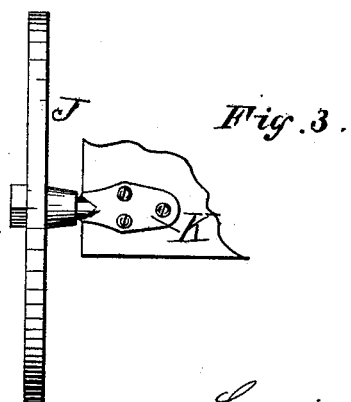
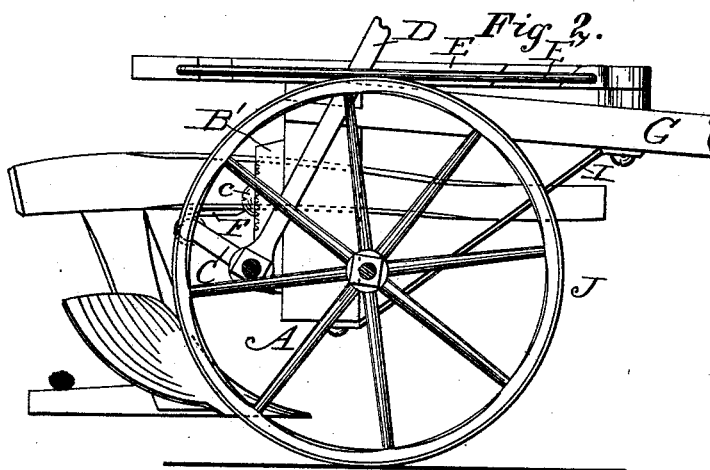
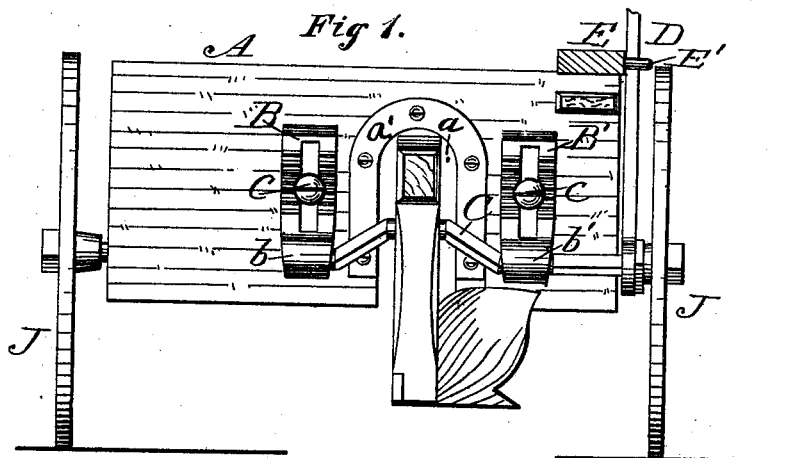


L. M. SUMMERS & M. WILSON.  
Sulky-Plow.

No. 219,997.

Patented Sept. 23, 1879.



Attest  
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Inventors.  
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# UNITED STATES PATENT OFFICE.

LAWRENCE M. SUMMERS AND MORDECAI WILSON, OF NORBORNE, MO.

## IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. 219,997, dated September 23, 1879; application filed January 22, 1879.

### *To all whom it may concern:*

Be it known that we, LAWRENCE M. SUMMERS and MORDECAI WILSON, of Norborne, Missouri, have invented an Improvement in Sulky-Plows, of which the following is a specification.

The object of our invention is the construction of a sulky-plow which, while being well adapted for any kind of plowing, will be very simple in its construction and operation, and cheap to manufacture, so that it can be made at comparatively small cost by an ordinary mechanic.

Our invention consists in peculiar and various novel points of construction, which will be particularly described in this specification, and pointed out in the claim.

In the drawings accompanying this specification, making a part of the same, Figure 1 represents a rear view; Fig. 2, a side view, and Fig. 3 a view showing the manner of attaching the axles.

The same letters indicate identical parts.

A represents the frame of the plow, to which the axles are attached. This frame is made from a piece of solid timber of proper dimensions, and has a large opening, *a*, cut in it, through which the beam of the plow passes when in position. The opening is cut a little nearer one end than the other, and is bound at the edges with an iron strip, *a'*, to prevent the wearing or damaging of the edges of the opening by long-continued use. On each side of the opening are plates, lettered, respectively, B B'. These plates are themselves of nearly the same length as the opening *a*, and have enlarged heads *b b'*, with a hole passing through, forming a bearing, for a purpose hereinafter to be mentioned.

The upper part of each of the plates B B' above the head is slotted for nearly its entire length, and on each side of the slot the plates are ribbed or corrugated. Through the slots pass bolts *c c*, with enlarged heads, which are preferably roughened or corrugated, to engage with the corrugations on the plates B B' and prevent the vertical movement of said plates. The other end of the bolts should pass directly through the frame A, and should be provided with nuts to hold them securely in place.

It is evident that by loosening the nuts and

withdrawing the bolts a little the slotted plates can be moved or adjusted vertically, to any desired extent.

C is a crank-shaft, one of whose ends is journaled in the opening in the head *b*, while the other end passes through the hole in the opposite head, *b'*, and is continued past the end of the frame A, the crank in such shaft coming between the slotted plates B B' and supporting the plow.

D is a lever, one end of which is attached to the crank-shaft C, which it operates.

E is a strip having a sufficient number of notches to hold the lever D in the desired position, with a rail, E', to limit its motion side-wise. A plow of any suitable or convenient kind is hung upon the crank on the shaft C, the plow-beam passing through the large opening *a*.

A metal bearing-plate, F, having one end bent to form an eye, is attached by a strap and bolts to the plow-beam back of the main frame, and through this eye passes the crank C, upon which the plow is thus hung. The plow is thus under the complete control of the operator, by means of the lever D, and can be lifted from or forced deeper into the ground, as may be desired.

G is a pole or shaft firmly attached to the main frame, and strengthened by braces I. The wheels J are provided with short metallic axles K, composed of flat plates and a rounded bearing. These axles are adjustable on the front of the main frame A by bolts driven through the flat portion. By reason of this adjustability of the axles wheels of any size may be used.

The operation of the various parts of the plow is so simple and plain upon inspection that no detailed description is necessary.

When on a level the plow is under the complete control of the operator, and may be forced into or withdrawn from the ground by the lever.

When one wheel is in a furrow the plow may be leveled by partially withdrawing the bolts *c c* and adjusting the slotted plates as required.

The plow is intended to be drawn by three horses, by means of a three-horse clevis and equalizer on the plow-beam.

The handles may be removed, if desired,

and a seat of any kind placed upon the main frame.

The principal advantages of our plow lie in the fact that the manner of constructing it makes it easy for any mechanic to make one at a small expense, and in a short time. Aside from this, it is easy to operate on any kind of land owing to the adjustability of the parts and the complete control which the driver has over them.

We are aware that a recessed axle is not new in a sulky-plow, and that adjustable bearings for the crank-shaft, as well as the crank-shaft itself and foot-lever, are old and prior to our invention, and in view of the state of the art we limit our claim to the precise construction and arrangement which we have shown.

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

In a sulky-plow, a main wooden frame, A, recessed to receive the plow-beam, and provided with a strip, *a*, around the recess, and with short axles bolted to the said frame, in combination with the slotted plates held to the main frame by bolts, and adjustable vertically, said slotted plates carrying the crank-shaft C, journaled in bearings on their lower ends, all the parts being constructed and arranged as and for the purpose set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

LAWRENCE M. SUMMERS.  
MORDECAI WILSON.

Witnesses:

WILLIAM S. KENDALL,  
JOHN WHEELER.