No. 897,200. PATENTED AUG. 25, 1908.

S. H. FERRIER.

TURFING NEEDLE.

APPLICATION FILED OCT. 17, 1907.

Fig. 1.

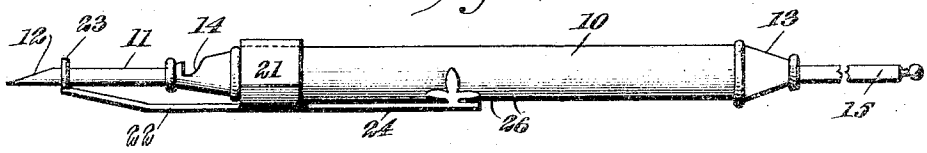


Fig. 2.

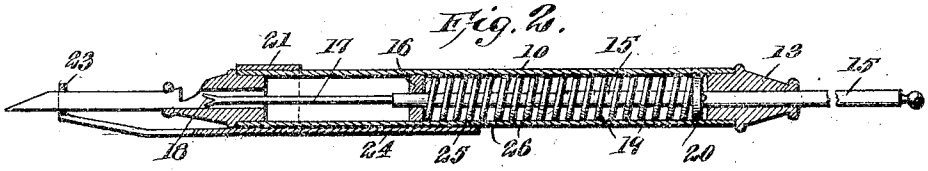


Fig. 3.

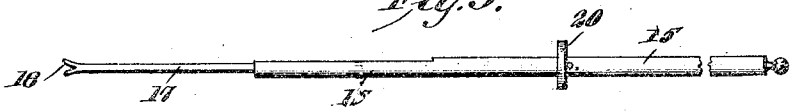


Fig. 5.

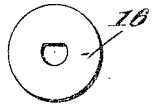
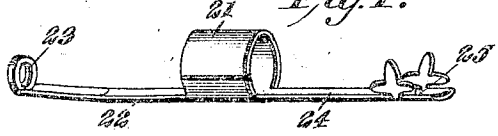


Fig. 4.



WITNESSES

E. M. Callaghan

F. C. Berry

INVENTOR

SAMUEL H. FERRIER.

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

SAMUEL HENRY FERRIER, OF TROY, OREGON.

TURFING-NEEDLE.

No. 897,200. Specification of Letters Patent. Patented Aug. 25, 1908.

Application filed October 17, 1907. Serial No. 397,730.

To all whom it may concern:

Be it known that I, SAMUEL HENRY FERRIER, a citizen of the United States, residing at Troy, in the county of Wallowa and State of Oregon, have invented a new and useful Improvement in Turfing-Needles, of which the following is a specification.

This invention relates to turfing needles designed to produce tufted or pile work in embroidery and rug making, and has for its object to provide a simple and easily operated device, improved especially with respect to the means for threading the needle and feeding the silk or thread, for the purpose of inserting loops through the cloth as close together as possible. These loops are or may be afterwards sheared to form a plush or pile fabric. A gage is also provided for adjusting the depth of stitch, and the device has the advantages that it may be threaded quickly and economizes the use of the silk, and is adapted for rapid operation.

The device is illustrated in the accompanying drawings, in which

Figure 1 is a side view of the needle. Fig. 2 is a central longitudinal section. Fig. 3 is a view of the threading rod and wire, removed from the barrel. Fig. 4 is a perspective view of the gage, detached. Fig. 5 is a detail of a guide diaphragm in the barrel.

Referring particularly to the drawings, 10 indicates a barrel provided at its lower end with a tubular point 11 which is beveled at the tip as at 12 so that it may be easily inserted through the foundation fabric. At the upper end the barrel has a bushing 13; and the barrel forms a handle or device which may be readily held in the hand for operation.

At a suitable distance from its tip the point is provided with a notch or eye 14 cut half way, or a little more, across the tube, in one side. A threading rod 15 works in the barrel, through the bushing 13 and a ring or diaphragm 16 fixed in the barrel, and the end of the rod projects above the barrel in position to be pressed by the finger. The lower end of the rod carries the threading wire 17 which extends into the point and has a fork 18 at the end. A coiled spring 19 between the diaphragm 16 and a collar 20 on the rod, normally retracts the rod, in which position the fork 18 is just above or behind the eye 14.

The gage for adjusting the depth of stitch comprises a band 21 around the lower end of the barrel and slidable up and down thereon, and this band has a rod 22 extending downwardly therefrom beside the point and terminating in a ring 23 around the point. A spring rod 24 extends upwardly from the band and has a pin 25 which may be entered into any one of a series of holes 26 in the barrel, to adjust the distance of the ring 23 from the tip of the needle. Said ring acts as a stop against the foundation, when the needle is inserted, and limits the depth of stitch accordingly.

In threading, the end of the thread is laid across in the eye 14 and the threading rod pushed down with the finger engaging the thread in the fork 18 and by continued pressure advancing the thread through the point and from the end thereof, where it may be caught by the thumb and finger.

The needle is operated by inserting the point through the foundation fabric, in an obvious and well known manner.

The diaphragm 16 has a D-shaped hole, and the threading rod 15 is flattened accordingly, the arrangement being such that the fork 18 extends across at a right angle to the eye, so that the fork will always engage the thread when it is stretched across the eye. The band 21 of the gage is split as shown and embraces the barrel with a spring pressure so as to hold the gage in desired position and preventing the annoyance of the gage working loose on the barrel.

In operation, the needle is inserted in the cloth which is to be turfed, and the rod 15 is moved to project the point thereof through the tubular point 11. This movement carries the thread through the cloth and the friction of the cloth on the thread prevents its withdrawal with the point, so that a tuft or loop of thread remains on the opposite side of the cloth. This operation is repeated throughout the extent of the pattern which it is desired to work on the material.

I claim—

1. A turfing needle comprising a barrel, a tubular point at the end thereof having an eye in the side, a rod slidable up and down in the barrel and having a forked end in the point adapted to engage a thread in the eye and advance the same through the point, a collar on the rod, said barrel being provided with a diaphragm, and a spring arranged between the collar and the diaphragm to retract the rod.

2. A turfing needle comprising a barrel, a tubular point at the end thereof having an eye in the side, a rod slidable up and down in the barrel and having a forked end in the point adapted to engage a thread in the eye, and advance the same through the point, a coiled spring connected to the rod, to retract the same and means to prevent rotation of the rod with respect to the barrel.

SAMUEL HENRY FERRIER.

Witnesses:
ERKIE EVERETT FENTON,
NINA MILLER.