(Model.)

S. M. ROBERTSON & A. A. HAMILTON.

Sulky Plow.

No. 238,053. **Patented Feb. 22, 1881.**

Fig. 1.

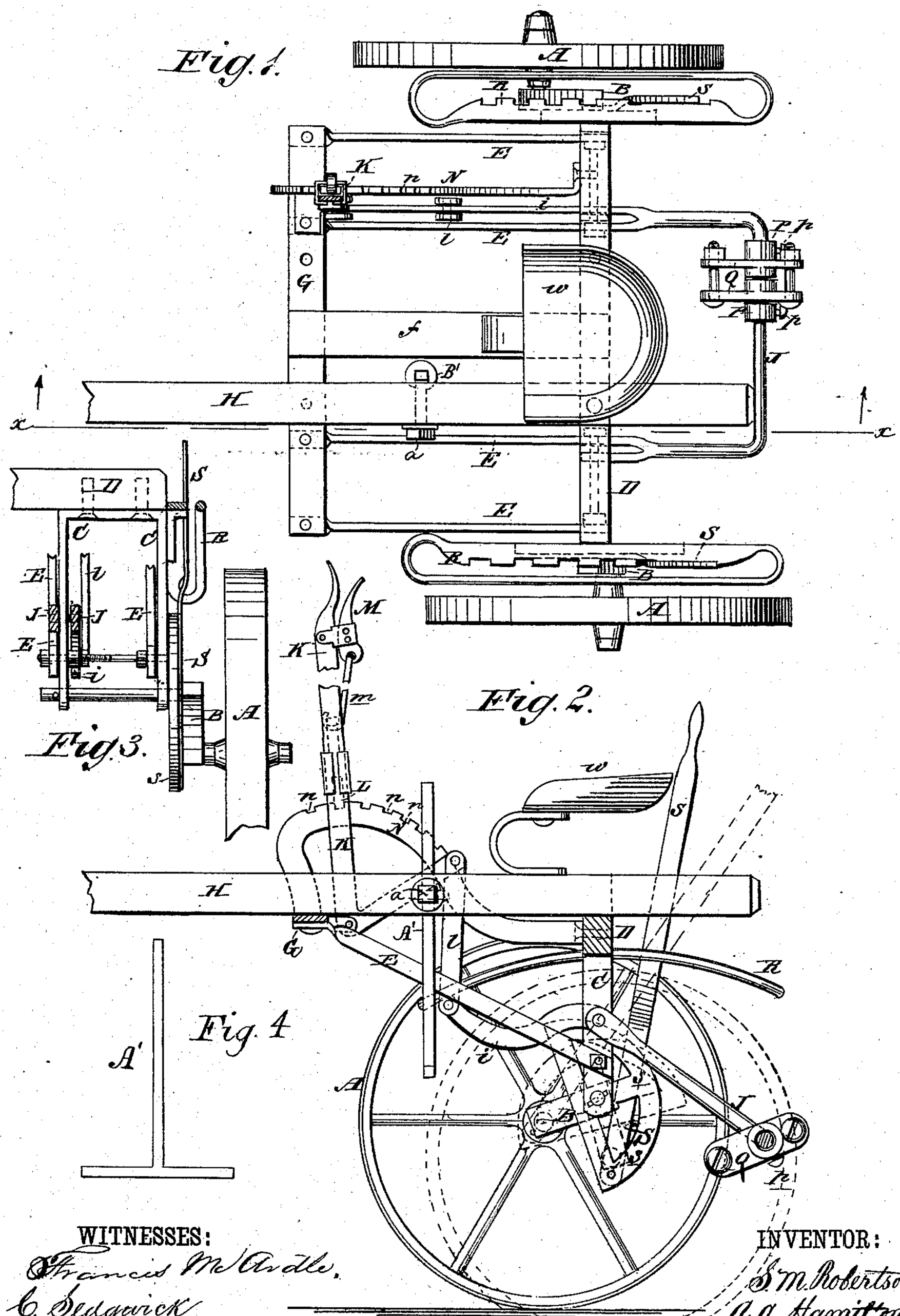

Fig. 2.

Fig. 3.

Fig. 4

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SAMUEL M. ROBERTSON AND AUGUSTUS A. HAMILTON, OF LYNNVILLE, IOWA.

SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 238,053, dated February 22, 1881.

Application filed September 13, 1880. (Model.)

To all whom it may concern:

Be it known that we, SAMUEL M. ROBERTSON and AUGUSTUS A. HAMILTON, of Lynnville, in the county of Jasper and State of Iowa, have invented a new and useful Improvement in Sulky-Plows, of which the following is a specification.

Our invention relates to certain improvements in that class of sulky-plows having the plow-beam supported by adjustable hangers arranged on a suitable frame extending back of the seat, and provided with vertical adjustment for raising and lowering the plow; and the invention consists in the special construction, arrangement, and combination of parts, all of which will be hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a top view of our invention. Fig. 2 is a vertical section taken in the line *x x* of Fig. 1. Fig. 3 is a detail sectional view, showing one of the axles and vertical bearings; and Fig. 4 is a view showing the T-shaped iron.

A A represent the wheels, and B B the axles. Each axle B is bent upward from the wheel, and thence horizontally at a right angle with the upright portion; and said horizontal portion is journaled in bearings in a vertical frame, C. The two frames C are connected with each other by a cross-beam, D. Extending forward from the two frames C are bars E, the front ends of which are connected by a cross-beam, G, parallel with the beam D. On the top of the beams D and G rests a bar, *f*, which carries the driver's seat *w*. The tongue H rests upon the cross-beams D G parallel with the bar *f*. It is secured to said beams by screws or bolts passing through holes provided for the purpose, so that it may be secured to the beams on either the right-hand or left-hand side of the seat, as may be desired.

To the rear of the two frames C is pivoted a frame, J, from one side of which extends an arm, *i*. The front end of this arm is connected by a link, *l*, with the short arm of an elbow-lever, K, pivoted in bearings attached to the front cross-beam, G. The long arm of the lever K is provided with a handle, and also with a pivoted lever, M, connected by a rod, *m*, with a latch, L. The latch L engages with notches *n* in a curved rack, N, attached to the beams D and G.

To the rear portion of the frame J are attached two collars, P P, provided with set-screws *p p*, so that they may be allowed to slide on the frame and be held in position at whatever point they may be placed. Between these two collars is a hanger, Q, consisting of two bars connected by screw-bolts. The rear portion of the frame J passes through the hanger in the same manner as through the collars, so that said hangers and collar may slide together when moved from one side to the other.

The beam of the plow to be used in connection with this sulky is attached to the bail or frame J by the hanger U and clamped tightly by the bolts. By means of the hanger and collars arranged to slide as above described the plow may be shifted toward one side or the other, so as to follow directly in line with the tongue, or otherwise, as may be desired. By means of the lever K and connections the plow may be raised or lowered at pleasure by the driver, and held at different heights by the engagement of the latch L and rack N.

To each axle B is attached a hand-lever, S. The attachment may be made in any suitable manner. As here shown, the lever is attached to a semicircular plate, *s*, which is rigidly secured to the horizontal portion of the axle which works in the bearings in the frame C. Each lever engages with notches in a rack, R, above the axle. By moving these levers S forward or backward the crank-shaped axles are moved so as to place the upright portion in a vertical position or an inclined position, so as to either raise or lower the wheel, as may be desired.

The forward end of the plow-beam is prevented from rising by an inverted T-shaped iron, A′, the long end of which passes through an eyebolt, B′, in the tongue H, as shown in

Figs. 1 and 2. Said iron A′ is held in any desired position by screwing nut *a* tightly against the tongue.

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

In a sulky-plow, the combination of beam D, frames C, lever K, link *l*, arm *i*, and U-shaped frame J, having bifurcated ends, as shown and described, for attachment to the frames C, as set forth.

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