

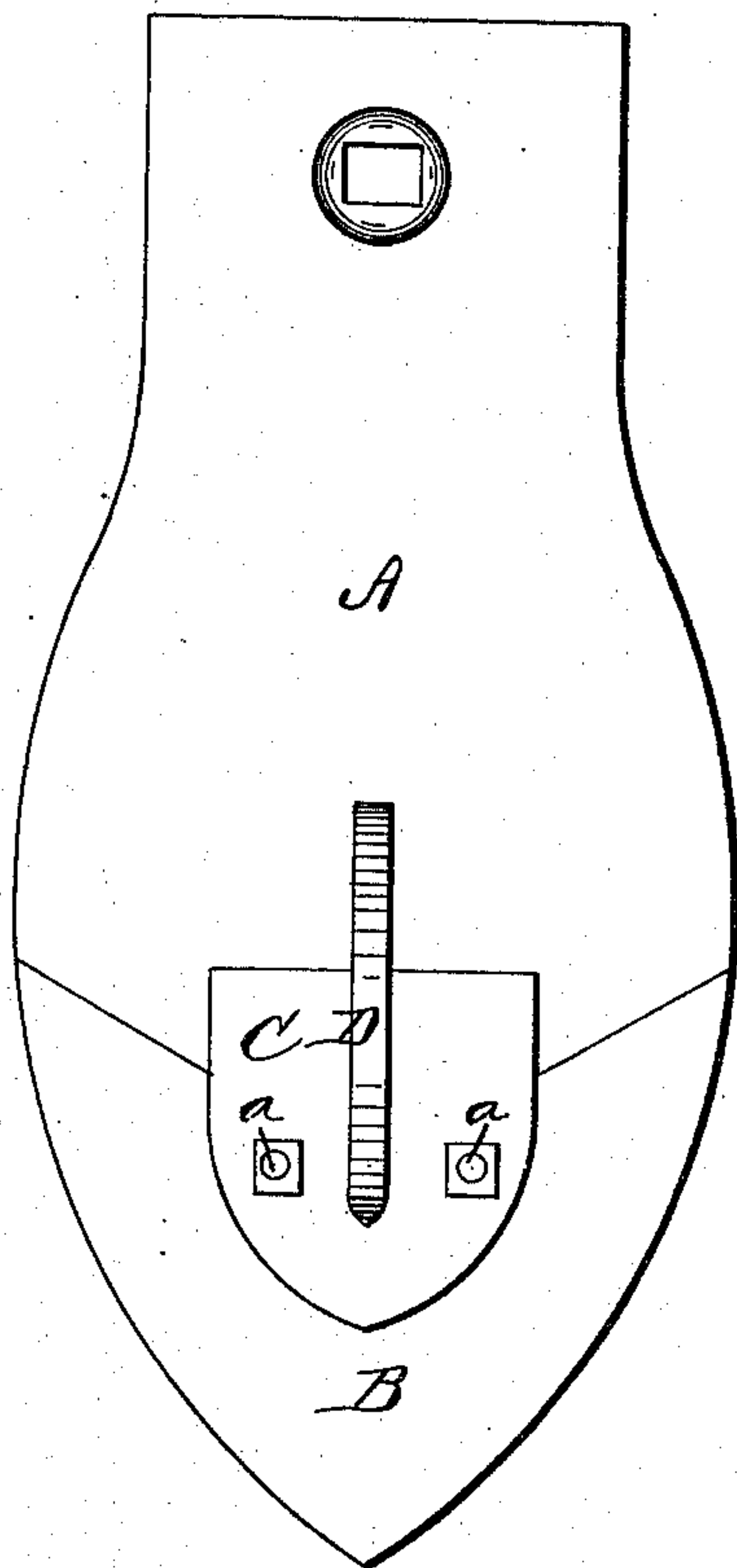
A. R. GRANBERRY & J. ELLIOTT.

Cultivator Teeth or Hoes.

No. 154,667.

Patented Sept. 1, 1874.

Fig. 1.



WITNESSES

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UNITED STATES PATENT OFFICE.

ALLEN R. GRANBERRY AND JOSEPH ELLIOTT, OF HAZLEHURST, MISS.

IMPROVEMENT IN CULTIVATOR TEETH OR HOES.

Specification forming part of Letters Patent No. **154,667**, dated September 1, 1874; application filed July 20, 1874.

To all whom it may concern:

Be it known that we, ALLEN R. GRANBERRY and JOSEPH ELLIOTT, of Hazlehurst, in the county of Copiah and in the State of Mississippi, have invented certain new and useful Improvements in Cultivator-Teeth and Shovel-Plows; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of our invention consists in the construction and arrangement of a cultivator tooth or hoe with removable point, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a rear elevation of a cultivator-tooth embodying our invention, and Fig. 2 is a longitudinal section of the same.

A represents the body or main part of a cultivator-tooth or plow-hoe, and B is the point thereof. These are made separate, of cast malleable steel, the adjoining edges being inclined upward from the center toward both sides. On the under side of the part A, at the lower end, in the center, is a broad lip or tongue, C, cast with, or welded, or otherwise permanently attached to it; and in the center,

on the under side of said lip or tongue, is a curved rib, D, extending up on the part A, and either cast with or permanently attached to the tongue and blade. The point B is fastened to the lip or tongue by two bolts, *a a*, one on each side of the rib D.

By this means the point B can be easily removed when dull or worn, and a new one put on, thus obviating the necessity of sharpening, saving both time and labor.

When the point is fastened by the bolts *a a* it is braced centrally, as well as on both sides, by the lip or tongue C and the rib D.

We are aware that a cultivator-tooth made in two parts, with the point or lower part detachable from the blade or upper part, is, broadly, not new.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The blade A, provided with the lip or tongue C and rib D, and the removable point B, attached to said tongue by means of bolts *a*, all as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 26th day of June, 1874.

ALLEN R. GRANBERRY.
JOSEPH ELLIOTT.

Witnesses:

J. L. ARD,
J. DENNIS GRANBERRY.