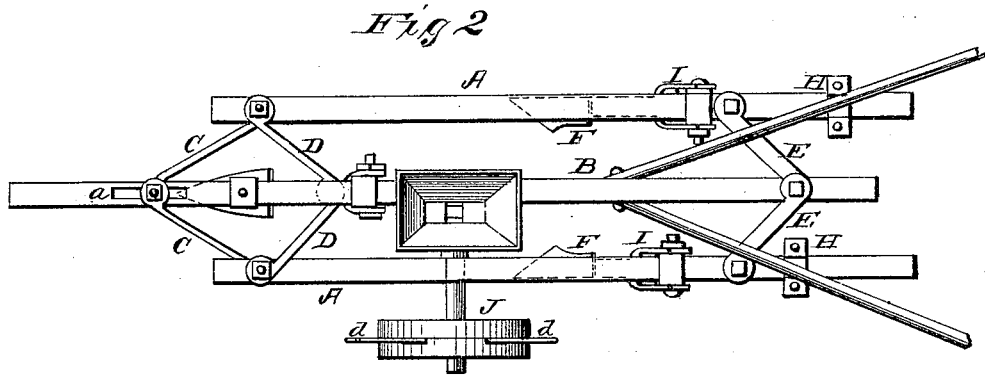
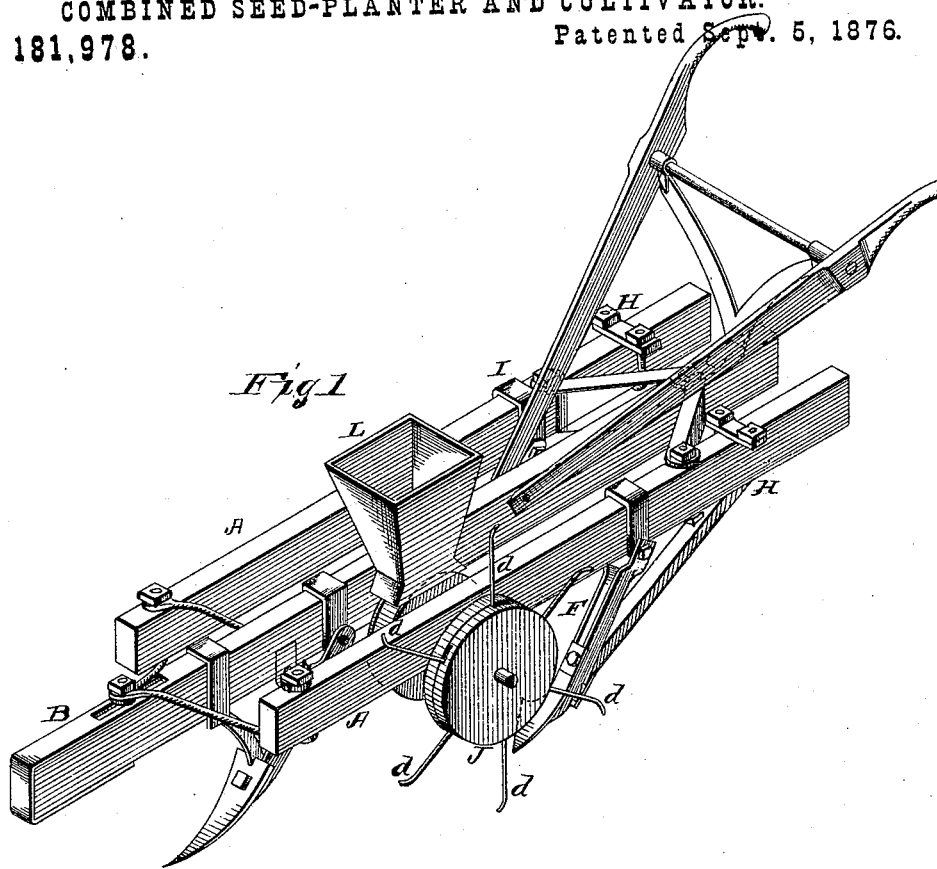


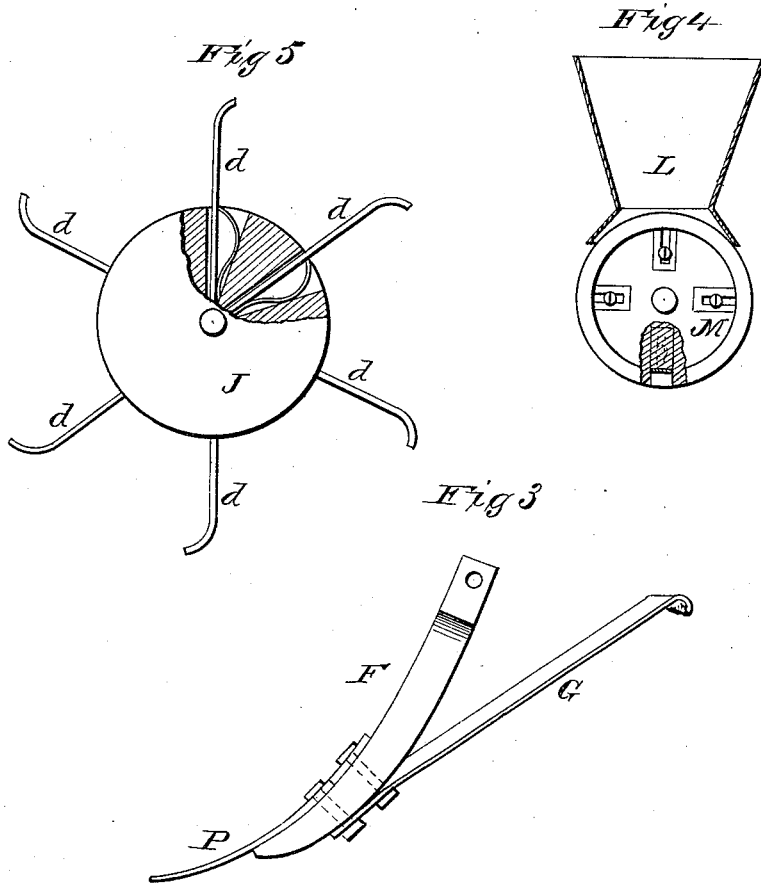
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COMBINED SEED-PLANTER AND CULTIVATOR.  
No. 181,978. Patented Sept. 5, 1876.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

WILLIAM J. PIRKLE, OF CUMMING, GEORGIA.

## IMPROVEMENT IN COMBINED SEED-PLANTER AND CULTIVATOR.

Specification forming part of Letters Patent No. 181,978, dated September 5, 1876; application filed July 12, 1876.

*To all whom it may concern:*

Be it known that I, WILLIAM J. PIRKLE, of Cumming, in the county of Forsyth and in the State of Georgia, have invented certain new and useful Improvements in a Seed-Planter and Cultivator; and 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.

The nature of my invention consists in the construction and arrangement of the several parts of a planter and cultivator combined, the peculiarities of which will be hereinafter more fully described.

In the accompanying drawings, making part of this specification, Figure 1 represents a perspective view, Fig. 2 a plan, and Figs. 3, 4, and 5 detached parts, of the machine.

In the figures, A A represent two side pieces of a cultivator-frame, which are parallel to each other, and which have interposed between them the beam B. The side pieces are connected adjustably to the beam by means of the bars E E, D D, and C C. These bars are so connected to the beam and side pieces as to form hinges, by means of which the parts can be moved to or from each other, and thus narrow or widen the cultivator-frame. The bars D D are bolted to the upper sides of the frame-pieces A A, and to the lower side of the beam B, the bolts acting as pivots. The bars C C are bolted to the under side of the side pieces A A, and then bolted together at the upper side of the beam. The head of the bolt which connects these bars together works in a slot in the beam, as seen at *a*. L represents the seed-hopper, which rests upon

the frame, and M the seeding-wheel at its bottom. This wheel M is provided with seed-apertures, and these apertures are regulated as regards depth by means of suitable followers, which are regulated by set-screws. Upon the axle of the seeding-wheel is a wheel, J, which is provided with arms *d d*, properly spaced, to regulate the flow of grain. F represents a foot of the cultivator, to which the point or shovel tooth is secured. This foot is in two parts at its upper end, and is hinged to the clip I, which surrounds the side pieces A. G represents a brace for the foot F. This brace is bolted to the foot near its lower end, and is fastened to the frame-piece A by means of a clip, H. By moving the clip H the brace G may be moved, and the angle of the foot changed.

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

1. The frame-pieces A A, in combination with the beam B, and the bars E E, D D, and C C, arranged substantially as and for the purpose set forth.

2. In combination with the adjustable frame-pieces and beam, the seeding-wheel M and the spacing-wheel J, upon the same shaft, said shaft being sufficiently long to allow of lateral spreading of the frame, substantially as herein represented.

In testimony that I claim the foregoing I have hereunto set my hand this 12th day of June, 1876.

WILLIAM J. PIRKLE.

Witnesses:

JOHN W. JAMES,  
JAMES A. WISE.