W. S. LAWRENCE.

Plow-Wheels.

No. 156,427. Patented Nov. 3, 1874.

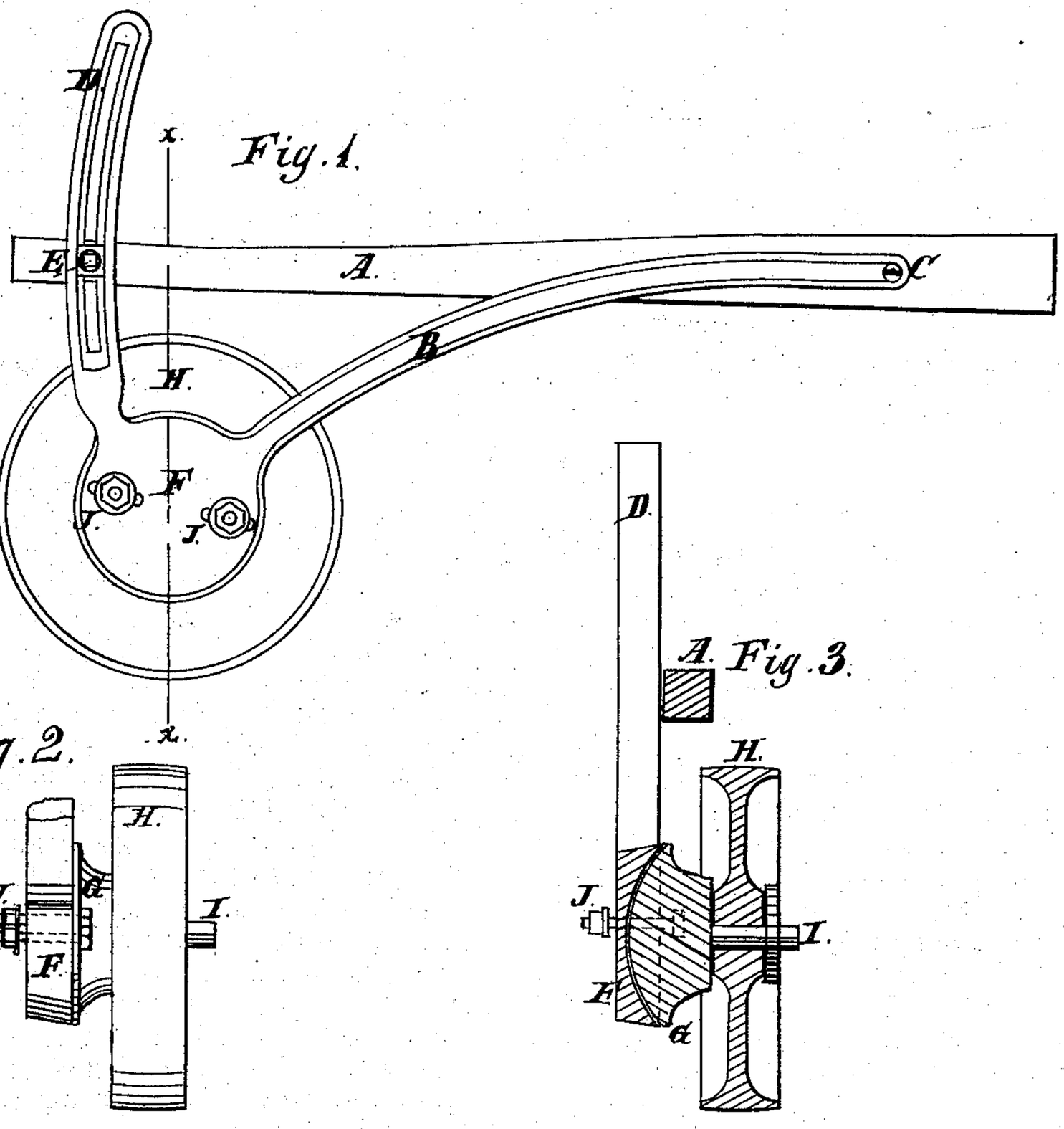

Fig. 1.

Fig. 2.

Fig. 3.

Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM S. LAWRENCE, OF KALAMAZOO, MICHIGAN, ASSIGNOR OF ONE-HALF HIS RIGHT TO LEBEUS C. CHAPIN, OF SAME PLACE.

IMPROVEMENT IN PLOW-WHEELS.

Specification forming part of Letters Patent No. **156,427**, dated November 3, 1874; application filed September 17, 1874.

To all whom it may concern:

Be it known that I, WILLIAM S. LAWRENCE, of the city of Kalamazoo, in the county of Kalamazoo and State of Michigan, have invented an Improvement in Plow-Wheels, reference being had to the accompanying drawings, which form a part thereof.

The object of my invention is to make a plow-wheel that can be readily adjusted so as to change the line of its direction relatively to the line of the beam of the plow, so as to make it run more or less to land, as desired. My invention consists in the concave receptacle and convex hub, whereby the direction of the wheel is changed by moving it laterally, as hereinafter more fully described.

In the annexed drawing, Figure 1 represents a side elevation of the end of the plow-beam and plow-wheel attached thereto. Fig. 2 represents a front view of the wheel, and the coupling attachment detached from the plow. Fig. 3 represents a vertical sectional view taken at the line *x x* in Fig. 1.

A represents the plow-beam. B is an arm, pivoted to the beam A at C. D is a vertical slotted arm, also connected to the beam A by means of a bolt, E. F is a circular receptacle, concave upon its under side, and the arms B and D are firmly and rigidly attached to it. G is the hub of the wheel, and it has a convex surface corresponding to the concave surface of the plate F. H is the plow-wheel, and revolves on a spindle, I, on the hub in the ordinary manner. J J are bolts which pass through the flange of the hub G and slots in the plate F. By loosening the bolts J J and moving them forward in the slots in the plate F, the front side of the hub is carried out of the concave, and the rear side of the hub passes deeper into the concave in the plate F, and the wheel stands at an angle to the line of the plow-beam. If the bolts are adjusted so as to have the flange of the hub put even with the sides of the concave in the plate F, the wheel stands parallel with the line of the plow-beam; if the bolts J J are moved back in the slots, then the front edge of the flange is depressed in the concave, the rear edge of it thrown out, and the wheel forms an angle with the line of the plow-beam directly opposite from what it did when the bolts were driven forward in the slots, as above described. It is obvious that the same results would be obtained by making the concave on the hub of the wheel and the convex surface on the plate F. The relative height of the wheel to the plow-beam is adjusted by raising or lowering the slotted arm D on the bolt E.

I claim—

The plate F and hub G, provided with convex and concave surfaces for attaching a plow-wheel, as described.

WILLIAM S. LAWRENCE.

Witnesses:

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