J. NORTON.

Wrench.

No. 164,867. Patented June 22, 1875.

Fig. 1.

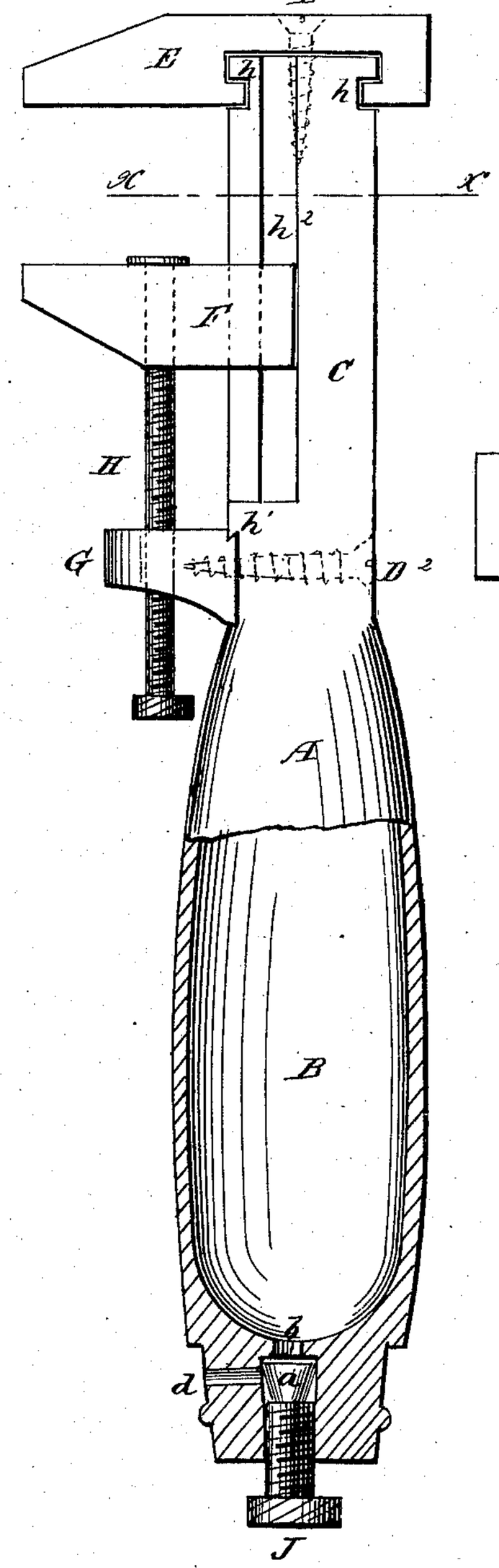
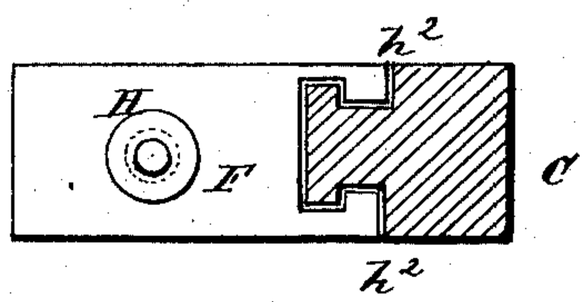


Fig. 2.



WITNESSES:

P. C. Dieterich

W. C. McArthur

INVENTOR:

James Norton

per. T. H. Alexander

ATTORNEY.

UNITED STATES PATENT OFFICE.

JAMES NORTON, OF MIDDLEBURY, VERMONT.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. **164,867**, dated June 22, 1875; application filed January 16, 1875.

To all whom it may concern:

Be it known that I, JAMES NORTON, of Middlebury, in the county of Addison and State of Vermont, have invented certain new and useful Improvements in a Combined Wrench and Oiler; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in providing a wrench with an oil-reservoir in the handle, or forming the handle hollow to constitute an oil-reservoir, which is so constructed that it can be securely closed against leakage, yet be easily and quickly opened by the operator. It also consists in forming a wrench of removable pieces, so that those parts that are liable to be worn and broken may be easily and quickly removed from the handle and stem and replaced by new parts, thus making a wrench that can be easily and cheaply repaired by the owner.

In the accompanying drawing, Figure 1 is a side view, partly in section, of a wrench embodying my invention. Fig. 2 is a cross-section through the line *x x*, Fig. 1.

A represents the handle of my wrench, formed at one end with the stem C. The handle is made hollow, so as to form an interior chamber, B, for the reception of oil. In the other end of the handle is inserted a screw, J, which is formed at its inner end with a valve, *a*, to close the entrance *b* to the oil-chamber. By slightly unscrewing the screw J the oil will flow around the valve *a* and out at the side outlet *d*. E is the stationary jaw of the wrench, which is dovetailed sidewise onto the end of the stem, as shown at *h*, and is fastened by a screw, D. The stud G, through which the adjusting-screw H passes, is in like manner fastened to the stem C by a dovetail, h^1, and secured by a screw, D^2. The movable jaw F, operated by the screw H, moves in dovetails h^2 in the sides of the stem. By thus attaching the parts E F G to the stem by dovetails, they are easily removed in case of breakage or when worn, so as to be replaced by new ones.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the wrench-handle A with interior oil-chamber B, having passage *b*, the screw J, with valve *a*, and the outlet *d*, all substantially as and for the purposes herein set forth.

2. The stationary head E, provided with a T-shaped or dovetailed groove, fitting over the end of the stem, the two parts secured by means of a screw, D, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JAMES NORTON.

Witnesses:

EDWARD P. RUSSELL,

WM. S. BLAISDELL.