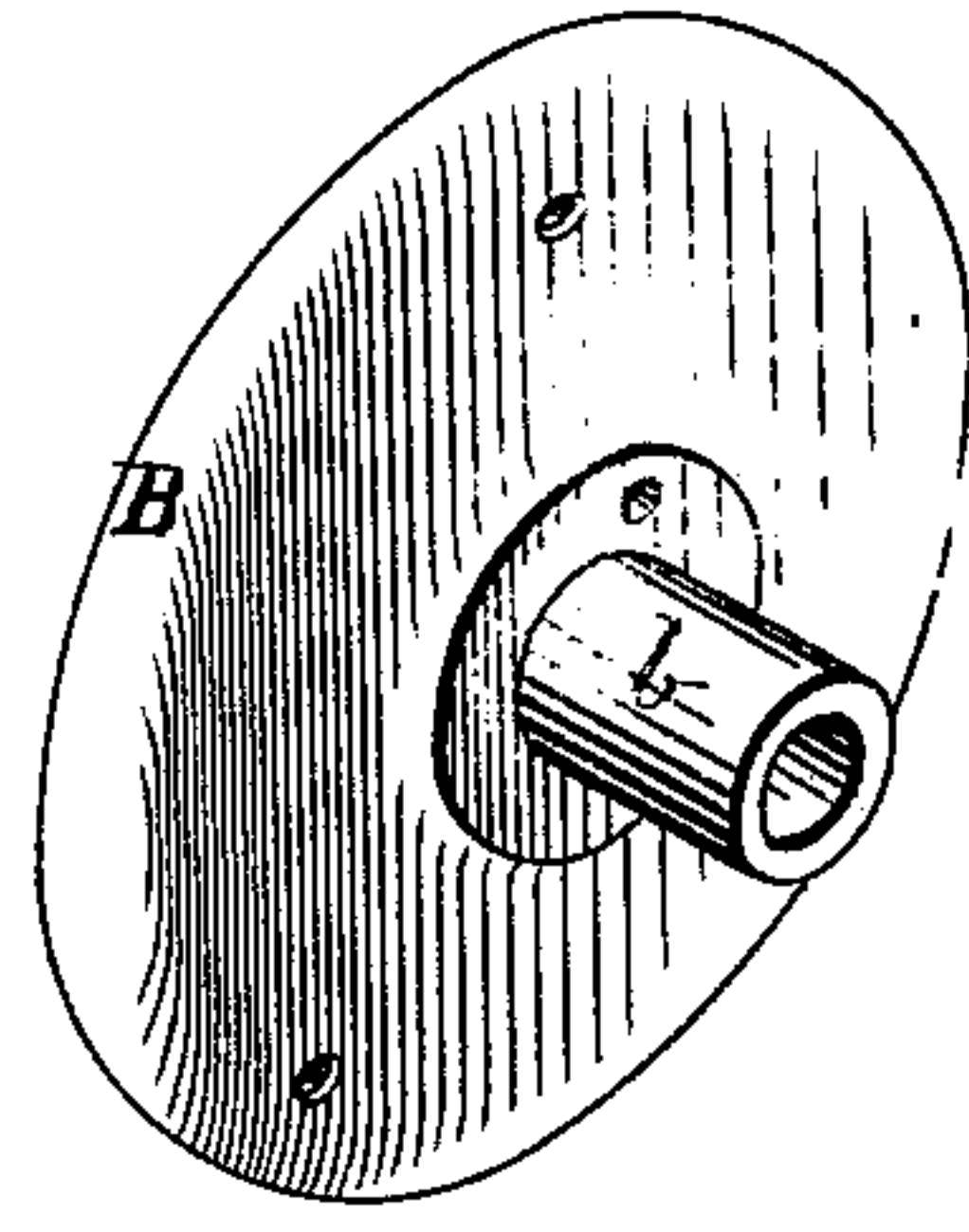
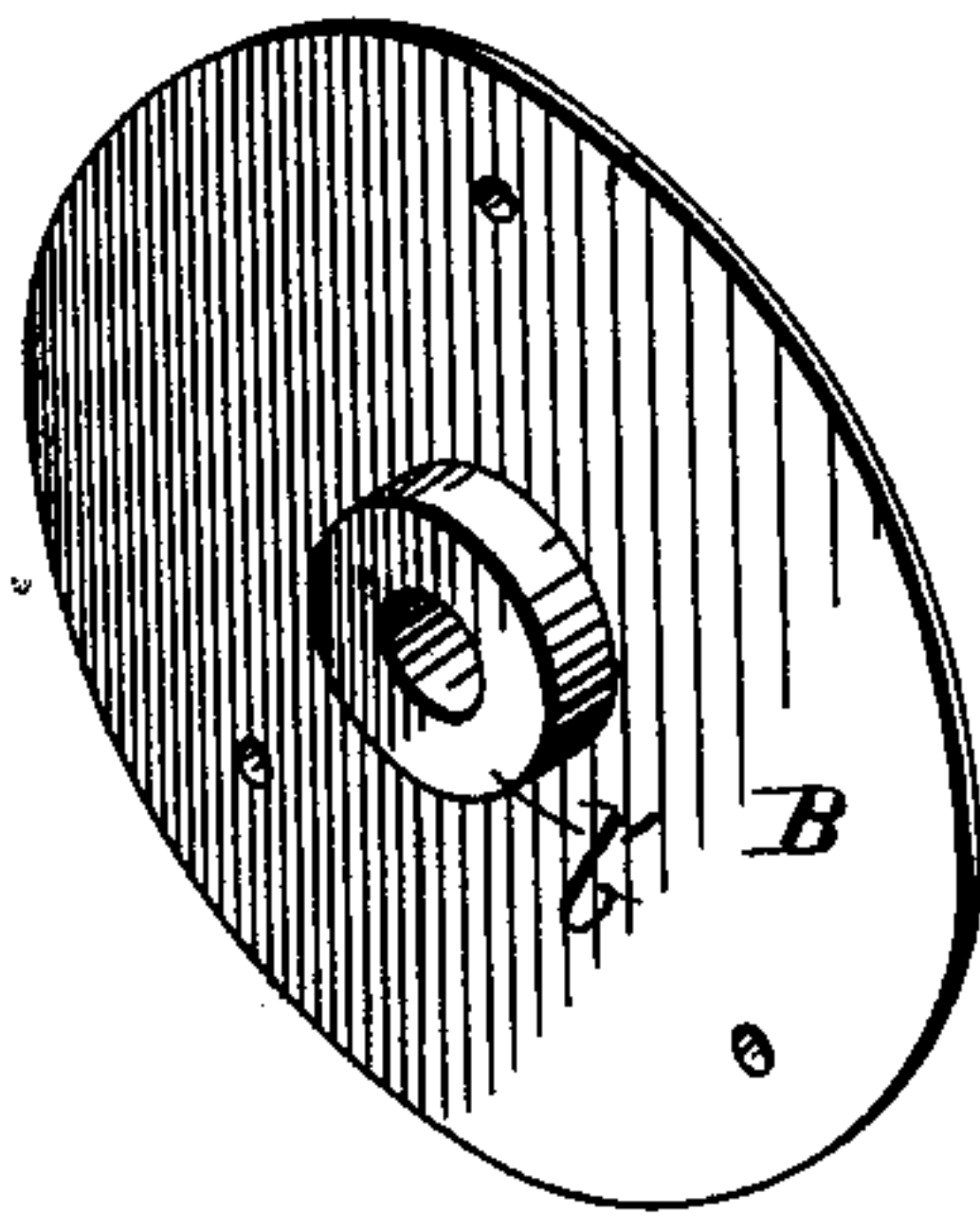
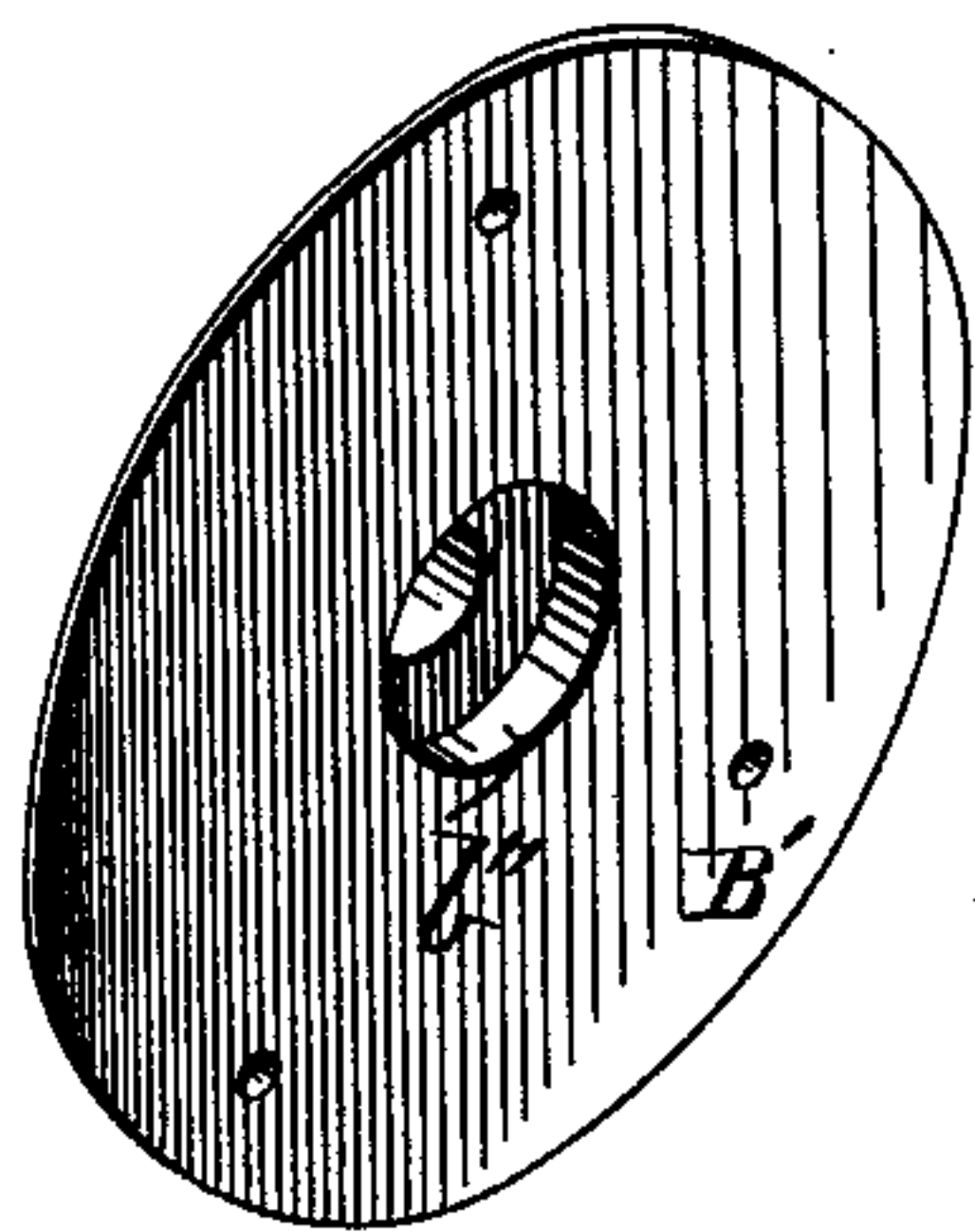
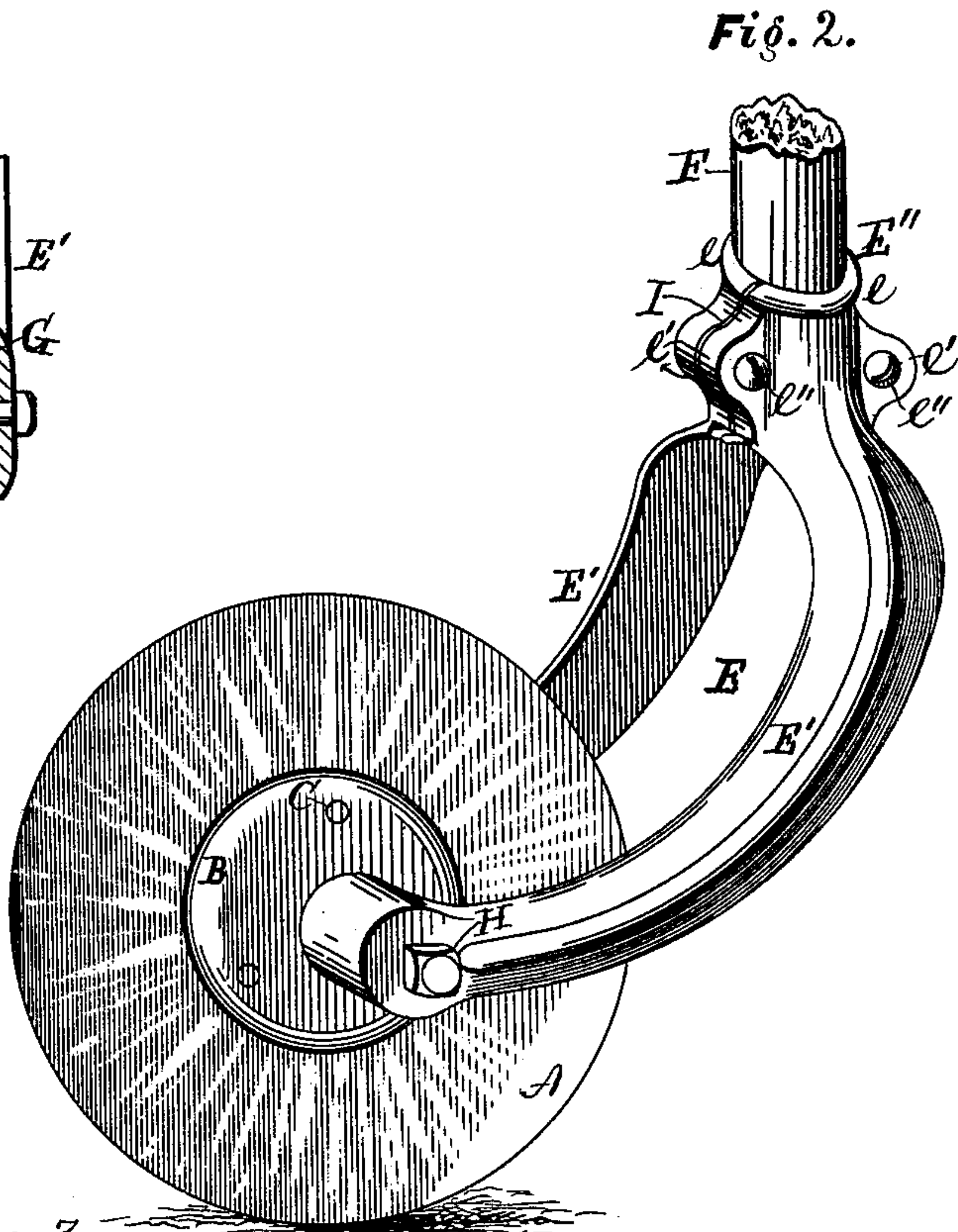
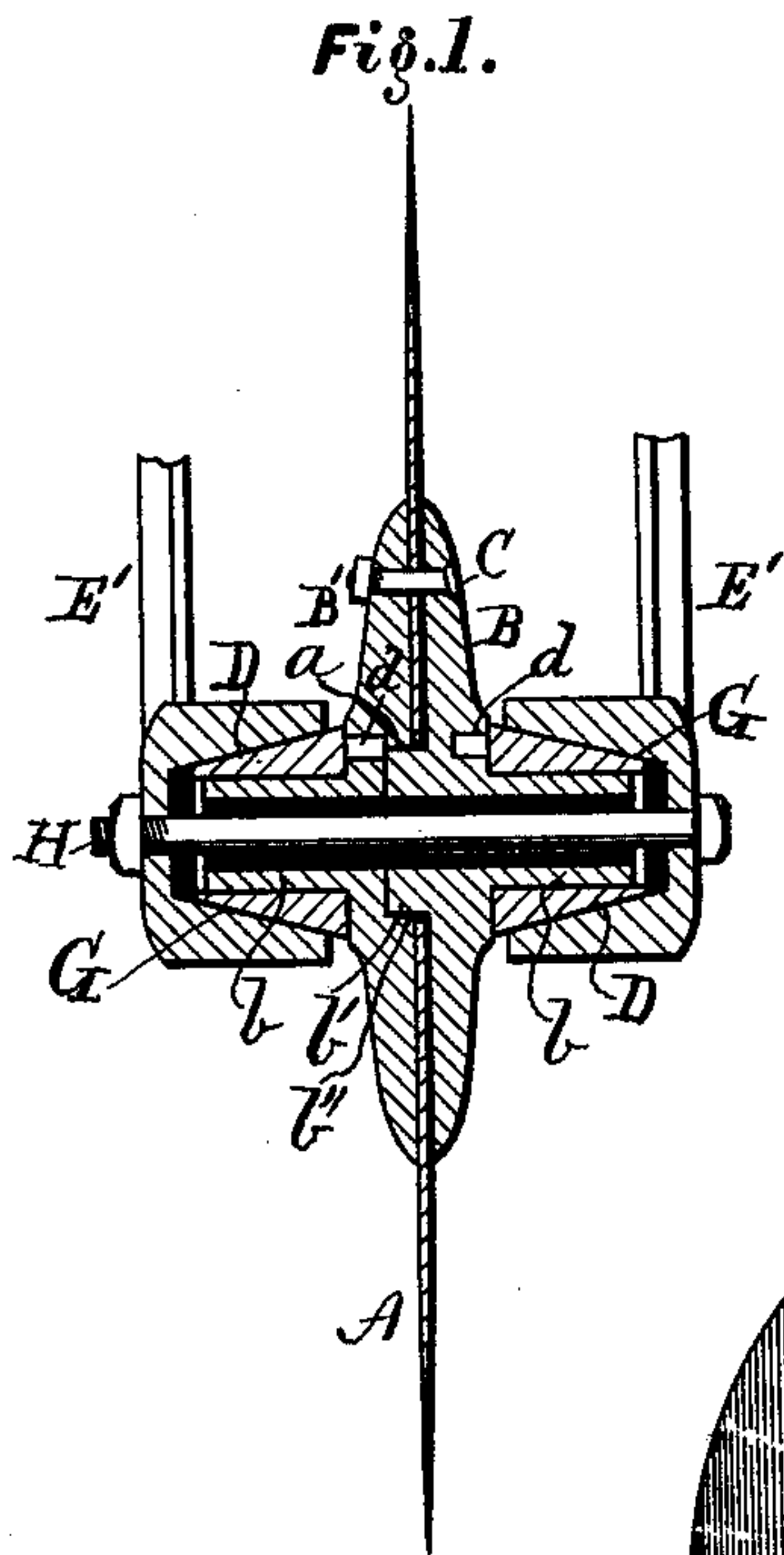


J. PIERPONT.
Plow-Colter.

No. 200,842.

Patented March 5, 1878.



Witnesses:
Amel Wallum
D. L. Stuart

Inventor:
Joshua Pierpont,
By W. B. Richards,
Atty.

UNITED STATES PATENT OFFICE.

JOSHUA PIERPONT, OF BUSHNELL, ILLINOIS, ASSIGNOR TO PIERPONT & TUTTLE, OF SAME PLACE.

IMPROVEMENT IN PLOW-COLTERS.

Specification forming part of Letters Patent No. 200,842, dated March 5, 1878; application filed December 31, 1877.

To all whom it may concern:

Be it known that I, JOSHUA PIERPONT, of Bushnell, in the county of McDonough and State of Illinois, have invented certain new and useful Improvements in Plow-Colters; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a central sectional view through a construction embodying my invention. Fig. 2 is a perspective view of the colter and yoke. Fig. 3 is a perspective view, showing the adjacent faces of the colter-bosses. Fig. 4 is a perspective view of the outer face of one of the colter-bosses, and Fig. 5 is a perspective view of one of the substitutive journals.

My invention relates to circular rotating plow-colters; and consists, first, in improvements relating to the construction of the colter-bosses and their attachment to the colter, adapting them to be easily adjusted correctly and to withstand great strain without affecting the rivets by which they are secured to the colter; second, in the use of journals, removably seated on the colter-bosses, adapting them to be easily and readily removed when worn for the substitution of new journals.

The invention further relates to a colter-yoke made in two parts, and devices provided for adjusting it at both ends, whereby it may be adjusted to the journals on the colter, and the bearings in its ends aligned with said journals.

Referring to the parts by letters, the same letter indicating the same part in the different views, A represents an ordinary circular plow colter or cutter, with a central aperture, *a*. B B' are the bosses, having cylindrical projections *b*, surrounding central apertures. The bosses B B' are secured to the colter by means of the ordinary rivets C. To give greater strength and security to the parts and relieve the rivets C of undue strain, one of the bosses, B, is provided with a central projection, *b'*, which passes through the central aperture in the colter, and fits into a corresponding interdental space, *b''*,

in the adjacent face of the boss B'. The projection *b'* and space *b''*, being properly formed on the respective bosses, will facilitate seating the bosses properly on the colter, with the projection *b* in line.

D D are substitutive journals, fitted over the projections *b*, and held from revolving thereon by lugs *d*, entering recesses in the adjacent faces of the bosses, as shown at Fig. 1 of the drawings; or they may be seated by fitting them on projections *b*, polygonal in their cross-sections, or circular, and provided with spline-seats, fitted to corresponding parts in the journals D, in a manner to hold them securely and permit of their ready removal for replacement by new journals when desired. The exteriors of the journals D are circular in cross-section and frusto-conical or tapering from their inner ends upward.

E is the yoke, formed in two limbs, E' E', each limb E' formed into a semi-tube, *e*, at its upper end, having projecting lugs *e'*, through which bolts *e''* are inserted to unite them to form a tube, E'', which forms a journal-bearing for the bar F, by which the yoke is connected with the plow in the ordinary manner. The lower end of each limb E' is provided with a tapering aperture, G, which forms a bearing for the tapering journals D, and also with a perforation, through which a bolt, H, passes, which also passes through the bosses and projections *b* and through the colter, as shown at Fig. 1.

When the journals D and bearings G become worn, their tapering surfaces may be drawn together again and the parts be kept in line by adjusting the nut on the bolt H, and by adjusting the semi-tubes *e* toward each other by means of the bolts *e''* and strips I, of any suitable material, placed between the semi-tubes *e*. The limbs E' may be taken apart to seat the colter, in the evident manner.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The substitutive journals D, arranged to operate with bosses B B', having projections *b*, on which the journals D are fixed, and with the colter A, substantially as and for the purpose specified.

2. The substitutive tapering journals D, arranged to operate with similarly-shaped opposed bearings in the limbs E' of the yoke E, and seated on the projections *b* from the bosses B B', substantially as and for the purpose specified.

3. The yoke E, made in two parts, E' E', adjustable at both ends, in combination with tapering journals D and colter A, substantially as described, and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOSHUA PIERPONT.

Witnesses:

M. REBSTEIN,
J. H. BRAMHALL.