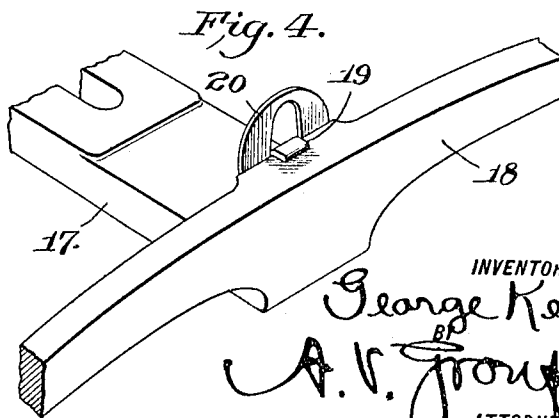
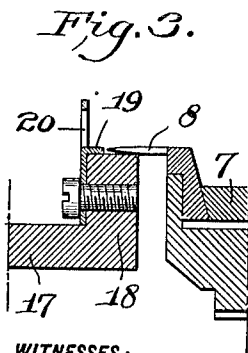
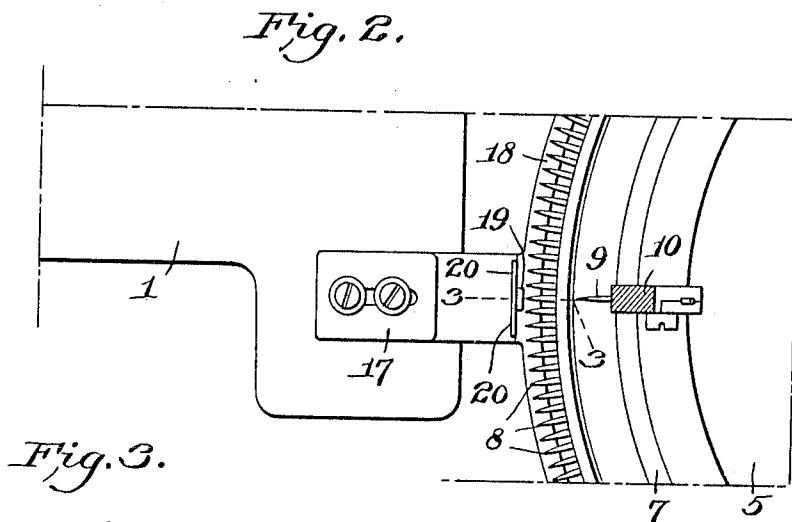
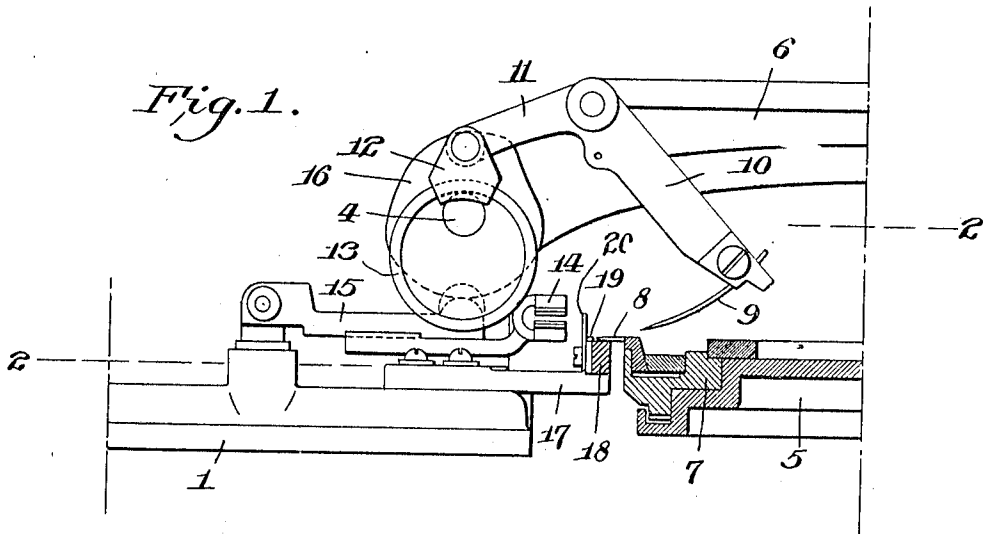


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MACHINE FOR UNITING KNIT FABRICS.
APPLICATION FILED JULY 3, 1905.

949,280.

Patented Feb. 15, 1910.



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MACHINE FOR UNITING KNIT FABRICS.

949,280.

Specification of Letters Patent.

Patented Feb. 15, 1910.

Application filed July 3, 1905. Serial No. 268,055.

To all whom it may concern:

Be it known that I, GEORGE KEYSER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Uniting Knit Fabrics, of which the following is a specification.

This invention relates to machines for uniting knit fabrics of the class wherein sewing mechanism is operated in conjunction with an intermittently rotatable head, carrying a series of radially projecting impaling pins, to receive the edges of the fabric to be united, and progressively feed said edges to the sewing mechanism. In machines of this class, the sewing mechanism includes the well known thread-carrying needle and looper, and during the operation of the machine, as the impaling pins, carrying the fabric to be united, are successively presented to the sewing mechanism, the needle is projected over each pin in a manner to penetrate the edges of the fabric and, acting in conjunction with the looper, to form the stitches in the usual manner. During the retraction of the needle from each impaling pin in drawing the loose thread cast off by the looper, in forming the stitches, it frequently happens that the cast off thread passes under the impaling pins instead of over the same as it should do to properly form the stitches.

It is the object of my present invention to overcome this defect of operation and to provide a means for insuring the passage of the thread above the impaling pins as will be hereinafter fully described and claimed.

In the drawings:—Figure 1 is a sectional elevation of a portion of a machine for uniting knit fabrics embodying my invention. Fig. 2 is a sectional plan thereof, as on the line 2—2 of Fig. 1. Fig. 3 is an enlarged sectional detail, as on the line 3—3 of Fig. 2. Fig. 4 is a perspective view of the fabric guard, the throat plate and the thread guiding or deflecting member.

1 designates the bed plate, 4 the main driving shaft mounted in bearing thereon and 5 an annular head supported by a bracket 6 projecting from the bed plate. Rotatably mounted on the head 5 is an annulus 7 carrying the radially projecting impaling pins 8 to receive the edges of the fabric to be united.

9 designates the thread-carrying needle

mounted on one arm 10 of bell-crank lever the other arm 11 of which is provided with a block 12 in engagement with an eccentric 13 on the main shaft 4.

The looper 14 is carried by the free end of an arm 15 which is pivotally connected to the bed plate 1 and is operated by a cam 16 on the shaft 4.

Secured to the bed plate 1 is an arm 17 carrying a fabric guard 18 which is arranged below the path traversed by the needle 9 and directly below the path traversed by the impaling pins 8, the purpose of the guard 18 being to prevent the fabric from being moved from the impaling pins during the sewing operation.

The construction and operation of the parts thus far described are common and well known and no detailed illustration or description thereof is deemed necessary herein.

Formed on or secured to the fabric guard 18 is a thread-guiding or deflecting member 19 which is arranged directly below the path traversed by the needle and in the same horizontal plane with and adjacent to the path traversed by the free ends of the impaling pins 8. In the present instance, the member 19 comprises a lip forming an integral part of the throat plate 20, said lip being bent at right angles to the body of the plate to project over the top of the guard 18 toward the points of the pins 8.

The edges of the fabric to be united are impaled upon the pins 8 and, during the sewing operation, after each successive impaling pin 8 is brought to a position below the needle 9 by the usual well known mechanism (not shown), the needle with its thread is advanced over the top of the underlying pin to penetrate the edges of the fabric and coact with the looper 14 to form the stitches in the common well known manner. During the retraction of the needle 9, the loose thread forming the stitches is drawn into engagement with the fabric, and during the drawing of said loose thread into engagement with the fabric, the lip or member 19 acting as a guide or deflector insures the passage of the thread above the points of the pins and obviates any liability of it passing thereunder with the consequent destruction of a properly formed stitch.

I claim:—

1. In a machine for uniting knit fabrics

the combination with a thread-carrying needle, a looper, and impaling pins, of a thread guiding member having a flat substantially horizontal surface adjacent the path traversed by the points of the impaling pins and above said path and under the path traversed by the needle, whereby the thread is directed to pass over said pins during the formation of stitches.

10 2. In a machine for uniting knit fabrics, the combination with a thread-carrying needle, a looper, and impaling pins, of a throat

plate provided with a thread guiding lip extending therefrom under the path traversed by the needle, the upper surface of said lip being above the path traversed by the points of the impaling pins, whereby the thread is directed to pass over said pins during the formation of stitches. 15

GEORGE KEYSER.

Witnesses:

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