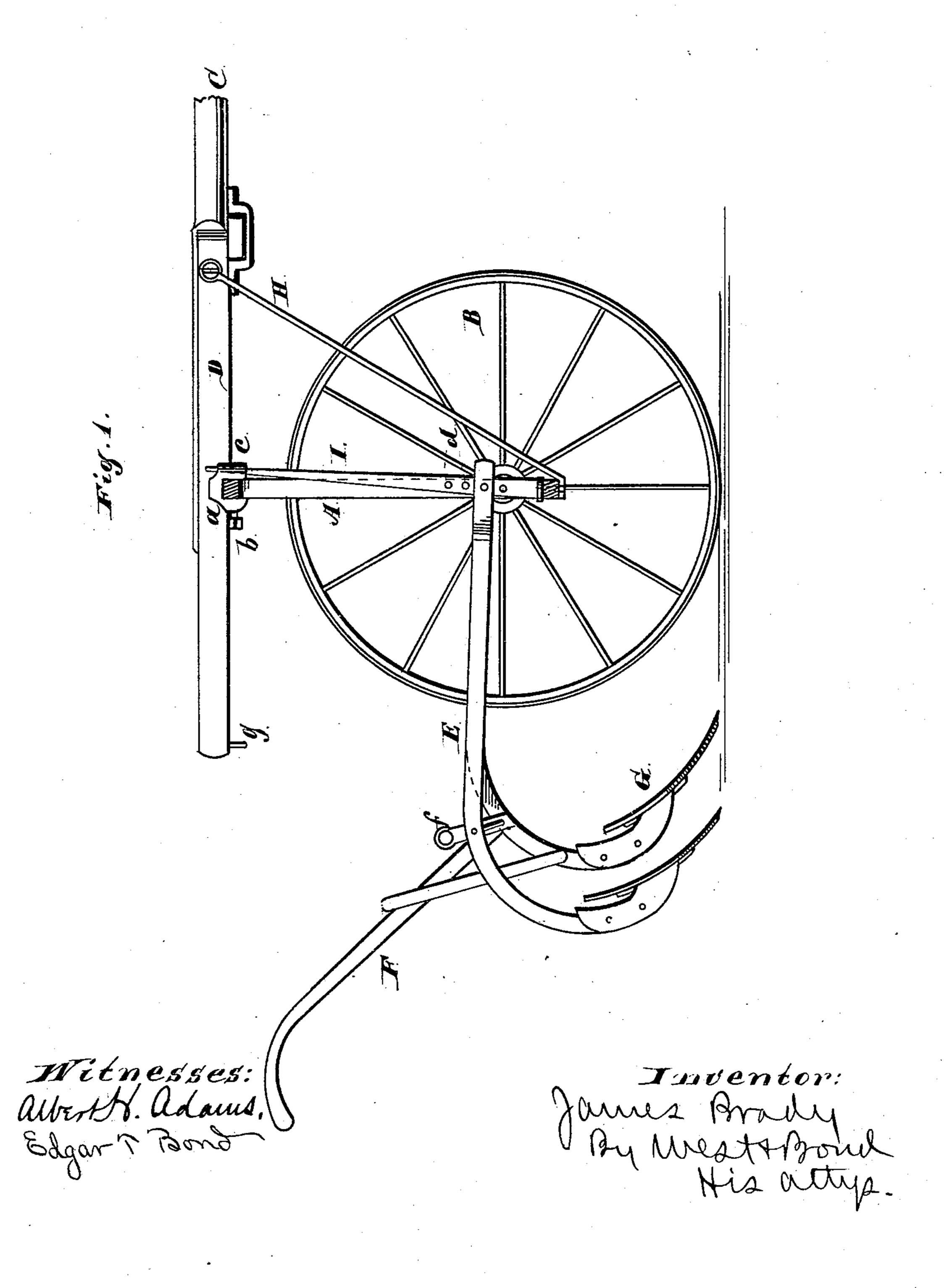
## J. BRADY.

CULTIVATOR.

No. 250,876.

Patented Dec. 13, 1881.

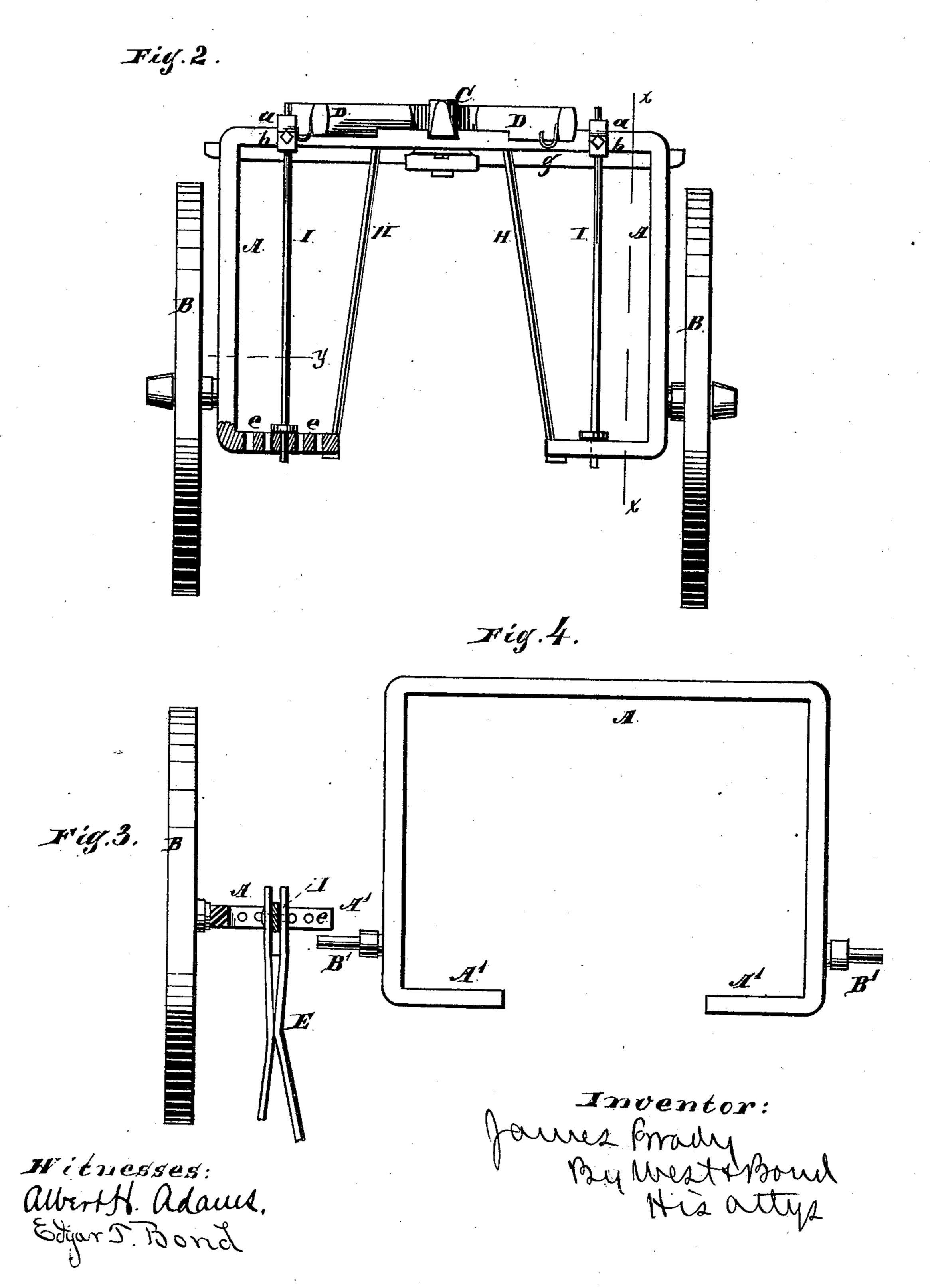


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## United States Patent Office.

JAMES BRADY, OF DIXON, ILLINOIS, ASSIGNOR TO THE ORVIS PLOW COMPANY, OF SAME PLACE.

## CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 250,876, dated December 13, 1881.

Application filed June 24, 1881. (No model.)

To all whom it may concern:

Be it known that I, JAMES BRADY, residing at Dixon, in the county of Lee and State of Illinois, and a citizen of the United States, have 5 invented new and useful Improvements in Cultivators, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal vertical section on to line x x of Fig. 2. Fig. 2 is a rear view with the plows removed, and partly in section; Fig. 3, a section showing the manner of forming the front end of the plow-beams and of adjusting them laterally, and Fig. 4 an elevation of the 15 axle-frame detached.

The object of this invention is to improve the means for adjusting the front ends of the plowbeams so as to increase or diminish the space

between the plows of the two beams.

My invention consists in a novel construction and combination of parts, which will be fully hereinafter described in detail, and specifically pointed out in the claims.

In the drawings, A A' indicate the arch or 25 axle-frame; B, the wheels; B', wheel-spindles; C, the tongue; D, braces; E, plow-beams; F, handle; G, plows; H, braces; I, rocking plate; a, the adjusting block or cap for the upper end of the plate I; b, the adjusting set-screw; c, 30 bearing in block a for the upper end of plate I; d, holes in plate I for vertically adjusting the front ends of the plow-beams; and e, holes in the parts A for laterally adjusting the lower end of plate I, and thereby narrowing or spread-35 ing the front ends of the plow-beams.

The plow-beams, with their handles and plows or shovels, and the wheels, tongue, and braces D, with their rearward extensions and the hangup devices f g, are, or may be, made in any of

40 the usual or well-known forms.

The arch or axle-frame A is made of a single piece or bar of iron bent or formed into the shape shown at Fig. 4, and its lower ends, A', are turned inward, as shown, to form supports 45 for the rocking plates I and attaching parts for the braces H. The wheel-spindles B' are permanently attached thereto, and may be made a part thereof, or they may be adjustably attached.

The arms A' of the arch are provided with I

holes e, adapted to receive the lower ends of the plates I, and the braces H are attached to their inner ends by rivets, bolts, or clips, and said braces are inclined inward and forward, as shown, and are attached at their upper ends 55 to the braces D. The plates or bars I are flattened above their lower pivots, and are provided with holes d, for the vertical adjustment of the front ends of the plow-beams, which are made to "fork" the plate. The plates I are ex- 60 tended upward to the top of the arch, and are pivoted in the bearing c of the block a. The blocks a are cut away at the bottom, so as to be easily applied, and they are held in place by the set-screws b, by means of which they may 65be adjusted along the top of the arch, as desired, and as the bearings c are in front of the arch, there is no strain on the blocks or their set-screws; and as it is not essential that the plates I should be exactly vertical, a close or 70 fine adjustment can be made, notwithstanding the lower adjustment by holes.

By making the arch or axle-frame in the form shown it passes around outside of the beams and lower ends of the braces and under the 75 beams, and the sides are brought close to the wheels, so that the weight of the parts comes on the wheels without leverage, and any bendingor straining on the parts A' does not affect therunning of the wheels. I also avoid joints by 80 this construction, and therefore make a stronger frame, and by connecting the braces H with the inner ends of the frame I give them a strong support, and the braces form guides to direct the growing corn through the open space, and 85 prevent the leaves from catching on the frame.

I do not claim, broadly, the method shown for attaching the plow-beams at their front ends.

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

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1. The combination, with the arch or frame A, having inwardly-projecting portions A', of the adjustable blocks a, arranged to slide horizontally on the arch or frame, and provided with the bearings c, and the upright plates I, hav- 95 ing their upper ends arranged in the bearings on the sliding blocks and their lower ends adjustably connected with the inwardly-projecting portions of the arch or frame, substantially as and for the purpose described.

- 2. The combination, with the arch or frame A, of the sliding blocks a, constructed to embrace the arch or frame, and provided with the front bearings, c, and adjusting set-screws b, and the upright plates I, having their upper portions arranged in the bearings on the sliding blocks and their lower portions adjustably connected both with the arch or frame and the forward ends of the plow-beams for adjusting the beams both laterally and vertically, substantially as described.
- 3. The combination of the arch or frame A, constructed as described, with the braces H and D, tongue C, pivoted plates I, and laterally-adjustable blocks a, provided with bearings c, in which the upper ends of the plates are arranged, substantially as set forth.

JAMES BRADY.

Witnesses:

FRANKLIN E. ORRIS, JAMES B. CHARTERS.