

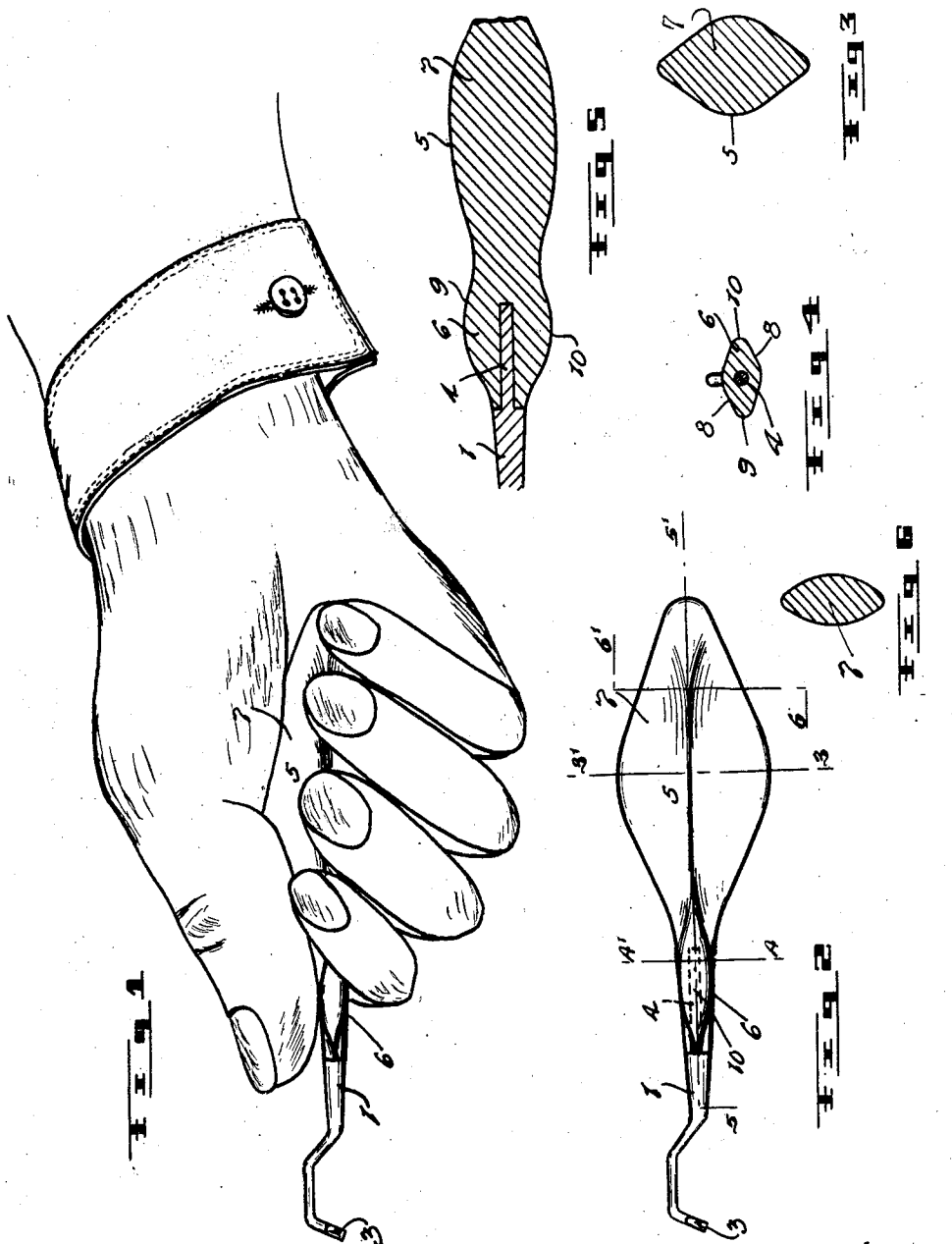
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TOOL HANDLE

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TOOL HANDLE.

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The invention relates to improvements in tool handles and an object of the invention is to provide a convenient tool handle of such a shape that when gripped by the hand, it cannot rotate and such that complete control of the tool by the operator is obtained.

A further object is to provide a handle shape which fits the gripping hand and will not tire the hand and which permits of a grip which will in no way make it awkward for the operator to use the tool.

With the above more important objects in view, the invention consists essentially in the arrangement and construction of parts hereinafter more particularly described, reference being had to the accompanying drawing, in which:—

Fig. 1 is a perspective view of the tool as it appears gripped in the right hand.

Fig. 2 is a side view of the tool.

Fig. 3 is a vertical sectional view at 3—3' Figure 2.

Fig. 4 is a vertical sectional view at 4—4' Figure 2.

Fig. 5 is a horizontal sectional view at 5—5' Figure 2.

Fig. 6 is a vertical sectional view at 6—6' Figure 2.

In the drawing like characters of reference indicate corresponding parts in the several figures.

The handle is herein shown as applied on a dentist's tool, the particular tool shown being what is known as a dentist's root elevator. The tool presents an extending shank 1 which is bent in the manner as shown in Figures 1 and 2 and has the free end thereof terminating in a sharpened gouging edge 3. The other end of the shank terminates in a spindle 4 to which a handle 5 is secured.

The handle 5 is preferably formed from aluminum or other such like metal and is cast in the peculiar shape shown to provide a specially shaped forward neck portion 6 and a specially shaped bulbous rear portion 7. The forward portion is flat lying and is adapted to be gripped between the thumb and first finger and the rear bulbous portion is adapted to be gripped in the palm of the hand between the base of the thumb and the remaining fingers.

It will be observed that the forward portion or neck 6 is comparatively wide (horizontally) and comparatively thin (vertically) and that it tapers from the centre to the sides as indicated at 8 and that the sides

9 and 10 are bowed or arched outwardly. The rear portion 7 of the handle has the central part and the forepart thereof somewhat diamond shaped in vertical cross section, the cross sectional area gradually diminishing in passing forwardly and forwardly it merges into the front portion 6 of the handle in gentle curves. The rear part of the portion 7 changes gradually from a diamond shaped vertical cross section to a somewhat elliptical shaped cross section with the major axis vertical and the cross sectional area of the ellipse gradually diminishing in passing rearwardly.

By so forming the handle, it snugly fits the hand when tightly gripped by the same and any possible rotation of the handle around its longitudinal axis is effectively prevented. The tool is also positively under control as the portion 6 is gripped between the thumb and first finger and has the thumb overlying it.

The necessity for a handle of this kind is particularly noticeable in dental work where it is essential that the tool be held firmly and against rotation to accomplish the required work as otherwise the tooth might be broken or improperly cut and the patient also unnecessarily hurt.

What I claim as my invention is:—

1. A tool handle embodying a bulbous portion having a major and a minor axis and tapering towards the ends and adapted to fit the tightly closed hand and a neck portion interposed between the bulbous portion and the tool and adapted to be tightly gripped between the thumb and forefinger, said neck portion having a major and a minor axis and with the major axis disposed at right angles to the major axis of the bulbous portion.

2. A tool handle embodying a bulbous portion having a major and a minor axis and with the forepart thereof presenting a gradually diminishing diamond shaped cross sectional area and the rear part thereof presenting a gradually diminishing elliptical shaped cross sectional area and a neck connecting the bulbous portion to the tool, the neck having a major and a minor axis with the major axis at right angles to the major axis of the bulbous portion and being substantially elliptical in vertical cross section and having the cross sectional area gradually diminishing in passing forwardly and rearwardly from the central part thereof.

3. A tool handle embodying a bulbous portion presenting four forwardly converging and tapering inclined exterior faces which merge rearwardly into an elliptical shape which gradually decreases in vertical cross sectional area and which merge forwardly into a flat lying neck substantially elliptical in vertical cross section and with the cross sectional area gradually diminishing in passing forwardly and rearwardly from the central part thereof. 10
- 5 Signed at Winnipeg, this 12 day of August 1926.

E. ROY BIER.