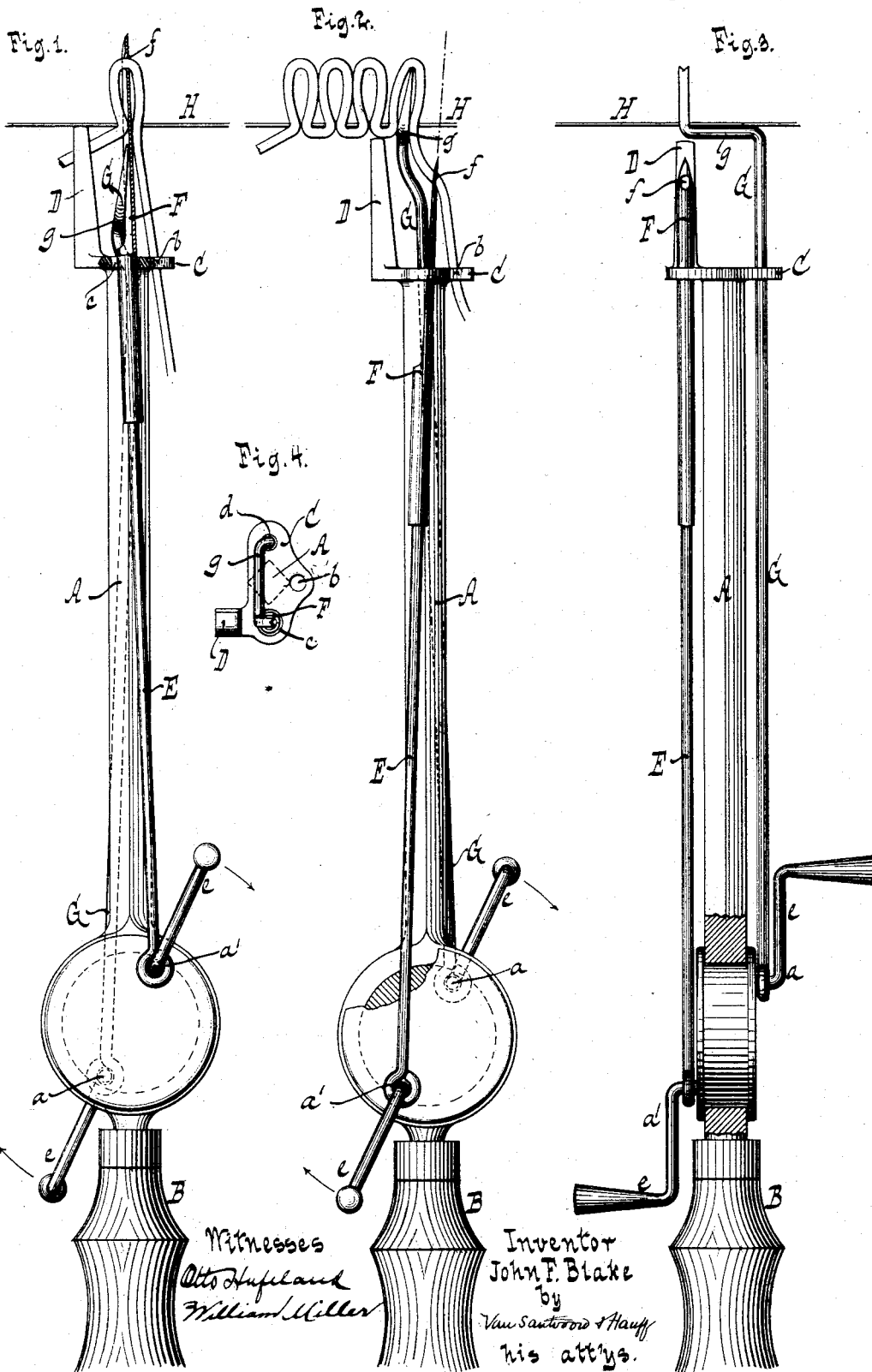


J. F. BLAKE.  
FABRIC TURFING IMPLEMENT.

No. 342,569.

Patented May 25, 1886.



# UNITED STATES PATENT OFFICE.

JOHN F. BLAKE, OF NEW YORK, N. Y.

## FABRIC-TURFING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 342,569, dated May 25, 1886.

Application filed December 10, 1885. Serial No. 185,260. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN F. BLAKE, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Fabric-Turfing Implements, of which the following is a specification.

My invention relates to machines for turfing fabrics by forming a series of loops alongside of each other on canvas or other material; and it consists in certain novel features of construction, which are fully pointed out in the following specification and claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a sectional side view of my machine. Fig. 2 is a similar view of my machine with the parts in a different position. Fig. 3 is a sectional front view. Fig. 4 is an end view.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates the stock, provided with a handle, B. A double crank, having the wrist-pins *a a'* diametrically opposite to each other, has its bearing in this stock near the handle B, while at some distance from this bearing is the guide-plate C, from which extends a stop, D. The guide-plate is provided with an opening, *b*, Fig. 4, through which the worsted or other article of which the loops are to be formed passes, while openings *c d* in said plate form guides and fulcrums for the needle-bar E, which carries the needle F and the loop-holder G. Both the needle-bar and the loop-holder are attached to the double-crank—one to each wrist-pin—and, when this crank is rotated by means of the crank-handles *e*, both the needle and the loop-holder have imparted to them "fourway" motions, but always in directions opposite to each other.

The operation of my machine is as follows: The worsted or other turfing material is passed through the opening *b* in the guide-plate C, and from there to and through the eye *f* of the needle F. The parts are then moved to the position shown in Fig. 1, and the needle is thrust through the canvas H until the stop D rests against the same. The crank-handles *e* are now turned, and as the wrist-pins are carried around by the double-crank the loop-holder will slide up close to the needle in such a way as to pass inside of the loop formed by the needle, while the needle will move down

until the parts are in the position shown in Figs. 2 and 3. In these figures it will be observed that the loop-holder has moved up until the bend or shoulder *g* touched the canvas and could go no farther, while the continued action of the wrist-pin *a* has caused the whole machine to recede and move the stop D away from the canvas. It must also be observed that the wrist-pin *a*, as it passed over the center of the double-crank, has caused the loop-holder to have a tendency to move toward one side; but as this sidewise tendency does not begin until the point of the loop-holder has entered the hole made in the canvas by the needle, and is there held fast, the sideward motion is transferred to the fulcrum of the loop-holder, which is in the guide-plate C, and, as this sideward motion continues, the point of the loop-holder being held fast, the guide-plate, which is fast to the stock, and also carries the stop D, is moved sideward, carrying the whole machine to make a sideward motion, while it rests on the bend or shoulder of the loop-holder, which sideward motion is one half of the feed-step, and will bring the needle into the position shown in said Fig. 2. As the rotation of the double-crank is continued, a similar sideward tendency is imparted to the point of the needle as the same enters the canvas, with a similar result, causing the machine to make the other half of the feed-step, and again bringing the parts back to the position shown in Fig. 1.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a stock, A, having at one end a guide-plate, C, provided with the opening *b*, for the passage of the looping material, a loop-holder, G, having a lateral bend or shoulder, *g*, beyond the guide-plate, a needle-bar, E, a needle, F, carried thereby, and a double crank journaled on the stock, and having the wrist-pins arranged diametrically opposite each other and extending from opposite sides of the crank and connected with the loop-holder and needle-bar, said holder and needle-bar passing through and guided by the guide-plate, substantially as described.

2. The combination of the stock A, having at one end a plate, C, provided with the projecting stop D, and the opening *b*, for the passage of the looping material, a loop-holder, G,

having the lateral bend or shoulder *g*, a needle-bar, *E*, a needle, *F*, carried thereby, and a double crank journaled on the stock and having two wrist-pins projecting, respectively, from opposite sides of the crank, and respectively connected directly with the loop-holder and needle-bar, said holder and bar extending through openings in the guide-plate, substantially as described.

In testimony whereof I have hereunto set to my hand and seal in the presence of two subscribing witnesses.

JOHN F. BLAKE. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.