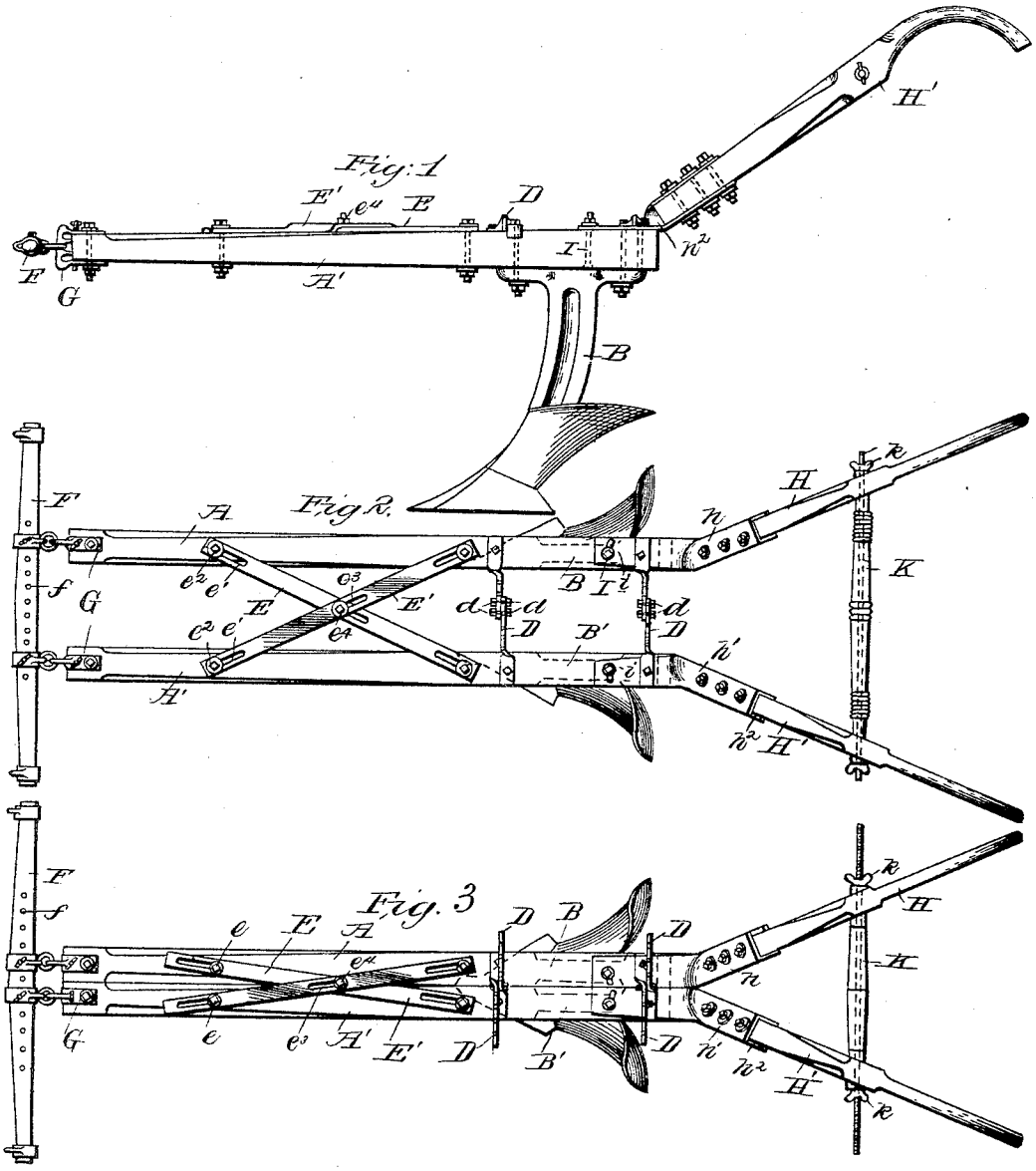
(No Model.)

H. P. MOORE.

COMBINED CULTIVATOR AND PLOW.

No. 460,983. Patented Oct. 13, 1891.



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UNITED STATES PATENT OFFICE.

HARWELL PARKS MOORE, OF BOSSIER PARISH, LOUISIANA.

COMBINED CULTIVATOR AND PLOW.

SPECIFICATION forming part of Letters Patent No. 460,983, dated October 13, 1891.

Application filed February 3, 1891. Serial No. 380,028. (No model.)

To all whom it may concern:

Be it known that I, HARWELL PARKS MOORE, a citizen of the United States, residing in Bossier Parish, State of Louisiana, have invented certain new and useful Improvements in Combined Cultivators and Plows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in combined cultivators and plows; and it consists in the construction and arrangement of parts hereinafter described, and definitely pointed out in the claims.

In providing a device of the kind above designated the object is, primarily, to simplify the construction and reduction from a complicated organism to a practical inexpensive device with the fewest number of parts, rendering the same practical, and particularly desirable for truck and general farming purposes, and whereby the need of two separate implements may be dispensed with and embodied in one organization. This object I attain by the construction illustrated in the accompanying drawings, wherein like letters of reference indicate corresponding parts in the several views, and in which—

Figure 1 represents a side elevation of my improved device; Fig. 2, a top plan view with the parts adjusted to form a cultivator, and Fig. 3 a similar view with the parts adjusted to form a plow.

In the drawings, A A′ represent two beams arranged parallel and each provided with a standard B B′, the adjacent faces of which are parallel and on the same plane as the inner faces of the beams. These standards are secured permanently to the beams by suitable bolts and carry on their lower ends landsides, points, and mold-boards, the landsides being parallel with each other, so that when the parts are forced together they will closely fit. The points are detachable, so that a double point may be placed on the standards when the device is to be used as a plow, or a nose may be placed over the points.

To permit the spreading of the beams when it is desired to form a cultivator and to securely retain the parts in position, I secure on the upper face of the beams, near their rear ends, lateral braces or arms D, made of iron bars set upon edge, having their connecting ends bent down at right angles, through which pass bolts for securing them in place. These arms are placed on one of the beams slightly in advance of those on the other beam, so that their opposite faces will come flush with each other. Through the inner ends of the arms are perforations at different points, through which binding-bolts *d* pass to unite the same. There are preferably two of these arms on each beam in front and rear of the standard.

E E′ represent diagonal tie-rods pivotally secured to the beams, crossing over and secured by binding-nuts *e* to the opposite beams near their forward ends. The forward ends of the rods are formed with elongated slots *e′*, through which bolts e^2 pass. They are also formed with elongated slots e^3 at their centers, through which a locking-bolt e^4 passes to unite the same.

F represents a singletree having a series of apertures *f* therein, through which pass the king-bolts of the clevises G on the ends of the beams.

H H′ are the handles, secured at their lower ends to the standards by plates *h′ h*, which are formed with a twisted shank or sockets h^2, extending out obliquely, through which the bolts pass to unite the handles thereto.

I are pivoted bolts with binding-nuts thereon, passing through the flat portion of the plates near their rear ends. The front portions of the plates have curved elongated slots *i* therein, through which bolts i^2 pass.

The reach K or connecting-rod between the handles is hollow and formed in sections, through which passes a metal rod, which also passes through the handles and is provided on its protruding ends with thumb-nuts *k*.

In operation when the parts are to be adjusted to form a plow the bolts in the arms are taken out and the binding-nuts and bolts of the cross-rods are loosened. A number of sections are then taken from the reach, the bolts in the curved openings in the handle-plates loosened, and the clevises detached from the singletree. The beams are then moved up in contact with each other, moving the handles on the pivotal bolts and forcing

the cross-rods out to the limit of the slots in their ends, the arms sliding past each other until the last aperture is reached. Bolts are then passed through the arms, the binding-bolts tightened on the cross-bars and handle-plates, the clevises secured in the central perforations in the singletree, and the thumb-nuts screwed down to take up the space formerly occupied by the removed sections of the reach.

The plow is thus formed having double mold-boards, and the parts are securely held together.

I am aware that many minor changes can be made in the construction and arrangement of the parts and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

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

1. In a combined cultivator and plow, the combination, with two parallel beams having standards thereon and adjustable connections between the beams, of handles pivoted to the beams, their ends having elongated slots formed therein, bolts passing through the slots, a sectional reach between the handles, a rod passing therethrough, and nuts on the rod outside the handles, substantially as described.

2. In a cultivator, the combination, with two parallel beams having standards thereon, and the handles, of means for adjustably uniting the beams, plates, to which the handles are secured, pivotally bolted to the beams and formed with curved slots in their outer ends, and bolts passing through the slots, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HARWELL PARKS MOORE.

Witnesses:
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