J. BAILEY.

RIDING ATTACHMENT FOR PLOWS.

No. 184,570. Patented Nov. 21, 1876.

FIG. 1.

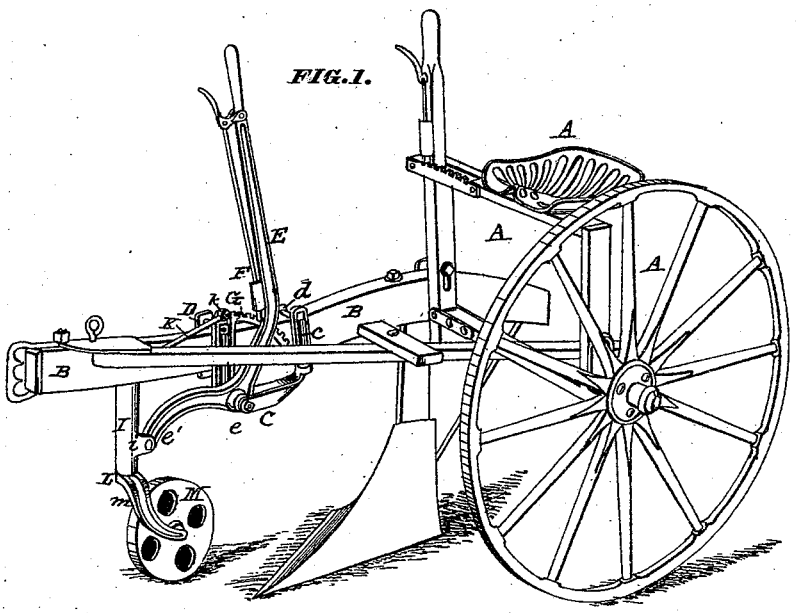

FIG. 2.

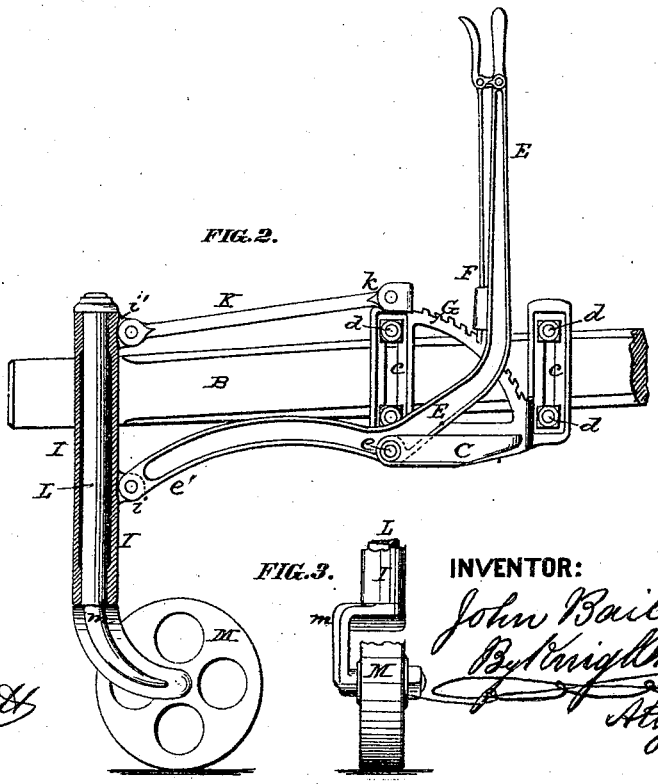

FIG. 3.

ATTEST:

Robert Burns.
Le Blond Burdett

INVENTOR:

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Attys.

UNITED STATES PATENT OFFICE.

JOHN BAILEY, OF BELLEVILLE, ILLINOIS, ASSIGNOR TO THE PUMP AND SKEIN COMPANY, OF SAME PLACE.

IMPROVEMENT IN RIDING ATTACHMENTS FOR PLOWS.

Specification forming part of Letters Patent No. **184,570**, dated November 21, 1876; application filed May 27, 1876.

To all whom it may concern:

Be it known that I, JOHN BAILEY, of Belleville, St. Clair county, State of Illinois, have invented a certain new and useful Improvement in Riding Attachment for Plows, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, making part of this specification.

My invention relates to an improvement upon Patent No. 137,975, granted to W. P. Sweeney, 15th April, 1873, for an improvement in wheel-plows.

My invention consists, first, in connecting the socket-piece of the caster-wheel to the hand-lever by a joint, and connecting the top of said piece to the frame by a radius-rod, as shown, so as to confine the socket-piece to a simple vertical movement, in which it retains its perpendicularity. The end of the lever between the fulcrum and the socket-piece, and the rod from said piece to the frame, (which is attached to the plow-beam,) are parallel and act together as parallel radius-rods for the above purpose. My invention consists, secondly, in the removal of one of the bearing-arms of the caster-wheel, so as to allow the escape of any earth and weeds that may be carried up by the wheel.

Figure 1 is a perspective view of my attachment as applied to a plow. Fig. 2 is a side view of the attachment. Fig. 3 is an edge view of the caster-wheel and its bearing-arm.

It is not necessary to describe the plow in general, or the riding attachment A applied thereto, as my improvement relates wholly to the caster-wheel attachment. B is the plow-beam, to whose side the bracket-frame C is connected by bolts *d*, passing, respectively, over and under the beam and through bridle-plates D, on one side of the beam, and through vertical slots *c* in the bracket-frame C. These slots give means for vertical adjustment of the frame upon the beam. E is a curved hand-lever, fulcrumed to the frame C at *e*, and secured in any position in which it may be placed by a catch-rod, F, whose lower end engages the toothed sector G. The forward end *e'* of the lever is hinged to the socket casting or piece I by a pin passing through the lugs *i i* and through the end of the lever E. *i' i'* are lugs extending backward from the upper part of the socket-casting, and a pintle-pin passes through these lugs *i'* and the end of a rod, K, whose other end, *k*, is hinged to the frame C.

The arrangement is such that, as the end *e'* of the lever and the rod K oscillate on their pivots at *e* and *k* as the socket-piece rises and falls, the socket retains its verticality, as *e'* and K are of equal length and parallel, and the points *e* and *k* in the same vertical line. This vertical movement is imparted to the socket-casting by the forward and backward movement of the handle end of the lever E.

It will be understood that, when the socket-casting, with pintle L (of the caster-wheel M) therein, is vertical, the caster-wheel will turn freely on its pintle in the socket, whereas when the socket is inclined this freedom of action is destroyed, because the wheel will then turn on its caster-pivot in a plane oblique to the surface of the earth. This difficulty is present in the apparatus described in patent 137,975, where the socket piece C is rigidly attached to the end of the hand-lever, so that the inclination of the socket is changed with each movement of the lever. In the patent aforesaid (No. 137,975) the fork in which the caster-wheel has bearing is apt to get choked with earth and weeds carried up by the caster-wheel. To avoid this, I leave one side of the wheel free altogether, and bend the remaining bearing-arm *m* outward from the wheel, so that there is a free space between the periphery of the wheel and the arm, and consequently any matter clinging to the wheel will be carried over without lodgment.

It is necessary that the caster-wheel shall be in the same plane with its caster-pintle L, and that the bearing-arm *m* shall be at a distance from the periphery of the wheel, and to meet these necessities the arm *m* is bent outward at a distance from the wheel, in manner shown in Fig. 3.

The essential feature in the first part of my invention is the connection of the socket piece to the frame C by the two parallel bars K *e'*; and it is not necessary that the latter, *e'*, should

be part of the lever E, because some other means might be used to raise and lower the socket-piece, and the rods e' K would give it the desired movement to preserve its verticality.

I claim as new and of my invention—

The combination, with the caster-wheel L M, of the socket-piece I, connected to the frame C by parallel rods or arms e' K, preserving the verticality of the socket, substantially as set forth.

In testimony of which invention I have hereunto set my hand this 20th day of May, A. D. 1876.

JOHN BAILEY.

Witnesses:

A. S. WILDERMAN,

L. C. BOWMAN.