

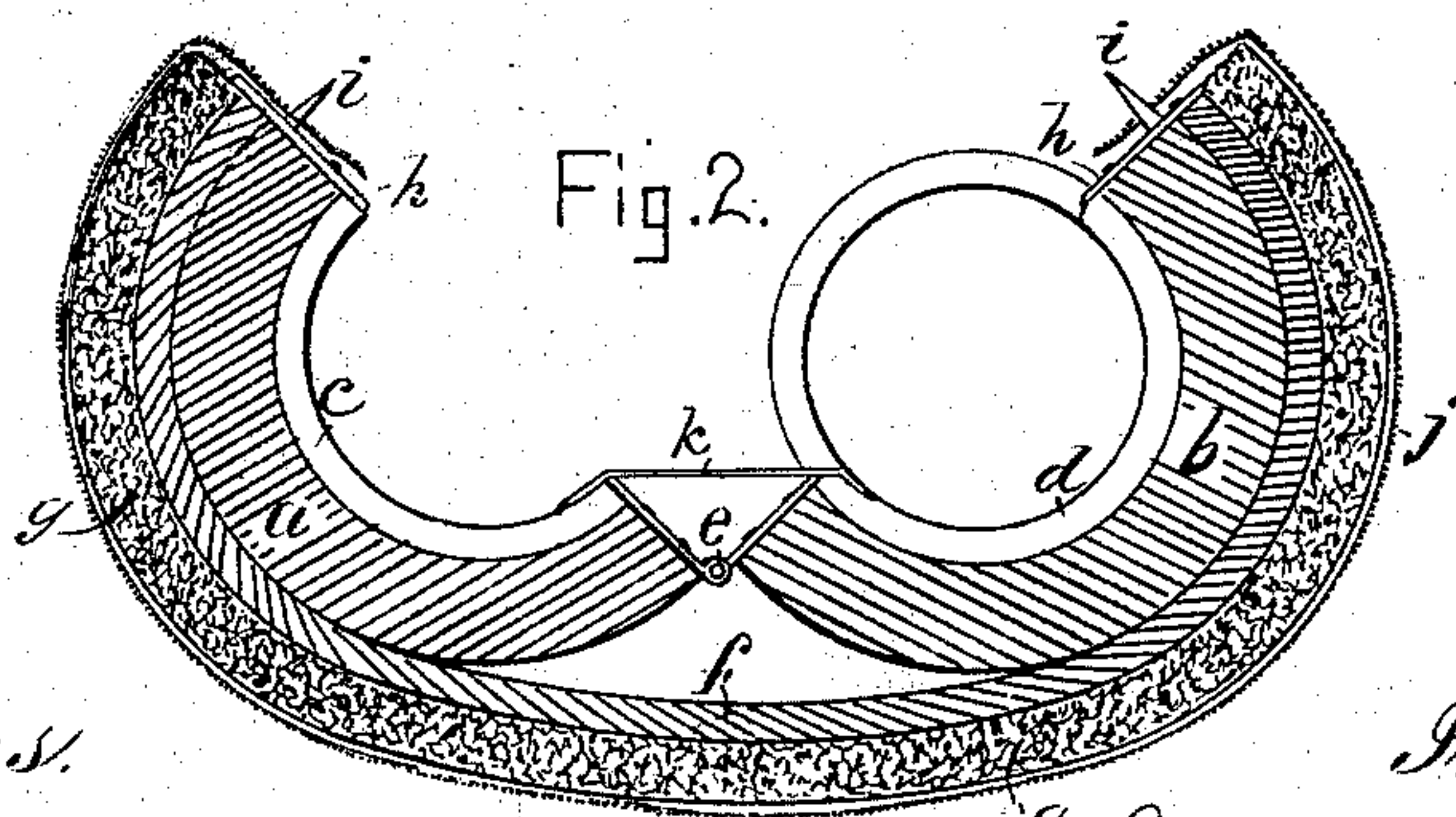
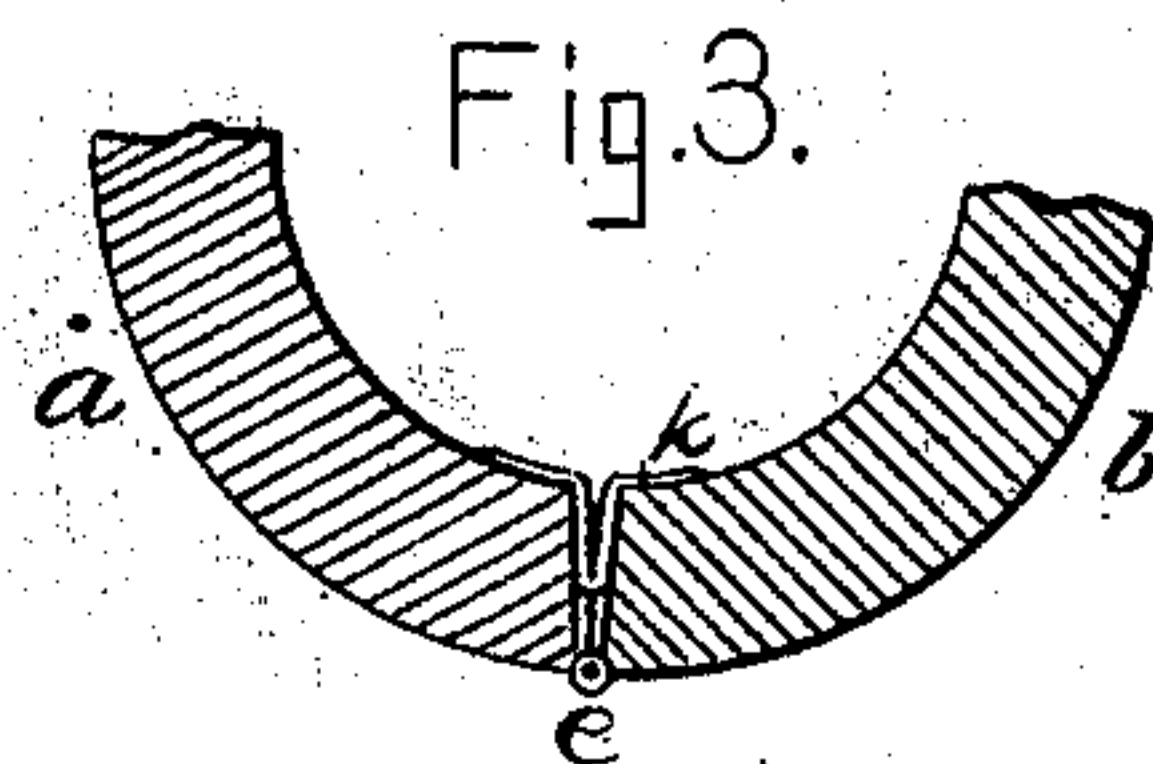
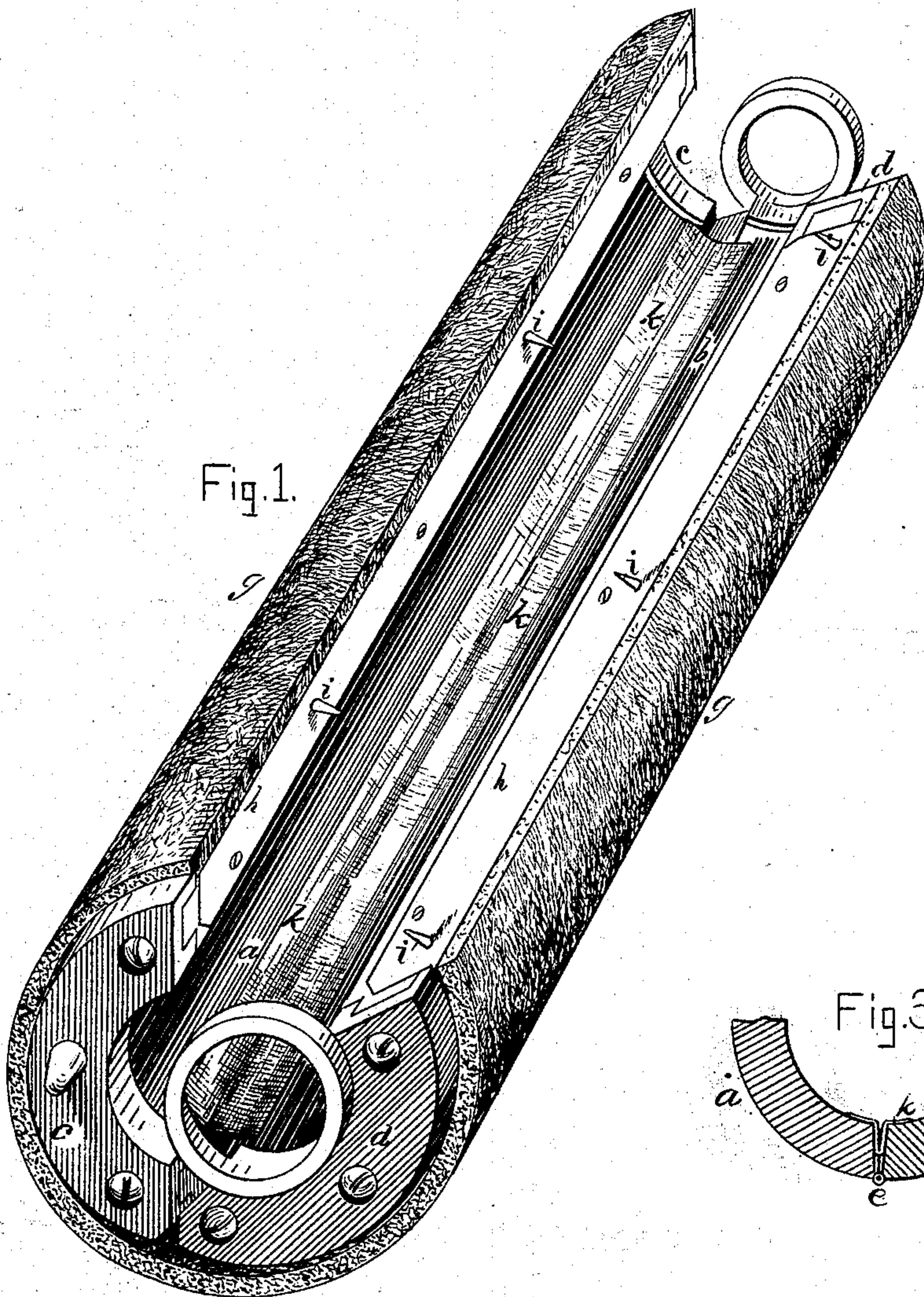
(No Model.)

J. G. BUZZELL.

BUFFING ROLL.

No. 261,906.

Patented Aug. 1, 1882.



Witnesses:  
H. E. Remick,  
Eugene Humphrey

Inventor.  
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Attys.



# UNITED STATES PATENT OFFICE.

JOHN G. BUZZELL, OF LYNN, MASSACHUSETTS.

## BUFFING-ROLL.

SPECIFICATION forming part of Letters Patent No. 261,906, dated August 1, 1882.

Application filed June 9, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN G. BUZZELL, of Lynn, State of Massachusetts, have invented an Improvement in Buffing-Rollers, of which  
5 the following is a specification.

This invention relates to rollers for buffing leather, as in the manufacture of boots and shoes, and has for its object to prevent the detached grit of the sand-paper and the dirt and  
10 dust resulting from the abrading action of the roll upon the leather from passing through the longitudinal joints in the roll and becoming deposited between the wooden shell and the backing upon which the felt covering is se-  
15 cured, thereby wearing away and destroying such backing, and at the same time throwing the roll out of balance by enlarging the roll upon the side where such grit and dirt accumulate.

20 This invention is an improvement upon the roller described and shown in United States Patent No. 232,333, dated September 21, 1880, which was an improvement upon United States Patent No. 100,229, dated February 22, 1870,  
25 and No. 137,187, dated March 25, 1873, to all which reference may be had.

My invention in longitudinally-divided buffing or abrading rolls consists in combining with the shells or semi-cylinders of the roll a flexible curtain or cover extending the length of  
30 said shells, and having its edges secured to the inner periphery of the shells, adjacent to their abutting faces, on the hinged side of the roll, such curtain being arranged to fold between  
35 said abutting faces when the roll is closed together, and being of such width as to allow the roll to be opened sufficiently to facilitate the removal of the worn sand-paper and the affixing upon the roll of a new sheet thereof.

40 In the drawings, Figure 1 is a perspective view of an opened roll without the sand-paper, and showing my improvement. Fig. 2 is a transverse section of Fig. 1, but showing the sand-paper applied thereto. Fig. 3 is a cross-  
45 section similar to Fig. 2, but only showing a portion of the shells as hinged together with my curtain folded between them, as when the cylinder is closed together.

50 In these views, *a b* represent the shells or semi-cylinders of wood, suitably connected by hinges, as shown at *e*. At the ends of these

shells are secured metal plates *c d* for securing the roll upon its arbor. The backing *f* is secured at its longest edges to shells *a b*, and the felt *g* is cemented to said backing, and at  
55 its edges is secured to its supporting-plates *h* by stitching.

The sand-paper is represented at *j*, and is secured in place by pins *i*, projecting from plates *h*. All of these parts are represented as in my  
60 said former patent of September 21, 1880, and hence do not require further description.

When the roll is in use the liberated grit of sand-paper *j*, as well as the dust, grit, and dirt that is worn from the leather being acted up-  
65 on, sifts through between the meeting faces of the sand-paper where the same is secured to spurs *i*, and accumulates in the spaces between the interior of shells *a b* and the arbor, and also in the spaces between the meeting faces  
70 of the shells at the hinged edges thereof; and when the roll is opened (which is a frequent necessity to replace the worn-out sand-paper with new) the described accumulation of dirt and grit falls through between the hinged edges  
75 of the shells and lodges between the outer periphery of the shells and back *f*, and is embedded in the latter by the closing of the roll, and consequent tightening of the back thereon. Such accumulation of dirt beneath the back  
80 throws the same out of true, and also wears away and destroys the back, such wearing being hastened by the distension of the back, caused by the deposit of dirt beneath it. To  
85 obviate this serious objection, I provide the curtain *k*, of firm fine cloth, gum-elastic sheet, or other suitable flexible material, which I cement, glue, nail, or otherwise secure to shells *a b*, adjacent to their hinged abutting faces. This  
90 curtain is of such width that it admits of the requisite opening of the roll when the sand-paper is changed, as shown in Figs. 1 and 2, and when the roll is closed the curtain automatically folds between the meeting faces of  
95 the shells, as shown in Fig. 3. The edges of the curtain being closely nailed, cemented, or glued to the shells, no dirt can pass it when the roll is in use, and when the roll is opened the dirt is raised by the curtain from between the  
100 edges of the shells, and is then by an inclination of the roll thrown clear of the same; and hence as there is no accumulation of dirt be-

tween the shells and back *f* the roll maintains its true cylindrical form, and back *f* will last for a long period.

I claim as my invention—

- 5 1. In a buffing-roll composed of two longitudinally-divided sections hinged or otherwise connected at their inner edges, a curtain properly secured to such connected edges and spanning or covering the space between said sections, thereby preventing the passage of dust  
10 or dirt through said space, substantially as specified.

2. In an abrading-roll, the combination of shells *a b*, the flexible back *f*, secured at its edges to said shells, and curtain *k*, secured to said shells and extending across the space between the same, substantially as specified.

JOHN G. BUZZELL.

Witnesses:

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