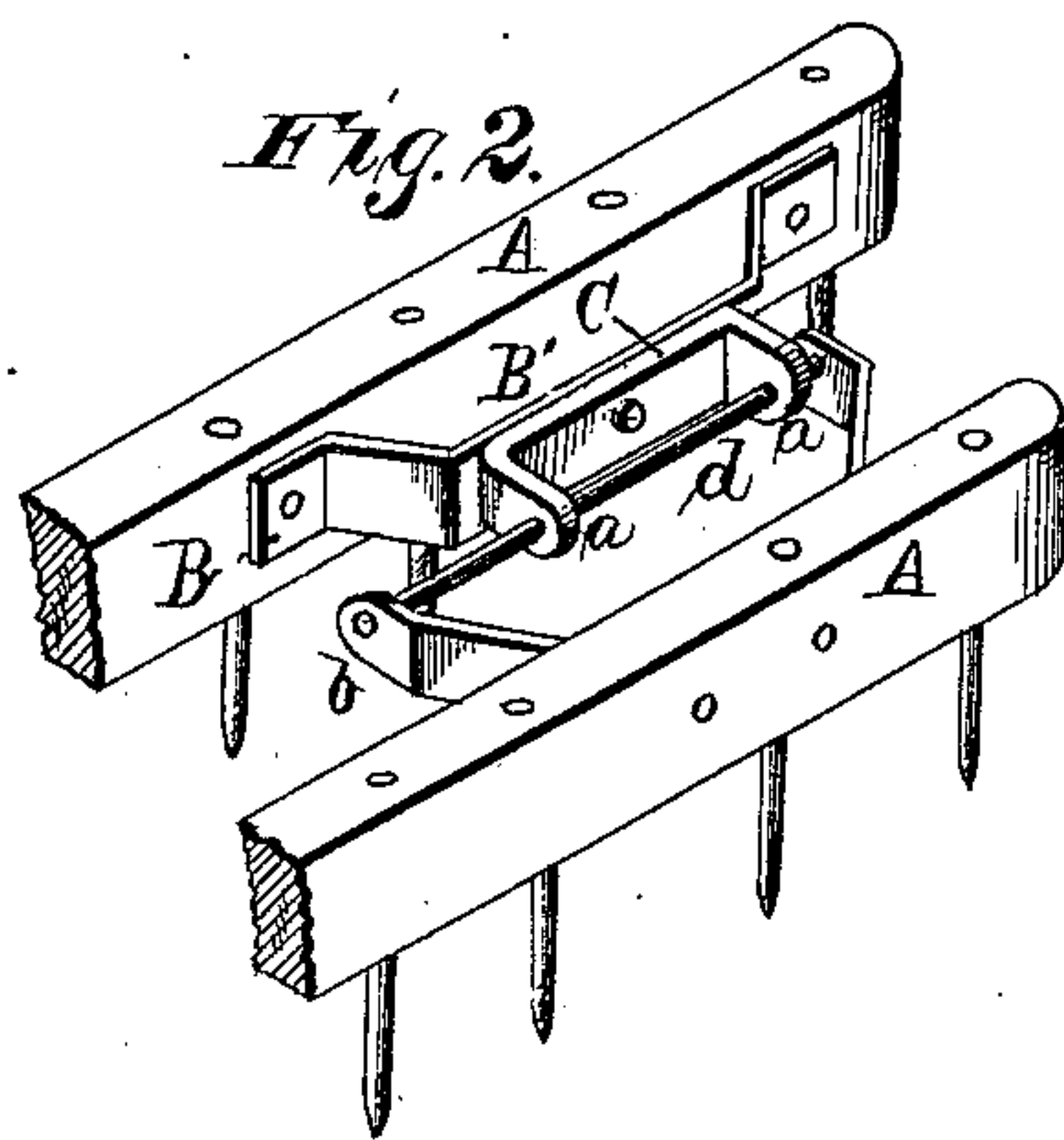
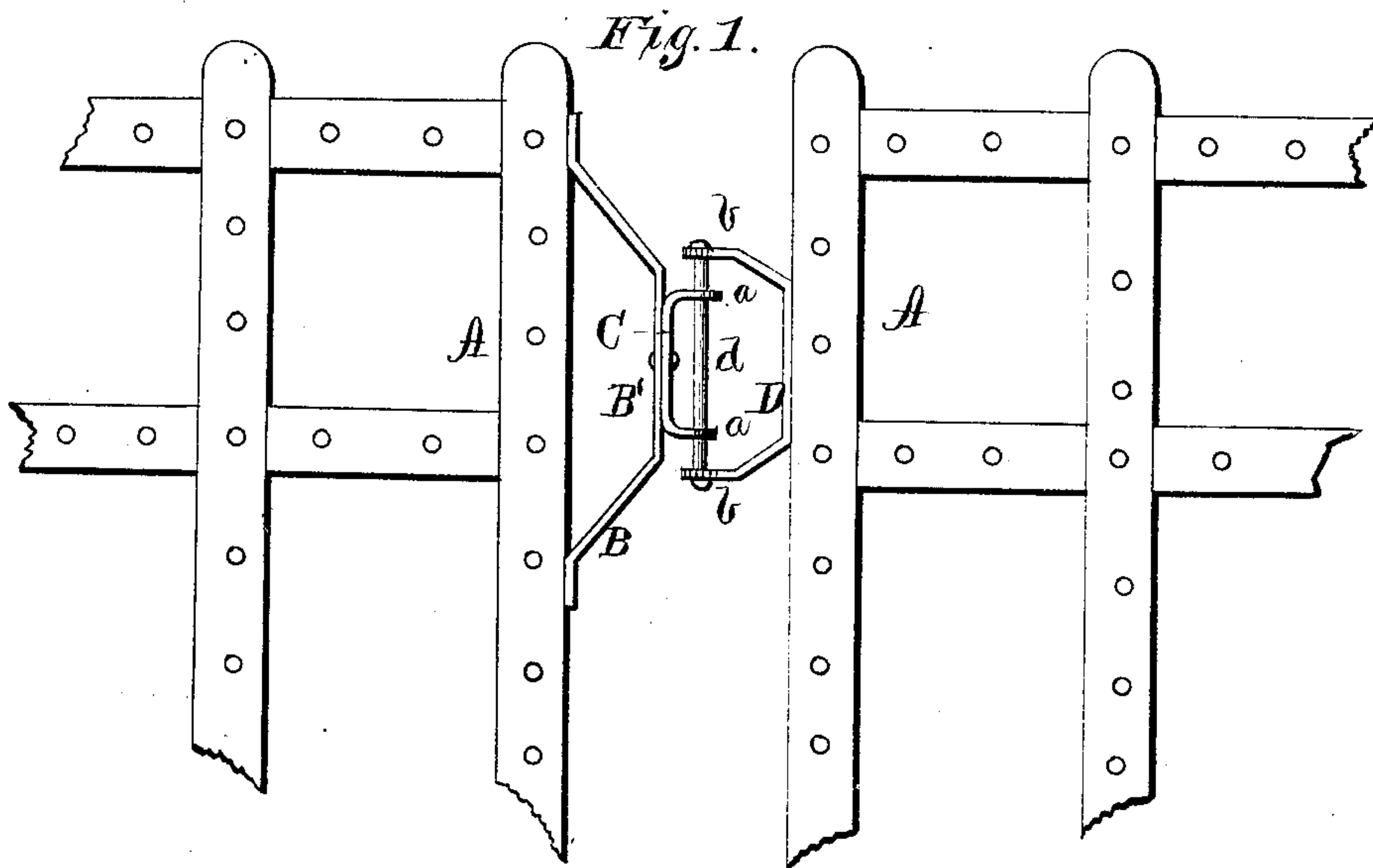


W. OUGH, B. L. LOYD, & J. JOHNSON.
HARROW-COUPPLINGS.

No. 195,839.

Patented Oct. 2, 1877



WITNESSES
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UNITED STATES PATENT OFFICE.

WILLIAM OUGH, BRYAN L. LOYD, AND JOHN JOHNSON, OF ATKINSON, ILL.

IMPROVEMENT IN HARROW-COUPPLINGS.

Specification forming part of Letters Patent No. **195,839**, dated October 2, 1877; application filed March 15, 1877.

To all whom it may concern:

Be it known that we, WILLIAM OUGH, BRYAN L. LOYD, and JOHN JOHNSON, of Atkinson, in the county of Henry, and in the State of Illinois, have invented certain new and useful Improvements in Harrow-Coupling; 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.

Our invention relates to that class of harrows in which two separate and independent sections are coupled together; and the nature of our invention consists in the construction and arrangement of a universal-joint coupling for harrows, 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 plan view of our invention, and Fig. 2 is a perspective view of the same.

A A represent parts of the two sections of a harrow coupled together by our harrow-coupling.

To one of the sections is fastened, by bolts or otherwise, a bracket, B, having a straight side, B', parallel with the section; and in the center of this straight side of the bracket is pivoted another bracket, C, having at its ends perforated ears *a a*.

To the other section A of the harrow is fastened a bracket, D, forming two projecting arms, *b b*, of such shape that the distance between their outer ends shall be considerably larger than the distance between the ears *a a* of the pivoted bracket C. A rod, *d* is then passed through the ends of the arms *b b*, and through the ears *a a*, which latter are located on the rod between the arms, as shown.

It will readily be seen that by this coupling the harrow-sections will adjust themselves perfectly to the ground, it being, of course, understood that the sections are connected by such coupling at one end only.

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

In combination with the harrow-sections A A, the coupling herein described, consisting of the bracket B, having straight side B', the pivoted bracket C, with ears *a a*, the bracket D, with arms *b b*, and the rod *d*, all substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 2d day of March, 1877.

WILLIAM OUGH.
BRYAN L. LOYD.
JOHN JOHNSON.

Witnesses:

WILLIAM BELLAIRS,
IULUS TABER.