F. M. COLE.

TURFING IMPLEMENT.

APPLICATION FILED FEB. 6, 1915.

1,176,032. Patented Mar. 21, 1916.

Fig. 1

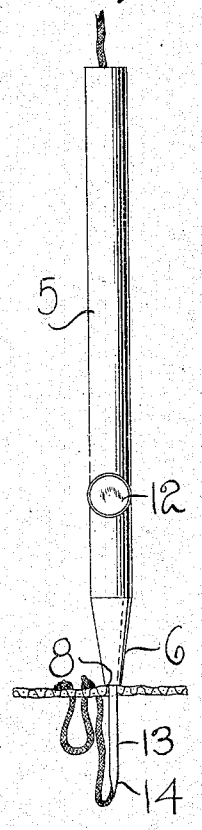


Fig. 2

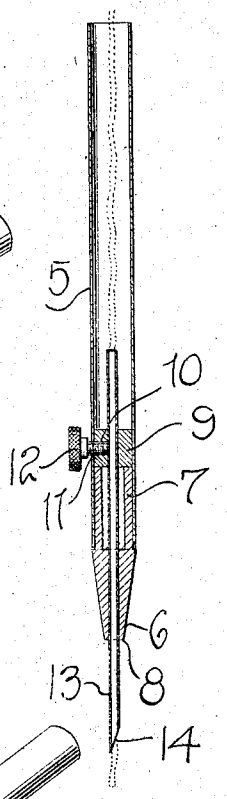


Fig. 3

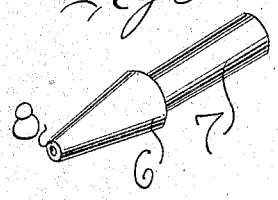
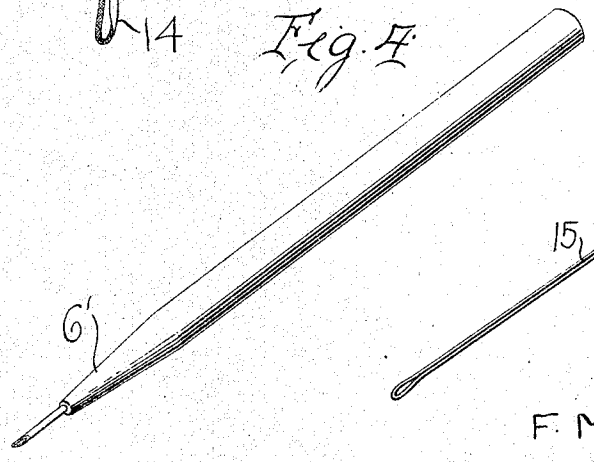


Fig. 4



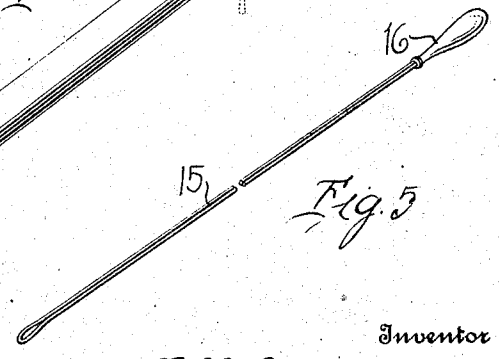


Fig. 5

Witnesses
Robert M. Sutphen
A. L. Prindle

Inventor
F. M. COLE

By Watson E. Coleman
Attorney

UNITED STATES PATENT OFFICE.

FRANK M. COLE, OF SENECA FALLS, NEW YORK.

TURFING IMPLEMENT.

1,176,032. Specification of Letters Patent. Patented Mar. 21, 1916.

Application filed February 6, 1915. Serial No. 6,566.

To all whom it may concern:

Be it known that I, FRANK M. COLE, a citizen of the United States, residing at Seneca Falls, in the county of Seneca and State of New York, have invented certain new and useful Improvements in Turfing Implements, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to an improved turfing implement of that character generally used in art embroidery work, such embroidery consisting of a succession of loops of suitable thread or yarn raised upon the surface of the silk or other fabric.

The invention has for its primary object to provide a hand operated implement for the above purpose, embodying a hollow needle through which the thread or yarn is longitudinally threaded, and means for adjusting said needle to regulate the length of the loop formed thereby.

The invention has for an additional object to provide a turfing implement which is of such simplicity in its construction, that the portion of the fabric which is pierced by the needle point, is at all times visible, so that tangles, knots, or other defects in the yarn or thread may be instantly detected, and such impediment to the proper feed of the thread removed before proceeding with the operation.

It is an additional object of the invention to provide a turfing implement wherein the thread will be held out of all possibility of interference by the fingers of the operator, and stoppage or choking of the feed of the thread, thus avoided.

The invention has for another object to provide a device for the above purpose, which is highly serviceable, convenient, and efficient in actual operation, and capable of manufacture at relatively small cost.

With the above and other objects in view, my invention consists in the novel features of construction, combination, and arrangement of parts to be hereinafter more fully described, claimed, and illustrated in the accompanying drawing, in which,

Figure 1 is a side elevation of a turfing implement embodying one form of my invention; Fig. 2 is a longitudinal section thereof; Fig. 3 is a detail perspective view of the separable tapering point of the needle holder or tube; Fig. 4 is a similar view of an integral tube construction; and Fig. 5 is a detail perspective view of the device used for threading the needle.

Referring in detail to the drawing, 5 designates the cylindrical body of the tube or holder, which is provided with a longitudinally bored detachable tapering point 6. At the larger end of this detachable point of the tube, the same is formed with a reduced longitudinal extension 7 for telescopic engagement in the end of the tube body and frictional contact with the walls thereof. The taper or conical shaped point of the tube is truncated at its smaller end to produce an annular shoulder 8 thereon, the purpose of which will be hereinafter made apparent.

A ring or annulus 9 is loosely disposed within the tube body 5 and is provided with a transverse threaded opening 10. The wall of the tube body 5 is also provided with an opening 11, through which the shank of a set screw 12 is adapted to be inserted, said screw being threaded into the opening 10 in the collar 9.

13 designates the hollow needle which is of such diameter as to have a snug sliding fit within the bore of the detachable point 6 of the holder or tube, and the bore of the collar or annulus 9.

In the operation of the implement, the needle 13 is first adjusted within the holder or body of the device, to space its tapering point 14 from the shoulder 8 of the detachable tapering point 6 of the body, in accordance with the length of the loop which it is desired to form in the thread or yarn. After the parts have been properly assembled, as shown in the drawing, the hollow needle is threaded by means of the wire threader, indicated at 15 in Fig. 5 of the drawing. This threading device consists of a length of ductile wire which is bent upon itself intermediate of its ends, and has its extremities secured together, preferably in a suitable handle element 16. The looped end of this wire threader is inserted into the point of the needle 13 and extended therethrough and through the body 5. The end of the thread is then engaged in the loop of the threading device and said device withdrawn from the hollow needle 13. The thread is thus obviously also drawn with the wire threading device, through said needle. The hollow needle is now adjusted longitudinally in the body of the device, to dispose its point 14 at the desired distance from the shoulder 8, and such needle securely held in such ad-

justed position by the binding engagement of the screw 12 against the same. The implement is now in condition for operation, and it will be understood that, as the needle point is alternately inserted and withdrawn into and from the material being embroidered, a succession of loops will be formed in the thread and raised upon the surface of the material. The shoulder 8 on the end of the removable point section of the tube, by contact with the material, constitutes an effectual stop, so that all of the loops in the thread will be of precisely the same length. In order to vary the length of the loop, it is only necessary to lengthen or shorten the protruding portion of the needle 13, as will be readily understood. Should the hollow needle become broken or lost, the fragment may be very easily and quickly removed from the holder and replaced by a new needle.

By means of my improved turfing implement, it will be noted that the thread, as it feeds into the upper open end of the needle body, is at all times held above the operator's hand and out of any possible interference thereby. Thus, the thread cannot be accidentally entangled in the fingers of the operator, or knotted. The needle may also be readily turned in the body of the holder, to dispose its obliquely cut point from which the thread issues, in proper position, so that the operator can, at all times, observe the condition of the thread or yarn. Thus, breaks or knots in the thread or yarn, can be instantly detected, and the embroidered work rendered entirely even and uniform.

In Fig. 4 of the drawing, I have shown the needle body formed in one piece and provided with the integral tapering point 6'. This integral construction is preferable in actual practice, although it will be understood that, by the provision of the detachable point section 6 of the holder, when the bore through this point section becomes unduly worn by frequent adjustment of the hollow needle, such detachable point section may be readily replaced at an insignificant expense.

From the foregoing, it will be seen that I have produced a very simply constructed and serviceable turfing implement, wherein the needle may be very easily and quickly adjusted, and minute differences in the length of the loops, which are sometimes necessary, produced. It will, of course, be apparent that needles of various sizes may be employed, in which the adjustable feature, above referred to, is embodied. The several elements of the device are also susceptible of considerable modification in form and proportion, and I, therefore, reserve the privilege of resorting to all such legitimate modifications as may be fairly embodied within the spirit and scope of the invention as claimed.

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

1. A turfing implement including a hollow body, a ring removably engaged within said body, a hollow needle snugly fitting within said ring for longitudinal movement therethrough, and a set screw threaded in the ring and engaged with the body to hold the ring against movement with respect thereto and to also secure the needle against longitudinal movement through the ring.

2. A turfing implement including a hollow body open at both ends, a detachable tapering section telescopically engaged in one end of the body having a longitudinal bore, said section, at its smaller end, terminating in an annular shoulder, a hollow needle snugly fitting within the bore of said section for sliding movement therethrough, a ring removably engaged within said body, said needle extending through said ring, said ring being provided with a transverse threaded opening, the wall of said body also having an opening therein to register with the opening in said ring, and a set screw threaded into the opening in the ring for binding engagement with the needle to hold the same against longitudinal movement and also prevent shifting movement of the ring within the body.

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

FRANK M. COLE.

Witnesses:
CLARENCE A. MACDONALD,
EMMA MAIER.