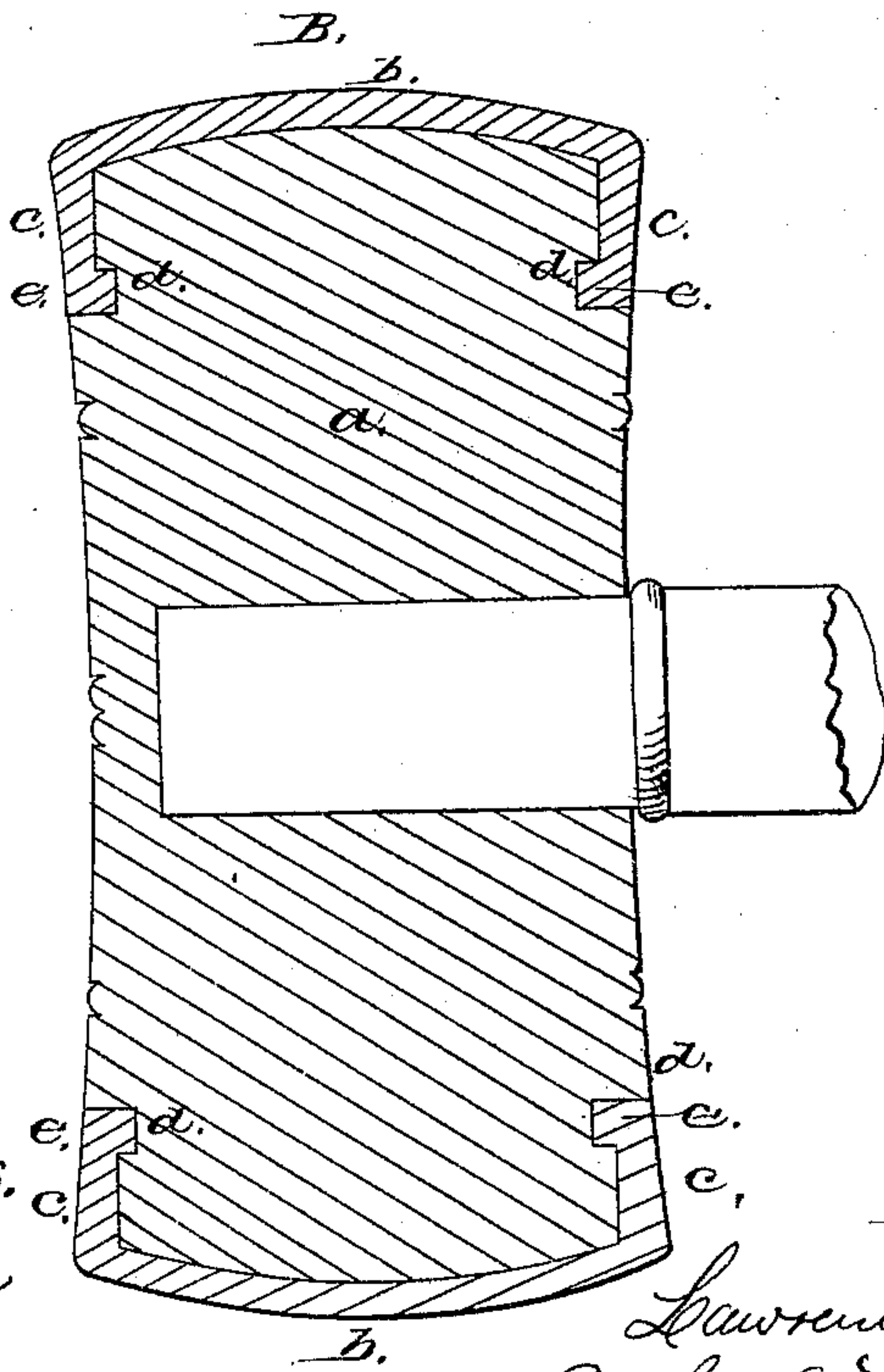
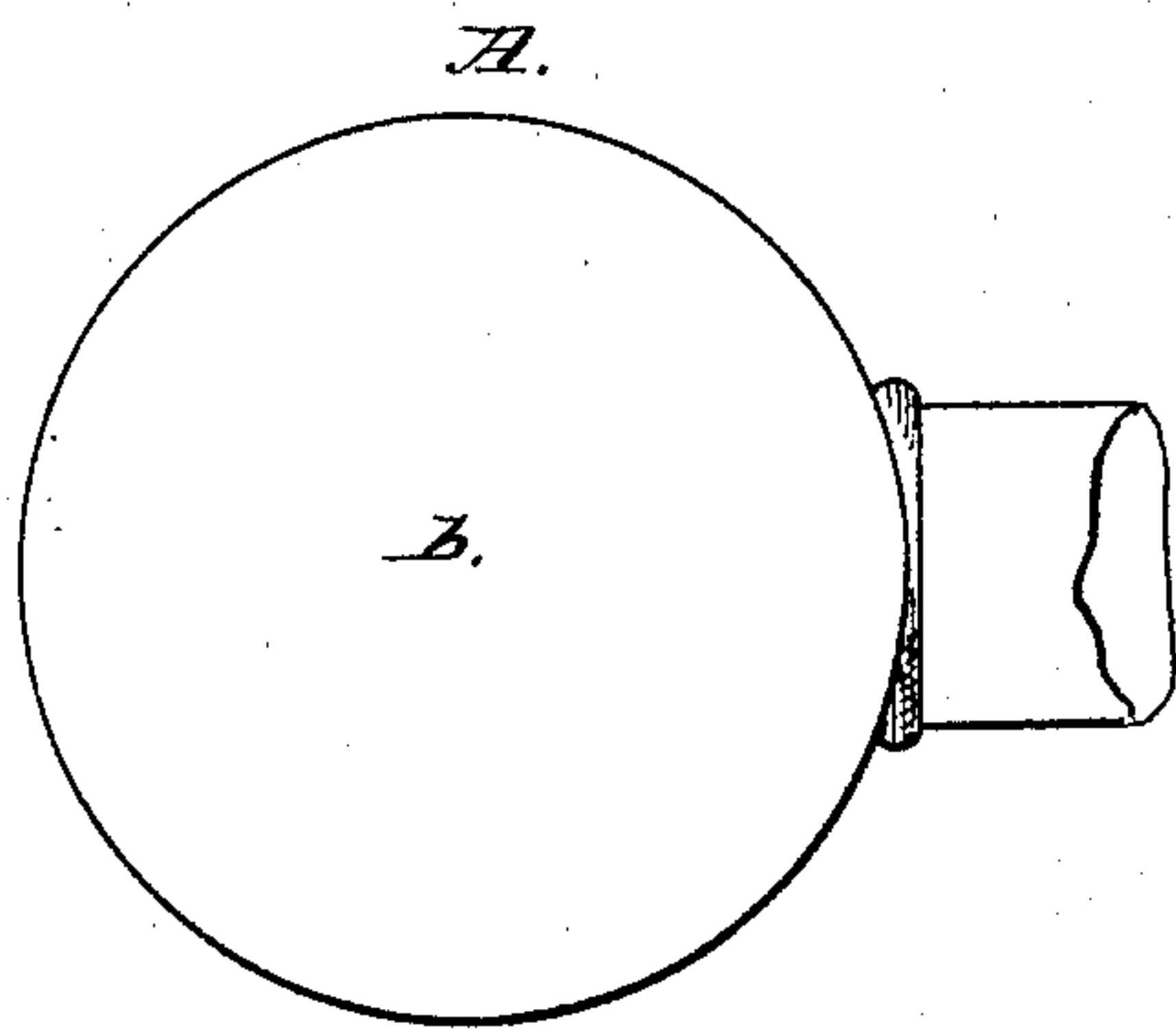


L. Byrnes
Croquet Mallet.

N^o 51016.

Patented Nov. 21, 1865.



Witnesses.
W. B. Gleason

H. Gould

Inventor:
Lawrence Byrnes
By his atty W. B. Crosby.

UNITED STATES PATENT OFFICE.

L. BYRNES, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN CROQUET-MALLETS.

Specification forming part of Letters Patent No. **51,016**, dated November 21, 1865.

To all whom it may concern:

Be it known that I, LAWRENCE BYRNES, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Croquet-Mallet; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

This invention relates to the construction of mallets used for driving the wooden balls in the game called "croquet." These mallets are usually made entirely of wood, in which form they soon become injured upon the striking-faces by contact with the balls, the wood splitting open or becoming indented, so as to render it difficult, if not impossible, to strike fairly with them, and the balls being soon battered by such contact.

It is the object of my improvement to remedy this defect in the mallet, the improvement consisting in covering one or both the striking faces with an elastic-surfaced material, which shall shield the wood from the concussion, preventing injury to itself and to the balls, and enabling the player to strike more fairly. Such improved construction is represented in the drawings, in which—

A and B, denote, respectively, an end view and a central section of the mallet-head. Over one or both faces of the mallet-head *a*, I apply a rubber cap, *b*, in such manner as to cover the entire end surface, making an elastic striking-face instead of a wooden or hard-surfaced face, as in the common construction. To apply the rubber cap so that it shall firmly fit upon the

mallet, I mold it in the form of a shallow cup and stretch the flange *c* over the perimeter of the mallet-face, which is turned down for this purpose, and is furnished with a groove, *d*, into which a lip, *e*, formed upon the cap, springs. The contraction of the flange of the rubber cap causes it to impinge tightly against the perimeter of the mallet-face, while the lip *e* and groove *d* will effectually prevent the cap from drawing off the head. I prefer to make the cap *b* of such thickness that the force of the impact is received and diffused through the elastic material, but does not extend materially into the wood beyond.

Leather has sometimes been inserted into the face of such mallets, but this does not obviate the difficulties above referred to, as the leather does not cover or make the entire striking-face, and the ball is about as liable to be struck by the exposed wood as by the leather surface, while there is no band around the circumference of the mallet-end to keep it from cracking or splitting.

I claim—

1. The construction of a croquet-mallet with an elastic cap forming the entire striking-face of one or both of its ends.

2. The formation of the cap with a flange, *c*, and with a lip, *d*, to fit and secure it to the mallet-face, substantially as described.

In witness whereof I have hereunto set my hand this 29th day of August, A. D. 1865.

L. BYRNES.

Witnesses:

J. B. CROSBY,

F. GOULD.