C. A. PRATT.

Plow.

No. 222,075. Patented Nov. 25, 1879.

Fig. 1

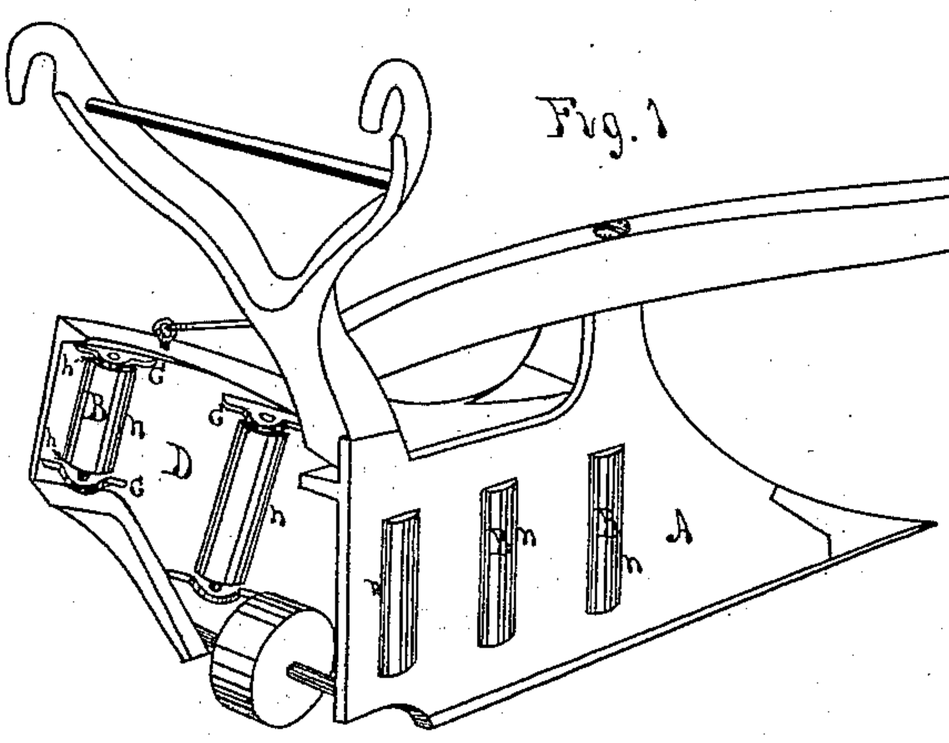


Fig. 2

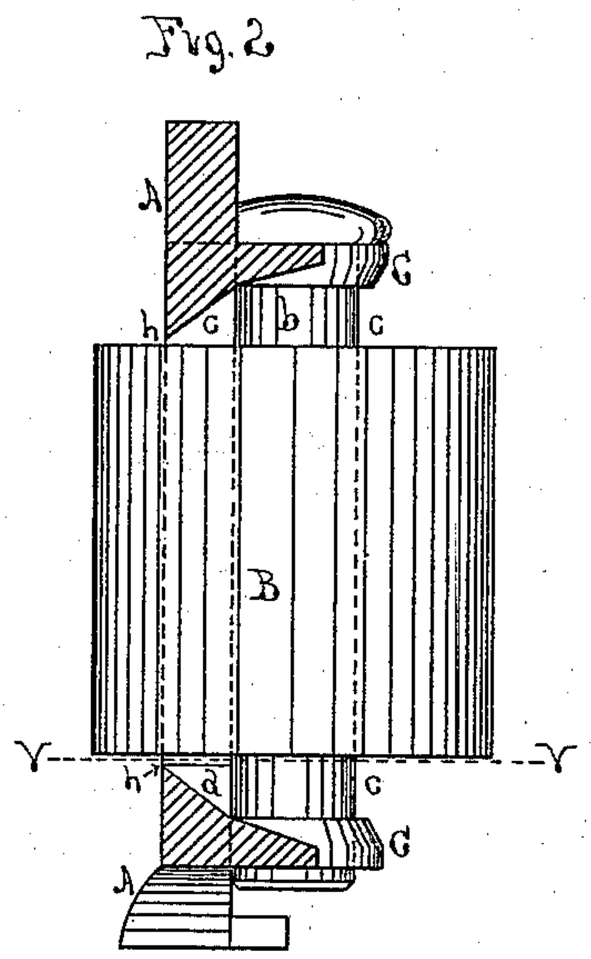
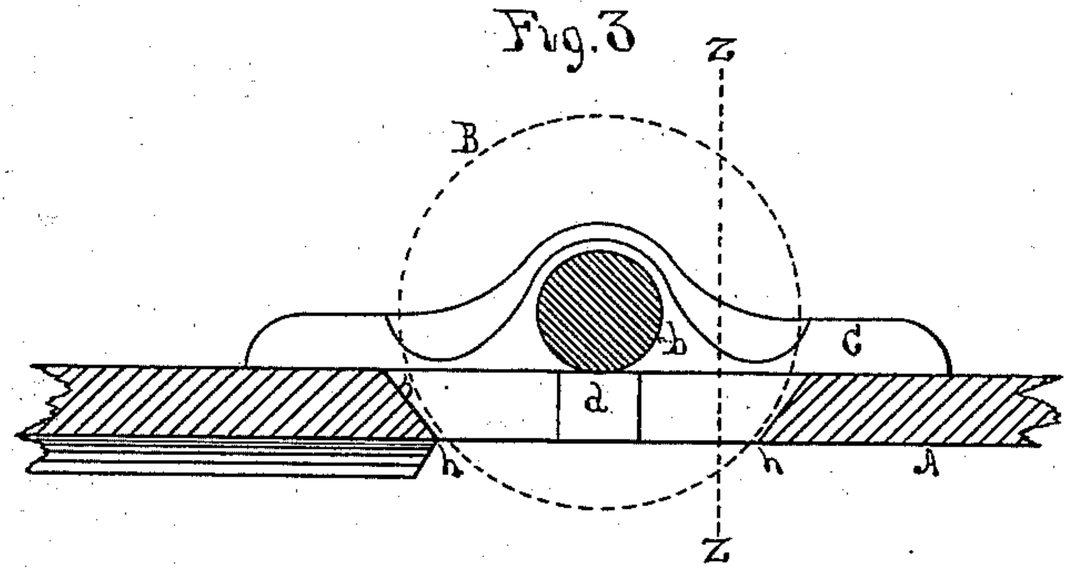


Fig. 3



Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES A. PRATT, OF CLINTON, MASSACHUSETTS.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **222,075**, dated November 25, 1879; application filed August 4, 1879.

To all whom it may concern:

Be it known that I, CHARLES A. PRATT, of Clinton, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Plows, of which the following is a specification.

My invention relates to plows which are provided with rollers set into their mold-boards and land-sides to lessen the friction incident to the use of the tool, and to render its passage through the soil easier.

Heretofore the ends of the rollers and the surfaces against which they abut have been substantially parallel, so that the mold, when moist and of some conditions of composition, tends to pack upon the stationary surfaces of the mold-board and lug in which the journal or shaft of the roller bears, and, gradually accumulating thereupon, finally obstructs the rollers until they move with so much difficulty that their utility is greatly diminished, if not altogether destroyed, and although the distance between the roller end and the end of the slot in the mold-board through which the roller projects may be small, the mold will pack therein with such solidity that it will require the use of a metal tool to remove it.

The object of my invention is to prevent the rollers from clogging or choking by the dirt, mold, or grass-roots accumulating about the shaft or journal on which the rollers revolve, and between the end of the roller and the mold-board or land-side, or lug or flange in which the shaft or journal bears.

My invention consists in forming the mold-board or land-side and the lug holding the shaft or journal on which the rollers revolve in such a manner that the distance between the end of the roller and the stationary parts shall increase backward from the outer surface of the mold-board or land-side, excepting only a small portion lying on the under lug directly between the shaft or journal and the outer surface of the mold-board, on which the weight of the roll is allowed to rest to prevent undue wear on the clearing-edge formed of the outer surface of the mold-board or land-side; also, in placing the lugs holding the shaft on which the rollers revolve farther from the roll when in operative position than the ends of the slot or mortise through the land-side or mold-board through which the roller projects.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 represents a rear perspective view of a plow embodying my invention. Fig. 2 is a rear view of land-side on line *z z* of Fig. 3. Fig. 3 is a broken section of land-side on line *v v* of Fig. 2, showing step or shoulder for roll.

A is the land-side; B, one of the friction-rollers, of which there can be as many as may be desired. C C are the lugs by which the shaft *b* is held in position. *d* is a shoulder left on the lug, which is below the roller, to sustain its weight, and keeps it from cutting the edge *h* away by bearing upon it. *c* is the space formed by cutting away the lug C, so that the substances passing through between the roller and the land-side will fall out within the furrow. *h* is the clearing or scraping edge, formed of the outer surface of the land-side or mold-board.

The space *c* is formed by casting the lug upon the land-side or mold-board somewhat removed from the slot through which the roller projects.

n is the slot or mortise in the land-side or mold-board through which the roller projects. D is the mold-board, having a roller, B, constructed as described.

What I claim as new and of my invention is—

1. The combination of the roller B, lug C, cut away, as shown at *c*, and mold-board D, having the clearing-edge *h*, operating against the end of the roller, substantially as described.

2. The combination of the mold-board D, roller B, and lug C, constructed substantially as described, so that the space between the lug and the end of the roller is greater than that between the clearing-edge of the mold-board and the roller, substantially as specified.

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Witnesses:
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