(No Model.)

G. A. FULLERTON.

BELTING FOR BUFFING BOOT OR SHOE SOLES.

No. 305,068. Patented Sept. 16, 1884.

Fig. 1.

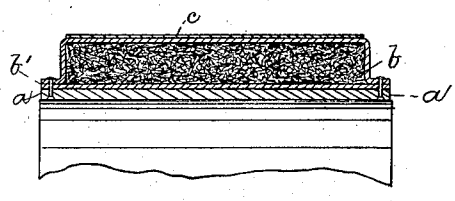


Fig. 2.

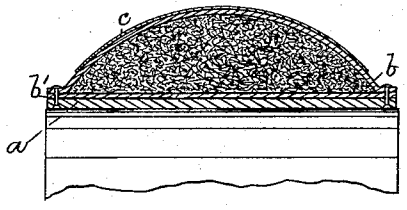


Fig. 3.

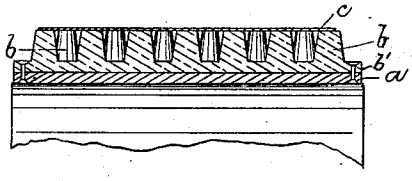
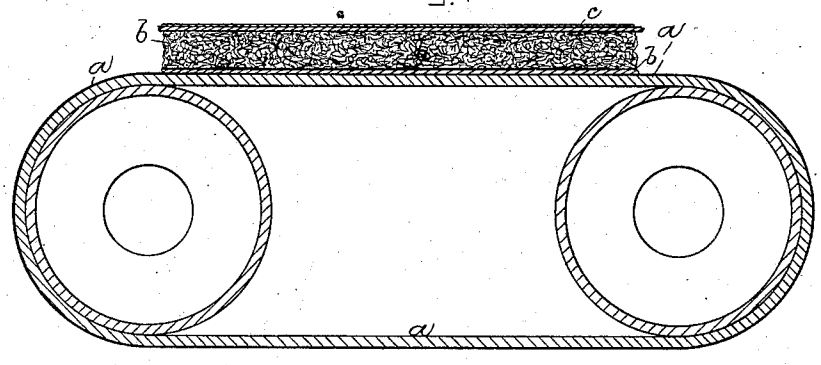


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE A. FULLERTON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO GEORGE H. P. FLAGG, TRUSTEE, OF SAME PLACE.

BELTING FOR BUFFING BOOT OR SHOE SOLES.

SPECIFICATION forming part of Letters Patent No. 305,068, dated September 16, 1884.

Application filed February 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. FULLERTON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Belts for Buffing Boot or Shoe Soles, of which the following is a specification.

My invention consists in securing to a leather or rubber belt of the usual construction a cushion of soft elastic material, and thereby form a continuous elastic bearing for an abrasive belt, more especially for the sand-paper belt for which Letters Patent No. 253,196 were granted to Flagg and Gordon, February 7, 1882.

In the patent to F. W. Coy, No. 247,315, dated September 21, 1881, a buffing-machine is described, the main novelty of which consists in the use of an endless belt of sand-paper on two pulleys, one of which is cushioned, the sand-paper belt above mentioned being brought to the desired tension by moving one of the pulleys away from the other. When a sand-paper belt is carried by my improved carrier-belt, the relation between the shoe-sole to be buffed and the sand-paper and the cushion against which the sand-paper is pressed by the pressure of the shoe-sole on the sand-paper is substantially different from anything before known in a buffing-machine or any other abrading-machine known to me, for all the advantages of using the sand-paper in the form of a belt are retained, and the disadvantages done away with. The main advantages of using the sand-paper in the form of a belt are the great length of abrasive surface and the great surface speed readily attainable with pulleys of a small diameter, and the fact that the abrasive surface of the sand-paper is largely freed from dust by its passage over the pulleys, while the disadvantages are the strain upon the sand-paper belt and the distortion of the soft or cushion-carrying pulley due to that strain in machines of the kind described in the patent above referred to.

The accompanying drawings illustrate my improved belting.

Figure 1 is a cross-section showing the arrangement for a flat belt; Fig. 2, a similar section, showing that for a belt having a convex abrasive surface. Fig. 3 is a cross-section of a rubber cushion, and Fig. 4 is a longitudinal section showing the belt over two pulleys.

a represents a leather or rubber belt of the usual well-known construction; *b*, a cushion of soft elastic material, preferably felt; but soft vulcanized rubber may be used, as in Fig. 3, where it is indicated as cellular, as in Patent No. 257,308, dated May 2, 1882, to G. H. P. Flagg.

The modification of my invention (shown in Fig. 2) may be used with the ordinary molded paper and with the ordinary pulleys, but requires for its best employment a novel arrangement of pulleys and a novel sand-paper belt, which will form the subject of other applications for Letters Patent.

When made of felt, the cushion is inclosed in a suitable casing of leather or the like, provided with flanges or projections *b'*, by means of which it is secured to the belt *a* by stitches or rivets. When made of rubber, this flange or projection will be molded as a part of the cushion.

The endless belt *c*, of sand-paper, is readily put on and taken off of my carrier-belt, and is supported without undue strain by the elasticity of the cushion *b*.

It is obvious that with this arrangement no elastic pulleys are required, and the article to be abraded or polished may be applied to any part of the abrasive belt, although it is better to apply it to a portion of that belt passing over one of the pulleys.

My attention has been called by the Patent Office to Letters Patent No. 233,211, of 1880; No. 141,712, of 1873; Reissue No. 9,752, of 1881, and No. 238,200, of 1881; and I therefore disclaim everything shown in either of these patents, for I do not claim an elastic cushion moving with a disk of sand-paper, (shown in Reissue No. 9,752,) nor an elastic cushion forming a tire or covering for a wheel, (shown in Nos. 141,712 and 233,211,) nor a tubular belt, with a yielding filling or core, whether coated or not with an abrasive compound, (shown in No. 238,200,) for my belt consists, essentially, of an ordinary belt, *a*, having a cushion, *b*, secured upon its outer face; and I disclaim all belts in which the covering of the cushion is of

the same substance and texture as is that part of the belt which is in contact with the pulleys, as in Patent No. 238,200.

I claim as my invention—

The improved abrasive belt above described, made up of the belt proper, *a*, of leather or like stout material, the cushion-belt *b*, secured upon the outer surface of belt *a*, and the independent sand-paper belt *c*, surrounding the cushion-belt *b*, substantially as described.

GEORGE A. FULLERTON.

Witnesses:

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