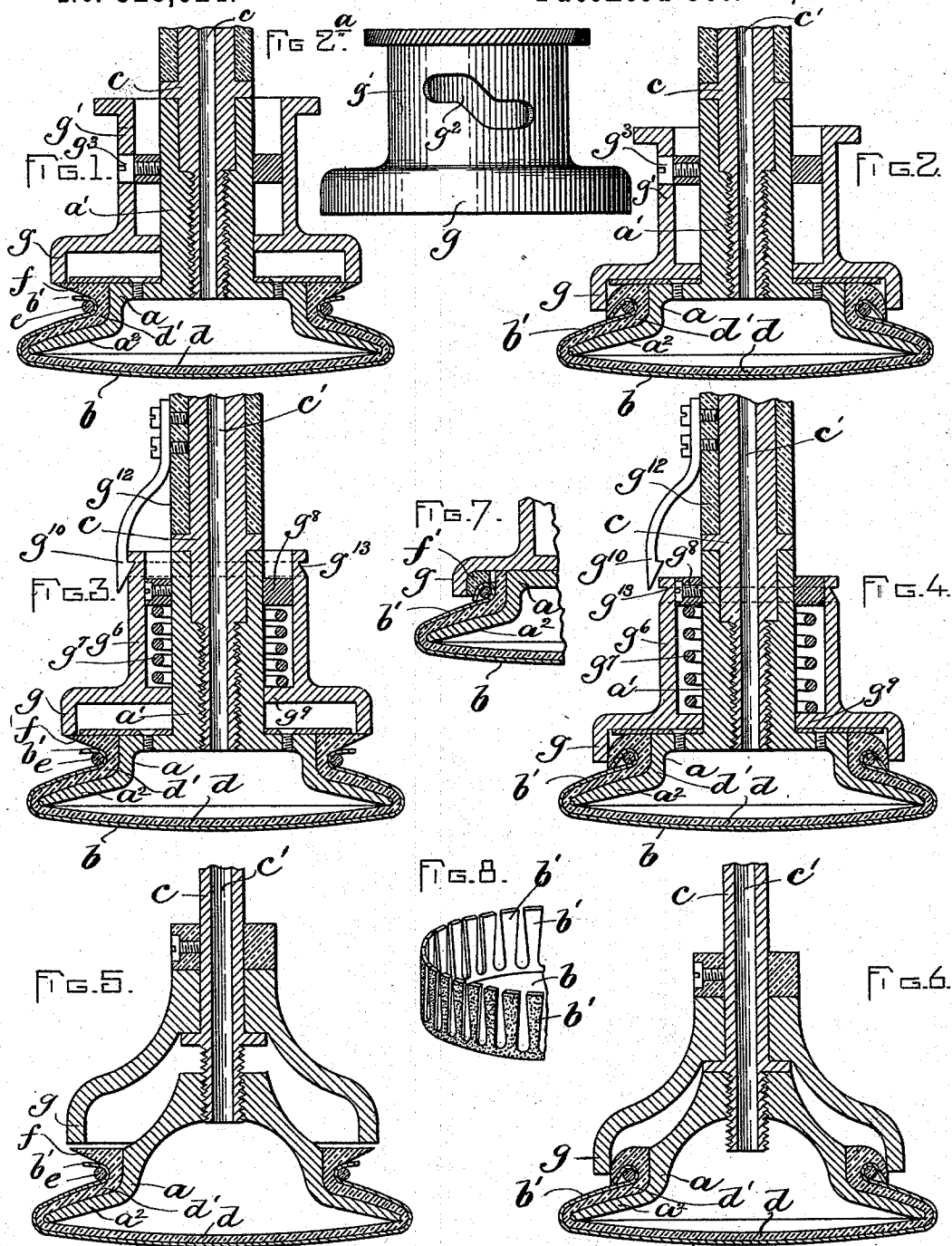


(No Model.)

A. E. PERRY.
BUFFING PAD HOLDER.

No. 528,024.

Patented Oct. 23, 1894.



WITNESSES:

M. C. Jackson
Wm. F. M. L. L.

INVENTOR

A. E. Perry
by Wright Brown (Cousin)
Atty.

UNITED STATES PATENT OFFICE.

AUSTIN E. PERRY, OF WAKEFIELD, ASSIGNOR TO GEORGE H. P. FLAGG, OF BOSTON, MASSACHUSETTS.

BUFFING-PAD HOLDER.

SPECIFICATION forming part of Letters Patent No. 528,024, dated October 23, 1894.

Application filed January 3, 1894. Serial No. 495,545. (No model.)

To all whom it may concern:

Be it known that I, AUSTIN E. PERRY, of Wakefield, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Buffing-Pad Holders, of which the following is a specification.

This invention relates to a holder for a buffing-pad, having its margin cut or slotted to form tongues, which are bent back substantially at right angles to the body of the pad, so that they may be conveniently applied to a holder having a tongue-supporting seat, and secured to said seat by a clamp formed to surround the tongues and seat and press the tongues inwardly against the seat.

A pad and a holder therefor embodying the above-mentioned features are shown in Letters Patent of the United States No. 505,644, dated September 26, 1893, and it is the object of my invention to provide means, in addition to those shown in said patent, for securing the tongues to the holder in such manner as to prevent all liability of the loosening or slipping of the tongues.

To this end, the invention consists in a pad-holder, comprising a tongue-seat adapted to support the pad-tongues, a clamp adapted to encircle the tongues and seat and hold the tongues against the seat, and a tongue-bending device adapted to bend the outer portions of the tongues down over the clamp and thereby co-operate with the latter in holding the tongues, as I will now proceed to describe.

Of the accompanying drawings, forming part of this specification: Figure 1 represents a sectional view of a pad-holder embodying my improvements, the tongue-bending device being in its inoperative position. Fig. 2 represents a similar view, showing the tongues bent by said bending-device. Fig. 2^a represents a side view, showing the presser in the position shown in Fig. 2. Figs. 3, 4, 5 and 6 represent similar views, showing different means for operating the tongue-bending device. Fig. 7 represents a modification hereinafter described. Fig. 8 represents a perspective view of a portion of the tongued pad.

The same letters of reference indicate the same parts in all the figures.

In the drawings: *a* represents a supporting-

base or holder, which may be of any suitable general form adapted to support a buffing-pad *b* having marginal tongues *b'* (Fig. 8). I prefer to make said body of metal, and provide it with a shank *a'*, adapted to be attached to the rotary shaft *c* which gives motion to the pad. As here shown, the body *a* has an outwardly-projecting flange *a*², with which is engaged an elastic flange *d'* formed on an elastic diaphragm *d* extending across the body *a*, there being an air-chamber between said diaphragm and body, which may receive air under pressure through a channel *c'* in the shaft *c*, said channel communicating, if desired, with an air-pump located at any suitable point, so that the pad which rests on the diaphragm is supported by an air-cushion. I wish it understood, however, that my improvements are not limited to a pneumatic or air-cushioned holder, and may be used in connection with any suitable pad-cushion or backing.

The elastic diaphragm flange *d*, supported by the rigid body flange *a*², constitutes the seat for the pad-tongues, and is preferably of the inclined or frusto-conical form shown.

e represents the tongue-clamp, which is preferably an elastic rubber ring, formed to surround and contract upon the tongue-seat, although it may be otherwise constructed, and may be, for example, a metal bracelet, composed of sections connected by a hinge and provided with catches or fastening-devices at their free ends, as shown in the above-mentioned patent.

In the construction shown in Figs. 1, 2, 3, 4, 5 and 6, an elastic or yielding flange or cushion *f*, preferably of rubber, projects outwardly over the tongue-seat, said cushion co-operating with the presser hereinafter described in bending the pad-tongues over the clamp.

g represents a presser, which is formed to surround the clamp, and is movable relatively to the tongue-seat and clamp, so that it may be caused to bend the tongues over the clamp, as shown in Figs. 2 and 4; or may be removed, as shown in Figs. 1 and 3, to expose the clamp. In Figs. 1 and 2, the presser is shown as provided with a tubular sleeve *g'*, which is movable on the body-

shank a' , and may be held down to its tongue-bending position by the action of an offset slot g^2 in the sleeve, and a stud g^3 secured to a collar g^4 affixed to the shank a' and projecting into said slot. The presser may be raised and held in the raised position shown in Fig. 1 by turning it until the stud g^3 enters the lower end of the slot g^2 , and may be depressed and held in the position shown in Fig. 2 by turning it until the stud enters the higher end of the slot.

In Figs. 3 and 4, the presser is provided with a sleeve g^6 , which is normally held down to its tongue-bending position by a spring g^7 , interposed between a collar g^8 affixed to the shank a and a flange or lip g^9 formed on the presser. The presser may be raised and held in the raised position shown in Fig. 3 by means of a latch g^{10} , affixed to the bearing g^{12} in which the shaft c rotates, and engaging a groove g^{13} in the sleeve g^6 .

In Figs. 5 and 6, the presser is secured to the shaft c , and the relative movement which causes it to bend the tongues is produced by so turning the body a as to raise the latter, and thus move the clamp upwardly into or toward the presser, as shown in Fig. 6. When the body a is turned in the opposite direction, the clamp is withdrawn from the presser, as shown in Fig. 5.

It will be seen that in each case the presser acts to bend the pad-tongues over the clamp, and thus aid the latter in preventing the tongues from slipping between it and the seat. This result is due, in the constructions thus far described, mainly to the increased frictional hold on the tongues caused by the increased bearing of the tongues on the clamp, and by the bearing of the yielding cushion f on the tongues.

In the construction shown in Fig. 7, the cushion that bears on the tongues, instead of being formed as a flange on the seat d' , is formed as a facing f' attached to the presser, as a substitute for the said flange.

I claim—

1. A buffing-pad holder, comprising a seat or support for the tongues of a pad, a clamp adapted to confine said tongues against said seat, and a tongue-bending device adapted to bend the tongues over said clamp.

2. In a buffing-pad holder, the combination of a pad-tongue seat or support, a tongue-clamp, a tongue-bending device, and a frictional yielding cushion adapted to be pressed

by the bending-device against the pad-tongues and bend the same over the clamp.

3. A buffing-pad holder, comprising a pad-tongue seat or support, a cushion formed as an outwardly-projecting yielding flange above said seat, a tongue-clamp, and a presser adapted to bend said flange or cushion and the pad-tongues over said clamp.

4. In a buffing-pad holder, the combination of a supporting-base or body having a pad-tongue seat and a shank adapted for attachment to a shaft or spindle, a pad-tongue clamp formed to surround said seat, and a presser formed to surround said clamp, one of the two parts termed respectively the base or body and the presser being movable relatively to the other, as set forth, so that the pad-tongues may be bent by the presser over the clamp.

5. In a buffing-pad holder, the combination of a supporting-base or body having a pad-tongue seat and a shank adapted for attachment to a shaft, a pad-tongue clamp formed to surround said seat, and a presser movable on said shank and formed to surround said clamp and bend the pad-tongues over the same.

6. In a buffing-pad holder, the combination of a supporting-base or body having a pad-tongue seat and a shank adapted for attachment to a shaft, a pad-tongue clamp formed to surround said seat, a tongue-bending presser movable on said shank and formed to surround said clamp, and means for holding the presser in either its tongue-bending position or its inoperative position.

7. In a buffing-pad holder, the combination of a supporting-base or body having a pad-tongue seat and a shank adapted for attachment to a shaft, a pad-tongue clamp formed to surround said seat, a tongue-bending presser having a sleeve which is movable on said shank, one of the two parts termed respectively the shank and sleeve having an offset slot and the other a stud entering said slot, whereby the presser may be held in either of two positions, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 28th day of December, A. D. 1893.

AUSTIN E. PERRY.

Witnesses:

C. F. BROWN,
ARTHUR W. CROSSLEY.