

E. M. POMEROY.
POLISHING-CHUCK.

No. 174,152.

Patented Feb. 29, 1876.

fig. 1

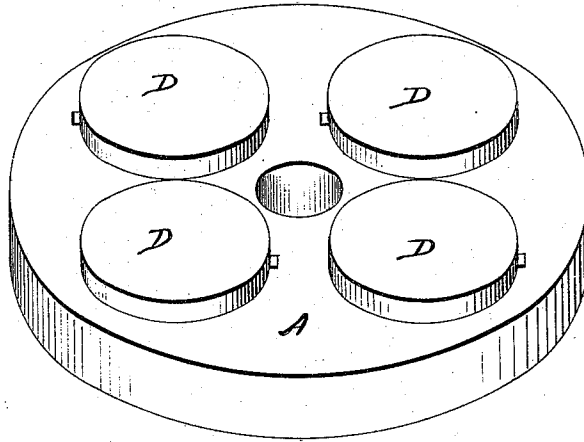


fig. 2

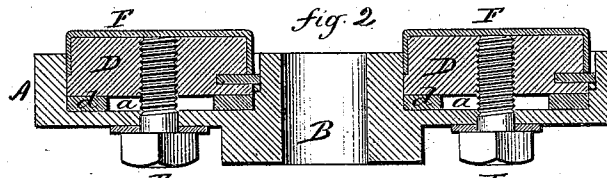


fig. 3

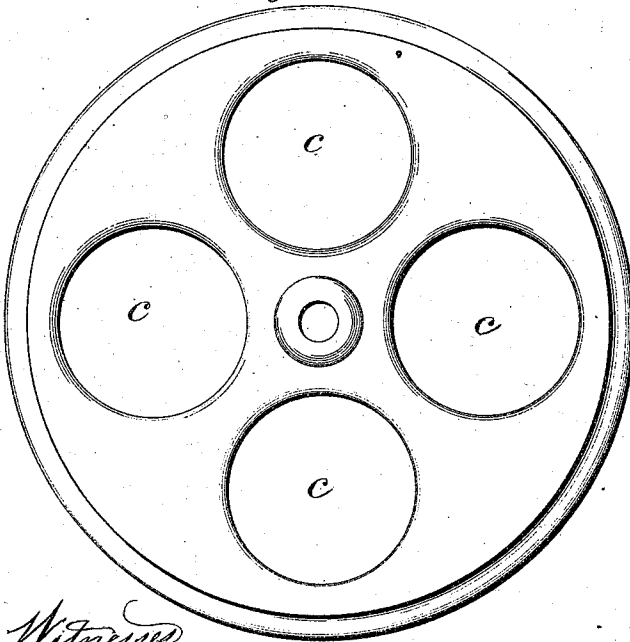
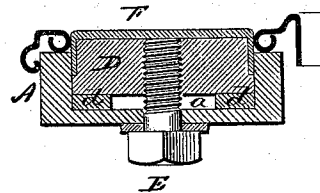


fig. 4



Witnessed.
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ELISHA M. POMEROY, OF WALLINGFORD, CONNECTICUT.

IMPROVEMENT IN POLISHING-CHUCKS.

Specification forming part of Letters Patent No. **174,152**, dated February 29, 1876; application filed January 24, 1876.

To all whom it may concern:

Be it known that I, ELISHA M. POMEROY, of Wallingford, in the county of New Haven and State of Connecticut, have invented a new Improvement in Chucks for Burnishing Plated Ware; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent in—

Figure 1, perspective view; Fig. 2, central section; Fig. 3, plan of a caster-ring; Fig. 4, partial section, showing the ring in position.

This invention relates to an improvement in a chuck for holding articles of plated ware for burnishing, specially designed for table-caster rings, that is, the perforated ring or plate through which the bottles are inserted. This has usually been burnished by hand, which is a laborious process and occupying so much time as to make this a very considerable item in the expense of production.

The object of this invention is to construct a chuck which will not only hold the ring, but at the same time fill the perforations so as to form, substantially, a plane surface, and so that the burnisher may run over the whole surface, while revolving, without detriment to the surface of the ring or edge of the perforations, as would be the case if such an operation were attempted without this chuck; and the invention consists in a base or plate fitted to be attached to a revolving-mandrel in the usual manner for fitting other chucks, combined with metal face adjustable elastic bosses, corresponding to the several openings or perforations in the ring, as more fully hereinafter described.

A is the plate, which corresponds in diameter, substantially, to the interior of the caster-ring, and constructed with a hub, B, or other device, by which to be attached to the revolving mandrel, in, substantially, the usual manner for attaching other face-plates. In the face of this plate several recesses, *a*, are formed, corresponding to the several openings, *c*, in the caster-ring. Into these recesses the bosses D are placed, preferably prevented

from revolving on their own axis by means of a lug extending into a corresponding groove in the side of the recess. Between the bosses and the bottom of the recesses an elastic material, *d*, is placed to form the bed for the bosses, and from the opposite side of the plate a screw, E, is run into each boss, by means of which the boss may be drawn down into the recess, or allowed to rise or be forced from it.

These bosses are made of a soft metal, or faced with a soft-metal cap, F, the nature of the metal being, substantially, that of or the same as the caster-ring to be burnished. The caster-ring is placed upon the chuck, the openings *c* passing on to the respective bosses D, and as seen in Fig. 4, and the face of the bosses adjusted to correspond to the face of the caster-ring. In this condition the chuck and ring are caused to revolve rapidly, and the burnisher is passed over the surface in the usual manner for burnishing plane surfaces on a chuck. The edges of the openings in a caster-ring are usually rounded, and the outer or exposed edge of the bosses are also rounded; hence, as the burnisher passes from the surface of the ring to the surface of the boss it does so over the rounded edge of the boss, and the slight elasticity of the boss prevents the jumping of the burnisher as it passes from one surface to another, thus enabling the burnishing of caster-rings and similar articles with equal facility with which a plane revolving surface may be burnished.

I claim—

1. The herein-described chuck for burnishing plated ware, consisting of the plate A, combined with bosses D corresponding to the openings in the article to be burnished, substantially as described.

2. The herein-described chuck for burnishing plated ware, consisting of the plate A, constructed with the recesses *a*, combined with adjustable bosses D corresponding to the openings in the article to be burnished, and the elastic bed *d* for the bosses, substantially as described.

ELISHA M. POMEROY. [L. S.]

Witnesses:

HARRISON FOOTE,
LUCIEN POMEROY.