

May 24, 1927.

F. V. RALSTON

1,629,965

CLEANER

Filed Nov. 13, 1925

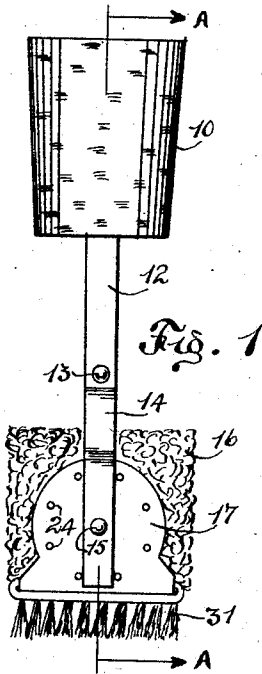


Fig. 1

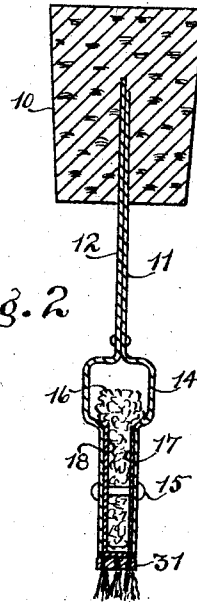


Fig. 2

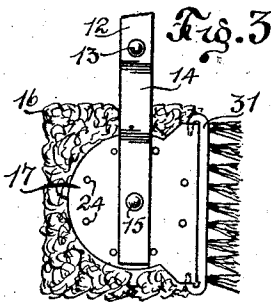


Fig. 3

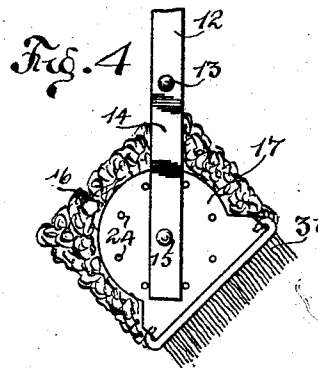


Fig. 4

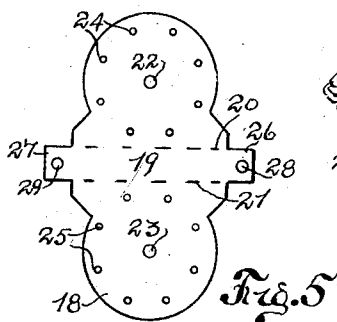


Fig. 5

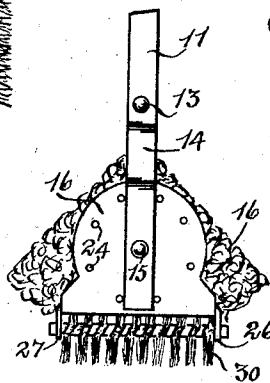


Fig. 6

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UNITED STATES PATENT OFFICE.

FLORENCE V. RALSTON, OF NEW YORK, N. Y.

CLEANER.

Application filed November 13, 1925. Serial No. 68,803.

The device, the subject of this invention, while especially designed as a type cleaner for typewriters, may be employed for general cleaning purposes, such as the removal of spots from clothing, the removal of stains from the fingers or from other surfaces or for any other purpose where a dauber and scraper or brush may be conveniently and satisfactorily employed.

The objects of this invention will be set forth as the specification progresses, but certain objects may here be particularly referred to, such as; that of providing a combination of an applicator and a brush or of a brush and polisher; the provision of means for mounting the applicator and brush, so that they may be revolved and brought to the most desirable and convenient position for service and the simple and inexpensive construction of the whole device.

The following is what I consider the best means of carrying out this invention and the accompanying drawing should be referred to for a complete understanding of the specification which follows.

In the drawing:—

Fig. 1, is a view in elevation, showing one construction of my device.

Fig. 2, is a sectional view on the line A—A in Fig. 1.

Fig. 3, is a fractional view, showing the device turned at one angle.

Fig. 4, shows the device turned at another angle.

Fig. 5, is a plan view of part 17—19 before bending, and

Fig. 6, shows another important and advantageous construction.

Similar reference numerals indicate like parts in all the figures where they appear.

As my device is intended to be enclosed in a bottle containing a suitable cleaning fluid, such as gasoline, carbon tetrachloride, or other suitable fluid, the device may be permanently secured to a cork, and in Figs. 1 and 2, such a cork is indicated at 10 and secured in the cork are the ends of a plurality of strips of flat resilient metal as shown at 11 and 12. The metal employed may be hard brass though, for economy, I prefer to use spring tempered steel.

The strips 11 and 12 extend parallel and close together for a certain portion of their distance and a rivet, as shown at 13, secures these strips together. Beyond the rivet, I may extend the strips away from each other

at right angles, continuing them again parallel for a distance and then causing them to approach each other to a limited degree, thus producing a box sectional enlargement as shown at 14 in Fig. 2 and as indicated by the same reference character in the remaining figures.

A rivet 15, passing through the free extensions of the strips 11 and 12 receives a plurality of plates, which are formed integral, into one receiving member for a block of felt. The felt block, which may be square and of suitable thickness is shown at 16 and the receiving member therefor, extending across one of the narrow edges of the felt block and to each of the wider sides thereof, as shown in plan view in Fig. 5, the side extensions being indicated at 17 and 18 and the portion 19 being that part which extends across the bottom or one of the narrower sides of the felt block 16. The dotted lines 20 and 21 indicate bending lines in the plate, as shown in Fig. 5.

Each of the parts 17 and 18 is provided with central perforations 22 and 23, through which the rivet 15 is free to pass and each part is provided with a plurality of outwardly pressed buttons or projections as shown at 24 and 25, these buttons or projections serving as stops to limit the free rotation of the felt member and parts associated therewith, upon the rivet or pivot 15, the buttons engaging one at each side of each of the strips 11 and 12, as shown in Figs. 1, 3, 4 and 6.

It will be noted that I have formed lugs or projections 26 and 27 upon the plate shown in Fig. 5 and that in the construction shown in Fig. 6, the perforations 28 and 29 in the lugs 26—27, receive the ends of a brush 30. The brush here employed is a twisted wire, into which bristles are inserted. Such a brush is sometimes referred to as a "Fuller" brush, in the trade. The particular type of brush construction is not important, except that the brush should be constructed with rather stiff, short bristles.

In Figs. 1 to 4, inclusive, I show a metal backed brush 31, the ends of which are bent inward to engage behind the portion 19 of the plate shown in Fig. 5. In this construction, the lugs 26 and 27 are omitted, the hooks upon the brush being indicated in Fig. 3, by the dotted lines 32. A wooden backed brush may be secured in any suitable manner, such as by means of a pin extend-

ing through the perforations in the lugs 26 and 27.

In the use of my device, as previously stated, it is my intention that the device should usually be found in a wide necked bottle, the mouth of which is closed by means of the cork 10. When withdrawn from the bottle, the felt portion will be saturated with the cleaning fluid, which may be applied in the desired quantities to the keys of a typewriter or to the spot to be removed and thereafter a brisk rubbing with the brush will remove the foreign matter. To accomplish the cleaning and to reach all parts or all of the keys of any make typewriter, the brush and applicator may be rotated to a convenient portion as indicated in the drawing. To provide a long, uninterrupted applicator surface, the brush may be arranged across one corner of the felt member as shown in Fig. 6 and not along one of the sides thereof, as shown in the remaining figures. The arrangement may be determined by the particular used or the desires of the user or manufacturer.

Such modifications may be made as are within the scope of the appended claims,

without departing from the principle or sacrificing the advantages of the invention.

Having carefully and fully described my invention, what I claim and desire to obtain is:—

1. A cleaner comprising a plurality of resilient metallic strips and cleaning elements rotatable therebetween and means for supporting said cleaning elements adjacent each other, said means comprising bifurcated plates arranged one at each side of one of said elements, each said plate being provided with a plurality of projections receiving said forked member therebetween.

2. A cleaner comprising a plurality of resilient metallic strips and cleaning elements rotatable therebetween and a plurality of opposed plates formed integral and arranged one at each side of one of said elements and supporting cleaning elements, each of said plates being provided with a plurality of abutments for engaging the ends of said resilient strips to prevent the free rotation of said cleaning elements.

Signed at the city, county and State of New York, this day of November, 1925.

FLORENCE V. RALSTON