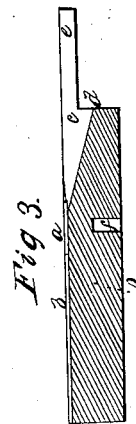
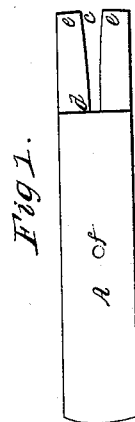
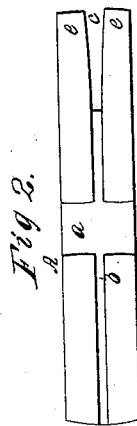
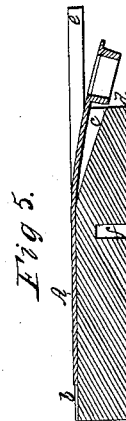
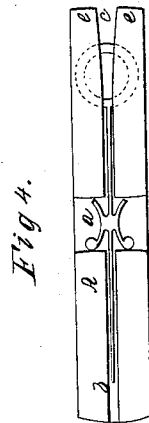


G. Hastings,
Polishing Watch Hands.
N^o 55,097. *Patented May 29, 1866.*



Witnesses.

Samuel H. Porter
Huntis

Inventor.

George Hastings

By his attorney,

R. W. Allen

UNITED STATES PATENT OFFICE.

GEORGE HASTINGS, OF WALTHAM, MASSACHUSETTS.

IMPROVEMENT IN BLOCKS FOR POLISHING AND GLOSSING WATCH-HANDS.

Specification forming part of Letters Patent No. 55,097, dated May 29, 1866.

To all whom it may concern:

Be it known that I, GEORGE HASTINGS, of Waltham, in the county of Middlesex and State of Massachusetts, have made a new and useful invention having reference to Grinding, Polishing, or Glossing Watch or Time-Piece Hands; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, in which it is exhibited on a scale about four times that of its usual working size for a watch hour-hand.

Of such drawings, Figure 1 is a top view, Fig. 2 a bottom view, and Fig. 3 a longitudinal section, of the watch-hand holder, carrier, or device belonging to my invention. Fig. 4 is an under-side view of it, and Fig. 5 a longitudinal section of it and a watch-hand as applied to and held by it during the process of grinding or polishing such hand.

The common process of glossing or polishing a watch-hand on its upper face has generally been accomplished by pressing and moving it against a whetstone by means of a pointed tool like an awl held in the hand of an operative. By this mode of operation it frequently results that the watch-hand where pressed upon by the tool is rendered concave, or is more or less thrown out of shape, so as to be ground or polished unevenly.

My invention is designed to obviate these difficulties, and to hold and give full support to the watch-hand, in order that it may be evenly and properly reduced, polished, or glossed on the surface of its head or *fleur-de-lis*, as the case may be, and as circumstances may require.

In carrying out my invention I employ a block of steel or other suitable metal, (represented at A in the drawings,) which I provide with a recess, *a*, extending across and formed in its lower side; and I also form in said lower side a groove, *b*, to run longitudinally through the middle of the block, or in one direction from the recess. Next I form in the block, and so as to extend in an opposite direction from the said recess, a saw-kerf, *c*, which I make more or less flaring, as circumstances may require, and I carry the said saw-kerf through the block, and reduce the block, as shown at *d*, in order to form the block with two projecting parts, *ee*, which may be termed the "fingers" of the block.

In the upper surface of the block, and directly

over the middle of the recess *a*, a small hole, *f*, should be drilled or bored a short distance into the block.

To apply a watch-hand to the block or carrier so made, its shank should be placed in the slit between the two fingers, and so that its pipe may rest on the upper surfaces of the fingers and its *fleur-de-lis* or head be within and project from the recess *a*, the part or point extending in advance of the *fleur-de-lis* being arranged in the groove *b*. This having been accomplished, the watch-hand carrier so holding the watch-hand is to be placed upon the grinding or polishing stone, and with the watch-hand against the reducing-surface thereof. Next the workman should insert an awl or pointed tool in the recess *f*, and by means of it impart to the carrier a reciprocating movement sufficient to effect the proper reduction or glossing of the watch-hand. All that part of the watch-hand extending back of the recess will be left unground or unpolished.

By means of the carrier the reduction or polishing of the watch-hand can be effected not only quicker, but in every respect to better advantage than by the pointed awl alone acting in connection with the stone.

I do not confine my invention to the precise form of carrier as described, as it may be varied somewhat to suit the kind of watch-hand. One for an independent second-hand would not require the same kerf, but should have a recess or socket made in its bottom surface to sufficiently correspond in shape to hold or support the hand while being rubbed on the stone.

The distinguishing features of the carrier are, first, the recess for holding the watch-hand and preventing it from slipping longitudinally and laterally while being ground; and, second, the hole or its equivalent to receive the awl or pointed tool by which the carrier is put in motion on a stone.

I claim as my invention—

The carrier constructed substantially as described, and also the employment of such or its equivalent in manner and for the purpose as hereinbefore explained.

GEO. HASTINGS.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.