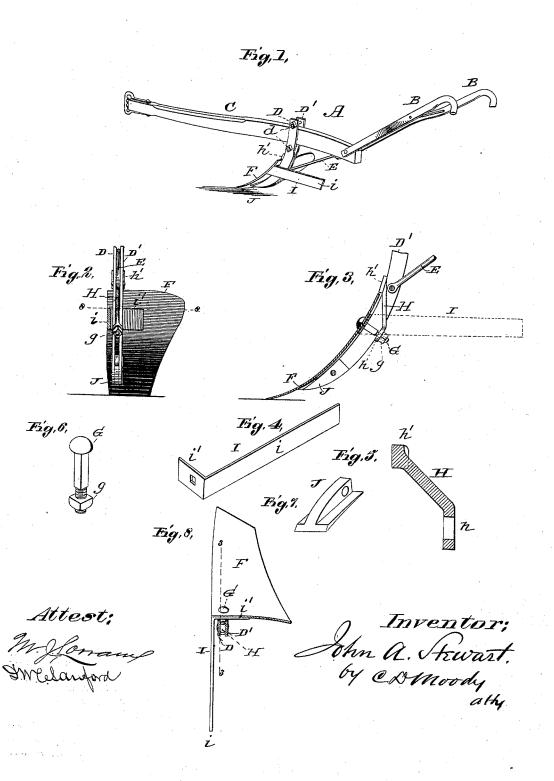
(No Model.)

## $\begin{array}{cccc} J. & A. & \texttt{STEWART}. \\ & & \texttt{PLOW}. \end{array}$

No. 422,896.

Patented Mar. 4, 1890.



## UNITED STATES PATENT OFFICE.

JOHN A. STEWART, OF HOUSTON, TEXAS, ASSIGNOR OF ONE-FOURTH TO CHARLES H. POPE, OF ST. LOUIS, MISSOURI.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 422,896, dated March 4, 1890.

Application filed February 5, 1889. Serial No. 298, 739. (No model.)

To all whom it may concern:

Be it known that I, John A. Stewart, of Houston, Texas, have made a new and useful Improvement in Plows, of which the following is a full, clear, and exact description.

The said improvement consists in the construction and novel combination of parts, substantially as is hereinafter set forth and claimed, aided by the annexed drawings, 10 making part of this specification, in which—

Figure 1 is a view in perspective of a plow having the improvement; Fig. 2, of the lower portion of the plow; Fig. 3, a vertical longitudinal section on the line 3 3 of Fig. 8; Fig. 15 4, a view in perspective of the improved attachment; Fig. 5, a longitudinal section of the tie; Fig. 6, a view in perspective of the bolt for fastening the blade; Fig. 7, a view in perspective of the filling-block at the foot of 20 the standard, and Fig. 8 a horizontal section on the line 8 8 of Fig. 2.

The same letters of reference denote the same parts.

Saving as the plow A is modified or supple-25 mented by the present improvement, it is of

the usual construction.

B B represent the handles; C, the beam; D D', the bars constituting the principal portion of the standard and secured to the beam and 30 to each other by means of the bolts d, and at the lower end fastened together; E, the brace, secured at its upper rear end to the beam and at its lower forward end passing between and secured to the bars D'D'; and F, the 35 blade secured to the standard by means of the bolt G and nut g and the supplemental fastening H, which is in the nature of a tie perforated at its lower end h to encircle the bolt G beneath the nut g, and thence extend-40 ing upward and forward between the bars D D', and having a head h', which comes against the front side of the standard and the upper edge of the blade.

I represents the most desirable form of the 45 part constituting the improvement in question. While it may be otherwise introduced into the plow, it preferably is made to be attached to and detached from the standard of the plow. Viewed from above the part is 50 substantially L-shaped—that is, extended at l

i and at i'—and in practice made from a flat bar of metal. When it is applied to the plow, its extension i, which is of sufficient height and length therefor, forms a landside to the plow, and its extension i' comes in the rear 55 of and against the blade, and so as to furnish a wider support to the blade than is furnished by the bars D D' or standard.

The part I is secured to the standard by means of the bolt G, as shown, and so that 60 its extension i' comes between the standard and blade and bears continuously against the blade throughout the length of the extension i'. In this manner the attachment without any extra fastening is readily se- 65 cured in place, and, in addition to serving both as a landside for the implement and an improved support for the blade, it also serves to strengthen the construction generally, the blade and the standard both being re-enforced 70 thereby. Further, by reason of the extensions i and i' being made in one piece, or otherwise united to act as one piece, any force exerted upon the outer portion of the blade and tending to turn it upon the standard is 75 transmitted along the part I, and is resisted in part by the landside extension i, which in turn is sustained by the land against which it bears in use. Thus the part I will act as a landside and resist the thrust of the mold- 80 board. The part may be a removable attachment to the plow-frame, or it may be permanently united with the plow-frame standard, and that portion of it which supports the blade may be made in different ways. The 85 part is attached higher than the ordinary landside. This location will aid in lessening the friction, also in the ease of attaching or detaching the part where it is made removable. Furthermore, I consider the landside i 90 not only a novel but an especially useful feature in a Georgia stock or analogous plowframe, in that it provides means for steadying the implement in use without at the same time interfering with the interchange of 95 blades upon the standard.

The filling-block J or its equivalent at the foot of the standard is suitably shaped to complete the standard and, if desired, to bear

against the blade.

The bend between the parts  $i\,i'$  of the landside bar or plate I is nearly or quite at a right angle.

Ĭ claim-

5 1: The combination, with the standard and blade, of the removable L-shaped landside bar or plate I, having one part or arm i' secured by a bolt or otherwise between the upper part of the blade and standard and the other part or arm i standing at about right angles backward to resist the mold-board thrust as a landside, substantially as specified.

2. The combination of the standard, the

rectangularly-bent landside-bar I, the bolt G, the block J, and the supplemental fastening H, having the head h' at one end and perforated at its lower end, through which the bolt passes, and the nut on the outer side of said perforation, substantially as specified.

Witness my hand this 10th day of January,

1889.

JOHN A. STEWART.

Witnesses:

C. D. MOODY, C. H. POPE.