No. 719,414.

PATENTED FEB. 3. 1903.

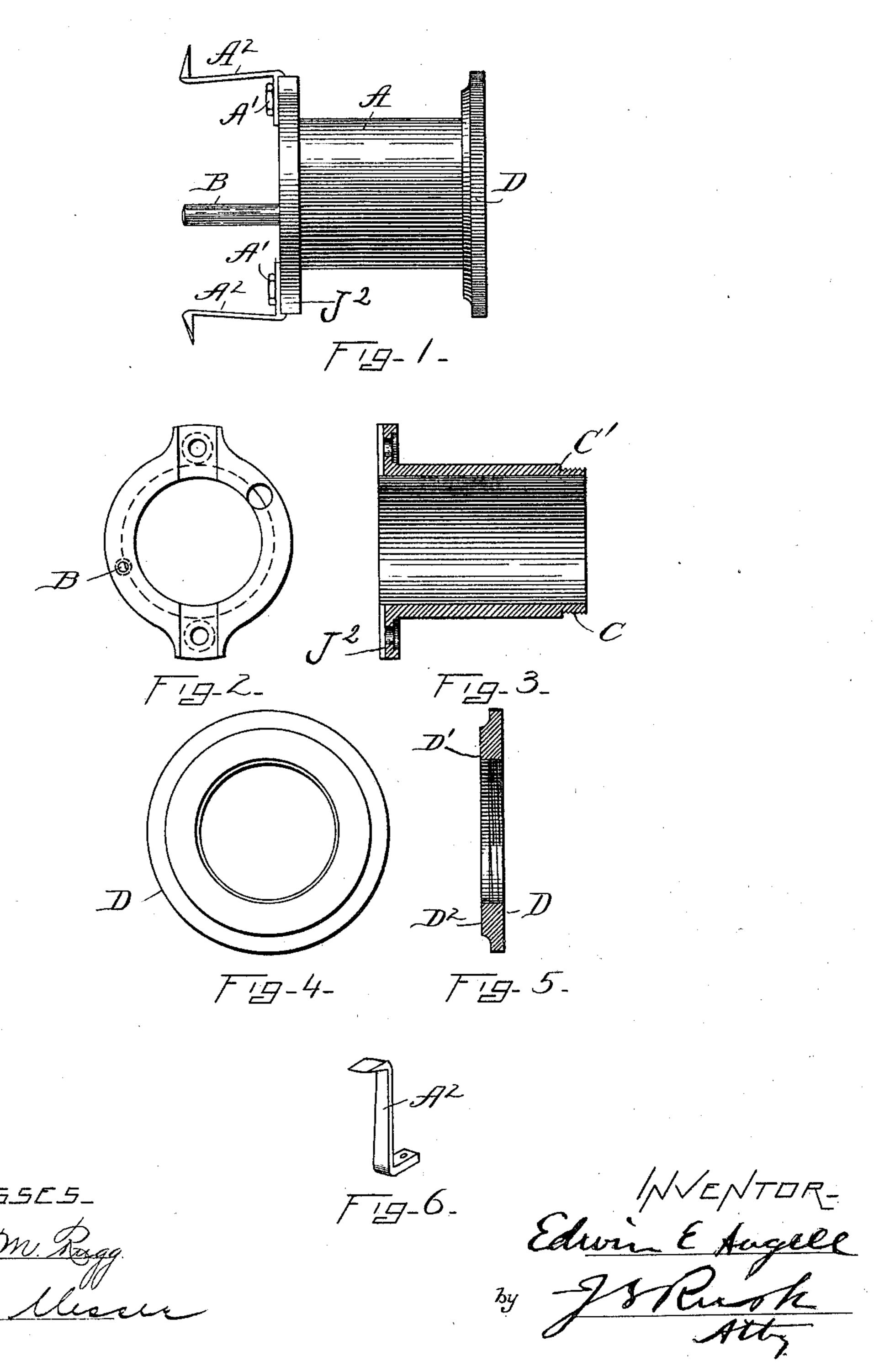
#### E. E. ANGELL.

### BOOT OR SHOE TRIMMING MACHINE.

APPLICATION FILED FEB. 23, 1899.

NO MODEL.

2 SHEETS-SHEET 1.



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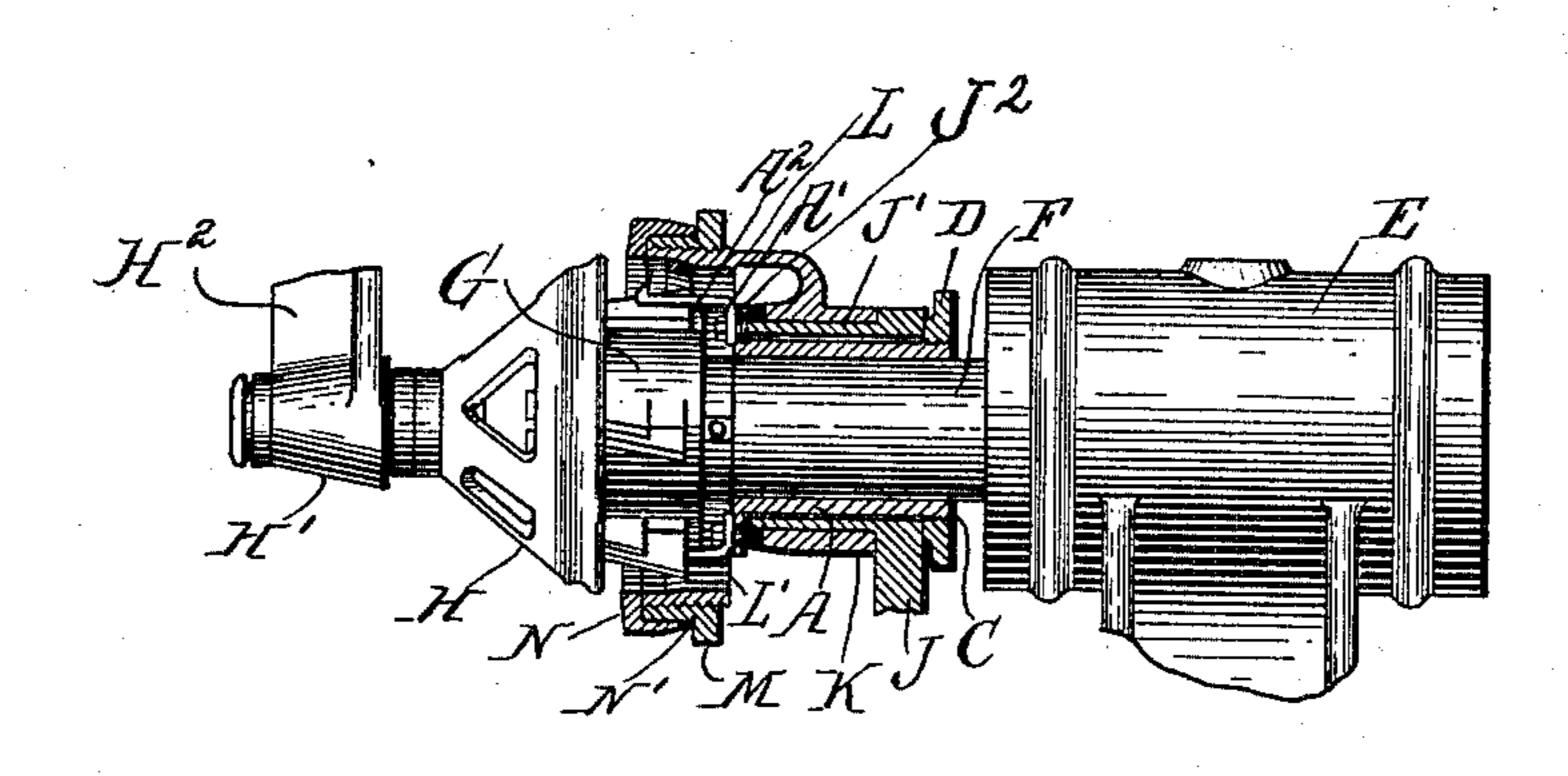


Fig-7-

WITNESSES-Grant Rumonger. CM. Chandler.

Edwin E. Augele By J.S. Rulas Atta

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

EDWIN E. ANGELL, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR TO THE AMERICAN SHOE MACHINERY COMPANY, OF PORTLAND, MAINE, A CORPORATION OF MAINE.

# BOOT OR SHOE TRIMMING MACHINE.

SPECIFICATION forming part of Letters Patent No. 719,414, dated February 3, 1903.

Application filed February 23, 1899. Serial No. 706,563. (No model.)

to all whom it may concern:

Be it known that I, EDWIN E. ANGELL, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Boot or Shoe Trimming Machines, of which the following

is a specification. This invention relates to improvements in the manufacture of blade-holders for boot and to shoe machinery shown in the patent to A. S. Vose, No. 560,825, dated May 26, 1896, and especially shown in Figure 9 of said patent; and the improvement consists in providing a large contact-bearing for the means which 15 holds the blade-holder in its proper position. The blade-holder shown in said Vose patent, Fig. 9, is held in its position by two retaining-fingers, and owing to the rotary and reciprocating motion of said cutter said fingers 20 and also the recess wear away rapidly, and it is to prevent this wearing that I have provided the construction shown in the drawings. . In the accompanying drawings, which illustrate a construction embodying my invention, 25 Fig. 1 is a side view of my improved extension-blade holder. Fig. 2 is an end view from the blade side. Fig. 3 is a sectional view. Fig. 4 is a plan view of the retaining-nut looking from the blade end. Fig. 5 is a sectional 30 view of the retaining-nut. Fig. 6 is a detail perspective view of one of the blades. Fig. 7 is a side view, partly in section, of a part of the machine, showing my improvements applied thereto.

Like letters of reference refer to like parts

throughout the several views.

A represents an extension-blade holder, to which is secured at one end at A' the extension-blades A² for feather-edging the bottom of the boot or shoe. B is a carrier upon said extension-blade holder, which engages with a hole in the cutter-head in order to give revolution to said extension-blade holder, as shown in Fig. 5 of said Vose patent; but I have only shown one in the present application, although any number could be used for this purpose. The extension-blade holder on its rear end is screw-threaded at C, and with said thread there is adapted to engage the retaining-nut D, also internally threaded to engage

the thread C at the end of the extension-blade holder A. Upon screwing up the nut D its inner surface D' contacts with the shoulder C' on the extension-blade holder, thus locking the nut to the extension-blade holder and 55 providing a wearing-surface D<sup>2</sup>, which contacts with the rear side of the sole-guard carrier, as shown in Fig. 3 of Patent No. 688,815, granted December 17, 1901.

As shown in Fig. 7, the cutter G, of usual 60 construction, is mounted on the end of the shaft F, supported by the bearing E, one of which is shown in said figure, and over the cutter Gislocated the cutter-guard H, mounted on the hub H', carried by the movable arm 65 H2, and said guard is capable of being removed from proximity to the cutter G when it is desired to gain access to said cutter. The upper end of the carrier J, which corresponds to the carrier shown in my application 70 filed February 23, 1899, and having Serial No. 706,561, is provided with a hub J', around which is located the sole-guard holder K, provided with arms L, which carry on their extreme ends the externally-threaded ring L', 75 on which is located and adjustably secured thereto the internally-threaded ring M, around which is located the sole-guard N, having a lip N', which fits into a suitable recess in the adjustable ring M, and on said ring the sole- 80 guard N is adapted to freely move.

The extension-blade holder A has considerable length and is journaled in the elongated carrier-hub J'. It is held therein by the fixed flange J<sup>2</sup>, projecting from one of its ends and engaging with an end of the hub, and the nut D, turned on its other end and engaging with the other end of the hub. By removing the nut D the holder can be detached from the carrier.

By this construction a less number of parts is required and greater durability is obtained over the patent previously referred to.

I do not limit myself to the arrangement and construction shown, as the same may be 95 varied without departing from the spirit of my invention.

Having thus ascertained the nature of my invention and set forth a construction embodying the same, what I claim as new, and 100

desire to secure by Letters Patent of the United States, is—

In a boot and shoe trimming machine, a carrier, an elongated hub mounted in said carrier, and a blade-holder comprising a sleeve of considerable extent to be received within said carrier-hub, said sleeve being provided with a fixed flange at one end to constitute a stop to engage an end of said hub and a removable collar screw-threaded to the other end of the sleeve to engage the other end of

said hub whereby the blade-holder is removably connected to the carrier.

In testimony whereof I have signed my name to this specification, in the presence of 15 two subscribing witnesses, this 15th day of February, A. D. 1899.

EDWIN E. ANGELL.

Witnesses:

A. L. MESSER, C. A. STEWART.