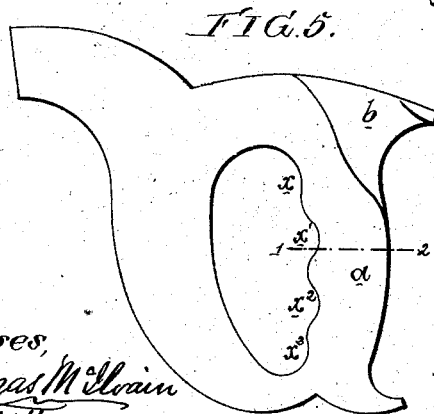
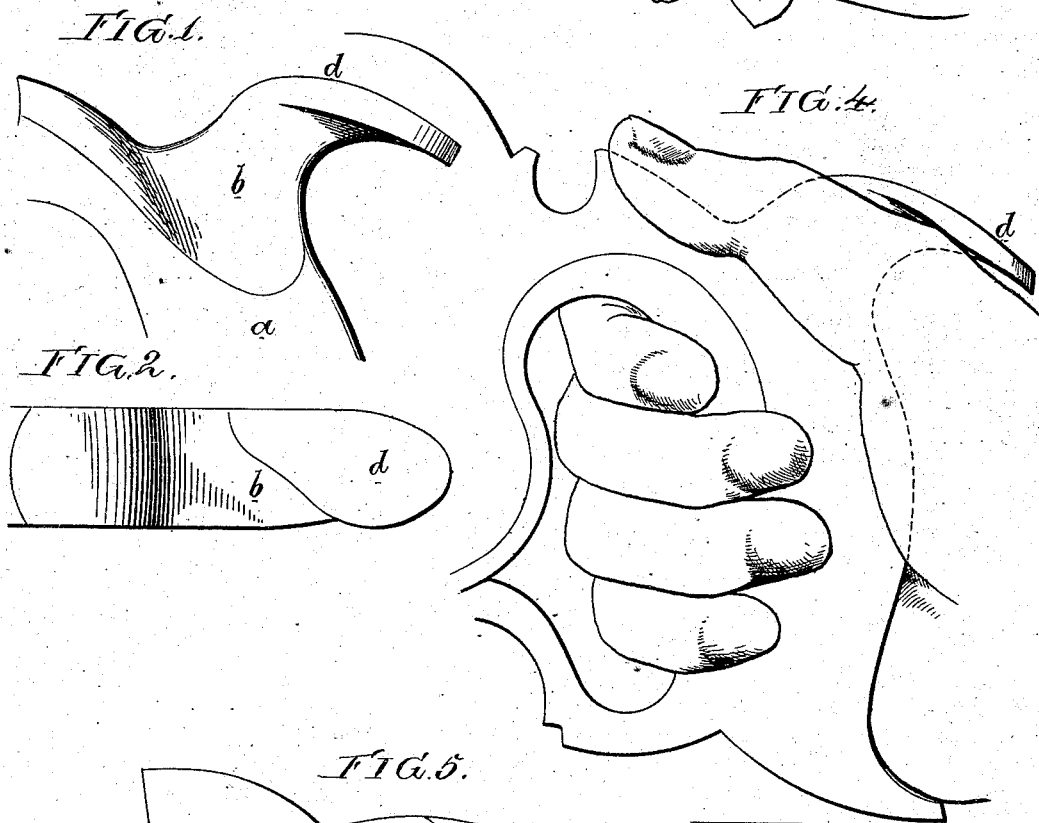
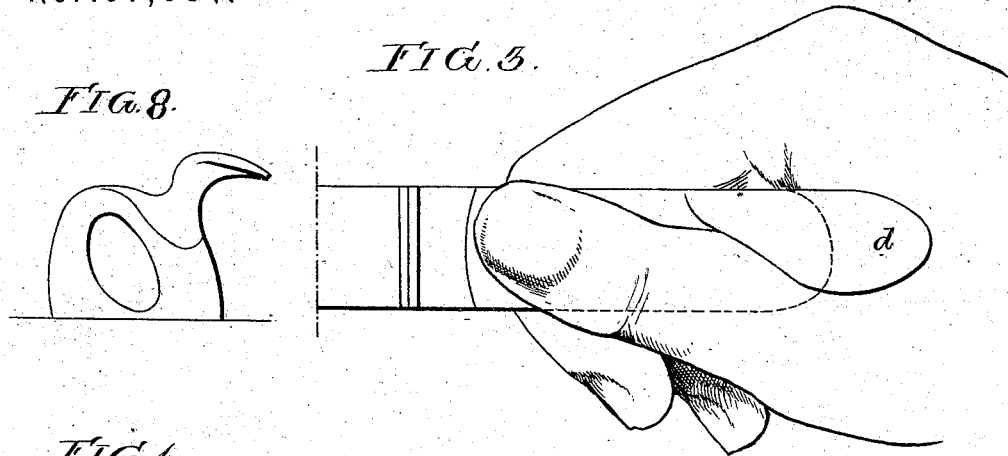


W. J. REAGAN.
Handles for Saws.

No. 157,634.

Patented Dec. 8, 1874.



Witnesses,
Thomas M. Sloan
Hubert Howson

W. J. Reagan
by his Atty.
Howson and Son

UNITED STATES PATENT OFFICE.

WILLIAM J. REAGAN, OF ROYER'S FORD, PENNSYLVANIA.

IMPROVEMENT IN HANDLES FOR SAWS.

Specification forming part of Letters Patent No. **157,634**, dated December 8, 1874; application filed November 14, 1874.

To all whom it may concern:

Be it known that I, WILLIAM J. REAGAN, of Royer's Ford, Montgomery county, Pennsylvania, have invented certain Improvements in Handles for Saws, &c., of which the following is a specification:

The object of my invention is to so construct the handle of a saw or plane that it will be better adapted than an ordinary handle to the hand of the operator; and this object I attain mainly by combining with the handle a recess or socket, *b*, for the thumb, as shown in the accompanying drawing.

My invention is illustrated in its simplest form in the side view, Figure 1, and plan view, Fig. 2, of part of an ordinary saw-handle, which is constructed in the usual manner, excepting that a recess or socket, *b*, is formed for the reception of the thumb of the operator, who can grasp the handle in the manner illustrated in Figs. 3 and 4.

In grasping an ordinary saw-handle the thumb must be separated from the forefinger to the extent of the thickness of the said handle, and is not in the most comfortable position, as the inside of the first joint of the thumb must bear against and be more or less abraded by the side of the handle; and if an attempt be made to stretch out the thumb so that it can reach the upper edge of the handle, it can only come in contact with the sharp edge of the same.

In manipulating a handsaw, in fact, the thumb contributes little or nothing from its second joint outward toward a firm gripe of the handle by the hand, or to the exertion of the force demanded in operating the saw. The socket *b*, which is made of a convenient form for the thumb, permits the latter to assume the comfortable position shown in Figs. 3 and 4, where it not only becomes available as a contributing member of the hand in grasping the handle and operating the saw, but also permits the operator to adjust the palm of his

hand more satisfactorily to the gripe *a* of the handle than in grasping one of ordinary construction.

It will be observed that in Figs. 1, 2, 3, and 4 the old guard *d*, for retaining the hand in a proper position on the handle, is retained; in fact, the socket is formed partly in this guard, which, however, may, owing to the presence of the socket, be a comparatively small affair, as shown in the modification, Fig. 5.

In ordinary handles the gripe is rounded at the back, as shown in the sectional view, Fig. 7, so as to present a somewhat prominent rib, *v*, for the palm of the hand to bear against.

A much better shape is that shown in Fig. 6, where the most prominent part of the rear of the gripe is at the edge *y* on the left side of the handle, from which edge the gripe is gently rounded on a curve, merging into the right side of the handle, thus affording a surface far better adapted to the palm of the hand than the comparatively abrupt ridge *v* above alluded to.

It will be evident, on referring to Fig. 9, that my invention is applicable to the handles of planes, and that it can also be adopted with advantage in other tools which have to be grasped by the hand.

I claim as my invention—

1. A tool-handle provided with a recess, *b*, substantially as and for the purpose described.
2. A saw-handle having a gripe, *a*, rounded at the back from a comparatively abrupt edge, *y*, on the left of the handle, and on a curve merging into the right side of the handle, as herein set forth, and as illustrated in Fig. 6.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WM. J. REAGAN.

Witnesses:

HUBERT HOWSON,
HARRY SMITH.