

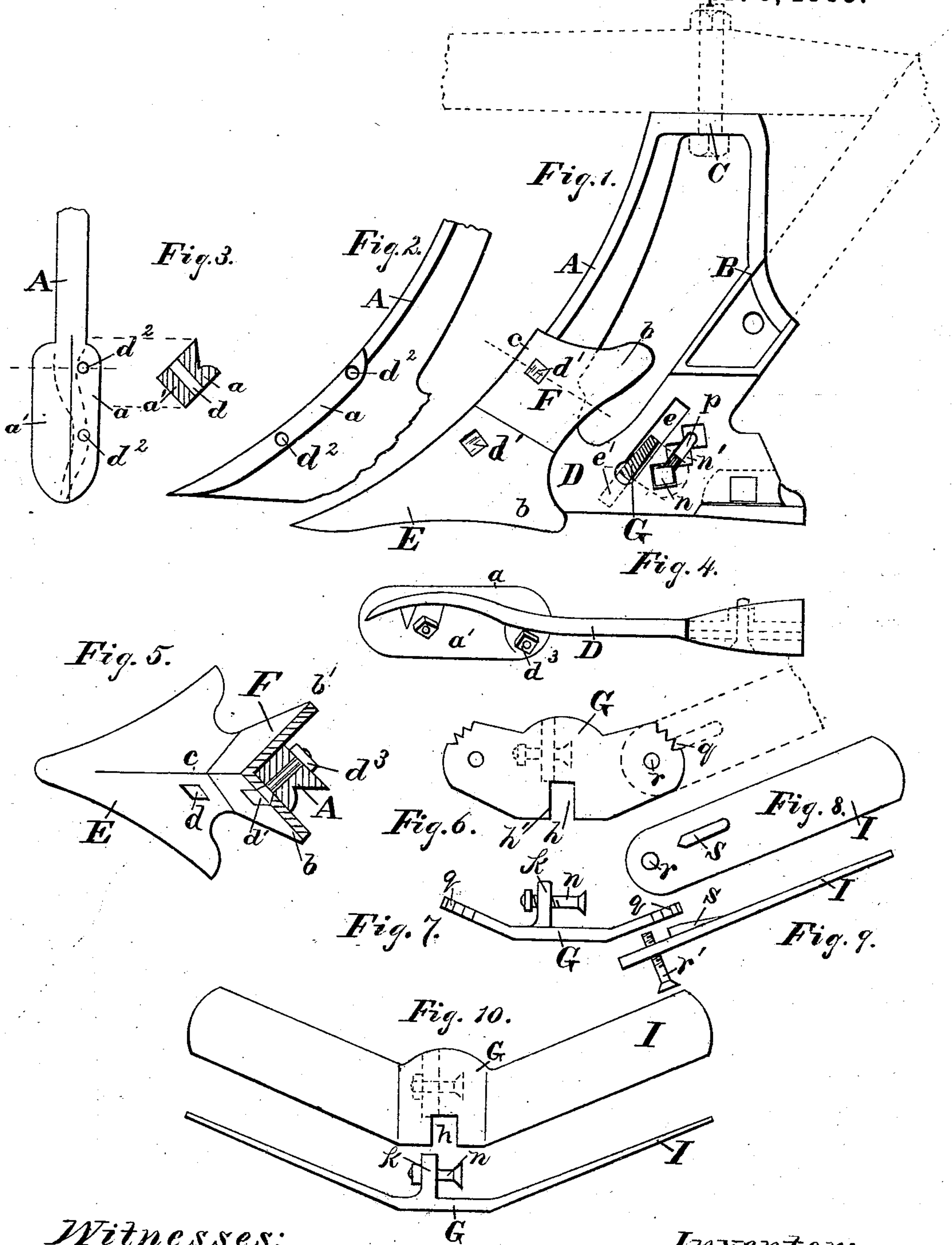
(No Model.)

R. W. WHITEHURST.

PLOW.

No. 275,304.

Patented Apr. 3, 1883.



Witnesses:
A. C. Eader.
John E. Morris.

Inventor:
Robt. W. Whitehurst,
By Chas. B. Mann,
Attorney.

UNITED STATES PATENT OFFICE.

ROBERT W. WHITEHURST, OF NORFOLK, VA., ASSIGNOR OF TWO-THIRDS
TO AURELIUS WRENN AND McDONALD L. WRENN, OF SAME PLACE.

PLOW.

SPECIFICATION forming part of Letters Patent No. 275,304, dated April 3, 1883.

Application filed December 1, 1882. (No model.)

To all whom it may concern:

Be it known that I, ROBT. W. WHITEHURST, a citizen of the United States of America, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Cultivating-Plows, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain improvements in cultivating-plows, and the same will first be described, and then designated in the claims.

In the drawings hereto annexed, Figure 1 is a side view of the plow. Fig. 2 is a side view of the standard and foot. Fig. 3 is a front view of the front standard. Fig. 4 is a bottom view of the same and of the foot. Fig. 5 is a horizontal section of the front standard and mold-board. Fig. 6 is a front view of the sweep-stock. Fig. 7 is a top edge view of the same. Fig. 8 is a back view of the sweep. Fig. 9 is a top edge view of the same. Fig. 10 is a view of the two sweeps and stock in one piece.

The letter A designates the front standard; B, the back standard; C, the cap-piece, which connects the two standards at the top; and D, the foot, which connects the same at the bottom. All these parts constitute one casting. It is immaterial, however, whether these parts are constructed in this special manner or not, or whether there be one or two standards.

The point E and mold-board F are secured to the front standard, and the handles (indicated by broken lines) to the back standard, while the beam, which is also indicated by broken lines, is supported on the cap-piece.

The front standard, at the lower end or foot part, is provided with flanges a a' , projecting laterally from the front edge. These flanges are inclined to the rear, and the two form an angular face, on which the point E and mold-board F rest. The point and mold-board are each made with two faces or wings, b b' , which incline from the center or cutting line, c , to the rear. Thus these parts are adapted to rest, saddle-fashion, on the angular face of the front standard.

I do not claim that the construction thus far described is new; but the manner hereinafter described, in which points and mold-boards of

this form are secured or made fast to the standard, I believe is a new and much improved one. But one bolt is used to secure each of these parts, and the peculiar construction whereby the said bolt is entered through the point or mold-board and through the standard constitutes one of the features of my invention.

Instead of passing the bolt through the center or cutting line of the point or mold-board, as is usually done in plows of this class where but one bolt is employed, I form a hole, d , in one of the inclined faces. This hole, as usual, is countersunk to admit the square head of the bolt d' , so that the flat surface of said head will coincide with the surface of the inclined face. Thus, although but one bolt is used, its position is such that there is no break in the cutting-line. As there is but one hole for the molder to watch, the work in manufacturing is lessened and the cost thereby reduced. This applies to both the point and mold-board. In the standard the bolt-hole d^2 has its opening in one of the side flanges, a , and thence passes diagonally through the center of the standard, and has its other opening in the rear side of the other flange, a' . By this diagonal position it will be seen the bolt d' has its head on the inclined face of the point (or mold-board, as the case may be) at one side of the cutting-line c , while the nut d^3 of the bolt is on the rear of the standard and at the opposite side of the cutting-line. Thus the bolt passes through the center and heaviest part of the standard, where it has greatest strength, and the nut is exposed in a position which greatly facilitates its attachment or removal.

An inclined slot, e , is formed in the foot or in the back standard, and the sweep-stock G occupies this slot and is adjustable therein up or down. The sweep-stock has two wings, one of which projects on each side of the plow, and a sweep, I, is attached to each wing. If desired, the sweeps may be cast integral with the wings, as shown in Fig. 10; or the stock part and sweeps may be made separate. A notch or open-ended slot, h , is formed in the lower edge of the central part of the sweep-stock, and a lug, k , is formed on the back of said central part and integral with the sweep-stock. This lug has a bolt-hole for the passage of a bolt, n , which holds the sweep-stock rigidly to

any position on the foot of the plow. A bolt-slot, *p*, is formed in the foot, and the same is parallel with the inclined slot *e*. At one side of the foot this slot has on each edge V-shaped notches *n'*, which are adapted to serve as countersinks for the square head of the bolt *n*, by which the sweep-stock is secured. It will be seen this contrivance will prevent the bolt from slipping, and so the bolt will secure the sweep-stock at any position in the inclined slot to which it may be adjusted. The notch *h* in the center of the sweep-stock serves a useful purpose, in that its practical effect is to stay the sweep-stock by the edges *h'* of the notch impinging against the sides *e'* of the foot just below the end of the inclined slot. By this arrangement of sweep-stock in an inclined slot the sweeps may be adjusted up or down without changing their inclination or the angle of their position, which is desirable in cultivating cotton and other crops. The end of each wing of the sweep-stock is provided with notches *q*, and a bolt-hole, *r*, has such position that the notches are concentric with it. The separate sweeps I also have a bolt-hole, *r*, and on the rear side is provided with a lug, *s*. The position of this lug on the rear side is such that it is not affected or worn by the soil or earth during the work of cultivating. When the bolt *n'* is passed through the holes *r* in the sweep and in the wing of the sweep-stock, the lug *s* on the sweep will engage one of the notches *q* on the wing. As there are several notches, the outer end of the sweep may be adjusted.

Having described my invention, I claim and

desire to secure by Letters Patent of the United States—

1. The herein-described construction, consisting of the point or mold-board having two inclined faces, *b b'*, and provided in one face only with a single bolt-hole, *d*, the standard having on each side a flange, *a*, with a hole, *d*², which opens in one flange only, and thence passes diagonally through the center of the standard and opens in the rear of the other flange, and a bolt, *d'*, which occupies the said hole in the point or mold-board and standard, as set forth.

2. A plow having a standard or foot provided with an inclined slot, *e*, combined with a sweep whose stock has in the lower edge of the central part an open slot, *h*, which said central part occupies the inclined slot, adapting the stock to be adjusted up or down without changing the inclination of the sweeps, as set forth.

3. The combination of a plow standard or foot having an inclined slot, *e*, and a bolt-slot, *p*, parallel therewith, and said bolt-slot provided with V-shaped notches *n'*, a sweep whose stock occupies the inclined slot, and has on the back of the said stock a lug, *k*, and a square-headed bolt, *n*, as set forth.

In testimony whereof I affix my signature, in presence of two witnesses, this 10th day of November, 1882.

ROBERT W. WHITEHURST.

Witnesses:

GEO. W. DEY,
GEO. D. DEY.