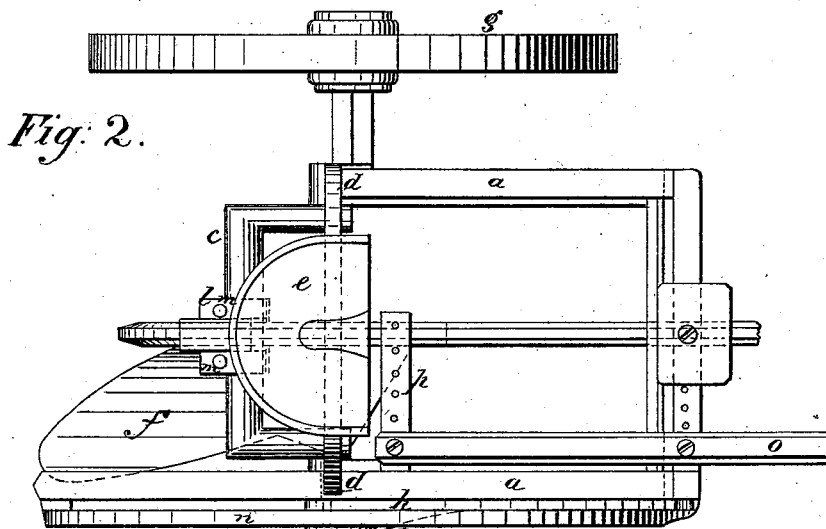
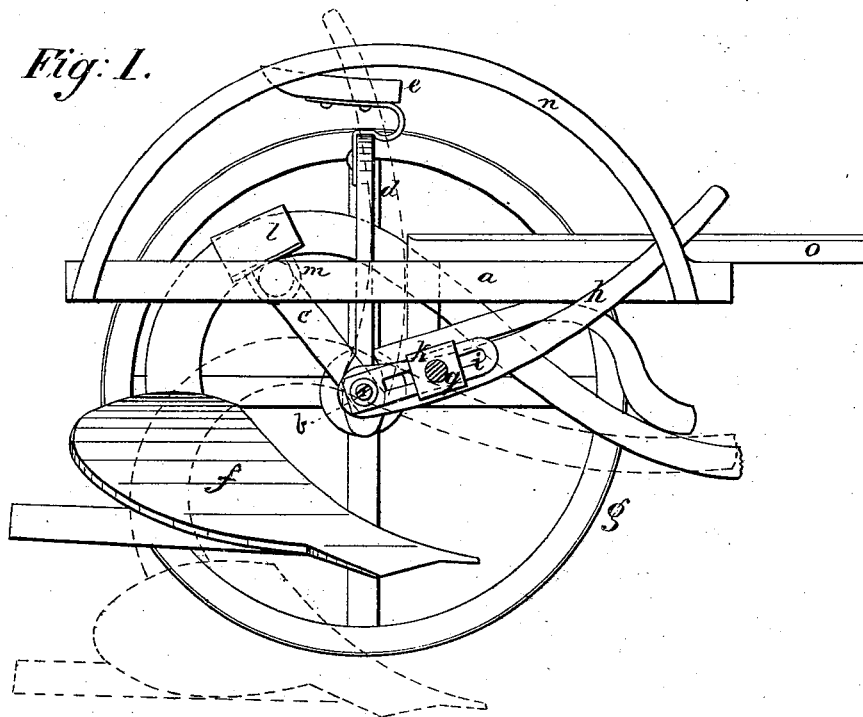


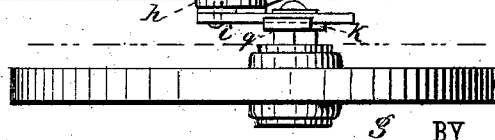
J. E. ALEXANDER.  
Sulky-Plow.

No. 208,053.

Patented Sept. 17, 1878.



WITNESSES:  
*A. Schehl.*  
*C. Sedgwick*



INVENTOR:  
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BY *Munroe*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JAMES E. ALEXANDER, OF NEOSHO, MISSOURI.

## IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. **208,053**, dated September 17, 1878; application filed June 7, 1878.

*To all whom it may concern:*

Be it known that I, JAMES E. ALEXANDER, of Neosho, in the county of Newton and State of Missouri, have invented a new and useful Improvement in Sulky-Plows, of which the following is a specification:

The object of my invention is to provide a simple and efficient adjustment of a sulky-plow to allow for deep or shallow plowing.

In the drawing, Figure 1 is a side elevation of my improved sulky-plow with the right-hand wheel removed, and Fig. 2 is a plan of the same.

Similar letters of reference indicate corresponding parts.

*a a* is the main frame of the sulky, united at the forward portion by cross-bars, and having the bearings *b* for the axle *c* connected by an arch, *d*, and the seat *e* is secured upon the arch *d*. The axle *c* between the bearings *b* is bent to the rear to form a support for the plow *f*. The wheel *g* is upon the axle *c* at the outside of the bearing *b*, as usual. The axle at the opposite bearing *b* has the lever *h* keyed upon it, and carries loosely at its end the slotted arm *i*. *k* is a plate fitted to slide upon the arm *i*, and secured thereto by a screw passing through the slot in the arm *i*. This allows the adjustment of the plate *k* upon the arm *i* to or from the bearing *b*. The plate *k* carries the journal *q* for the wheel *g*, so that by the adjustment of the plate *k* the frame of the sulky and the axle *c* can be set nearer to or farther from the ground, to cause the plow to run more or less deep. The lever *h*, which is keyed to the axle *c*, projects upward adjacent to the seat *e*, so as to be operated therefrom, and this lever is to be used to raise the plow entirely out of the ground, as shown in Fig. 1, in passing over stones, stumps, or other obstructions. The end of the lever *h* moves against the segment *n*, and this segment may be provided with rack-teeth to hold the lever *h* in any desired position. The lever *h* being

keyed upon the axle *c*, if the upper end of the lever be thrown forward, the axle *c* is turned in its bearings, and the bent portion of the axle *c*, where the plow *f* is hung, is thereby raised.

The plow *f* is fixed to the sulky by passing the plow-beam over the axle and securing the same to the axle by a plate or strap, *l*, over the top of the plow-beam, held to the axle by pins or bolts *m*. The forward end of the plow-beam is held down by the forward cross-bar of the sulky, under which the end of the beam passes. By these means wood or iron beam plows may be readily attached.

To adapt the plow for two or three horses I employ the changeable tongue *o*, secured at its inner end by a pin or bolt to the arm *p* projecting from the frame *a*. The tongue *o* also rests upon the forward cross-bar of the sulky, and is fastened thereto by a pin or bolt passing into a hole in the cross-bar. This cross-bar, as well as the arm *p*, is provided with numerous holes for holding the tongue *o* at any place between the center and side of the sulky-frame, thus enabling the tongue to be shifted in place when it is desired.

I do not limit myself to the exact construction of the parts of my sulky-plow as herein set forth, as they may be varied without departing from the essential features of my invention.

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

In a sulky-plow, the slotted arm *i*, hung loosely upon the axle *c*, in combination with the plate *k*, carrying the journal for the wheel *g*, substantially as and for the purposes set forth.

JAMES EMMONS ALEXANDER.

Witnesses:

JOHN W. NORTH,  
JOSEPH HOPKINS.