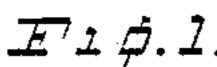
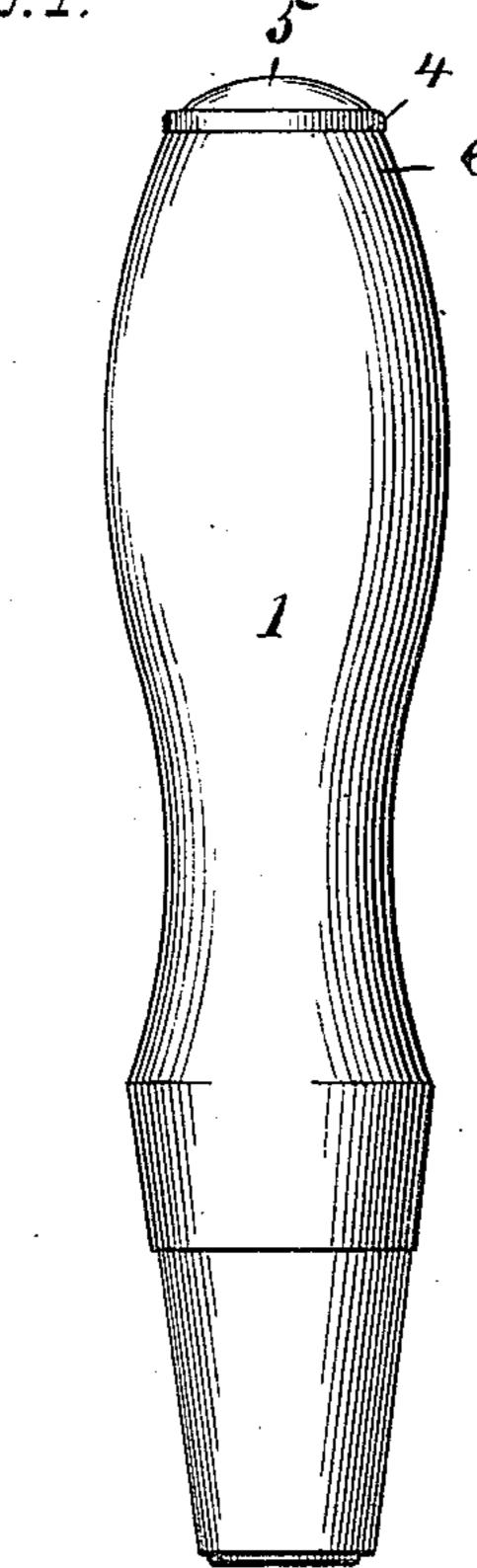
(No Model.)

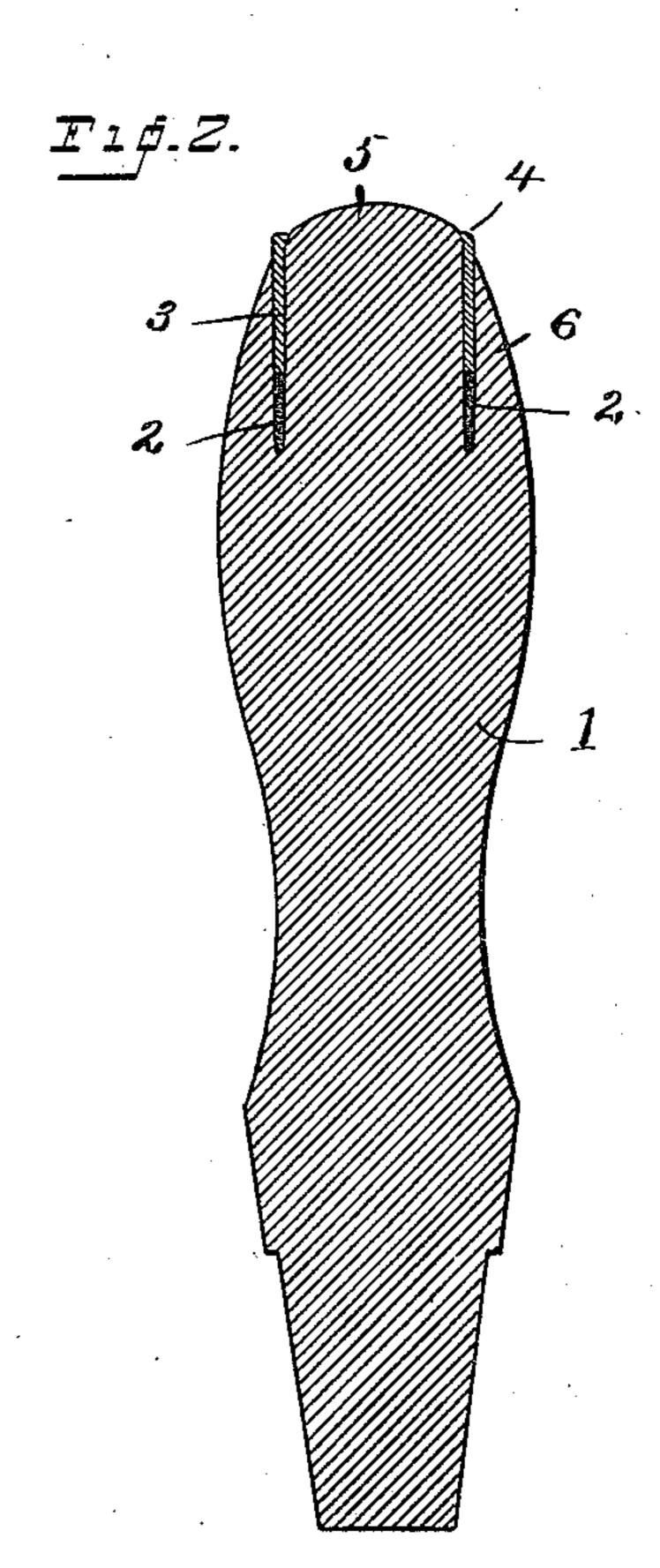
J. SWAN.
TOOL HANDLE.

No. 440,795.

Patented Nov. 18, 1890.







WITNESSES

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

United States Patent Office.

JAMES SWAN, OF SEYMOUR, CONNECTICUT.

TOOL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 440,795, dated November 18, 1890.

Application filed July 21, 1890. Serial No. 359,408. (No model.)

To all whom it may concern:

Be it known that I, James Swan, a citizen of the United States, residing at Seymour, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Tool-Handles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the class of toolhandles—for example, chisel-handles—which in use are required to receive blows upon their outer ends, and has for its object to devise a construction in which the wood of the handle shall be prevented from splitting and from crumbling away when subjected to constant blows in use, and in which the cost of construction shall be but slightly increased over that of the cheapest wood handles in the market, my novel handle being, as a matter of fact which has been thoroughly demonstrated in use, practically indestructible.

With the above-described ends in view I have devised the simple and novel construction which I will now describe, reference being made to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation of my novel handle, 30 and Fig. 2 a longitudinal section thereof.

1 denotes the body of the handle, which is made of wood, and is provided in its outer end with a circular kerf or cut 2.

3 denotes a ferrule, which is provided at its
35 outer end with a slight flange. This ferrule
is of just sufficient size to permit it to be
driven into the kerf, holding the central portion of the handle firmly, but without danger
of splitting the wood outside of the ferrule,
40 the flange of the ferrule engaging the wood
at the outer end. The kerf is made deeper
than the length of the ferrule for a purpose
which I will presently explain. For convenience in description I will designate the portion of the body within the kerf as 5 and the
portion outside of the kerf as 6. It will be

noticed that portion 5 of the body is rounded,

so as to project beyond the end of the ferrule

when the latter is inserted, and that the end of the ferrule projects outward slightly be- 50 yond portion 6. I construct the parts in this manner so that the blows upon the end of the handle in use will strike upon portion 5, which, in practice, tends to spread out slightly and partially cover the end of the ferrule. 55 An important feature of my invention, however, and one that adds greatly to the life of the handle when subjected to hard usage, is that I make the kerf of greater depth than the width of the ferrule, so that as the wood 60 of part 5 spreads out and wears away at the end the tendency of the blows is to constantly drive the ferrule inward slightly, this yielding or inward movement of the ferrule insuring in practice that a surface of wood be pre- 65 sented at the end of the handle to receive the blows of the mallet, and that as the wood wears away in use the ferrule will move inward sufficiently to overcome any tendency toward splitting of the body.

Having thus described my invention, I

1. A tool-handle consisting of a wooden body having a circular kerf at the outer end thereof and a ferrule driven into the kerf, 75 said ferrule being of less width than the depth of the kerf and having an inwardly-turned flange engaging the wood at the end of the handle, so as to leave room for the ferrule to be driven inward in use without danger of 80 splitting the body.

2. A tool-handle consisting of a wooden body having a kerf at its outer end, within the kerf a portion 5, and outside of the kerf a portion 6, and a ferrule of less width than 85 the depth of the kerf lying therein, portion 5 of the body extending outward beyond the end of the ferrule, and the end of the ferrule projecting outward beyond portion 6, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES SWAN.

Witnesses:
A. M. Wooster,
ARLEY I. MUNSON.