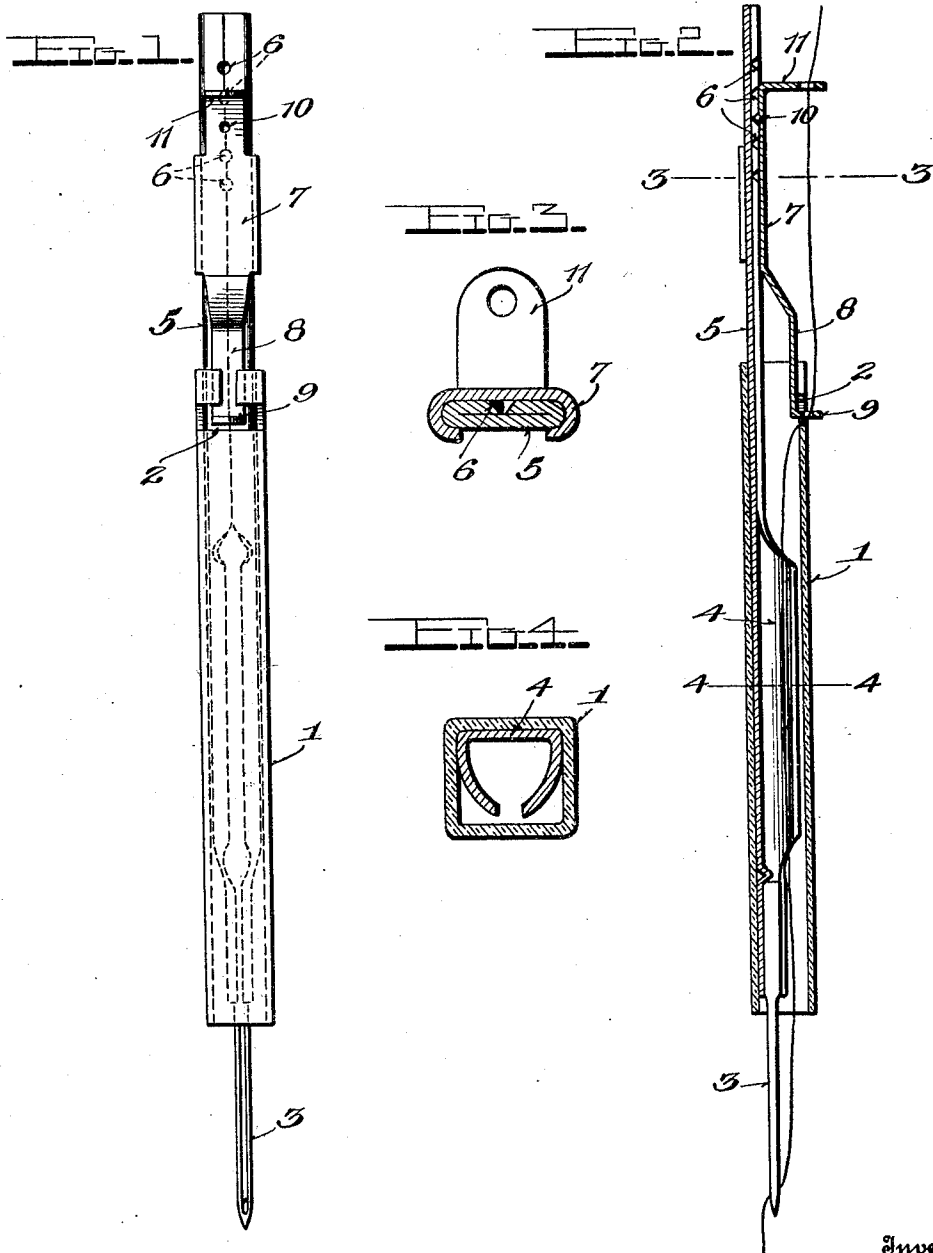


D. H. BUTLER.
EMBROIDERY NEEDLE.
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1,366,556.

Patented Jan. 25, 1921.



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EMBROIDERY-NEEDLE.

1,366,556.

Specification of Letters Patent. Patented Jan. 25, 1921.

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To all whom it may concern:

Be it known that I, DAVID H. BUTLER, a citizen of the United States, residing at Edgewood, in the county of Providence and State of Rhode Island, have invented new and useful improvements in Embroidery-Needles, of which the following is a specification.

This invention relates to certain new and useful improvements in embroidery needles, and the object of the invention is to provide a needle which has means for guiding and holding the yarn under tension, and wherein the tension is released following retrograde movement, so as to permit free motion of the needle and at the same time retain a loop in the yarn to form the decoration.

A further object of the invention is to provide means for attaining the aforementioned object, which is simple and economical, positive and certain in operation and which can be adjusted to vary the tension on the yarn.

Further and other objects will be later set forth and manifested in the course of the following description.

In the drawings:

Figure 1, is a front elevation of the invention;

Fig. 2, is a longitudinal sectional view thereof; and

Figs. 3 and 4, are enlarged sectional views, taken on lines 3—3, and 4—4 respectively of Fig. 2.

In proceeding in accordance with the present invention a tubular handle or member 1 is employed, which latter may be constructed of celluloid and at its upper end is formed with a T-shaped slot 2. The needle 3 is removably carried by one end of a channeled carrier or member 4, the latter having a cross-section conforming in part to that of the handle or holder 1. The member 4 has a shank 5 provided with a series of spaced substantially circular depressions 6. A stop member 7 is slidably mounted on the shank 5 and is formed with a front spring arm 8 having an upturned perforated end 9, while its rear end is formed with a teat 10 which engages in one of the depressions 6, the rear end being turned outwardly at substantially right angles and perforated to form an arm 11 which extends above the rear end of the holder 1.

In operation the thread is passed through

the perforations in the parts 11 and 9, through channel of the needle holder or member 4, and thence through the eye. This operation is performed with the needle holder member 4 removed from the holder 1.

The member 4 is now placed in the holder 1 by forcing the spring arm 8 back until the part 9 enters the T-shaped slot 2. The needle is now pushed through the goods to be embroidered by the operator holding the holder until the bottom of the holder 1 contacts with the goods. In this operation the thread is free to move through the perforations in the parts 11 and 9 and by reason of its bedding in the groove in the needle with least friction on the goods.

When the needle is pulled out of the goods, the first action is for the holder 1 to move upward to contact with the perforated end 9 of the spring arm 8 thus pinching or tensioning the thread between the holder and the perforated end 9. By reason of the stop member being adjustable on the shank 5 of the needle carrier the projection of the needle through the holder 1 can be controlled to produce the desired loop, also as the needle is removably held in the holder, different sizes of needles may be used for producing fine or coarse work.

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

1. An embroidery needle including a tubular holder having a slot at its rear end, a needle carrier slidable in the holder, and a stop member adjustable on the needle carrier and having a spring arm formed with an end movable through the slot and further having an arm extending above the rear end of the holder, said end of the spring arm and the second arm each being perforated to enable the thread to pass therethrough.

2. An embroidery needle including a tubular holder having a slot in one end, a needle carrier slidable in the holder, an arm carried by the carrier and extending above the rear end of the holder and a spring device carried by the carrier and having a part movable through the slot of the holder, said part and the arm being formed with a thread receiving hole.

3. An embroidery needle including a holder, a needle carrier slidable within the holder, and a pair of spaced thread receiving parts borne by the carrier, one of said parts

being arranged adjacent the rear end of the holder so as to pinch the thread against said end upon withdrawal movement of the holder.

5 4. An embroidery needle including a holder, a needle carrier movable therewithin and thread engaging means borne by the carrier and arranged adjacent the rear end of the holder so as to pinch the thread
10 against said end upon withdrawal movement of the holder.

5. In an embroidery needle, a holder, a needle carrying member movably carried by the holder, a member adjustably connected
15 to the needle carrying member to limit the extent of projection of the needle from the holder, and means to connect the second member to the holder so as to limit relative
20 movement in both directions between the holder and needle-carrying member.

6. In an embroidery needle, a tubular holder having an opening adjacent its rear end and in its rear wall, a needle carrier engaged with the front wall of the holder, and
25 a member adjustably connected at its upper end to the carrier and having its lower end engaged through the opening.

7. An embroidery needle including a tubular holder, a needle carrier slidable in the
30 holder, thread engaging means borne by the carrier and means on the holder to engage the first means so as to limit sliding of the carrier in both directions.

8. In an embroidery needle, a holder, a member movably carried by the holder and having a needle which extends below one end of the holder, the opposite end of the member extending above the opposite end of the holder and a member adjustably connected
40 at one end to the upper end of the needle carrying member and having its opposite end connected to the upper end of the holder.

9. An embroidery needle including a

holder having an opening, a needle carrier slidable in the holder, thread engaging
45 means borne by the carrier, and means borne by the carrier and movable throughout the length of the opening and engageable with the end walls of the opening so as to permit and limit relative and predetermined sliding
50 of the carrier and holder in both directions when the needle is pulled out of and inserted into the goods.

10. In an embroidery needle, a holder, a member movably carried by the holder and
65 having a needle which extends below one end of the holder, the opposite end of the member extending above the opposite end of the holder and a member adjustably connected at one end to the upper end of the needle
60 carrying member and having its opposite end extending through an opening provided therefor in the holder, said opening being of a size to allow and limit relative and pre-
65 determined sliding movement in both directions between the needle carrying member and the holder upon pulling the needle out of and inserting same into the goods.

11. In an embroidery needle, a holder having an opening, a needle carrier movable
70 in the holder, and a member carried by the needle carrier and having a part extending through the opening, said part being perforated to receive the thread and to allow the latter to extend over one of the walls
75 formed by the holder opening whereby to pinch the thread between said wall and said part upon movement of the part toward said wall.

In testimony whereof I have signed my
80 name to this specification in the presence of two subscribing witnesses.

DAVID H. BUTLER.

Witnesses:

E. P. TOOMEY,

JOSEPH A. MILLER.