(No Model.)

H. M. LOOMER & C. G. BELMER.

ROTARY CUTTER SLEEVE.

No. 522,262. Patented July 3, 1894.

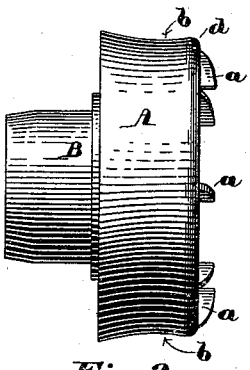

Fig. 2.

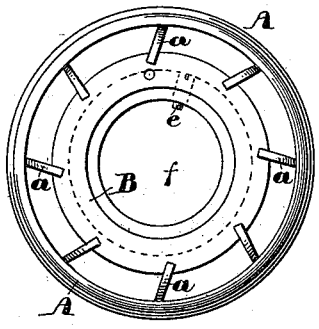

Fig. 1.

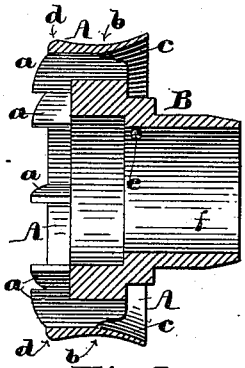

Fig. 3.

Witnesses:

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UNITED STATES PATENT OFFICE.

HENRY M. LOOMER, OF HYDE PARK, AND CHARLES GRANT BELMER, OF WHITMAN, ASSIGNORS TO HENRY W. EDDY, OF WORCESTER, MASSACHUSETTS.

ROTARY CUTTER-SLEEVE.

SPECIFICATION forming part of Letters Patent No. 522,262, dated July 3, 1894.

Application filed January 16, 1894. Serial No. 497,046. (No model.)

To all whom it may concern:

Be it known that we, HENRY M. LOOMER, of Hyde Park, in the county of Norfolk, and CHARLES GRANT BELMER, of Whitman, in the county of Plymouth, State of Massachusetts, have invented a new and useful Improvement in Rotary Cutter-Sleeves, which will, in connection with the accompanying drawings, be hereinafter fully described, and specifically defined in the appended claims.

In said drawings Figure 1 is a front elevation of a sleeve embodying our invention. Fig. 2 is an elevation as viewed from the left in Fig. 1; and Fig. 3 is a central section and as viewed from the right in Fig. 1.

This invention relates to a sleeve that is used in conjunction with a rotary cutter that is used in molding the edges of boots and shoes; and it consists in enveloping the inserted cutting teeth in a ring that houses in said teeth so that it may be utilized as a rest for the hand of the operator and also protects the hand from injury resulting from the teeth.

Referring again to said drawings, B represents the sleeve employed in this invention, which is formed with a passage *f* extending through it, and which is locked to the shaft by the short stud *e*. The teeth are shown at *a*, *a* and are inserted in shallow slots cut in the periphery of the sleeve. Said teeth at their outer edges are flush with band A, and they have a certain amount of flare as they extend inwardly from said ring, as shown in Figs. 1 and 3. In using this sleeve the operator stands as at the right in Fig. 1, or as at the near side in Fig. 3, and the fingers of the right hand, when manipulating the shoe, bear against ring A; and as said ring extends at the right beyond the ends of teeth *a* as at *c* it is not possible that said teeth shall bruise and injure the fingers of the operator in the process of trimming the shoe sole. The ring is curved or depressed in its length, as shown at *b*, and rounded at *d* in order that the operator may rest his finger in the depression so formed without danger of injury. By extending ring A over the teeth at the right and flaring it outwardly at *c*, trumpet like, as shown in Fig. 3, the dust from the cutter is by the action of said ring carried directly into the exhaust and does not fill the air to the great discomfort of the operator. And in passing round the toe of the sole as also when the cutter is in contact with the sharply curved sole at the shank, said ring formed as shown gives a perfect control to the operator over the action of the cutter at all such difficult points of the shoe sole.

Having thus explained our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A rotary sole cutter consisting of inner ring B formed to be secured upon the shaft; a series of teeth *a* inserted in said ring around the periphery thereof, and extending outward therefrom, the outer sleeve A secured upon the outer surface of said teeth and extending inward as at *c* beyond the inner ends of teeth *a* to shield the fingers of the operator from injury by said teeth, substantially as specified.

2. A rotary sole cutter consisting of inner ring B, formed to be secured to the shaft, a series of teeth *a* inserted in said ring around the periphery thereof and extending outward therefrom, and the outer sleeve A, secured upon the outer surface of said teeth and formed with a longitudinal depression as at *b* between parts *c* and *d*, to serve as a rest or seat for the finger of the operator when guiding the shoe past the cutter, substantially as specified.

3. A rotary sole cutter consisting of inner ring B formed to be secured to the shaft, a series of teeth *a* inserted in said ring around the periphery thereof and extending outward therefrom, and the outer sleeve B secured upon the outer surface of said teeth and at its inner end *c* formed trumpet like or outwardly flaring so that the currents of air passing between teeth *a* will by the flaring of sleeve A conduct into the exhaust the dust cut by said teeth, substantially as specified.

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Witnesses:
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