(No Model.)

## J. F. FRENCH.

## HANDLE FOR FILES AND OTHER TOOLS.

No. 288,045.

Patented Nov. 6, 1883.

FIG. 1.

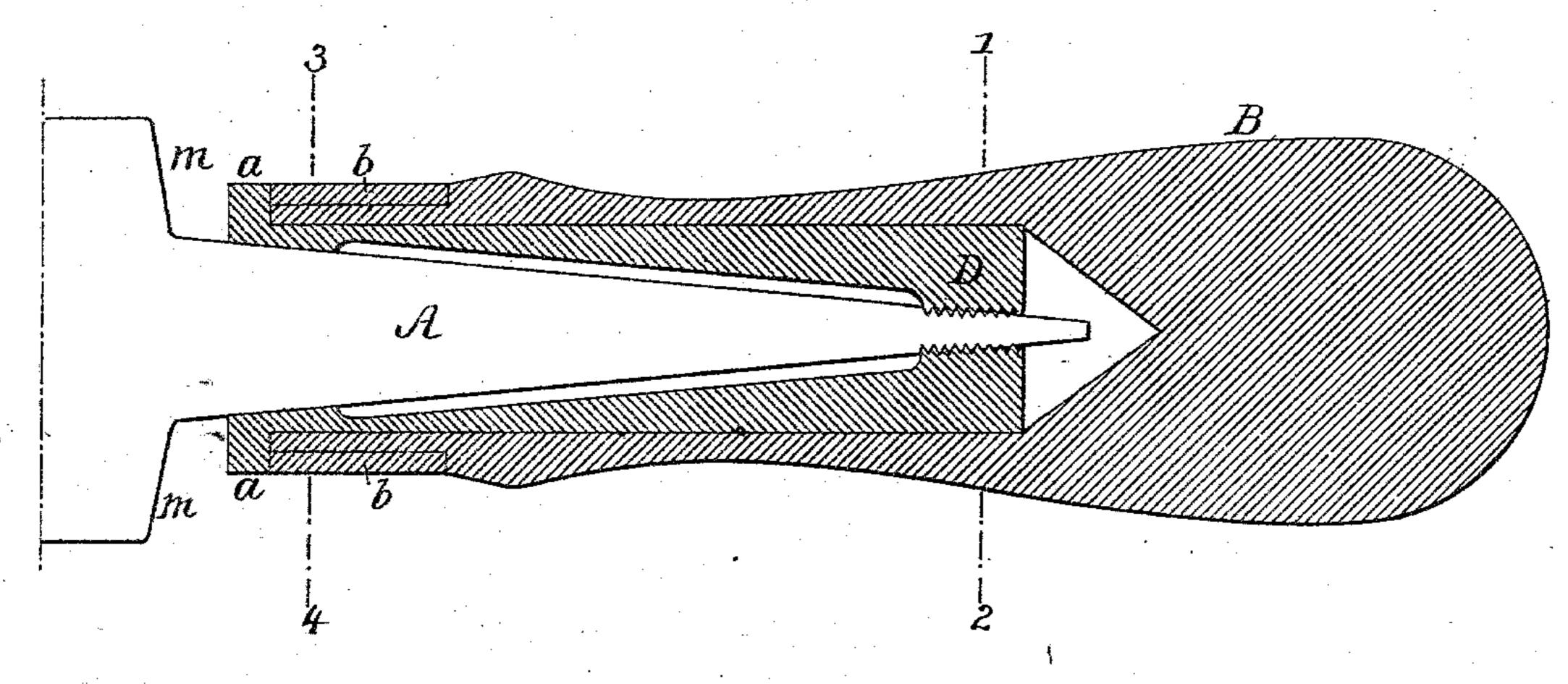


FIG.2

FIG.3.

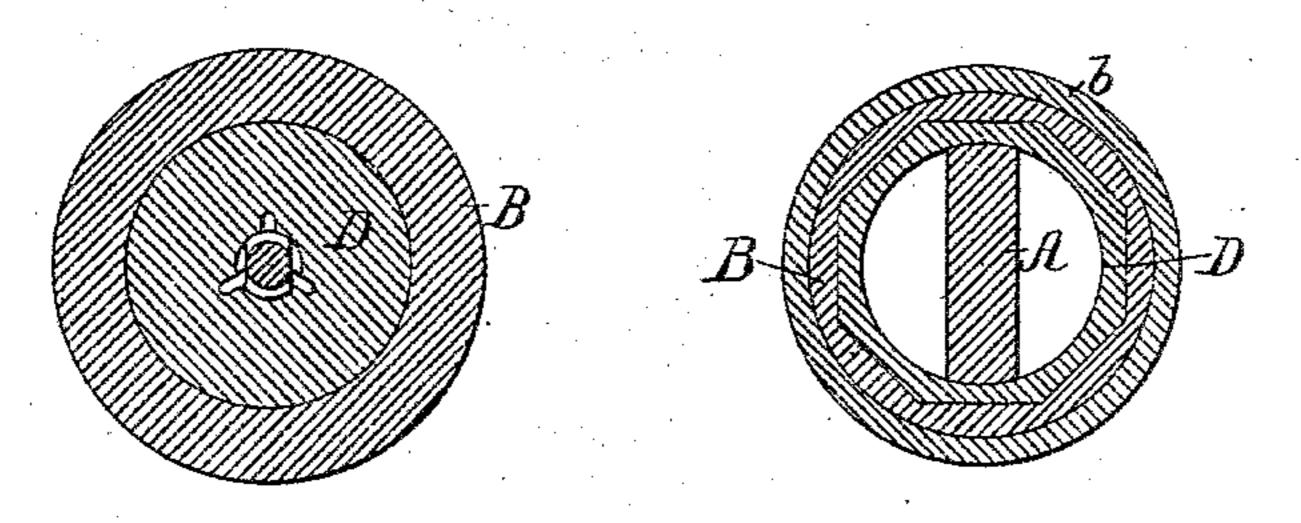
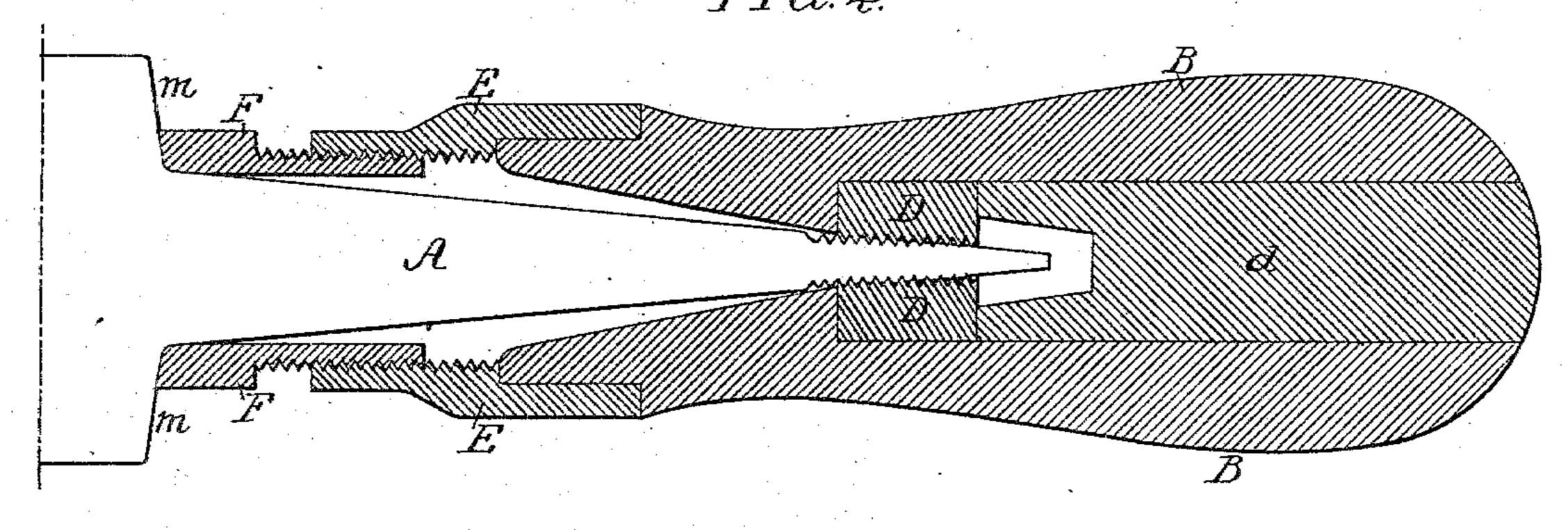


FIG. 4.



WITNESSES: Harry L. achenfelter. James F. Jobins

INVENTOR: forvale French by his attorneys Howson Voors

## United States Patent Office.

JOSIAH F. FRENCH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO THE J. BARTON SMITH COMPANY, OF SAME PLACE.

## HANDLE FOR FILES AND OTHER TOOLS.

SPECIFICATION forming part of Letters Patent No. 288,045, dated November 6, 1883. Application filed September 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, Josiah F. French, a Philadelphia, Pennsylvania, have invented 5 certain Improvements in Handles for Files and other Tools, of which the following is a specification.

My invention consists in so combining a hard-metal nut with a handle that by propto erly applying the same to the tang of a file or other tool a thread will be cut by the nut on the said tang, to which the handle will conse-

quently be secured.

In the accompanying drawings, Figure 1 is 15 a sectional view of my improved handle for files and other tools; Fig. 2, a section on the line 1 2; Fig. 3, a section on the line 3 4, and Fig. 4 a modification of the handle.

Referring to Figs. 1, 2, and 3, A is the ta-20 pering tang of a file or other tool, and B the body of the handle, made of wood or other available material, into which is driven the metal tube D, provided in the present instance with a flange, a, which bears against 25 the end of the handle and against the usual ferrule, b.

A portion of the exterior of the tube, near the flange a, is made many-sided—octangular in the present instance; or it may be other-30 wise constructed to prevent it from turning in

the wooden portion of the handle.,

There is a threaded orifice in the outer end of the metal tube, and this end is hardened, so that when the handle is applied to the tang 35 A and turned thereon a thread corresponding with that in the orifice in the tube will be cut on the tang, to which the handle will thus be firmly secured, the tube in this instance bearing against the opposite inclined 40 edges of the tang near the shoulders m m; but it may be made to bear directly against these shoulders.

It will be seen on reference to Fig. 2 that the threaded orifice in the end of the tube is 45 notched like an ordinary threading-die; but this is not essential to my invention, for a thread can be cut on the tapering tang if the threaded orifice is without notches.

The end of the tube may be termed a

"threading-nut," which serves the twofold 50 purpose of cutting a thread on the tang and, citizen of the United States, and a resident of | through the medium of this thread, securing the handle to the tool.

> In Fig. 4 the threading-nut is a simple hardened block of steel driven into a cham- 55 ber formed in the wooden portion of the handle, the nut being many-sided, or otherwise formed to prevent it from turning in the said chamber, and the latter being filled with a plug, d, after the nut has been fitted to its 60 place. In this instance the wooden portion of the handle is fitted and secured to a substantial projecting ferrule, E, the interior of which is threaded and adapted to the exterior thread on a collar, F, which bears against 65 the shoulders m m of a file or other tool. The object of this collar, which forms part of the handle, is to regulate the distance between the end of the said handle, where it bears against the shoulders m m, and the threading- 7cnut. The collar is screwed into the ferrule before the handle is applied to the tang and manipulated to cut a thread on the same, after which the handle may be partly unscrewed from the tang and extended in length by un- 75 screwing the collar, so that on reapplying the handle it will bear against the shoulders m m before the nut reaches the end of the thread which it had previously formed on the tang.

> The tang is in the present instance paral-80 lelly threaded, leaving the terminal portion plain—a feature which is described in the application filed by me August 27, 1883, Serial No. 104,858, and which I consequently disclaim in this application. It may be remarked, 85 however, that the nut and tang may be threaded on a slight taper without departing from my present invention. I, moreover, disclaim the internally-threaded tube extending to the end of the handle, as this forms the 90 subject of an application for a patent filed by me July 2, 1883, Serial No. 99,803.

I do not desire to restrict myself to any specific mode of embedding a hard threadingnut in the handle.

I claim as my invention—

1. A handle in which a body of word or other available material is combined with a hard threading-nut embedded in or otherwise attached to and prevented from turning in the said body of the handle, all substantially as set forth.

2. The combination of a handle having a hard threading-nut and a ferrule, E, with a collar, F, adjustable on the ferrule, substantially as set forth.

Intestimony whereof I have signed my name to this specification in the presence of two 10 subscribing witnesses.

JOSIAH F. FRENCH.

Witnesses:
JOHN E. PARKER,
HARRY SMITH.