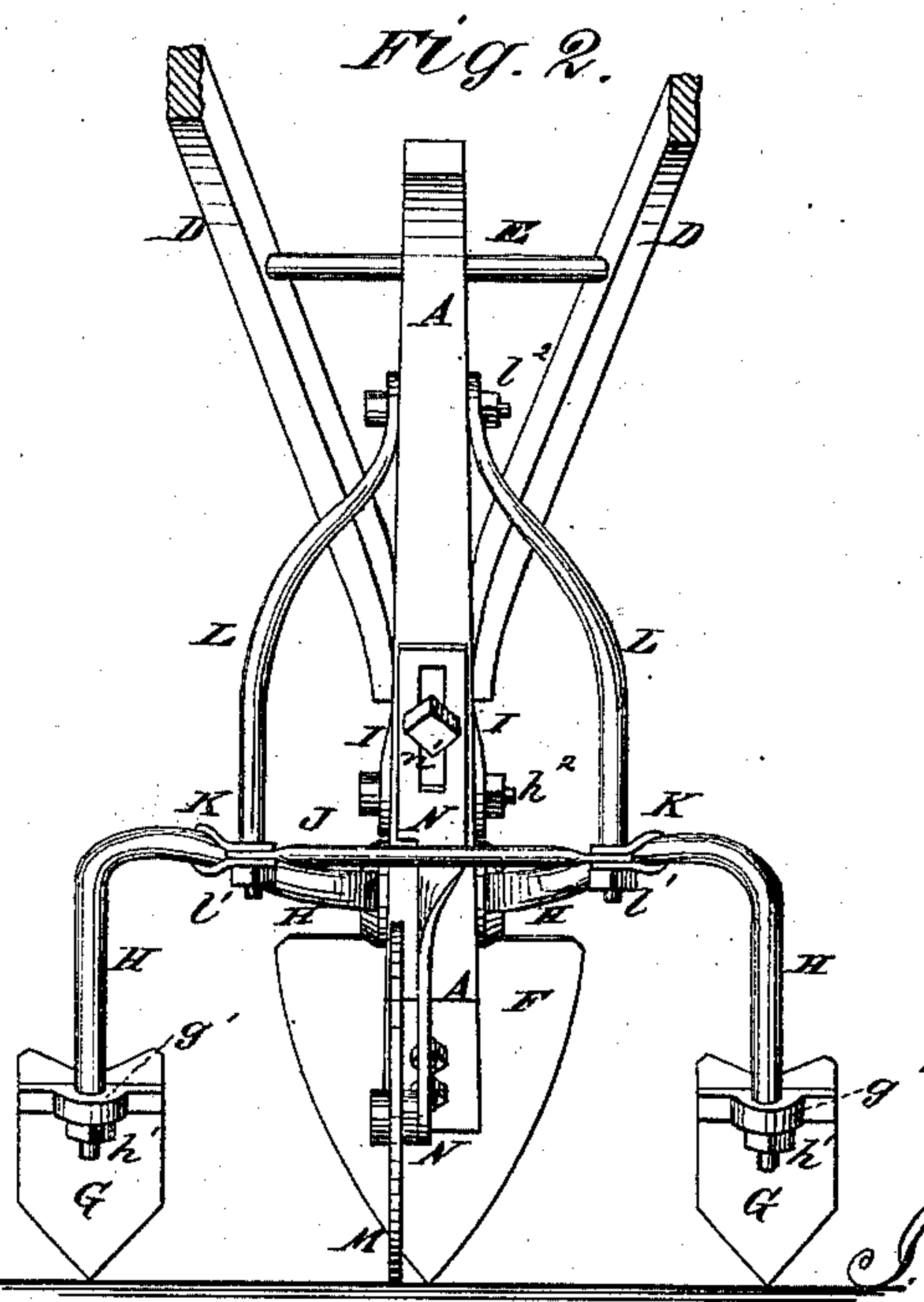
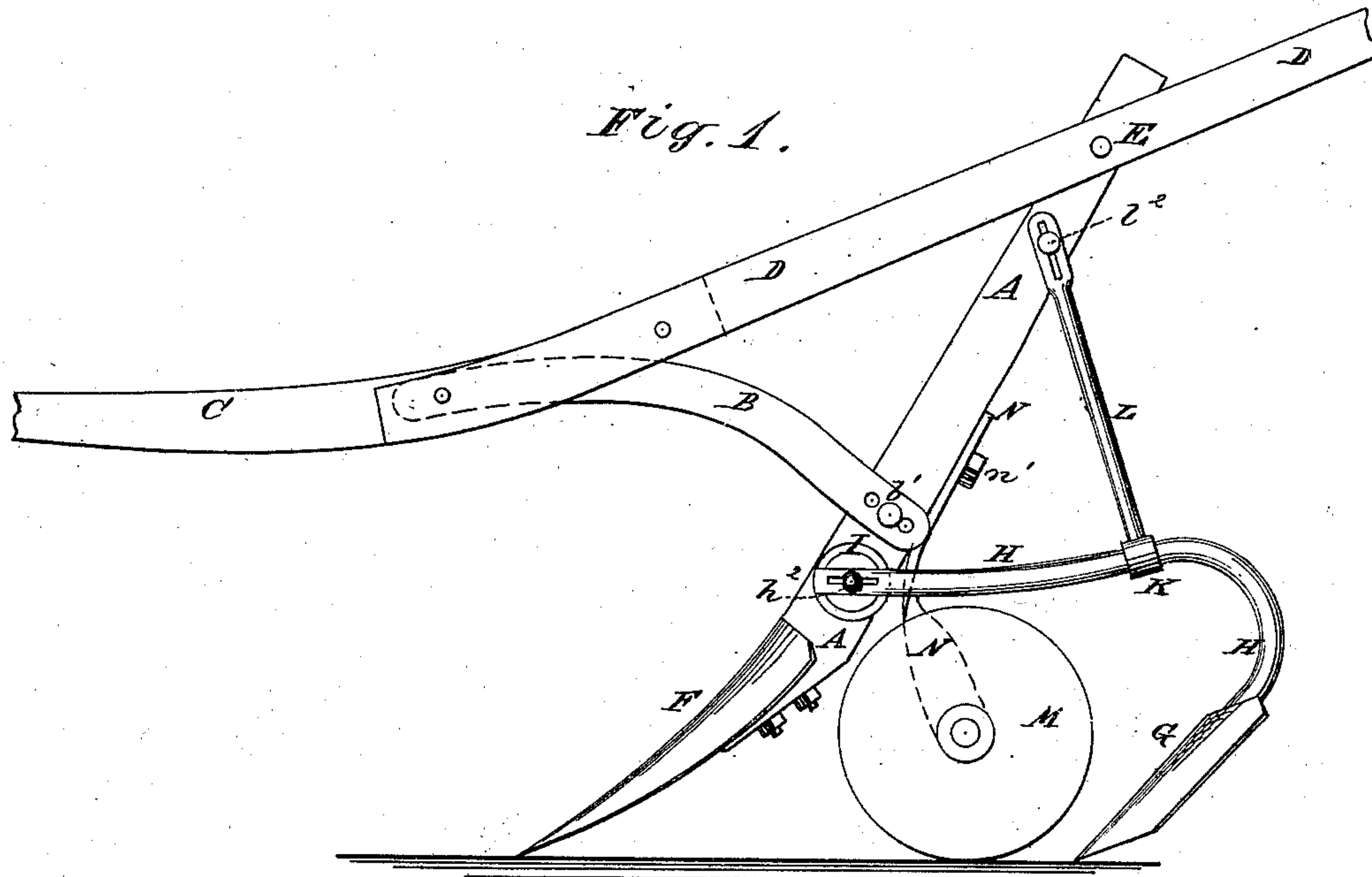


I. A. BENEDICT.  
Cultivator.

No. 199,017.

Patented Jan. 8, 1878.



WITNESSES:

*H. Rydquist*  
*J. H. Scarborough.*

INVENTOR:

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BY

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ATTORNEYS.

# UNITED STATES PATENT OFFICE.

ISAAC A. BENEDICT, OF WEST SPRINGFIELD, PENNSYLVANIA.

## IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **199,017**, dated January 8, 1878; application filed October 25, 1877.

*To all whom it may concern:*

Be it known that I, ISAAC A. BENEDICT, of West Springfield, in the county of Erie and State of Pennsylvania, have invented a new and useful Improvement in Cultivator-Plows, of which the following is a specification:

Referring to the accompanying drawings, forming part of this specification, Figure 1 is a side view of my improved cultivator-plow; Fig. 2 is a rear view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish improved cultivator-plows which shall be simple in construction, light, strong, and durable, easily adjusted, convenient in use, and effective in operation.

The invention will first be described in connection with the drawings, and then pointed out in claim.

C is plow-beam, to the opposite sides of the rear end of which are attached the forward ends of the handles D. The middle parts of the handles D are attached to the ends of a round, E, the center of which passes through, and is secured to, the upper end of the standard A. To the lower end of the standard A is attached the middle plow F, which may be made larger than the side plows G. The draft-strain upon the standard A is sustained by the braces B, the forward ends of which are attached to the opposite sides of the rear end of the beam C. The rear ends of the braces B are slotted, or have a number of holes formed in them, to receive the bolt  $b'$ , by which they are secured to the opposite sides of the standard A, so that the pitch of the plow may be adjusted by adjusting or loosening the said bolt  $b'$ . To the rear sides of the side plows G are attached eyes  $g'$ , to receive and fit upon the lower ends of the standards, bars, or arms H, where they are secured in place by nuts  $h^1$  screwed upon the lower end of the arms H, so that by loosening the said nuts  $h^1$  the plows G may be adjusted to throw the soil inward or outward, as may be desired.

The arms H are curved forward, and their

forward ends are placed in cross-grooves in the outer sides of the blocks I, placed upon the opposite sides of the standard A, and are slotted to receive the bolts  $h^2$ , by which they and the said blocks I are secured to the said standard A.

J is a cross-bar, the ends of which are secured to the arms H by the clamps K, which pass around the said arms and are secured to the lower ends of the rods L by nuts  $l^1$  screwed upon the said lower ends, the said lower ends passing through the said clamps K and the ends of the said cross-bar J.

The upper ends of the rods L are slotted to receive the bolt  $l^2$ , by which they are secured to the opposite sides of the upper part of the standard A.

By this construction, by loosening the bolts  $h^2$   $l^2$  and the nuts  $l^1$ , the side plows G may be adjusted wider apart or closer together, or at any desired pitch.

M is a small wheel placed in the rear of the lower end of the standard A, and which rolls along the bottom of the furrow opened by the plow F. The wheel M is pivoted to the lower end of the arm N, which projects upward, and is so bent that its upper part may fit against the rear side of the standard A.

The upper part of the arm N is slotted longitudinally to receive the bolt  $n'$ , by which it is secured to the standard A, so that by loosening the bolt  $n'$  the wheel M may be adjusted to cause the plows to work deeper or shallower in the ground, as may be desired.

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

The combination, with end-slotted and adjustable standards H H, of the connecting-bar J, clamps K, and rods L, the latter being vertically adjustable on standard A, as and for the purpose specified.

ISAAC A. BENEDICT.

Witnesses:

CHARLES HURD,  
S. D. BLICKENSDECKER.