in combination a body provided with a rounded end, levers having each intermediately of its length an independent fulcrum connection with said body, and a rear arm, said levers having, each at its free end, a downwardly extending rounded guide finger located adjacent to and cooperating with the rounded end of said body to guide the embroidery tape therearound, and means having cam engagement with the

rear arm of each of the levers for adjusting the same and the guide fingers thereof.

3. An embroidering attachment for sewing machines, having in combination a body provided with a rounded end, levers having each intermediately of its length an independent fulcrum connection with said body, and a rear arm provided with a slot, said levers having each at its free end a downwardly extending rounded guide finger located adjacent to and cooperating with the rounded end of said body to guide the embroidery tape therearound, and a reciprocatory plate having cam engagement with each slot for adjusting said levers and the guide fingers thereof.

4. An embroidering attachment for sewing machines, having in combination a body provided with an upturned end having a slot therein, a spring lip engaging said slot, levers having fulcrum connection with said body and provided at their free ends with guide fingers located adjacent to and cooperating with one end of said body to guide the embroidery tape therearound, and means for simultaneously adjusting said levers to simultaneously adjust the guide fingers thereof.

5. An embroidering attachment for sewing machines, having in combination a body provided with an upturned end having a slot therein, a spring lip engaging said slot, levers having fulcrum connection with said body and provided at their free ends with guide fingers cooperating with one end of said body, and a screw having engagement with a perforation of said upturned end of the body and provided with actuating connection with said levers to simultaneously adjust the same to simultaneously adjust the guide fingers thereof.

6. An embroidering attachment for sewing machines, having in combination a body provided with an upturned end having a slot therein, a spring lip engaging at its free end in said slot, levers having fulcrum connection with said body and provided at their free ends with guide fingers cooperating with a free end of said body, a reciprocatory plate having cam engagement with said levers to adjust the same and the guide fingers thereof, and a screw having operative engagement with said plate.

7. An embroidering attachment for sewing machines, having in combination a body provided with an enlarged portion at one end and at its opposite end with an upturned portion provided with a slot, levers having fulcrum connection with said body and provided with guide fingers at their free ends cooperating with the enlarged end portion of said body, a reciprocatory plate having cam engagement with said levers to simultaneously adjust the same to simultaneously adjust the guide fingers thereof, a screw

having engagement with an upturned lug of said plate to adjust the same and to adjust said levers, a spring lip having engagement at its free end portion with said slot and at its lower end provided with a perforation engaging the stem of said screw, and a coiled spring surrounding the stem of said screw and bearing at one end against the upturned end of said body and at its opposite end against the lower end of said lip.

8. An embroidering attachment for sewing machines, having in combination a body provided with an upturned end having a slot therein, a spring lip having engagement at its free end with said slot, levers having fulcrum connection with said body and provided at their free ends with guide fingers cooperating with a free end portion of said body, means for simultaneously adjusting said levers to simultaneously adjust the

guide fingers thereof, and a detachable presser foot having a screw connection with said body between said levers, said presser foot having a laterally extending bearing for the embroidery tape.

9. An embroidering attachment for sewing machines, having in combination a body and levers having fulcrum connection with said body and provided at their free ends with guide fingers located adjacent to and cooperating with the end of said body to guide the embroidery tape therearound, said fingers having hook projections located beneath the end of said body.

In testimony whereof I affix my signature, in presence of two witnesses.

MAURICE ACKERMAN.

Witnesses:

RICHARD A. CURTIN,
GEORGE M. ANDERSON.