

No. 662,691.

Patented Nov. 27, 1900.

G. B. GODDARD.

MALLET.

(Application filed Aug. 22, 1900.)

(No Model.)

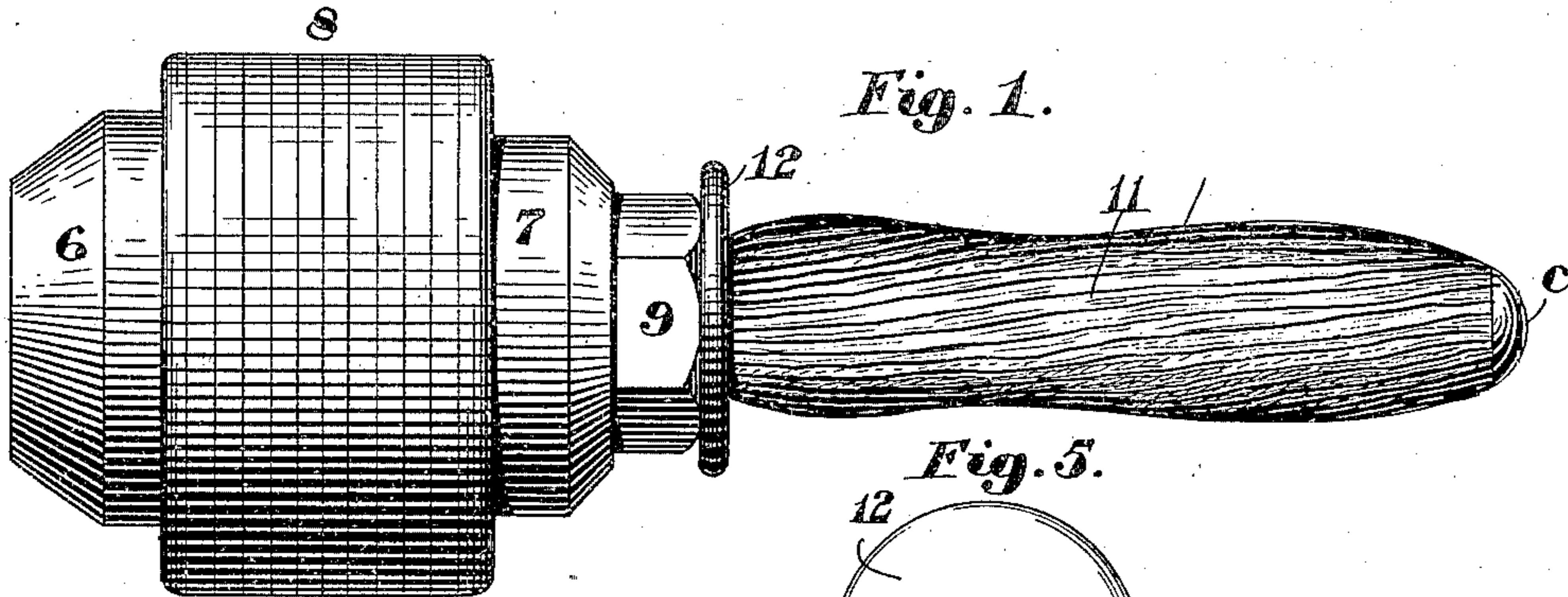


Fig. 5.

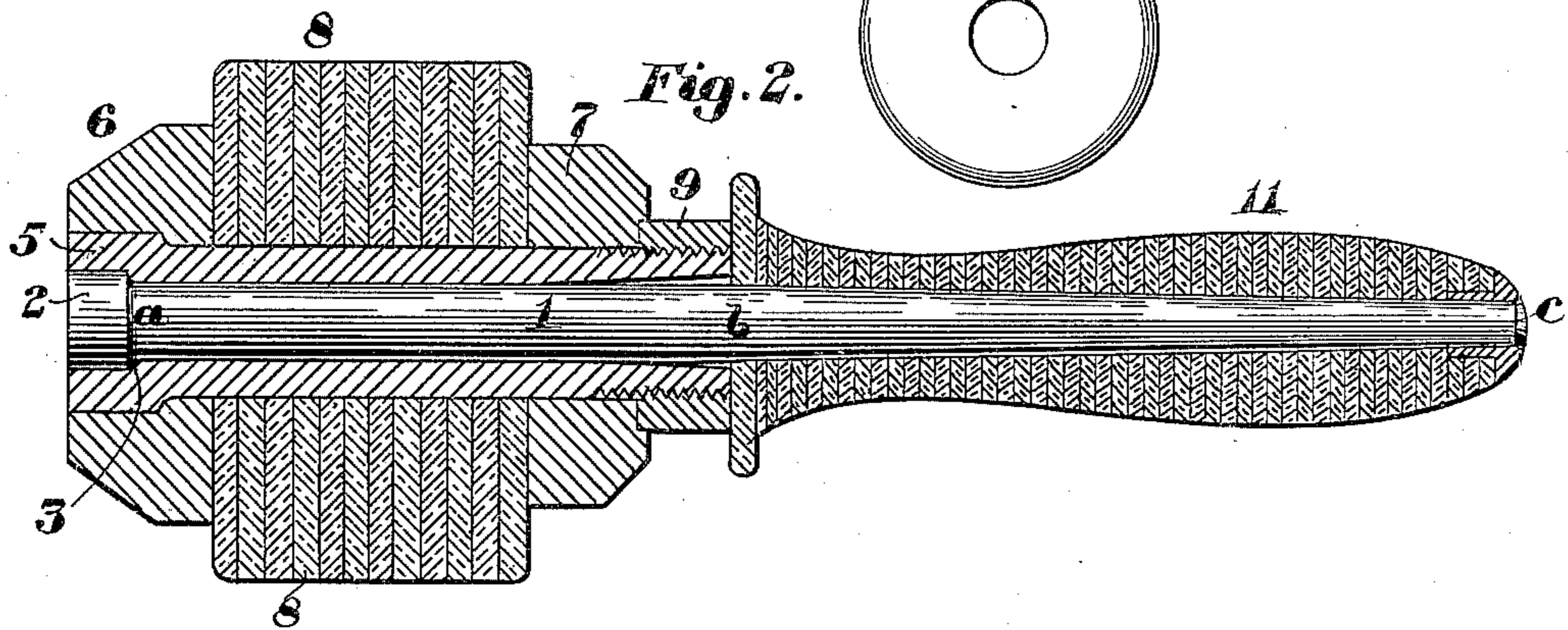


Fig. 2.

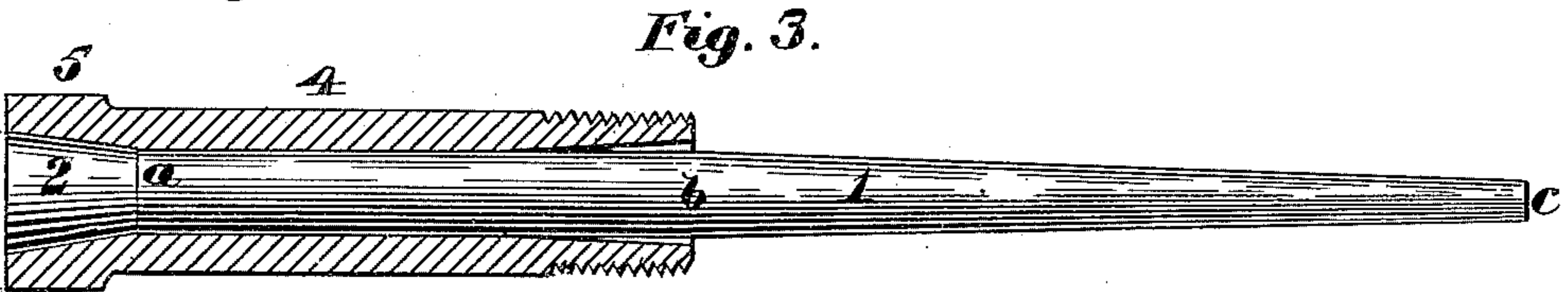


Fig. 3.

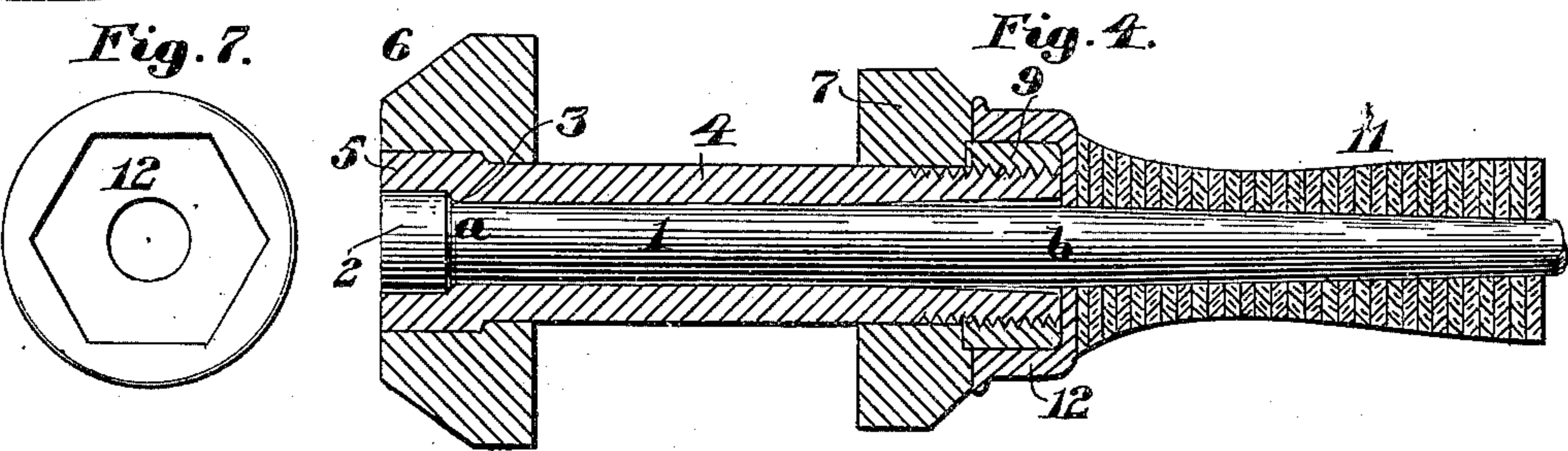


Fig. 4.

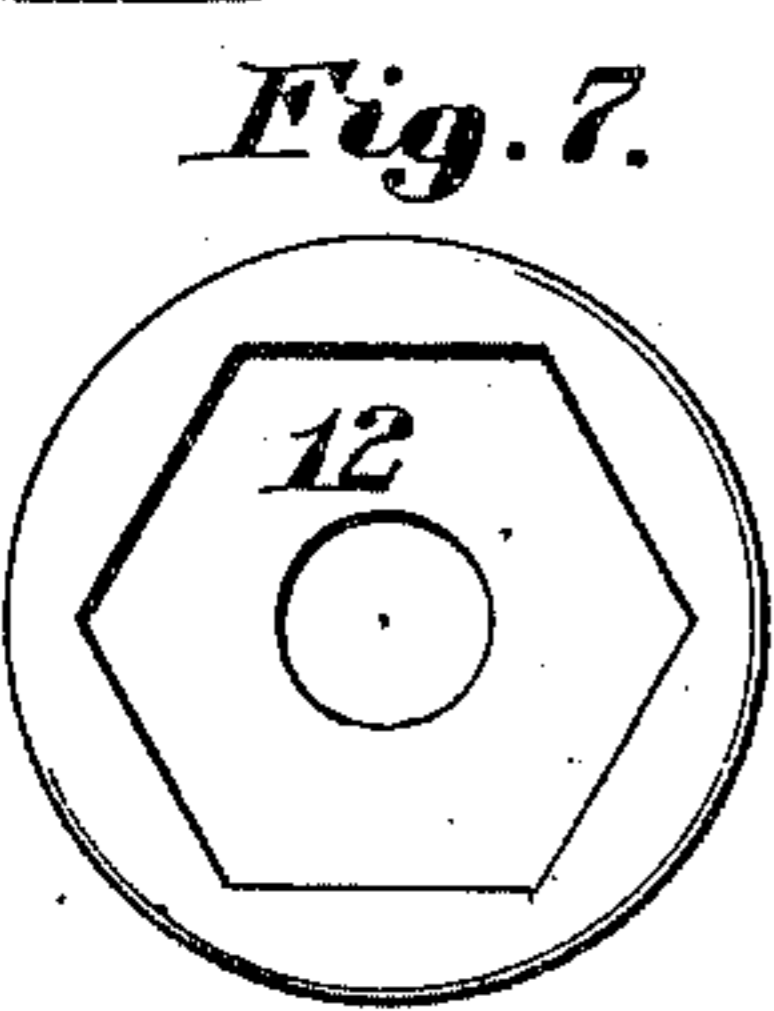


Fig. 7.

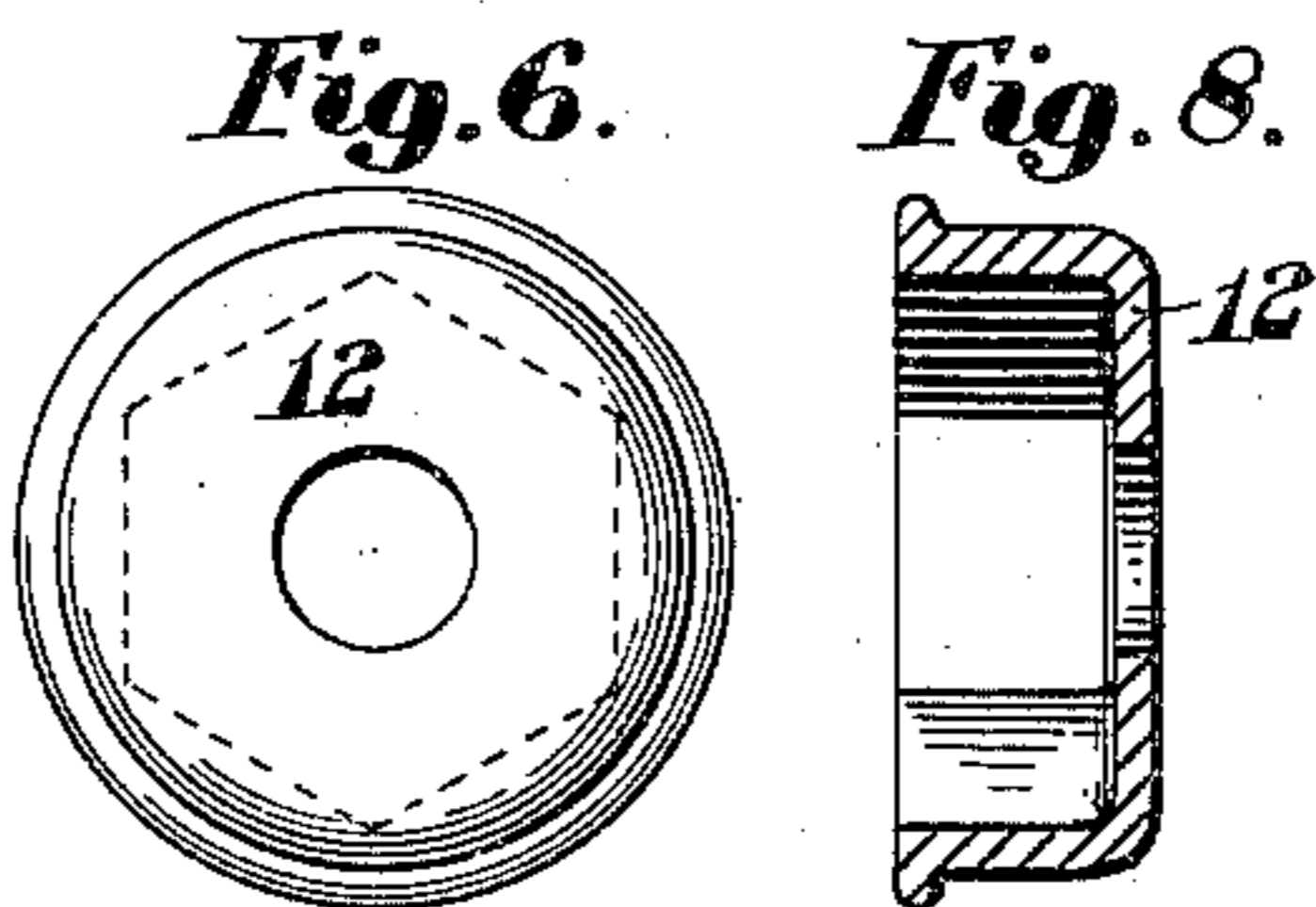


Fig. 6.

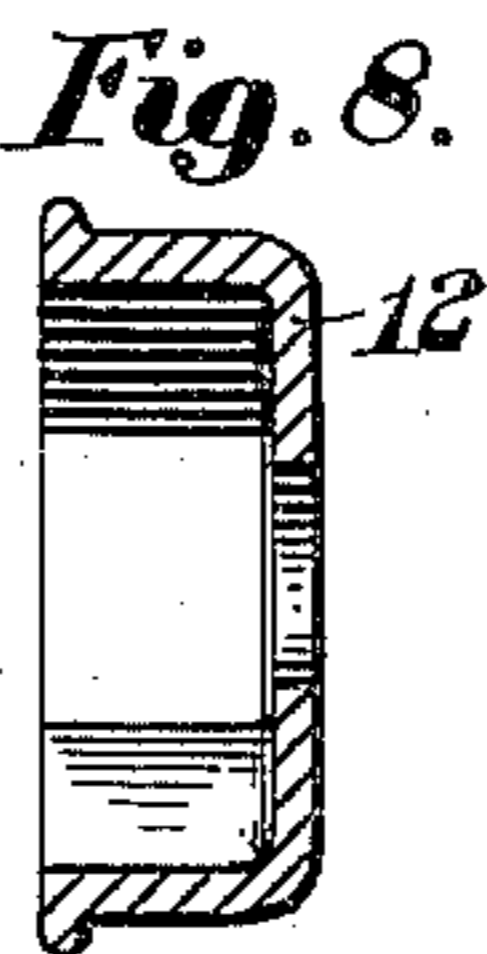


Fig. 8.

Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE B. GODDARD, OF BROCKTON, MASSACHUSETTS.

MALLET.

SPECIFICATION forming part of Letters Patent No. 662,691, dated November 27, 1900.

Application filed August 22, 1900. Serial No. 27,688. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. GODDARD, of Brockton, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Mallets, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to mallets of the class usually used in shoe factories; and it consists in certain novel features of construction, arrangement, and combination of parts, which will be readily understood by reference to the description of the accompanying drawings and to the claims hereto appended and in which my invention is clearly pointed out.

Figure 1 of the drawings is an elevation of a mallet illustrating my invention, the body of the handle being of wood. Fig. 2 is a central longitudinal section of the same, but having the handle-covering composed of rings of leather. Fig. 3 is an elevation of a slightly-modified form of the handle-bolt with a longitudinal section of the sleeve. Fig. 4 is a partial central longitudinal section with the rawhide body of the mallet removed and illustrating a modified form of the hand-guard. Fig. 5 is an elevation of one form of the hand-guard; and Figs. 6, 7, and 8 are respectively an outside elevation, an inside elevation, and a section of a modified form of the hand-guard.

In the drawings, 1 is the handle-bolt, provided with a head 2 at one end, which may form a shoulder 3, as shown in Figs 2 and 4, or may be in the form of a frustum of a cone, as shown in Fig. 3. This bolt is made straight or of uniform diameter from *a* to *b* and tapering from *b* to *c*. A metallic sleeve 4, provided with the head 5 at one end and a male screw-thread on its other end, the bore of said sleeve having an enlargement at its headed end to receive the head 2 of the bolt 1 and having a gradually-expanding section at its other end, is fitted to the handle-bolt 1, as shown.

The mallet-head 10 is composed of the collars 6 and 7 and the rawhide disks 8, clamped firmly together upon the sleeve 4 by the nut 9, as shown in Figs. 1 and 2.

That portion of the bolt 1 which projects beyond the threaded end of the sleeve 4 has secured thereon in any well-known manner

the handle 11, which may be of wood, as shown in Fig. 1, or of rings of leather firmly compressed together upon said bolt, as shown in Figs. 2 and 4.

The collar 6 has a portion of the opening through it enlarged to receive the head 5 of the sleeve 4, and the collar 7 has formed in its outer face a shallow hexagonal recess to receive the nut 9, all as shown in Figs. 2 and 4.

The construction of the mallet so far as described is substantially the same as that shown and described in the Letters Patent No. 414,808, granted to me November 12, 1889, except that in said patent the mallet-head is built directly upon the handle-bolt, which is threaded to receive the clamping-nut. This has been found to be an objectionable feature in the construction of the mallet, owing to the liability of the breaking of the handle-bolt, which occasionally occurs and invariably at some point in the threaded section of said bolt, thus rendering the mallet useless. To obviate this objection and render the mallet less liable to such accidents, and therefore more durable, is one of the objects of my present invention, and to this end I build the mallet-head complete upon the sleeve 4, having the flaring bore at its threaded end, whereby the handle-bolt is permitted to spring slightly within said sleeve when a heavy blow is struck, and thus render the liability of breakage much less than when the head is built directly upon the handle-bolt, as heretofore. Another objection that has been raised to my said prior invention is that in cases where the operator wishes to strike a light blow he seizes the mallet-handle close to the clamping-nut, and after continuous use in this way for some time the angular corners of said nut coming repeatedly in contact with the hand between the thumb and forefinger soon chafes and irritates the flesh to such an extent as to cause a sore. To obviate this objection, I provide the handle at its end next the clamping-nut with a hand-guard 12, so arranged relative to said nut as to prevent the hand of the operator coming in contact with said nut and so formed as to present no angular or rough surfaces to contact with the hand. This guard may be made in the form of a circular disk or flange hav-

ing a smooth rounded edge, as shown in Figs. 1, 2, and 5, or in the form of a cup-guard to fit over and inclose said nut, and having a smooth circular outer surface, as shown in Figs. 4, 6, 7, and 8. This guard may be made of leather or rawhide and turned to a perfectly smooth surface.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

10 1. In a mallet of the class described, the combination of a handle-bolt having a head at one end, and a portion of its length made cylindrical, or of uniform diameter, and the remaining portion made tapering; a sleeve
15 inclosing the cylindrical portion of said handle-bolt, and fitting closely thereto for a distance from said bolt-head equal to about two-thirds the length of said sleeve, and not touching said bolt for the remaining portion of its
20 length, and provided with a head at one end, and a male screw-thread at its other end, the collars 6 and 7, the former provided with a recess to receive the head of said sleeve; a plurality of rawhide disks between said col-
25 lars; a clamping-nut fitted to the threaded end of said sleeve and a suitable covering inclosing that portion of the handle-bolt which projects beyond the threaded end of said sleeve to form a handle.

30 2. In a mallet of the class described, the combination of a smooth handle-bolt provided

with a head at one end; a sleeve fitted thereon and provided with a head at one end and a male screw-thread on its other end, and having a portion of its bore at its threaded
35 end frusto-conical; the collars 6 and 7 fitted to said sleeve and the former provided with a recess to receive the head of said sleeve; a plurality of rawhide disks between said collars; a clamping-nut fitted to the threaded
40 end of said sleeve; and a suitable covering inclosing that portion of the handle-bolt which projects beyond the threaded end of said sleeve to form a suitable handle.

3. The combination of a mallet-head com-
45 prising two collars, a series of rawhide disks between said collars, and means for clamping said parts together; and a handle attached to said head and provided at its inner end with a cup-shaped hand-guard having a
50 smooth circular exterior surface and constructed and arranged to entirely inclose the clamping-nut substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of
55 two subscribing witnesses, on this 20th day of August, A. D. 1900.

GEORGE B. GODDARD.

Witnesses:

N. C. LOMBARD,

JAMES A. WOODBURY.