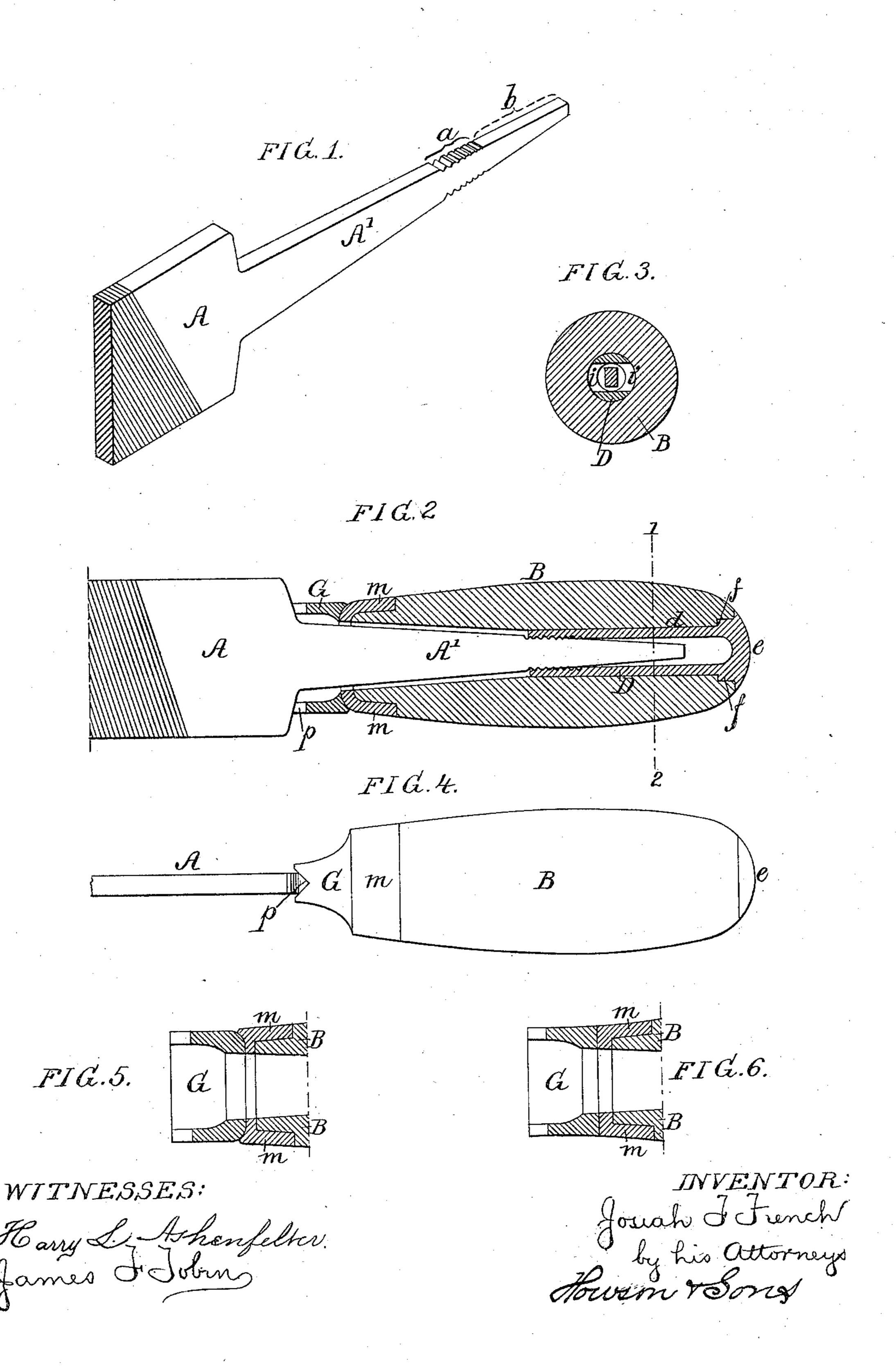
J. F. FRENCH.

HANDLE FOR FILES AND OTHER TOOLS.

No. 285,991.

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HANDLE FOR FILES AND OTHER TOOLS.

SPECIFICATION forming part of Letters Patent No. 285,991, dated October 2, 1883. Application filed July 2, 1883. (No model.)

To all whom it may concern:

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

My invention relates to tangs and handles for files and other tools, the main object of my 10 invention, which is fully described hereinafter, being the secure attachment of the handles to the tools.

In the accompanying drawings, Figure 1 is a perspective view of part of a file, showing 15 the threaded tang; Fig. 2, a sectional view of the handle; Fig. 3, a transverse section on the line 12, Fig. 2; and Figs. 4, 5, and 6, views representing modifications of my invention.

Referring to Figs. 1, 2, and 3, A is the butt-20 end of a file, and A' its tang, a portion, a, of the latter being threaded; but the terminal portion, b, being in the present instance plain. As a file or other tool with this tapering threaded tang and plain terminal portion forms the sub-25 ject of another application for a patent, it will suffice to remark here that the thread is parallelly cut, and not made on a taper, and that the thread is such as not to prevent the free driving of the tang into an ordinary wooden 30 handle when there is no special handle at hand. It is not essential to my present invention, moreover, that the threaded tang should be of the precise form shown.

The body of the handle B is made of wood 35 and of the usual shape, an opening extending through the body for the reception of the tang of the file and of a nut, D, consisting in the present instance of a stem, d, which fits tightly in the said opening in the body of the handle, 40 and a rounded head, e, which forms the end of the handle, a lug or lugs, f, at the junction of the stem with the head, preventing the nut from turning, and the interior of the inner end of the stem being threaded to correspond with the 45 thread cut on the opposite edges of the file-tang. The stem d of the nut may be simply a hollow cylinder, or the threaded and cylindrical portion of the stem may be connected to the head by legs i i, as shown in Fig. 3, in which case

50 a slot will extend entirely through a portion 1

of the stem, this plan being the best, as it permits the nut to be readily made of cast-iron. A metal ferrule, m, is snugly fitted and secured to the body of the handle, and between this ferrule and the shoulders n n of the file 55is interposed a metal ring, G, the ferrule being rounded in the present instance, and adapted to a concave socket in the ring; or the socket may be formed in the ferrule m, and the ring G may be rounded, as shown in 60 Fig. 5.

In carrying out my invention I prefer to make in the ring V-shaped notches p for admitting the shoulders of the file, as shown in Fig. 4, so as to prevent the ring from turning, 65 the V shape of the notches permitting files differing in thickness to fit the said notches.

It is not essential that there should be a ball-and-socket junction of the ferrule m with the ring, for if the end of the ring should af- 70 ford a flat bearing for the flat end of a ferrule, as shown in Fig. 6, one of the main objects of the invention would be attained—namely, a better bearing against which to tighten the handle than that presented by the two shoul- 75 ders of the file. The ball-and-socket bearing, however, presents this advantage, that it permits the handle to accommodate itself to the ring should the shank be slightly out of line, or should the shoulders of the file be irregu- 80 lar and not permit the arrangement of the ring in exact line with the shank.

The tapering threaded tang of the tool is hereby disclaimed, as it forms the subject of another application for a patent filed by me 85 August 27, 1883, Serial No. 104,858.

I claim as my invention—

1. The combination of a file or other tool having a threaded tang and a handle having a nut adapted to the threaded portion of the 90 . tang, with a ring, G, interposed between the ferrule of the handle and shoulders of the tool, substantially as described.

2. The combination of the tool, its threaded tang, the handle, and its nut, with a ring, G, 95 interposed between the shoulder of the tool and the ferrule of the handle, and having a ball-and-socket junction with the said handle,

substantially as described.

3. The combination of a file or other tool 100

having a threaded tang and a handle having a nut adapted to the threaded portion of the tang, with a ring, G, interposed between the ferrule of the handle and shoulders of the tool, and having V-shaped notches for receiving the said shoulders, substantially as specified.

In testimony whereof I have signed my name

to this specification in the presence of two subscribing witnesses.

JOSIAH F. FRENCH.

Witnesses:

HARRY L. ASHENFELTER, HARRY SMITH.