(Model.)

V. FERNANDEZ.

FABRIC TURFING IMPLEMENT.

No. 456,805. Patented July 28, 1891.

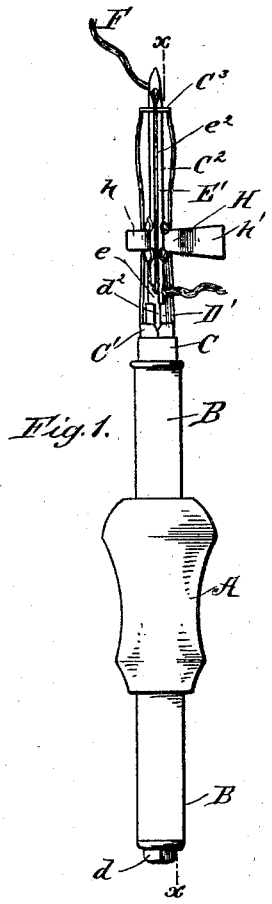

Fig. 1.

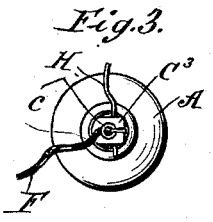

Fig. 3.

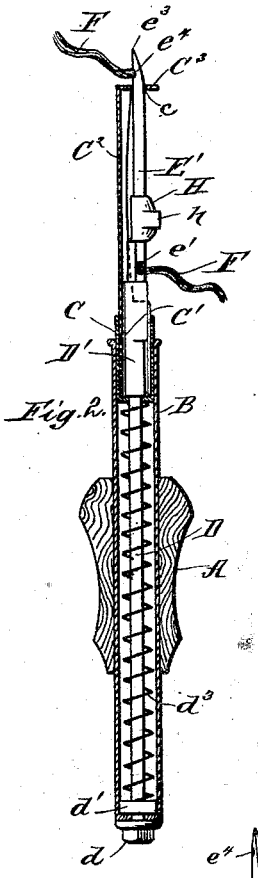

Fig. 2.

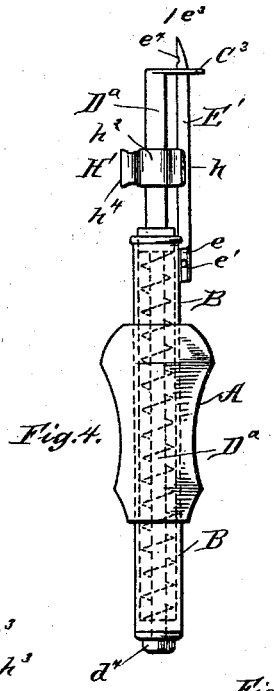

Fig. 4.

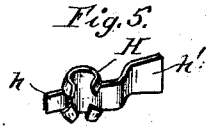

Fig. 5.

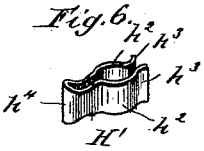

Fig. 6.

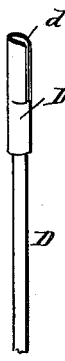

Fig. 7.

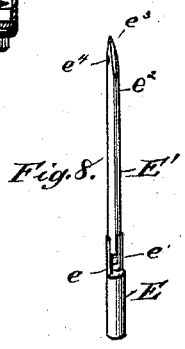

Fig. 8.

WITNESSES:

C. Sedgwick

E. M. Clark

INVENTOR:

V. Fernandez

BY Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

VICENTE FERNANDEZ, OF GUANAJUATO, MEXICO.

FABRIC-TURFING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 456,805, dated July 28, 1891.

Application filed July 17, 1890. Serial No. 359,103. (Model.)

To all whom it may concern:

Be it known that I, VICENTE FERNANDEZ, of Guanajuato, Mexico, have invented a new and Improved Embroidering-Tool, of which the following is a full, clear, and exact description.

My invention relates to improvements in embroidering-tools, and its object is to provide a tool of simple construction that may be easily carried in the pocket, that may be used on a great variety of work, that may be easily threaded, that may be easily changed to carry a great variety of thread, and that may be conveniently operated by a single hand.

To this end my invention consists in certain features of construction and combinations of parts, as will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the device embodying my invention. Fig. 2 is a central longitudinal section on the line *x x* of Fig. 1. Fig. 3 is an end view looking onto the needle and presser-foot. Fig. 4 is a plan view of a modified form of embroidering-tool. Fig. 5 is a detail perspective view of the regulator or brake for controlling the movement of the presser-foot. Fig. 6 is a detail perspective view of the brake or regulator used with the modified form of tool shown in Fig. 4. Fig. 7 is a broken detail view of the central rod and sleeve which carries the needle, and Fig. 8 is a detail view of the needle used in the tool.

The tool is provided with a convenient handle A, and extending longitudinally through the handle and fixed thereto is a sleeve B. A short sleeve C is fixed in the open end of the sleeve B, and fixed to the inner side of the sleeve C is a sleeve C′, from which extends in line with the handle A a rounded or curved rod C^2, which is bent at right angles at its outer end to form the presser-foot C^3. The presser-foot C^3 is slotted from one side, and has a central opening *c* therein for the passage of the needle, as best shown in Fig. 3.

A rod D extends longitudinally through the sleeve B and through the bottom of the sleeve C, one end of the rod being fixed to the end of the sleeve B by the nut *d* and collar *d′*. The end of the rod D, which passes through the sleeve C, is formed into an enlarged sleeve D′, which is split, as shown at d^2, and is adapted to receive the spindle E of the needle E′, the spring of the sleeve serving to hold the needle in place. A spiral spring d^3 encircles the rod D within the sleeve B, one end of the spring pressing against the collar *d′* and the opposite end against the sleeve C, so that the sleeve C′ and the presser-foot C^3, connected therewith, are normally pressed outward.

The needle E′ is cut away on one side near the base or spindle E, as shown at *e*, and opposite said portion *e* is a transverse perforation *e′*, through which the worsted F or other embroidering material is inserted. The needle E′ is hollow, and is provided with a longitudinal slot e^2, extending from the cut-away portion *e* nearly to the point. The point e^3 of the needle is formed by cutting off the needle diagonally, and a transverse perforation extends through the needle adjacent to the point, so that to thread the needle the worsted is inserted through the perforation *e′*, is then drawn through the slot e^2, and is passed through the perforation e^4. A brake or regulator H is mounted loosely upon the needle E′, said brake having a laterally-extending ear *h*, adapted to frictionally engage the curved rod C^2, and on the opposite side of the brake is a thumb-piece *h′*, by means of which the brake may be tilted. By pressing on the thumb-piece *h′* the brake H is oscillated, the ear *h* is forced against the rod C^2, and the friction of the ear upon the rod holds the rod in position, and as the end of the rod is formed into a presser-foot the position of the presser-foot is thus regulated.

The object of the brake or regulator is to hold the presser-foot in a desired position and prevent it from being pushed outward or downward by the spring. By pressing upon the thumb-piece *h′* the brake is tilted on the needle and the ear *h* is pressed upon the rod C^2, and by regulating the pressure the rod and presser-foot may be prevented from moving or may be allowed to move as little as desired.

In Fig. 4 I have shown a modified form of

the embroidering-tool having the handle A and sleeve B, as described above, and a central spring-pressed rod D^a extends longitudinally through the sleeve B, said rod having at one end a nut b^4 to limit its movement in one direction and having its opposite end enlarged and bent at right angles to form a presser-foot C^3, which is slotted and shaped like the presser-foot already described. The needle E′ in this tool, instead of being centrally mounted, as described above, is fixed to one side of the sleeve B and extends parallel with the enlarged portion of the rod D^a and through the perforation in the presser-foot C^3.

A brake H′ is centrally mounted upon the enlarged portion of the rod D^a, said brake consisting of two similar members h^2, shaped to slide upon the rod, said members having curved ends h^3, adapted to frictionally engage the needle E′ and regulate the movement of the presser-foot, and the members are doubled opposite their curved ends, as shown at h^4, said portions serving as a thumb-piece, by means of which the brake may be tilted. The brake H′ operates like the brake H, described above. By tilting it on the rod D^a one of the curved ends h^3 presses against the needle, and the central part may be forced against the rod D^a hard enough to control the movement of the rod and presser-foot.

To operate the device, the needle E′ is threaded in the manner described, and the needle is passed through the fabric which is to be embroidered and the presser-foot travels up the needle, and when the needle is withdrawn the tension of the fabric holds the embroidering material in place and causes it to be fed through the needle. The operation is repeated, and it is evident that the stitches may be made of any desired length.

From the foregoing description it may be seen that the needle may be easily removed from the needle-holder D′ and that a needle of any desired size may be quickly substituted. The sleeve D′, by being split, as shown, adapts itself to varying sizes of the needle-spindles.

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

1. An embroidering-tool consisting, essentially, of a handle carrying a hollow sleeve, a slotted needle mounted at one end of the sleeve, and a spring-pressed rod adapted to slide within the sleeve, said rod having its outer end bent to form a presser-foot, substantially as shown and described.

2. An embroidering-tool comprising a handle carrying a hollow sleeve, a slotted needle mounted in one end of the sleeve, a spring-pressed rod movable in the sleeve, said rod having its outer end formed into a presser-foot to encircle the needle, and a tilting brake mounted on the needle and adapted to impinge upon the spring-pressed rod, substantially as described.

3. An embroidering-tool comprising a handle carrying a hollow sleeve, a spring-pressed rod having one end formed into a sleeve adapted to slide in the handle-sleeve and the opposite end slotted and bent to form a presser-foot, a rod extending through the handle-sleeve, a needle attached to one end of the rod, so as to project through the presser-foot, and a brake for regulating the position of the presser-foot, substantially as described.

VICENTE FERNANDEZ.

Witnesses:
GABRIEL MONTES DE OCA,
GMO. MONTES DE OCA.