

(No Model.)

J. BUSFIELD.
BUFFING ROLL.

No. 485,170.

Patented Nov. 1, 1892.

Fig. 1.

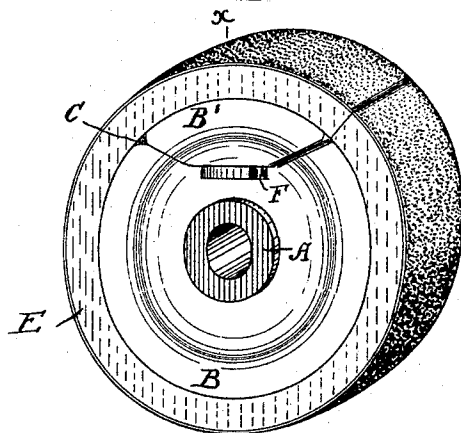


Fig. 2.

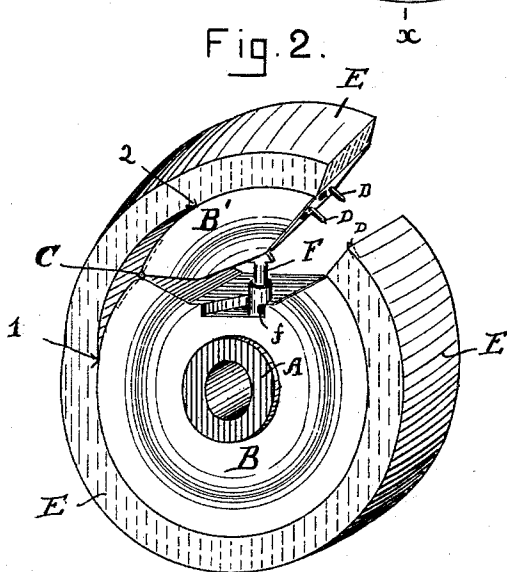
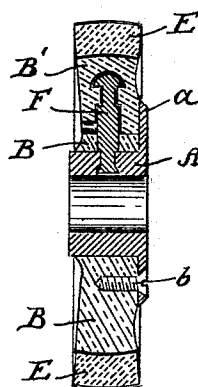


Fig. 3.



Witnesses.

Charles L. Ames
George C. Hadley.

Inventor.

James Busfield
by Edwin Blanta.
Attorney.

UNITED STATES PATENT OFFICE.

JAMES BUSFIELD, OF HAVERHILL, MASSACHUSETTS.

BUFFING-ROLL.

SPECIFICATION forming part of Letters Patent No. 485,170, dated November 1, 1892.

Application filed June 12, 1891. Serial No. 395,975. (No model.)

To all whom it may concern:

Be it known that I, JAMES BUSFIELD, a citizen of the United States, residing at Haverhill, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Rolls for Scouring and Buffing Shoe Heels and Bottoms, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to certain improvements in rollers for scouring or buffing shoe-heels and bottoms. Rolls as usually employed are covered with a layer of felt, over which when employed for scouring is secured a strip of sandpaper. When the rolls are new or newly covered with felt, they work well; but as they are used the felt is gradually compressed and becomes less elastic, which causes the sand to be stripped off the paper as soon as it comes into contact with the surface to be scoured. The roll has then to be recovered with felt. Now the object of my invention is to overcome this defect and to produce a roll that will not constantly have to be repaired; and the invention consists in covering the roll with india-rubber or an india-rubber compound, so that the elasticity will be maintained for a very long period.

Referring to the accompanying drawings, Figure 1 represents a perspective view of a roll embodying my invention and covered with sandpaper for scouring shoe-heels. Fig. 2 is a similar view showing the hinged strainer-piece raised ready to receive a piece of sandpaper or buffing-leather. Fig. 3 is a vertical section taken on line $x x$ of Fig. 1.

A represents the hub of metal, which has a flange a on one side and is secured to the roll-body B by screws b . The body has a portion B' cut out, which portion is hinged to the body at C and forms the straining-piece. The piece B' and the body B are each provided with spurs D, as shown, for holding the ends of the sandpaper or buffing-leather.

E is a thick piece of india-rubber or india-rubber compound secured to the outer edge of roll, as shown, by elastic or other suitable cement; but from the point 1 on the roll-body B to the point 2 on the strainer-piece B' the rubber is left free, so that the strainer-

piece can be raised without injury to the surface of the rubber.

F is a lock-bolt held at one end in the hub A and at the upper end formed with projections that fit into a recess in the strainer-piece B', so that when turned one way, by a piece of wire inserted into the hole f , (see Fig. 2,) the strainer-piece is free, but when turned in the other direction it is securely locked. A narrow slot G is formed in the roll by cutting away a portion of it extending from the locking-pin out to the surface of the roll, through which the wire is inserted into the hole f in the lock-bolt. This construction secures a positive lock for the strainer-piece without the possibility of an accidental disengagement which might happen with a spring-catch, and especially in one in which the disengagement takes place upon an inward pressure upon the catch, which is liable to happen accidentally by touching the catch with the article being operated upon. With the slot and the bolt, however, disengagement can only happen by placing a wire in the slot and partially rotating the bolt.

To place a strip of sandpaper or buffing-leather upon the roll, the lock-bolt F is turned so that the strainer-piece B' is free. One end of the strip of sandpaper or buffing-leather is placed upon the spurs D on the strainer-piece. It is then brought round the roll and the other end passed on to the spur D on the body B. The strainer-piece B' is then pressed down and the lock-bolt turned to hold it down. In closing the piece B' the sandpaper or buffing leather is stretched, so as to fit tightly over the roller.

It will be seen that by the employment of india-rubber or its compounds a roll with a surface of the desired elasticity is obtained and one that will last for a very long time, and by the employment of a roll thus constructed much time and material is saved and the work done in a much more satisfactory manner than with rolls of ordinary construction.

What I claim as my invention is—

A cylindrical scouring and buffing roll consisting of a nearly-cylindrical body, a hub therein, a segmental strainer-piece hinged to

the body, a lock-bolt swiveled at its inner end to the hub and projecting radially therefrom through the body and the outer end of said bolt being provided with shoulders and an opening, said shoulders being adapted to enter and engage with the strainer-piece and lock it to the body portion, the body of the roll being cut away on one side to form a slot to register with the opening in the bolt, whereby a wire may be inserted into the opening of the bolt through the slot and the bolt may

be operated, and means for detachably securing a piece of material to the roll, substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 23d day of May, A. D. 1891.

JAMES BUSFIELD.

Witnesses:

HARRY J. COLE,
CHARLES E. HOYT.