

(No Model.)

N. B. RUNNALS.

MALLET.

No. 393,789.

Patented Dec. 4, 1888.

Fig. 1.

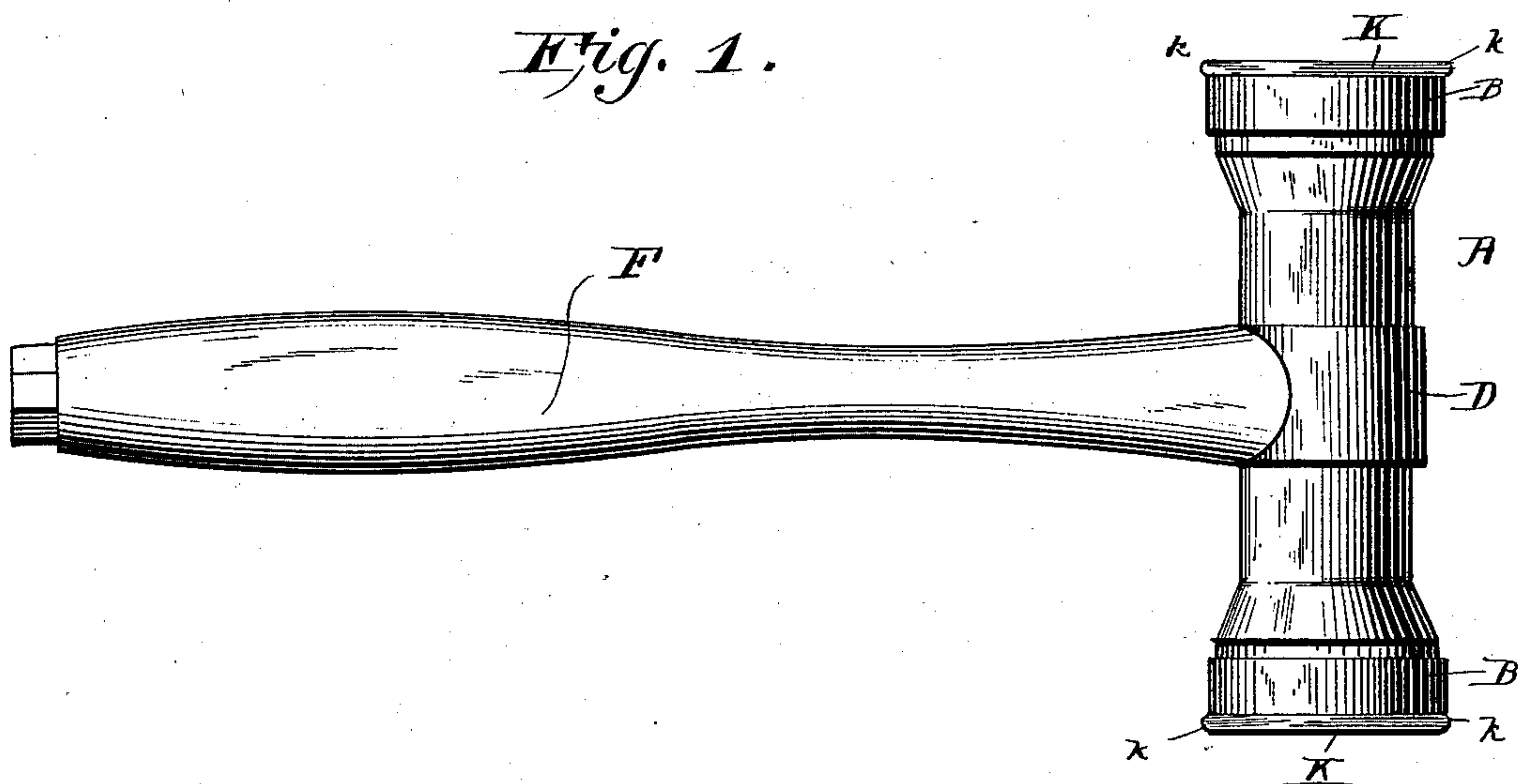


Fig. 2.

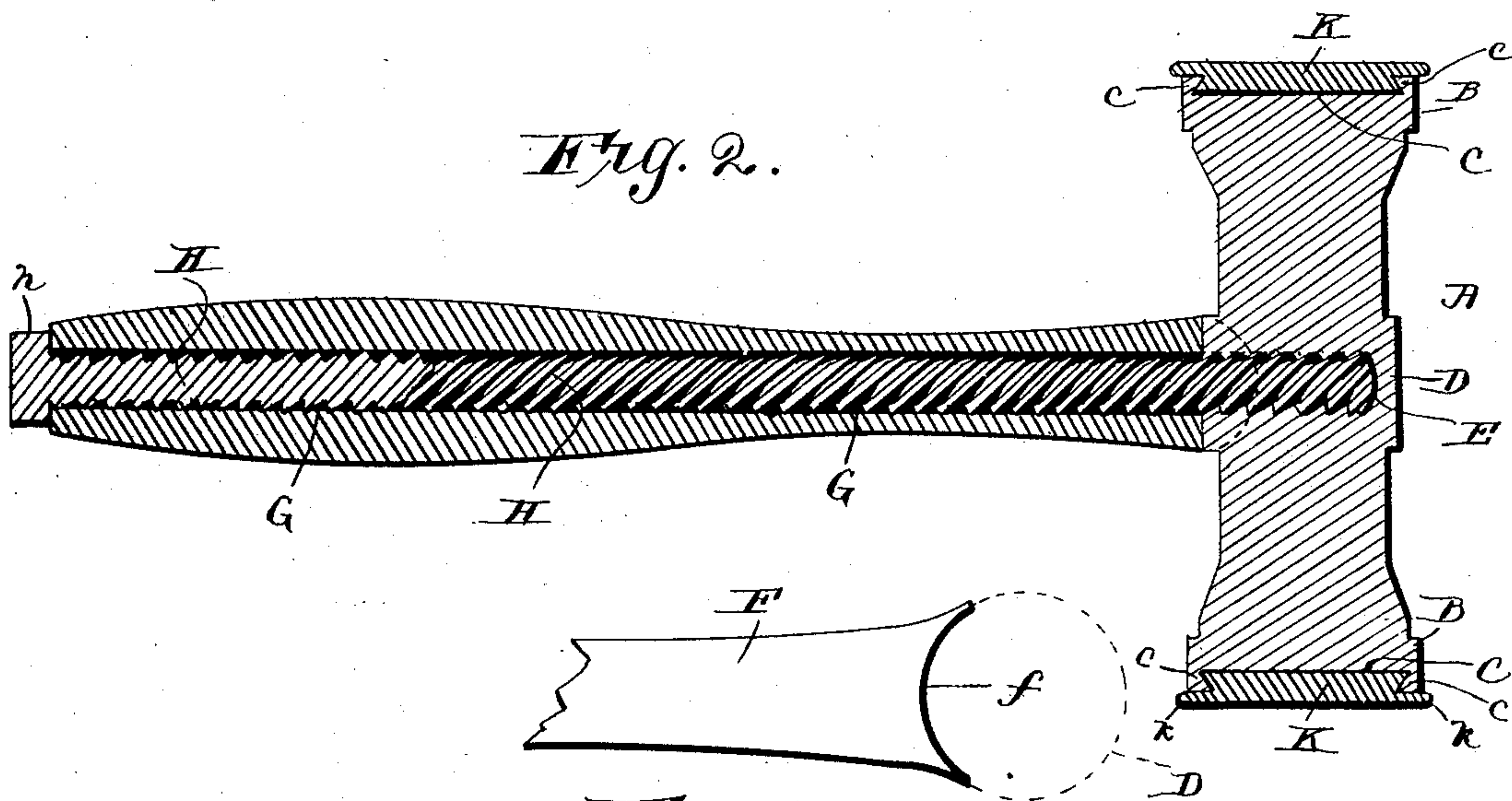


Fig. 3.

Witnesses.

Frank Owen

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UNITED STATES PATENT OFFICE.

NATHANIEL B. RUNNALS, OF PITTSFIELD, MAINE, ASSIGNOR OF ONE-HALF
TO H. J. BRACKET AND N. C. SMITH, OF SAME PLACE.

MALLET.

SPECIFICATION forming part of Letters Patent No. 393,789, dated December 4, 1888.

Application filed July 18, 1888. Serial No. 280,286. (No model.)

To all whom it may concern:

Be it known that I, NATHANIEL B. RUNNALS, a citizen of the United States, residing at Pittsfield, in the county of Somerset and State of Maine, have invented a new and useful Improvement in Mallets, of which the following is a specification.

My invention relates to improvements in mallets, having for its object to provide a simple and cheap device which will not bruise or injure the end of the handle of a chisel; and it consists in a certain novel construction and arrangement of devices, fully set forth hereinafter, and specifically pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side view of a mallet embodying my improvements. Fig. 2 is a central longitudinal sectional view of the same. Fig. 3 is a detail view showing the fitting of the handle around the head of the mallet.

Referring by letter to the drawings, A designates the cylindrical head of the mallet, which is preferably formed of turned metal, the ends of which are provided with the enlargements B B, in which are formed the depressions or sockets C C, and the center of the head is provided with a peripheral enlargement, D, in which is formed a diametrical tapped opening, E.

The handle F is provided at its inner end with a curved depression, *f*, which fits the side of the enlargement D snugly, and a central longitudinal bore, G, formed in the handle registers with the tapped opening in the head. A bolt or screw, H, is arranged in the said registering bore and opening, and when it is tightened the head is drawn firmly against the end of the handle. The bore in the handle may be made smooth, so that the bolt will slip freely therethrough; but I prefer to form the bore somewhat smaller than the bolt and allow the latter to cut threads therein as it is passed through, as in this case there will be less chance for the handle to become loose and rattle.

The sides of the depressions or sockets C C are formed by peripheral flanges *c c*, which are formed integral with the head, and the depressions or sockets are enlarged slightly

toward their inner ends by inclining or beveling the inner sides of the flanges *c*. In the depressions or sockets are arranged cushions K K, preferably of leather or a similar yielding compressible material, and these cushions are compressed forcibly into the sockets, so as to cause them to spread and snugly fit the inner ends thereof, whereby the cushions cannot become detached.

It will be seen that mallets formed in this way are smaller than wooden mallets of the same weight, and they can be made of any desired weight without rendering them clumsy.

The cushions prevent the ends of the handle of a chisel or other tool from being crushed or bruised, and at the same time, being inclosed in the depressions or sockets in the ends of the metallic head, the cushions cannot spread and thus fray out around the ends of the head.

The outer sides of the cushions are provided with small peripheral lips *k k*, which overhang the outer edges of the flanges *c c*, and thus protect the same to prevent the handle of the chisel from being accidentally struck thereby.

The outer end of the bolt H is provided with a square head, *h*, which is adapted to be engaged by a wrench to clamp the head against the end of the handle. It will be seen that when the bolt is screwed tight and the depression in the end of the handle is pressed tightly against the side of the head the handle cannot be turned independent of the head, and cannot be moved in any way until the bolt is unscrewed sufficiently to allow the depression in the end of the handle to be disengaged from the side of the head.

Having thus described the invention, I claim—

1. The herein-described hammer, comprising the cylindrical head provided at its ends with inwardly enlarged or flared depressions or sockets C C and at its center with a diametrical tapped opening, E, the cushions fitting in the depressions or sockets and provided with outwardly-extending lips, the longitudinally-bored handle provided at its inner end with a curved depression, *f*, fitting against the periphery of the head and held

thereby from turning independently of the head, and the bolt extending through the bore of the handle and engaging the tapped opening in the head, and provided at its outer end with a head which bears against the end of the handle, substantially as described.

2. In a hammer, the combination of the cylindrical head provided with a diametrical tapped opening, the handle provided with a longitudinal bore and a curved depression at its inner end fitting snugly against the periphery of the head, and the headed bolt passing inwardly through the bore of the handle

and engaging the tapped opening in the head, whereby the depression in the end of the handle is held tightly against the side of the head to prevent the head and handle from turning independently, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

NATHANIEL B. RUNNALS.

Witnesses:

WALTER K. DAMAN,

ALFRED H. WEBENDORFER.