(No Model.)

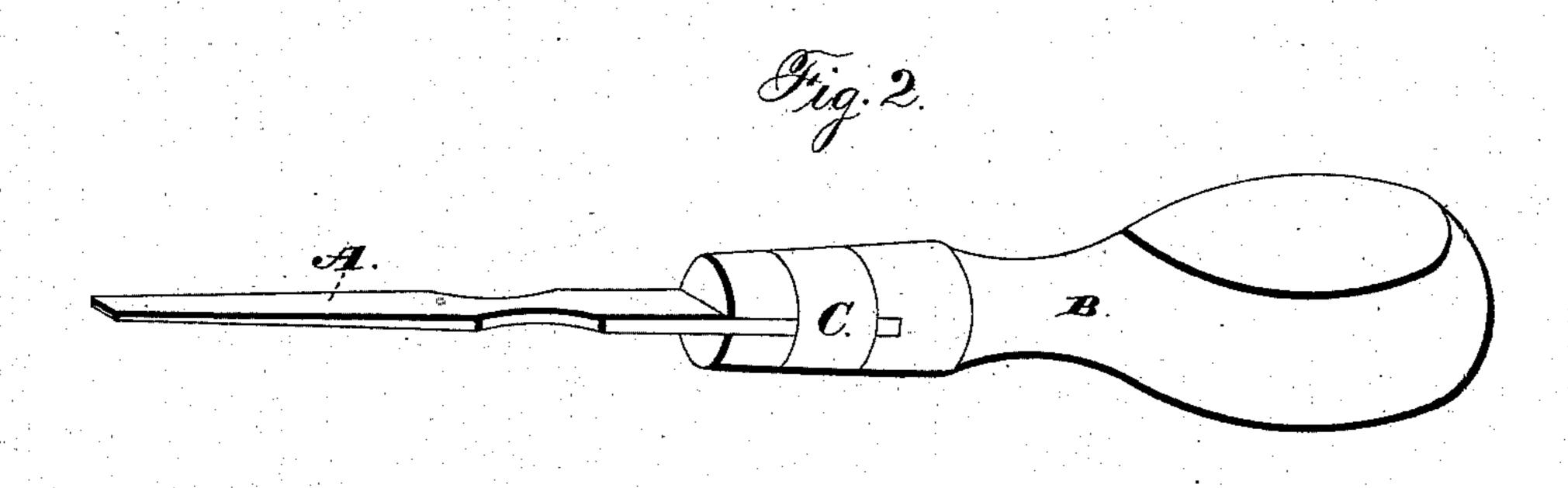
R. C. ELLRICH.

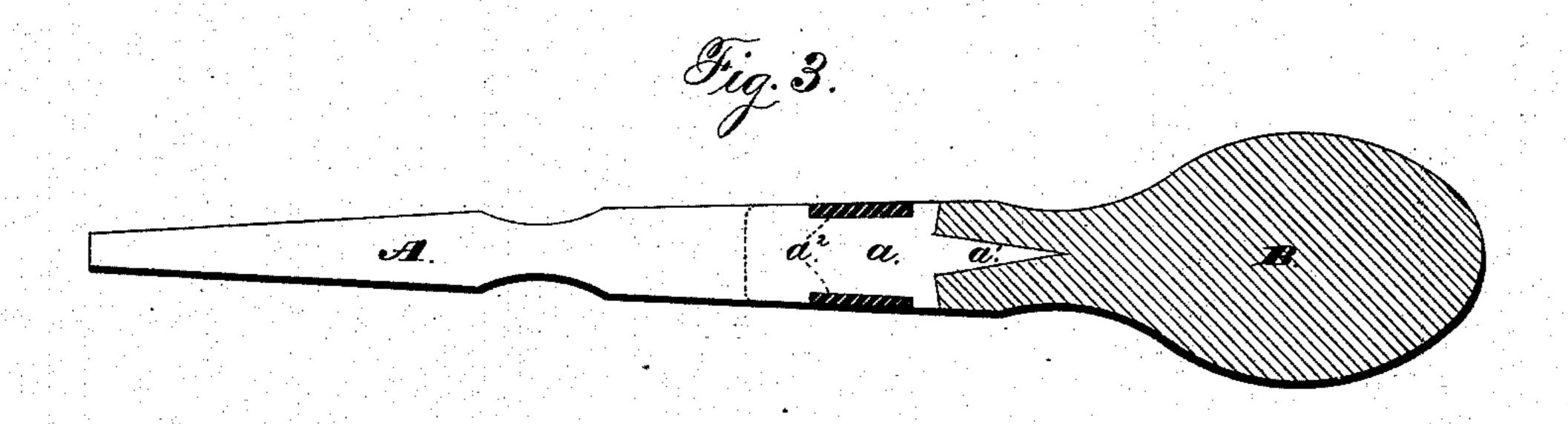
TOOL HANDLE.

No. 288,560.

Patented Nov. 13, 1883.







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United States Patent Office.

ROBERT C. ELLRICH, OF SOUTHINGTON, ASSIGNOR TO THE ELLRICH HARD-WARE MANUFACTURING COMPANY, OF PLANTSVILLE, CONNECTICUT.

TOOL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 288,560, dated November 13, 1883.

Application filed July 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, ROBERT C. ELLRICH, of Southington, in the county of Hartford, and in the State of Connecticut, have invented certain new and useful Improvements in Tool-Handles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specino fication, in which—

Figure 1 is a perspective view of the parts of a screw-driver adapted for connection by means of my improved ferrule. Fig. 2 is a like view of the same combined, and Fig. 3 is a central longitudinal section of said parts as combined.

Letters of like name and kind refer to like parts in each of the figures.

In the use of tools provided with wooden 20 handles great difficulty has heretofore been experienced in so uniting the same as to prevent accidental separation, and much trouble and annoyance has arisen from the insecurity of such connection.

To obviate this difficulty is the design of my invention, which consists, as a means for uniting tools to handles, in a ferrule fitted into and caused to fill a circumferential groove which is formed within the periphery of the 30 handle and the edges of the tool-shank inserted

within said handle, substantially as hereinafter specified.

In the annexed drawings, A represents a screw-driver blade, which has, generally, the 35 usual form, but at its handle end is provided with a shank, a, which has a comparatively short tang, a', at its upper end, and from thence downward to the blade portion has an extreme width substantially equal to the contiguous 40 portion of said blade, and within each edge is

provided with a notch, a^2 , as shown.

The handle B has any desired general form; but at its lower end has a diameter correspond-

ing to the extreme width of the shank a of the blade A, and is provided with a recess, b, which 45 receives said shank with its tang a'. At a point coinciding with the notches a^2 of said tang said handle has cut within its periphery a circumferential groove, b', which corresponds in depth and width to said notches, 50 and of which the latter forms a part.

Fitted closely into the groove b' is a ferrule, C, which may be made of wire wound within and soldered, of fusible metal cast in place, of malleable metal spun into shape and position, 55 or of any suitable material and construction, the only requisite being that said ferrule possess sufficient strength to properly confinesaid parts together and fit closely within and thoroughly fill said groove. The blade and han-60 dle thus combined can only be separated by the breakage of one of the parts, as it is manifestly impracticable for such to be done while the ferrule remains intact, and before the latter can be removed it must be cut apart or the 65 lower end of said handle cut or broken away.

While this invention is illustrated in its application to screw-drivers, it will be seen that it is equally applicable to any kind of tool which is united by a shank to wooden handle. 70

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

As a means for uniting tools to handles, a ferrule fitted into and caused to fill a circum- 75 ferential groove which is formed within the periphery of the handle, and the edges of the tool-shank inserted within said handle, substantially as specified.

In testimony that I claim the foregoing I 80 have hereunto set my hand this 3d day of July, A. D. 1883

ROBERT C. ELLRICH.

Witnesses:

L. W. Robbins, George S. Allen.