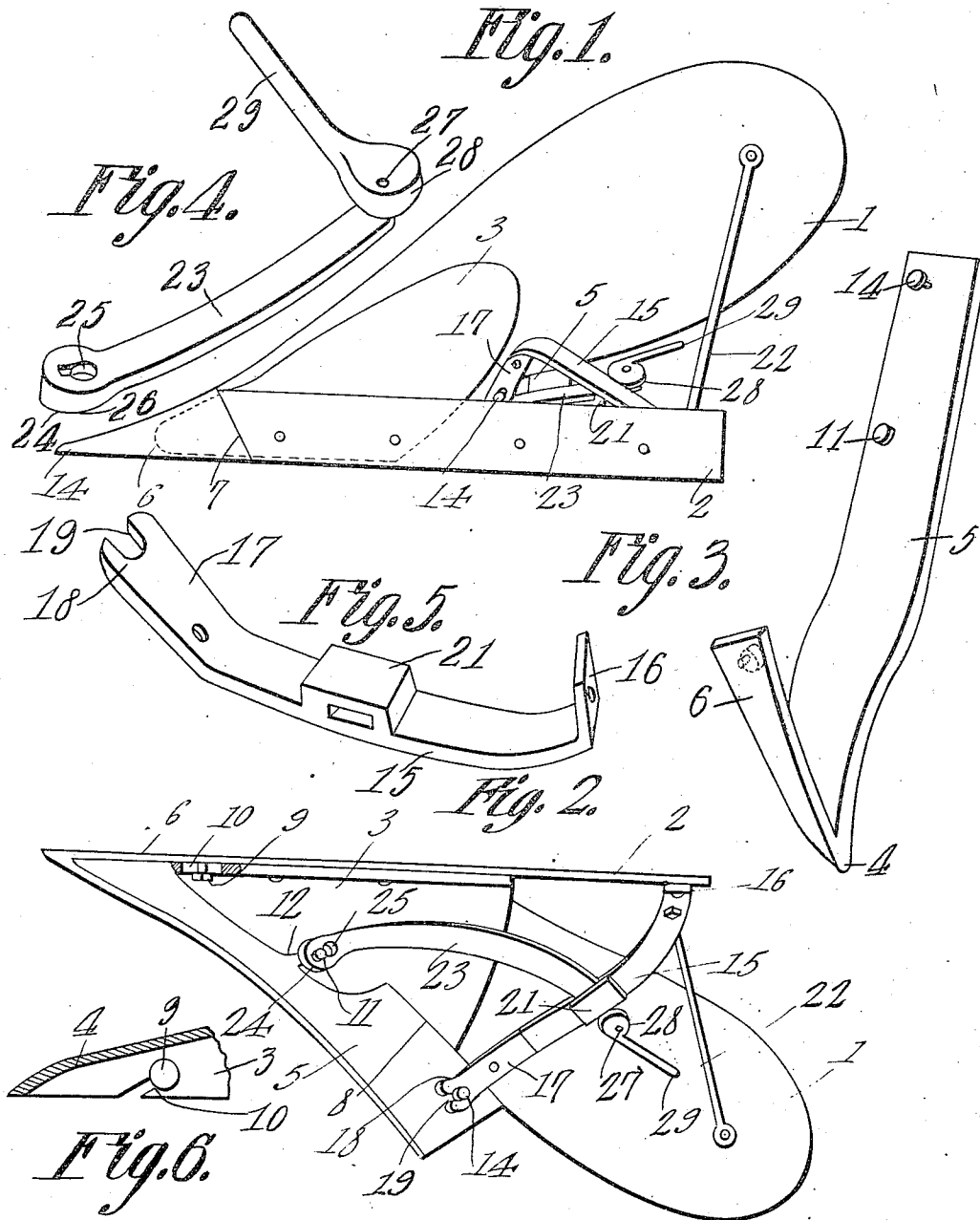


G. W. HAMMERS.
 PLOWSHARE.
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1,055,743.

Patented Mar. 11, 1913.



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UNITED STATES PATENT OFFICE.

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FLOWSHARE.

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To all whom it may concern:

Be it known that I, GEORGE W. HAMMERS, a citizen of the United States, residing at Billings, in the county of Yellowstone and State of Montana, have invented a new and useful Plowshare, of which the following is a specification.

The present invention aims to provide novel means whereby the share of a plow may be assembled readily with the land side and with the mold board of the plow, and with equal facility, be removed therefrom.

The invention aims, further, to provide a structure of this type which will render the connection between the share and the body portion of the plow secure, the several parts of the plow being braced and sustained with respect to each other.

It is within the scope of the invention to improve generally and to increase the utility of devices of that type to which the present invention appertains.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction herein after described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings:—Figure 1 shows the invention in side elevation; Fig. 2 is a bottom plan; Fig. 3 is a perspective of the plow share; Fig. 4 is a perspective of the tie and parts carried thereby; Fig. 5 is a perspective of one of the braces; and Fig. 6 is a sectional elevation showing a portion of the frog.

In the accompanying drawing, the numeral 1 indicates the mold board and the numeral 2 indicates the land side, the same being connected by means of a frog 3. The share is denoted by the numeral 4 and comprises a mold board section 5 and a land side section 6. The share 4 receives the extremity of the frog 3, the land side section 6 of the share 4 abutting as shown at 7 against the land side 2, and the mold board section 5 cooperating with the mold board 1 as shown at 8. Projecting inwardly from the land side 6 of the share 4 is a

headed stud 9, received within a rearwardly inclined, open ended slot 10 formed in one edge of the crown piece 3. Projecting from the mold board section 5 of the share 4 is a headed stud 11 received within a rearwardly inclined, open ended slot 12 formed in one wing of the frog 3, as shown most clearly in Fig. 2. To the rear of the stud 11, the mold board section 5 of the share 4 is provided with another headed stud 14.

The invention further includes a brace, denoted by the numeral 15, the brace 15 being provided at its ends with feet 16 and 17, the foot 16 being secured to the land side 2, and the foot 17 being secured to the mold board 1. The foot 17 is provided with an extension 18 which overlies the inner face of the mold board section 5 of the share 4, there being a notch 19 in the outer end of the extension 18, receiving the stud 14 and fitting beneath the head of the stud. The extension 18 is tapered or wedge-shaped toward its free end, so that when the stud 14 is received within the notch 19, the extension 18 will be held between the head of the stud 14 and the mold board section 5. Intermediate its ends, the brace 15 is equipped with the depending lug 21 in which is mounted to slide, transversely of the brace 15, a tie which is denoted by the numeral 23. At the forward end, the tie 23 is equipped with a head 24 having a key-hole slot 25 in which the stud 11 is received. The head 24 is thickened or rendered wedge-shaped, toward its free end, so that when tension is exerted upon the tie 23, the head 24 may be wedged tightly between the head of the stud 11 and one wing of the frog 3. Projecting from one end of the tie 23 is a pin 27 supporting for rotation a cam 28 provided with a handle 29. The cam 28 is adapted to bear against the rear face of the lug 21 and against the rear face of the brace 15. Another brace 22 extends from the brace 15, adjacent the land side 2, into engagement with the mold board 1.

The operation of the device herein disclosed is as follows:—The share 4 is engaged with the mold board 1, with the land side 2, and with the frog 3, as is common, the stud 11 entering the slot 12. The key-hole slot 25 of the tie 23 is engaged with the stud 11 which projects from the mold board section 5 of the share, the stud 14 upon the mold

section 5 entering the slot 19 in the section 18 of the brace 15. The handle 24 of the cam 28 is then swung, causing the cam 28 to bear against the lug 21 and against the rear edge of the brace 15, whereupon the tie 23 will be slid longitudinally, and transversely of the brace 15, the share 4 being drawn rearwardly. During this operation, the wedge-shaped end 26 of the tie 23 will bear against the head of the stud 11, the stud 11 being retracted into the slot 12 formed in one wing of the frog 3. At the same time, the stud 14 will be drawn rearwardly into the notch 19 and the tapered wedge-shaped end 18 will be bound between the head of the stud 14 and the mold board section 5.

Having thus described the invention what is claimed is:—

1. In a plow, a land side; a mold board; a share comprising a land side section and a mold board section; a brace connected with the land side and with the mold board, the brace having a slotted extension overlying the mold board section of the share, said section having a stud registering in the slot of the extension; a tie slidable transversely of the brace, the tie and the mold board section of the share having interengaging elements; and means upon the tie for engaging the brace to slide the tie.

2. In a plow, a frog having a slot; a land side and a mold board carried by the frog; a share comprising a land side section and a mold board section, the land side section having a stud received in the slot; a brace connected with the land side and with the mold board, the brace having a slotted extension overlying the mold board section of the share, said section having a stud registering in the slot of the extension; a tie slidable transversely of the brace, the tie and the mold board section of the share having interengaging elements; movable means co-operating with the tie and with the brace for sliding the tie; and another brace connecting the first specified brace with the mold board.

3. In a plow, a land side; a mold board; a share comprising a land side section and a

mold board section; a brace connected with the land side and with the mold board, the brace having a slotted extension overlying the mold board section, said section having a headed stud registering in the slot of the extension, the extension being tapered toward its free end to engage with the head of the stud; a tie slidable transversely of the brace, the tie and the mold board section having interengaging elements; and means upon the tie for engaging the brace to slide the tie.

4. In a plow, a land side; a mold board, a share comprising a land side section and a mold board section; a brace connected with the land side and with the mold board, the brace having a slotted extension overlying the mold board section, said section having a stud registering in the slot of the extension; a tie slidable transversely of the brace and provided with a slotted end, there being a headed stud projecting from the mold board section of the share and received in the slot of said end, said end being thickened in the direction of its free end, to bind beneath the head of the last specified stud; and means upon the tie for engaging the brace to slide the tie.

5. In a plow, a frog provided with a slot; a land side and a mold board carried by the frog; a share comprising a land side section and a mold board section, the mold board section being provided with spaced studs, one of which is received within the slot of the frog; a brace connecting the land side and the mold board and provided with a slotted extension adapted to receive the other stud; a tie slidable transversely of the brace and having an opening adapted to receive the first specified stud; and means upon the tie for engaging the brace, to impart movement to the tie.

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

GEORGE W. HAMMERS.

Witnesses:

C. P. TOOLEY,

CHARLES W. TICE.