

No. 648,264.

Patented Apr. 24, 1900.

E. B. JACOBSON.
POLISHING WHEEL.

(Application filed June 15, 1899.)

(No Model.)

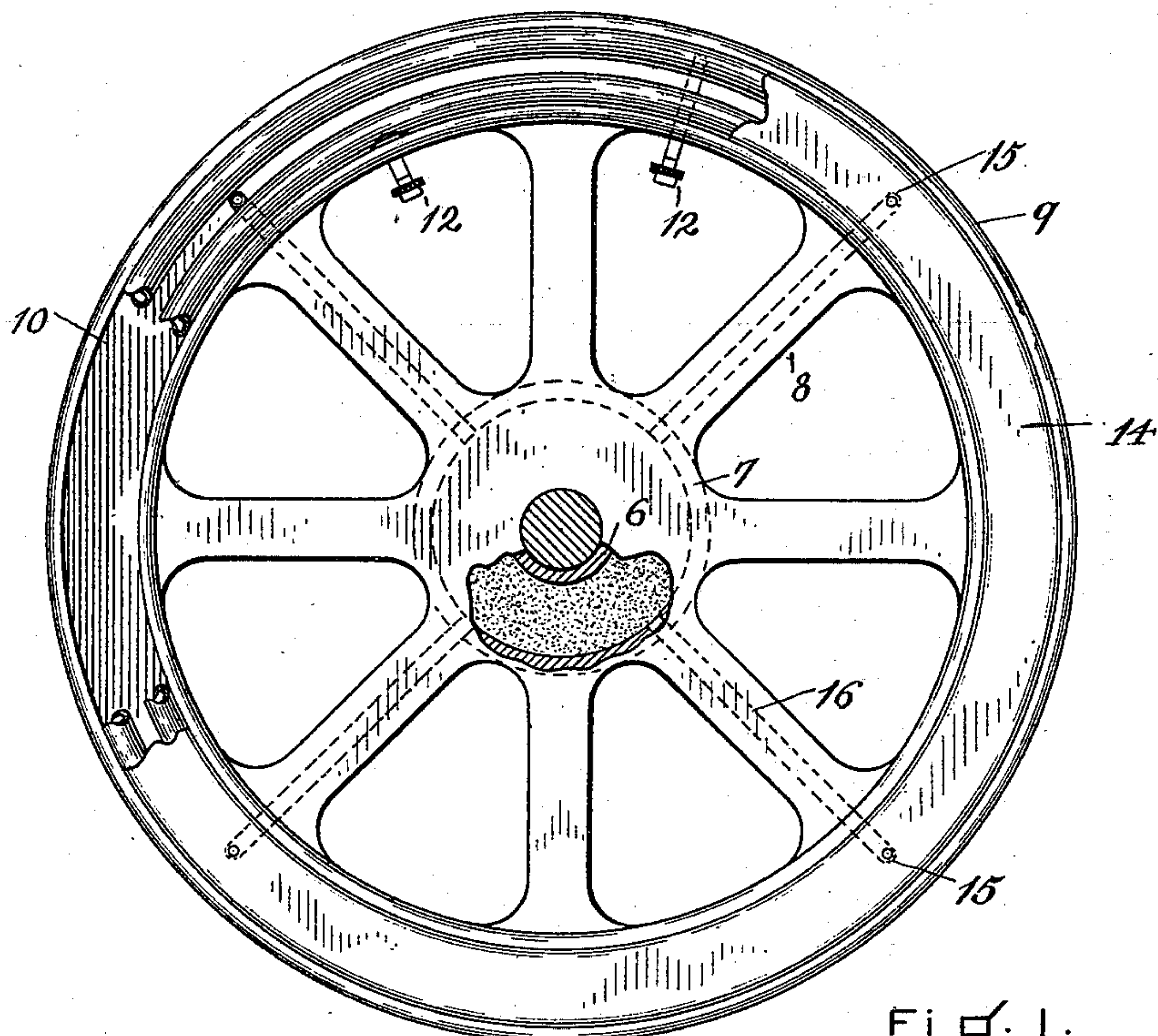


FIG. 1.

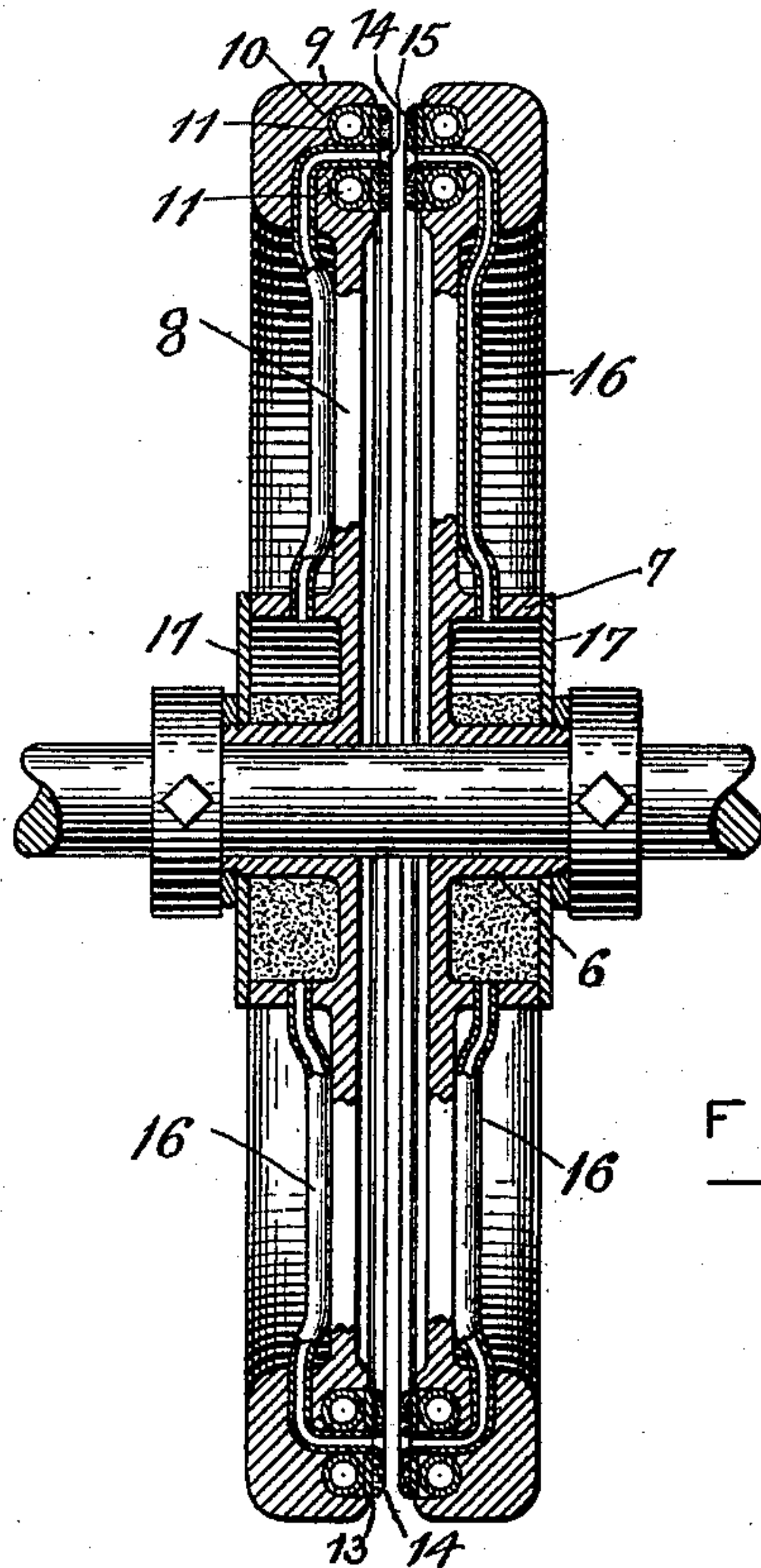


FIG. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWARD B. JACOBSON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THOR
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POLISHING-WHEEL.

SPECIFICATION forming part of Letters Patent No. 648,264, dated April 24, 1900.

Application filed June 15, 1899. Serial No. 720,619. (No model.)

To all whom it may concern:

Be it known that I, EDWARD B. JACOBSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Polishing-Wheels; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

10 This invention has reference to improvements in polishing-wheels.

One object of the invention is to so construct a polishing-wheel that a continuous polishing-surface may be yieldingly supported in position to receive the article to be polished and that polishing material may be supplied to such surface.

Another object is to simplify the construction of the wheel and the devices carried thereby.

The invention consists in the peculiar construction of the wheel, its annular polishing-ring, and the means whereby the polishing material is supplied to the ring.

25 The invention also consists in such other novel features of construction and combination of parts as shall hereinafter be more fully described, and pointed out in the claims.

In the drawings, Figure 1 represents a face view of the improved polishing-wheel partially broken away. Fig. 2 represents a cross-sectional view of two of the wheels as they are arranged in some forms of polishing-machines.

35 Similar numbers of reference designate corresponding parts throughout both views.

In carrying my invention into practice it has been my object to produce a strong and durable construction in which a continuous polisher is yieldingly supported in the face of the wheel and is supplied with a suitable polishing material from a reservoir in the wheel.

As shown in the drawings, the wheel has a hub 6, embracing which is a reservoir 7. From the reservoir extend the radial arms 8, connected at their outer ends by the peripheral member 9, having in its face the annular channel 10. Within the channel 10 are located the tubes 11 11, preferably formed of

elastic material to form a cushioning device. These tubes may be constructed to serve as cushions or they may be inflated, as by means of the connection 12. (Shown in Fig. 1.) On the tubes rests a flexible ring-shaped polisher-pad 13, generally formed with a leather face 14 and a rubber back. Through the polisher-pad perforations 15 15 are formed, and these are connected by means of the tubes or channels 16 16 with the reservoir 7, whereby the polishing material contained in the reservoir may pass to the surface of the polisher-pad by centrifugal action. The reservoir is closed by means of the cover 17.

When this wheel is mounted in a polishing-machine and rotated, the polishing material is driven by centrifugal force through the channels 16 16 to the face of the polisher-pad ring 13 in a predetermined amount, and the article to be polished being held against the polisher-pad is acted upon by such material, while the polisher-pad can yield to the pressure of the article by working into the channel 10 of the wheel against the cushioning of the tubes 11 11.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A polishing-wheel having a central reservoir, an annular member, having a channelled face, embracing the reservoir at a distance therefrom, cushioning devices located in the channel, a ring-shaped polishing-pad working in the channel and bearing on the cushioning devices, and a connection or conduit between the reservoir and the face of the pad.

2. The combination with a wheel having the reservoir 7, the arms extending therefrom to connect with the member 9 having the channel 10 in its face, the tubes 11 11 seated in said channel, the polisher-pad 13 working in the open face of the channel and having the perforations 15 15, and tubular connections between the perforations and the reservoir 7, as and for the purpose described.

EDWARD B. JACOBSON.

Witnesses:

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H. J. MILLER.