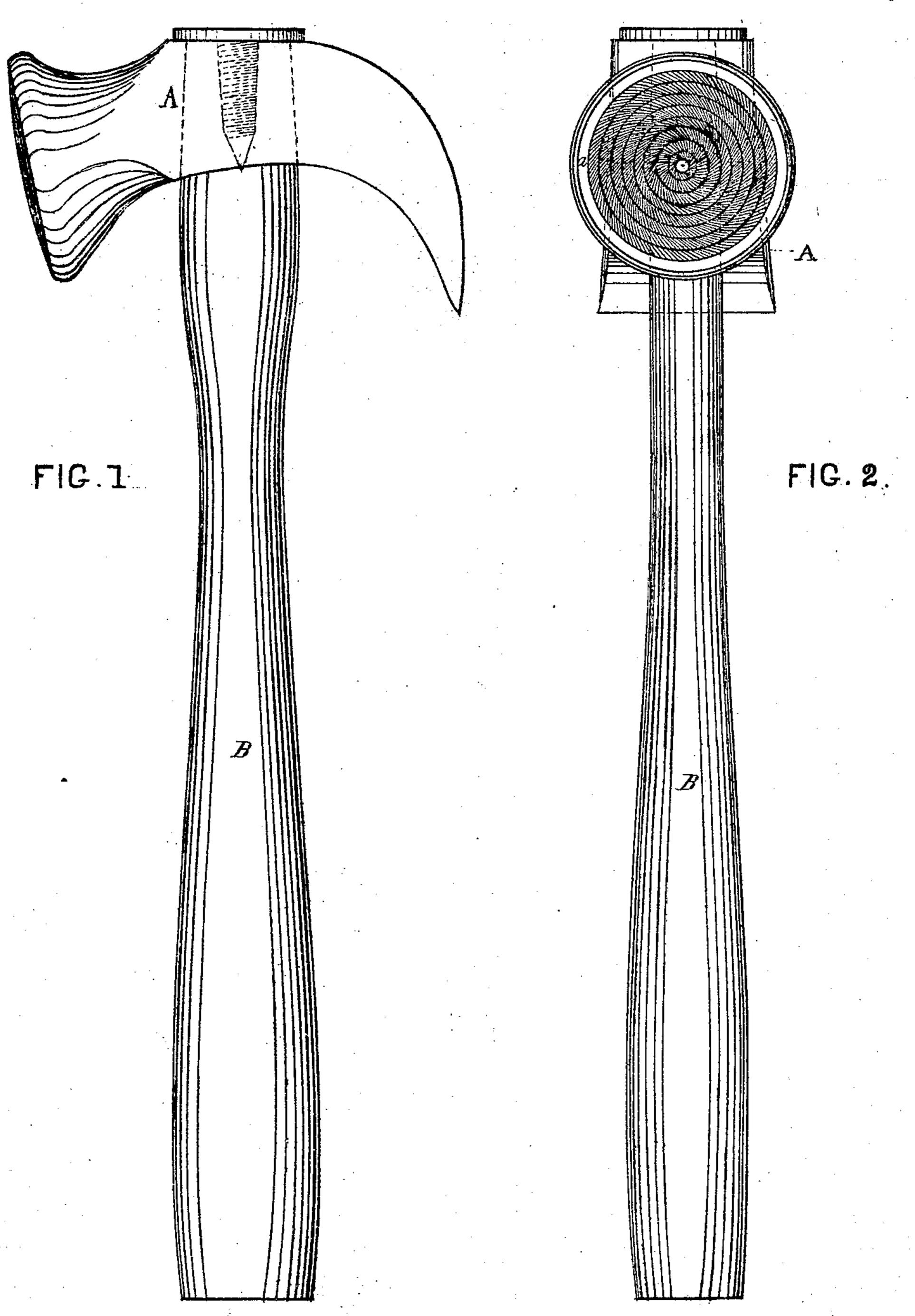
ALFRED CLARKE & ARTHUR CLARKE.

Shoe-Makers' Hammer.

No. 128,463.

Patented July 2, 1872.



WITNESSES

Thomas & Bewley,

INVENTORS

Alfred Clarke, Arthur Clarke. By their Uttomey Stephen Ustick,

UNITED STATES PATENT OFFICE.

ALFRED CLARKE AND ARTHUR CLARKE, OF PHILADELPHIA, PA.

IMPROVEMENT IN SHOE-MAKERS' HAMMERS.

Specification forming part of Letters Patent No. 128,463, dated July 2, 1872.

SPECIFICATION.

We, ALFRED CLARKE and ARTHUR CLARKE, of the city of Philadelphia and State of Pennsylvania, have invented certain Improvements in Shoe-Makers' Hammers, of which the follow-

ing is a specification:

The nature of our invention consists in the first place in the construction of the face of the hammer with fine elongated teeth, which bite into the heads of the nails to prevent the slipping of the face when it strikes the same, the teeth being made of elongated form to increase the durability of their edges.

We usually cut the face by a milling process, yet it can be done by dies to answer the

purpose.

Faces of hammers have been checkered with grooves or raised teeth of pyramidal form; but these hammers do not answer the purpose of driving the nails in the heels of boots and shoes, the nails being slender and made of soft metal, and thus requiring to be struck with great precision to prevent their bending under the hammer. The improved hammer, in consequence of the peculiarity of its cut surface, fully meets this want, as will be hereinafter shown.

The invention in the second place consists in the construction of the head of the hammer with a greater amount of metal inside than outside of the middle of the eye, in order to concentrate the force of the blow.

The curve described by a hammer during the blow has the tendency of throwing the hammer outward, and thus causing more or less slip. This difficulty is somewhat overcome by turning the pane of the hammer inward toward the handle, as is often done. But to give a proper balance to the hammer, the head requires a similar treatment, and, in addition to the turn of the pane inward, we make the inner part of the head heavier than the outer part, as hereinafter described.

To enable others skilled in the art to which our improvement appertains to make and use our invention, we will now give a detailed de-

scription thereof.

In the accompanying drawing, which makes a part of this specification, Figure 1 is a side view of the improved hammer. Fig. 2 is a face view of the same.

Like letters in both figures indicate the same parts.

A is the hammer, and B the handle. The face a is milled, so as to form fine teeth over its surface, as shown in Fig. 2. The teeth are represented in the drawing in concentric rows and running in an angular direction, yet we do not confine ourselves to these features, the object being merely to fill the face with fine elongated teeth to give certainty to its holding on to the head of the nails.

The nails used in putting on heels are slender and made of soft metal, so to effectually clinch on the inside when they strike the last, and consequently, when the hammer has the least slip, are liable to bend under the blow. This difficulty is completely overcome by the improved hammer. The teeth being very close together their fine edges do not fail to penetrate the heads of the nails sufficiently to insure the holding on of the face. The elongation of the teeth insures greater durability to the teeth than when brought to a point, as heretofore.

In order to well balance the hammer so as to overcome its tendency to fly outward when a blow is struck, in addition to turning the pane inward, as represented in the drawing, we construct the head with an increased amount of metal on its inner side, as seen in Fig. 1. This gives a proper balance to the hammer, and neutralizes its tendency to fly outward in its curved course in striking the blow, thereby enabling the workman to drive the nail with greater accuracy.

What we claim as our invention, and desire

to secure by Letters Patent, is—

The construction of the face of the hammer with elongated teeth, substantially in the manner and for the purpose set forth.

In testimony that the above is our invention we have hereunto set our hands and affixed our seals.

ALFRED CLARKE. [L. s.]

Witnesses:

H. D. REED, J. S. SANBORN.

ARTHUR CLARKE. [L. s.]

Witnesses:

STEPHEN USTICK, THOMAS J. BEWLEY.