G. B. VAUGHAN.

Plows.

No. 139,036. Patented May 20, 1873.

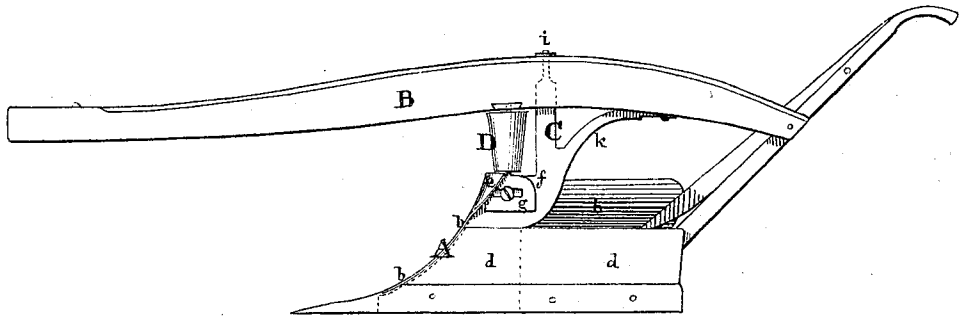


Fig. 1.

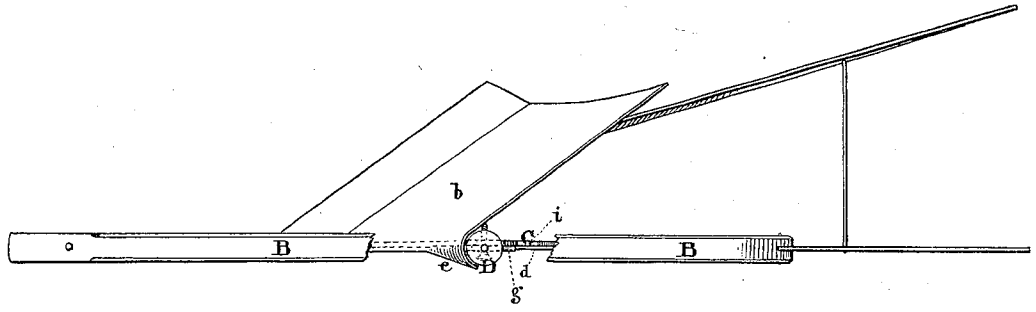


Fig. 2.

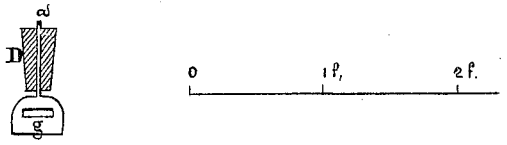


Fig. 3.

Witnesses
Thomas Margetts
Harry Harding

George B. Vaughan
by Ed. Thurston. Atty

AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

GEORGE B. VAUGHAN, OF PEORIA, ILLINOIS.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **139,036**, dated May 20, 1873; application filed October 15, 1872.

To all whom it may concern:

Be it known that I, GEORGE B. VAUGHAN, of the city of Peoria, in the county of Peoria and State of Illinois, have invented an Improvement in Plows, or modification of same, to throw off weeds, &c.; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a longitudinal elevation; Fig. 2, a plan; Fig. 3, elevation of roller, (sectional,) and its adjusting-plate.

This invention relates to an adjustable plate, in combination with a roller on the front of the plow for regulating its angle, so as to facilitate the discharge of the weeds or stalks from the plow, as will be hereinafter more fully explained.

A represents the plow; *b*, the mold-board; *d*, the land-sides; *e*, a shield, or overlapping part of the upper angle of the mold-board, which covers the lower end of the roller D; B, the beam, of the ordinary construction; C, the standard, which, rising from the land-sides, on reaching the upper edge of the mold-board *b*, makes a horizontal elbow, *f*, backward for a few inches, and then rises to, and is fixed to the beam, with or without the after-brace *k*; D, the roller, or fender for averting weeds, &c., consisting of a vertically pivoted roller or "frustum" of a cone, inverted, and set on a spindle or pin running from the plow to the beam, or having a spindle of its own, or an independent spindle. One of the ways in which I mount the roller is as follows: The spindle *a* terminates at its lower end in an adjustable plate, *g*, having a horizontal slot across its center fitted with a screw or bolt, which is set in the side of the plow land-sides, or other convenient surface contiguous thereto, so that the spindle or roller may be adjusted at the required angle. The roller is made like similar devices of this description, narrower in diameter at its lower end, and revolves just clear of the upper surface of the plow or standard C; and is made flaring above, where it approaches the beam B, and where it leaves merely space enough between it and said beam to allow it free motion. In short, the roller just fills the space between the upper part of the mold-board and the beam, the mold-board being reduced in height, if necessary, to admit it; being thus placed in the best position to receive and discharge weeds or stalks. The retirement of the upper part of the standard from the face of the mold-board will accomplish the same ends, as the weeds, in such case, cannot hang on the standard, as they are carried away by the rolling up of the soil, having no point to attach themselves to.

The operation of this plow and feeder is as follows: The standard being set back at the upper edge of the mold-board removes that part of a plow which generally catches and drags weeds, &c., as the latter have no point on which to cling, and they are carried away by the passage of the soil up the face of the mold-board; but to render the operation of the plow and the entire discharge and burial of weeds, &c., complete, the roller D is inserted in the angle thus left by the offset of the standard C. The roller can be set at the proper angle to best fulfill its office by means of the adjustable plate *g*, which, by loosening the screw or bolt in the slot in the middle of the said plate, can be moved to right or left to suit requirements. The plate set in the plow-beam in which the upper end of the roller or its spindle is pivoted may be also made adjustable, if necessary. The shield *e* defends the lower end and pivot of the roller from entrance of weeds, and as soon as the roller feels the unequal pressure, or drag, on its surface, it turns toward that side on which the greatest pull is received and rolls away encumbrances. Thus more effect is conferred upon the operation of the whole plow by these devices—better tillage being the result, together with less labor and care for the plowman.

What I claim as my invention is—

1. An adjustable plate, in combination with roller D, for regulating its angle so as to facilitate the discharge of weeds or stalks from the plow, substantially as set forth.

2. The combination of the adjustable plate *g*, shield *e*, roller D, standard C, and beam B, substantially as set forth.

In testimony that I claim the foregoing improvement in plows, I have hereunto set my hand this 2d day of October, 1872.

GEORGE B. VAUGHAN.

Witnesses:

HENRY B. WELLS,

HARRY HARDING.