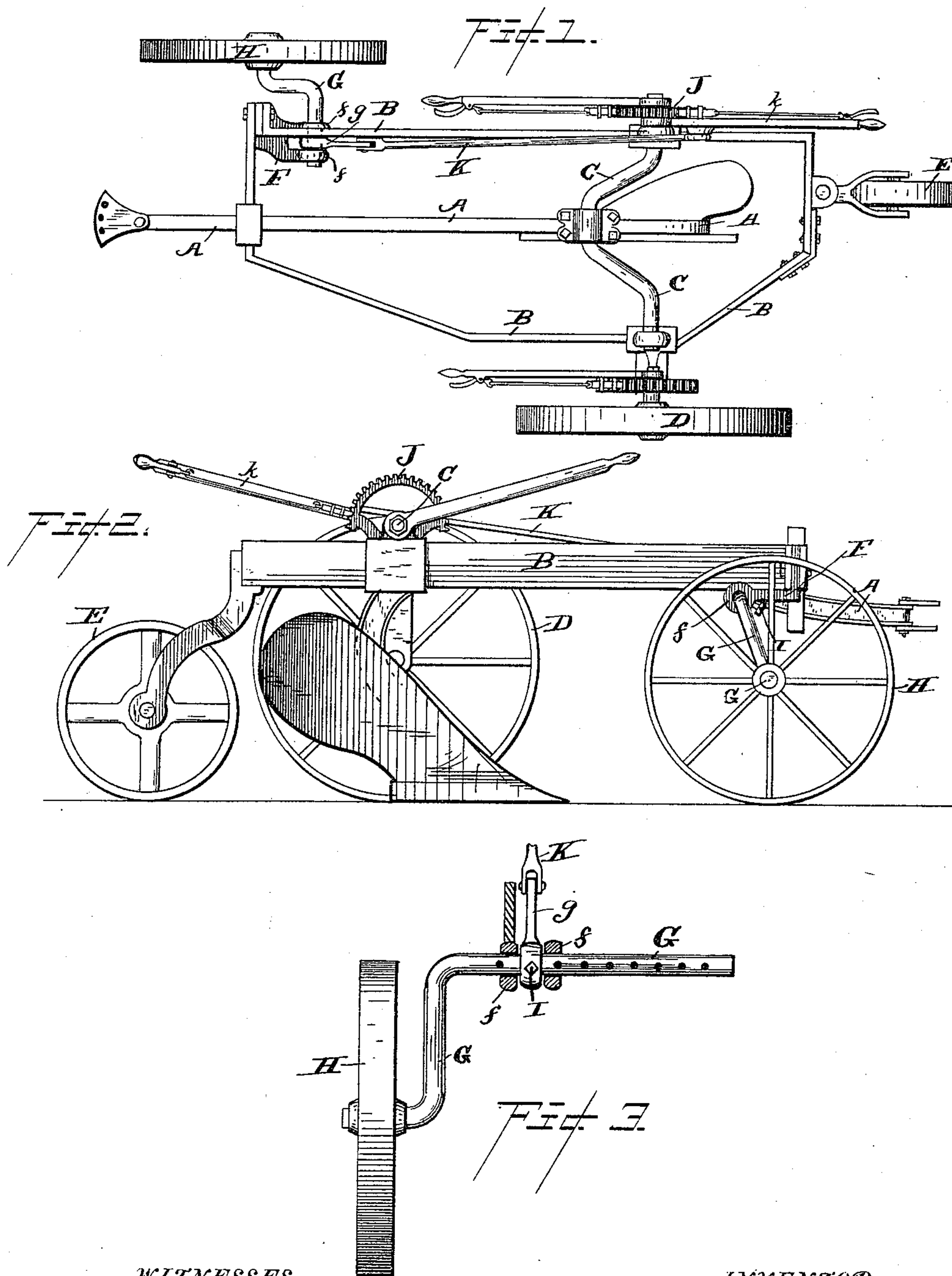


(No Model.)

M. H. GARWOOD.  
WHEEL PLOW.

No. 438,539.

Patented Oct. 14, 1890.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

MATHEW H. GARWOOD, OF SOUTH BEND, INDIANA.

## WHEEL-PLOW.

SPECIFICATION forming part of Letters Patent No. 438,539, dated October 14, 1890.

Application filed July 9, 1890. Serial No. 358,168. (No model.)

*To all whom it may concern:*

Be it known that I, MATHEW H. GARWOOD, of South Bend, in the county of St. Joseph and State of Indiana, have invented certain  
5 new and useful Improvements in Wheel-Plows; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this  
10 specification, in which—

Figure 1 is a plan view of a riding or wheel plow, showing my improvements. Fig. 2 is a side view in detail of the same. Fig. 3 is a  
15 detail sectional view through the parts embodying my invention.

This invention relates to riding or wheel plows, and is an improvement on the plow for which Letters Patent of the United States  
20 No. 398,961 were granted on the 5th day of March, 1889, and it has especial reference to the furrow-wheel and its mountings on the frame, as will be clearly understood from the following description and claim.

25 Referring to the drawings by letters, A designates the beam of an ordinary plow.

B designates a frame, roughly rectangular in contour and formed of metal, lying parallel with and above the beam, and the beam is  
30 connected by shackles to a cranked shaft C, mounted in bearings transversely of the frame. The frame is supported upon an adjustable wheel D at the land side of the plow, a rear caster-wheel E, and on the furrow side  
35 by an adjustable wheel H, hereinafter referred to. These parts are or may be, with the exception of wheel H and its mountings, constructed and arranged substantially as shown in the patent above referred to. At  
40 the front end and furrow side of frame B is attached a casting F, which is formed with tubular portions *f f*, through which pass the upper horizontal portions of a cranked shaft G, which is retained in position and kept  
45 from longitudinal play through portions *f f* by a crank-arm *g*, which is slipped on the shaft between portions *f f* and secured by a set-screw I.

50 The shaft bends at right angles to the portions *f f* at the outside of the frame, and its

lower end is bent outward again at right angles, and on this end is mounted a furrow-wheel H, about similar in construction to wheel D. Arm *g* is connected by a rod K with a lever *k*, pivoted on the side of the  
55 frame near the driver's seat and provided with a hand-latch engaging a sector J on the frame. By turning shaft G in its bearings in casting F the wheel H will be raised or lowered, as is evident. By loosening screw I the  
60 shaft G can be shifted in its bearings in casting F, and thus set wheel H closer to or farther from the frame. It will be observed that this wheel H is at the furrow side of the plow and will run in the furrow previously made.  
65 It does not have any lateral movement or oscillation, but constantly revolves in a plane parallel with the plow-beam, and the beam is not affected by the rising or falling of the furrow-wheel or frame in passing over small ob-  
70 structions. The width of the furrow is regulated by the adjustment of wheel H toward or from the frame. The plow being suspended from the cranked shaft in a nearly-balanced condition can be suspended from the frame  
75 clear of the ground and transported. In turning, the plow-wheel H is raised by shifting shaft G until it is out of the furrow and clear of the ground and so held until the turn is completed. It is then lowered to working po-  
80 sition. By this wheel the frame can be so supported that the plow will cut either deep or shallow. In making the first furrow the wheel is set to run on top of the ground while the plow cuts a furrow, and on the next  
85 round of the plow the wheel is lowered into the furrow and adjusted to cause the plow to cut a furrow of desired width and depth.

In the patent referred to there is a caster-wheel employed at the furrow side, and this  
90 not only prevents regulating the width of the furrows thereby, but makes them uneven or undulating, as the caster can swing to one side and revolve at angles to the beam.

What I claim is—

95 In a riding-plow, a frame B, a plow-beam A, loosely connected and suspended therefrom by a cranked axle C, and the wheel D on said axle, in combination with a casting F, secured to the front furrow-side corner of the  
100



frame and having tubular portions *ff*, a crank-shaft G, journaled in said portions *f*, the arm *g*, adjustably fixed on the shaft between portions *f f*, the lever *k*, rod K, and sector J, for  
5 oscillating and adjusting shaft G and the furrow-wheel thereon, substantially as and for the purpose set forth.

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

MATHEW H. GARWOOD.

Witnesses:

JAMES DUSHANE,  
CHARLIE GARWOOD.