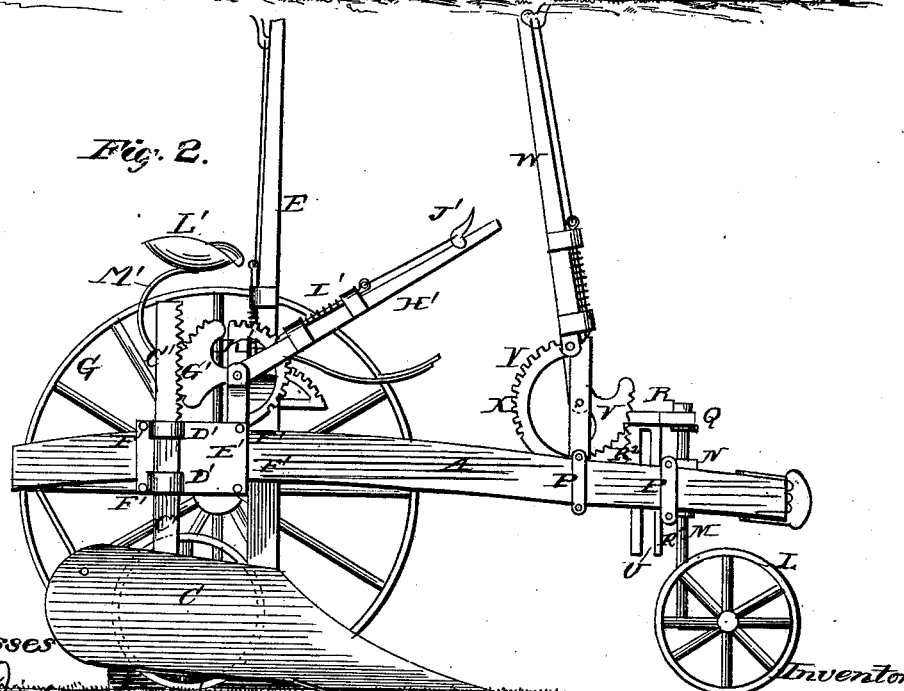
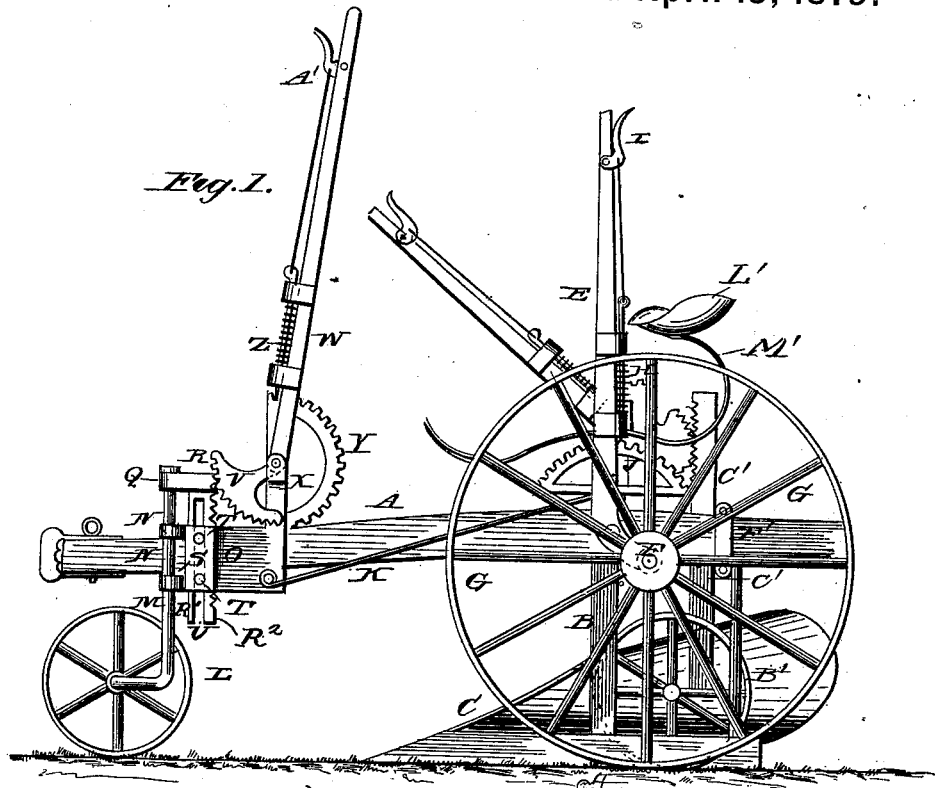


J. M. PAYNE.  
Sulky-Plow.

No. 214,440.

Patented April 15, 1879.



Witnesses

Red G. Dittmer  
George. Brintnburg

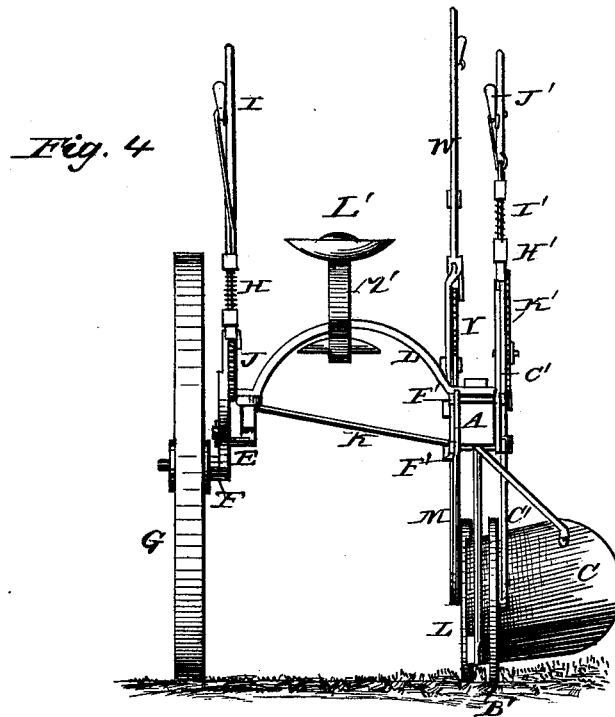
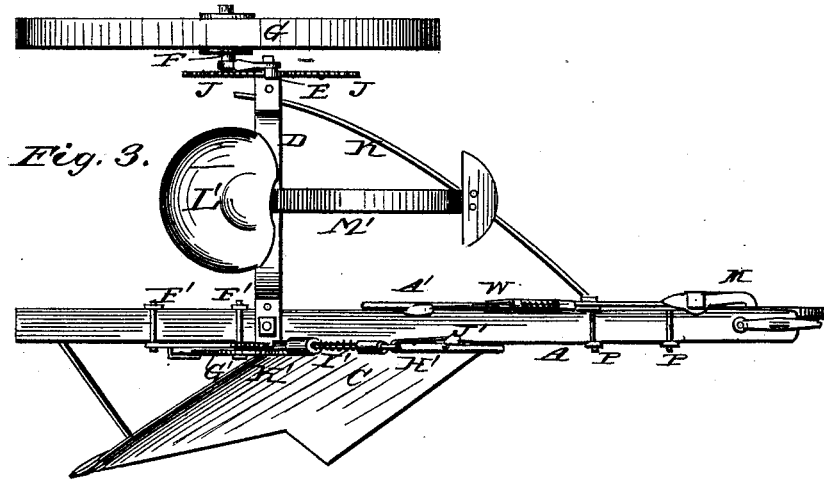
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J. M. PAYNE.  
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# UNITED STATES PATENT OFFICE.

JOSEPH M. PAYNE, OF BOONVILLE, MISSOURI.

## IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. **214,440**, dated April 15, 1879; application filed October 23, 1878.

*To all whom it may concern:*

Be it known that I, JOSEPH M. PAYNE, of Boonville, in the county of Cooper and State of Missouri, have invented certain new and useful Improvements in Sulky-Plows; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a side view. Fig. 2 is a side view, taken from the opposite side. Fig. 3 is a top plan, and Fig. 4 is a rear elevation.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to certain improvements in sulky-plows; and it consists in the construction and arrangement of parts, which will be hereinafter more fully described, and particularly pointed out in the claim.

In the drawings, A represents the plow-beam, provided with the standard B, carrying the plow C. D is the axle, one end of which is rigidly secured to the plow-beam. To its other end is pivoted a lever, E, the short arm of which carries the spindle F, upon which is journaled the wheel G. The lever is provided with a spring-catch, H, operated by a handle, I, and engaging with a segmental ratchet-plate, J, secured to the end of axle D. By this means a perfect adjustment of the wheel in relation to the plow-beam is secured, so that the latter may be tilted, with the plow, to either side, as may be required, according to the more or less hilly character of the ground. The cross-bar or axle D is braced by one or more rods, K, running to the plow-beam.

L represents a caster-wheel or roller, secured adjustably at the front end of the plow-beam in the following manner: Its shank M is swiveled in bearings N N, formed in a plate, O, which is secured to the plow-beam by clips P. It is also swiveled in an eye, Q, formed at the upper end of a rack, R, sliding upon plate O, upon which it is held by a plate, S, secured thereto with bolts T, for the accommodation of which the rack R is provided with a slot, U.

It will thus be seen that the rack R consists of two legs, R<sup>1</sup> R<sup>2</sup>, straddling the bolts T T, by which the plate S, which retains the rack

upon plate O, is secured to the latter. The leg R<sup>2</sup> is toothed to form the rack. By this method of constructing and joining the parts together great strength is attained, as well as facility of operation.

Rack R engages with a segmental rack, V, arranged or formed upon the short arm of a lever, W, which is pivoted upon a bracket or standard, X, projecting upwardly from plate O, as shown.

Y is a segmental rack, also forming part of, or projecting upwardly from, the plate O. With this engages the spring-catch Z of lever W, which said catch is provided with and operated by a handle, A'. By this arrangement the caster-wheel L may at any time be easily adjusted, thus regulating the point of the plow.

If the segment V should slip or become disengaged from the rack R, the latter will not slide out of its bearings, thus causing the caster-wheel to swing rearwardly in under the plow-beam, as if the wheel were simply swiveled under a solid rack-plate it would be apt to do. The caster-wheel is also, by this construction, better enabled to carry the weight of the plow-beam when the plow is thrown out of the ground for transportation upon a road.

Near the heel of the plow, between the mold-board and the land-side, is arranged a small wheel, B', provided with a shank, C', which slides in bearings D' upon a plate, E', which is secured upon the plow-beam by clips F'. Shank C' is toothed to form a rack, which engages with a segmental rack, G', formed upon the short arm of a lever, H', provided with spring-catch I', operated by a handle, J', and engaging with a segmental rack, K'. By means of this lever H' the wheel B' is vertically adjustable, thus providing for the adjustment vertically of the heel of the plow.

By this construction, it will be seen that perfect control is had over the wheel B', thus enabling it to carry the weight of the plow when thrown out of the ground.

The levers E, W, and H' are all within convenient reach of the driver, whose seat L' is secured upon a spring-bar, M', bolted to the axle D.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States.

The plate O, having bearings N N, bolts T T, and plate S, in combination with the slotted rack R, straddling the bolts T T, and having eye Q, caster-wheel L, having shank M, swiveled in the bearings N N Q, and the segment-lever W V, for operating the rack, the whole arranged and operating substantially as described, for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOSEPH MOTT PAYNE.

Witnesses:

CHAS. E. ANDREWS,

J. A. MEIER, Jr.