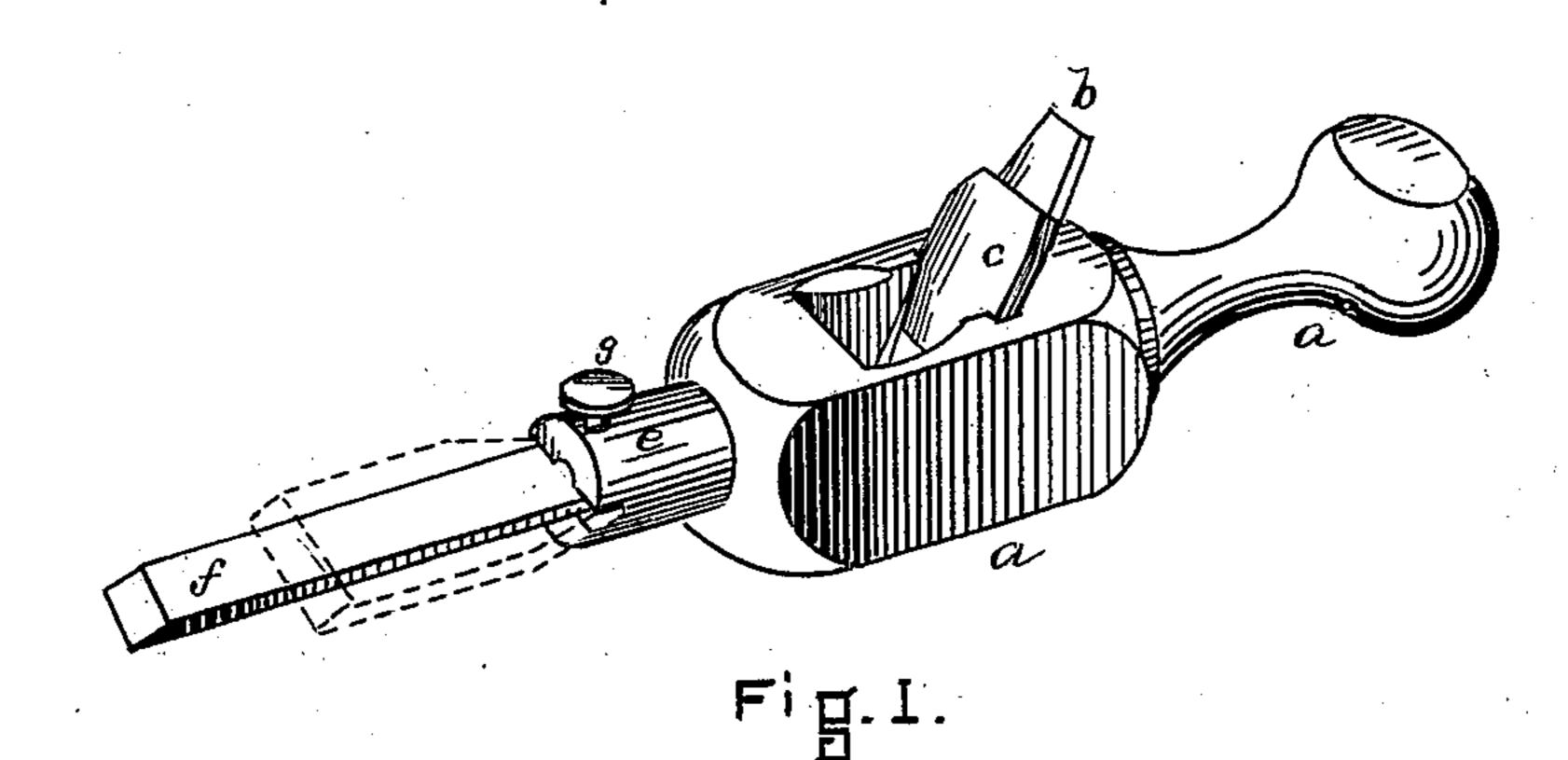
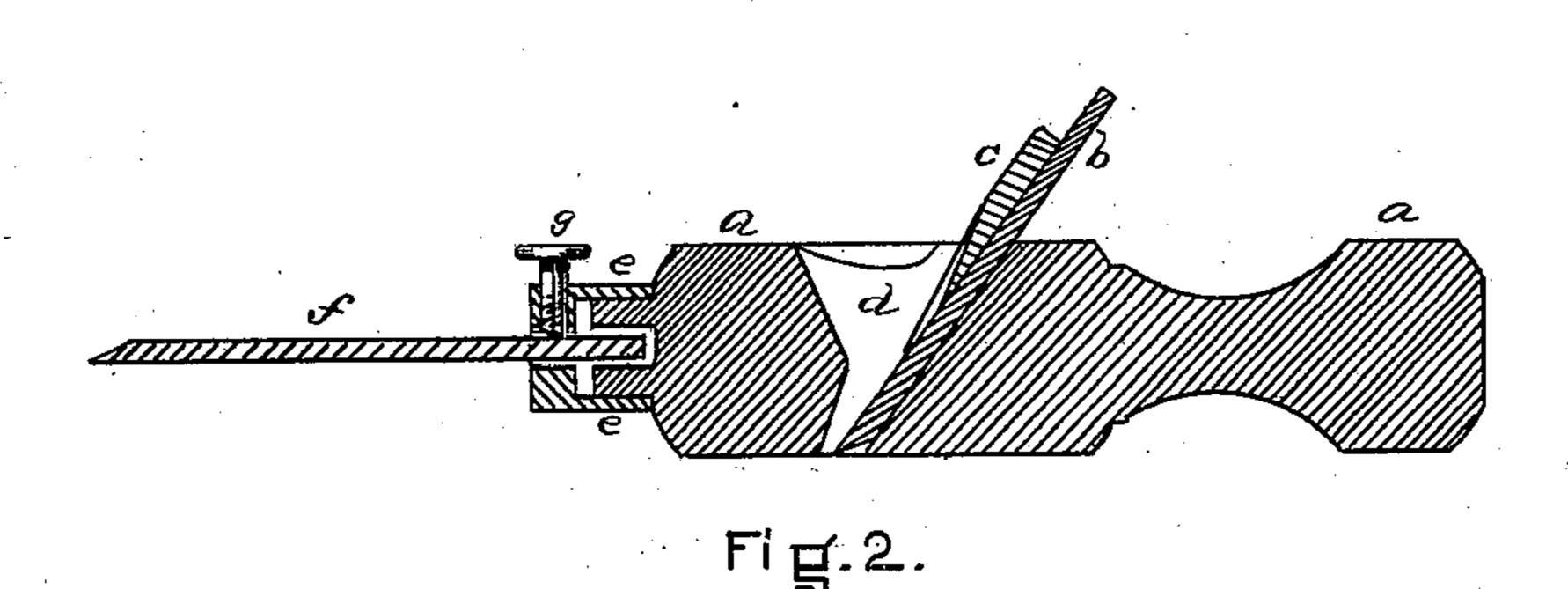
## P. A. GLADWIN. Tool Handle.

No. 202,105.

Patented April 9, 1878.





WITNESSES

D. M. William Porter a. Gladwin

John & Frenning. By his Attys.

Senny Welliams 269

## UNITED STATES PATENT OFFICE.

PORTER A. GLADWIN, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN TOOL-HANDLES.

Specification forming part of Letters Patent No. 202,105, dated April 9, 1878; application filed March 4, 1878.

To all whom it may concern:

Be it known that I, Porter A. Gladwin, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Tool-Handles, of which the following is a specification:

This invention relates to handles of tools of different kinds, such as chisels, screw-drivers, &c.; and consists in the combination with and insertion in such handle of a plane-iron and necessary adjuncts, so that the said handle, being made flat upon at least one side, may be used and operated as a plane. The tools are usually arranged to be removable from the handle.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a view, in perspective, of a toolhandle and tool embodying my invention. Fig. 2 is a longitudinal section of the same.

a represents a tool-handle. e is the ferrule, and f a tool, which is held in the slot in said ferrule by means of the set-screw g. A tool of any kind may be placed in the handle by loosening the screw g. A suitable opening, d, is cut in the handle, (which is made sufficiently large for the purpose,) and the plane-iron b

and wedge c inserted therein. The side of the handle through which the cutting-edge of the plane-iron projects is made nearly or quite flat. It will thus be seen that the tool-handle a can be used as a handle or as a plane, as desired. When used for the latter purpose, the tool f is usually removed.

The broken lines in Fig. 1 represent the plane-iron inserted in the ferrule e-an arrangement which is sometimes convenient.

The device may be made of wood, metal, or any suitable material.

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

The hereinbefore-described improvement in tool-handles, consisting of the handle a, provided with the described arrangement for holding different tools, and having the opening d cut therein for the purpose of accommodating the plane-iron b, the said handle being made flat, or nearly so, upon the under side,

all substantially as described.

PORTER A. GLADWIN.

Witnesses:

HENRY W. WILLIAMS, JOHN E. FRENNING.