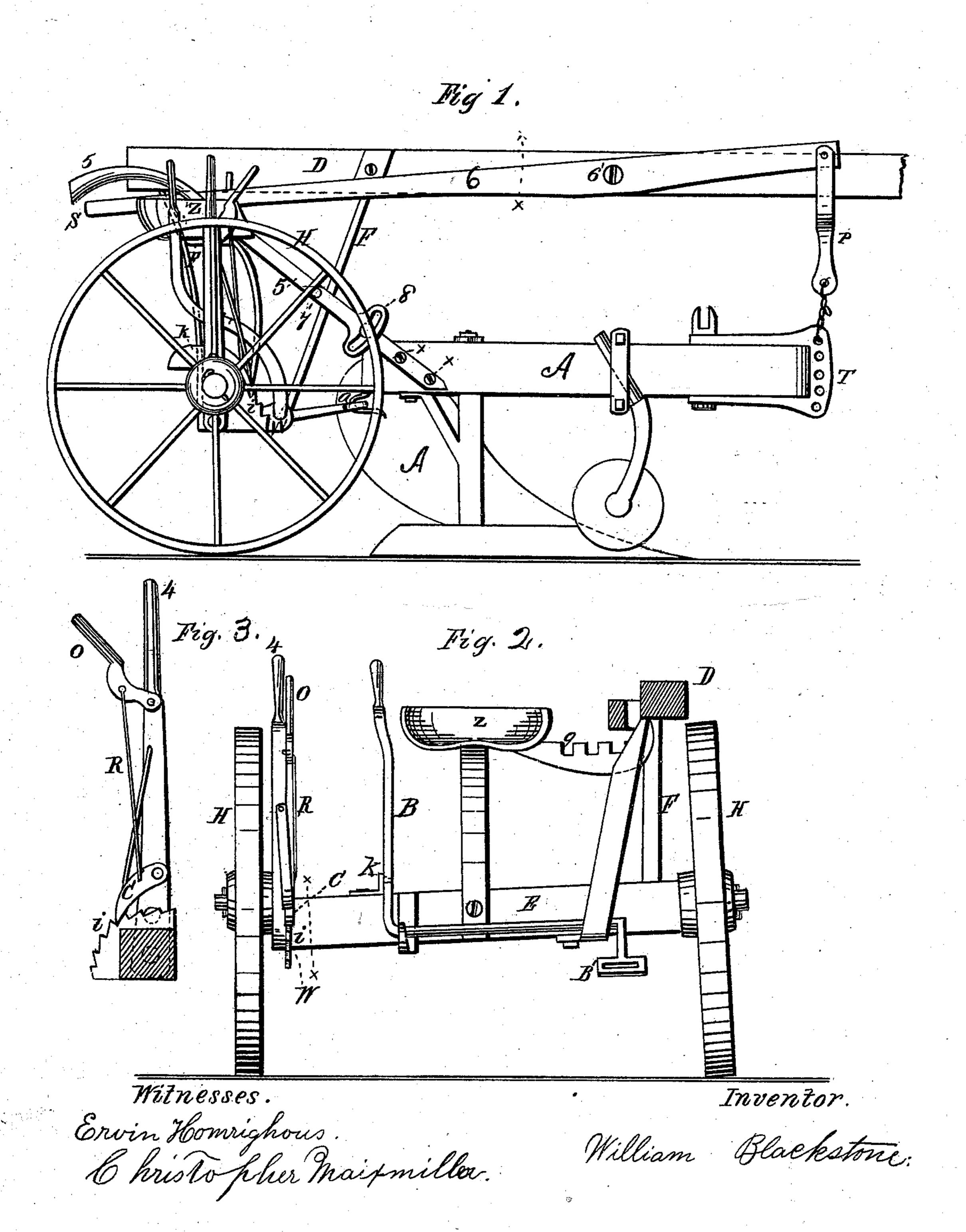
W. BLACKSTONE.

Plows.

No. 143,660.

Patented Oct. 14, 1873.



UNITED STATES PATENT OFFICE.

WILLIAM BLACKSTONE, OF SHELBY COUNTY, ILLINOIS.

IMPROVEMENT IN PLOWS.

Specification forming part of Lefters Patent No. 143,660, dated October 14, 1873; application filed July 25, 1873.

To all whom it may concern:

Be it known that I, WILLIAM BLACKSTONE, of the county of Shelby and State of Illinois, have invented a new and useful Improvement in Riding Breaking-Plows, by which the carriage is entirely relieved from the weight of the plow, and which can readily be controlled, and adapted to all the positions necessary to good work, by means of levers which are positive in their results, and at the command of the plowman; and I do hereby declare the following to be a full, clear, and exact description of my invention and the operation of the same, reference being had to the annexed drawings making a part of this specification, in which—

Figure 1 is a side view of said riding plow as ready for operation. Fig. 2 is a front view, showing the wheels and the axle with its attachments. Fig. 3 is a detail view of lever, pawl, and ratchet for adjusting one end of the

axle in height.

A is a common plow without the ordinary handles. At the end of the beam is a hook, a, made of wrought-iron, and securely fastened into said beam. B is a lever, made of one-inch round iron, bent at right angles, with a slot, B', on the end of said lever, and secured to the carriage by means of eyes, as represented in accompanying drawings, the said slot B' to be of sufficient length to allow the proper adjustment of the plow in taking more or less land. D is a tongue, which is connected to axle E by means of two bars of iron, F F, about twenty inches long, securely bolted to said tongue and axle, said bars F F to be of sufficient strength to hold the carriage at right angles with said tongue D. 5 is a jointed wrought-iron lever, said joint to be made as an ordinary hinge, or with a slot, 8, operating upon an iron pin, and connected to the back part of said lever by means of a bolt, as at 7, thus allowing the end of said lever 5 to move up and down, the said lever 5 to be bolted to the plow-beam at xx. E is an axle, about four feet long, resting in wheels H H; said wheels to be of sufficient height to bring the under side of said axle the same height as the under side of the plowbeam. 4 is a wrought-iron lever, with dog O connected to pawl C by one-fourth-inch round iron R, said pawl C operating in ratchet i. The | in proper position relative to the plow, the

use of said lever 4 is to raise or lower the end of said axle E at w, to adapt the carriage to the depth of plow-furrow. 6 is a wooden lever, sufficiently long to reach from the driver's seat Z forward to the end of the plow-beam, and fastened to tongue D, at 6', by means of a bolt, allowing said lever 6 to move up and down. P is a loose iron connection between said lever 6 and the end of the plow-beam. 9 is a ratchet, fastened to the under side of the seat Z, and to the tongue D, for the uses of said lever 5. Z is a seat for the plowman. The plow should be a sixteen-inch plow, and be operated by three horses, one of which should work on the near or left side of the tongue D, and the other two on the off or right side, the size, as represented, to be subject to alteration, as may be required. The rear of the plow is connected to the carriage by hook a, operating in slot B' of lever B, the uses of said lever B being to lower or elevate the rear end of the plow, The slot B' admits of the rear of said plow being moved to the right or left by means of lever 5, thereby causing the plow to take more or less land, as desired. Lever B is also used in connection with lever 6 in carrying the plow above ground by placing said lever under a ratchet or lug at k. Lever 5 is used to control the plow in taking the proper amount of land by moving to the right or left in ratchet 9; also, in connection with P, to allow the said plow to run level notwithstanding the roughness of the ground over which the off wheel passes. The object of the joint 8 in lever 5, as described, is to allow the wheels H H to pass over obstacles without disengaging lever 5 from ratchet 9, or throwing said plow out of the ground. By lever 6, in pressing down upon the handle s, the plow is brought out of the ground, and, by the aid of lever B, is carried above ground, so as to enable the plowman to turn the plow and carriage.

The horses are to be hitched to plow A by means of a double-tree attached to the plow-

clevis at T.

The connection of the carriage to the horsepower is by hook a, engaged in slot B', as heretofore described.

The tongue D is used to keep the carriage

fore end of said tongue D to work in a neckyoke, in the ordinary way.

Having thus fully described my invention and its operation, what I claim, and desire to secure by Letters Patent of the United States, 1S+++

1. Rock-shaft and lever B, with its slotted arm B', in combination with the plow-beam nd rear connecting hook, as and for the pur- Witnesses:
ose described. Ervin Homrighous,
2. Lever No. 6 and connection P, in combi- Henry Shade. and rear connecting-hook, as and for the purpose described.

nation with lever No. 5, with joint 8, and the plow-beam, as and for the purpose described.

3. The combination of the plow-beam, the rock-shaft, and lever B, levers 5 and 6, with their connecting joints and slots, and ratchets 9 and k, as and for the purpose described.

WILLIAM BLACKSTONE.