

P. G. JOHNSON.

PLOW.

No. 176,001.

Patented April 11, 1876.

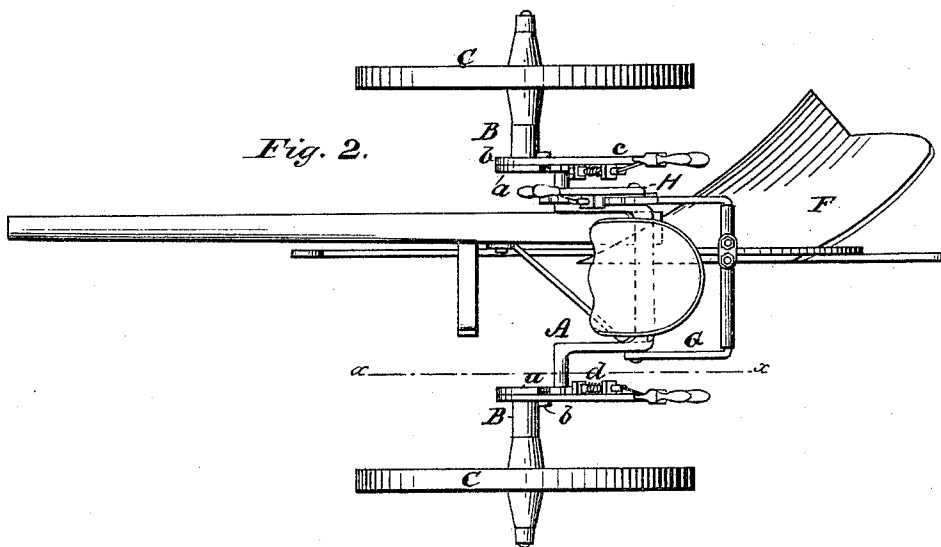
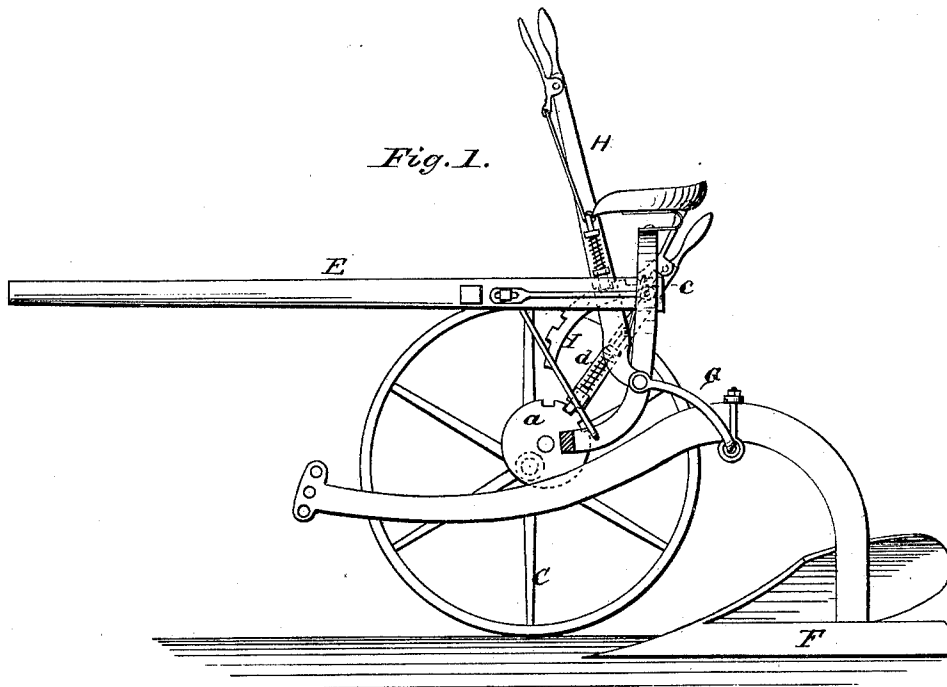
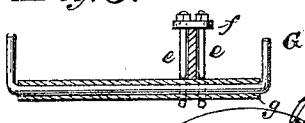


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

PETER G. JOHNSON, OF HOOPESTON, ILLINOIS.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **176,001**, dated April 11, 1876; application filed March 4, 1876.

To all whom it may concern:

Be it known that I, PETER G. JOHNSON, of Hoopeston, in the county of Vermillion and State of Illinois, have invented a new and useful Improvement in Plows; and I do hereby declare that the following is a full, clear, and exact description of the same:

My invention is an improvement in the class of riding or sulky plows whose trucks are provided with a bent or cranked axle. The improvement relates particularly to the means, and the construction and arrangement of the same, whereby the plow is attached to the pivoted bent lever employed for raising and lowering it as required in the practical use of the machine.

In the accompanying drawing, Figure 1 is a sectional elevation of my improved plow on line *xx* of Fig. 2; Fig. 2, a plan top view of the same; and Fig. 3 shows certain details in section.

The axle is formed mainly of three parts, namely, the central arch *A* and journals or arms *B B*, upon which latter the wheels *C* are mounted. The ends of arch *A* are bent outward at right angles, and a notched circular disk, *a*, is formed on or attached to each. The journals *B* are attached eccentrically to disks *b* of corresponding size, and each of said disks is pivoted centrally to a disk, *a*. A lever, *c*, is formed in one piece with or attached to each of disks *b* on the side opposite that to which the journal is attached. The said levers are provided with spring-pawls *d*, which engage with notched disks *a*, as shown. It will be perceived that by this construction and arrangement of parts the adjustment of one of the levers *c*, either forward or back, will vary the height of the contiguous part *B* of the axle from the ground. The adjustment, therefore, adapts the truck to preserve its horizontality, whatever be the unevenness or degree of inclination of the surface over which the plow passes. In addition to this function, in the performance of which the disks *ab* are the chief elements, they form broad, firm bearings or connections between the respective parts of the axle, thus imparting firmness, solidity, and steadiness to the truck.

The tongue *E* is secured to the arch *A* by means of screw-bolts and braces, as shown, and may be shifted from one side to the other of the arch, according as a right or left plow is employed.

The plow *F* is connected to the truck by means of a bail-shaped lever, *G*, which is pivoted to the lower portion of the arch *A*, and extended on one side to form the lever *H*, which is provided with a spring-pawl to engage with the curved rack-bar *I* attached to the side of the arch.

The plow-beam is secured by means of a clamp or yoke, composed of eyebolts *e* and plate *f*, to a loose sleeve, *g*, which is applied to the straight or rear portion of the lever *G*. Thus the plow has entire freedom of movement on and around that part of the lever as a center, but the beam thereof cannot be longitudinally adjusted without first loosening the screw-nuts on the bolts *e*, which are firmly attached to the sleeve.

When the lever *H* is adjusted or inclined forward, the rear part of bail-lever *G* is necessarily raised correspondingly, thereby also raising the plow out of or off the ground, according to the degree of such inclination. When, on the contrary, the said lever is adjusted backward, the plow will be lowered to take more or less earth.

By adjusting both the dis'-levers *c c* backward to a horizontal position and the lever *H* to a vertical position, the arch *A* will be lowered as far as practicable, and the plow thus allowed to enter the earth to the full depth.

A common plow, either with an iron or wooden beam, may be employed, and hence the farmer may purchase the truck, with or without a plow attached, according as his circumstances may require.

I do not claim a plow-truck provided with a cranked axle whose journals or arms are separate and adjustable to vary the height of either side of the truck from the ground; nor do I claim the vertical adjustment of a plow by means of a pivoted lever for the purpose of varying the depth of a furrow.

What I claim is—

The combination, with the plow-beam and the bent lever *G*, pivoted to the frame and provided with an arm, *H*, extending upward, as shown, of the rotating sleeve *g*, the clamping eyebolts *e*, and plate *f*, all as and for the purpose specified.

PETER G. JOHNSON.

Witnesses:

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