

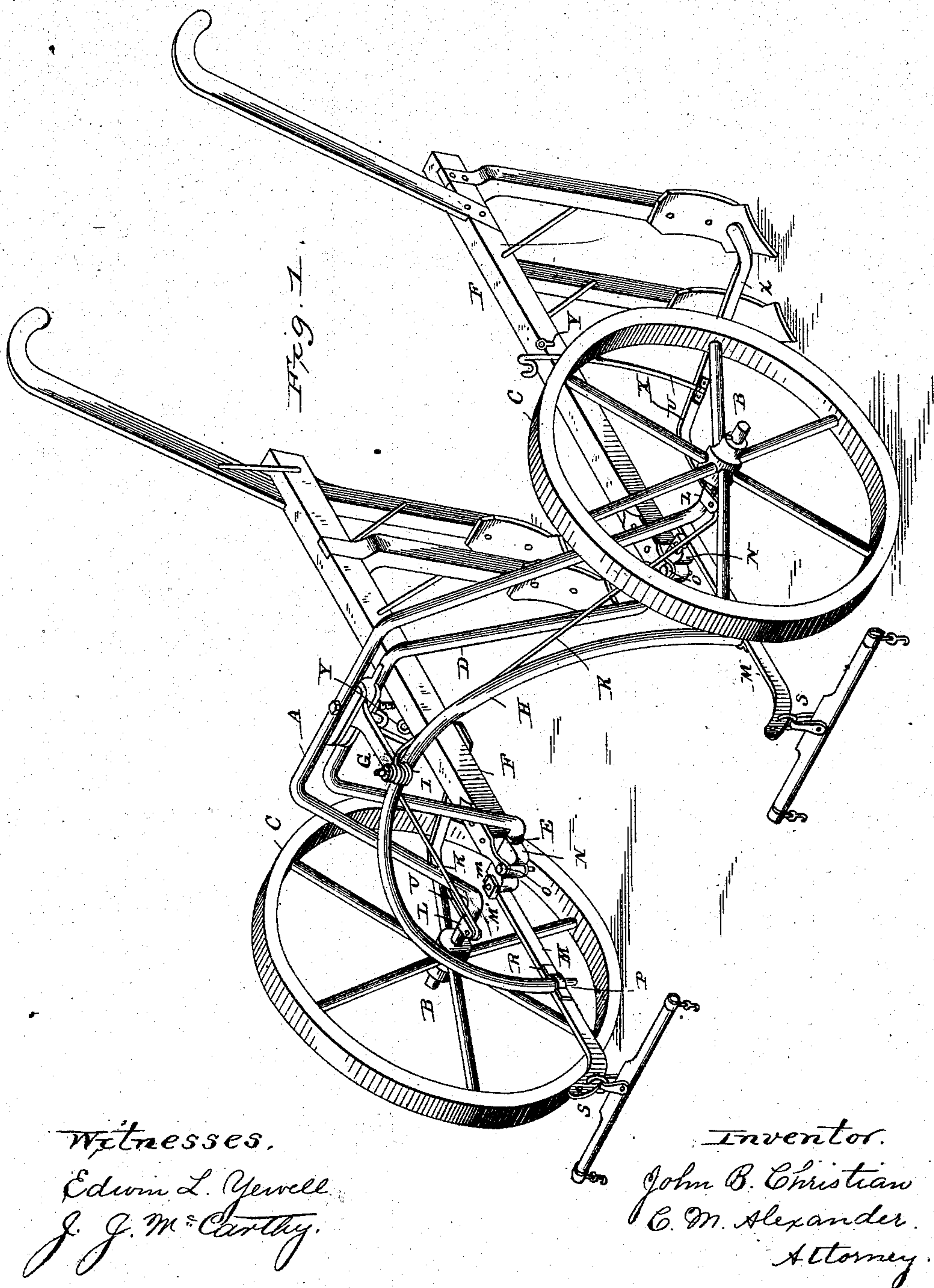
(Model.)

2 Sheets—Sheet 1.

J. B. CHRISTIAN.  
CULTIVATOR.

No. 284,380.

Patented Sept. 4, 1883.



Witnesses.  
Edwin L. Yewell  
J. J. McCarthy.

Inventor.  
John B. Christian  
C. M. Alexander.  
Attorney.



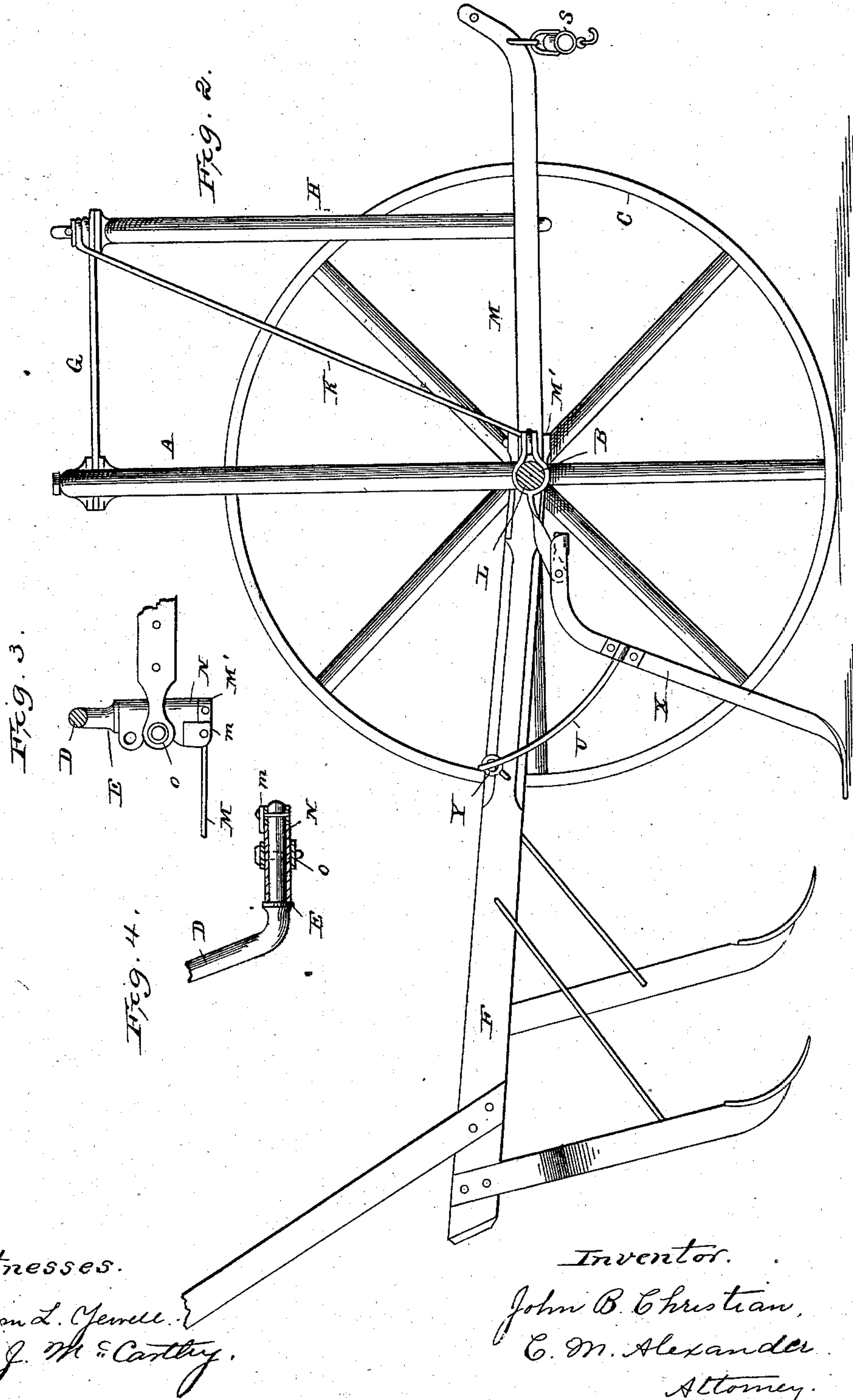
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Attorney.



# UNITED STATES PATENT OFFICE.

JOHN B. CHRISTIAN, OF HAMBURG, IOWA.

## CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 284,380, dated September 4, 1883.

Application filed August 29, 1882. Renewed May 31, 1883. (Model.)

*To all whom it may concern:*

Be it known that I, JOHN B. CHRISTIAN, of Hamburg, in the county of Fremont, and in the State of Iowa, have invented certain new and useful Improvements in Cultivators; and I 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.

This invention relates to certain improvements in arched wheel plows, which are intended to straddle a row of plants in cultivating the same; and it has for its objects to provide for an independent draft upon the separate plows, for elevating the plows when the machine is being transported from place to place, and to provide for holding the wheels in proper line of travel, as more fully herein- after specified. These objects I accomplish by means of the devices shown in the accompanying drawings, in which—

Figure 1 represents a perspective view of my improved plow; Fig. 2, a sectional view thereof; Fig. 3, a detached view of the connection by which the plow-beams are secured to the machine, and Fig. 4 a sectional view thereof.

The letter A indicates the arch, which is provided with axles B at its ends, upon which are mounted the wheels C.

D indicates a supplementary arch, secured to the arch A, an extension, G, being interposed, the whole being united by means of a king-bolt. The arch D is free to swing on the said bolt, and at its ends is bent laterally and horizontally, forming pintles E, on which the metallic blocks N are pivoted. These blocks are perforated, as indicated, and to them are pivoted the connections o, secured to the forward ends of the plow-beams F in such manner that the beams may swing laterally as well as vertically.

The letter M indicates the draft-beams, which are swiveled between the jaws of the clips M', secured to the ends of the before-mentioned pintles, the said clips being provided with stops m, which engage the edges of the blocks N and prevent the draft-beams from falling too low. The draft-beams are

also-secured to the ends of an arch, H, which is swiveled to the extension G, above mentioned, in such manner as to permit the draft-beams and the plow-beams at each side to move independent of each other, so as to equalize the draft upon the plows. The draft-beams, at their forward ends, are provided with the usual whiffletrees, S.

The letter K indicates two rods connected to the forward end of the extension G, and extending backward and laterally, and secured to the clips L, clasped upon the axles B. These form a brace, by means of which the wheels are caused to follow in line properly after the horses.

The letter X indicates a bent lever, fulcrumed to a rearward extension of the clips L, and provided with a hooked support, U, which is adapted to engage the rings Y on the plow-beams and hold them in an elevated position, the levers being provided with shoes at the lower ends, which drag along the ground, the whole serving to support the beams when the plow is moved from place to place.

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

1. The combination, in a wheel-plow, of the axle-arch, upon the axle of which the wheels are mounted, the supplementary arch and its pintles, the pivoted blocks and connected plow-beams, the swiveled draft-beams, and the bail to which they are attached, the latter being swiveled to an extension projecting from the axle-arch, substantially as and for the purposes specified.

2. The combination, in a cultivator, of the arched axle and a supplementary arch pivoted thereto, and having connected to them a forward extension, with a bail attached thereto and, respectively, with the arched axle and the draft-beams, substantially as shown and described.

In testimony whereof I affix my signature, in presence of two witnesses, this 19th day of July, 1882.

JOHN B. CHRISTIAN.

Witnesses:

J. P. BEACH,

J. M. WATERMAN.