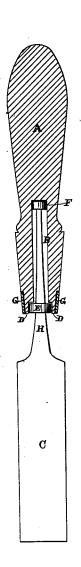
C. GROTH. TOOL-HANDLE.

No. 191,757.

Patented June 12, 1877.



Witnesses John L. Doone Olwyn T. Stacy Inventor Charles Groth By Dewey Ho. Attije

UNITED STATES PATENT OFFICE.

CHARLES GROTH, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN TOOL-HANDLES.

Specification forming part of Letters Patent No. 191,757, dated June 12, 1877; application filed May 5, 1877.

To all whom it may concern:

Be it known that I, CHARLES GROTH, of the city and county of San Francisco and State of California, have invented an Improved Tool-Holder; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings.

My invention relates to an improved arrangement for securing the shanks of tools in tool holders or handles, and is especially adapted for holding such tools as have a long tapering shank, such as files and the like.

Referring to the accompanying drawings, Figure 1 is a section of my invention.

Let A represent an ordinary tool-handle. In the end of this handle I bore a hole, B, which is large enough and deep enough to admit the shank H of the file C or other tool. I then cut a square channel across the end of the handle, so as to leave the projecting points D D on opposite sides of the hole. E is a piece of leather, india-rubber, horn, or other elastic spongy substance, which is first cut out in a circular form as large as the small end of the handle. I then cut away two op-posite sides of this disk, so that it will fit between the points D of the handle. In the center of this disk I make a hole, through which the shank of the tool or file can be inserted to the desired point. F is another small circular piece of leather or other elastic spongy substance, which is of the proper size to fit snugly in the hole B in the handle. This piece of leather has also a hole in its center, through which the point of the tool-shank can

be inserted.

When these disks are in place on the shank, I insert it into the hole B, and push it down as far as the disk E will permit. The small disk F enters the hole, and is pushed down with the point of the shank, so as to steady it, while the partial disk E fits down between the points D D of the handle, thus preventing the shank from turning in the hole. The ferrule G then fits down over the end of the handle, in the usual way.

This device for fastening tools in handles is quite simple and effective. It can be applied by any ordinary mechanic, and has the advantage of allowing the tool to be removed

whenever desired without trouble.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is-

The tool-handle A, with its bore B and projecting points D D, in combination with the tool-shank H, with its disk F and partial disk E, substantially as and for the purpose de-

In witness whereof I have hereunto set my hand and seal.

CHARLES GROTH. [L. s.]

Witnesses:

FRANK A. BROOKS, CHARLES ELSASSER.