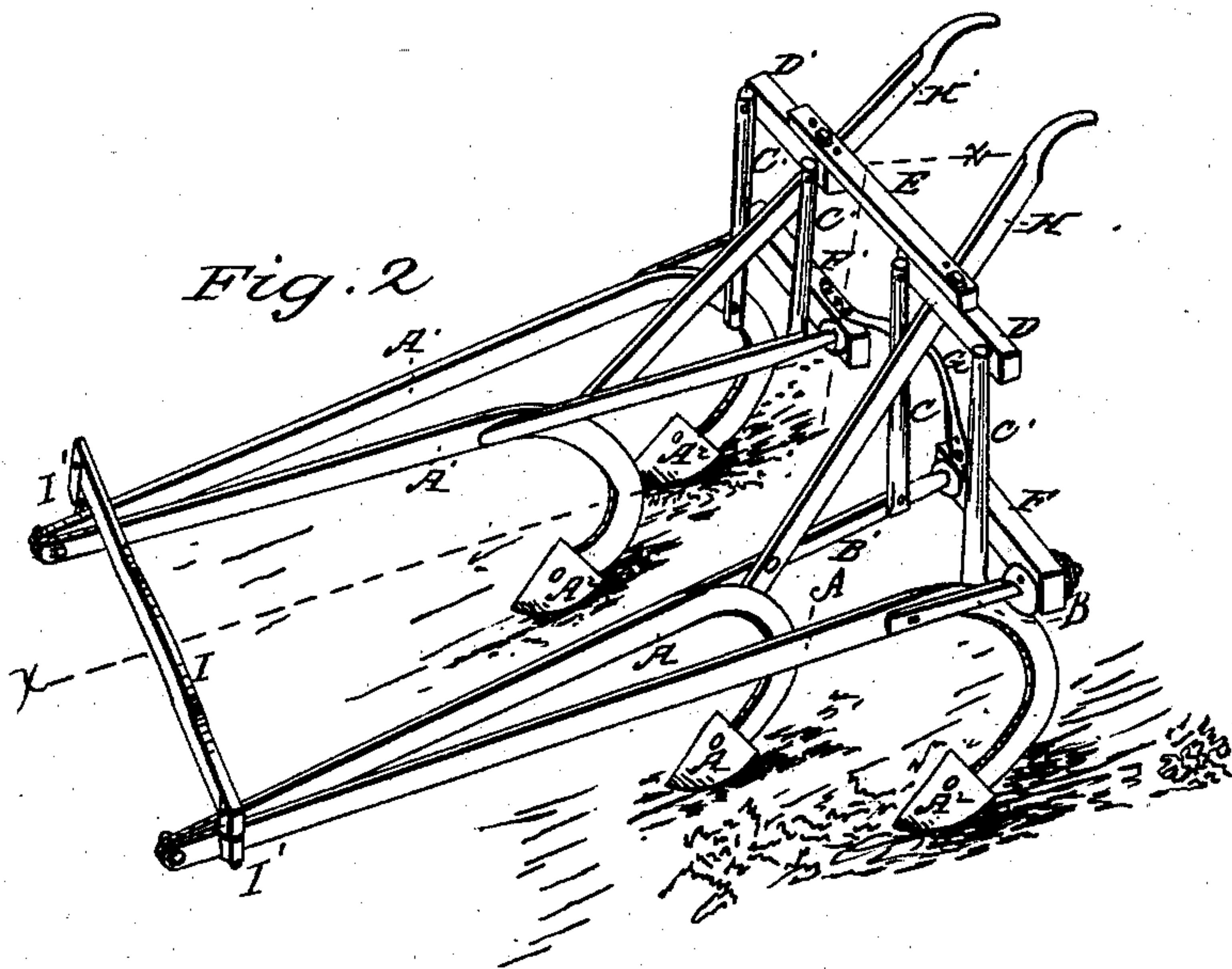
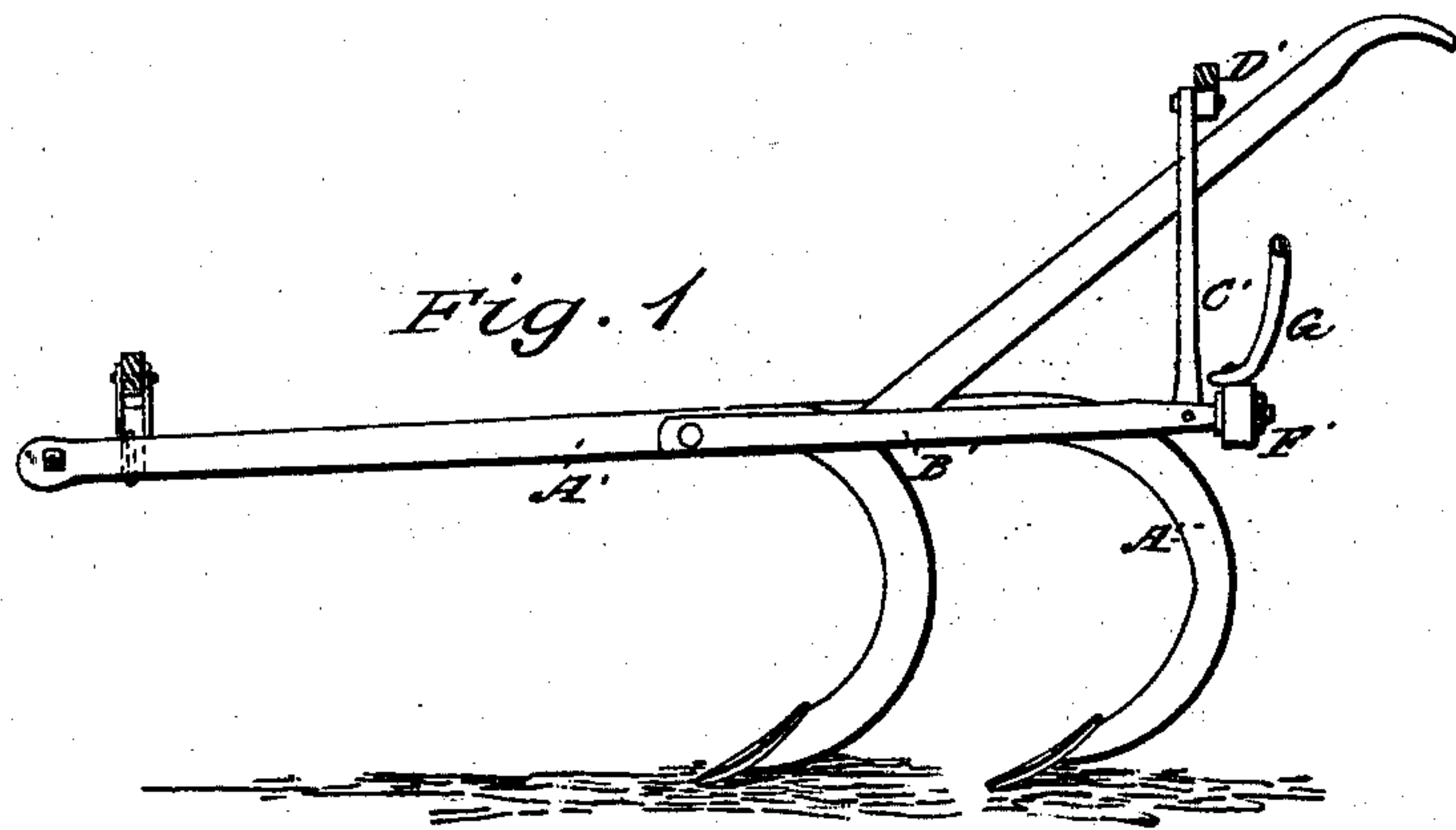


L. L. SLOSS.

Cultivator.

No. 98,640.

Patented Jan. 4, 1870.



Witnesses:

A. Ruffen  
C. H. Sprague.

Inventor:

L. L. Sloss  
D. P. Halloway & Co  
Atty



# UNITED STATES PATENT OFFICE.

L. L. SLOSS, OF AUBURN, KENTUCKY.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 98,640, dated January 4, 1870.

*To all whom it may concern:*

Be it known that I, L. L. SLOSS, of Auburn, in the county of Logan and State of Kentucky, have invented a new and useful Improvement in Plows; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a central sectional elevation of my improved plow on line *xx* of Fig. 2; and Fig. 2 is a perspective view of the same, showing all the parts in position.

Corresponding letters refer to corresponding parts in both figures.

This invention relates to plows or cultivators for plowing among growing crops which are planted in rows or hills; and it consists in the combination and arrangement of the parts of which it is composed, as will be more fully explained hereinafter.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A A and A' A' represent four plow-beams, which are to be secured together at their front ends in pairs, those marked A A constituting one pair, while those marked A' A' constitute the other. They may be of iron, and have their rear ends curved in the manner shown in the drawings for the reception of the shovels or shares, or they may be of wood, and be made straight, with downwardly-projecting arms, to which to secure the shovels. The two beams, composing each of the pairs, at their forward end are in contact with each other but diverge from that point to their rear ends, at which point they should be some distance apart, say from eight to twelve inches.

B B' represent bars of metal or other suitable material, which are to be secured to the beams A A', as shown in the drawings, they being for the purpose of receiving upon their rear ends bars F F', for a purpose soon to be described.

C C C' C' represent uprights, which may be of iron or wood, they being secured at their lower ends to the bars B B', and extending up for a suitable distance to receive upon their upper ends the cross-bars or connecting-bars D D', which are pivoted or bolted thereto in such a manner that the tops of said uprights may be turned to the one side or the other of

a perpendicular line at the pleasure of the operator.

E represents a bar of wood or metal, which is to be placed upon top of the bars D D', to which it is to be attached by means of bolts, it being supplied with a series of holes in its ends, to permit of the two pairs of beams, with their shovels, being set farther apart or nearer together, as circumstances may require.

F F' represent bars, which connect the rear ends of the bars or rods which are secured to the plow-beams together, and determine the distance at which they shall be kept apart from each other at this point. These bars are to be provided with holes, through which the ends of the bars or rods B B' pass, and in which they work loosely, so that, as the handles of the plows are pushed in either direction for the purpose of bringing the outer shovel of either pair of plows in closer contact with the growing crop, these rods may partially rotate in such bars.

G represents a bar of metal, which is to be secured to the inner ends of the bars F F', between which points it is to have a curved form, substantially as shown in Fig. 2 of the drawings. This bar is to be provided at its ends with a series of holes, so that it, in conjunction with the bar E, may permit of the pairs of plows being regulated as to their distance from each other.

H H' represent handles of the usual or any other suitable form, which are to be attached to the inner ones of the two pairs of beams, or to the bars which extend therefrom, and to the upper portions of the uprights C C', so that as said handles are pushed in either direction from a vertical position the plows or shovels will be carried nearer to the rows or hills of the growing crop than they could be otherwise, and, at the same time, the one nearest to such row or hill will cut a shallow furrow, while all the rest may be made to cut much deeper furrows at the same time.

I represents a connecting bar or rod, which extends from the forward end of one of the outside beams to the other, it being secured thereto by means of a swivel-joint in such a manner as to permit of one of the pairs of beams, with its shovels, getting in advance of the other, and of one end of such beams rising above or falling below the other. The swivel-bolts project some distance above the beams,



so as to raise the connecting-bar sufficiently to prevent its coming in contact with weeds and other obstructions, whereby the plow would be clogged and its draft increased.

It will be apparent that one of the objects of this form of construction is to provide a plow or cultivator which shall be capable of being used astride of one row of corn, and thus of cultivating two rows at one time.

Another object is to produce what may be termed a "flexible cultivator," one which may have its shovels brought into close proximity to the rows or hills of the growing crop without coming in contact therewith, and at the same time be capable of having one pair of its beams or shovels in advance of the other, so that in the event of any one of the shovels striking any obstruction the shock may be relieved and partially thrown upon the other section of the plow.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

1. The combination of beams A A A' A' and adjusting-bars F F', substantially as shown and described.

2. The combination and arrangement of the beams A A A' A', extension-bars B B', up-rights C C', connecting-bars D, D', and E, and rod or bar G, substantially as and for the purpose set forth.

3. The arrangement of the cross connecting-bar I, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

L. L. SLOSS.

Witnesses:

D. S. GORDON,  
R. W. THOMPSON.