

(No Model.)

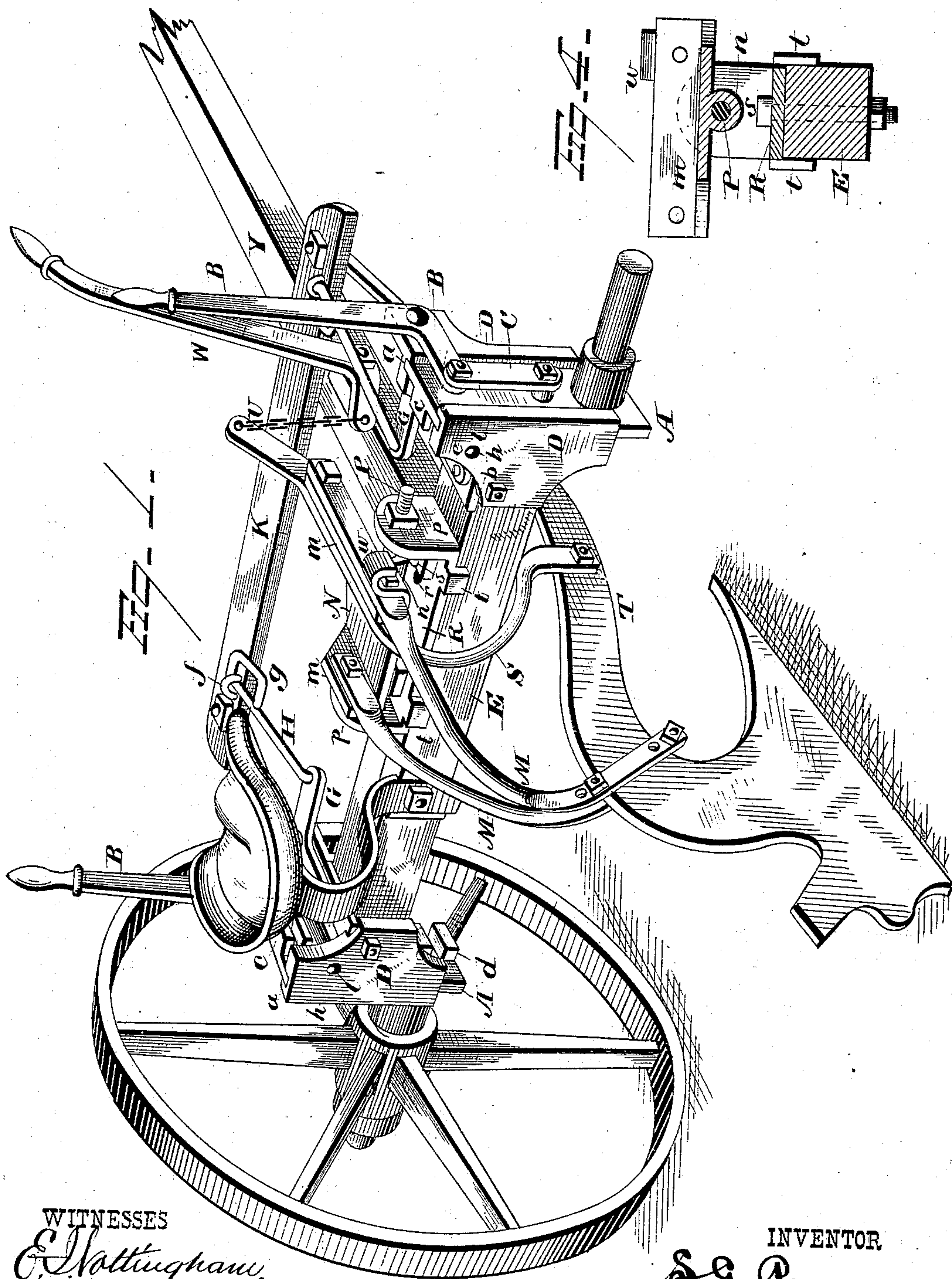
2 Sheets—Sheet 1.

S. G. POMEROY.

Sulky Plow.

No. 238,808.

Patented March 15, 1881.



WITNESSES

E. H. Hattugham,
Geo. S. Seymour.

INVENTOR

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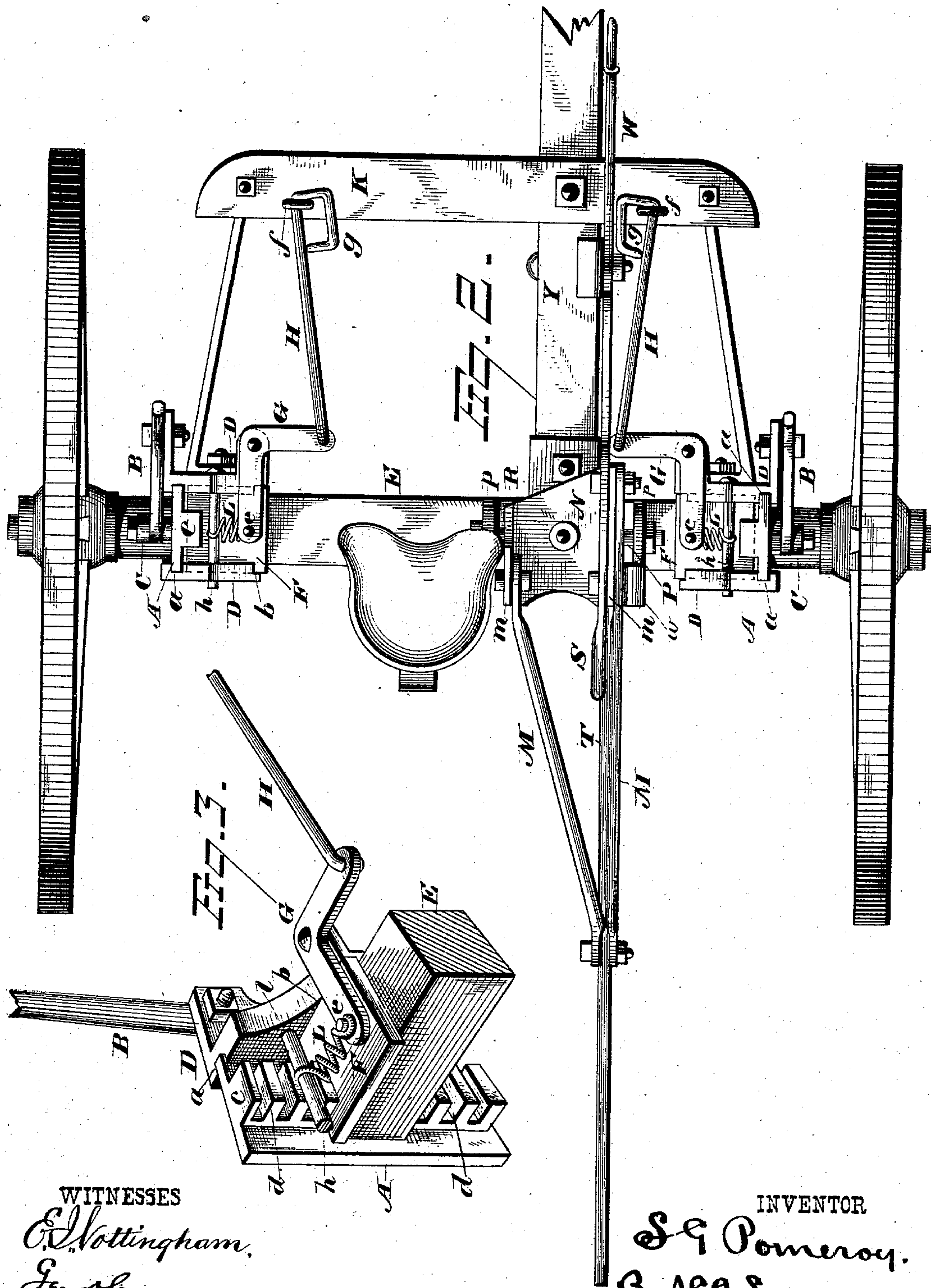
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UNITED STATES PATENT OFFICE.

SENECA G. POMEROY, OF KING'S FERRY, NEW YORK.

SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 238,808, dated March 15, 1881.

Application filed December 2, 1880. (No model.)

To all whom it may concern:

Be it known that I, SENECA G. POMEROY, of King's Ferry, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Sulky-Plows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

The object of my invention is twofold, relating to mechanism for vertically adjusting the axle on the spindle-uprights of the wheels, and also to mechanism for securing the plow to the axle.

The several improvements constituting the subject-matter of the invention will first be described in the specification, and finally clearly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of the plow. Fig. 2 is a plan view of the same. Fig. 3 is a detail view, showing the inner side of the spindle-upright, the vertical guideway, and the connecting parts. Fig. 4 is a detail view of the plate provided with ears, to which the secondary plow-beam is pivoted.

The spindle-uprights A are respectively connected to their appropriate bell-cranks B by links C. The spindle-uprights are fitted in guideways, each of which latter is formed by two castings, D, respectively secured to the front and rear sides of the axle E. Each casting has its inner side provided with a vertical groove, *a*, and with a horizontal groove, *b*. Each spindle-upright has its inner side provided with a longitudinal central rib, *c*, projecting laterally therefrom, this rib being formed with transverse serrations *d*. The sides of the spindle-uprights fit in the vertical grooves of the casting, and the sides of the locking-plate F fit in the horizontal grooves. A vertical pin, *e*, connects one arm of a bell-crank, G, to the locking-plate, and a longitudinal sliding rod, H, is connected to the other arm of this bell-crank. This rod extends forward and slides in a loop, *f*, secured to a cross-bar, K, a lateral projection, *g*, being formed on the inner side of the forward extremity of the rod, and forming a bearing for the foot of the driver. A spring, L, has one end connected to the pin *e*, and its opposite end connected to

a horizontal pin, *h*, having its extremities mounted respectively in holes *l* formed in the two castings. This spring tends to maintain the locking-plate in engagement with the serrations of the spindle-upright.

To adjust the height of the axle the driver presses with his foot against the lateral bearing *g* of the sliding rod. The bell-crank is thereby operated so as to overcome the force of the spring and to disengage the locking-plate from the spindle-upright. By throwing the bell-crank B either forward or backward with his hand the driver can raise or lower the axle to the position required. Then by releasing the longitudinally-sliding rod from foot-pressure the spring throws the locking-plate into engagement with the spindle-upright.

To secure the plow to the axle I provide two laterally-diverging hangers, M. Each of these hangers is secured to upturned flanges *m* of an upper plate, N, the lower side of this plate being provided with a transverse sleeve, *n*, in which a rod, P, is loosely fitted. The extremities of this rod are mounted respectively in holes formed in vertical ears *p*, projecting from a plate, R, this plate being provided with slots *r*, which permit bolts *s* to secure the plate in lateral adjustment to the upper side of the axle. Plate R is provided at both front and rear sides of its end portions with depending flanges *t*, which fit against the sides of the axle and aid in maintaining the plate in position. An arm, S, is secured to the forward end of the plow-beam T, and is also secured to one of the two hangers M of the plow-beam. The forward end of the arm has a chain, U, which connects it to the short arm of the bell-crank W. This bell-crank is pivoted to the tongue Y. One of the hangers M is provided with a catch, *w*, adapted to engage with the long arm of the bell-crank W when the plow is raised from the ground. The hangers M are secured rigidly to the rear end of the plow-beam, so that, though the plow is beneath the axle, its pivotal point of motion is at P, above the axle. In this respect it differs from ordinary hangers or bails.

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

1. In a sulky-plow, the combination, with a vertically-adjustable bar or plate having the

spindle secured thereto, said plate or bar having a rack formed on its rear side, of a spring-pressed locking-plate located in horizontal grooves in the guideway and adapted to engage the teeth of said rack, a bell-crank lever pivoted at one end to the locking-plate, and a rod attached to the other end of the bell-crank lever and extending forward and adapted to be operated by the boot of the driver, substantially set forth.

2. In a sulky-plow, the combination, with a pivotal bracket located over the axle of diverging hangers M, secured at one end to the bracket and rigid with the plow-beam, and a hanger, S, secured at one end to the plow-beam and having its opposite end attached to one of the hangers M, and a bell-crank lever for raising and lowering the plow, substantially as set forth.

3. In a sulky-plow, the combination, with the pivotal plate or bracket N, of the diverging hangers M, secured at one end to said plate or bracket, and at their lower ends rigidly secured to the plow-beam, a hanger, S, secured at one end to the plow-beam and at its upper end to the plate or bracket N, and a bell-crank lever and chain for raising and lowering the plow, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 6th day of November, 1880.

SENECA G. POMEROY. [L. S.]

Witnesses:

DARIUS W. ADAMS,
C. A. TOAR.