H. & J. OLDENDORPH.

Colter Attachment for Plows.

No. 220,650. Patented Oct. 14, 1879.

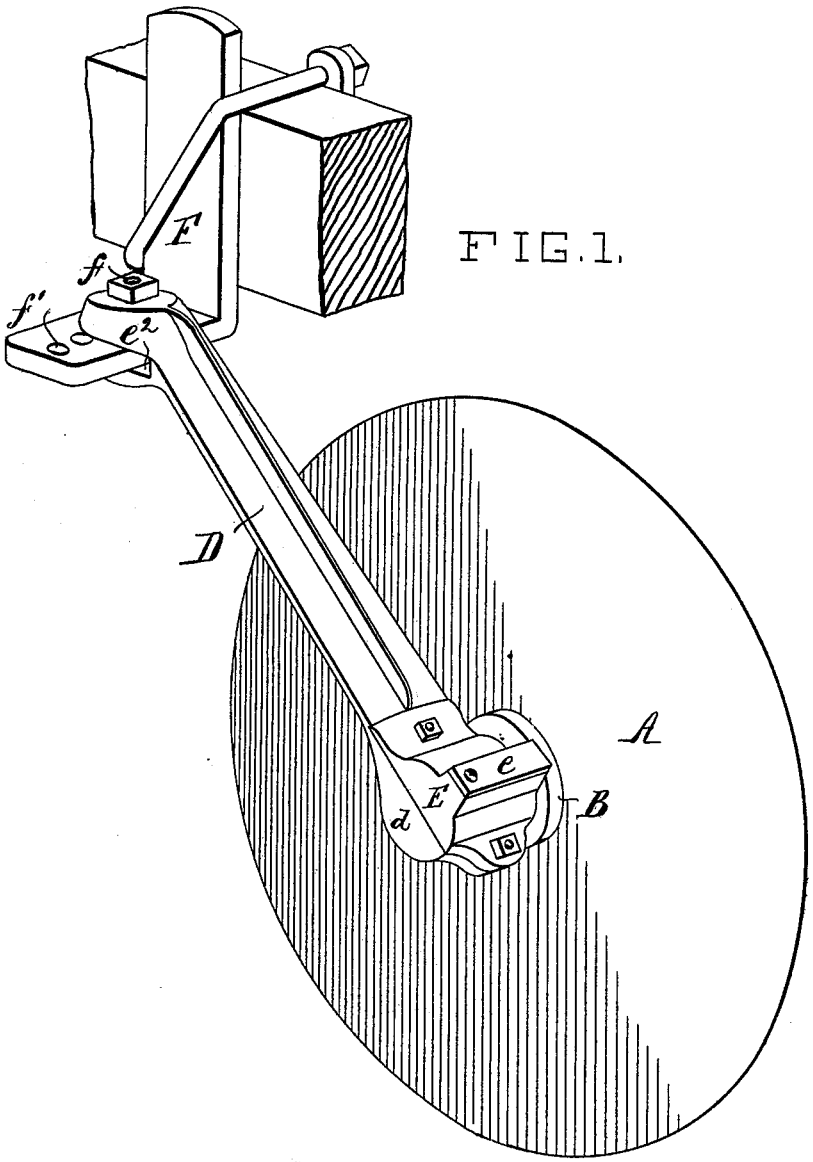
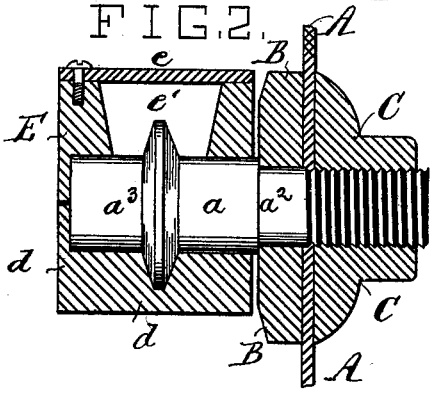


FIG. 1.

FIG. 2.



ATTEST.

John W. Kerthel.

Chas. Kerthel

INVENTOR'S

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UNITED STATES PATENT OFFICE.

HENRY OLDENDORPH AND JOHN OLDENDORPH, OF DU QUOIN, ILLINOIS.

IMPROVEMENT IN COLTER ATTACHMENTS FOR PLOWS.

Specification forming part of Letters Patent No. **220,650**, dated October 14, 1879; application filed November 20, 1878.

To all whom it may concern:

Be it known that we, HENRY OLDENDORPH and JOHN OLDENDORPH, both of Du Quoin, Perry county, and State of Illinois, have invented an Improved Colter Attachment for Plows, of which the following is a specification.

This invention relates more specially to the class of wheel-colters used with plows and the like.

We will first fully describe our invention, and hereinafter point out the novel features thereof in the claims.

Of the drawings, Figure 1 is a perspective view of our improvements as applied and used. Fig. 2 is an enlarged transverse section of the lubricating-box and the parts that carry and clamp the colter to the axis.

A is the wheel-colter. *a* represents the axis employed. It is a bolt or short shaft having screw-threads at a^1, the shoulder at a^2, and the V-shaped bearing a^3, all shown clearly in Fig. 2. B is a washer inserted on the axis to rest against the shoulder a^2. (See Fig. 2.)

The disk or colter A, by its central opening, is inserted on the axis *a*, alongside of the washer B. (See figures.) C is also a washer or cap, internally threaded to screw on the end of the threaded axis *a*, alongside of the colter. (See Fig. 2.) By means, therefore, of the washers B C, the colter can be firmly secured to the axis *a*, so as to be part of and turn with the same. We by this means dispense with one of the standards, and support the colter by a single standard in the following novel manner: D is the standard. Its lower end we make to have a lubricating-box, in which the end of the axis can be secured to operate and kept properly lubricated. Hence the lower end, *d*, of the standard is one section of the lubricating-box, and F, the cap or cover, the remaining section. Both the sections *d* E have the corresponding recesses to suit the shape and V-bearing of the axis. (See Fig. 2.) The remaining end of the axis is therefore seated in the lower section, *d*, (see Fig. 2,) and the cap E is bolted to section. The axis can freely revolve in the box, and it will be noted that the V-bearing prevents lateral play, and consequently the colter remains in true vertical line.

Bushing or Babbitt metal can be employed between the sections *d* and E, to follow up all wear of parts within the box, and to insure at all times a proper seating of the axis, as well as operation of same. But one end of the axis protrudes outside the box; and as the joint between the sections can be sufficiently closed, dirt, dust, and impurities can be prevented from entering. The cap E has a cover, *e*, to control the opening e^1, (see figures,) and by means whereof the bearings can be kept properly lubricated.

A firm, true, and substantial support is thus afforded the colter and its axis in a single standard, and the colter can be kept in truer position to facilitate the action of plowing.

The upper end of the standard has a jaw or fork, e^2, to engage the angle-plate F. Further, a pivot-bolt, *f*, unites the standard to said plate, as shown in Fig. 1. The series of holes f' in said plate permit the pivot-joint to be changed so as to adapt or adjust the colter to take more or less land. Otherwise, by means of the vertical arm, the standard and its parts can be properly secured to the plow-beam. (See Fig. 1.)

Having thus fully described our said invention, what we claim is—

1. The combination of the standard D, the sections *d* E, forming the lubricating-box, as shown, the axis *a*, having the V-bearing a^3, thread a^1, shoulder a^2, the washers B C, and colter-wheel A, by means whereof the said colter and axle can revolve in manner described, and all said parts be supported by the single standard employed, as shown and described.

2. In combination with the standard D, having fork e^2, the angle-plate F, having holes f' and bolt *f*, to operate as and for the purposes set forth.

In testimony of said invention we have hereunto set our hands.

HENRY OLDENDORPH.
JOHN OLDENDORPH.

Witnesses:
ADAM KERN,
J. T. HERBERT.