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PLOW ATTACHMENT.

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UNITED STATES PATENT OFFICE.

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991,920.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, Alpheus R. White, Arthur M. White, and William S. White, citizens of the United States, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Plow Attachments, of which the following is a specification.

This invention relates to plows and has particular reference to an improved attaching means for securing the plow point and the mold board sections upon the standard to admit of the detachment of the same separately.

The invention has for an object to provide a standard with a set of clamping irons which independently support the mold board sections and the plow point in such a manner as to retain each of the members rigidly upon the standard when once ad-

justed.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction, reference is to be had to the following description and accompanying drawing, in which:

Figure 1 is a perspective view of the complete plow; Fig. 2 is a bottom plan view of the same; and, Fig. 3 is a detail perspective view of the parts of the plow separated one from the other.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawing by the same

reference characters.

Referring to the drawing the numeral 10 designates a plow standard which is provided in the usual manner with a forwardly projecting foot 11 upon its lower end. One sides of the standard above its lower end, one of the angle irons seating in the recess, 13 terminating in the recess 12 which is located immediately above the foot 11 for a purpose hereinafter set forth. At the opposite side of the standard 10 the foot 11 is provided with a projection 14 extending from the extreme point of the foot backwardly to a short distance. An aperture 15 is formed transversely through the foot 11 immediately below the recess 12.

The foot 11 carries a plow point 16 which is held firmly thereon by one of the improved clamping irons. The clamping iron is formed, preferably, of a casting, with a

socket comprising a base plate 17 having at its opposite longitudinal edges the upstanding flanges 18 and 19. The plate 17 is slightly reduced at its forward end to conform to the shape of the foot 11. The 60 flanges 18 and 19 project upwardly against the opposite sides of the foot 11, the flange 18 terminating flush with the upper curved edge of the foot 11 while the flange 19 is spaced considerably below the upper edge of 65 the foot. The flange 18 extends back beyond the flange 19 and is provided with an aperture 20 adapted for registration with the aperture 15 formed through the foot 11. A bolt 21 passes through the apertures 20 70 and 15, respectively, and is provided with a clamping nut 22 to hold the socket member in position. The flange 18 is provided at its forward end with an elongated and substantially triangularly formed opening 23 75 receiving the lateral projection 14 of the foot 11. The projection 14 engages in the opening 23 to retain the forward end of the socket upon the foot. Laterally extending wings 24 and 25 are carried upon the flanges 80 19 and 18, respectively. The wings 24 and 25 are turned back at a slight angle and snugly fit against the inner face of the plow point 16. The wings 24 and 25 are suitably apertured, as at 26, for the reception of 85 clamping bolts 27 passing through the plow point 16 and the openings 26. The clamping bolts 27 are provided with nuts 28 engaging against the under sides of the wings 24 and 25 to retain the bolts 27 in position. The 90 heads of the bolts 27 are countersunk in the plow point 16 so as to provide an uninterrupted outer surface for the same.

The standard 10 is provided with oppositely extending mold boards 29 which are 95 held across the forward edge of the same and in registration with the plow point 16 by the improved mold board irons. Each of the mold board irons comprises a retaining flange 30 engaging against the side of the 100 standard 10 and held in such position by a transverse clamping bolt 31 passing through the standard 10 in one of the openings 13. The outer edge of the retaining flange 30 is curved to conform to the forward edge of 105 the standard 11 and carries a laterally extending supporting flange 32 against which is secured the mold board section 29. The supporting flange 32 is apertured as at 33 for the reception of a short clamping bolt 110

34. The clamping bolt 34 passes inwardly | through the mold board section 29 and through the supporting flange 32, the head of the bolt 34 being countersunk in the mold 5 board section 29 and the inner end of the clamping nut carrying a clamping nut 35. The supporting flange 32 is given a curve conforming to the curvature of the mold board section 29 so as to snugly receive the 10 same. It will also be noted that the supporting flange 32 projects below the retaining flange 30 to provide considerable supporting surface for the mold board section 29. The supporting flange 32 is provided with a boss 15 36 upon its inner face circumscribing the marginal edge of the opening 33 to receive

the side of the standard 10 for further rein-20 forcing the mold board iron.

By thus peculiarly forming these plow attachments the plow point and the mold board sections can be quickly and easily removed from the standard 10 and the foot 11 with-25 out interrupting or removing the remaining parts. This feature is found advantageous in repairing the plows when only one por-

thereagainst the clamping nut 35. The re-

duced inner end 30b of the flange 30 overlaps

tion of the same is to be replaced. Having thus described the invention, what

30 is claimed is:

1. A plow attachment including a standard having a lateral projection upon its lower extremity and a recess in one side spaced above the lower end thereof, a socket 35 fitting about the under end and the sides of the standard and having an opening in one of its flanges for the reception of the projection, the socket being provided with outturned wings to receive a plow point, and 40 angle irons engaging against the opposite sides of the standard above its lower end, one of the angle irons seating in the recess, the angle irons having outwardly projecting flanges to receive mold board sections regis-45 tering above the plow point.

2. A plow attachment including a standard having a recess in one side above its lower end and having a lateral projection upon its opposite side at its lower extremity, 50 a socket fitting about the lower extremity of

the standard and having a recess in one side to receive the projection to hold the socket in position, said socket being provided with outwardly extending wings to receive a plow point, angle irons carried against the oppo- 55 site sides of the standard and registering with the recess one of the angle irons seating in the recess and having an overlapping portion engaging against the side of the standard to hold the angle iron rigidly in posi- 60 tion, and clamping bolts engaging through the socket and the angle irons to hold the same upon the standard.

3. A plow attachment including a standard having a recess in one side above its 65 lower end and a projection upon its opposite side at its lower extremity, a socket fitted beneath the end of the standard and having flanges snugly engaging against the opposite sides thereof, one of the flanges being 70 provided with a recess to receive the projection, the socket having laterally extending wings registering with the forward edge of the standard to receive a plow point, angle irons carried against the sides of the 75 standard above the socket, one of the angle irons being adapted to seat in the recess, and clamping bolts engaging through the angle irons and the socket to bind the same to the standard.

4. A plow attachment including a standard, a socket carried upon the lower end of the standard for the reception of a point, and angle irons carried against the sides of the standard above the point for the recep- 85 tion of the mold board, the supporting flanges of the angle irons disposed against the inner side of the mold board projecting below the lower edge thereof to lap against the inner face of the point to register the 90 mold board therewith.

In testimony whereof, we affix our signatures in presence of two witnesses.

ALPHEUS R. WHITE. ARTHUR M. WHITE. L. S. WILLIAM S. WHITE. $[\mathbf{L}, \mathbf{S}_{\bullet}]$

Witnesses: JOHN T. MERRILL, Jr., CHAS. O. BOECKS, Jr.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."