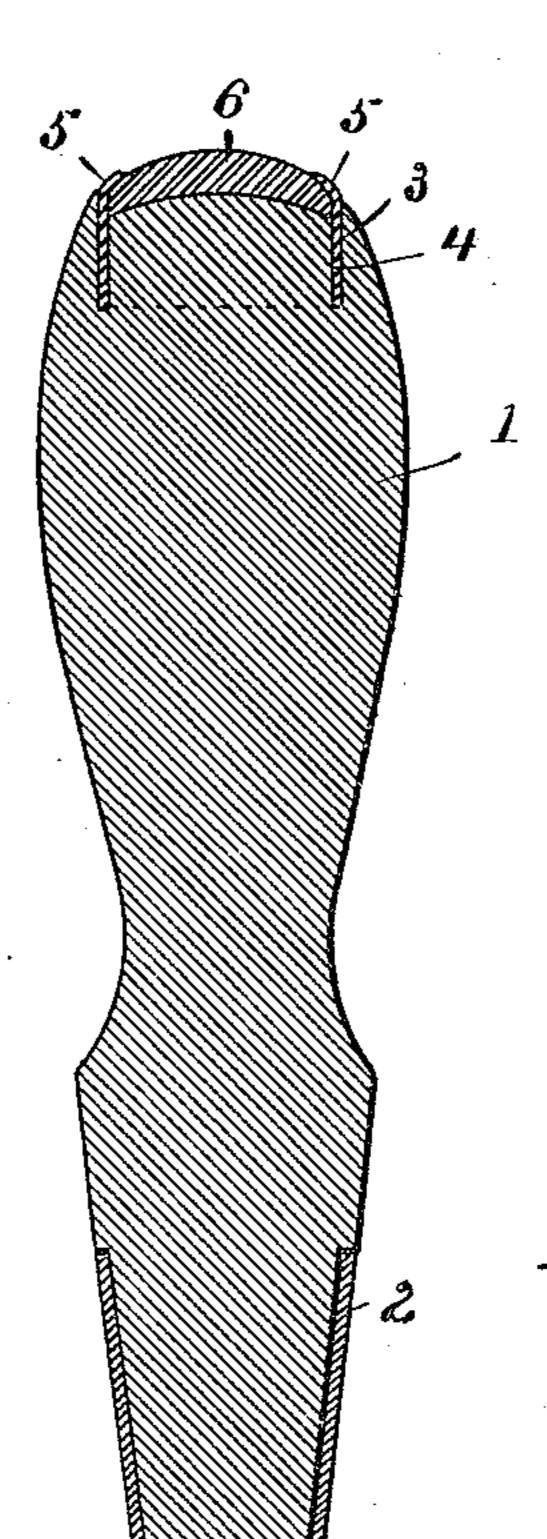
(No Model.)

J. SWAN.
TOOL HANDLE.

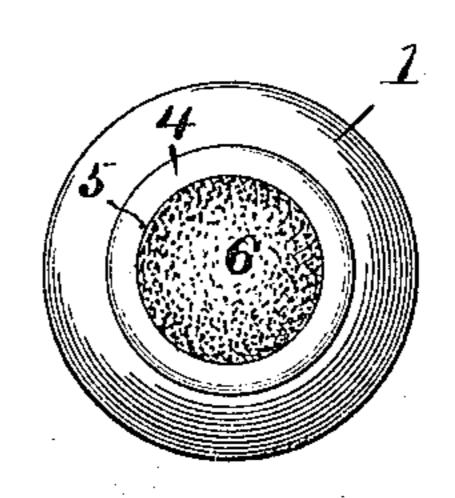
No. 442,670.

Patented Dec. 16, 1890.

F1\$.1.



F15.2.



WITNESSES

C.M. Newman, Arley S. Munson. James Swan
By Hooster
atty

## United States Patent Office.

JAMES SWAN, OF SEYMOUR, CONNECTICUT.

## TOOL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 442,670, dated December 16, 1890.

Application filed July 21, 1890. Serial No. 359,407. (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 use the same.

My invention relates to tool-handles generally, but more especially to chisel and other handles, which in use are likely to receive blows upon their outer ends, and has for its object to greatly improve the construction and operation of this class of handles without materially increasing the cost of production.

With this end in view I have devised the novel improvement of which the following description, in connection with the accompanying drawings, is a specification, numerals being used to denote the several parts.

Figure 1 is a longitudinal section of a toolhandle embodying my novel improvement, and Fig. 2 is a plan view of the butt-end of the handle.

1 denotes the handle proper, which is ordinarily made of wood, and 2 the usual ferrule at the inner end thereof. At the outer or 30 butt end of the handle I make a circular groove or kerf, denoted by 3, into which a ferrule 4 is firmly driven. The outer end of this ferrule is provided with an inwardly-turned flange 5.

6 denotes a pad, made of sole-leather or other equally tough elastic substance. This pad is made of just the exact size to cover the

end of the handle and fit within ferrule 4, and is held firmly in place by the flange of said ferrule when the latter is driven into place, the 40 flange acting to stretch the pad over the end of the handle and hold it firmly in place. It will be noticed that the outer surface of the pad is rounded and that it projects outward slightly beyond the flange of the ferrule, so 45 that blows of a hammer or mallet in driving a chisel or other tool strike upon the pad instead of striking the wood or the ferrule. The ferrule acts in the usual manner to prevent the wood from splitting. The pad acts to re- 50 ceive the force of the blow and prevent the wood at the end of the handle from being splintered and crushed by blows in long-continued usage. It is found in practice that a pad of this class held at the end of a handle 55 by a ferrule in the manner described adds greatly to the durability of the handle and is greatly preferred in use.

Having thus described my invention, I claim—

A tool-handle having at its outer end a circular groove, a yielding pad covering the end of a handle, and a ferrule provided with an inwardly-turned flange which overlaps the outer edge of the pad and is driven into the 65 groove, whereby the pad is held firmly in place.

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

JAMES SWAN.

6**0** 

Witnesses:

ORRILLA E. HURLBURT, JOHN TURK.