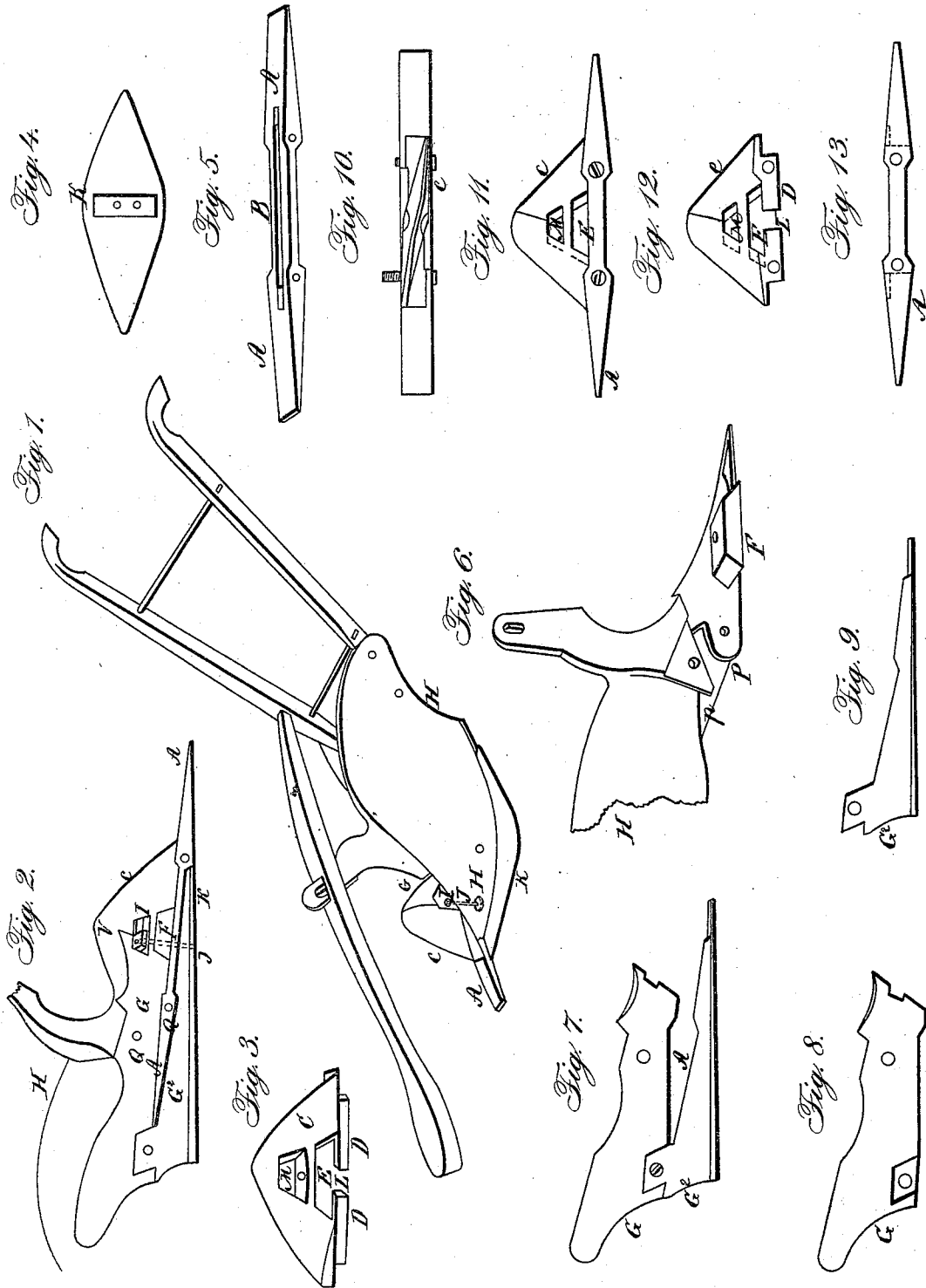


J. BALL.

Plow.

No. 4,263.

Patented Nov. 8. 1845.



UNITED STATES PATENT OFFICE.

JOHN BALL, OF GREENTOWN, OHIO.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 4,263, dated November 8, 1845.

To all whom it may concern:

Be it known that I, JOHN BALL, of Greentown, in the county of Stark and State of Ohio, have invented a new and useful Improvement in Plows, of which the following is a specification.

The nature of my invention consists in providing the land-side of the mold-board with a dovetail tenon, by means of which it is firmly attached to the cutter, and also by uniting the cutter and the points by means of a tenon and mortise, and binding them together by means of an iron rod passing up through the bottom of the landside and through the center of the point and the tenons on the cutter and the mold-board, and screwing into a nut in the aperture near the top of the cutter, and also in providing the share with four edges, which may be used alternatively, as occasion may require.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Letter A is the point, which may be made of any convenient size, and is in the form of those in common use, and may be changed, either end for end or upside down, as occasion may require.

Letter B, Figure 5, in the point, is a mortise running lengthwise with it, and passing through it from the upper to the lower side. This mortise is half an inch wide, and about two-thirds the length of the lower side or edge of the cutter C.

Letter D, Figs. 3 and 12, on the lower edge of the cutter, represents the tenons, which are made of the proper size to enter and fill up the mortise B, Fig. 5, in the point, and by means of which they are firmly attached to each other, as represented in Fig. 11.

The cutter C is nearly in the form of an isosceles triangle, with the upper corner or angle a little rounding, and has two edges, either of which may be set to the front at pleasure. Fig. 10 is a top view of the cutter and point united.

Letter E, Figs. 3, 11, and 12, in the cutter, represents the dovetail mortise passing through it from the mold-board to the landside, immediately over the center of the point, and into which the dovetail tenon F, Figs. 2 and 6, on the land side of the mold-board enters, as represented by letter F, Figs. 2 and 6.

Letter L, Figs. 3 and 12, represents a gap or fault in the center of the tenon D on the lower edge of the cutter, through which the iron rod J, Figs. 1 and 2, passes from the lower side of land-bar G², Figs. 2, 7, and 9, up through the mortise B in the point A, tenon F, on the land side of the mold-board H, and center of the cutter into a nut, I, placed in the aperture M in the cutter C, as represented in Figs. 2, 11, and 12, and by means of which rod J and screw-nut I, the mold-board H, the cutter C, and point A are all fastened together, as represented in Figs. 1 and 2. The mold board is made in the usual form.

Letter G represents the landside, which, with the back end of the point A, is fastened to the flange P p, Fig. 6, on the land side of the mold-board by means of screws Q Q, Fig. 2, inserted from the landside of the plow.

Fig. 2 represents the landside of the plow when its several parts are combined.

G² is the land-bar.

Letter K represents the share, which is nearly oval on the edges, and running nearly to a point at either end. This share has four edges, and acts upon the principle of a self-sharpener, either of which edges may be used by turning it upside down, or end for end alternately, as occasion may require. This is made of suitable length and width and thickness to suit the other members of the plow. This share is attached to the lower edge of the mold-board by means of screws.

Fig. 1 represents a plow when completed, the beam and handles of which are made of wood, and are in the usual form. I make no claim to securing this part by a single bolt; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

The combination of the point A, cutter C, and mold-board H, by means of the mortises in the point and the cutter, the tenon D on the lower edge of the cutter, and the dovetail tenon F on the land side of the mold-board H, so as to unite them and render them more permanent and durable than plows now in use.

JOHN BALL.

Witnesses:

SAMUEL PETREE,
WILLIAM DUNBAR.