

(No Model.)

R. W. HARDIE.

HANDLE FASTENER.

No. 255,166.

Patented Mar. 21, 1882.

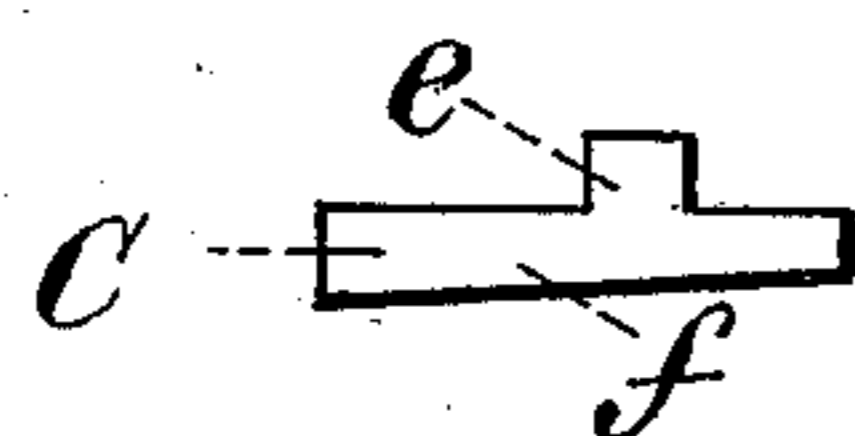
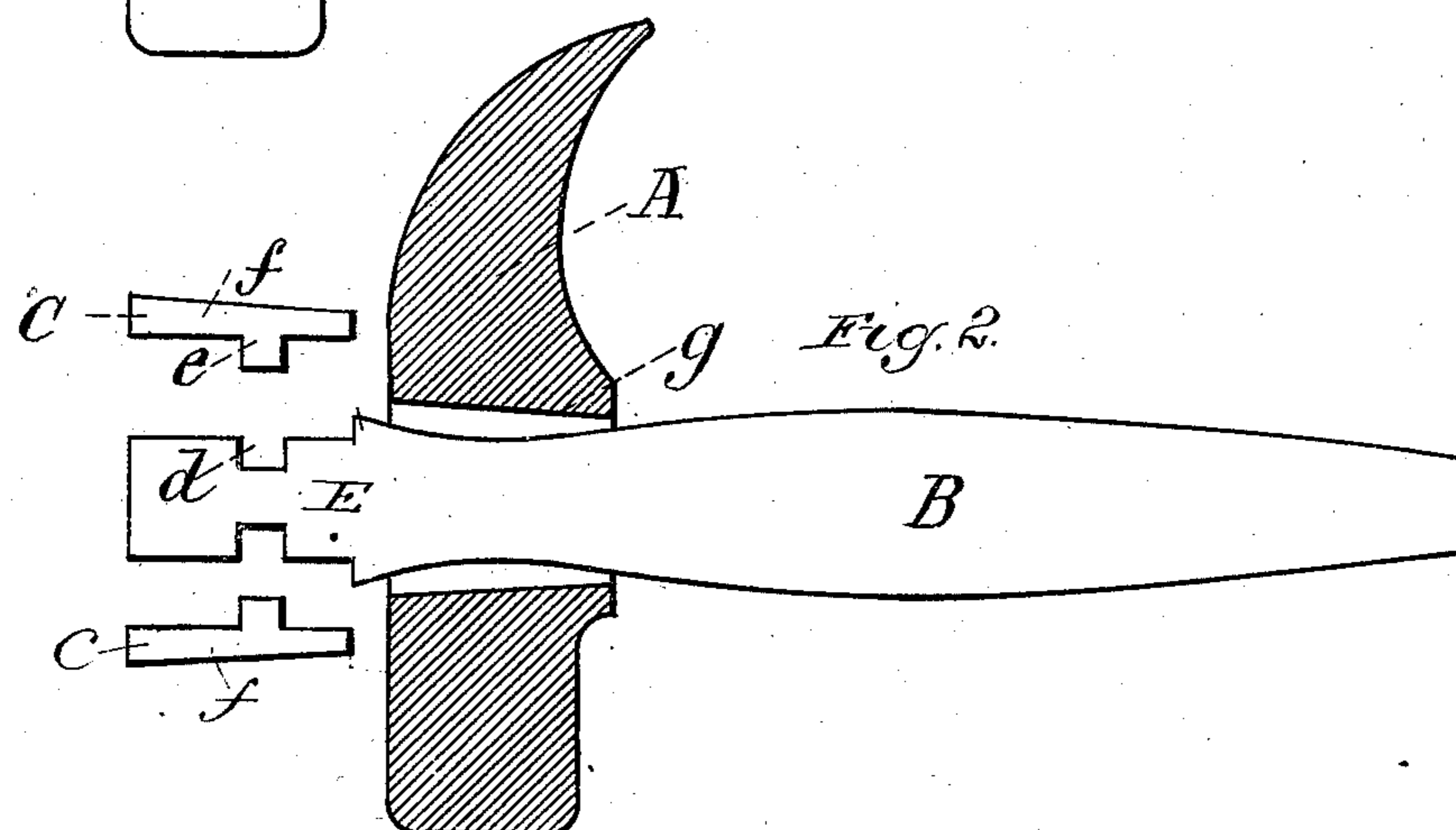
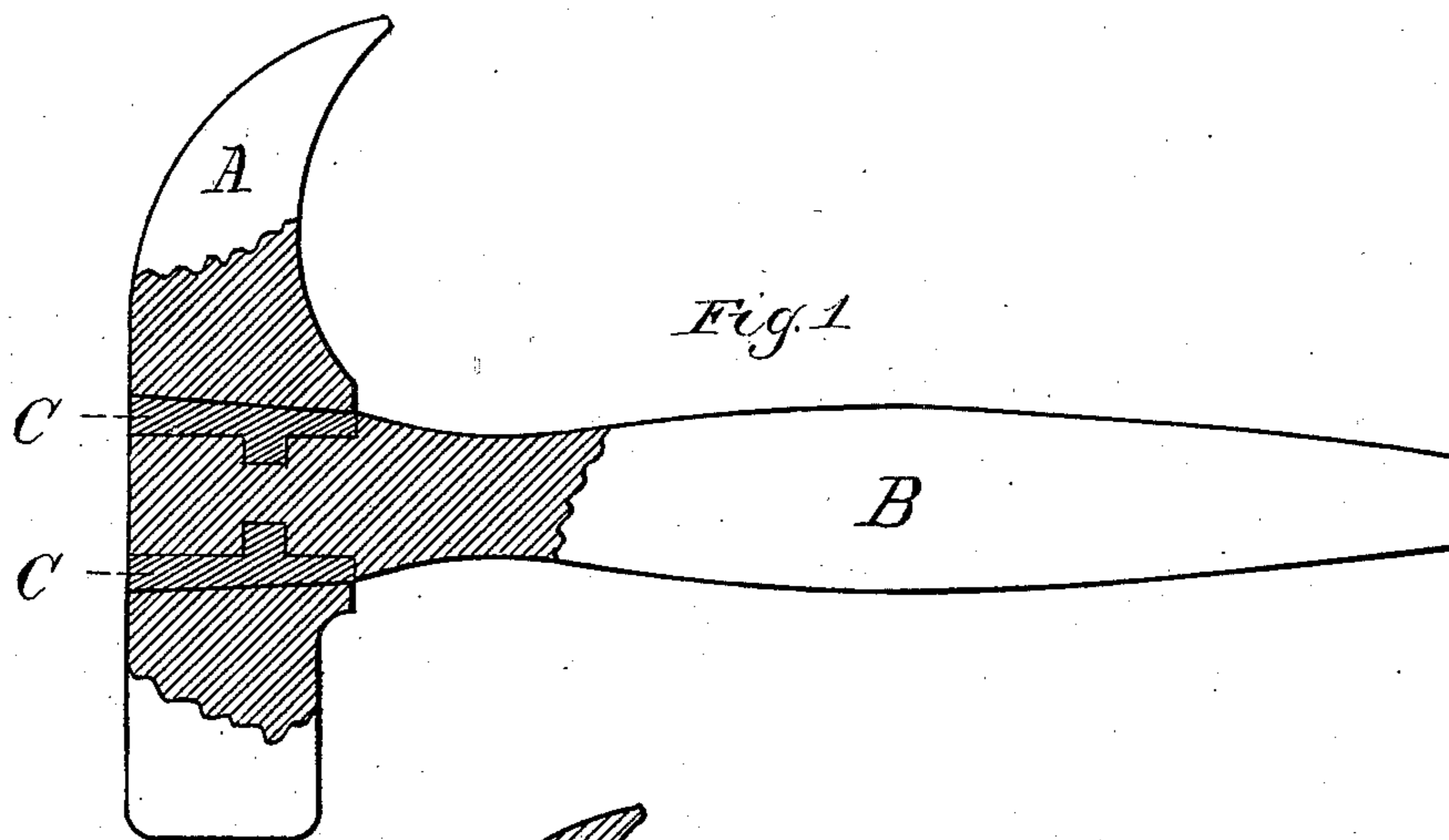


Fig. 3.



Witnesses,

Thos. E. Norman.

Adolph Fleischman.

Inventor,

Robert W. Hardie.

# UNITED STATES PATENT OFFICE.

ROBERT W. HARDIE, OF ALBANY, NEW YORK.

## HANDLE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 255,166, dated March 21, 1882.

Application filed November 3, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT W. HARDIE, a citizen of the United States, residing at Albany, in the county of Albany and State of New York, have invented a new and useful Improvement in Handle-Fasteners, of which the following is a specification.

My invention is a handle-fastener; and it consists of a certain specific device, the construction and arrangement of the parts of which are hereinafter fully set forth, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 represents the device applied to a hammer, in which a longitudinal section of the fastening in place in the hammer is shown. Fig. 2 shows a side elevation of the handle and the fastening device with the hammer in longitudinal section, the device being in position ready for application to the hammer. Fig. 3 shows different views of the locking-keys.

In these drawings, the eye of the hammer A is shown as flaring outwardly. The handle B is formed with a reduced end, E, and shoulders *e e*; but the dimensions of the handle at the widest part of the shoulders *e e* are not larger than the smallest part of the eye, so that the handle may be pushed through the eye into a position shown in Fig. 2, in which the shoulders come a little outside of the outer surface of the hammer. Plainly, the shoulders may project only so far as to be flush with that surface, or may remain a little inside, it being only necessary that the handle shall project far enough to permit the application of the wedging or locking pieces *f f*. These pieces *f* are made with one side sloping or inclined to the axis of the handle and the other substantially parallel therewith, the pieces fitting to the reduced end of the handle, which, when the handle is in place, is within the tool. These pieces are also provided with teeth or projections *t t*, which fit into corresponding notches

in the reduced end of the handle. When they are in place upon their sides on said-reduced end they are fitted exactly to the eye, so that when driven into the eye with the handle in the position shown in Fig. 1 they fit snugly and perfectly. When in such position it will be obvious that the centrifugal force arising from the delivery of the blow will only tend to wedge the tool upon its handle more firmly, so that the tool cannot fly off, even if the handle be not tightly fitted in the eye. The handle may be easily removed by driving it outward through the eye into the position shown in Fig. 2.

I am aware that handles have been wedged in various ways, and that wedges with roughened or serrated faces bearing upon the wood of the handle have been driven by the side of the handle, the reduced end of the handle being sloped to admit the wedge, and I do not broadly claim any such construction, the essential principle of my invention being limited to a handle which is passed through the eye, with a wedging or locking piece provided with a projection or tooth placed against it, and wedged by drawing or driving back the handle into its place in the eye. I desire only not to be limited to the use of two of the pieces *f*, as a single one may be sufficient.

What I claim is—

A handle-fastener consisting of the notched handle adapted to be inserted through the eye and to project therefrom at the outer side, the locking wedge piece or pieces *f*, fitted thereto, in combination with the flaring eye of the tool, whereby when the parts are all in place the centrifugal force is made to wedge the tool upon its handle, substantially as described.

ROBERT W. HARDIE.

Witnesses:

JAMES M. RUST,  
H. L. THOMAS.