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R. DOUGLAS

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POLISHER

Filed Aug. 3, 1927

Fig. 1.

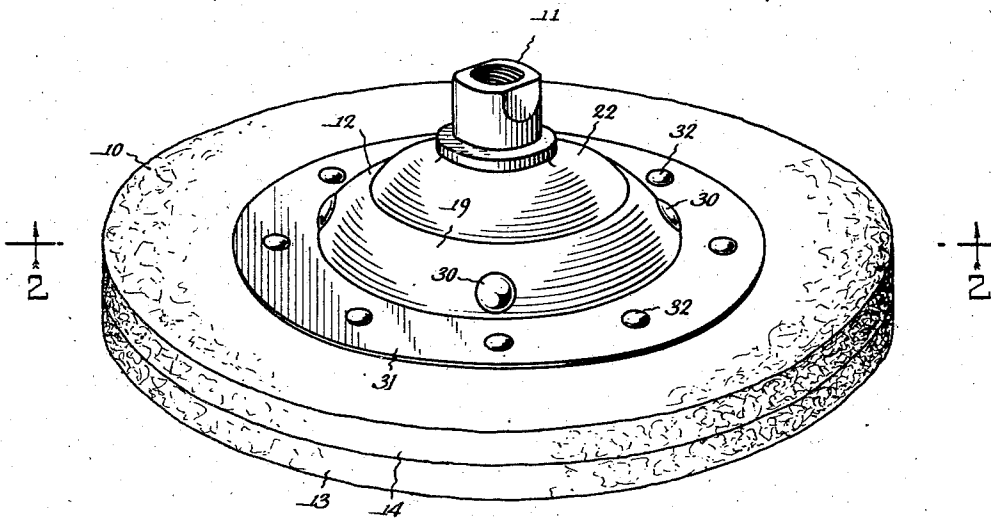
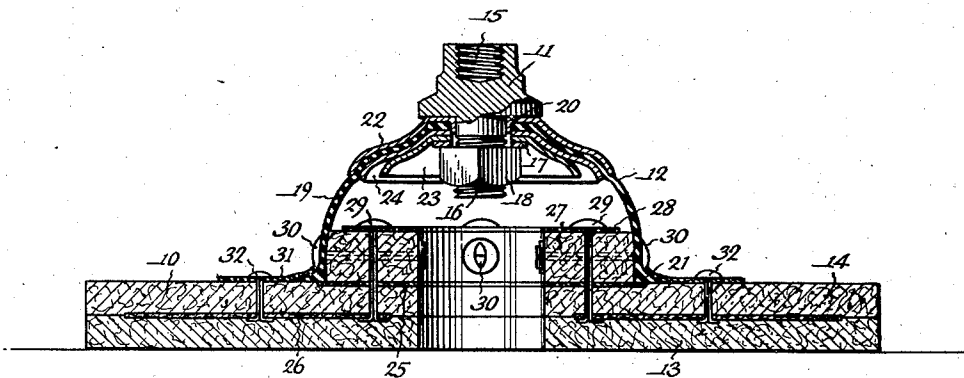


Fig. 2.



WITNESSES

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POLISHER

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This invention relates to the class of power driven polishers and buffers, and has especial reference to devices of the character which are used for polishing, cleaning, or buffing the smooth or glazed surfaces of automobile bodies, furniture, marble, etc.

The principal object of the present invention is to provide a polisher or buffer of the indicated character which embodies novel features of construction whereby the polisher or buffer may be used to subject the work with sufficient pressure for setting up the polishing or buffing action without scorching, marring or burning the surfaces of the work subjected to the buffing action.

Another and more specific object of the invention is to provide a polisher or buffer which embodies means in the form of a cushion which absorbs excessive thrust pressure while the polisher or buffer is in use.

The nature of the invention and its distinguishing features and advantages will appear when the following specification is read in connection with the accompanying drawing, in which—

Figure 1 is a perspective view of a polisher or buffer embodying the features of the present invention.

Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1.

Generally stated, the polisher or buffer of the present invention comprises a polishing or buffing element 10, a spindle 11 adapted to be connected with a power driven flexible shaft, and cushioning means 12 connected between the polishing or buffing element 10 and the spindle 11.

The polishing or buffing element 10 is in the form of a disk of felt or like material, and consists of two parts, a part 13 and a part 14. These parts 13 and 14 are similar in shape and size. The part 13 is brought into contact with the work to be polished, cleaned, or buffed. The spindle 11, as stated, is adapted to be connected with a power driven flexible shaft, and to this end the spindle is provided with a threaded socket 15 into which the terminal of the flexible shaft is threaded. The spindle 11 also includes a threaded stud

16. A washer 17 and nut 18 cooperate with the stud 16 for a purpose to appear.

The cushioning means 12 which serves for absorbing excessive thrust pressure in the use of the polisher, may be diversely formulated, and in the illustrated embodiment consists of and is connected between the spindle 11 and the part 14 of the polishing or buffing element 10 in a manner presently to be described. A cup shaped element 19 of resilient material such as rubber is employed. The element 19 has a central opening 20, and an outwardly directed circumferential flange 21. The element 19 is connected with the spindle 11, and this is accomplished by the use of annular metallic plates or members 22 and 23 which surround the stud 16 of the spindle and are arranged respectively on opposite sides of the central portion of the element 19, there being a fiber annular member 24 arranged between the plate 23 and the central portion of the element 19. The stud 16 extends through the opening 20 in the central portion of the element 19 as well as through the plates 22 and 23, and the member 24. The stud 16 being so disposed allows the arrangement of the washer 17 on the stud in contact with the plate 23, and the nut 18 to be screwed on to the stud 16 to effectively clamp all of the parts securely together, to the end that the spindle 11 will be effectively connected with the cushioning element 19. The element 19 will be cemented to the plate 22 and fiber member 24. The spindle 11 will thus be prevented from turning with respect to the cushioning element 19.

In order to connect the cushioning element 19 with the polishing or buffing element 10, the part 14 of the element 10 has cemented or pasted to one face of the central portion thereof, an annular fiber member 25. The opposite face of the part 14 has cemented or pasted thereto an annular fiber member 26. An annular member 27 of felt or like material is cemented or pasted to the annular fiber member 25, and an annular fiber member 28 is cemented or pasted to the member 27. Suitable fastening elements 29 are extended through the members 25, 26, 27, 28 and the part 14, and are properly clinched to aid in fasten-

ing all of these parts together. The cushion-
ing element 19 is connected with the annular
member 27 by the use of suitable fastening
elements 30. In order to more securely hold
the resilient element 19 there is provided an
5 annular fiber member 31 which surrounds the
element 19 in contact with the flange 21. The
member 31 is connected with the part 14 of the
element 10 by suitable fastening elements 32
10 which extend through the fiber member 26 as
well as the part 14 and member 31, and are
properly clinched against the member 31.
The part 13 of the polishing or buffing ele-
ment 10 is cemented or pasted to the part 14
15 after the fastening elements 32 have been ap-
plied to complete the polisher or buffer.

From the foregoing it will be apparent that
there has been described a polisher or buffer
which may be used for polishing, cleaning,
20 and buffing polished or glazed surfaces, and
that by virtue of the intervention of the
cushioning means 12 excessive thrust pres-
sures will be absorbed while the device is in
use, thereby overcoming the possibility of the
25 work being scorched, marred or burned.

I claim:

1. A polisher comprising a polishing ele-
ment in the form of a felt disk, a spindle, a
cup-shaped rubber element having an inner
30 and outer edge, said rubber element being
connected with said spindle by means con-
sisting of plates connected with the spindle
and respectively disposed on opposite sides
of the inner edge of said rubber element, and
35 a ring member engaging the outer edge of
said rubber element, said ring member being
connected with said polishing element.

2. A polisher comprising a disk shaped felt
polishing element, a spindle, a cup shaped
40 element of rubber having an inner edge and
an outer edge, means securing the inner edge
of said cup shaped element to one end of said
spindle, and means securing the outer edge of
said cup shaped element to said polishing ele-
45 ment at the back within the circumferential
edge thereof.

Signed at New York in the county of New
York and State of New York this 1st day of
August, A. D. 1927.

50 RICHARD DOUGLAS.

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