

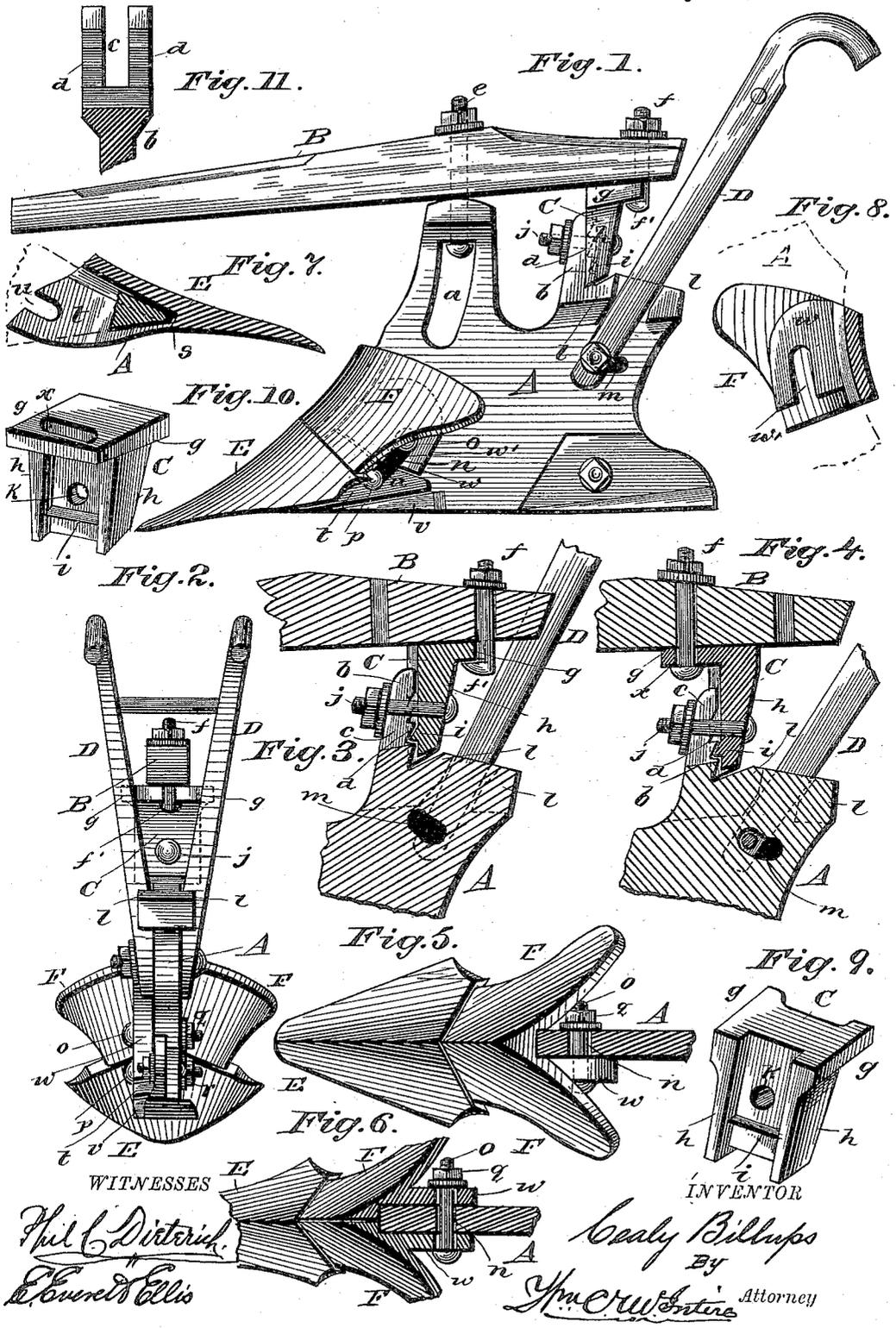
(No Model.)

C. BILLUPS.

PLOW.

No. 363,109.

Patented May 17, 1887.



WITNESSES

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PLOW.

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To all whom it may concern:

Be it known that I, CEALY BILLUPS, a citizen of the United States, residing at Norfolk, county of Norfolk, State of Virginia, have invented new and useful Improvements in Plows, of which the following is a specification.

This invention relates to certain new and useful improvements in plows; and it consists, substantially, in the same as constructed, and in such peculiar arrangement and combinations of parts, as will hereinafter be more particularly described, and pointed out in the claims.

The invention has for its object to so construct both the mold-board and the point of the plow for attachment to the standard that their adjustability may be readily effected without removal of the nuts by which they are secured, and also by such construction to enable the parts to be cast and removed from the sand without a core.

Further, the invention has for its object to provide simplified means by which the plow-beam may be readily adjusted vertically at its rear end to vary the inclination of the point or share and be quickly secured to said adjustment. Further, to so attach the handles to the standard that they may be conveniently varied or adjusted to position; and, finally, the invention has such additional objects in view as will more fully appear from the description hereinafter following.

Before proceeding with the details of construction and arrangement of the parts contributing toward my invention, I would state that I am aware that the objects sought to be accomplished by me are not new, broadly, as they have all been accomplished heretofore in different ways; but the purpose of the present invention is in the main to so simplify the arrangement, construction, and combinations of these parts as that their cost is reduced to a minimum, and many inconveniences heretofore experienced greatly overcome.

Referring to the accompanying sheet of drawings, Figure 1 is a side elevation of a plow embodying my invention, and Fig. 2 a rear view thereof. Fig. 3 is a detail sectional view of a portion of the standard, beam, and handles, the same indicating more clearly

the manner of adjusting the rear end of the beam for regulating the pitch or inclination of the point or "share." Fig. 4 is a similar view to Fig. 3, wherein a modification of the adjusting frame or device is illustrated. Fig. 5 is a top or plan view of the point and mold-board, together with a portion of the standard in section, this figure showing the manner of attachment of said point and mold-board to the standard by means of bolts and securing-nuts. Fig. 6 is a similar view to Fig. 5, showing the manner of attachment of the same devices as when the mold-board is made in two parts. Fig. 7 is a longitudinal sectional view of the plow share or point to show its construction for attachment to the standard. Fig. 8 is a like view of the mold-board for a similar purpose. Fig. 9 is a perspective detail of the adjusting frame or device, to which the rear end of the plow-beam is secured in such manner as to have a slight swing or play horizontally; and Fig. 10 is a similar view of a modification of such device. Fig. 11 is a rear elevation of the serrated yoke either attached to or formed with the standard, and in which the adjusting-frame for the beam works.

Reference being had to the several parts by the letters marked thereon, A represents the plow-standard slotted at its upper forward end, as at *a*, and having rearward of such slotted portion a yoke or receiver, *b*, the said yoke being either formed with the standard or separate therefrom and suitably attached, the same in either case to have the recess *c*, and provided on its rear side with the notches or serrations *d*.

B represents the plow-beam, attached to the standard by a bolt, *e*, extending into the slot *a* and secured by means of a nut, as shown. Passing downwardly through the rear end of this beam is a pin or bolt, *f*, provided on its lower end with a lip, *f'*, fitting beneath the projecting ledge or top of the adjustable frame or device C, and between the extended corners *g g* thereof, as shown, thus allowing the necessary limited play of the rear end of the beam in a horizontal plane. This device C is formed with extended sides *h h*, by which to embrace the two sides of the yoke *b*, while between these sides a rib, *i*, extends, adapted for engagement with the notches or serrations of

such yoke, thus enabling an adjustment of the inclination of the standard, the parts C and *b* being held together by means of a screw-bolt, *j*, passing through the hole *k* of the former and resting in the recess *c* of the latter, and secured by a nut, as shown. In Figs. 4 and 10 I have illustrated a modified form of this adjusting-frame C, and wherein, instead of having the lip of the bolt fitting beneath the projecting ledge of the top, I have shown the pin or bolt as working within a slot of the top, which projects forwardly of the plow, as shown, instead of rearwardly thereof, as in the first instance.

ll indicate projections formed on each side of the plow-standard at its upper rearward end, between which the handles D are allowed a slight movement forwardly and backwardly, and these handles are supported in a curved slot, *m*, of the standard by means of a bolt and nut, as shown. It is evident that a small curvature of this slot will suffice for as full adjustment of the handles as is required in practice, it only being necessary to loosen the nut and again tighten it when the adjustment has been effected. The forward lower end of the standard is formed with a slot, *n*, and it is through this slot that the securing-bolts *o* and *p* for the "point" and mold-board are passed, the parts being secured in position by tightening the nuts *q* and *r*.

E represents the plow share or point, which is recessed, as at *s*, for the reception of the point of the standard, (see Fig. 7,) and is formed beneath to one side of such recess with a rib or flange, *t*, having in its rear edge a slightly-curved notch, *u*, the said rib fitting snugly or closely against the side of the standard (its slot registering with the slot *n* thereof) when the point is secured in place. The standard is formed or provided on its side beneath the slot with a slightly-inclined plane or flange, *v*, upon which the lower edge of the rib *t* rides on inserting the point, and by which the latter is assisted in being held to its place after being secured in position. If desired, a similar rib may be provided on the bottom of the point to fit against the opposite side of the standard in like manner, a single bolt and nut only being required in either case.

F represents the mold-board, which is fitted to the front of the standard, with its lower edge conforming to and resting upon the upper edge of the point E. The said mold-board is also provided with a rib, *w*, projecting from its inner side, and which is provided with a notch, *w'*, extending inward or upward from its lower edge, such notch registering or coinciding with notch *n* of the standard.

The manner of securing both the mold-board and point to the standard is by the screw-bolts *q* and *r*, which pass through the slots of the ribs and that of such standard and are provided with tightening-nuts, as shown. It is evident that adjustments of either can be made without entire removal of the nuts, and that from the constructions thereof they can be cast without a core. In some instances I propose to construct the mold-board in two parts, (see modification, Fig. 6,) in which event each part will have the slotted ribs to corresponding or opposite sides of the standard; but the same bolt and nut will suffice to hold them in place in either case. Again, also, when making the mold-board of a single piece I may employ a rib, *w*, on each side of the standard and formed with said mold-board. For a view of the internal construction of the latter see Fig. 8.

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

1. In a plow, the combination, with the standard having yoke *d* and curved slot *m*, and formed or provided on opposite sides with projections *ll*, of the device C, having extended corners and embracing and engaging the yoke, the beam, the pin *f*, passing through the beam and engaging the device C between its corners, and the handles D, passing between the projections *ll* and adjustably secured in the slot *m* by a bolt and nut, substantially as described.

2. In a plow, the combination, with the standard having yoke *b*, constructed as described, of the device C, having extended sides and corners *g g*, and sides *h h*, embracing the yoke, the beam, and the pin *f*, passing through the beam and engaging the device C between its corners, substantially as described.

3. In a plow, the combination, with the standard formed with the slot *n*, of the plow-point, recessed as at *s*, and formed or provided with rib *t*, having the notch *u*, and a bolt and nut securing said point to the standard, substantially as shown, and for the purpose set forth.

4. In a plow, the combination, with the standard having slot *n* and flange *v*, of the point having recess *s*, and formed or provided with notched rib *t*, the mold-board also formed with a notched rib, and bolts and nuts for adjustably securing said point and mold-board to the standard, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CEALY BILLUPS.

Witnesses:

K. H. GAYLE,
L. ROYSTER.