

C. E. BARRETT

SEWING MACHINE

Fig. 1.

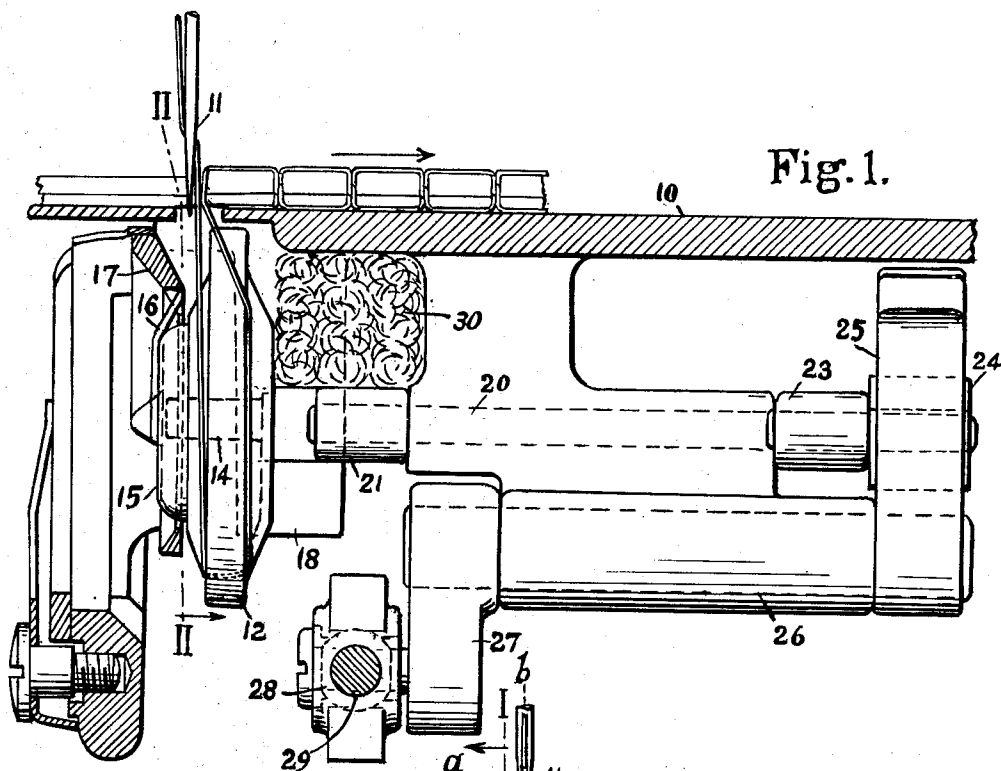
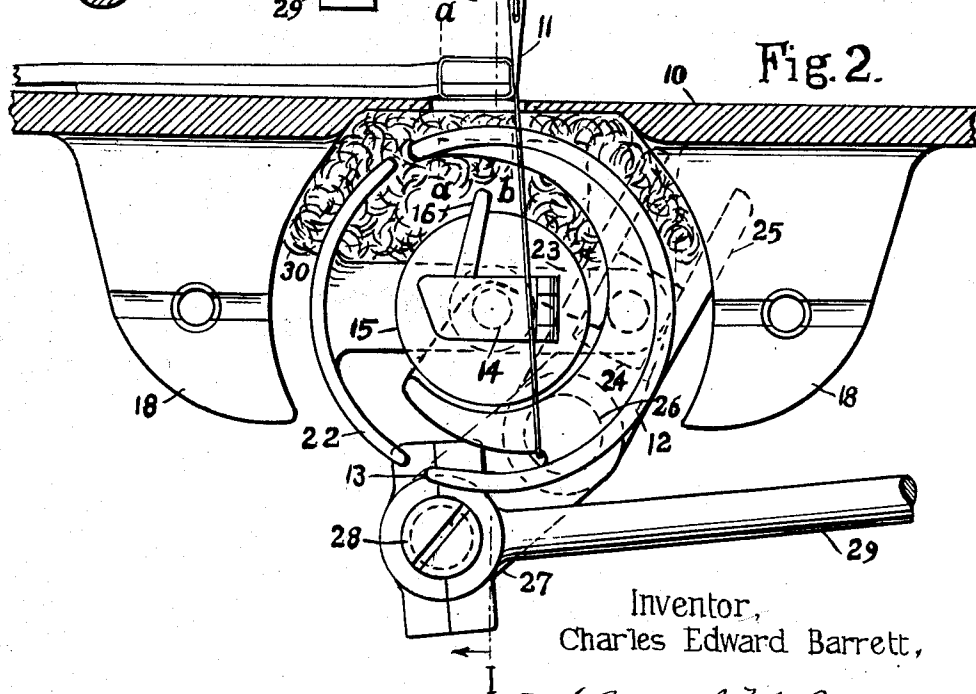


Fig. 2.



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SEWING MACHINE

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2 Claims. (Cl. 112—256)

It is sometimes desirable in the stitching of bindings to the edges of fabrics, to use a binding, one side of which, including the part through which the needle passes, is coated with dry cement which becomes adhesive when heated. This is a thickened latex, which is not entirely dry, but is a gummy substance, and some is picked up by the needle and needle thread and carried to the loop taker which becomes coated and interferes with the ready passage of the loop of needle thread thereover.

The object of this invention is to provide a solvent for this cement and a wiper which will apply the solvent and remove the softened and dissolved cement from the loop taker.

In the accompanying sheet of drawings which forms a part of this description,

Figure 1 is a vertical section through the bed plate of a sewing machine on the line I—I of Fig. 2, transverse to the direction of feed, showing the loop taker, means for actuating the same and the wiper which embodies this invention.

Fig. 2 is a vertical section of the same on the line II—II of Fig. 1, at right angles to the plane of Fig. 1.

The invention is shown in connection with the sewing machine which is set forth in United States Patent No. 1,975,728, dated October 2, 1934, for a sewing machine for attaching a binding strip to the cut edge of a rug or carpet and No. 545,882, dated September 10, 1895, wherein the loop taker is an oscillating shuttle, but the invention is not restricted in its broader aspects to a sewing machine with this type of loop taker or for this particular use.

The sewing machine has the usual overhanging bracket arm, not shown, and bed plate 10. An eye-pointed needle 11 is laterally vibrated and vertically reciprocated alternately along the lines a—a and b—b to form a zigzag overedge lock-stitch seam in cooperation with a loop taker 12. The loop taker is an oscillating shuttle with a beak 13 which engages the needle thread, forms a loop thereof and passes the shuttle therethrough. The shuttle has an axial pin 14 which is journaled in the bobbin case 15 containing the lower thread supply and provided with an arm 16 which enters

a holding notch in the ring 17 which is fastened to brackets 18 depending from the bed plate. The ring loosely holds the bobbin case. A shuttle-actuating rock-shaft 20 has fixed upon its forward end a hub 21 of a shuttle driver 22 which alternately engages the two ends of the shuttle in producing the to and fro oscillating movement of the shuttle. The rock-shaft has fixed upon its rearward end a crank arm 23 having a stud 24 embraced by a laterally extending forked arm 25 of a rock-shaft 26 which is provided with a second lateral arm 27 carrying a stud 28 and engaged by one end of a link connection 29 which is suitably reciprocated in unison with the main shaft of the machine as shown in the above named patents. The shuttle turns with its axial pin and is loosely held between the ring in front and a wiper 30 in the rear which is carried by a fixed part of the machine.

It has been found that in the operation of the machine some of the gummy latex, with which the binding to be stitched has been coated, tends to accumulate particularly on the rear face of the shuttle and prevents the loop of the needle thread from freely passing thereover. To stop this accumulation the wiper is of soft material with capillary pores, as felt, and is kept saturated with a suitable solvent for the latex, as oil, and the wiper contacts with the oscillating shuttle, discharges the solvent and wipes off the softened and dissolved latex. There is only a loose contact between the shuttle and the wiper so that there will be no interference with the passage between them of the needle thread.

I claim:

1. In a sewing machine, a loop taker, means for actuating the loop taker, and a wiper carried by a fixed part of the machine and engaging a substantial area of one side of the loop taker over which the loop contacts.

2. In a sewing machine, a loop taker, means for actuating the loop taker, and a wiper of porous material carried by a fixed part of the machine and engaging a substantial area of one side of the loop taker over which the loop contacts.

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