

## United States Patent Office.

## ARTHUR C. SMITH, OF JOYNER'S DEPOT, NORTH CAROLINA.

Letters Patent No. 110,506, dated December 27, 1870.

## IMPROVEMENT IN PLOWS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, ARTHUR C. SMITH, of Joyner's Depot, in the county of Wilson and State of North Carolina, have invented a new and useful Improve-ment in Plows; and I do hereby declare that the follow-ing is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a rear perspective view of my plow. Figure 2 is a horizontal section of the same.

Figure 3 is a detail view of a portion of the same. Similar letters of reference indicate corresponding

My invention has for its object to improve the construction of turn-plows to better adapt them for running the first furrows, in breaking up the land, and forming the ridges in preparing the land for planting cotton; and

It consists in the construction and combination of various parts of the plow, as hereinafter more fully described.

A is the plow-beam, to the opposite sides of the rear end of which are attached the handles B.

The lower ends of the handles B are bolted to the

inner side of the rear end of the land-side C.

Upon the inner side of the forward end of the landside O is formed a flange, c', through which pass the bolts that secure the said forward end of the said land-side to the rear side of the standard D, and moldboard E1 E2, either or both.

board E' E', either or both.

D is the standard, upon the upper end of which is formed a tenon, which passes through the beam A, and is secured by a wedge, key, or pin.

The upper part of the standard D is made broad in the direction of the length of the beam A, to form a shoulder upon the upper end of the said standard to rest against the under side of the said beam to strengthen the standard against the draft-strain.

The standard D and mold-beard E' E' may be made

The standard D and mold-board E' E' may be made

in one piece or separately, as may be desired.

The mold-board E' E' is made in two pieces, the line of division running from a point in the lower edge of the mold-board, four inches, more or less, according to size of plow, from the outer point of the cuttingedge of the base of the plow to a point upon the upper edge of the mold-board, four inches, more or less, ac-

cording to size of plow, from the standard D.

Upon the inner sides of the two parts of the moldboard E<sup>1</sup> E<sup>2</sup>, near their adjacent edges, are formed
lugs or ears which overlap each other, so that the said two parts may be hinged to each other by a bolt or rod passing through the said lugs, and detachably secured in place by a nut or other convenient fastening.

This construction enables the outer or hinged part

E2 of the mold-board to be conveniently detached or swung back, when required, so that in running the first furrows in breaking up the land the whole of the land may be broken up without raising the ridge in the middle much.

The hinged part E2 of the mold-board is supported against the inward pressure of the soil, being turned by the brace F, which is made triangular in its general form.

Upon the ends of the brace I are formed pivots, which enter sockets attached to the handles B, and formed in or attached to the mold-board E E and standard D, either or both, so that the brace may be turned down to support the said hinged part E<sup>2</sup> of the mold-board E<sup>1</sup> E<sup>2</sup>, as shown in full lines in fig. 2, or turned up out of the way, as shown in dotted lines

in fig. 2.

The free end of the brace F, when turned down into working position, rests upon a stop formed upon or attached to the said hinged part E<sup>3</sup> of the said mold-

board.

The brace F may have a pin attached to or formed upon the lower side of its free end to enter a hole in the supporting-stop to keep the end of the said brace

in place upon the said stop.
Having thus described my invention,
I claim as new and desire to secure by Letters Pat-

The hinged part E2 of the mold-board E1 E2 and pivoted brace F, in combination with each other, with the stationary part  $E^1$  of the said mold-board  $E^1$   $E^2$ , and with the frame-work of the plow, substantially as forth.

Witnesses: W. S. Parker, R. S. WELLS.

ARTHUR C. SMITH.