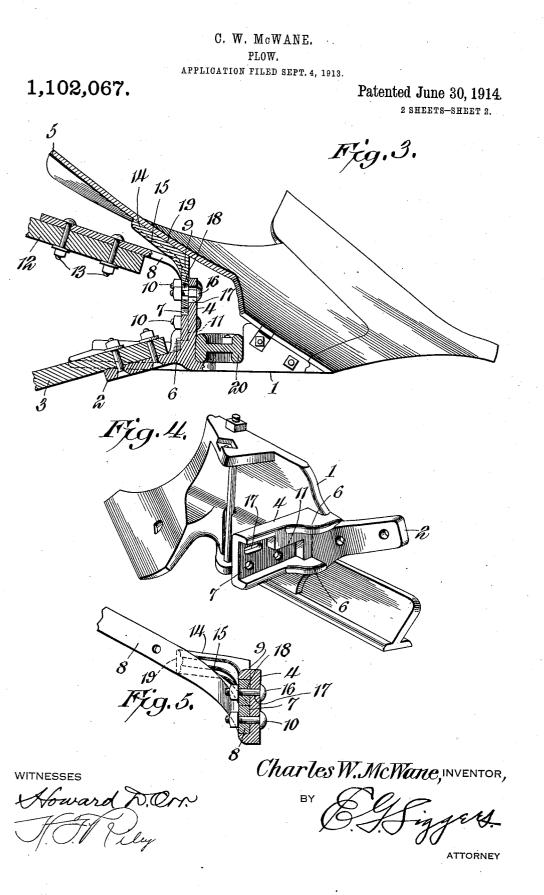


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# UNITED STATES PATENT OFFICE.

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### PLOW.

## 1,102,067.

# Specification of Letters Patent. Patented June 30, 1914.

Application filed September 4, 1913. Serial No. 788,107.

#### To all whom it may concern:

Be it known that I, CHARLES W. MCWANE, a citizen of the United States, residing at Lynchburg, in the county of

residing at Lynchburg, in the county of 5 Campbell and State of Virginia, have invented a new and useful Plow, of which the following is a specification.

The invention relates to improvements in plows.

- 10 The object of the present invention is to improve the construction of plows, more especially the construction of the handle fastening means, and to provide a simple, strong and practical construction adapted
- 15 to afford an open space for the escape of trash and dirt falling over the moldboard, so that such trash and dirt will not pile up on the plow.
- A further object of the invention is to 20 provide handle fastening means equipped with a spreader bar, adapted to securely brace the rear portion of the moldboard, and capable of adjustment to compensate for any warpage of the moldboard.
- With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims
  hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacri-
- 35 ficing any of the advantages of the invention.

In the drawings:—Figure 1 is a perspective view of a plow provided with handle fastening means, constructed in accordance

40 with this invention. Fig. 2 is a rear elevation of the same. Fig. 3 is a horizontal sectional view of the plow. Fig. 4 is a perspective view of the plow standard. Fig. 5 is a detail sectional view, taken substantially on
45 the line 5-5 of Fig. 2. Fig. 6 is a detail

perspective view of the spreader bar. Like numerals of reference designate cor-

responding parts in all the figures of the drawings.

50 In the accompanying drawings in which | to brace the bars 8 and 9 and thereby reis illustrated the preferred embodiment of | lieve the fastening devices of lateral strain.

the invention, the handle fastening means is shown applied to the boltless moldboard plow, forming the subject-matter of an application, filed by me June 5, 1912, Serial 55 No. 701,849, but it is applicable to various other plows and comprises in its construction a standard 1 provided at the back with an upwardly and rearwardly inclined integral arm 2 for the attachment of the right 60 hand handle 3 and having a transversely disposed arm or flange 4, located at the inner side or face of the standard and extending inwardly therefrom and terminating short of the moldboard 5. The transverse arm or 65 flange 4 is preferably reinforced by upper and lower bracing webs 6 adjacent to the standard, and it is provided at its rear face with a recess 7 receiving a handle attaching bar 8 and an angle spreader bar 9. The 70 handle attaching bar, which preferably con-sists of a steel forging, is angularly bent at an intermediate point to form a front transverse portion and an upwardly extending inclined rear portion. The front trans- 75 verse portion is secured by bolts 10 to the arm or flange 4, and is arranged in the lower portion of the recess 7, which is provided with an inner reduced extension 11 into which fits the terminal of the transverse por- 80 tion of the handle attaching bar. The inclined portion of the handle attaching bar receives the left hand handle 12, which is secured to the same by bolts 13 or other suitable fastening means. 85

The angle spreader bar 9 is composed of a front transverse attaching portion and a rear substantially horizontal bracing or supporting portion 14, which is fitted against the inner face of the rear portion of the 90 moldboard 5. The transverse attaching portion and the rear supporting or bracing portion of the spreader bar are arranged at an obtuse angle to each other and are preferably reinforced at the rear face by a longi-95 tudinal web 15. The transverse attaching portion of the spreader bar is fitted in the recess 7 between the upper edge of the handle attaching bar 8 and the upper wall of the recess, the walls of the recess serving 100 to brace the bars 8 and 9 and thereby relieve the fastening devices of lateral strain

The spreader bar is adjustably secured to ] the flange or arm 4 by a bolt 16, which is arranged in slots 17 and 18 of the arm or flange and the spreader bar, and the latter is adapted to be adjusted inwardly  $\mathbf{5}$ and outwardly to arrange its outer supperting portion 14 in proper position to securely brace the rear portion of the moldboard. The adjustment of the spreader bar 10 enables the same to be arranged to compensate for any shrinkage or warpage of the moldboard. The outer face 19 of the spreader bar is shaped to conform to the configuration of the inner face of the mold-15 board.

This construction enables the plow handles to be placed several inches apart at the base of the plow, thereby leaving ample space for the escape of dirt and trash fall-20 ing over the moldboard of the plow, and such dirt and trash will be prevented from piling up on the plow. The plow beam 20 is bolted to the inner face of the standard in advance of the arm or flange 4 against 25 which the rear portion of the plow beam fits, as clearly illustrated in Fig. 3 of the drawings

What is claimed is:—

1. A plow including a standard provided 30 with an integral inwardly extending transversely disposed arm or flange and constituting a support for one of the handles of the plow, and a spreader bar secured to the arm or flange and having a supporting and 35 bracing portion arranged to fit against the inner face of a moldboard.

2. A plow including a standard provided with an integral inwardly extending transversely disposed arm or flange, and an angle 40 spreader bar composed of a front transverse portion secured to the arm or flange, and a rearwardly extending bracing or supporting portion arranged at an obtuse angle to the front attaching portion in position to fit 45 against the inner face of a moldboard.

3. A plow including a standard provided with an integral inwardly extending transversely disposed arm or flange having a recess, an angle spreader bar consisting of an 50 inner attaching portion fitted in the said recess and an outer supporting portion arranged to fit against the inner face of a moldboard, and a bolt piercing the spreader bar and the arm or flange, said parts hav-55 ing a slot receiving the bolt and permitting the adjustment of the spreader bar.

4. A plow including a standard provided with an integral inwardly extending transversely disposed arm, a handle attaching bar 60 secured to the arm and provided with a rearwardly extending portion adapted to receive a plow handle, and a spreader bar also secured to the said arm and having a rearwardly extending portion arranged to

fit against the inner face of a moldboard 65 for supporting the same.

5. A plow including a standard provided with an integral transversely disposed arm having a recess forming upper and lower walls, a handle attaching bar secured in the 70 recess against one of the walls thereof, and a spreader bar also secured in the recess and fitted against the other wall thereof, said spreader bar having an outer portion arranged to fit against the inner face of a 75 moldboard for bracing the same.

6. A plow including a standard provided at the back with an integral upwardly ex-tending inclined arm adapted to receive the right hand plow handle and having an in- 80 tegral transverse arm extending from the inner face of the standard, and a handle attaching bar secured to the said arm and provided with a rearwardly extending por-tion arranged to receive the left hand plow 85 handle.

7. A plow including a standard provided at the back with an integral rearwardly extending inclined arm adapted to receive the right hand plow handle, said standard 90 being also provided with an integral transversely disposed arm, a handle attaching bar secured to the said arm and having a rearwardly extending portion adapted to receive the left hand plow handle, and a 95 spreader bar also carried by the said transverse arm and having an outer rearwardly extending portion arranged to fit against the inner face of the moldboard for bracing the same. 100

8. A plow including a standard provided with an integral inwardly extending transversely disposed arm provided with a recess forming opposite side walls and having an inner reduced extension, a handle attaching 105 bar provided with a transverse portion secured in the said recess against one of the side walls thereof with its terminal portion arranged in the extension of said recess, and a spreader bar secured in the recess and 110 arranged between the handle attaching bar and the opposite wall of the recess, said spreader bar being provided with a rearwardly extending portion arranged to fit against the inner face of a moldboard. 115

9. A plow including a standard provided at the back with an integral transverse arm extending from the inner face of the standard and terminating short of the moldboard, and a handle attaching bar secured to the 120 said arm and provided with a rearwardly extending portion arranged to receive one of the plow handles.

10. A plow including a standard provided with a rigid transversely disposed arm 125 extending inwardly in the space between the standard and the moldboard and terminating short of the latter, a spreader bar se-

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cured to the said arm and extending to the inner face of the moldboard and having a rearwardly extending supporting and bracing portion fitted against the said face of 5 the moldboard, and a handle attaching bar also mounted on the said arm and having a rearwardly extending portion adapted to receive one of the plow handles.

In testimony, that I claim the foregoing as my own, I have hereto affixed my sig- 10 nature in the presence of two witnesses.

CHARLES WILLIAM MCWANE.

Witnesses: N. N. Holt, C. W. DAVIS.

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