Dec. 23, 1924. 1,520,596

J. K. PRATHER

POLISHING TOOL

Filed May 6, 1924

Fig. 1.

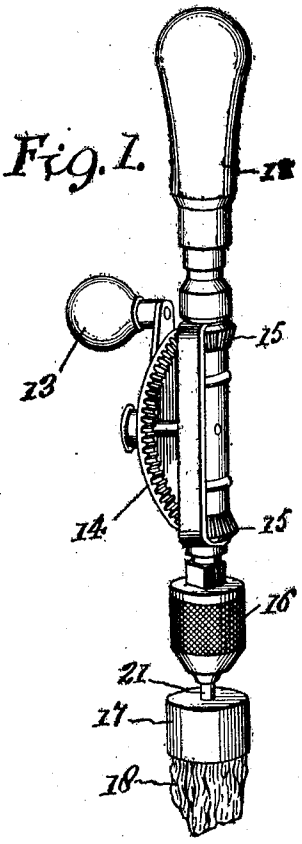


Fig. 2.

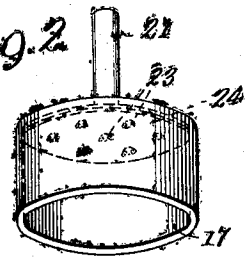


Fig. 4.

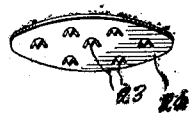


Fig. 3.

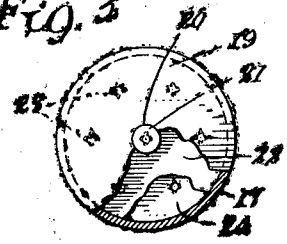


Fig. 5.

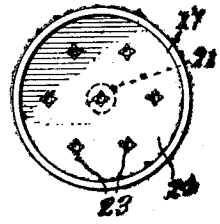


Fig. 6.

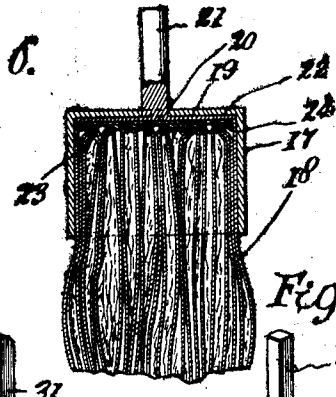


Fig. 7.

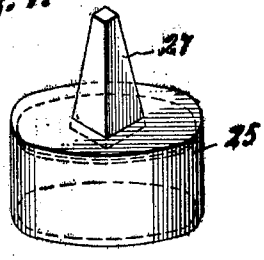


Fig. 9.

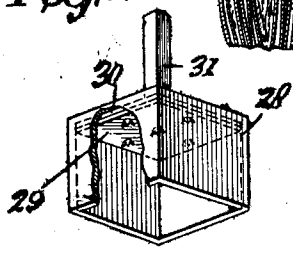


Fig. 10.

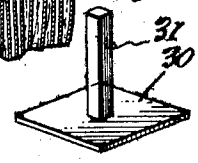


Fig. 8.

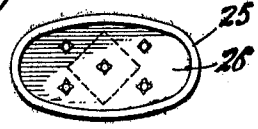


Fig. 11.



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UNITED STATES PATENT OFFICE.

JOHN K. PRATHER, OF EL PASO, TEXAS.

POLISHING TOOL.

Application filed May 8, 1924. Serial No. 711,936.

To all whom it may concern:

Be it known that I, JOHN K. PRATHER, a citizen of the United States, residing at El Paso, Texas, have invented certain new and useful Improvements in Polishing Tools; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to improvements in polishing tools or devices and has for an object to provide an improved tool for use in polishing the surfaces of typewriter keys or other surfaces which require cleaning or polishing from time to time.

Another object of the invention consists in providing a simple device which may be used in connection with a ratchet drill, motor, lathe or other implement for imparting a high rotary movement or movement in a horizontal or inclined direction and wherein the tool will hold a rag, chamois, steel wool or other polishing material with or without paste, powder or liquid in contact with the work throughout the rotary movement or movement in a horizontal or inclined direction thereby imparting a high polish to the work in the space of a very short time.

With the foregoing and other objects in view, the invention will be more fully described hereinafter, and will be more particularly pointed out in the claim appended hereto.

In the drawings, wherein like symbols refer to like or corresponding parts throughout the several views,—

Figure 1 is a perspective view of a hand ratchet drill illustrating a form of the improved tool in connection therewith.

Figure 2 is a perspective view on an enlarged scale of the tool removed from the ratchet drill and with the cleaning or polishing material removed.

Figure 3 is a plan view of the device shown in Figure 2 with parts broken away.

Figure 4 is a perspective view of the material retaining disc.

Figure 5 is a bottom plan view of the device shown in Figure 2.

Figure 6 is a sectional view taken through the complete tool.

Figure 7 is a perspective view of a slightly modified form of the tool.

Figure 8 is a bottom plan view thereof.

Figure 9 is also a perspective view showing a further modification.

Figure 10 is a perspective view of a portion of the device shown in Figure 9, and

Figure 11 is also a perspective view of the material retaining plate shown in Figure 9.

Referring more particularly to the drawings 12 designates the handle of a ratchet drill having the rotary crank 13 by which the bevel gear wheel 14 is rotated in connection with the bevel pinions 15. By this means the socket 16 of the drill receives a high rotary movement and the socket is adapted to receive the shank or tang of the tool used in conjunction with the ratchet device.

The improved implement is so constructed as to be received in the socket 16 whereby the tool may be rotated conveniently by the use of a ratchet drill. However, it will be understood that any other tool or device such as a lathe, motor, etc., capable of imparting a rapid rotary movement or a fast or slow movement in a horizontal or inclined direction may be employed in place of the ratchet hand drill.

Referring more particularly to Figures 2 to 6 inclusive the improved tool comprises a container 17, of inverted cup shape or round, rectangular, square, being open at its bottom to permit the rag, chamois, steel wool or other material 18 to depend therefrom; but the container is closed at its top by a head 19 perforated centrally or made in a solid piece as indicated at 20 to permit the passage of the shank or tang 21 which is designed to engage in the socket 16 of the rotary tool.

The shank or tang 21 is formed upon a plate 22 which is adapted to lie within the container 17 and against the inner wall of the head 19. The purpose of having the shank and plate separate from the container 17 is to permit the use of differently formed shanks to fit different styles of instruments and some of these different styles are shown in Figures 7 to 11 inclusive.

In Figures 2 to 6, however, the shank is shown as being round and the container 17 is cylindrical. The plate 22 being in the form of a disc. In this case the disc may fit tightly within the container so that no relative rotary movement may take place

or other means may be employed such as container with square sides instead of curved or rounded sides to bind the disc non-rotatively in the container so that the movement of the rotary drill will be communicated to the cloth or polishing material 18. This material 18 may be used in sufficient quantity and it may or may not extend beyond the open mouth of the container 17, but it is held in place by being caught upon the ragged projections 23 or by sides of container if made in square or other shape made by punching openings downwardly in a holding disc 24 which is mounted in the container 17, beneath the plate 22.

The disc also fits frictionally or otherwise in the container 17 so as to avoid its rotation therein and where rags are used, the middle portion of the rag may be caught between the plate 22 and the disc 24 as shown in Figure 6. In this case the rag will hold the disc tightly against the wall of the container.

All of the parts are preferably made of metal although wood or other suitable material may be used and with the material 18 in place, the container 17 forms the cushioned socket for receiving typewriter keys and like objects of metal wood or other material which are to be cleaned and polished.

In Figures 7 and 8 the container 25 is shown as being oval in form and the holding plate 26 is likewise of the same form, while the shank or tang 27 is of a pyramidal form.

In Figure 9 the container 28 is square or rectangular, the plates 29 and 31 being also square and the shank or tang 31 being likewise square in cross section. With the oval, rectangular or square plates and containers, of course the rotary movement will be imparted without any frictional fit of plate 29.

In the use of the device the parts are assembled as shown in Figure 6, or the plate 22 being first inserted in the container 17 with the shank or tang foremost and this plate is pushed to and against the head 19, the shank or tang 21 passing through the opening 20, or made in a solid piece attached to top of container. The material 18 is then wrapped about the plate 24 and engaged with the ragged edges 23. The plate and material are then inserted in the container and driven up against the plate 22. By inserting the shank 21 into the socket 16 of the ratchet drill or other implement, the tool may be given a high rotary movement while it is in engagement with typewriter keys or other objects, and suitable paste or other cleaning or polishing composition may be applied to the material 18 in desired quantities. The high rotary movement may be supplemented by suitable pressure put upon the device by hand or otherwise.

It is obvious that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of this invention without departing from the spirit thereof, such changes and modifications being restricted only by the scope of the following claim.

What is claimed is:—

A tool of the character described comprising a container having an open bottom and a closed top portion with an opening therethrough, a plate removably and non-rotatively fitted in through the open bottom portion of said container and up against the interior of the closed top part, a shank extending from said plate through the opening in the top portion of the container, and a second plate of substantially the same dimensions as the interior cross section of the container for fitting removably, snugly and non-rotatively in said container, said last mentioned plate having numerous small ragged projections extending downwardly therefrom, and cleaning material inserted in said container and caught upon said ragged projections.

JOHN K. PRATHER.