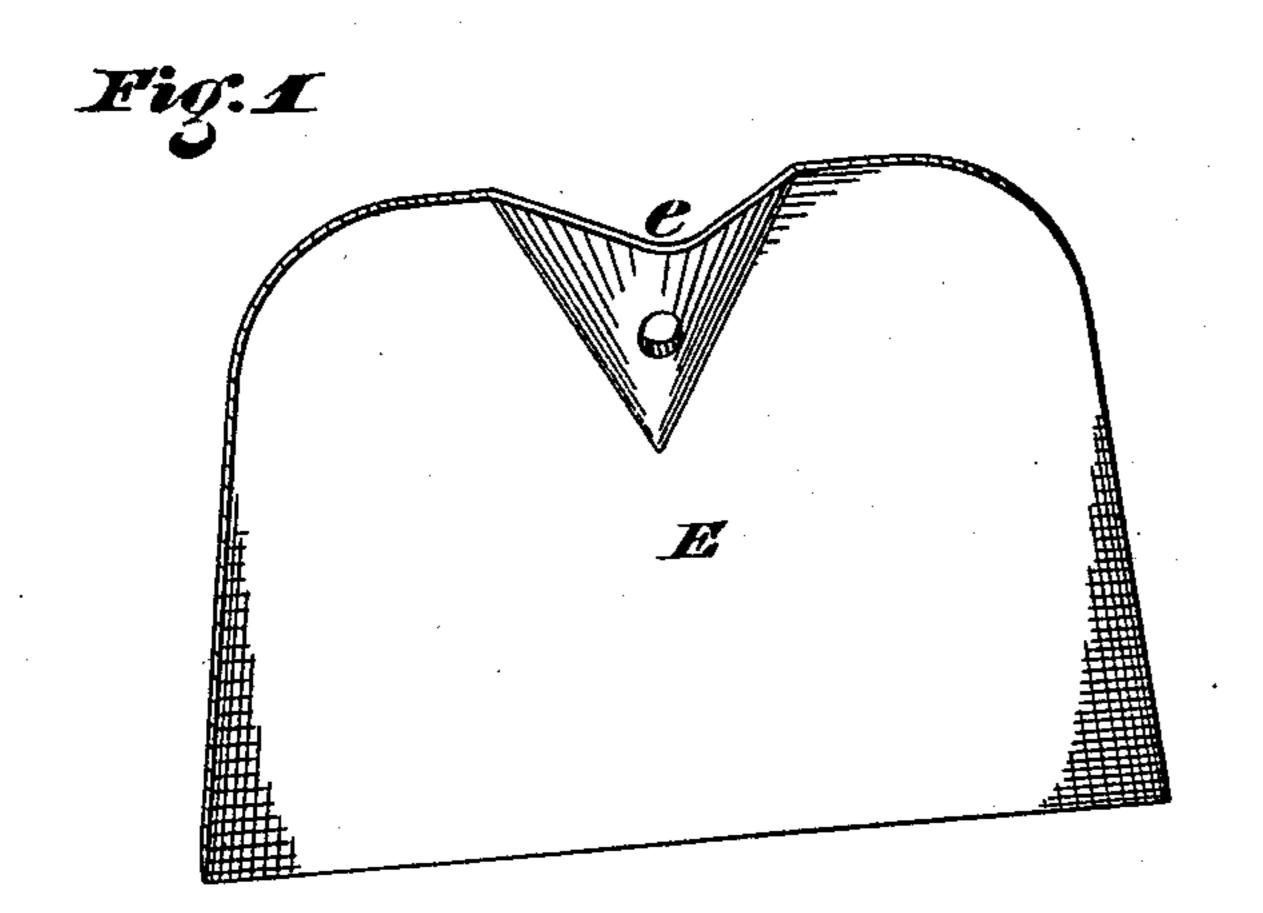
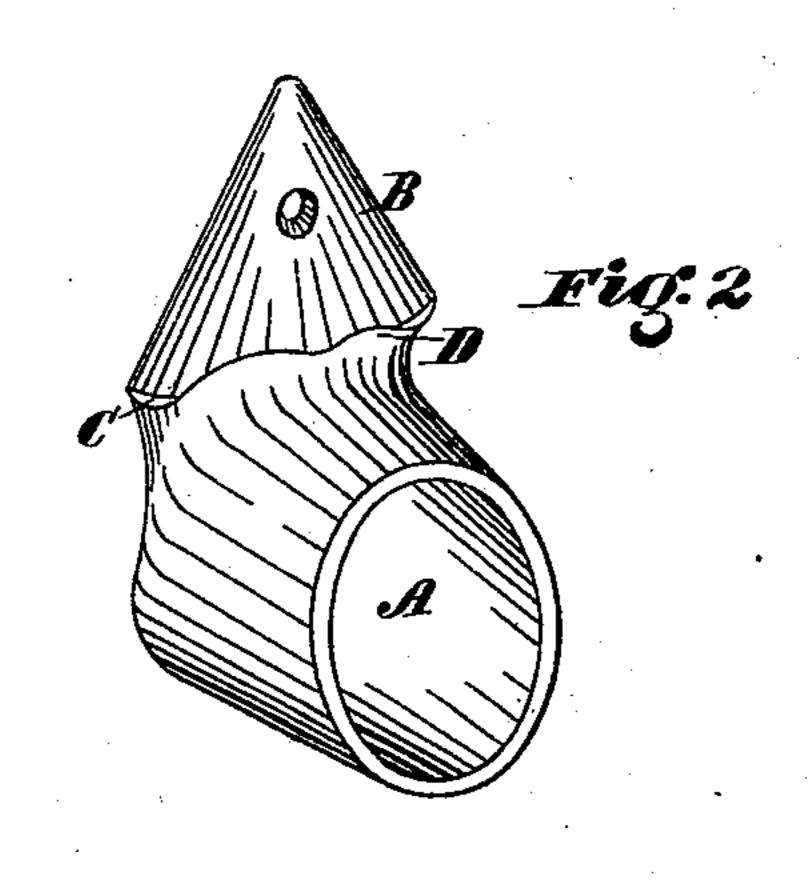
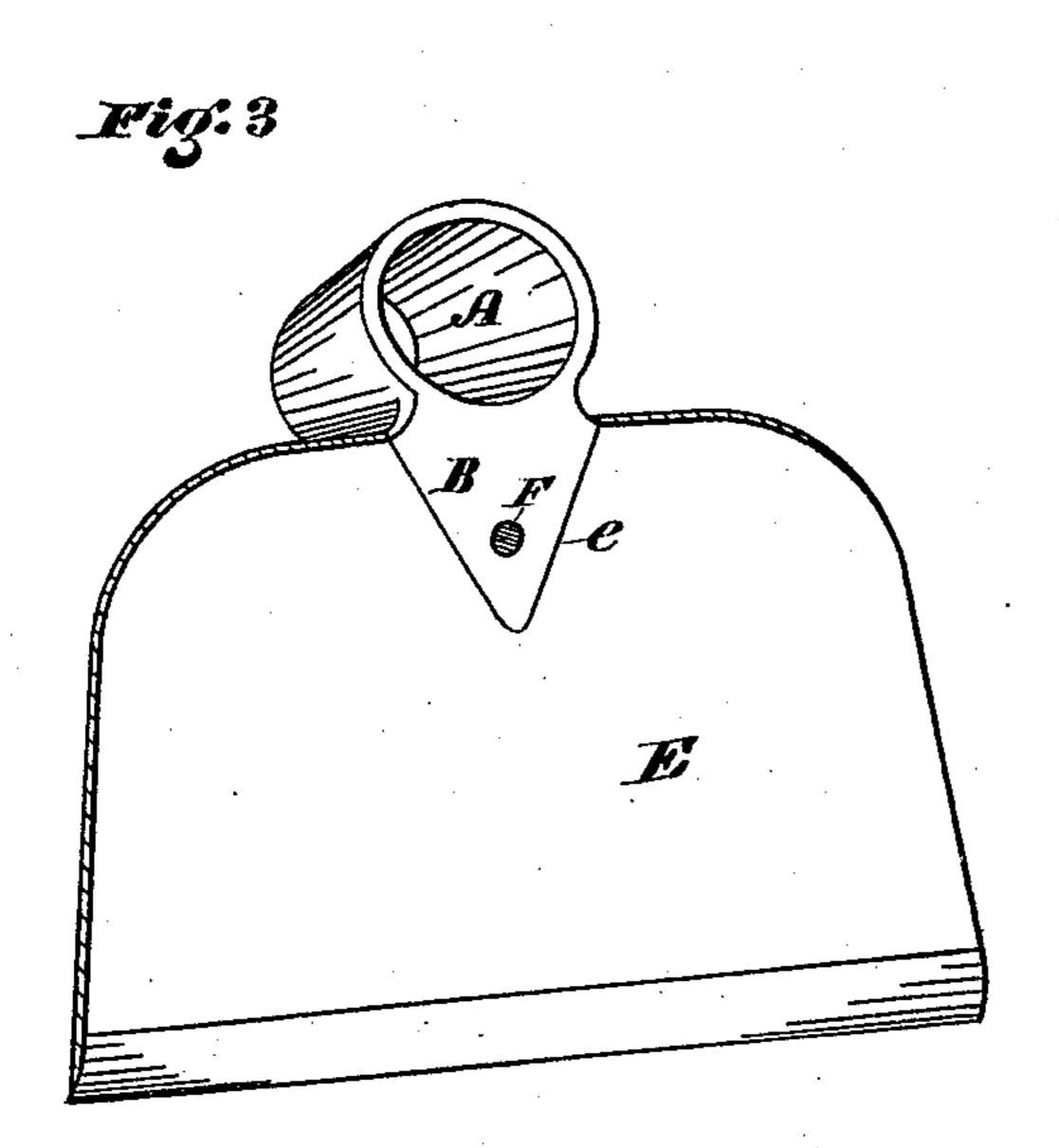
T. WEISS.
Hoe.

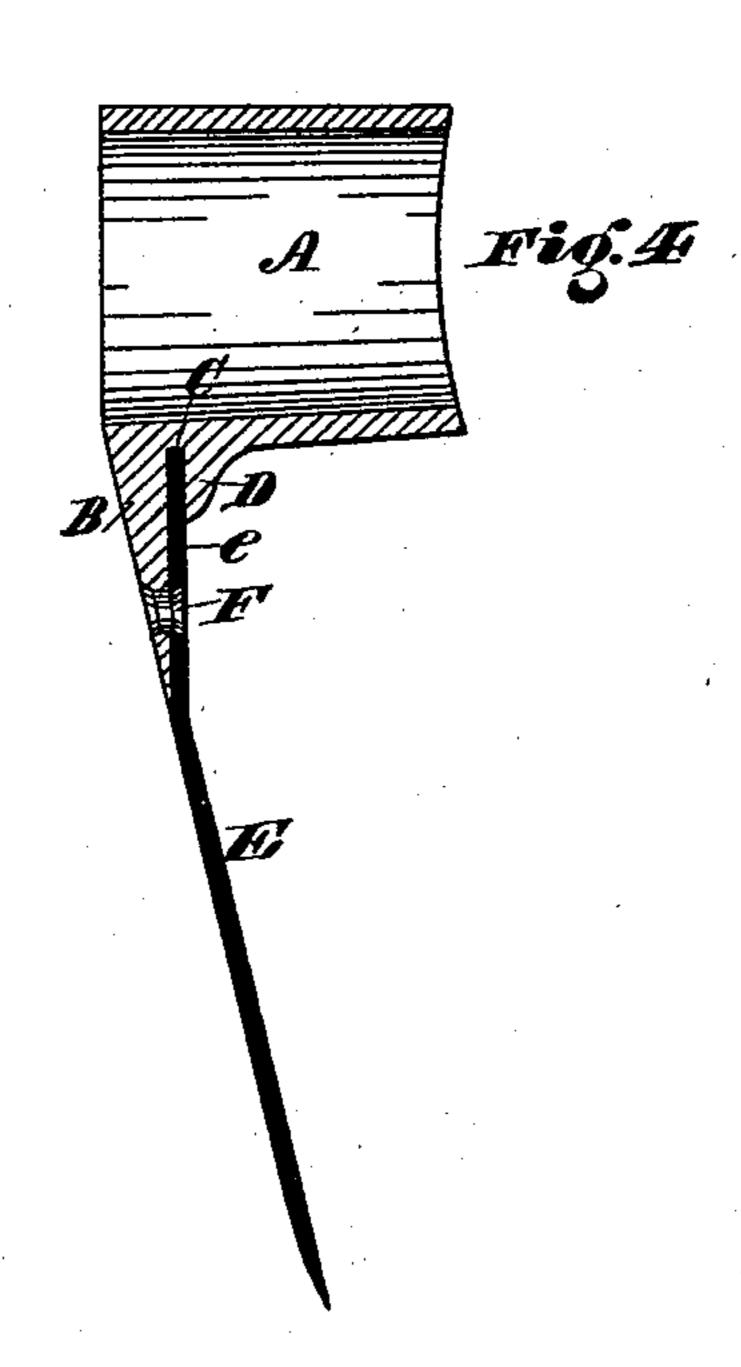
No. 209,000.

Patented Oct. 15, 1878.









Saml, J. Van Stavoren Thomas Heise

Jos. B. Connolly By Connolly Brown, ATTORNEYS.

## UNITED STATES PATENT OFFICE.

THOMAS WEISS, OF BETHLEHEM, PENNSYLVANIA.

## IMPROVEMENT IN HOES.

Specification forming part of Letters Patent No. 209,000, dated October 15, 1878; application filed February 5, 1878.

To all whom it may concern:

Be it known that I, Thomas Weiss, of Bethlehem, in the county of Northampton and State of Pennsylvania, 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 pertains to make and use it, reference being had to the accompanying drawing, which forms part of this specification, in which—

Figure 1 is a perspective of the blade. Fig. 2 is a perspective of the eye. Fig. 3 is a perspective of the hoe, and Fig. 4 is a vertical longitudinal section of the hoe.

My invention has for its object to provide more secure means for fastening the eye and blade of a hoe together than have been heretofore obtained; also, to obtain a smooth or

even back and face for the hoe-blade.

My improvements consist in the peculiar construction of the eye and hoe-blade, said eye being formed with a groove above or inside of the lug or tang, and said blade being formed with a socket or recess for the reception of said lug or tang.

My improvements further consist in the combination of the hoe-blade and eye, con-

structed as above set forth.

Referring to the accompanying drawing, A designates the eye, having a lug or tang, B. C is a groove or socket in the eye, above or inside of the lug B, leaving a rim or flange, D, the edge of the blade E being inserted in said groove between said lug and rim. The blade E is struck up to form a recess or socket, e, in which the lug or tang B rests, said lug being thus flush with the back of the blade E, the latter by this means being rendered smooth or even. F is a rivet passing through the tang B and blade E.

The advantages of the foregoing construction are, briefly, as follows: The blade has a smooth or even back, devoid of any projection which would interfere with the easy working

of the hoe, while at the same time the tang or lug is back of the blade, taking or receiving the strain and relieving the rivets accordingly. The front of the blade is also smooth, the elevation produced by the formation of the socket not being abrupt or of such character as to form an obstruction or impediment. The flange or rim D is also much thicker, and therefore more secure and stronger than it would be if formed on the other side of the lug or tang. The rivet F merely serves the purpose of holding the eye and blade together, and is not subject to the strain which falls on hoes of the common construction, wherein the eye and blade are so riveted that the entire strain of working falls on such rivets. By my improvements, therefore, I produce a hoe having a blade with smooth face and back, and one in which the rivet is wholly relieved of the strain incident to working.

I am aware that hoe-blades have been made with a recess to receive a tang or lug on the eye of the hoe, and the blade secured to said tang by rivets, with its surface flush or even

therewith.

but

I am also aware that a hoe has been made with a socket or groove in the eye to receive the upper edge of the blade.

I do not, therefore, claim a hoe possessing either of the above-mentioned peculiarities;

What I claim is—

The combination, with the eye A, having the groove or socket C, rim or flange D on the inner or face side, and lug or tang B, of the hoe-blade E, having a socket or recess, e, to receive said lug or tang, the blade being secured to the tang, with its outer surface flush or even therewith, as shown and set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of January, 1878.

THOMAS WEISS.

Witnesses:

GEO. C. SHELMERDINE, SAML. J. VAN STAVOREN.