



# UNITED STATES PATENT OFFICE.

THOMAS COTTMAN, OF CINCINNATI, OHIO.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 52,539, dated February 13, 1866.

*To all whom it may concern:*

Be it known that I, THOS. COTTMAN, of the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Plows; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being made to the annexed drawings, making part of this specification, in which—

Figure 1 is an isometrical projection of so much of the plow as is necessary to show my improvement. Fig. 2 is a similar projection of my improved head or block with the share A attached, fitting up to the shoulder or line *h*. Fig. 3 is a similar projection of my improved head C and C', the portion above the lines *h*, *h'*, and *h''* being the same, or nearly the same, as that patented by A. Gardner, October 26, 1852, and the portion C', or that part below the lines *h*, *h'*, and *h''*, represents my extension or addition to said head. Fig. 4 is a portion of the landside, showing the manner of attaching it to C' at I. Fig. 5 is my steel share A detached from the head C C'.

The same letters refer to the same things in all the figures.

A is the share; B, the mold-board; C, the upper or old portion of the block or head; C', the lower or added portion; D, the landside; E, the sheath; F, the beam-bolt; G, the beam; H, a portion of one of the handles; I, the recessed part of C', which receives the end of the landside D; J, the sheath-bolt.

C C' is of cast-iron. A and B are usually steel. D may be of steel, wrought or cast iron.

My improvement consists, mainly, in the extension or addition C' of the head C below the mold-board B, which enables me to fit the share A on the upper surface of the projection C'. The share A is a separate piece of steel, and is formed in a swage or mold, so as to fit exactly on the upper side or face of the projection or extension of the head C, fitting snugly against or along the shoulder or recess

*h*, and also to the point of C', as seen at *g*. It is secured in position by the single bolt *d*, passing through the hole *d'* in share and head.

The landside D is secured to the extension or addition C' immediately below the sheath by the single bolt *a* passing through the holes *a'* *a'* in the recessed portion I of C', and in the front end of D, and at its heel by the bolts *b* and *c* passing through the handle in the usual manner.

Steel or wrought plows have usually been constructed by making the share and landside in one piece and by placing the share under the head C and securing them to it by a number of bolts. This plan is expensive and complicated, and when either the share or the landside is worn out they can only be duplicated with certainty of fitting by the plow being returned to the manufactory, which in many cases is both inconvenient and expensive, while those constructed as herein described can have either or both these important and least durable parts replaced by new ones at a small cost and with a certainty of their fitting the plow.

I am aware that plows have been made with a similar extension for the attaching of landsides and shares; but these plows are differently constructed. Of these I make no claim, neither do I claim the particular manner of fastening landsides and shares herein described; but

What I do claim as my invention or improvement, and desire to secure by Letters Patent, is—

The extension or addition C' to the block or head C, patented by A. Gardner, October 26, 1852, so as to receive the share A and the landside D, made in separate parts, substantially as set forth and described.

THOS. COTTMAN.

Witnesses:

R. C. PHILLIPS,  
JOHN A. DAILEY.