

L. B. BURT.

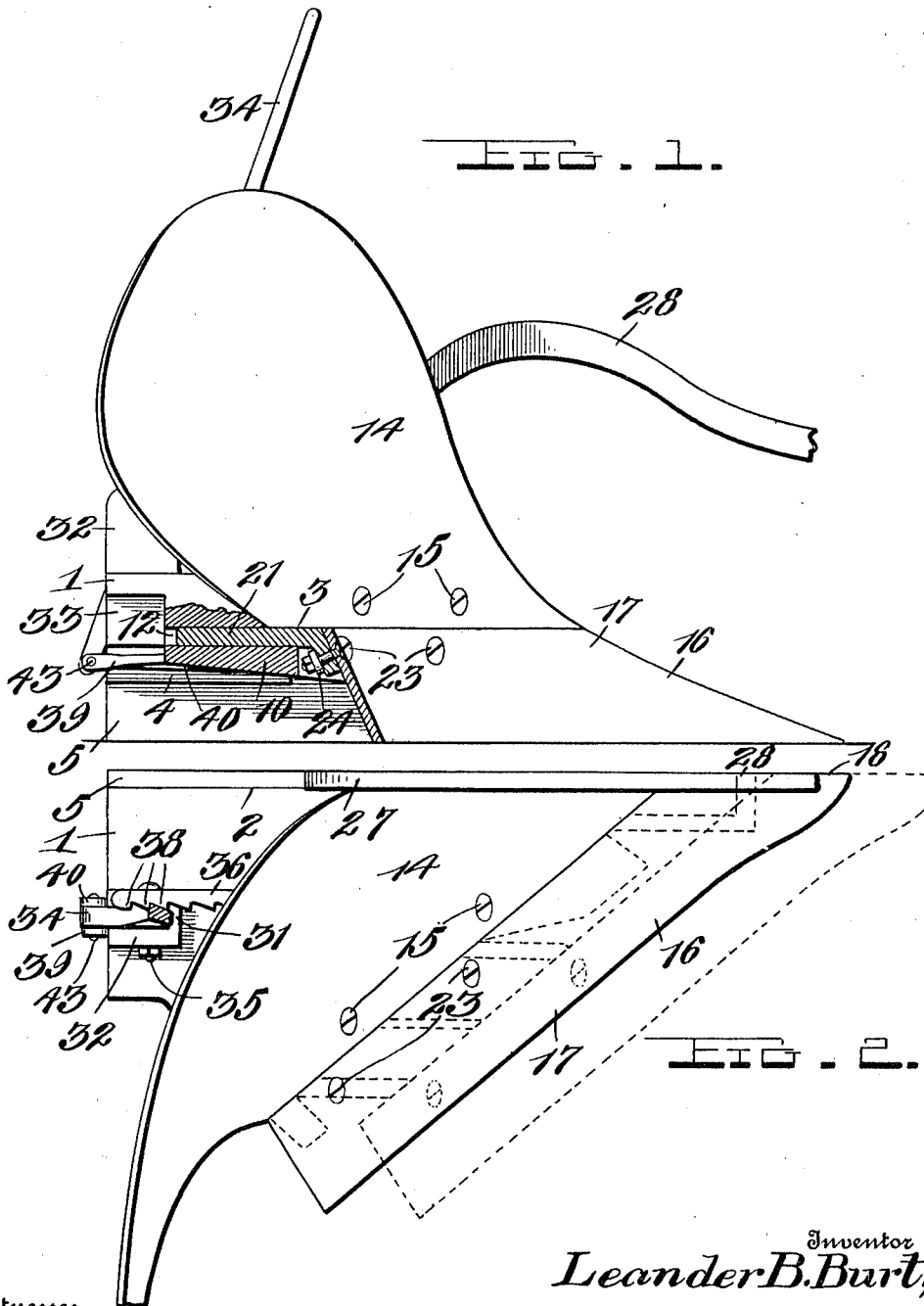
PLOW.

APPLICATION FILED FEB. 1, 1911.

1,001,616.

Patented Aug. 29, 1911.

2 SHEETS-SHEET 1.



Witnesses

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Inventor
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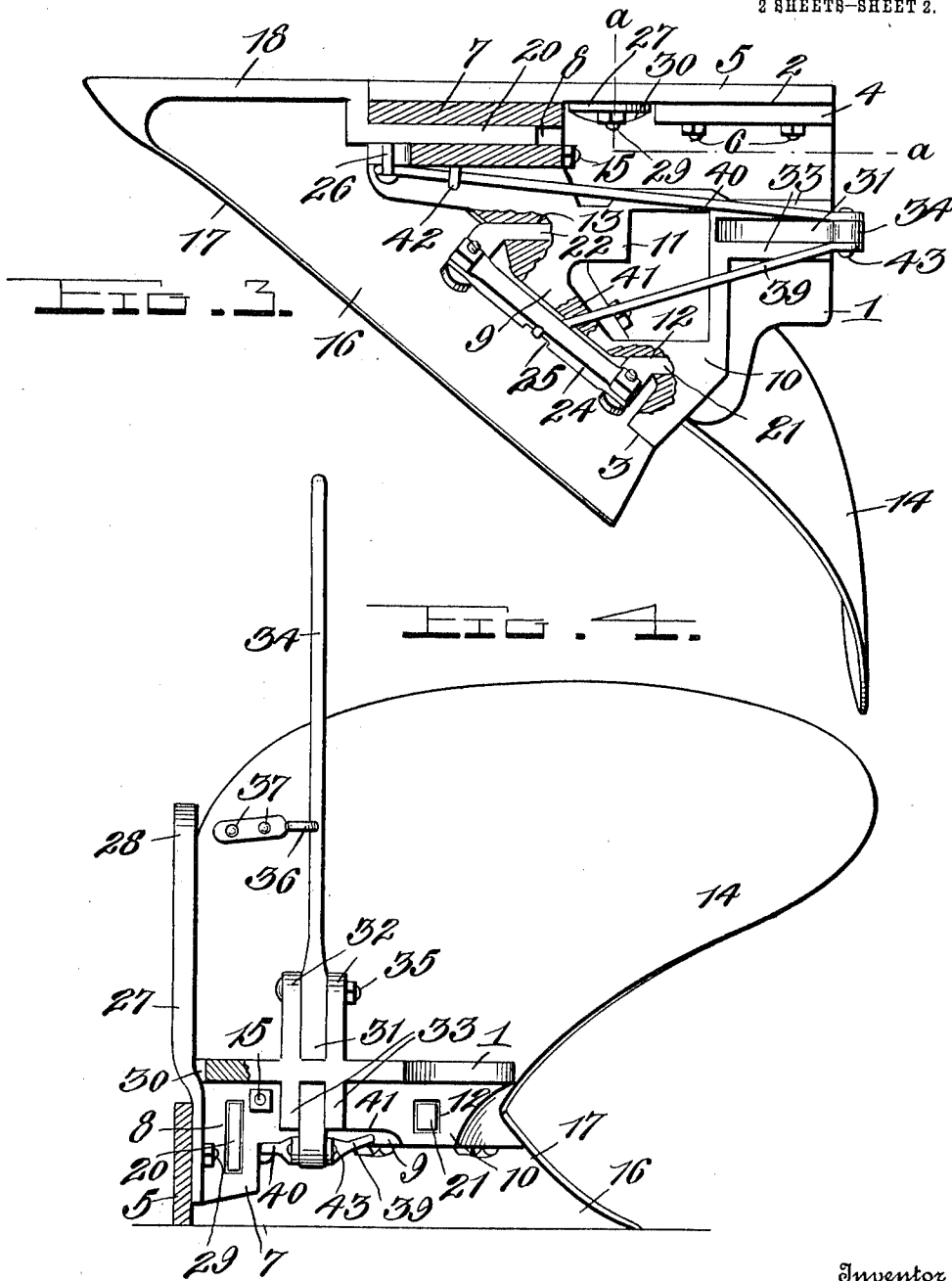
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UNITED STATES PATENT OFFICE.

LEANDER B. BURT, OF MINETTO, NEW YORK.

PLOW.

1,001,616.

Specification of Letters Patent.

Patented Aug. 29, 1911.

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To all whom it may concern:

Be it known that I, LEANDER B. BURT, a citizen of the United States, residing at Minetto, in the county of Oswego and State of New York, have invented certain new and useful Improvements in Plows, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in plows, especially with reference to the provision of improved devices for securing the plow share to the mold board and land side without the necessity of employing bolts or other like devices, the invention consisting in the construction, combination and arrangement of devices hereinafter described and claimed.

In the accompanying drawings—Figure 1 is a side elevation partly in section of a plow constructed in accordance with my invention. Fig. 2 is a plan of the same. Fig. 3 is an inverted plan of the same. Fig. 4 is partly a rear elevation and partly a transverse sectional view on the plane indicated by the line *a—**a* of Fig. 3.

In accordance with my invention I provide a bracket plate 1, which is substantially triangular in plan, and is provided with a straight longitudinal side 2, and an oblique front side 3. From the side 2 depends a vertical flange 4 to the outer side of which the rear portion of the land side plate 5 is secured as by means of bolts 6. At the front end of the bracket plate in the angle between the sides 2 and 3, is a downwardly extending block 7 which is formed integral with the bracket plate, and which also bears against the land side plate at and near the front end thereof. The said block is provided with a longitudinal opening 8 which extends from its front end to its rear end, lies in a vertical plane, and is of oblong rectangular form in cross section. Also formed integral with the bracket plate on the lower side thereof, and at its oblique front edge 3, is a flange 9 which is provided near its outer end and near its center with rearwardly extending bosses 10, 11 which are respectively provided with longitudinal openings 12, 13 which are rectangular in form cross sectionally. The lower portion of the mold board 14 is secured on the oblique front edge of the bracket plate 1, by means of suitable bolts 15. A portion of the flange 9 extends below the mold board as do also the bosses 10, 11.

The detachable share 16 of the plow com-

prises a point or plate 17 and a land side portion 18. The land side portion is provided at its rear end with an inwardly extending arm 20 which operates and is fitted in the longitudinal opening 8 of the block 7. A pair of guiding arms and securing arms 21, 22 respectively operate in the guide openings of the lugs 10, 11 and have their ends downturned, bearing against the rear side and secured to the plate or point 17 of the detachable share. Bolts 23 secure the front ends of these arms to the said plate or point, and also secure a cross bar 24 which connects the front ends of the said arms together. The said cross bar is provided on its upper side near its center with a notch 25. The arm 20 of the land side portion 18 of the detachable share is provided near its front end with a lug 26.

The standard portion 27 of the beam 28 is bolted to the inner side of the land side plate as at 29, at a point between the flange 4 and the block 7, the bracket plate being recessed as at 30 to clear the standard. In the rear portion of the bracket plate is a vertical longitudinal slot 31, the sides of which are formed by a pair of lugs 32 which project upwardly from the bracket plate 1, and a pair of guide flanges 33 which project downwardly from the bracket plate. A locking lever 34 operates in the slot 31, and is mounted on a pivot bolt 35 which connects the lugs 32. A locking arm 36 is secured to the rear side of the mold board as at 37 and projects rearwardly therefrom, and is provided on one side with a series of locking teeth 38. The locking lever 34 may be engaged by any one of the locking teeth of the said arm, to lock the lever at any desired position. The locking lever is made of suitable spring metal preferably steel, and by its own resilience bears against the toothed side of the locking arm, and is hence normally in engagement therewith, and remains in any adjusted position.

The arms 20, 21 and 22 by their sliding engagement with the guide openings of the bracket plate 1, serve to connect the share to the bracket plate for longitudinal movement, and for detachment, and permit the share to be moved forwardly from or drawn rearwardly back against the front edge of the bracket plate, and into coincidence with the lower edge of the mold board. The cross bar 24 and the lug 26 of the detachable share form keepers which may be detachably

engaged by the front ends of a pair of link rods 39, 40 respectively. The said link rods operate in guides 41, 42 on the under side of the bracket plate near the front end thereof, and their rear ends are pivotally connected as at 43 to the lower end of the lock lever. By moving the upper end of the locking lever rearwardly so as to cause its lower end to move forwardly, the link rods by their engagement with the keepers of the detachable share move the share forwardly a sufficient distance to enable the arms 20, 21 and 22 of the detachable share to become entirely disconnected from the bracket plate, and the keepers of the detachable share may be then disconnected readily from the hook shaped front ends of the said link rods, and hence the share may be entirely disconnected from the plow and another substituted in its stead. After the share has by means of its keepers been connected to the front ends of the link rods, and its arms 20, 21 22 have been engaged with the appropriate guide openings, of the bracket plate, the share may be then moved rearwardly, and caused to bear firmly against the front edge of the bracket plate so as to engage the upper side of its plate with the lower edge of the mold board and engage the rear end of its land side portion with the front end of the land side plate by appropriately operating the locking lever. The said locking lever as hereinbefore indicated, springs into engagement with one of the teeth of the locking arm, and hence serves in connection with the link rods, and the coacting devices hereinbefore described to securely and yet detachably fasten the share to the plow.

It will be understood from the foregoing that my improved plow permits the share to be attached to the mold board and land side and removed therefrom at will without the necessity of employing bolts or other like devices, and it will also be understood that the share of my improved plow may be readily detached therefrom by merely operating the locking lever, and disconnecting the keepers of the share from the link rods.

It will be understood that my bracket plate forms the connecting element between the mold board and land side plate and in

connection with the arms of the share also forms the connection between the mold board, the land side plate and the detachable share.

I claim:—

1. The combination of a land side, a mold board and a bracket plate in the angles between and connecting the land side and the mold board together and spaced above the lower edge of the land side, the said bracket being provided with longitudinal guide openings and being also provided with a longitudinal vertical slot and lugs on opposite sides of the said slot, a lever operating in the slot and pivotally mounted between the lugs, a detachable share having rearwardly extending guide arms operating in the guide openings of the bracket plate, the share being also provided on its under side with keepers, the said keepers and the said guide arms being spaced from the lower side of the share, link rods having their rear ends connected to the locking lever and their front ends provided with means to engage the keepers of the share and means to lock the lever.

2. The combination of a land side, a mold board, a bracket plate connecting the land side and the mold board together, disposed in the angles between them and spaced above the lower edge of the land side, the said bracket plate being provided with longitudinal guide openings, a detachable share having rearwardly extending guide arms spaced from its lower side and operating in the guide openings of the bracket plate, the share being also provided on its rear side with keepers, a locking lever mounted on the bracket plate, link rods having their rear ends connected to the locking lever and their front ends provided with means to engage the keepers of the share, and a locking arm extending rearwardly from the mold board and provided on one side with a series of locking teeth for engagement by the lever.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

LEANDER B. BURT.

Witnesses:

DALLAS S. BURT,
LIZZIE BURT.