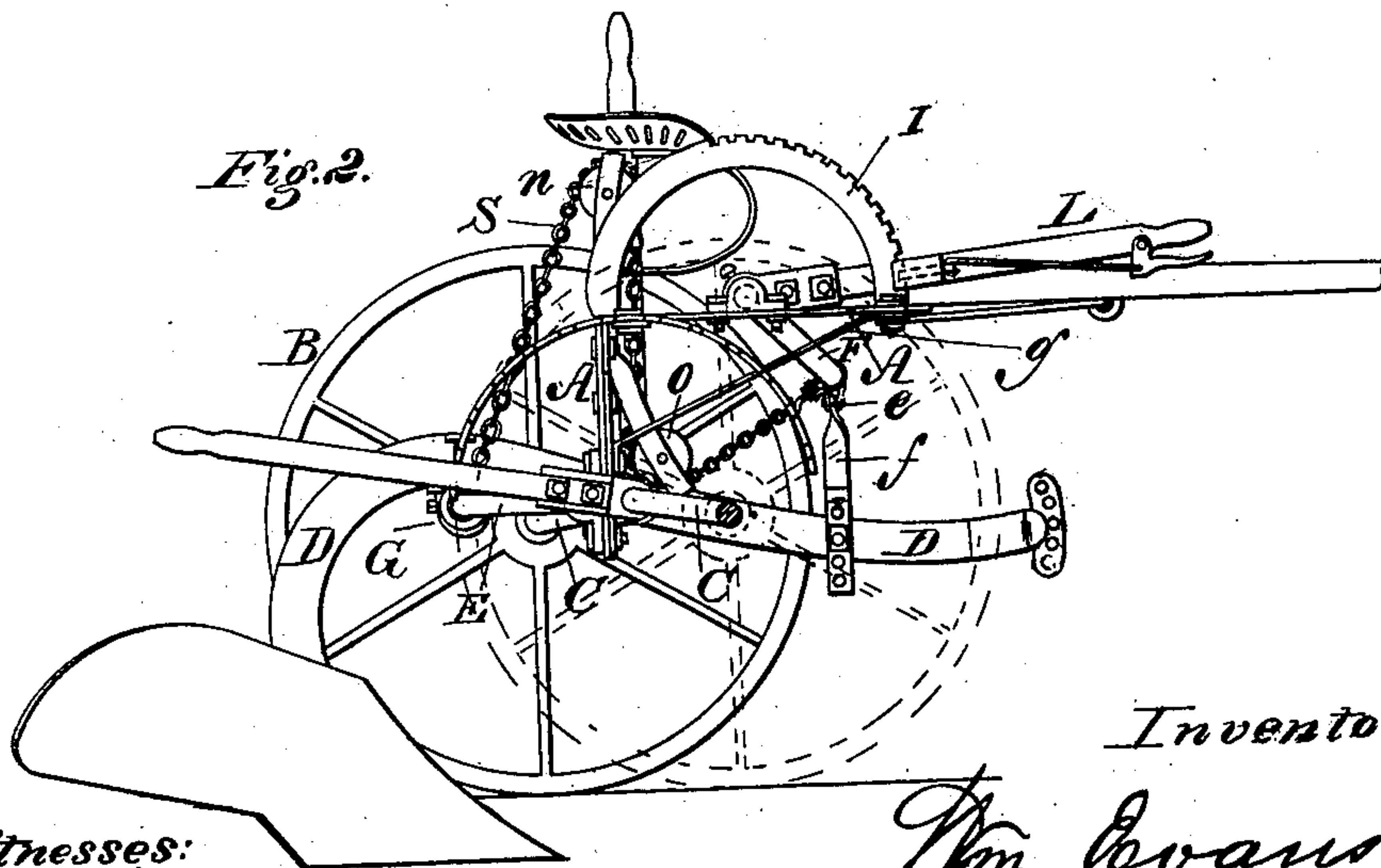
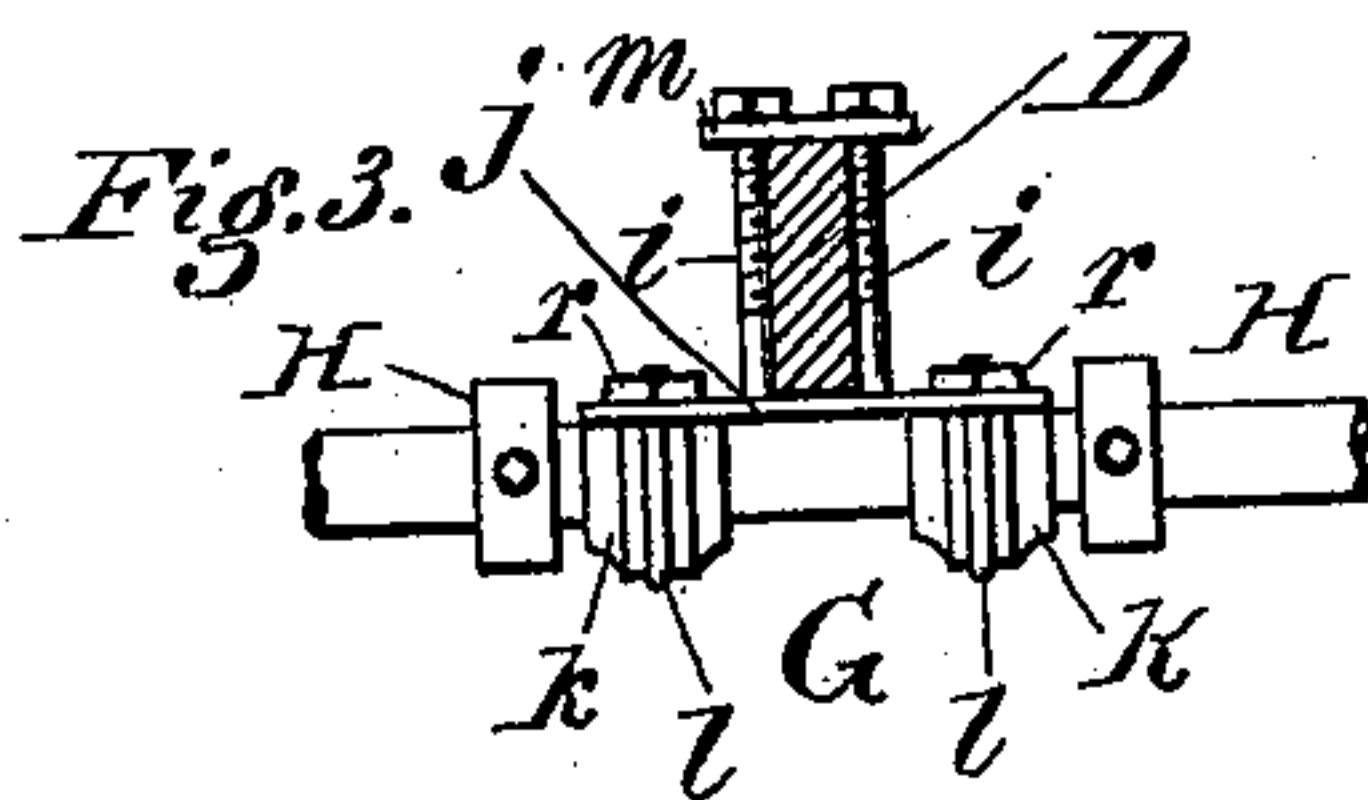
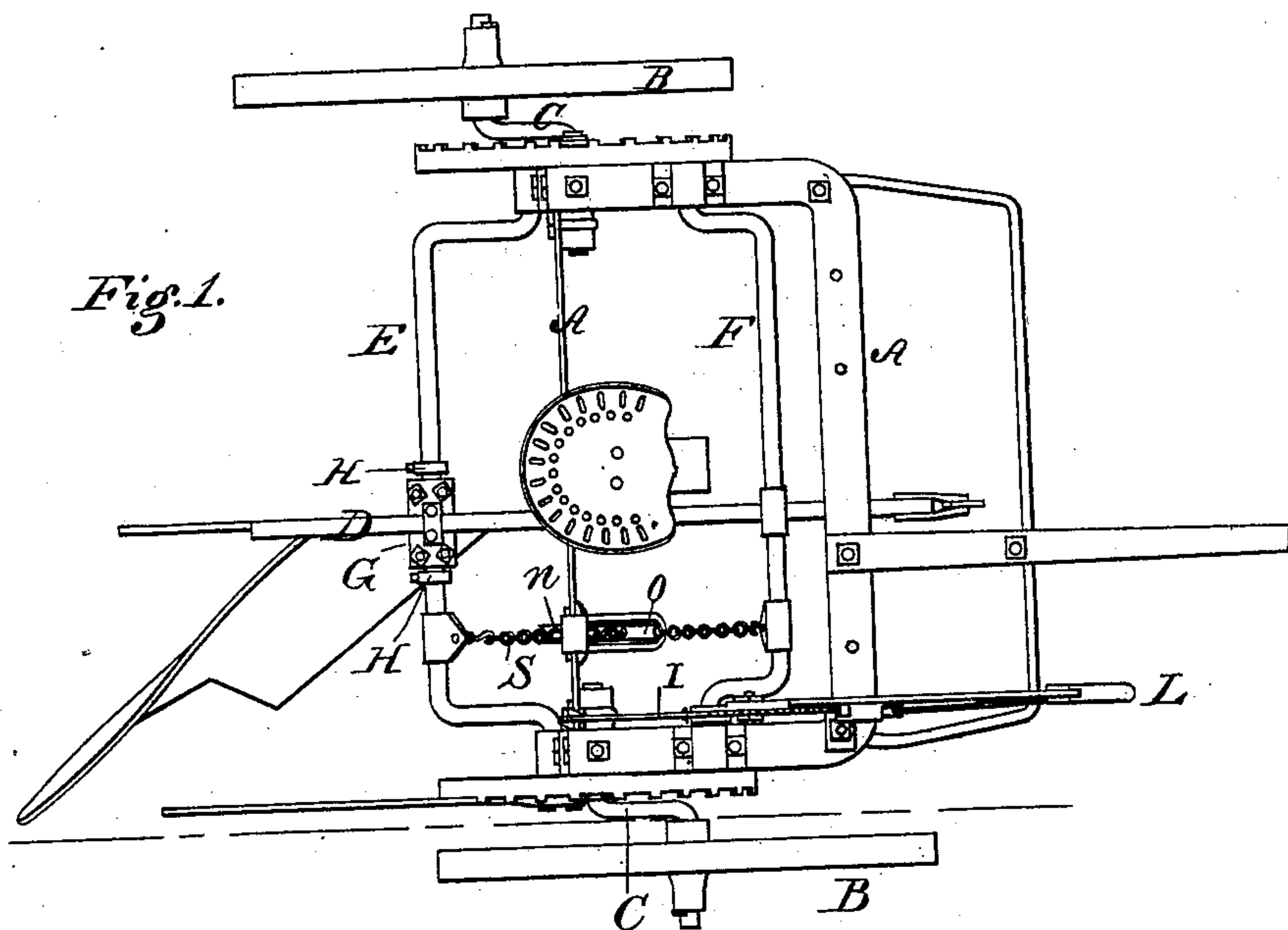


W. EVANS.  
WHEEL PLOW

No. 179,545.

Patented July 4, 1876.



Witnesses:

Donn P. Twitchell.  
Will H. Dodge.

Inventor:

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Attys.

# UNITED STATES PATENT OFFICE.

WILLIAM EVANS, OF MOLINE, ILLINOIS, ASSIGNOR TO THE MOLINE PLOW COMPANY, OF SAME PLACE.

## IMPROVEMENT IN WHEEL-PLOWS.

Specification forming part of Letters Patent No. 179,545, dated July 4, 1876; application filed April 15, 1876.

*To all whom it may concern:*

Be it known that I, WILLIAM EVANS, of Moline, in the county of Rock Island and State of Illinois, have invented certain Improvements in Wheel-Plows, of which the following is a specification:

My invention consists in a novel construction of sulky-plows, whereby the plow may be more readily raised and lowered, and more perfectly adjusted, than in those now in use.

In the drawings, Figure 1 represents a top or plan view of my improved device; Fig. 2, a side view of the same, having one of the wheels removed, to show more clearly the location of the parts; and Fig. 3, a detached view of the clamp or coupling by which the plow-beam is attached to its shaft.

In the drawings, A represents the frame of the machine, which, as shown in Fig. 2, consists of a vertical or upright portion and a horizontal portion, extending forward from the top of the same, the two portions being stiffened by brace-rods *g*, running from one to the other, as shown. On this frame A are mounted two transverse crank-shafts, E and F, the former working in bearings located at or near the lower part of the vertical portion of the frame A, and the latter in similar bearings on the horizontal portion of said frame, as shown. D is the plow-beam, which is attached to the crank-shaft E near its rear end by means of a clamp or coupling, G, which is shown detached and enlarged in Fig. 3. This clamp G is composed of a plate of metal, *j*, and two yokes, *k*, said yokes passing around the crank-shaft E until they come in contact with the under face of the plate *j*, to which plate they are firmly secured by means of bolt-rods passing around them and through the plate *j*, in which position they are held by nuts *r*.

The clamp or coupling G is fitted on the crank-shaft E loosely enough to permit it to play or move endwise thereon, the play or movement being regulated by collars H on said shaft, which collars are made adjustable, and are secured thereto by set-screws, as shown. The plow-beam D passes over and rests upon the upper face of the plate *j*, as

shown in Figs. 1 and 3, to which it is securely attached by the plate *m*, which passes over the beam, and is drawn down upon the same by means of nuts on the bolt-rods *i i*. The forward end of the beam D is attached to the forward crank-shaft F by means of a coupling, *f*, which is made to swing loosely on the said shaft, and is provided with a joint, *e*, as shown in Fig. 2, which permits a lateral or sidewise movement of the forward end of the plow-beam. The crank-shafts E and F are connected with each other by means of a chain or similar flexible connection, S, which passes upward from the shaft E over a pulley, *n*, thence downward under a pulley, *o*, and, finally, upward, and connects with the shaft F, as shown. To one end of the crank-shaft F is firmly attached a locking hand-lever, L, which locks into notches in a segmental rack, I. It will be readily observed that by elevating the hand-lever L, it being rigidly attached to the shaft F, said shaft must also be elevated, and that, as the plow-beam is attached at its forward end to the shaft F, the forward end of the beam will be elevated likewise. Now, as the chain S is attached to both the crank-shafts E and F, it follows that when the lever L is raised, carrying with it the shaft F, the chain S is carried forward and upward from under the pulley *o*, and down over the pulley *n*, thus drawing upward on the rear end of the plow-beam D, to which, as before stated, the chain is attached. It will thus be seen that when the lever L is elevated, the front and rear ends of the plow-beam D are elevated simultaneously. As shown in Fig. 2, the coupling *f*, by which the forward end of the plow-beam D is attached to the crank-shaft F, is provided with several holes, in order that the end of the beam may be elevated or depressed without reference to the rear end, in order to change the angle at which the point of the plow enters the ground, or for any other purpose that may be necessary.

The team is attached to the front end of the plow-beam, as usual, while the tongue is guided by the neck-yoke.

Each of the wheels is mounted on separate crank-shafts, which are adjusted and locked



in any desired position by means of levers and segments, in a manner well known, whereby either wheel may be raised or lowered at will.

Having thus described my invention, what I claim is—

The combination, in a sulky-plow, of the two crank-shafts, E and F, with the pulleys o

and n and the chain S, or its equivalent, all arranged to operate substantially as and for the purpose set forth.

WILLIAM EVANS.

Witnesses:

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