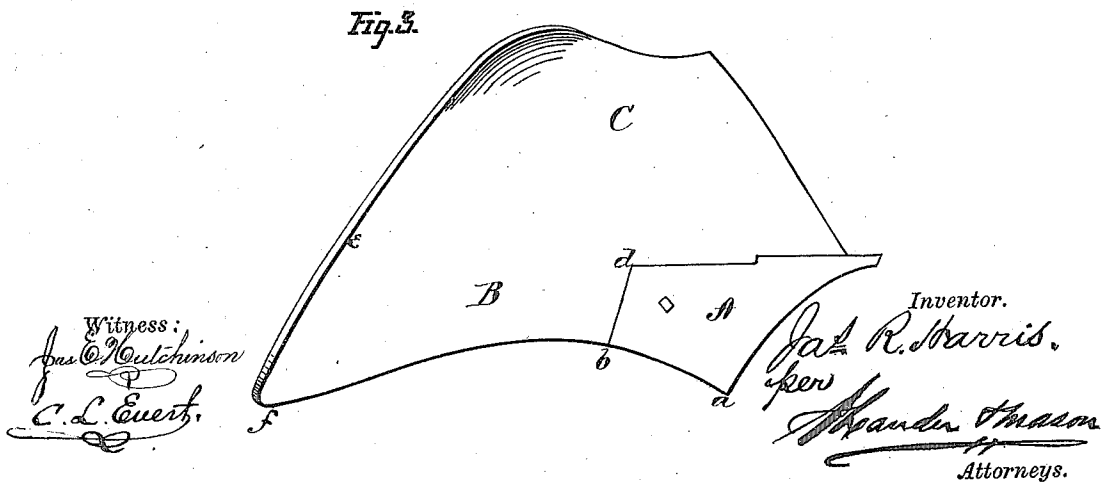
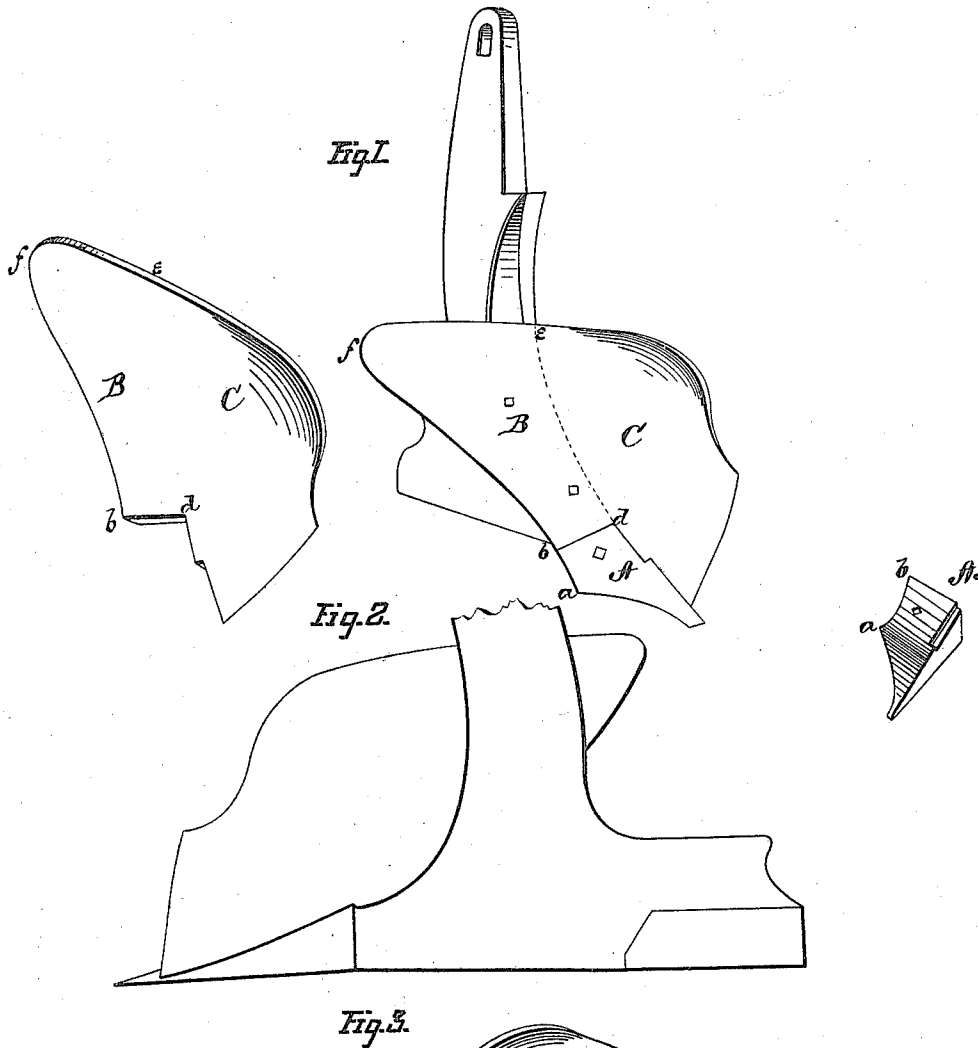


J. R. HARRIS.
Plows.

No. 134,275.

Patented Dec. 24, 1872.



UNITED STATES PATENT OFFICE.

JAMES R. HARRIS, OF HAZLEHURST, MISSISSIPPI.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 134,275, dated December 24, 1872.

To all whom it may concern:

Be it known that I, JAMES R. HARRIS, of Hazlehurst, in the county of Copiah and in the State of Mississippi, have invented certain new and useful Improvements in Combined Plow and Scraper; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing 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 mold-board of a plow, to be used with a scraper, whether said mold-board and scraper are made in one piece or separate, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view; Fig. 2, a side elevation; and Fig. 3, a plan view of my invention.

A represents the plow-point, B the mold-board, and C the scraper. The front end of the point A is made in the usual manner, but the rear side, from *a* to *b*, is slightly concave, as shown. The mold-board B extends upward from the upper end of the point A, the line *d e* being its inner and the line *b f* its outer side. The lower and rear portion of the usual mold-board is cut away from the point *f*, at an angle of about forty or forty-five degrees, down to the point *b*, said line *b f* forming a continuation of the curve *a b* of the plow-point A, thus reducing the width of the mold-board, whereby the resistance is very materially lessened.

The points on the throat and breast of the mold-board, where the earth usually lodges and creates the resistance, are by this construction of the mold-board cut away so that the earth will fall down behind.

The scraper C, shown in the drawing, is constructed in precisely the same manner, and has the same angles and curves, as described in my patent dated November 5, 1872; but I do not confine myself exclusively to this construction of scraper, as other scrapers might be used with my construction of the mold-board.

The scraper and mold-board may be made in one piece, or made separate and attached to the standard.

The plow-point A may be made separate, as shown, or in one piece with the mold-board and scraper, if so desired. When made separate it should be provided with an offset, *h*, and gain or recess, *i*, for the edge of the scraper, the point of the scraper being set back from the extreme end of the plow-point.

My present invention accomplishes the same results as intended in my former patent, above referred to, with a great reduction in the amount of power necessary to operate it.

This plow may be employed for all the purposes for which an ordinary turn-plow may be, and for some of them—such as “dirting” young plants—it is far superior to any implement known to me, because, unlike the common turn-plow, it does not move the soil in such heavy layers; but, taking it from the left of the land-side in thin layers, it is better pulverized in reaching its destination about the plant. Moreover, the plow-share, when running in the subsoil, does not intermix the subsoil with the soil; and though the subsoil is broken, yet the sectional mold-board will not receive and turn it, and it remains to be covered by the soil brought from the left of the land-side.

Another advantage of my invention over the ordinary turn-plow is that by the sectional mold-board and plow-share the power necessary to operate it, in comparison to that required for an ordinary turn-plow, is diminished perhaps one-half, yet equally effective in capacity.

A scraper with my mold-board is necessary, as, without it, the plow would not cut enough of land.

Two or more of these plows may be used on one beam as a gang-plow.

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

The mold-board B, having its outer or rear portion cut away, from *f* to *b*, at an angle of about forty or forty-five degrees, in combination with a plow-point and scraper, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 6th day of December, 1872.

JAMES R. HARRIS.

Witnesses:

A. N. MARR,
EDM. F. BROWN.