A. KEITH.

Wheel-Plow.

No. 50,828.

Patented Nov. 7, 1865.

Fig. 1

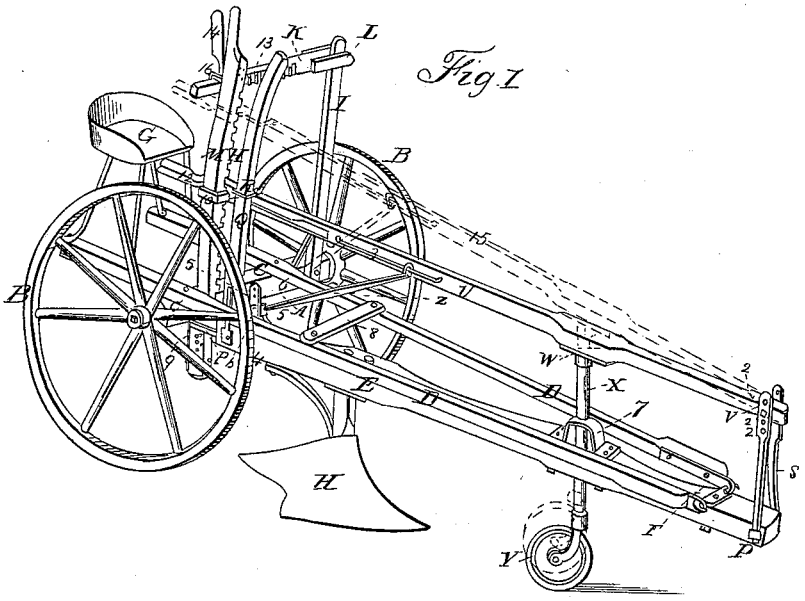
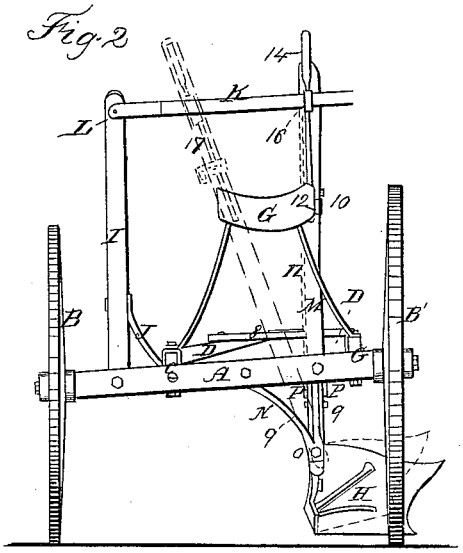


Fig. 2



Witnesses

Geo. L. Chapin

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# UNITED STATES PATENT OFFICE.

ALBERT KEITH, OF LISBON, ILLINOIS.

## IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. **50,828**, dated November 7, 1865.

*To all whom it may concern:*

Be it known that I, ALBERT KEITH, of Lisbon, in the county of Kendall and State of Illinois, have invented an Improved Sulky-Plow; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a perspective representation of my improved sulky-plow. Fig. 2 is a transverse elevation of the same.

The object of my invention is to construct a plow that is supported or carried upon the common axle and wheels in such a manner that a person riding on the same, in the rear of the plow, can gage the depth of the plow in the earth and the width of the furrow to be turned.

To enable others skilled in the art to make and use my invention, I will describe the method of making and using the same.

First, I use to support and carry my invention the common axle A and wheels B and B′. The only change in these consists in making the wheel that runs in the furrow sufficiently large to allow the axle A to have a horizontal position when plowing level ground.

To the axle A, at C, I attach the braces D, for the double purpose of supporting the end of the plow-beam E at F and the driver's seat G in the rear of the plow.

At H is shown the plow, which is attached to the beam E by any of the common methods used for such a purpose.

At I is represented a standard attached to the axle A and supported by the brace J. The object of this standard is to hold the arm K by means of the joint L.

At M is represented the standard that is attached to the hanging brace N by means of the joint *o* in such a manner as to allow the top of the standard to have a vibrating motion parallel with the axle A.

At F is shown the joint or hinge by means of which the beam E is attached to the braces D, so as to allow the rear end of the beam to be raised or lowered as required.

The guides P, sliding upon the standard M, keep the end of the plow-beam E in the proper position.

Q shows a guide-standard that is attached to the end of the beam E and extends upward through the loop R, in which it operates.

At S is represented what I term a "gage," and is attached to the end of the beam E by means of the strong bolt T. This gage is perforated at the top with four or more holes, 2, for the purpose of adjusting the end of the lever U by means of the bolt V.

At U is represented the lever which regulates the depth of the plow in the earth; and to this lever, at W, by means of a ball, a socket-joint is attached to the standard or shaft X, for the purpose of holding the caster-wheel Y in place in the usual manner.

At Z is represented the sliding brace, the top of which slides or operates upon the rod *z* when the rear end of the lever U is raised or lowered.

At 4 is shown the gage attached to the beam E, for the purpose of adjusting the lower end of the brace Z by means of the holes 5 and the bolt 6.

7 represents the bearing which supports the shaft X, where the same passes through the beam E.

8 represents the bar that is attached to the braces D, and is used as a stop to prevent too great an upward motion of the rear end of the beam E.

The lower end of the standard M is perforated with three or more holes, either of which may hold the pin 9 according to the adjustment required. This pin operates as a stop, in combination with the guides P, in preventing the rear end of the beam E from having too great a downward motion.

It will be seen from this description that the rear end of the beam E may have an easy vibrating motion between the bar 8 and the adjustable pin 9 when the plow is in use.

At 10 is shown the loop, which is attached to the lever U, through which the standard M is made to slide or operate, thus allowing the rear end of the lever U to occupy any point on the standard M between the braces D and the arm K.

On the side of the standard M, at 11, is shown the ratchet in which the spring-catch 12 operates in locking the lever U in the required position.

At 13, on the side of the arm K, is shown a

similar ratchet, and at 14 a similar spring-catch to the ones described above, and are used in locking the standard M to the required point on the arm K.

It will be seen by the dotted lines 15 that by raising the rear end of the lever U the caster-wheel *u* will be elevated high enough from the plow H to allow the same to run any required depth in the ground.

The dotted lines 17 show how the standard M is operated when giving an inclined position to the plow H.

Operation: The power used in operating my sulky-plow is two or more horses, which are attached to the beam E in the usual manner by means of the bolt T. The driver occupies the seat G and operates the plow in the following manner: When it is required to draw the plow to any place without turning a furrow the rear end of the lever U must be secured to the standard M at such a point by means of the spring-catch 12 as will place the caster-wheel *u* such a distance below the bottom of the plow H as to allow the same to ride clear from the ground. When it is required to turn a furrow the rear end of the lever U must be raised and secured to the standard M at any point that will give the proper depth of furrow. When plowing the width of the furrow turned is regulated by changing the position of the standard M on the arm K, as shown by the dotted lines 17.

I do not claim the carrying of a plow upon wheels or attaching the same to any kind of a carriage; but

What I do claim, and desire to secure by Letters Patent of the United States, is—

The combination of the lever U with the sliding brace Z, guide-standard A, and standard M, and the arrangement and combination of the standard I with the arm K and standard M, substantially as set forth.

ALBERT KEITH.

Witnesses:

GEO. L. CHAPIN,

LEWIS UMLAUF.