No. 855,133. PATENTED MAY 28, 1907.

W. F. REULMANN.

SOLE EDGE TRIMMER.

APPLICATION FILED DEC. 31, 1906.

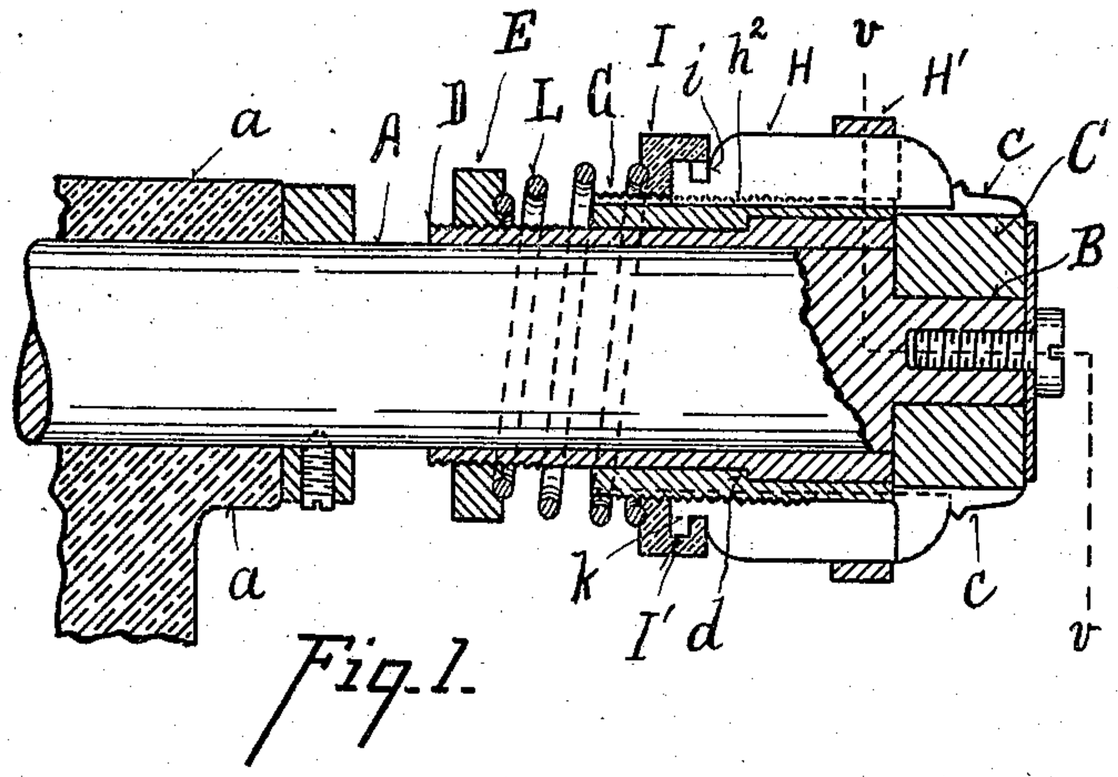

Fig. 1.

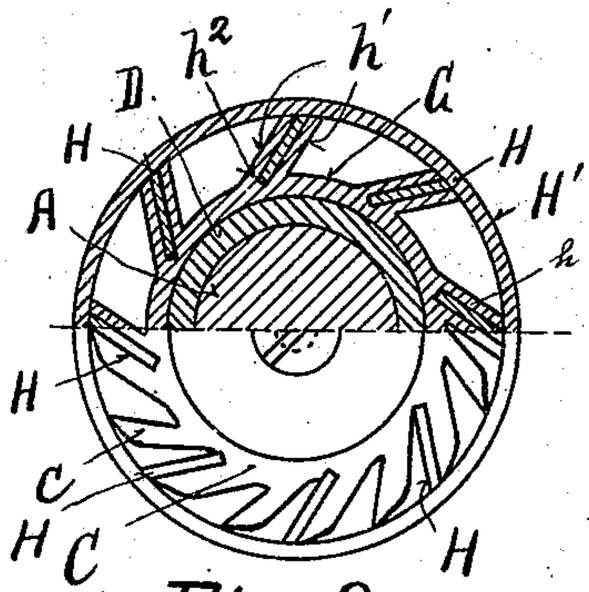

Fig. 2.

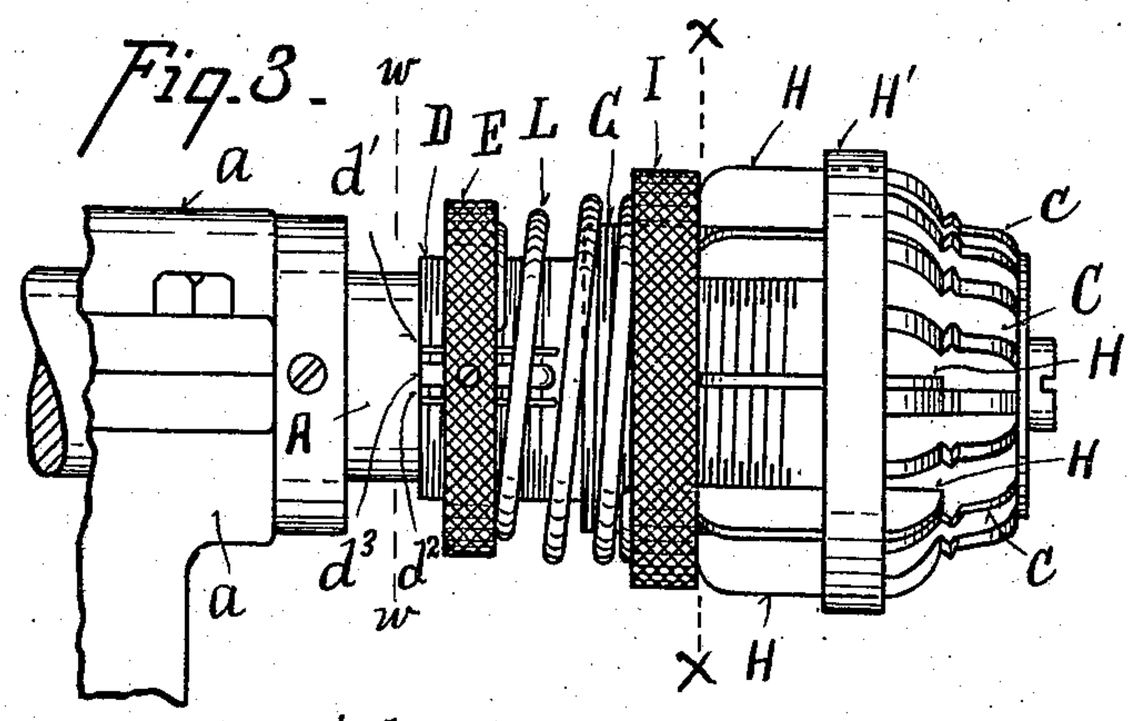

Fig. 3.

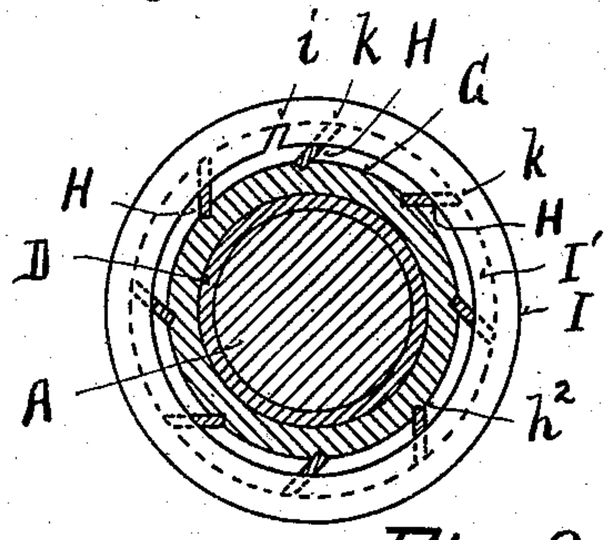

Fig. 6.

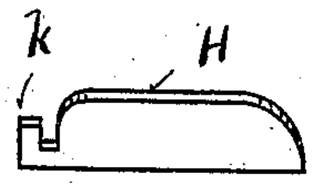

Fig. 4.

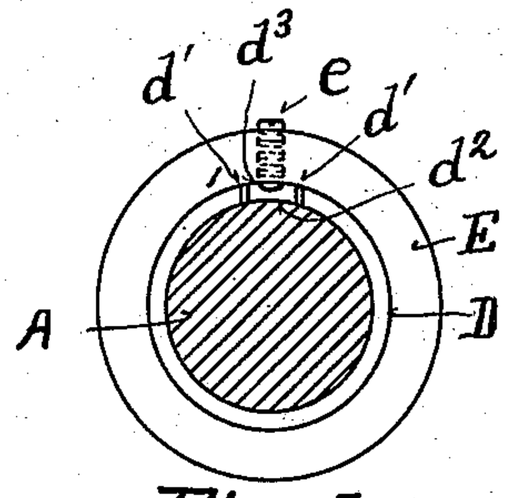

Fig. 5.

Witnesses
A. McCormack.
Walter J. Murray

Inventor
William F. Reulmann
By C. W. Miller
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM F. REULMANN, OF CINCINNATI, OHIO.

SOLE-EDGE TRIMMER.

No. 855,133. Specification of Letters Patent. Patented May 28, 1907.

Application filed December 31, 1906. Serial No. 350,193.

To all whom it may concern:

Be it known that I, WILLIAM F. REULMANN, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Sole-Edge Trimmers, of which the following is a specification.

My invention relates to improvements in buffers for sole edge trimmers.

One of its objects is to provide ready means for inserting and removing the buffer blades.

Another object is to provide means for simultaneously adjusting the buffer blades relative to their sleeve, whereby the blades may be ground and reground and adjusted as required.

Another object is to provide improved means for adjusting and holding the parts upon their shaft and securing the desired tension.

It further consists in certain details of form, combination and arrangement, all of which will be more fully set forth in the description of the accompanying drawings, in which;

Figure 1 is a central vertical section through a shaft with my improved buffer in place thereon. Fig. 2 is an end view, partly in section on line *v v* of Fig. 1. Fig. 3 is a side elevation. Fig. 4 is a perspective view of one of the buffer blades detached. Fig. 5 is a section on line *x x* of Fig. 3. Fig. 6 is a section on line *w w* of Fig. 3.

A represents the shaft or mandrel which is mounted in bearings one of which *a* is shown, said shaft being provided with a pulley and adapted to be driven at high speed. The end of the mandrel at B is reduced in size and thereon is mounted a rotary cutter C having a series of teeth *c*. On the shaft in rear of the cutter is mounted a sleeve D having preferably a shoulder *d*. The rear end of sleeve D is threaded and is also slit at *d'* forming a tongue d^2 which is channeled at d^3 to receive the end of a set screw *e* carried by collar E, which is internally threaded to engage the sleeve D. When screw *e* is set tight on the tongue d^2 it serves to lock the sleeve and collar E to their relative positions and to lock sleeve D to the shaft.

Loosely mounted on sleeve D is a sleeve or collar G which carries the buffer blades H, the said blades sliding longitudinally in slots *h* between the arms *h'*, which slots as indicated in Fig. 6 are deep enough to form channels h^2 in the sleeve to support the blades nearly their entire length. A ring H' encircling the blades and arms *h'* and attached to arms *h'*, holds the blades in place. The rear end of collar G is threaded and fitted with an internally threaded collar I. Collar I has an annular groove I' which engages a series of lugs *k* at the rear ends of the buffer blades. *i* represents a slot by means of which the lugs *k* are introduced into the groove I'. The collar I thus serves to shift and adjust the blades H endwise relative to sleeve G and also to lock the rear ends of the blades in the slots h^2.

It will thus be noted that any one of the blades H may be detached by bringing the slot *i* opposite its lug *k* and slipping the blade out endwise, also that by rotating collar I all the blades H can be simultaneously shifted endwise in either direction. Thus by detaching the cutter C, all the blades can be simultaneously sharpened by grinding while rotating, and as the blades are inexpensive and quickly replaced the blades may be reground and reset as frequently as required to produce efficient work. The forward end of the buffer blades pass between the teeth of the cutter and serve to remove the ragged threads of leather and to finish or scrape the work, which requires frequent sharpening and accurate adjustment.

A spring L interposed between collars E and I serves to normally hold the sleeve G against the shoulder *d*, and any desired tension, or pressure may be attained by adjusting collar E.

Having described my invention, what I claim is;

1. In a device of the character indicated, a buffer sleeve having a series of ways to guide the buffer blades, a collar threaded to said sleeve, and a series of buffer blades having members engaging said collar in such manner that said blades are simultaneously shifted endwise in either direction by the shifting of said collar, and locked against movement endwise when said collar is at rest upon said sleeve.

2. In a device of the character indicated, a buffer sleeve having a series of ways to guide the buffer blades, a collar threaded to said sleeve, and a series of buffer blades having members engaging said collar in such manner as to simultaneously shift said blades endwise in either direction when said collar is turned upon the sleeve, said collar having

a cross-recess which when shifted to register with the respective blades permits the blades to be detached or inserted.

3. In a device of the character described, a buffer sleeve having a series of slots to receive buffer blades, a collar threaded to said sleeve and provided with an annular groove and a side slot leading thereto, and a series of buffer blades having lugs adapted to engage the annular groove of said collar.

4. In a device of the character described a shaft, a sleeve adapted to be locked to the shaft and provided with a shoulder, a collar threaded to and adapted to be locked to said sleeve, a second sleeve loosely mounted on said first named sleeve and provided with a shoulder to engage the shoulder of said first sleeve, a series of buffer blades carried by and adjustable endwise relative to said second sleeve, a collar threaded to said second sleeve, and a spring interposed between said sleeves to yieldingly hold their shoulders in engagement.

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

WILLIAM F. REULMANN.

Witnesses:
AGNES MCCORMACK,
C. W. MILES.