

(No Model.)

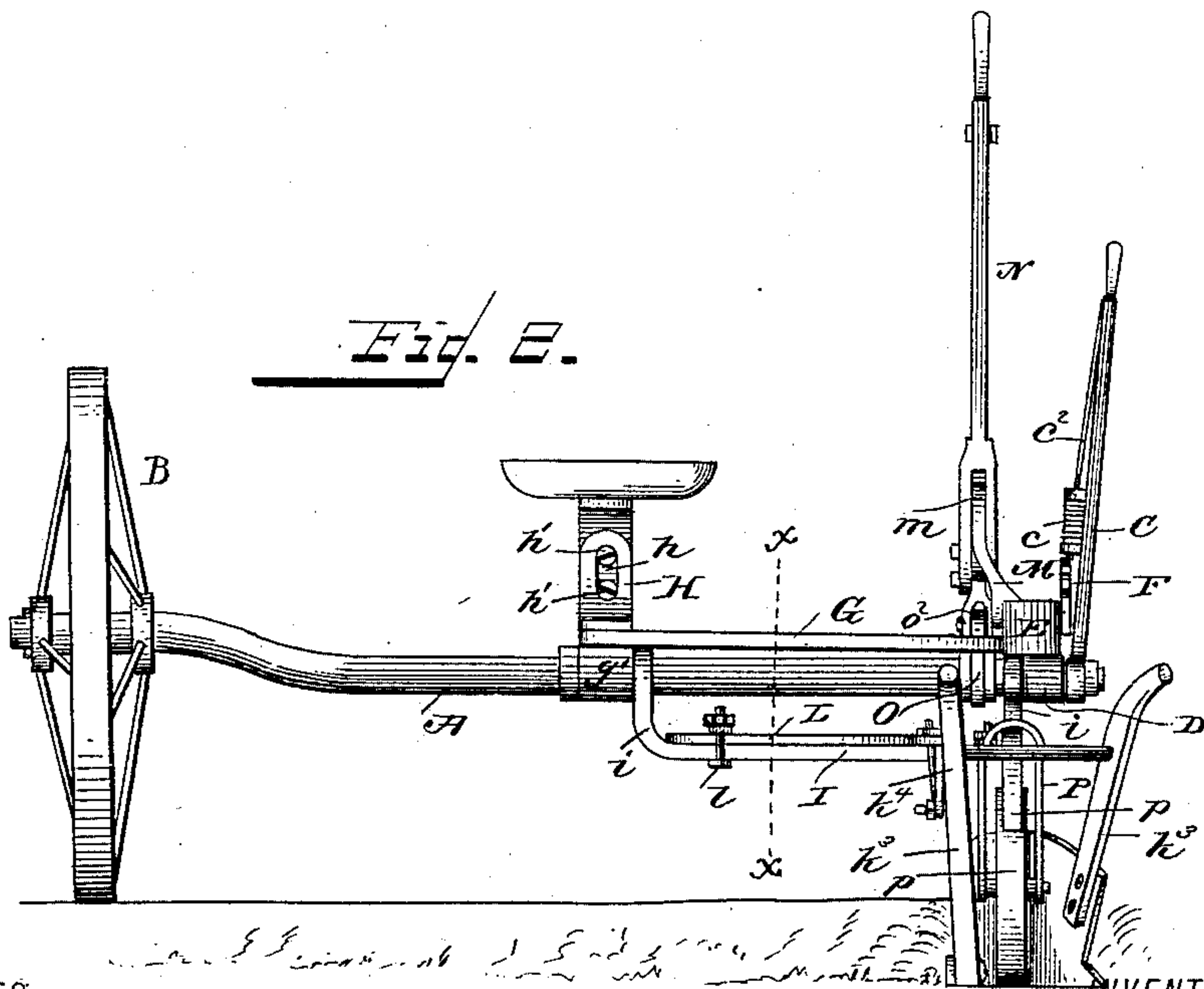
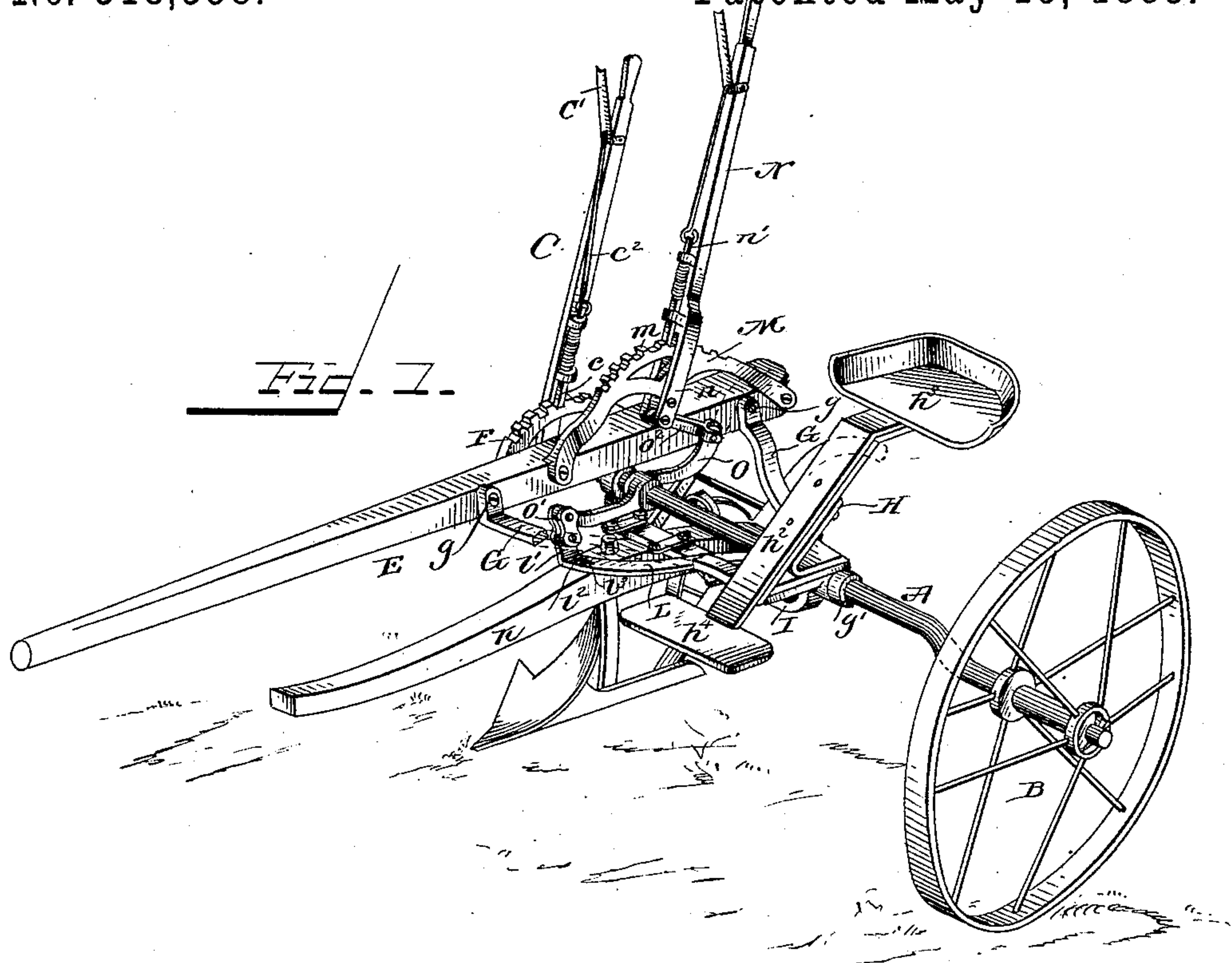
2 Sheets—Sheet 1.

W. G. DANIELSEN.

SULKY PLOW.

No. 318,358.

Patented May 19, 1885.



WITNESSES

C. M. Daphnell
Edw. G. Siggers

INVENTOR

William G. Danielson

By his Attorney

C. A. Snow & Co.

(No Model.)

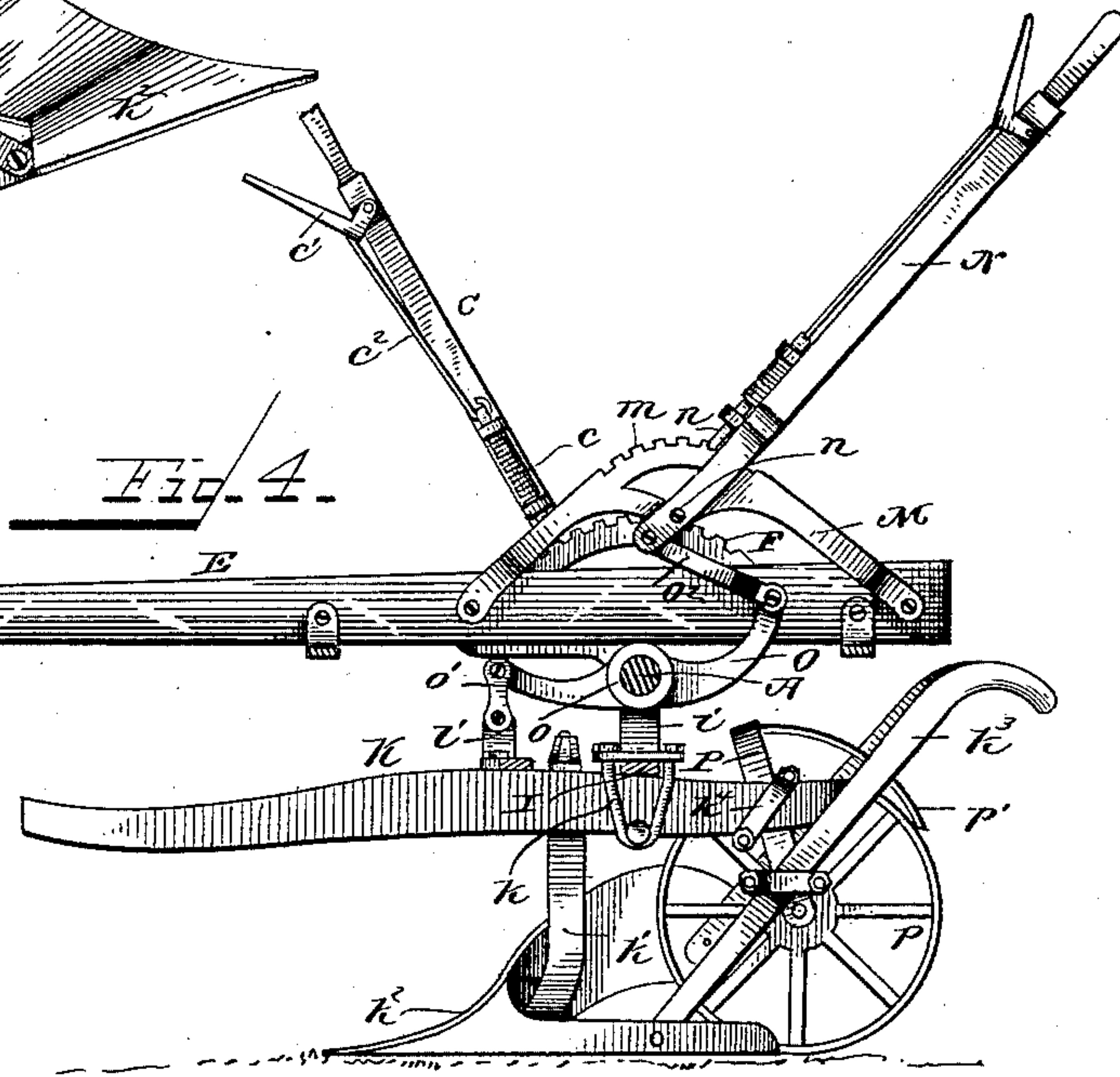
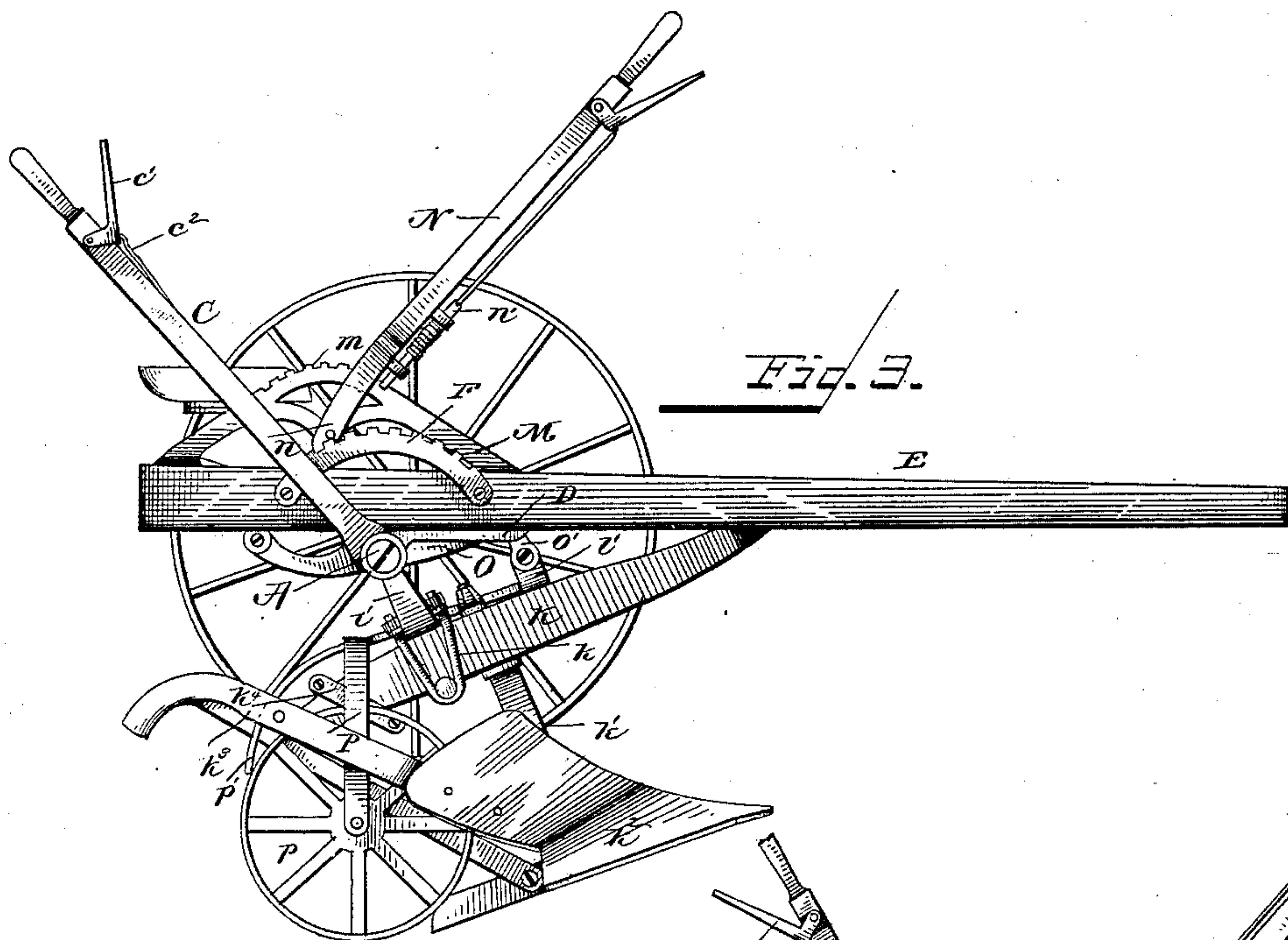
2 Sheets—Sheet 2.

W. G. DANIELSEN.

SULKY PLOW.

No. 318,358.

Patented May 19, 1885.



WITNESSES

C. M. Lashell
B. G. Siggers.

William G. Danielson
INVENTOR

By, *C. A. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM GEORGE DANIELSEN, OF RICHMOND, UTAH TERRITORY.

SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 318,358, dated May 19, 1885.

Application filed February 13, 1885. (No-model.)

To all whom it may concern:

Be it known that I, WILLIAM G. DANIELSEN, a citizen of the United States, residing at Richmond, in the county of Cache and Territory of Utah, have invented a new and useful Improvement in Sulky-Plows, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in sulky-plows; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective of my invention. Fig. 2 is a rear view of the same. Fig. 3 is a side elevation. Fig. 4 is a sectional view taken on the line $x x$ of Fig. 2.

A represents a cranked axle, to one end of which is journaled a supporting-wheel, B, and to the opposite end is rigidly secured a lever, C.

A block, D, is journaled on the end of the axle adjacent to the lever C, and this block is bolted to the under side of a draft-pole, E, near the rear end of said pole.

A segmental rack, F, is secured on the outer side of the pole, and the lever C is provided with a spring-actuated bolt, c , which engages with the rack, and thereby secures the lever C at any desired angle to the draft-pole. A handle, c' , is pivoted to the upper end of the lever, and is connected to the bolt by a rod, c^2 .

G represents a cast or wrought frame, which is bolted to the inner side of the draft-pole, as at g , and which extends inwardly to about the center of the axle, and is journaled thereto, as at g' .

A standard, H, which inclines rearwardly, extends from the upper side of the inner end of the frame G, is slotted at h , and to this standard is secured, by screws h' , which extend through the slot, the flat seat-bar h^2 , which has the seat h^3 secured to its upper horizontal end, and the foot-board h^4 secured to its lower horizontal end. By means of the slot and set-screws the seat and foot-board can be adjusted up or down to suit the driver.

I represents a stirrup having the upturned ends i , through which the axle is loosely passed,

the stirrup extending from the block D to the bearing g' .

A plow-beam, K, is secured to the stirrup near its outer end by the yoke-clamps k .

L represents an arm, that is secured to the upper side of the stirrup near its inner end, at an angle of about forty-five degrees thereto, by means of the clamp-yoke l . The front end of this arm is curved and extends outwardly to the outer side of the plow-beam, where it is upturned, as at l' . A slot, l^2 , is made in the arm at the part that is over the plow-beam, and through this slot is passed a bolt or screw, l^3 , which enters the plow beam and secures the slotted end of the arm thereto. This slot and securing bolt or screw enable the plow to be adjusted laterally.

M represents a bracket, which is bolted to the inner side of the draft-pole, and is provided with a segmental rack, m .

A lever, N, is pivoted to the bracket at the point n , and has a spring-actuated bolt, n' , for engaging with the rack, and a handle and connecting-rod for operating the bolt.

O represents a curved lever, that has its fulcrum on the axle, as at o , its front end connected to the upturned end of the arm L by the links o' , and its rear end connected to the lower end of the lever N by the link o^2 . The plow, which is secured to the stirrup and the arm, is of the ordinary construction, and, as here shown, is provided with the standard k' , share k^2 , and handles k^3 .

An inverted-U-shaped bracket, P, is secured to the plow-beam and to the land-side handle by the clamp-yokes k^4 , and in this bracket is journaled a small supporting-wheel, p , which runs in the furrow in rear of the plow. A scraper, p' , bears against the upper side of the wheel and keeps it clear of dirt.

By means of the lever C and the cranked axle the plow can be caused to run at any desired depth, and by means of the lever N, the curved lever O, and the links o' and o^2 the plow can be caused to enter the ground at any desired angle, or lifted entirely therefrom and its weight imposed upon the small supporting-wheel when being transported and not at work, or when it is necessary to pass over a stump,

stone, or other obstruction. The lower side of the small supporting-wheel is slightly lower than the plow, as shown, and by this construction the draft of the plow is greatly lessened, as will be very readily understood.

A sulky-plow thus constructed is adapted for the attachment of any of the common forms of walking-plows, is light, of very easy draft, simple in construction, can be easily operated, and put upon the market at a very reasonable cost.

Having thus described my invention, I claim—

1. The combination of the axle, the wheel journaled thereon, the draft-pole attached thereto, the stirrup I, hinged to the axle, the plow secured to the stirrup, and the levers N O, for tilting the plow, substantially as described.

2. The combination of the axle, the wheel journaled thereon, the draft-pole, the stirrup hinged to the axle, the plow secured to the stirrup and adapted to be laterally adjusted thereon, and the levers N O, for tilting the plow, substantially as described.

3. The combination of the axle, the wheel journaled thereon, the draft-pole, the stirrup hinged to the axle, the plow secured to the stirrup, the lever O, fulcrumed on the axle and connected to the plow by the links o' , the hand-lever N, fulcrumed on the draft-pole, and the link o^2 , connecting the levers N O, substantially as described.

4. The combination of the bent axle, the wheel journaled thereon, the hand-lever C,

fixed to the axle, the draft-pole hinged to the axle, the stirrup hinged to the axle, the plow secured to the stirrup, and the levers N O, for tilting the plow, substantially as described.

5. The combination of the bent axle, the wheel journaled thereon, the hand-lever C, fixed to the axle, the stirrup hinged to the axle, the plow secured to the stirrup, the lever O, fulcrumed on the axle and connected to the plow by the links o' , the lever N, fulcrumed on the draft-pole, and the link o^2 , connecting the levers N O, substantially as described.

6. The combination of the bent axle, the wheel journaled thereon, the hand-lever C, fixed to the axle, the draft-pole hinged to the axle, the rack F, and bolt c , for securing the lever C to the pole at any desired point, the stirrup hinged to the axle, the plow secured to the stirrup, the supporting-wheel in rear of the plow, the lever O, fulcrumed on the axle and connected to the plow by the links o' , the hand-lever N, fulcrumed to the draft-pole, the link o^2 , connecting the levers N O, and the rack m and bolt n' , for securing the hand-lever N at any desired point, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM GEORGE DANIELSEN.

Witnesses:

S. H. HOBSON,
WM. J. KERR.