

No. 644,092.

Patented Feb. 27, 1900.

C. A. PHOENIX.
ATTACHMENT FOR PLOWS.

(Application filed May 26, 1899.)

(No Model.)

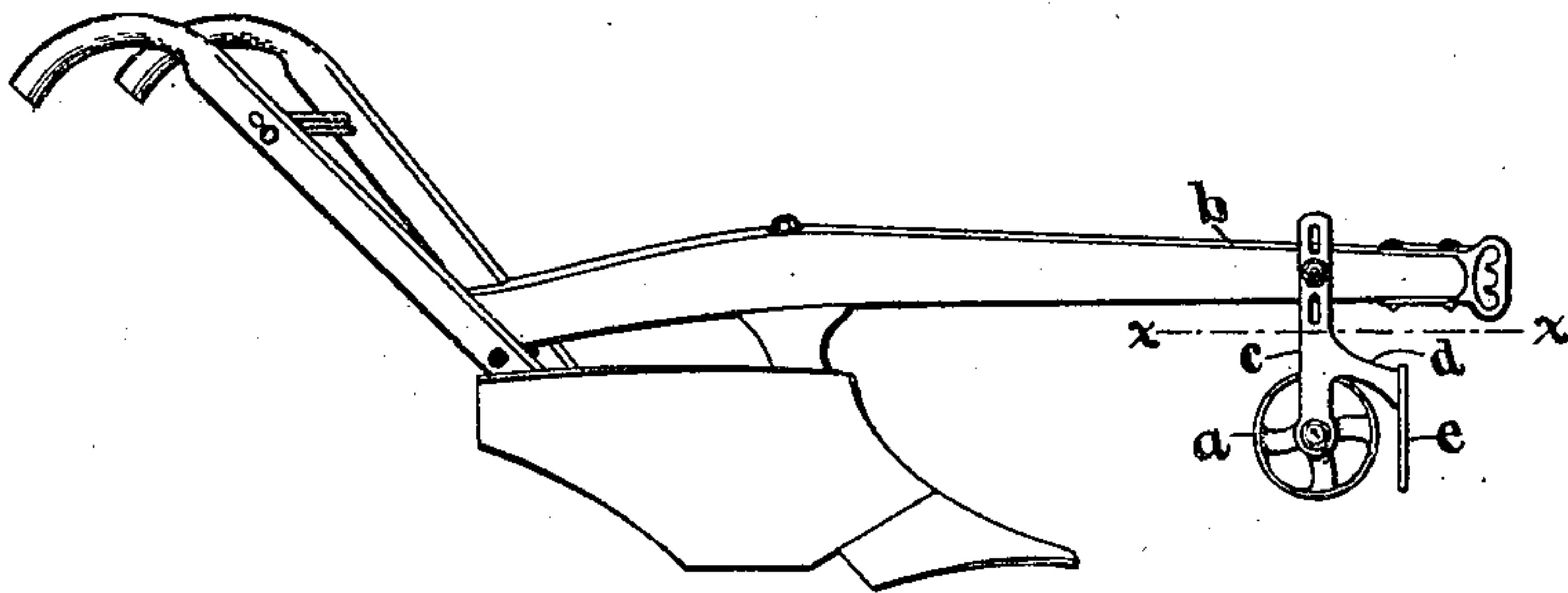


Fig. 1.

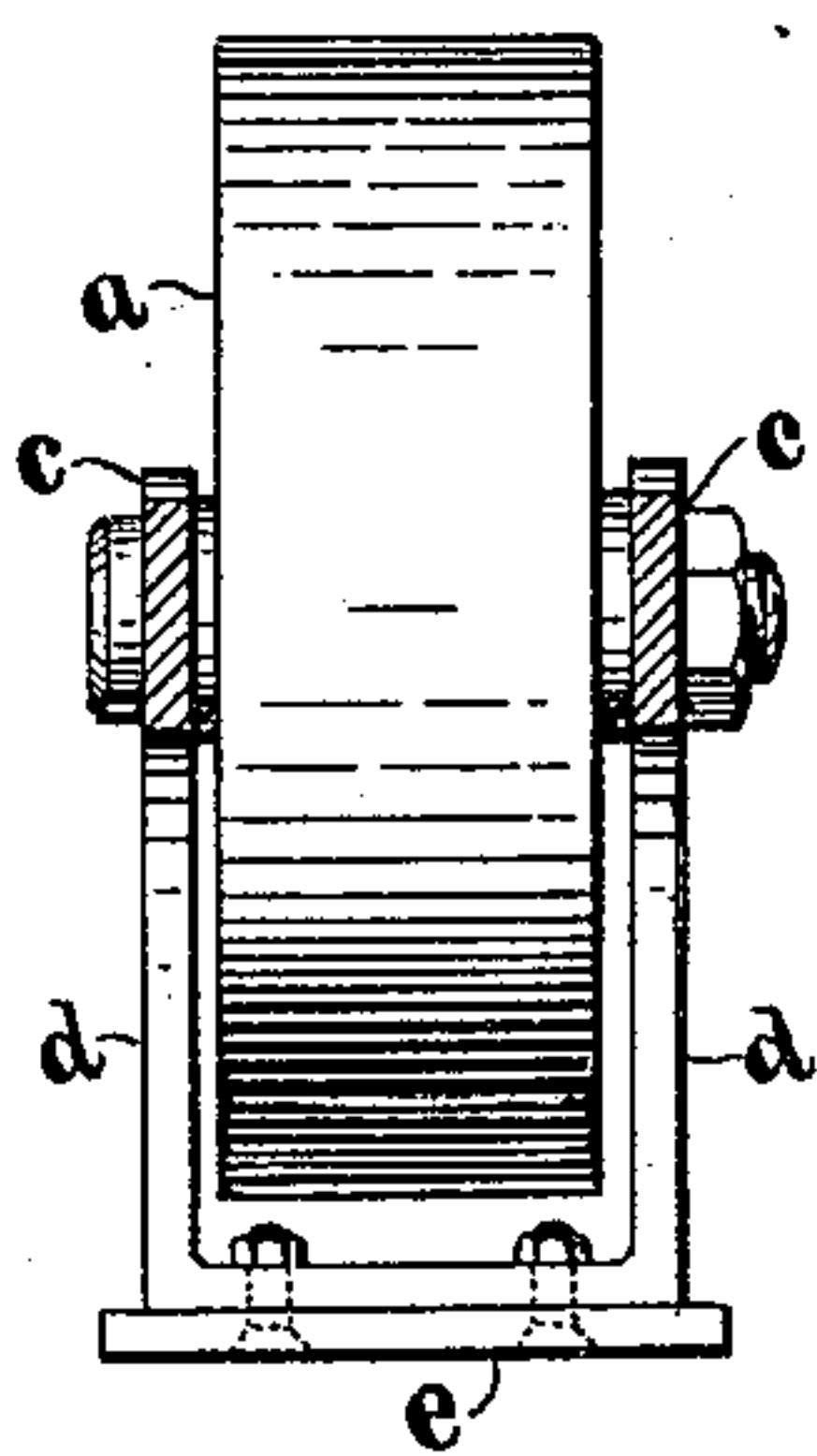


Fig. 2.

WITNESSES:

C. Tracy Hogg
Charles V. Eacker

INVENTOR

Charles A. Phoenix

BY

Eugene Diven
ATTORNEY

UNITED STATES PATENT OFFICE.

CHARLES A. PHOENIX, OF HARFORD MILLS, NEW YORK.

ATTACHMENT FOR PLOWS.

SPECIFICATION forming part of Letters Patent No. 644,092, dated February 27, 1900.

Application filed May 26, 1899. Serial No. 718,417. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. PHOENIX, a citizen of the United States, residing at Harford Mills, in the county of Cortland and State of New York, have invented a new and useful Attachment for Plows, of which the following is a specification.

My invention relates to improvements in plows which have a guide-wheel attached to the forward end of the beam to regulate and control the depth of furrow; and the object of my improvement is to provide an attachment whereby an approximately-level path will be cleared in front of said guide-wheel in order that the plowshare shall be made to travel on a practically-uniform level.

Heretofore plows have been provided with a guide-wheel located some distance in advance of the plowshare, the guide-wheel and the plowshare being both attached to the plow-beam, by reason of which, as the guide-wheel rides over protuberances in the ground—such as clods, stones, small hillocks, &c.—the plowshare is caused to rise and fall in conformity therewith, thus constantly changing its level and following a path practically parallel with all the surface undulations. With my attachment these small obstructions are removed from in front of the guide-wheel, causing it, and with it the plowshare, to follow a more steady and level course.

I attain my object by the attachment illustrated in the accompanying drawings, in which—

Figure 1 represents a side elevation of a plow provided with my attachment, and Fig. 2 a plan view of the guide-wheel and attachment on the line *x x* in Fig. 1.

Similar letters refer to similar parts in the two views.

a represents the guide-wheel, which is attached to the plow-beam *b* by the adjustable side bars *c c*, the guide-wheel being raised or lowered with respect to the beam by means of the said side bars in accordance with the depth of the furrow which it is desired to cut. Projecting in front of the side bars are two arms *d d*, to which is attached a flat plate *e*, of steel or iron, which said plate is set at a

short distance in front of the wheel, with its lower edge slightly above the bottom of the wheel. This plate is somewhat broader than the face of the guide-wheel, so as to project a little distance at each side of the wheel. As the plow is drawn along in the act of plowing it will be seen that this plate *e*, which I term a "grader," will push aside all small obstructions—such as clods, stones, hillocks, &c.—from in front of the guide-wheel, causing said wheel, and consequently the plowshare, to travel without undue undulations, leaving a practically-level furrow behind.

Instead of attaching the grader to the side bars *c c* it might be made independently adjustable by providing it with separate side bars similar to said bars; but I prefer to attach it and the guide-wheel to the same side bars in order that they may be adjusted together with one adjustment. Also instead of setting the grader parallel with the face of the guide-wheel it will be readily apparent that it could be set at an angle therewith, and, if desired, said grader can be given other shapes than the flat plate that I have shown.

It is preferable to use an upright grader-plate as shown, since a forward inclination in the grader would tend to draw the forward end of the plow-beam into the ground, thus throwing the point of the plow downward and increasing the depth of the furrow.

Having thus described my improvements, what I claim as my invention, and desire to secure by Letters Patent, is—

1. In a plow, the combination with a guide-wheel of an upright grader-plate positioned in front of and extending across the face thereof.

2. In a plow, the combination of a guide-wheel, a support therefor adjustably secured to the plow-beam, and a grader-plate fastened to said support in front of the wheel, as and for the purpose set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

CHARLES A. PHOENIX.

Witnesses:

FRED POLLARD,
D. S. PHOENIX.