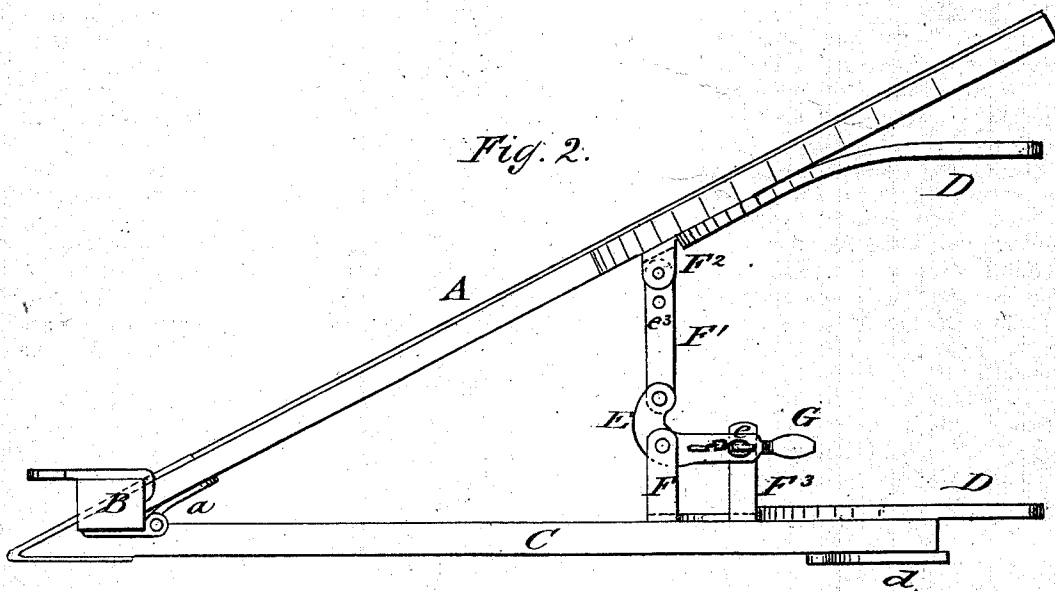
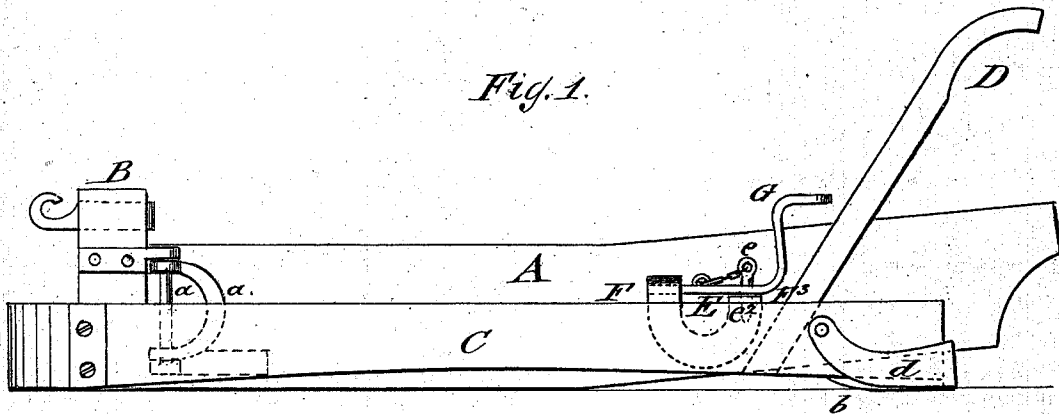


H. VON PHUL, Jr. & J. MALLON.
Sugar-Cane Cultivators.

No. 146,216.

Patented Jan. 6, 1874.



Witnesses:

E. Wolff
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Inventor:

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UNITED STATES PATENT OFFICE.

HENRY VON PHUL, JR., AND JAMES MALLON, OF HOLLY WOOD, NEAR BATON ROUGE, LOUISIANA.

IMPROVEMENT IN SUGAR-CANE CULTIVATORS.

Specification forming part of Letters Patent No. 146,216, dated January 6, 1874; application filed September 20, 1873.

To all whom it may concern:

Be it known that we, HENRY VON PHUL, Jr., and JAMES MALLON, of Holly Wood, near Baton Rouge, in the parish of East Baton Rouge and State of Louisiana, have invented a new and Improved Sugar-Cane Cultivator, of which the following is a specification:

In the accompanying drawings, Figure 1 represents a side view, and Fig. 2 a top view, of our improved sugar-cane cultivator.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and then pointed out in the claim.

In the drawing, A represents the mold-board, which is joined by a strong hinge, *a*, to a standard, B, and the land-side C. The land-side C is intended to pass midway or parallel to the rows of cane, and produces, with the mold-board A, the shape of a slanting V. The point of the cultivator and the outer lower edge of the mold-board are strengthened, in the usual manner, by metallic bands applied suitably to them. The rear part of the land-side C is provided at the bottom with a metallic plate, *b*, and the side with a sharp blade or knife, *d*, which cuts into the earth and resists the pressure of the mold-board thereon. The handles D are applied to mold-board and land-side in the usual manner, and the position of the mold-board and land-side regulated by a curved

ever, E, which is pivoted to a supporting-bar, F, of the land-side, and connected by a pivoted bar, F¹, to a projecting lug or plate, F², of the mold-board A. The larger end of the T-shaped lever E is provided with a handle, G, and has a chain with a pin, *e*, attached, which serves to lock the lever E into the different positions. For expanding the fluke to its largest width, the handle end of lever E is locked by pin *e*, through a hole, *e*¹, near its handle, into a hole, *e*², of a projecting bar, F³, of the land-side. For contracting the width, the lever is keyed to a hole, *e*³, of bar F¹; and to bring the fluke to its narrowest position for rows which are planted very closely together, the lever E is turned forward till its shorter pivoted end strikes bar F of the land-side.

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

The combination of board A and land-side C, hinged together, and having levers D and studs F F², with pivoted bar F¹, and lever E, capable of being fastened at different points of adjustment on a stud, F³, as and for the purpose set forth.

HENRY VON PHUL, JR.
JAMES MALLON.

Witnesses:

Z. S. DAIGN,
C. C. BIRD.