H. W. BRETT.

Sand-Paper Rollers.

No. 145,392. Patented Dec. 9, 1873.

FIG. 1.

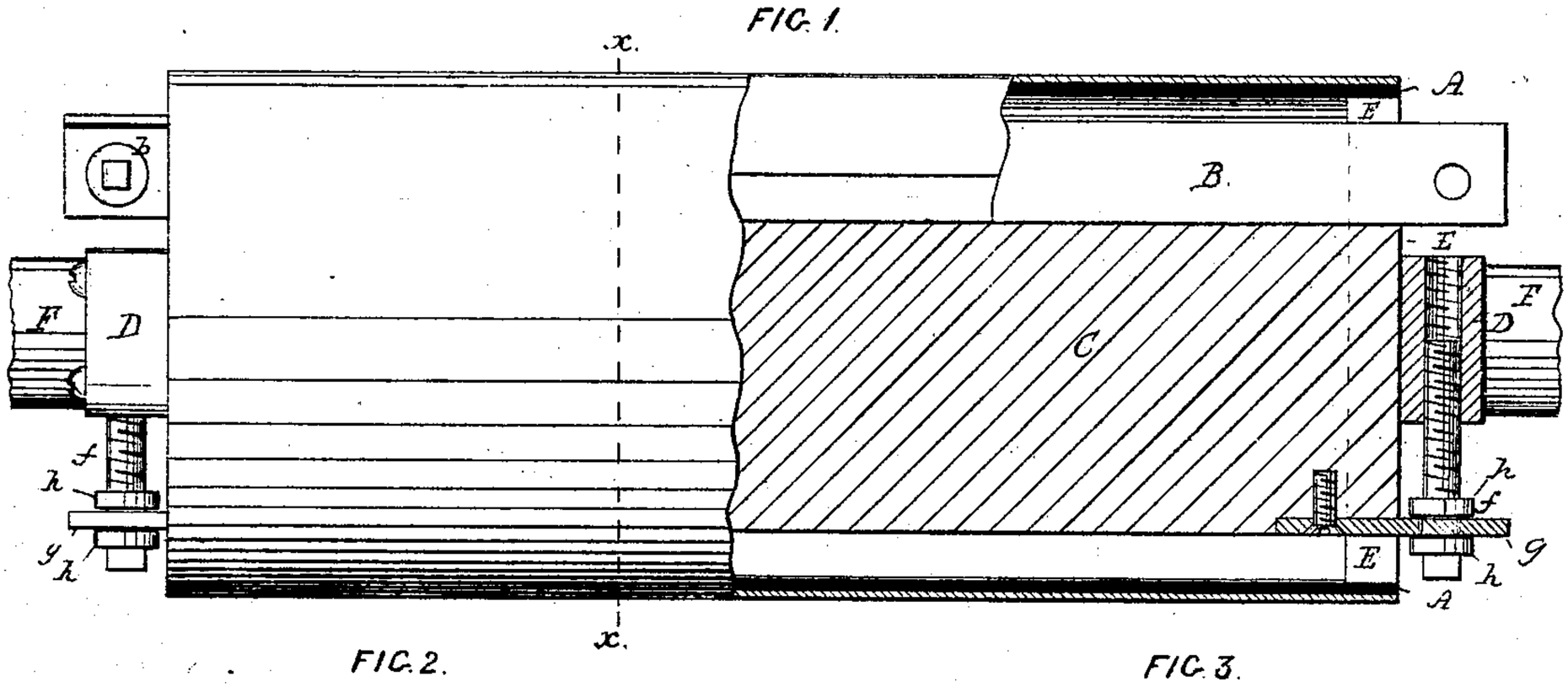


FIG. 2.

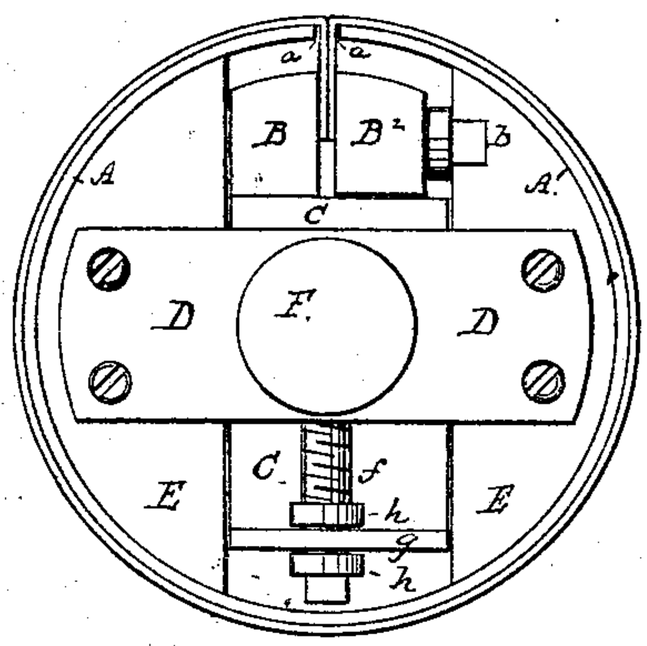
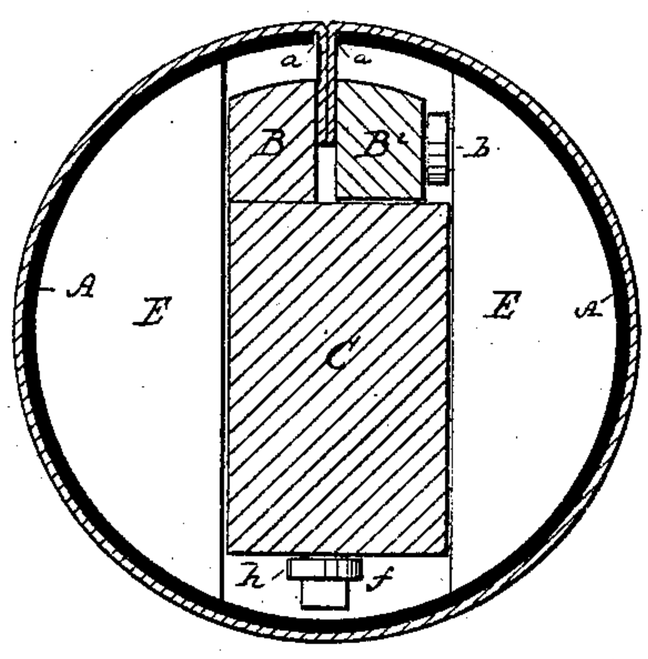


FIG. 3.



WITNESSES.

B. S. Bryant

J. P. McElroy.

INVENTOR.

H. W. Brett.

Per Brown Brothers

Attorneys.

UNITED STATES PATENT OFFICE.

HENRY W. BRETT, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SAND-PAPER ROLLERS.

Specification forming part of Letters Patent No. **145,392**, dated December 9, 1873; application filed November 12, 1873.

To all whom it may concern:.

Be it known that I, HENRY W. BRETT, of Boston, Suffolk county, State of Massachusetts, have invented an Improved Sand-Paper Roller, of which the following is a specification:

This invention is more particularly designed for sand-paper-covered rollers, to be used for sand-papering boot and shoe soles; and it relates wholly to the confinement or attachment of the sand-paper to and about the body of the roller.

Under the invention, the roller is wrapped with the sand-paper, and then its two edges are passed through a common longitudinal slit of the roller and made secure in and between two clamping-jaws that are located within the roller, and are there arranged to be adjusted to tighten the sand-paper about and to closely and firmly confine it to the roller-body, and to be then set or held against accidental movement or slip.

In the accompanying plate of drawings a sand-paper roller constructed according to this invention is illustrated, Figure 1 being partly a side view and partly a central longitudinal vertical section; Fig. 2, an end view; and Fig. 3, a cross-section in plane of line *x x*, Fig. 1.

In the drawings, A represents the roller-body, which may be made of wood, cast-iron, or any other suitable material. *a* is a slit running lengthwise and opening to the inside of the roller, which is, to some extent, hollow or open; B B^2, two clamping-jaws. The jaws B B^2 are carried by a common block, C. The jaw B is fixed to the block C, and the jaw B^2 is free to be set against or off from the fixed jaw B, and each end of the two jaws is provided with a screw-bolt, *b*, which passes loosely through the free jaw B^2, and screws into the fixed jaw B. The jaws B B^2 and their carrier C are located within the open body of the roller, and they extend from end to end thereof; and the opening line of the jaws is opposite to or in line with the longitudinal slit *a* of the roller. (See Fig. 3.) The jaws and carrier are confined within the roller-body by a cross-piece, D, at each end of the roller, and these cross-pieces D are firmly fastened to the roller ends E, and they each carry a projecting journal, F, by which to suspend the roller in its bearings. The jaw-carrier C, as to the confining cross-pieces D, is free to be moved across the roller-body. *f*, screw-bolts, one at each end of the jaw-carrier C. These screw-bolts *f* pass loosely through the ear-pieces *g* of the jaw-carrier C, and they screw into the cross-pieces D of the roller-body, and they have a collar, *h*, at each side of the ear-pieces *g*.

To secure sand-paper to a roller constructed as above described, first place one edge of the paper through the roller-slit and between the clamping-jaws; then wrap the paper about the roller, and similarly locate the other edge of the paper in the clamping-jaws. Now close the jaws tightly against the paper by properly turning their screw-bolts *b*, and then turn the screw-bolts *f* of the jaw-carrier C in the proper direction to draw the jaws inwardly from the roller-slit *a*. This drawing in of the jaws draws the sand-paper in, and thus tightens it about the roller, and there it is held firmly against escape, except it tears or breaks away under a too severe tension from such adjustment of the jaws.

To remove the sand-paper from the roller-body, simply loosen or open the clamping-jaws.

It is not intended to limit the invention to the precise construction of parts shown, nor to the particular form and arrangement of clamping-jaws, and of the parts for adjusting the jaws to tighten the paper about the roller-body, as, obviously, they can be varied in many respects.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A sand-paper roller constructed with the slit *a*, and with clamping-jaws B B^2, that are arranged and adapted for adjustment to draw the paper about the roller-body, substantially as herein described, and for the purpose specified.

2. The combination of the jaws B B^2, carrier-block C, and adjusting-bolts *f* with the cross-pieces D and roller A, having the slit *a*, arranged to operate substantially as and for the purpose specified.

The above specification of my invention signed by me this 5th day of November, A. D. 1873.

H. W. BRETT.

Witnesses:
EDWIN W. BROWN,
J. P. MCELROY.