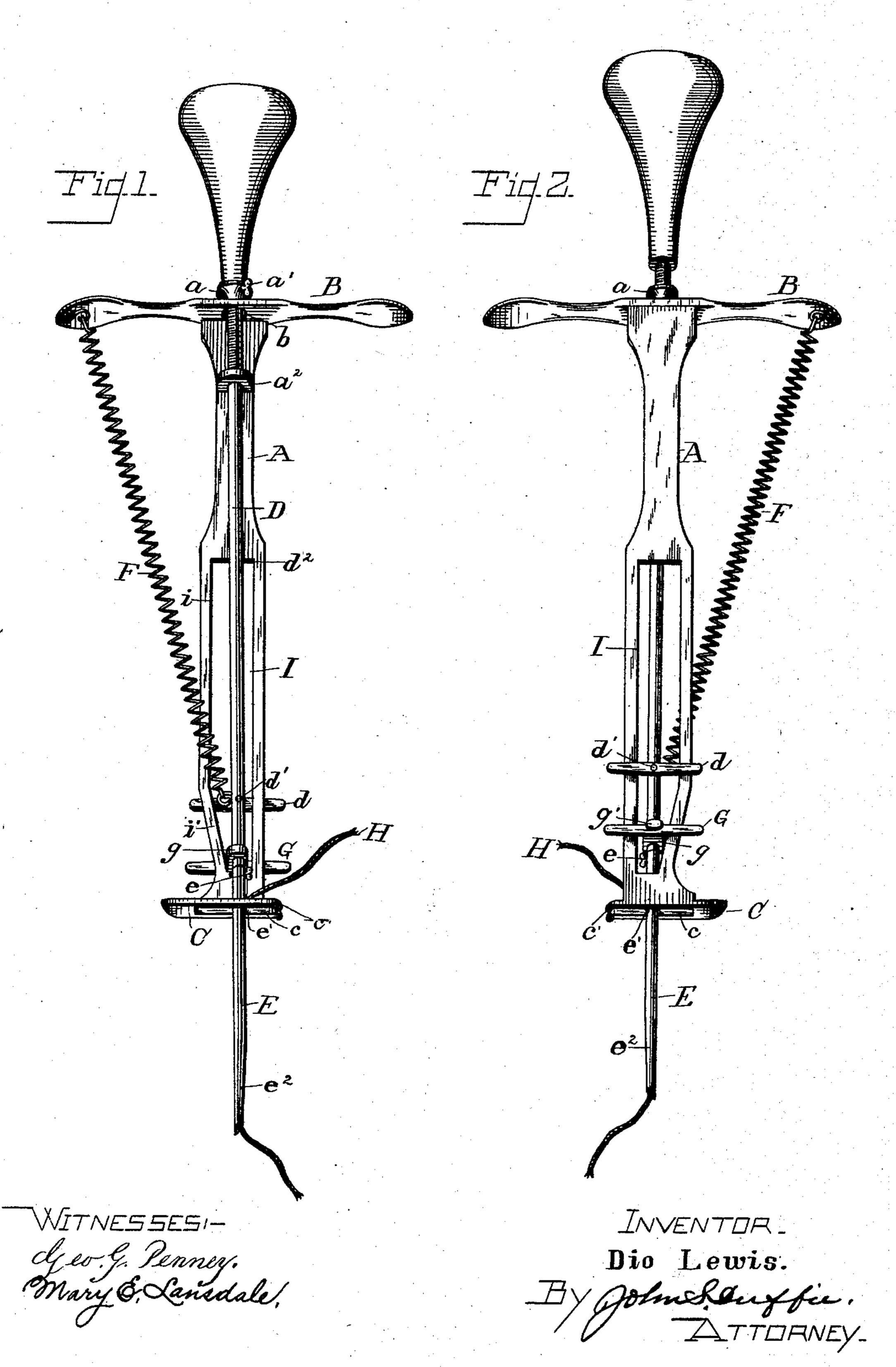
## D. LEWIS.

## FABRIC TURFING IMPLEMENT.

No. 388,422.

Patented Aug. 28, 1888.



N. PETERS, Photo-Lithographer, Washington, D. C.

## United States Patent Office.

DIO LEWIS, OF PRESCOTT, ARKANSAS.

## FABRIC-TURFING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 388,422, dated August 28, 1888.

Application filed June 1, 1888. Serial No. 275,704. (No model.)

To all whom it may concern:

Be it known that I, DIO LEWIS, a citizen of the United States, residing at Prescott, in the county of Nevada and State of Arkansas, have 5 invented certain new and useful Improvements in Fabric-Turfing Implements; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains 10 to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to fabric-turfing 15 implements; and it consists in the novel construction and arrangement of its parts.

In the accompanying drawings, Figure 1 is a rear face view of my invention. Fig. 2 is a front face view of the same.

My invention is constructed so that the operator can regulate the depth of the tuft and | the length of the stitch, and is described as | follows:

A represents the main bar or body of the 25 machine; B, the head cross-bar; C, the foot; D, the needle-bar; E, the needle; F, the spring.

a is a threaded gage-nut turning on the threaded end of the needle-bar D to regulate the length or depth of the tufting, and is pro-30 vided with a set-screw, a', to keep it from turning.

b is an oblong opening in the cross-head bar B sufficiently large to allow the threaded part of the needle-bar to play up and down 35 through the same without friction, and to allow lateral play of said needle-bar, the crosshead bar acting as a stop for said gage-nut, while one end of said bar answers as a handhold and the other as an attachment for the 40 spring F.

a<sup>2</sup> is a projecting sleeve fixed securely to said bar A, through which the needle-bar plays.

d is a bar rigidly attached to needle-bar by 45 a bolt, d', and keeps said needle-bar in position, and is the lower stop, preventing said needle-bar from rising too high, the said bolt impinging against the upper terminus,  $d^2$ , of the wide slot I in said bar A.

G is a sliding bar, and has rigidly secured to it or cast with it a sleeve, g, which fits |

round and is adapted to be moved up and down on the lower end of said needle-bar, and is secured in any desired position by a setscrew, g'. The foot C is provided with a slot, 55 c, to allow for the free play and lateral motion of the needle E. The front end of said foot is slightly turned up, so that it will not catch in the webbing, and the rear end terminates in teeth c', pointing slightly downward, to catch 60 in the webbing to prevent the foot from slipping back as the needle is rising up to take another stitch. The said needle E is cylindrical and hollow, and is secured to the needle-bar by a thumb-screw, e, and is provided 65 with an eye, e', near its upper end to receive the thread H, which passes down through the needle and out at its lower end. Said needle has in its rear face a groove, e2, which extends up one-third the length of the needle, that the 70 thread may lie closely in it while passing through the webbing. The spring F is attached, one end to the extreme end of the crosshead bar and the other to the said needle-bar near its lower end. Said spring throws the 75 said needle-bar up and draws the needle from the webbing, and its angle operates to cause the sleeve g to drop against the side i of the slot I, and as the needle goes down said sleeve impinges against the inclined side i' and 80 drives the foot forward one step for another stitch. When the gage-nut is turned up to the upper end of the threaded part of the needle-bar, the said machine gives its longest tufting, and when turned down to the lower 85 end of the said threaded part of the needle-bar it gives its shortest tufting. When the sleeve g is set on the needle-bar so as to reach the extreme lower end of the incline i' on the downward stroke of the needle, the machine 90 makes its longest stitch. The stitch may be made shorter and shorter by fixing said sleeve a little higher and higher on said needle-bar. Having described my invention, what I

claim as new, and desire to secure by Letters 95

The combination of the plate A, pro-

vided with the fixed sleeve a2, and slot I, hav-

ing the incline i', foot C, provided with the

elongated perforation b, needle bar D, pro-

vided with the needle E, gage-nut a, working

slot c, cross head bar B, provided with the 100

Patent, is—

on the threaded part of said needle-bar, bolt d', secured in said needle-bar, acting as the lower stop, bar G and sleeve g, regulating the length of the stitch, spring F, its lower end attached to said needle-bar near its lower end and its upper end to the extreme end of said cross-head bar, substantially as shown and described, and for the purposes set forth.

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

DIO LEWIS.

Witnesses:
W. R. WHITE, Jr.,
JNO. A. AURLY.