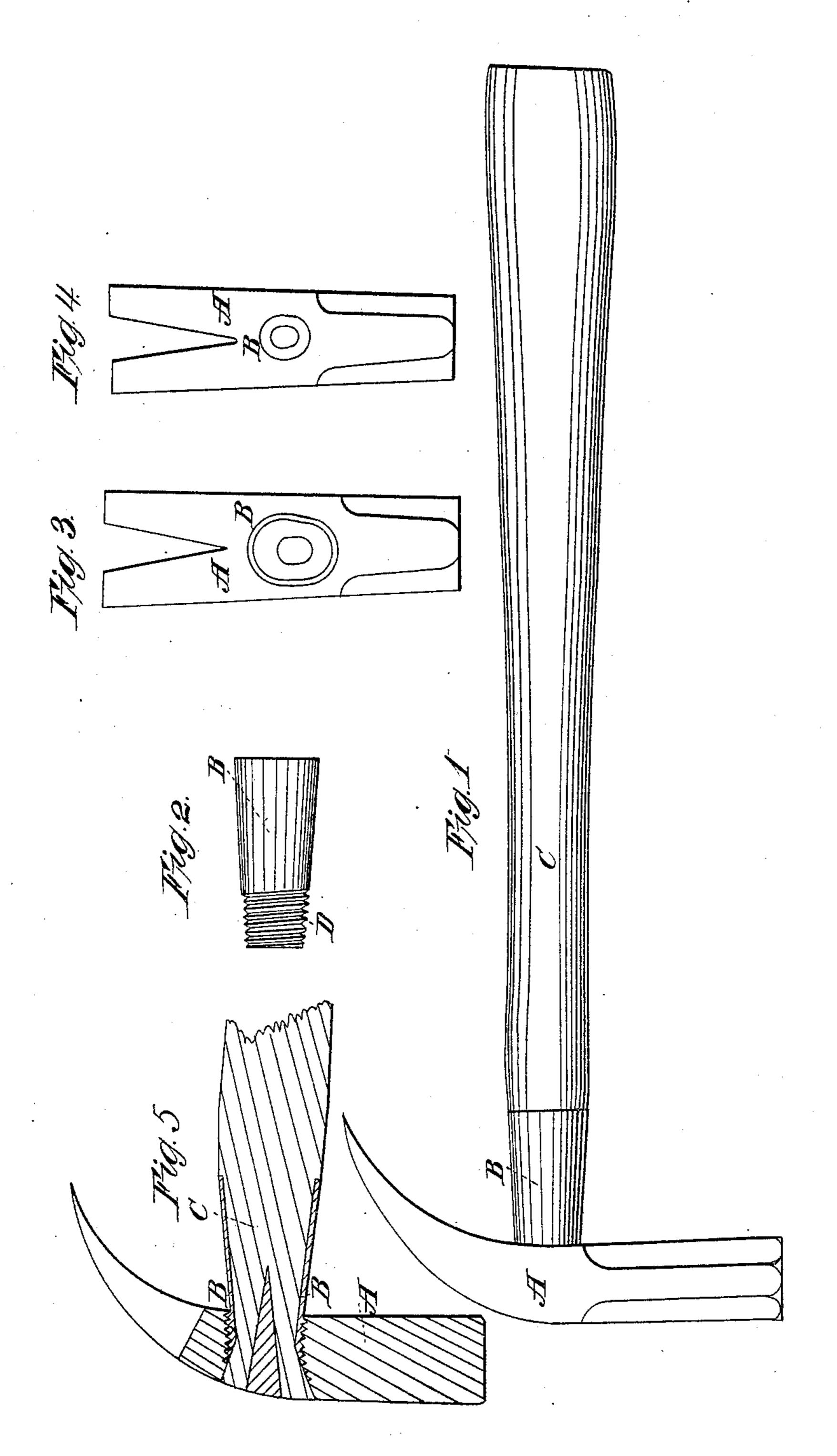
## Tool Handle,

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Fatented Inly 17, 1839.



## UNITED STATES PATENT OFFICE.

PHINEAS EASTMAN, OF CANAAN, NEW HAMPSHIRE.

MODE OF MANUFACTURING SOCKET HAMMERS AND HATCHETS.

Specification of Letters Patent No. 1,247, dated July 17, 1839.

To all whom it may concern:

Be it known that I, Phineas Eastman, of Canaan, Grafton county, New Hampshire, have invented a new and useful Improvement in the Mode of Making Hammers and Hatchets, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

the same, making part of this specification. The nature of this improvement consists 10 in so constructing the hammer or hatchet that the handle is secured to it in a permanent and effectual manner and the cost of the manufacture of the same greatly reduced, which objects are effected by first 15 drilling or punching a round aperture for the socket, form the inside or concave part. extending about half way through the hammer, the remaining half being drilled or punched of an oval shape and then cutting 20 a thread or male screw in said round part of the aperture to admit the round part of the socket, which has a thread or male screw to correspond with the female screw just described cut on the outside thereof into which 25 it is screwed extending in length about twothirds the distance of the length of aperture and when screwed into it so far that its end shall extend a short distance into the oval part of the aperture, an oval punch is used 30 and being driven into the end of the socket extends or spreads it until it is made to assume an oval shape or a figure to fit the oval part of the aperture, by which operation the socket will be prevented effectually from ever 35 becoming loose or getting at all out of place, or unscrewing; and then by using an oval punch of a larger size, which is driven into the larger or opposite end of the socket, it is caused to spread and assume an oval

40 shape to receive the handle, which is turned

to a size and shape to fit the socket, and is

split at its small end, driven well into the

socket and a wedge driven into said split end which will force it to spread and fit the oval part of the aperture next to the outside or convex part of the hammer and always afterwards prevent its either turning in, or drawing from the socket as long as the wedge remains in its proper place, said wedge causing the end of the handle to assume the oval shape, which effectually prevents its turning, and also to acquire a larger size than the part which passes through the round part of the socket which thus prevents its drawing out, and thus the handle is held 55 firm without the ordinary boring and fixtures of bolt, etc.

There are other advantages arising from this construction besides those above mentioned which will be evident to any mechanic 60 who will examine the hammer.

Figure 1 represents the hammer, socket, and handle put together; Fig. 2, the socket detached; Fig. 3, concave ends of hammer; Fig. 4, convex end of ditto; Fig. 5, longitu-65 dinal section of the hammer.

Similar letters refer to similar parts.

A is the hammer, B the socket, C the handle, D screw on the socket.

The invention claimed and desired to be 70 secured by Letters Patent consists in—

Making the socket with a screw on the outside thereof to screw into the aperture or female screw for the same and extending it into the oval part of the aperture in the 75 hammer a short distance when it is made to assume a corresponding oval shape by punching or otherwise, to prevent turning or drawing, as before described.

PHINEAS EASTMAN.

Witnesses:
WM. P. ELLIOTT,
EDMUND MAHER.