(No Model.)

G. C. WESTERVELT.

PLOW.

No. 484,129. Patented Oct. 11, 1892.

Fig. 1

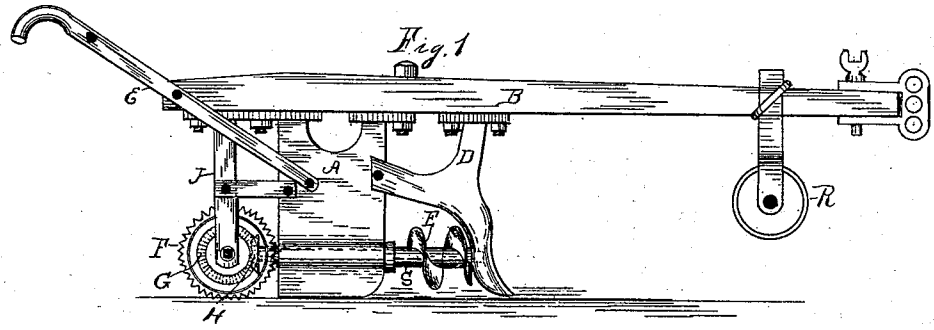
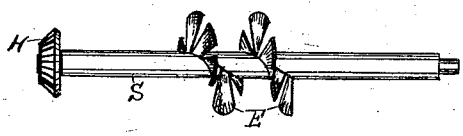


Fig 2



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE C. WESTERVELT, OF SOUTH BEND, INDIANA.

PLOW.

SPECIFICATION forming part of Letters Patent No. 484,129, dated October 11, 1892.

Application filed June 7, 1892. Serial No. 435,822. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. WESTERVELT, a citizen of the United States of America, residing at South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Plows, of which the following is a specification, reference being had therein to the accompanying drawings and the letters of reference thereon, forming a part of this specification, in which—

Figure 1 is a side view of the plow; and Fig. 2 is a detached view of the shaft, showing its auger divided, so as to form blades similar to propeller-blades.

This invention relates to certain improvements in plows, and pertains more particularly to the mold-board, consisting of a rotating screw or screw-blades, which improvements are fully set forth in the following specification and claims.

Referring to the drawings, A is the standard.

B is the beam.

C are handles secured to the beam and standard in the ordinary manner.

D is a colter secured to the plow-beam and braced to the standard and having a box formed in its rear part to receive the end of shaft S, which is boxed in said standard, and has on its part between the standard and colter the screw E, which takes the place of a mold-board. The rear end of said shaft is provided with a bevel-gear H, which is driven by means of the bevel-gear G on the spur drive-wheel F, boxed in standard J and adapted to travel in the furrow behind the standard.

R is a beam-wheel for sustaining the outer end of the beam and for preventing the plow from running too deep in the earth.

The principal new feature in this invention is in the use of the screw F, either in the form of an auger, as shown in Fig. 1, or in the form of separate auger-shaped blades, as shown in Fig. 2, in place of an ordinary mold-board for turning the furrow or stirring up the earth and pulverizing it.

In operation as the plow advances the colter enters the earth ahead of the shaft S and its auger mold-board. The spur drive-wheel F as it travels in the furrow behind the standard rotates the shaft S and the auger-blades E through the medium of the bevel-gears G H and causes the said auger-blades or mold-board to thoroughly cut and tear up the ground and invert it, the same as an ordinary mold-board, but pulverizes it much more thoroughly than an ordinary mold-board will and with less friction and draft on a team.

I do not confine myself to the precise form of the auger or screw shaped mold-board shown or to the precise method of driving or rotating it, being more desirous of covering the principle of applying the screw or auger to a plow for the purpose specified, rather than a stationary mold-board.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows, to wit:

1. In a plow, the combination of the standard and colter and the shaft having the auger or screw mold-board and means for rotating said mold-board, substantially as and for the purpose set forth.

2. In a plow, the combination of the standard A, having a journal-box shaft S fitting said journal-box and having the bevel-gear H and auger or screw blade E, colter D, having a box for receiving the forward end of said shaft, and spur drive-wheel F, having bevel-gear G for driving said shaft, substantially as and for the purpose set forth.

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