M. BROWN.

SULKY-PLOW.

No. 184,499. Patented Nov. 21, 1876.

Fig. 1

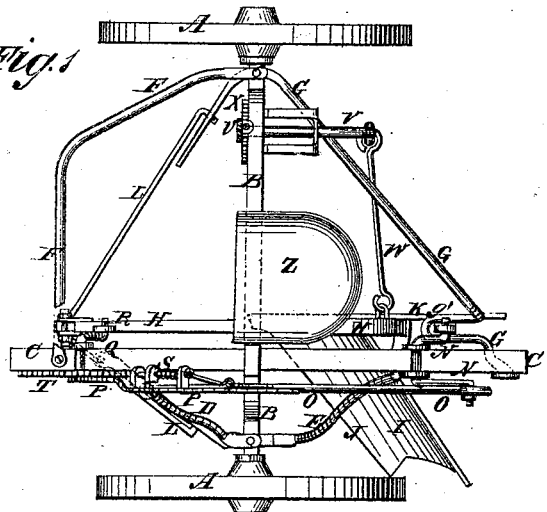


Fig. 2.

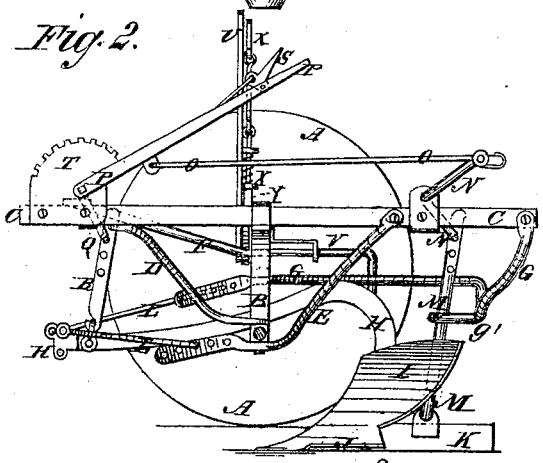
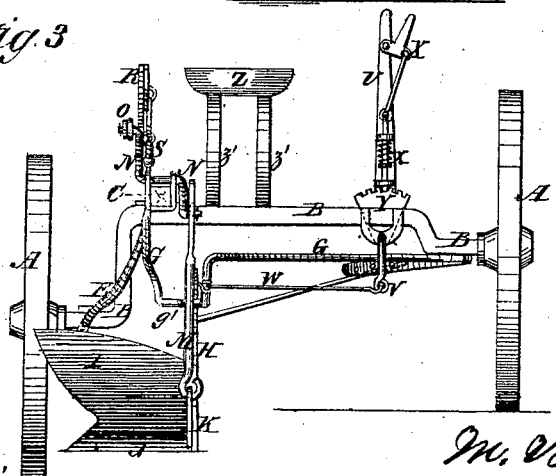


Fig. 3



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MERCER BROWN, OF ST. JOSEPH, ILLINOIS.

IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. **184,499**, dated November 21, 1876; application filed July 1, 1876.

To all whom it may concern:

Be it known that I, MERCER BROWN, of St. Joseph, in the county of Champaign and State of Illinois, have invented a new and useful Improvement in Sulky-Plows, of which the following is a specification:

Figure 1 is a top view of my improved sulky-plow. Fig. 2 is a side view of the same. Fig. 3 is a rear view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved sulky-plow which shall be so constructed that the plow may be easily and conveniently raised out of the ground, which will enable the plow to be turned upon the share or upon the bar without being swung to or from the land, and which will allow the wheels to run over corn-ridges or other uneven ground without raising the plow when the wheels rise, or forcing it down when they descend.

The invention will first be described in connection with drawing, and then pointed out in the claims.

A A are the wheels, which work upon the journals of the axle B. The axle B is bent four times at an angle, and the upright part at the plowed-land side is made longer than at the other, so that the middle part of said axle may be level while one wheel runs in the furrow. To the middle part of the axle B, near the upper angle, at its plowed-land end, is firmly secured the tongue C, which is strengthened against side strain by the braces D E F G. The inner ends of the braces D E are attached to the tongue C, and their outer ends are attached to the axle B at the inner end of its plowed-land journal. The outer ends of the braces F G are attached to the axle B at the inner end of its land-side journal. The brace F projects forward, is curved inward, and its inner end is attached to the tongue C. The brace G inclines rearward and inward, is bent downward, has a forwardly-projecting U bend or loop, g', formed in it, projects upward, and its end is attached to the rear end of the tongue. H is the beam, I is the mold-board, J is the share, and K is the bar or land-side of the plow, about the construction of which parts there is nothing new.

The draft is applied directly to the forward end of the plow-beam H, and the sulky is drawn from the forward end of the said plow-beam by the two stay-rods L, the forward ends of which are pivoted to the forward end of the plow-beam, and upon the rear ends of which are formed hooks to hook into holes in the ends of the braces E G, projecting in front of the axle B. Several holes are formed in the projecting ends of the braces E G to receive the hooks of the stay-rods L, so that the said stay-rods may be used for adjusting the plow to take or leave land. To the bar K of the plow is pivoted the lower end of a rod, M, that passes up through the U bend or loop g' of the brace G, and serves as a guard to keep the plow in place. The upper end of the rod M is pivoted to the lower arm of the double crank N, which works in bearings attached to the rear part of the tongue C. To the upper arm of the double crank N is pivoted the rear end of the rod O, which passes forward above the tongue C, and its forward end is pivoted to the lever P, attached to the end of the shaft of the crank Q. The crank Q is pivoted to the tongue C, and to its arm is pivoted the upper end of the rod R, the lower end of which is pivoted to the forward part of the plow-beam H. By this construction, by operating the lever P, the plow will be raised squarely from the ground. To the lever P is attached a lever spring-pawl, S, which engages with the toothed or notched plate T, attached to the tongue C, to lock the lever P, and thus hold the plow in any position into which it may be raised.

In the upper parts of the rods M R are formed a number of holes to receive the pins of the cranks N Q, so that the plow may be adjusted to work at any desired depth in the ground. In the end of the rod O, preferably the rear end, is formed a slot to receive the pivot, so that the wheels may rise and fall in passing over uneven ground without raising or lowering the plow. U is a lever attached to the forward end of the rod V, which works in bearings attached to the land-side end of the axle B. The rear end of the rod V projects in the rear of the axle B, is bent downward, and to it is pivoted the end of the rod W, the other end of which is pivoted to the side of the rear part of the plow-beam H, so

that by operating the lever U the plow may be turned upon its share or upon its bar, as may be desired. The lever U and rods V W enable the plow to be held level when both wheels are running upon unplowed or upon plowed land.

The lever U is provided with a spring lever-pawl, X, which engages with a toothed or notched plate, Y, attached to the axle B. Z is the driver's seat, the standards *z'* of which are attached to the axle B.

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

1. The frame-work formed of the bent axle B, the tongue C, the forward braces D F, and the rear braces E G, constructed and combined with each other substantially as herein shown and described.

2. The combination of the adjustable hook-rods L with the forward end of the plow-beam H, and with the forwardly-projecting ends of the rear braces E G, substantially as herein shown and described.

3. The combination of the plow H I K, hung by pivoted adjustable rods to the elevating mechanism, with the leveling devices, consisting of the cross-rod W, rock-shaft V, and lever U, and with the adjustable draft-braces L L, to take more or less land, all constructed substantially as shown and described.

MERCER BROWN.

Witnesses:
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