

# United States Patent Office. 

CEALY BILLUPS, OF NORFOLK, VIRGINTA.

## PLOW.

# SPECIFICATION forming part oí Letters Patent No. 362,598, dated May 10, 1867. 

Application filed March 22, 1e87. Serial No. 231,9 6. (No model.)

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 in5 vented 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 o in such features of arrangement and combinations of parts as will hereinafter be more particularly described, and pointed out in the claims.

The object of the invention is to provide a fecting form of plow-point for readidy also a peculiarity of form of mold-board designed to hold the plow-point in its place after being attached without the necessity of special securing means therefor, and to so construct the same as to cause it to break the sliding force of the dirt, and thus prevent the covering up of small plants while plowing.
The invention has for its object, further, to provide the plow with side sweeps capable of reversibility, so as to utilize at will the two
cutting-edges with which the same are constructed, and to permit of either one or both of them being used, accordingly as they may be required, with either a single or double mold-board plow, the said sweeps being also designed for adjustment to varying angles or degrees of pitch, as may be required under various conditions incident to the uses of the plow, and, finally, the invention has such other objects in view as will more fully hereinafter appear, when taken in connection with the accompanying drawings, wherein-

Figure 1 represents a side view of plow emtalyng my invention, and ig. 2 is a horizon tal sectional view thereor. Fig. 3 is a side view of a portion of the standard, showing the mold-board and plow share or point by which to indicate the form of attachment of the lat45 ter. Fig. 4 is a view in perspective of one of the side sweeps. Fig. 5 is a sectional detail showing, as when viewed from the rear, the mode of attachment of the point to the standard, and Fig. 6 is a similar view of a modification of such attachment. Fig. 7 is a sec- tional view showing the modification, Fig. 6,
as when viewed from the side. Fig. 8 represents a portion of the standard in section, representing the construction thereof on opposite sides, by which theside sweeps are maintained at adjustable points.

In an application marked "A," filed February 23 , 1887 , Serial No. 228,530 , I have set forth certain improvements in this class of inventions, and wherein I have set forth and 60 shown the same arrangement of both the plow beam and handles as is shown in the presentinstance. It will be understood that I lay no claim herein to such features. In the present case, as in the one referred to, the mold-board may be cast or formed of either one or two pieces.

Reference being had to the several parts by the letters of reference marked thereon, A represents the standard, $B$ the beam, and $C$ the handles, the construction, attachment, and arrangement of these being the same as in the accompanying application referred to, with the exception that on opposite sides of the stand ard, in order to practice the present invention, it is necessary to provide what I term 'hips' 11 , having projecting therefrom pegs 22 , preferably of a beveled form, although any de sired configuration thereof may be employed.

D D represent the adjustable and reversible side sweeps, each being formed with a rightangle portion, 3 , for resting against the side of the standard, and having a series of notches at the angle formed with the sweep proper, such notches being indicated at 4, and for the purpose of engaging the teeth 22 on the sides of the standard, the said sweeps being also provided in their portions 3 with an opening, 6 , coinciding with a similar opening, 7, in the standard, a bolt, 8, passing through and securing said sweeps in position in an obvious manner. It is evident that by turning these sweeps upon the bolt which secures them they may be adjusted to varying angles, and it will be seen, further, that I have provided the same with two cutting-edges, so as to be able to change or reverse the sweeps to opposite sides of the standard, thereby gaining a considerable amount of wear. I also form the sweeps pointed or bevel-shaped on their outer ends, by which construction the dirt 100 will be pushed close under plants without covering up same.

Thestandard A is formed upon opposite sides, near its lower forward edge, with lugs $a$, while slightly abore these lags the said standard is formed with a vertical slot or opening, $b$. The or howed out on its under side, as at $c$, to form a seat for the reception of the nose or lower forward corner of the standard, and it is formed with two slightlycurved lugs or ears, $d d$, that are designed to

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 slip over or fit upon the flanges $a a$ when the point is attached, the said ears being recessed slightly, as at $d^{\prime}$, for the reception of the lower edge of the mold-board.Instead of forming the flanges $a a$ as an in5 tegral part of the standard, (see Figs. 3 and 5,) I may cast them separate and attach them to the standard by means of a boltand nut, indicated by the numerals 9 and 10. (See Figs. 6 and 7.)
It is obvious that many modifications in the shape or form of the ears can be resorted to, as well as in the construction of lugs around which they fit.
G represents the mold board, formed of either web or rib, $g$, fitting against the side of the standard, to which it is secured by means of a bolt and nut, in like manner as in the other application referred to. It will be observed that the lower edge thereof rests or fits upon the top of the lugs or ears $d d$, thus acting to retain the plow-point securely in place against accidental dislodgment.

When it is desired to remove the point, all ing-nut of the mold-board and slightly elevate the latter, whereupon the lugs of the point can be easily slipped from their connection with those of the standard around which they fit.

With the mold-board I form a projecting peg, K, which may be ronnd, square, triangular, or any other shape, and which may be set on the face of the board at any preferred angle. The design of this peg is to break the sliding 45 force of the dirt, and thus prevent the covering up of small plants.
Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is-

1. In a plow, the combination of a standard formed or provided on oppositesides with lugs, a point or share fitting upon said lugs, and a mold-board secured to the standard and maintaining the attachment of the point, substanstantially as described.
2. In a plow, the combination, with astandard formed or provided with lugs on opposite sides of its lower edge, of a plow share or point recessed, as at $c$, for receiving the nose of the standard, and having curved lugs or ears adapted to fit upon those of said standard, and a mold-board secured to the standard and maintaining the attachment of the point, substantially as described.
3. In a plow, the combination, with thestandard, formed on opposite sides with hips 11 and pegs or teeth 22 , of the adjustable and reversible sweeps having portion 3 and formed with notches 4 , the said sweeps having double cutting.edges and formed beveled or pointed at their outer ends and the same being held to the sides of the standard by a bolt and nut in such manner as that the notches thereof will receive the teeth or pegs on the standard, substantially as described.
4. The combination, with a plow of the character described, of a mold-board formed with a projecting peg, $K$, as and for the purpose set forth.
5. In a plow, the combination, with a stand- 80 ard having slot $b$ and formed on opposite sides with lugs and teeth or pegs, the point baving recess $c$ on its under side and provided with lugs to fit those of the standard, the mold-board G, formed with pegs, and the reversible sweeps secured to the opposite sides of the standard adjustably by a bolt and nut, the same being formed with notches adapted to fit the pegs or teeth on said standard, as shown and set forth.
In testimony whereof I have hereunto set my hand in the presence of two subscribing wit-
nesses.

CEALY BILLUPS.
Witnesses:
I. H. Gayle,
I. H. Gayle,

