

(No Model.)

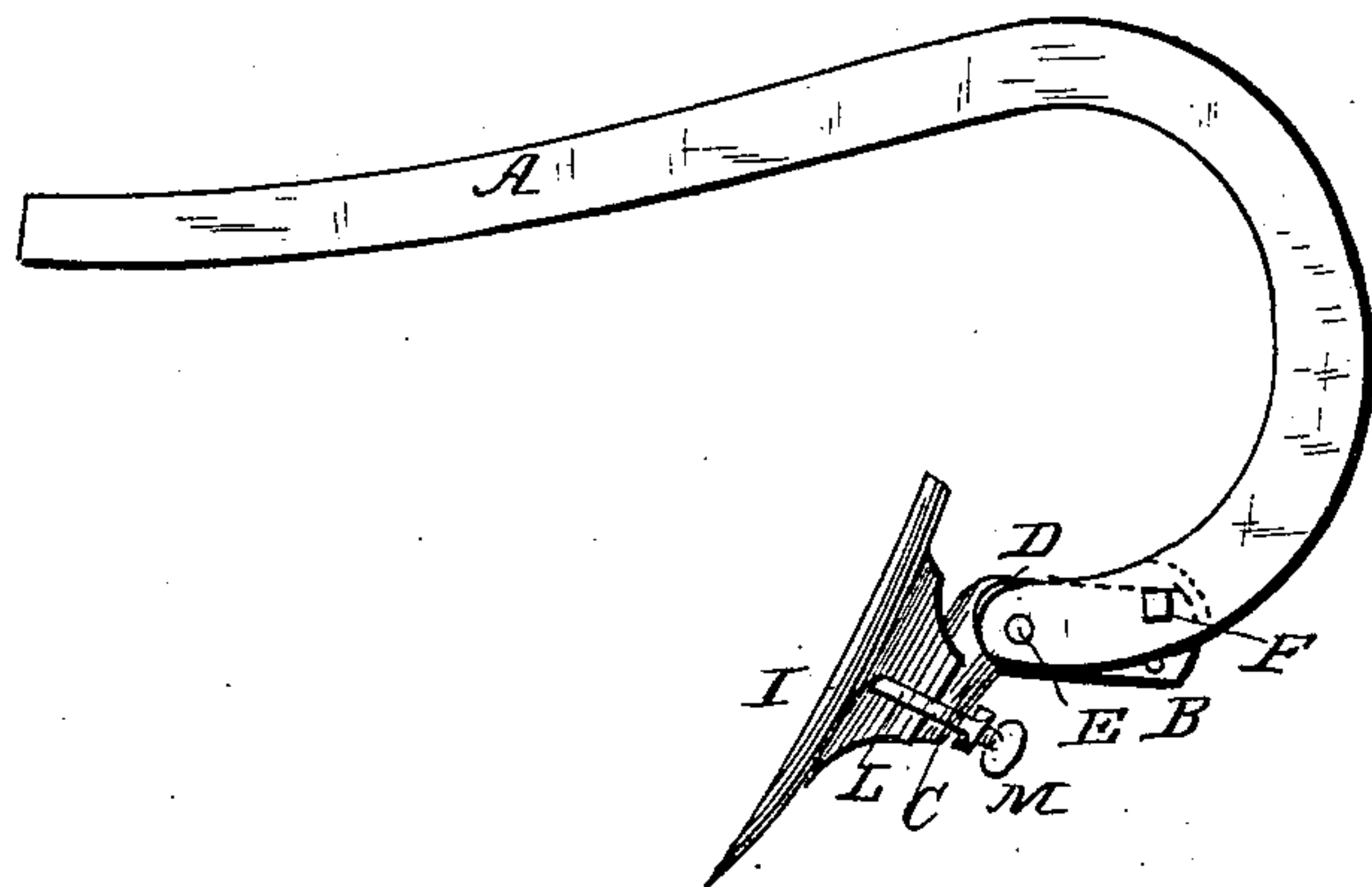
D. N. LUSE & J. W. BELL.

CULTIVATOR.

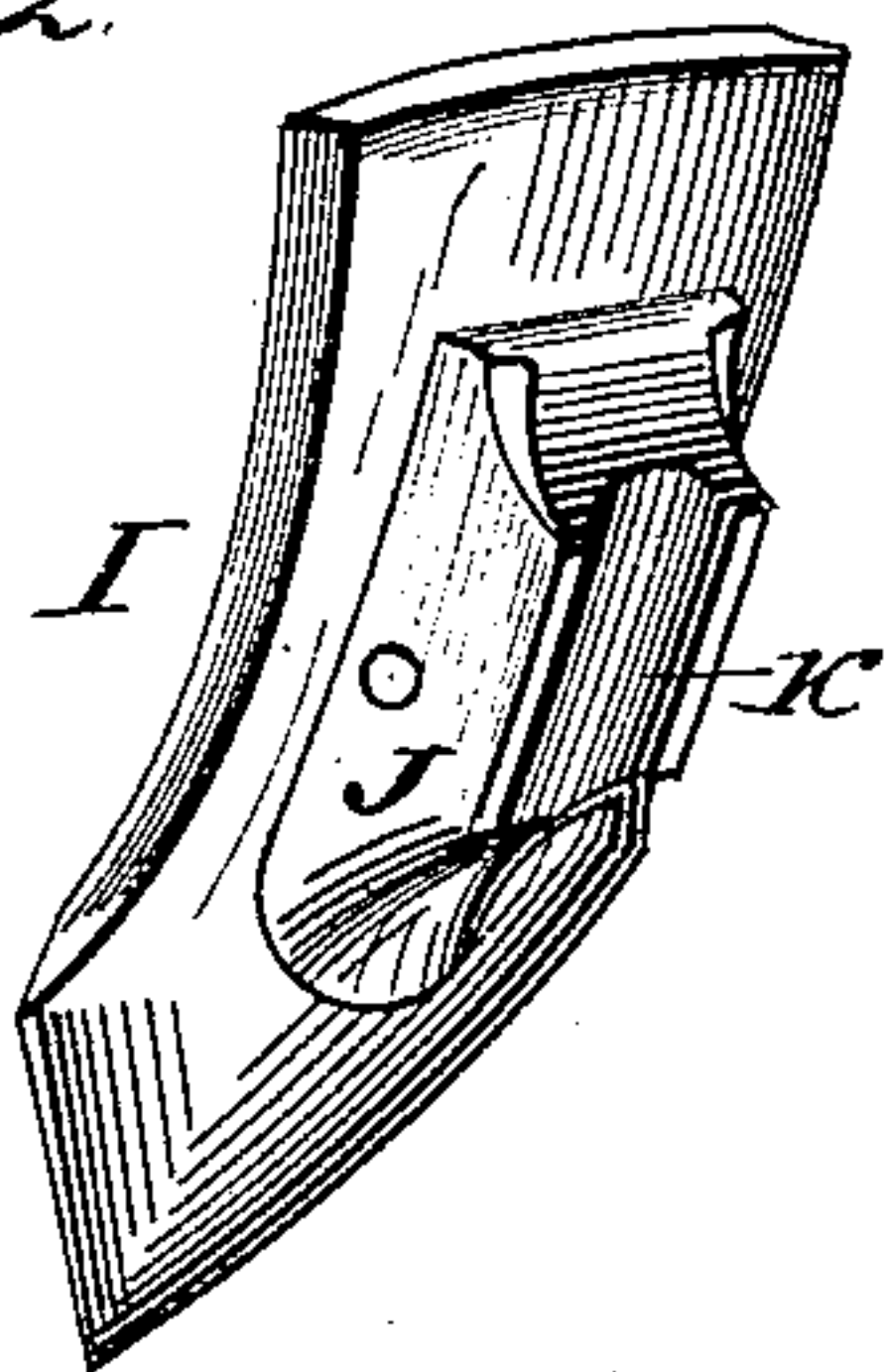
No. 284,565.

Patented Sept. 4, 1883.

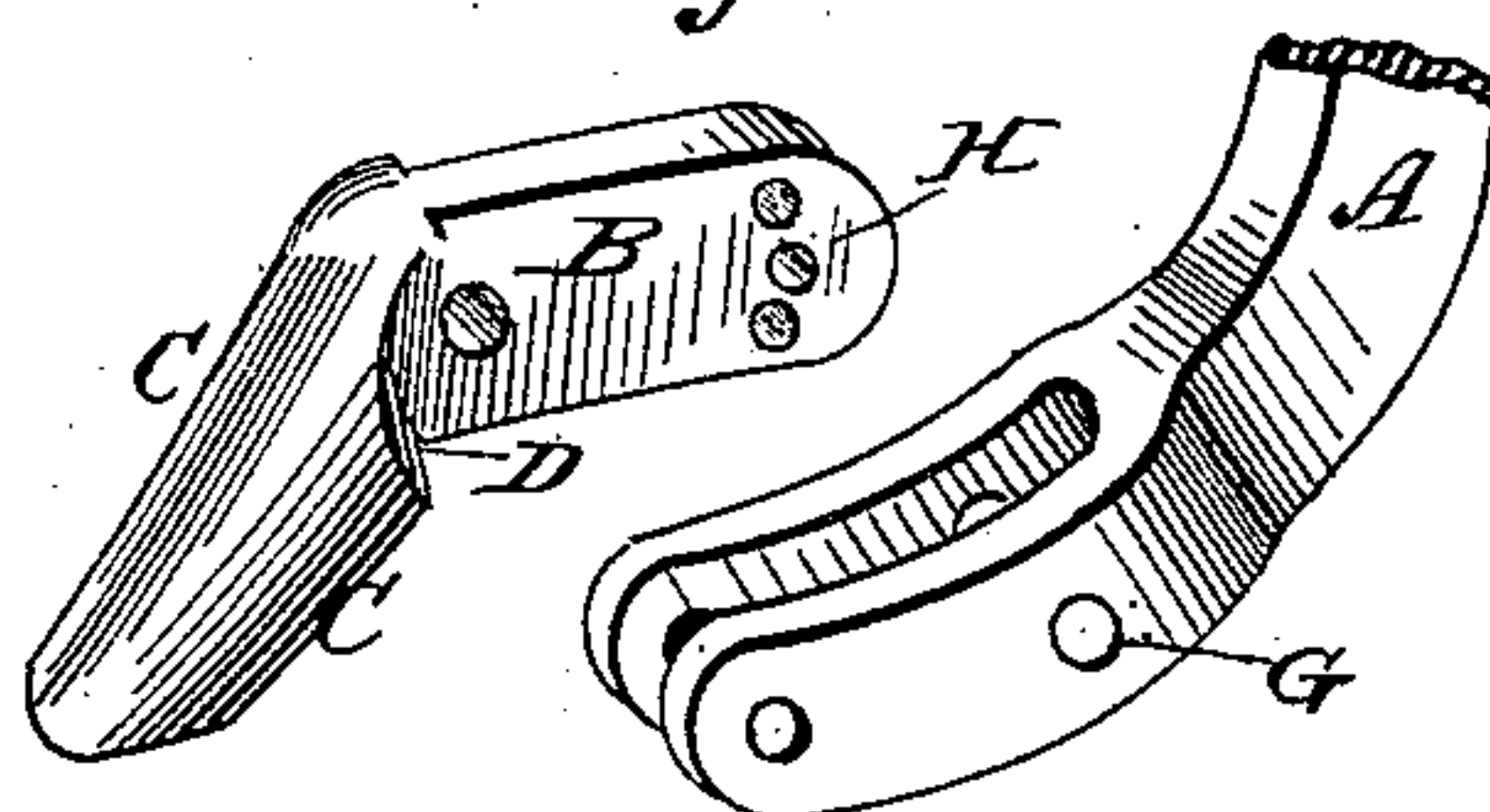
*Fig. 1.*



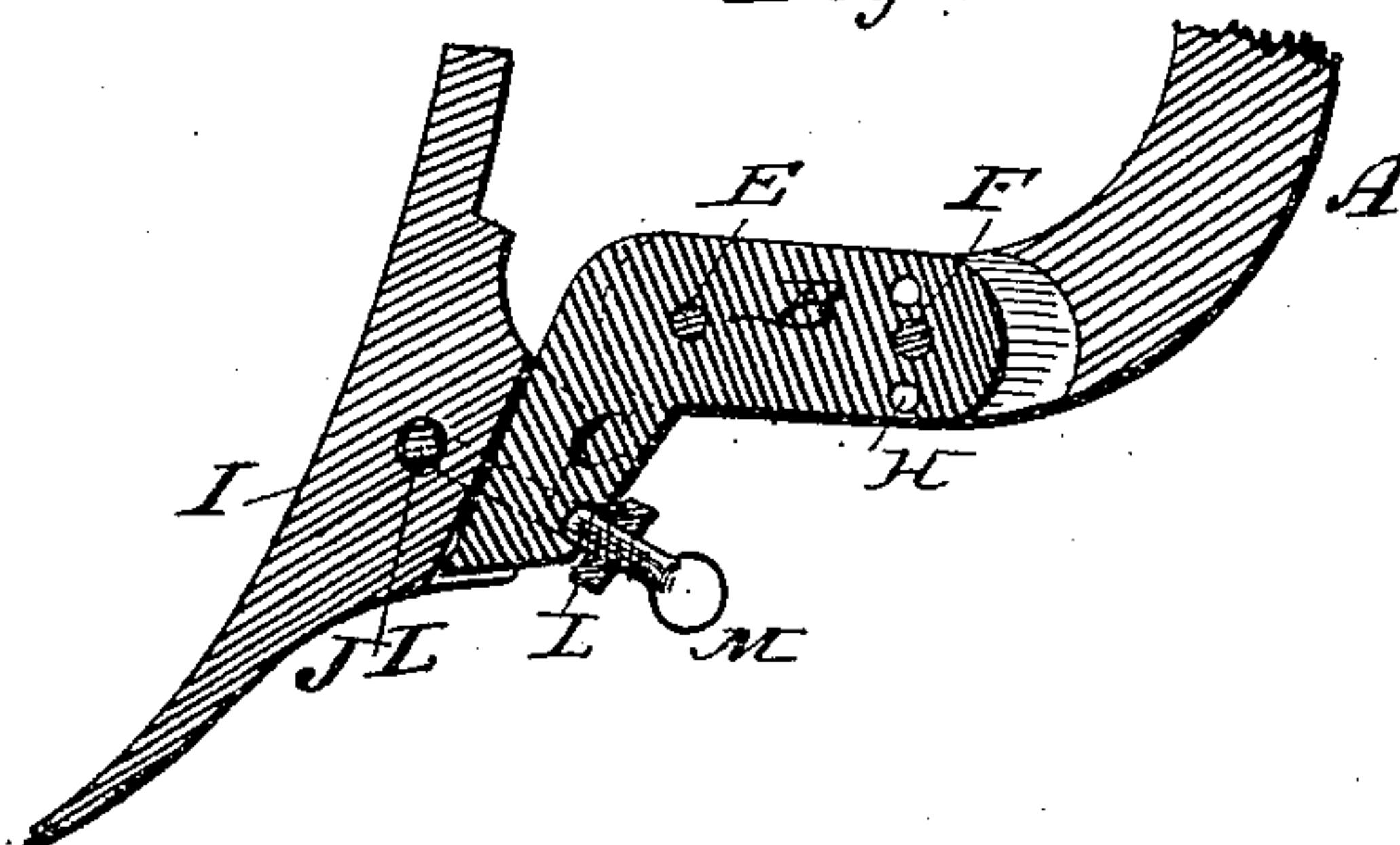
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

DAVID N. LUSE AND JOHN W. BELL, OF AUDUBON, IOWA.

## CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 284,565, dated September 4, 1883.

Application filed June 15, 1883. (No model.)

*To all whom it may concern:*

Be it known that we, DAVID N. LUSE and JOHN W. BELL, of Audubon, in the county of Audubon and State of Iowa, have invented certain new and useful Improvements in Cultivators; and we 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, which form a part of this specification, and in which—

Figure 1 is a side view of our improved cultivator-beam and adjustable shovel. Fig. 2 is a perspective view of the shovel detached. Fig. 3 is a similar view of the pivoted end of the beam, showing the detailed construction of the adjustable tongue for the attachment of the shovel; and Fig. 4 is a longitudinal section through the shovel and lower end of beam.

Similar letters of reference indicate corresponding parts in all the figures.

Our invention has relation to cultivators, and is especially adapted for corn-cultivators.

It consists in an improved construction of the shovel-beams and of the shovels, whereby not only the pitch of the shovels may be readily adjusted, but the position of the shovels upon the beams may be adjusted sidewise, so as to regulate the angle at which they are to penetrate the soil.

The nature of our said improvement will readily be understood by reference to the accompanying drawings, in which A represents one of the beams, made of wood, iron, or steel, and attached at its forward end to the cultivator-frame in any approved manner. The lower curved end of the beam is slotted longitudinally for the insertion of the shovel-holder, which consists of a flat piece, B, adapted to fit in the slot, and a rounded tongue, C, made in one piece therewith, and having rounded recesses D, adapted to fit the rounded slotted end of the beam. A bolt (shown at E) is inserted through the beam and the part B of the shovel-holder in the center of the arc described by the recesses D, so that the tongue-holder may readily be turned upon its pivot-bolt E.

It is secured in its adjusted position by a pin or bolt, F, inserted through the aperture G in the slotted end of the beam and through one of a series of apertures, H, in the part B; or a set-screw may be used instead of the bolt F, if desired.

The shovel consists of a blade, I, of any suitable shape, upon the under side of which is a saddle, J, which is recessed on its under side, as shown at K, to fit upon the rounded tongue C. This saddle has a yoke, L, through which is inserted a set-screw, M, and by inserting tongue C through the aperture formed by the saddle J and yoke L, and then tightening down the set-screw, it will be seen that the shovel will be fastened firmly upon the tongue. It will further be seen that by loosening the set-screw the shovel may be moved to one side or to the other, so as to adjust its angle, after which it may be fastened in its adjusted position by tightening down the set-screw M. The pitch or inclination of the shovel is effected by adjusting the tongue-piece or shovel-holder B C in the manner described.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

As an improvement in cultivators, the combination of the slotted beam A, having aperture G, and rounded at its lower end, shovel-holder composed of the flat piece B, inserted into the slotted beam, and tongue C, recessed at D to conform to the curvature of the lower end of the beam, pivot-bolt E, inserted through the center of the arc formed by the recesses D, removable and adjustable shovel I, having on its under side the saddle J, yoke L, and set-screw M, the whole constructed and combined to operate substantially in the manner and for the purpose herein shown and described.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

DAVID N. LUSE.  
JOHN W. BELL.

Witnesses:

H. S. PAYTON,  
JOSEPH LUSE.