

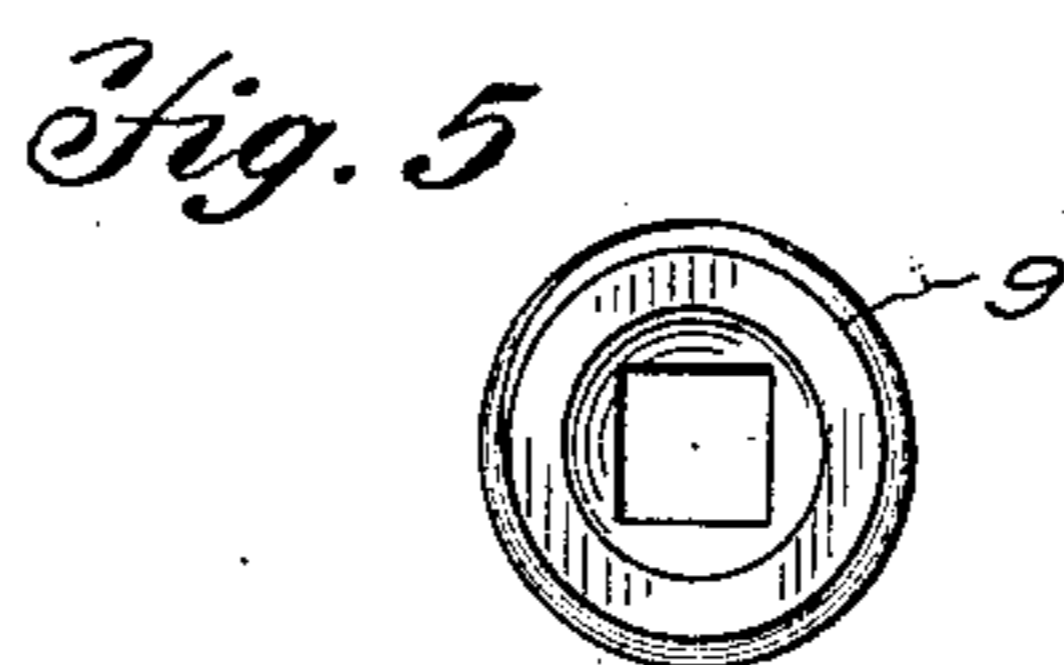
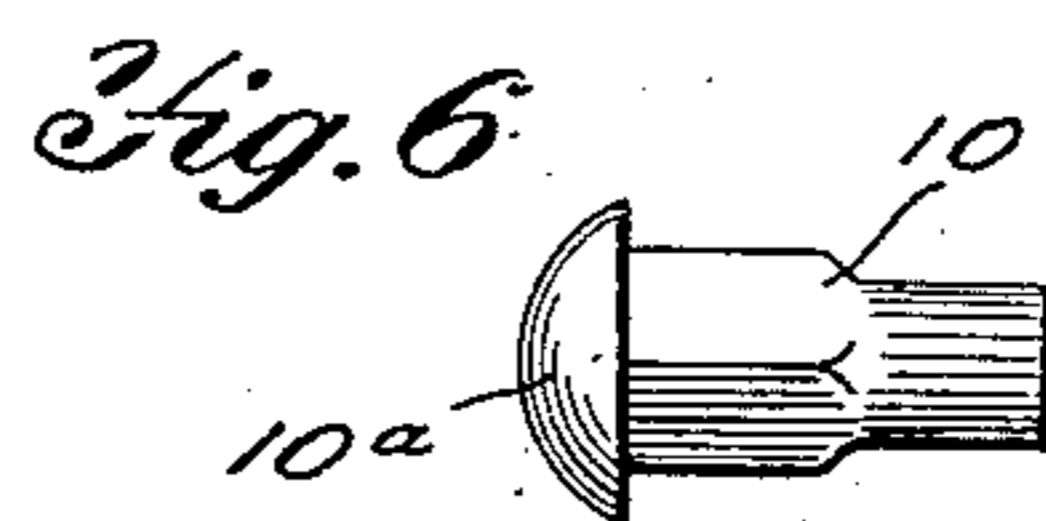
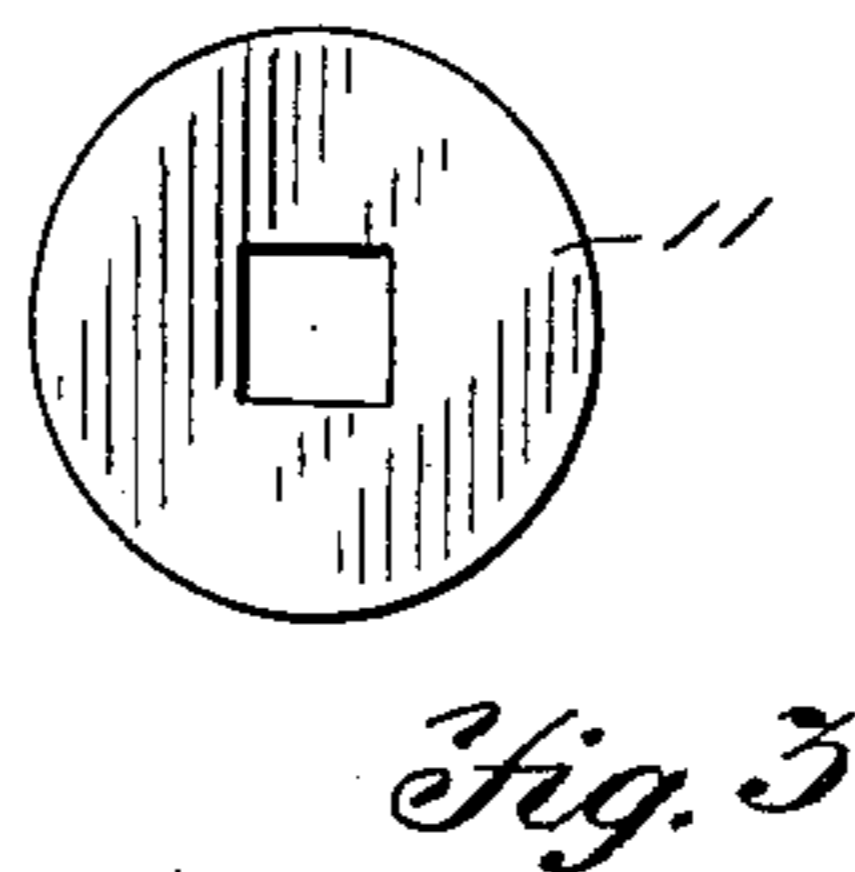
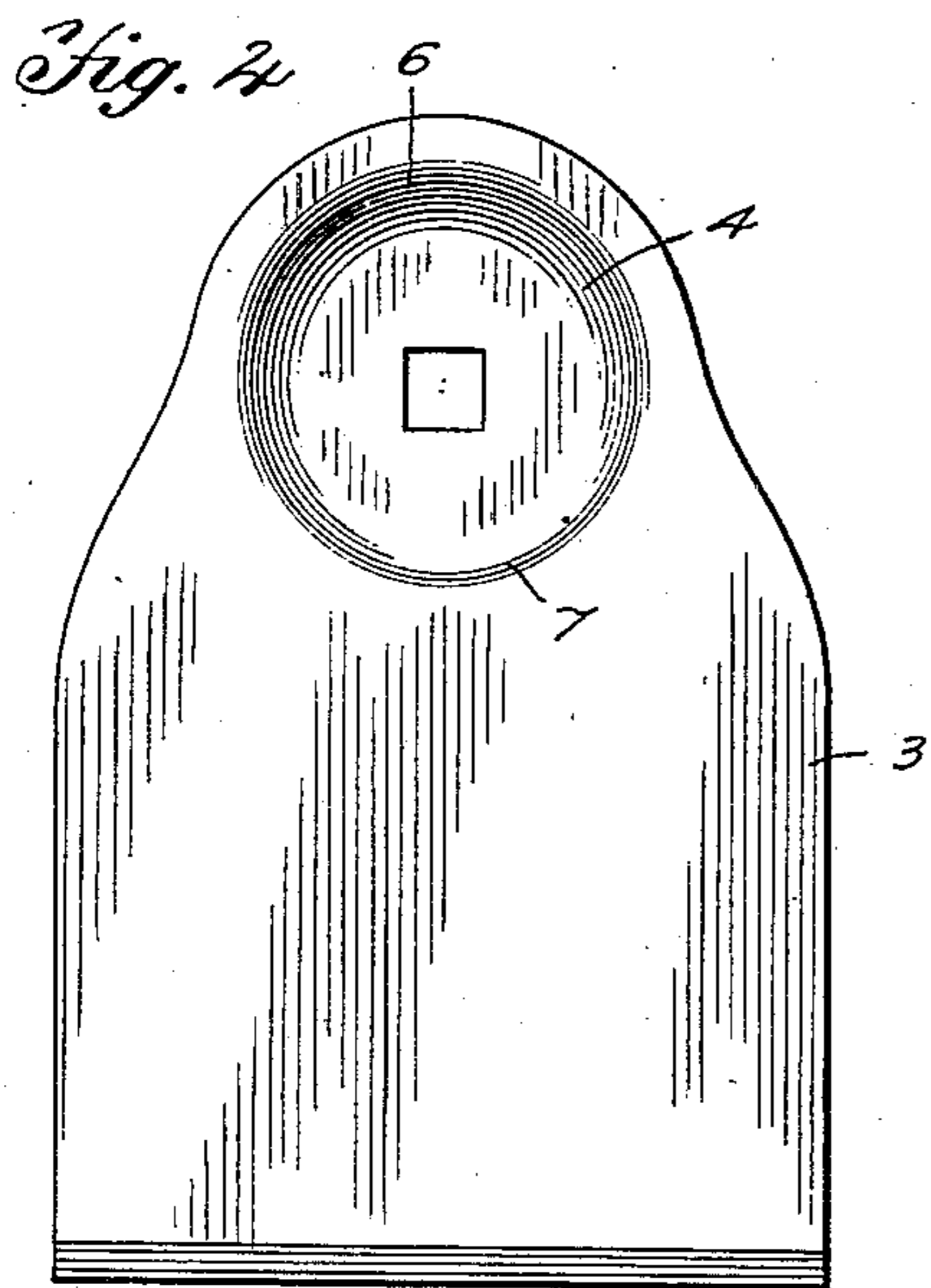
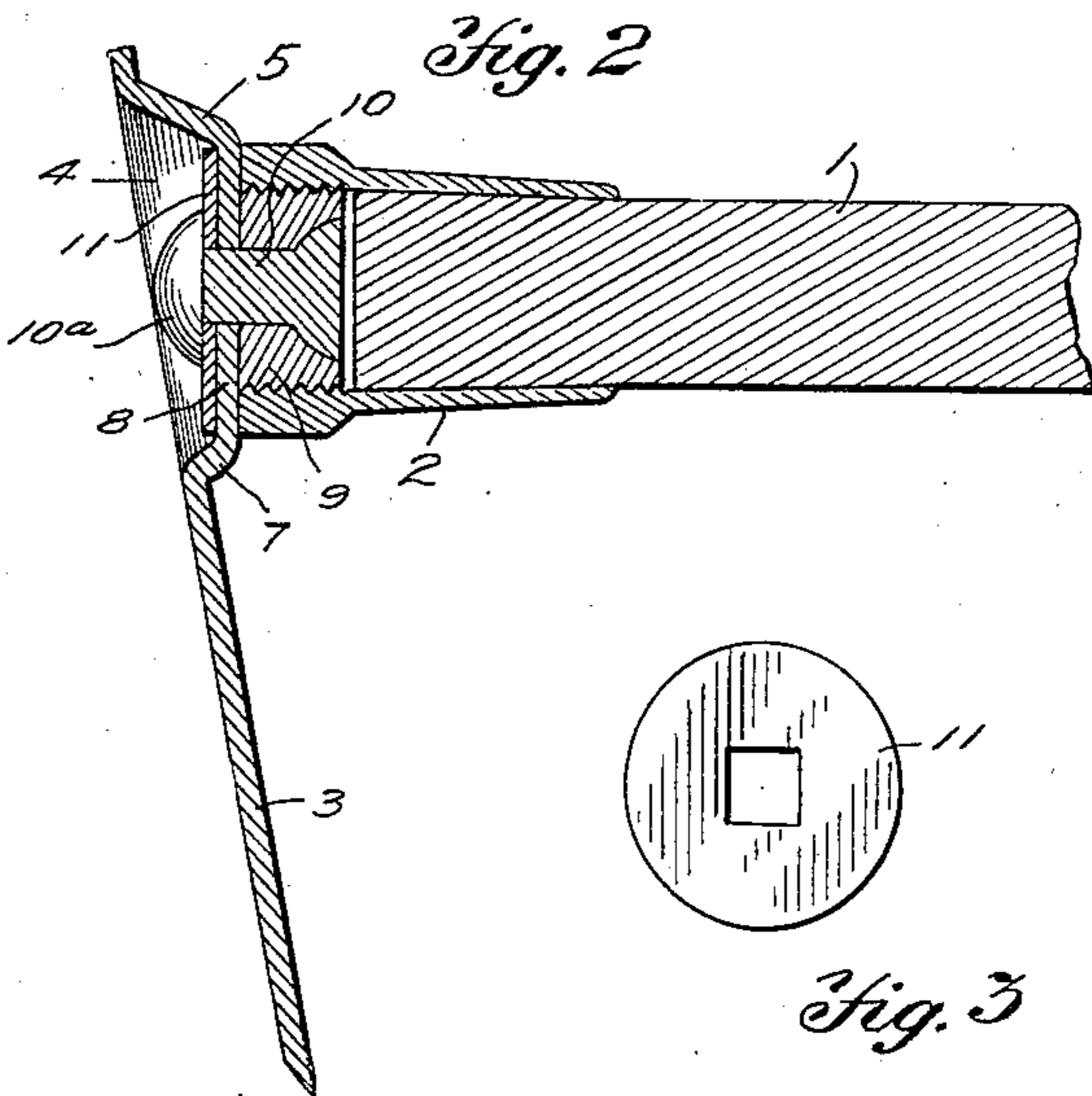
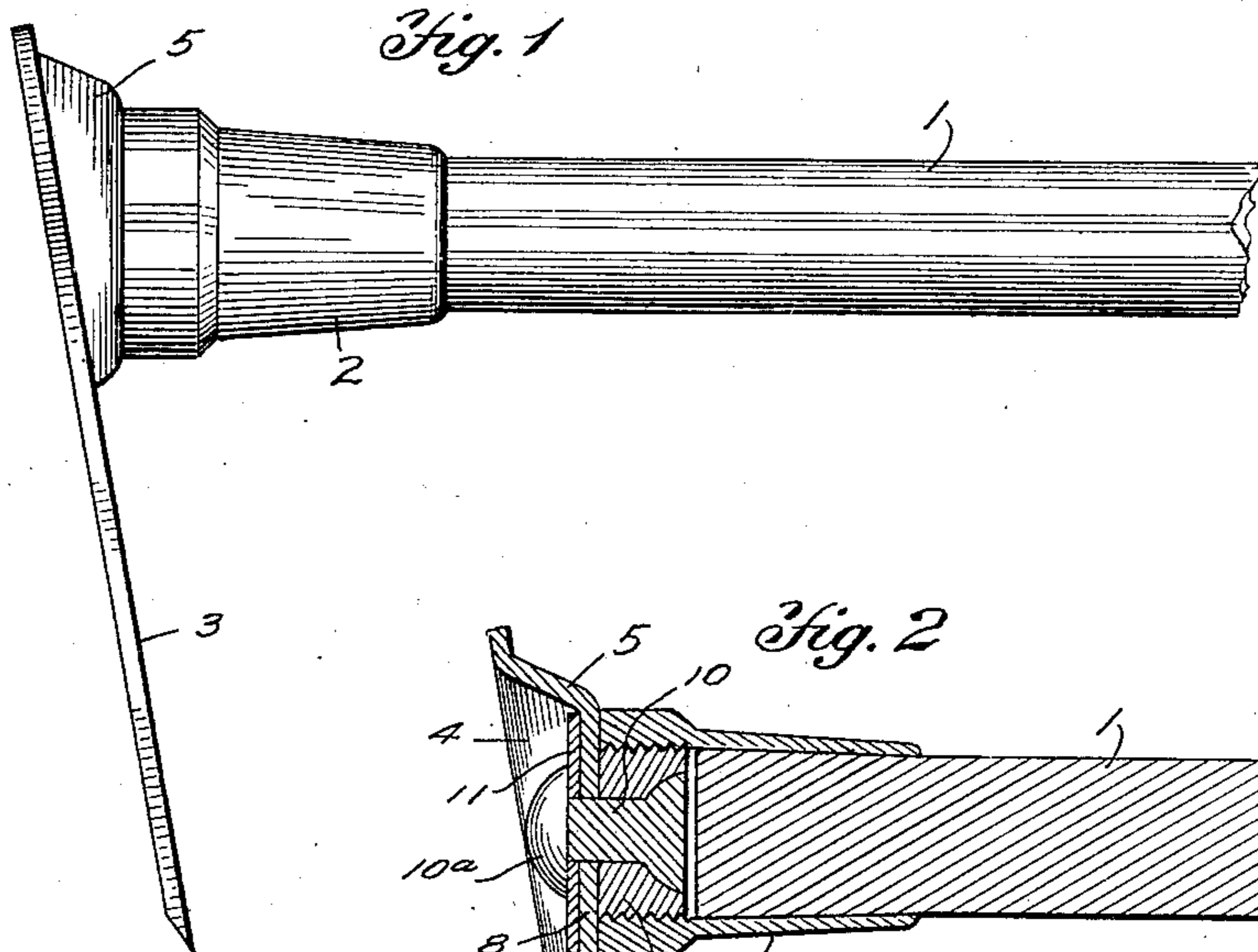
W. A. SPARKS.

HOE.

APPLICATION FILED FEB. 7, 1908.

898,521.

Patented Sept. 15, 1908.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM A. SPARKS, OF ST. MARYS, WEST VIRGINIA.

HOE.

No. 898,521.

Specification of Letters Patent.

Patented Sept. 15, 1908.

Application filed February 7, 1908. Serial No. 414,816.

To all whom it may concern:

Be it known that I, WILLIAM A SPARKS, a citizen of the United States, residing at St. Marys, in the county of Pleasants and State of West Virginia, have invented certain new and useful Improvements in Hoes; 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 appertains to make and use the same.

My invention relates to new and useful improvements in hoes and more particularly to that class of hoes having interchangeable blades.

It has for its object to simplify the construction and reduce the number of detachable parts.

It is designed as an improvement on the hoe shown and described in my U. S. Patent No. 843,501, dated Feb. 5, 1907.

The invention consists in the features of construction and combinations of parts hereinafter described and specified in the claims.

In the accompanying drawings, illustrating the preferred embodiment of my invention: Figure 1 is a side elevation of a hoe constructed in accordance with my invention. Fig. 2 is a longitudinal vertical section thereof, and Figs. 3, 4, 5 and 6 are detail views of the washer, blade, shank piece and rivet bolt respectively.

Referring more particularly to the drawing, 1 designates the handle on which is mounted the interiorly screw threaded socket piece 2. The blade 3 is constructed as in my Patent 843,501 above referred to, being provided with a depression or offset portion 4 which is preferably circular and has a wall 5 which extends rearwardly and tapers slightly inward. Said depression is deeper at the top 6 than at the bottom 7, as shown in Fig. 4. Hence the rear face 8 of the depression is inclined to the face of the blade. Whereas said rear face of the depression in Patent No. 843,501 was provided with a circular opening, in the present construction a smaller square opening is formed in said rear face.

An exteriorly screw threaded shank piece 9 is secured to the rear face of the depression in the blade by means of a square shanked rivet bolt 10 passed through the square opening in the rear face of said depression and a square opening in said shank piece. A washer 11 is preferably interposed between the head 10^a of the rivet bolt and the rear

face of the depression in the blade to strengthen the parts. Said washer is also provided with a square opening as shown in Fig. 3 for the passage of the shank of said rivet bolt.

It will be observed that in the present construction the shank piece is permanently secured to and made a part of the blade so that there are no small parts to become lost when the blade is detached from the socket piece on the handle. The present construction also has all the advantages possessed by that shown in my Patent No. 843,501.

I claim:

1. A hoe comprising a handle carrying a screw threaded socket piece, a blade having a perforation therein, a screw threaded shank piece adapted to engage said socket piece and also having a perforation therethrough, and a rivet passed through said perforations and securing said shank piece to said blade.

2. A hoe comprising a handle carrying a screw threaded socket piece, a blade having a square perforation therein, a screw threaded shank piece adapted to engage said socket piece and also having a square perforation therethrough, and a square shanked rivet bolt passed through said perforations and securing said shank piece to said blade.

3. A hoe comprising a handle carrying a screw threaded socket piece, a blade having a square perforation therein, a screw threaded shank piece adapted to engage said socket piece and also having a square perforation therethrough, a square shanked rivet bolt passed through said perforations and securing said shank piece to said blade, and a washer interposed between the head of said rivet bolt and the blade.

4. A hoe comprising a handle carrying a screw threaded socket piece, a blade having a depression therein, the rear face of said depression being arranged at an angle with the blade, and a screw threaded shank piece secured to the rear face of said depression and adapted to engage said socket piece.

5. A hoe comprising a handle carrying a screw threaded socket piece, a blade having a depression therein, a perforation arranged in the rear face of said depression, said rear face being arranged at an angle with the blade, a screw threaded shank piece adapted to engage said socket piece and also having a perforation therethrough, and a rivet passed through said perforations and securing said shank piece to said blade.

6. A hoe comprising a handle carrying a screw threaded socket piece, a blade having a depression therein, a square perforation arranged in the rear face of said depression, 5 said rear face being arranged at an angle with the blade, a screw threaded shank piece adapted to engage said socket piece and also having a square perforation therethrough, and a rivet passed through said perforations 10 and securing said shank piece to said blade.

7. A hoe comprising a handle carrying a screw threaded socket piece, a blade having a depression therein, a square perforation arranged in the rear face of said depression,

said rear face being arranged at an angle with 15 the blade, a screw threaded shank piece adapted to engage said socket piece and also having a square perforation therethrough, a rivet passed through said perforations and securing said shank piece to said blade, and a 20 washer interposed between the head of said rivet bolt and the blade.

In testimony whereof, I affix my signature, in presence of two witnesses.

WILLIAM A. SPARKS.

Witnesses:

CLYDE B. JOHNSON,
O. C. SWEENEY.