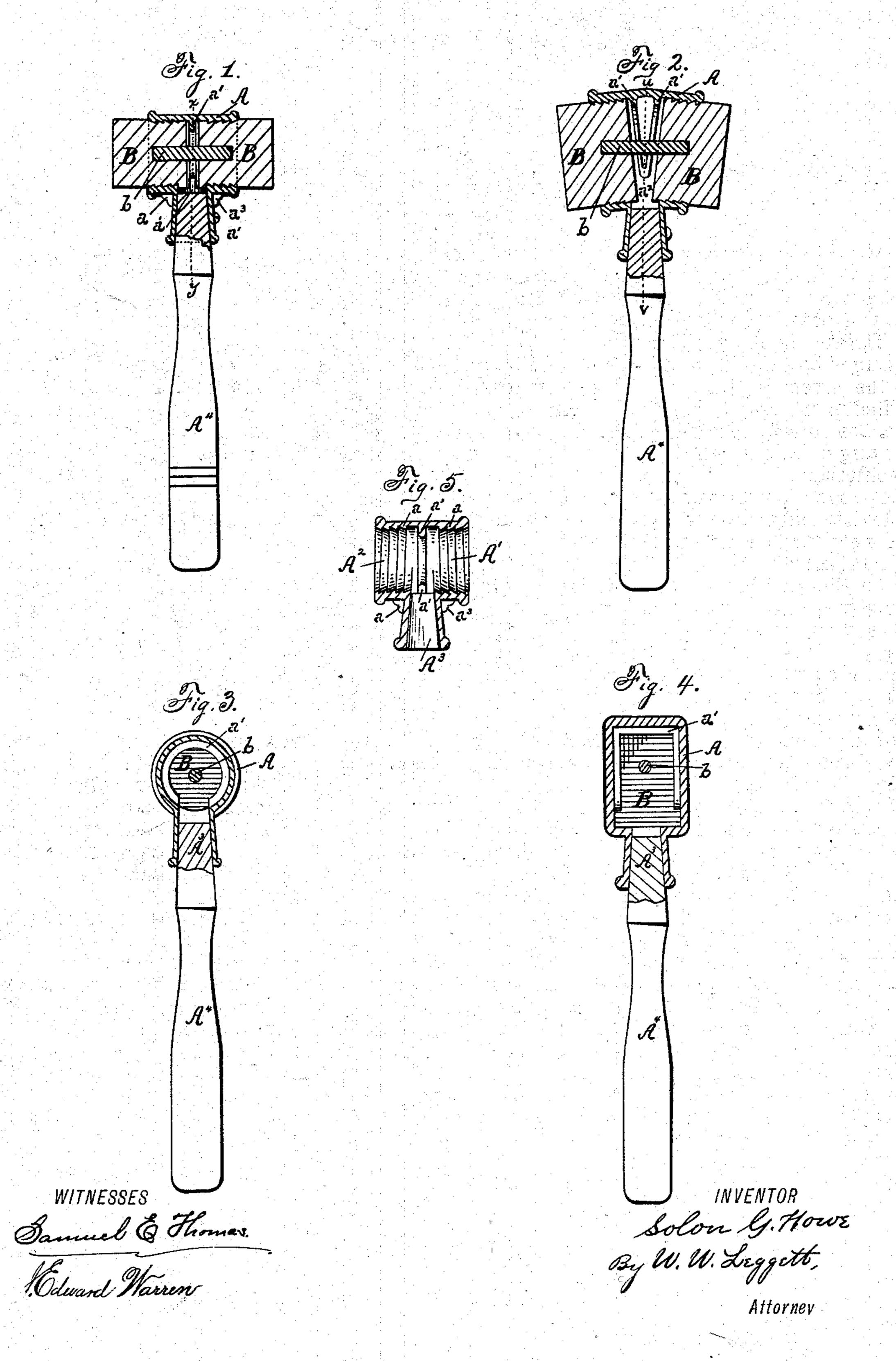
S. G. HOWE.

MALLET.

No. 276,247.

Patented Apr. 24, 1883.



## United States Patent Office.

SOLON G. HOWE, OF DETROIT, MICHIGAN, ASSIGNOR TO GEORGE L. CAR-RINGTON AND CHARLES F. ELLIOT, OF SAME PLACE.

## MALLET.

SPECIFICATION forming part of Letters Patent No. 276,247, dated April 24, 1883. Application filed July 18, 1882. (No model.)

To all whom it may concern:

Detroit, county of Wayne, State of Michigan, have invented a new and useful Improvement 5 in Mallets; 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 pertains to make and use it, reference being had to the accomre panying drawings, which form a part of this specification.

My invention consists in the combinations of devices and appliances hereinafter specified, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of a mallet embodying my invention, showing parts in section. Fig. 2 is a variation. Fig. 3 is a sectional view along the line x y in Fig. 1. Fig. 4 is a variation along the line uv in Fig. 2. 20 Fig. 5 is a sectional view of the metallic frame.

My invention relates to the manufacture of mallets, and is especially designed as an improvement upon the invention for which Letters Patent were granted to me December 7, 25 1880, No. 235,244.

In carrying out my present invention, A represents the metallic frame. A' and A2 are the sockets, adapted to receive the mallet-heads. I desire to construct said frame with either a 30 straight or curved socket, as may be desired, as shown in Figs. 1 and 2, and also for either square or round mallet-heads, as shown in the drawings.

 $A^3$  is a handle-socket provided with a fillet, 35  $a^3$ , at its juncture with the mallet-frame for the purpose of strengthening the same. It may either be made straight or tapering, as may be desired, for the handle A4. Instead of having the interior faces of these sockets plain and 40 smooth, I desire to construct them with a series of suitable retention-grooves, a. These grooves may be either straight or spiral, and are designed to aid in holding the mallet-heads in place in the metallic frame.

a' represents one or more central collars, constructed on the interior surface of the frame,

adapted to prevent one mallet-head from driv-Be it known that I, Solon G. Howe, of ling past the center, and so driving out the other, should the wood shrink enough to permit their otherwise coming in contact. In 50 case the sockets be curved for the purpose herein described, I prefer that a double central collar should be constructed within the metallic frame, as shown in Fig. 2, in which case the two faces of the double collar should each 55 be parallel with the outer face of the frame, the two points of the collar thus naturally approaching each other, as shown at  $a^2$ .

B represents the mallet-heads, of wood or any suitable material, adapted to fit into the 60 sockets A' and A2. I construct one or both of said mallet-heads with a suitable dowel pin or pins adapted to hold the heads firmly together in the sockets, and thereby coact with the retention-grooves in providing substantial 65 means for securely confining the mallet-heads in their proper relative position.

What I claim is—

1. The combination of the frame A, having the sockets A' and A2, constructed with the 70 retention-grooves a, and the inwardly-project. ing collar a', interposed centrally between the sockets, the separate mallet-heads driven into the sockets, and the dowel-pin connecting the adjacent ends of the mallet-head, substantially 75 as described.

2. The frame A, constructed with the sockets A' and A2, having the interior retentiongrooves, a, the inwardly-projecting central collar, a', and the laterally-projecting handle- 80 receiving socket A3, in combination with the separate mallet-heads B, driven into their receiving-sockets, and a dowel-pin connecting the adjacent ends of the mallet-heads, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

SOLON G. HOWE.

Witnesses:

J. EDWARD WARREN, N. S. WRIGHT.