

STANLEY & ENSIGN.

Wheel Plow.

Nò. 81,701.

Patented Sept. 1, 1868.

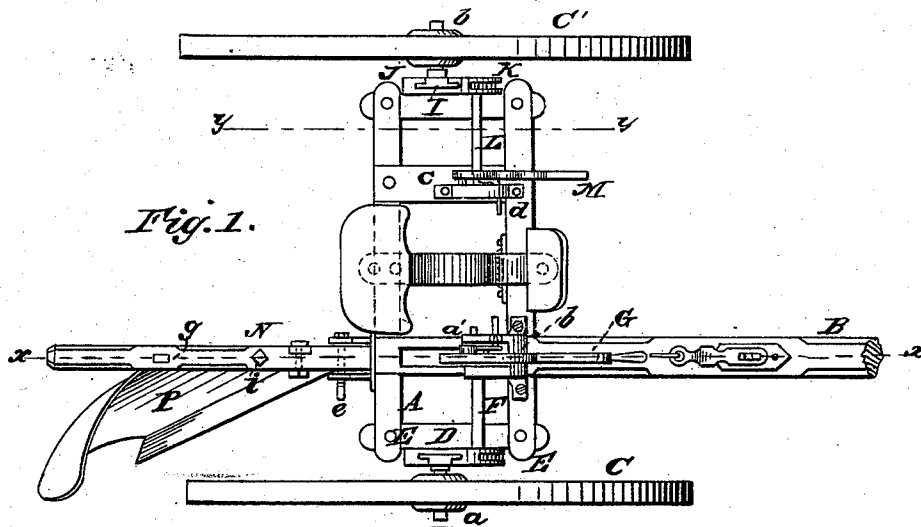


Fig. 1.

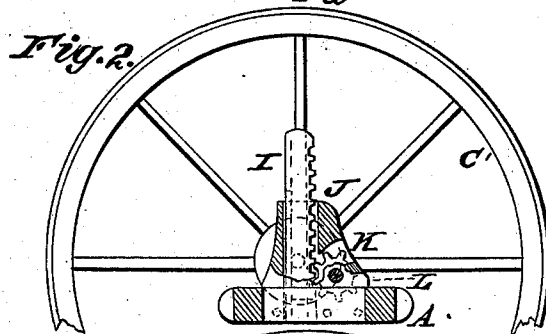


Fig. 2.

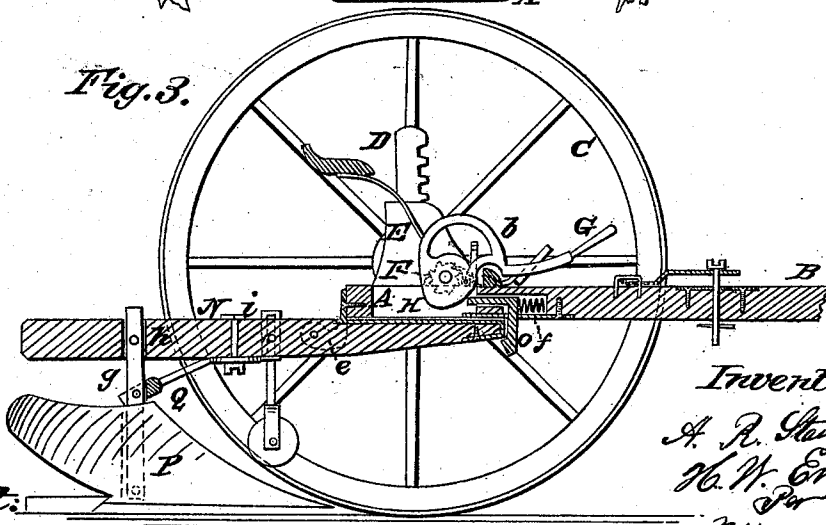


Fig. 3.

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UNITED STATES PATENT OFFICE.

A. R. STANLEY AND HENRY W. ENSIGN, OF SHULLSBURG, WISCONSIN.

IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. **81,701**, dated September 1, 1868.

To all whom it may concern:

Be it known that we, A. R. STANLEY and HENRY W. ENSIGN, of Shullsburg, in the county of La Fayette and State of Wisconsin, have invented a new and useful Improvement in Sulky-Plows; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan or top view of our invention. Fig. 2 is a side sectional view of the same, taken in the line *y y*, Fig. 1. Fig. 3 is a side sectional view of the same, taken in the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved plow of that class which are attached to a mounted frame, and are commonly termed "sulky-plows."

The invention consists in a novel and improved means for regulating the depth of the penetration of the plow into the earth, so that furrows of greater or less depth may be made, as desired; and also in a novel manner of attaching the plow to the carriage, and the arrangement of the same, as hereinafter set forth, whereby said plow may be liberated or thrown out of the ground, whenever necessary, by a very simple manipulation.

In the accompanying sheet of drawings, A represents the frame of the machine, having a draft-pole, B, attached. C C' are the wheels on which the frame A is mounted. These wheels work on separate or independent arms or axles, the axle *a* of the wheel C being attached to a rack, D, which is fitted in a guide, E, secured to one end of the frame A, said rack D having a pinion, E', gearing into it, which pinion is on a shaft, F, which extends inward on the frame A, and has a hand-lever, G, attached to its inner end. The inner end of this lever G is made in the form of an eccentric, H, (shown clearly in Fig. 3,) and on the inner end of the shaft F, adjoining the eccentric H, there is a ratchet, *a'*, into which a pawl, *b*, catches the retain-shaft F, and prevents it from turning, and thereby keeps the frame A at the desired height. The axle *b* of the other wheel, C', is also attached to a rack, I, which is fitted in a guide, J, on the frame A. This rack I also has a pinion, K, gearing into it, the pinion being on a shaft, L, which

extends inward, and has a lever, M, on its inner end, said shaft also having a ratchet, *c*, upon it, into which a pawl, *d*, catches to retain the frame A in proper position.

N represents a plow-beam, which is secured by a pivot-bolt, *e*, to the rear side of the frame A, and the front end of said beam is secured to the under side of the frame A by means of a catch, O, which has a spring, *f*, bearing against it, as shown clearly in Fig. 3.

P is the plow, provided with a standard or upright, *g*, which is secured in the beam N by a pivot-bolt, *h*. This standard or upright is braced by a rod, Q, the rear end of which is pivoted to the standard, and the front end secured to the plow-beam by a bolt, *i*, which passes through the beam and through an oblong slot in the rod. By this arrangement the point or share of the plow may have a greater or less degree of inclination given it, as may be desired.

From the above description it will be seen that the depth of the penetration of the plow may be varied, as desired, by raising or lowering the frame A, which is done by turning the shafts E L, and whenever it is necessary to throw the plow out of the ground, all that is necessary is simply to relieve the ratchet *a'* of the pawl *b*, draw back the upper end of the lever G, and the eccentric H will shove forward the catch O, and thereby release the front end of the plow-beam N, and the plow, under the forward motion of the machine, will instantly rise or turn up out of the ground, the shaft F, in being turned, raising the side of the frame where the plow is attached, and the eccentric bearing upon the plow-beam, and forcing it down after the catch O is shoved forward free from the plow-beam.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The pivoted plow-beam N, spring-catch O, and eccentric H, arranged to operate in the manner substantially as and for the purpose set forth.
2. The combination of the lever G, attached to the eccentric H, the shaft F, pinion E', rack D, and spring-catch O, fitting over the end of the plow-beam N, substantially as described, and for the purposes specified.

A. R. STANLEY.

Witnesses: HENRY W. ENSIGN.

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