No. 662,081. Patented Nov. 20, 1900.

C. L. MURPHREE.

CULTIVATING PLOW.

Application filed July 31, 1900.

(No Model.)

Fig. 4.

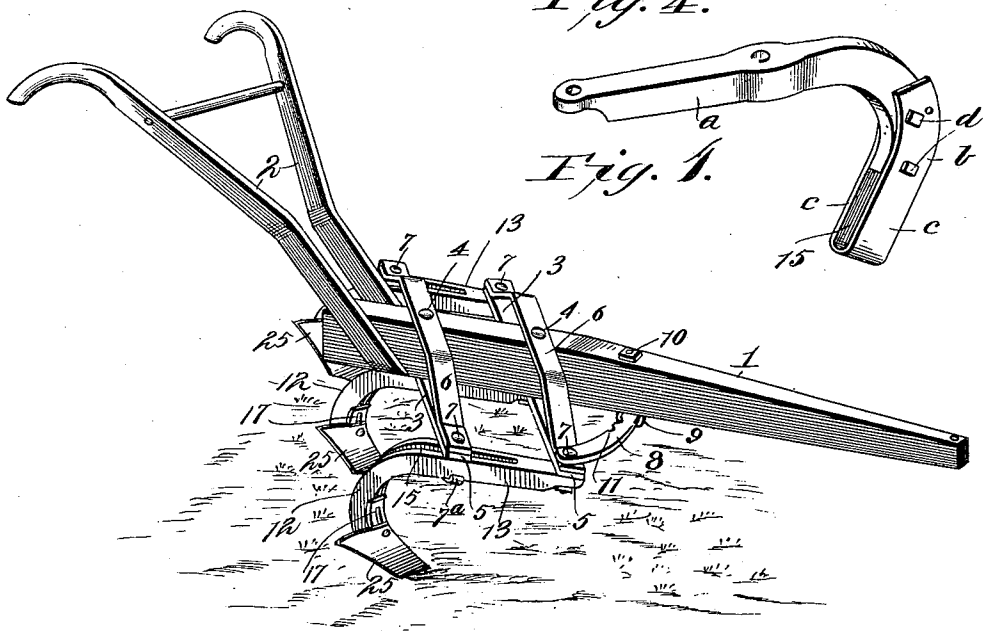


Fig. 1.

Fig. 2.

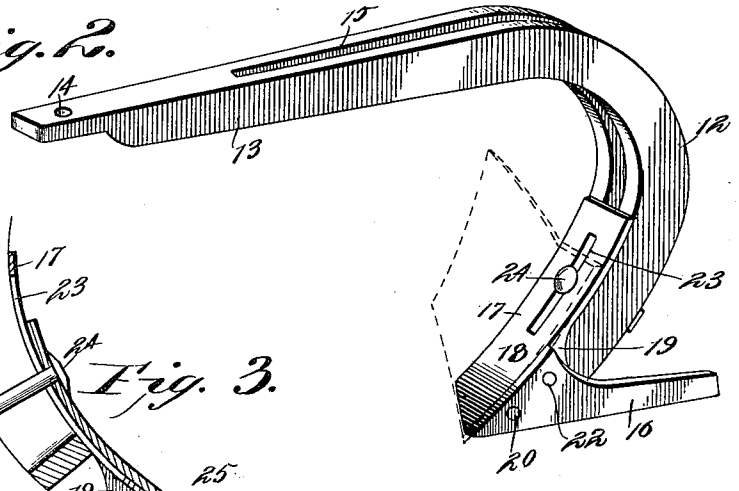
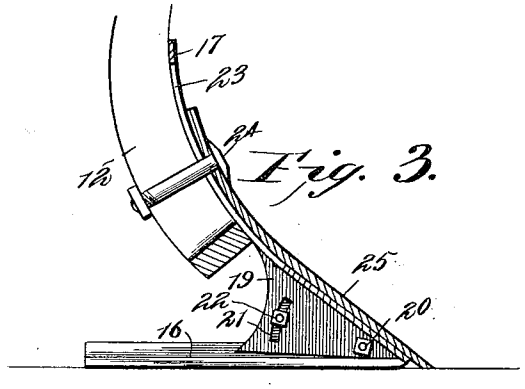


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

CLAUDE LEONIDAS MURPHREE, OF WALNUT GROVE, ALABAMA.

CULTIVATING-PLOW.

SPECIFICATION forming part of Letters Patent No. 662,081, dated November 20, 1900.

Application filed July 31, 1900. Serial No. 25,464. (No model.)

To all whom it may concern:

Be it known that I, CLAUDE LEONIDAS MURPHREE, a citizen of the United States, residing at Walnut Grove, in the county of Etowah and State of Alabama, have invented a new and useful Cultivating-Plow, of which the following is a specification.

My invention is an improved cultivating-plow; and it consists in the peculiar construction and combination of devices hereinafter fully set forth, and pointed out in the claims.

One object of my invention is to provide resilient supports for the cultivating-plows, whereby the latter are adapted to yield and spring when they encounter an obstruction, and thereby reduce the liability of breaking the parts of the cultivator.

A further object of my invention is to effect improvements in the devices for supporting the cultivating-plow points and adjusting the same laterally toward and from each other.

A further object of my invention is to effect improvements in the construction of the combined standards and beams which carry the cultivating-plow points.

A further object of my invention is to effect improvements in the construction of the cultivating-plows, whereby the same are provided with adjustable landsides and share-plates.

In the accompanying drawings, Figure 1 is a perspective view of a cultivating-plow embodying my improvements. Fig. 2 is a detail perspective view of one of my improved combined beams and standards and one of my improved cultivating-plow points attached thereto. Fig. 3 is a detail sectional view of the same. Fig. 4 is a detail perspective view of a modified form of the plow-standard.

The beam 1 is of the usual construction and is provided with the usual handles 2. Supporting cross-bars 3 are centrally pivoted to the beams by means of bolts 4. The said supporting cross-bars are made of spring metal, preferably spring-steel, and in the embodiment of my invention herein shown each of the said supporting cross-bars is composed of a lower bar 5 and an upper brace or truss bar 6, the latter passing over the beam 1 and having its ends secured to the ends of the lower bar 5 by bolts 7. On one of the said bolts 7, at one end of the front supporting cross-bar 3, is attached a segment-bar 8. The latter operates in a loop 9, formed at the lower end of a bolt 10, which extends vertically through the beam 1 at a point in advance of the front bolt 4. The said segment-bar is provided on its under side with adjusting-notches 11, which coact with the loop 9 to secure the segment-bar to the beam 1 at any desired adjustment, thereby securing the front supporting cross-bar 3 at any desired position with relation to the beam 1, either at right angles or obliquely thereto.

The standards 12, to which are attached the plow points or shares, are formed integrally with arms or beams 13, which extend forward therefrom, and said arms or beams are pivotally attached to the cross-bars 3 on the under sides thereof at their ends and at their centers by the bolts 7. Said bolts 7 of the front cross-bar 3 are inserted in openings 14 at the front ends of the beams or arms 13. The said combined standards and beams are each provided with a longitudinal slot 15, extending nearly throughout the combined length thereof. The bolts 7 at the ends of the rear cross-bar 3 operate in the front portion of said slots 15, and said bolts have T-plates 7^a at their lower ends, which serve as clamps to secure said beams or arms to said cross-bar. The pivotal bolt 4 of the rear cross-bar 3 is likewise provided with a similar T-plate 4^a for the central beam or arm when three of the latter are used, as in the form of my invention shown in Fig. 1; but it will be understood that the number of the cultivator-plows may be varied and that any number desired may be used in connection with the stock.

It will be understood from the foregoing that by adjusting the cross-bars by the means hereinbefore described, so as to dispose them at any required angle with relation to the beam, the cultivating-plows, which are carried by said cross-bars, may be adjusted laterally and disposed at any required distance apart. The cross-bars 3 being spring-bars, the cultivating-plows are adapted to yield and spring as they encounter obstructions, thereby greatly reducing the liability of breaking any of the parts of the implement.

I will now describe my improved cultivating-plow share or point: The landside 16, which is preferably of the form here shown, is provided with a supporting-bracket 17, comprising the front plate 18, which is curved and adapted to the contour of the standard 12 and adapted to fit on the front side thereof, and a flange 19, which depends from one side of said plate and overlaps one side of the standard. To the said flange is pivoted near its front end the landside by means of a bolt 20. Said flange 19 is provided with a curved slot 21, which is concentric with the bolt 20, and an adjusting-bolt 22, with which the landside is provided, operates in said curved slot and serves to clamp the landside to the flange and to adapt the landside to be adjusted, as may be required. The plate 18 is provided with a slot 23, which registers with the slot 15, and a bolt 24 in said slots 23 15 serves to secure the bracket 17 at any required adjustment on the standard. I further provide a share-plate 25, which may be either of the form here shown or of any modified form and is adapted to fit on the plate 18 of bracket 17 and to project laterally from one side of the standard like the moldboard of a plow. The bolt 24, which secures the bracket 17 to the standard, also secures the share-plate 25 on the bracket, the slot 23 of the latter admitting of the share-plate being adjusted on the face of the bracket and also enabling share-plates of varying sizes to be secured to and used in connection with the bracket.

In Fig. 4 I illustrate a modified form of the standard in which the same comprises the upper section *a*, formed integrally, and the lower section *b*, which is of U shape in front and rear elevation, and has the curved arms *c*, which are adapted to the contour of the section *a* and secured thereto by bolts *d*, the curved arms *c* bearing on opposite sides of the section *a*. The slot 15 is formed between the arms *c* below the section *a*, as will be understood.

Having thus described my invention, I claim—

1. The combination of a standard having a vertical slot therein extending from the front to the rear side thereof, a landside, bearing against one side of the standard and having a supporting-bracket comprising a plate bearing on the front side of the standard, said plate having a slot coincident with that of the standard, a share-plate on the face of said bracket, and a bolt securing said standard, bracket and share-plate together, said bolt passing through an opening in said share-plate and through said slots in said standard and bracket, substantially as described.

2. The combination in a cultivator-plow, of a beam, spring cross-bars secured to the lower side thereof, spring brace or truss bars, secured on the upper side of the beam and having their ends secured on the ends of the cross-bars, and cultivator points or shares having their standards secured to said cross-bars, substantially as described.

3. The combination of a supporting-bracket comprising a plate to bear on the front side of a standard, said bracket having a depending flange bearing against one side of the standard, and a landside pivoted near its front end to the said flange, at a point near the front end of the latter, said flange having a curved slot concentric with said pivot, and an adjusting-bolt to secure said landside to said flange, said bolt engaging said slot, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CLAUDE LEONIDAS MURPHREE.

Witnesses:
H. M. CORNELIUS,
J. H. ELLISON.