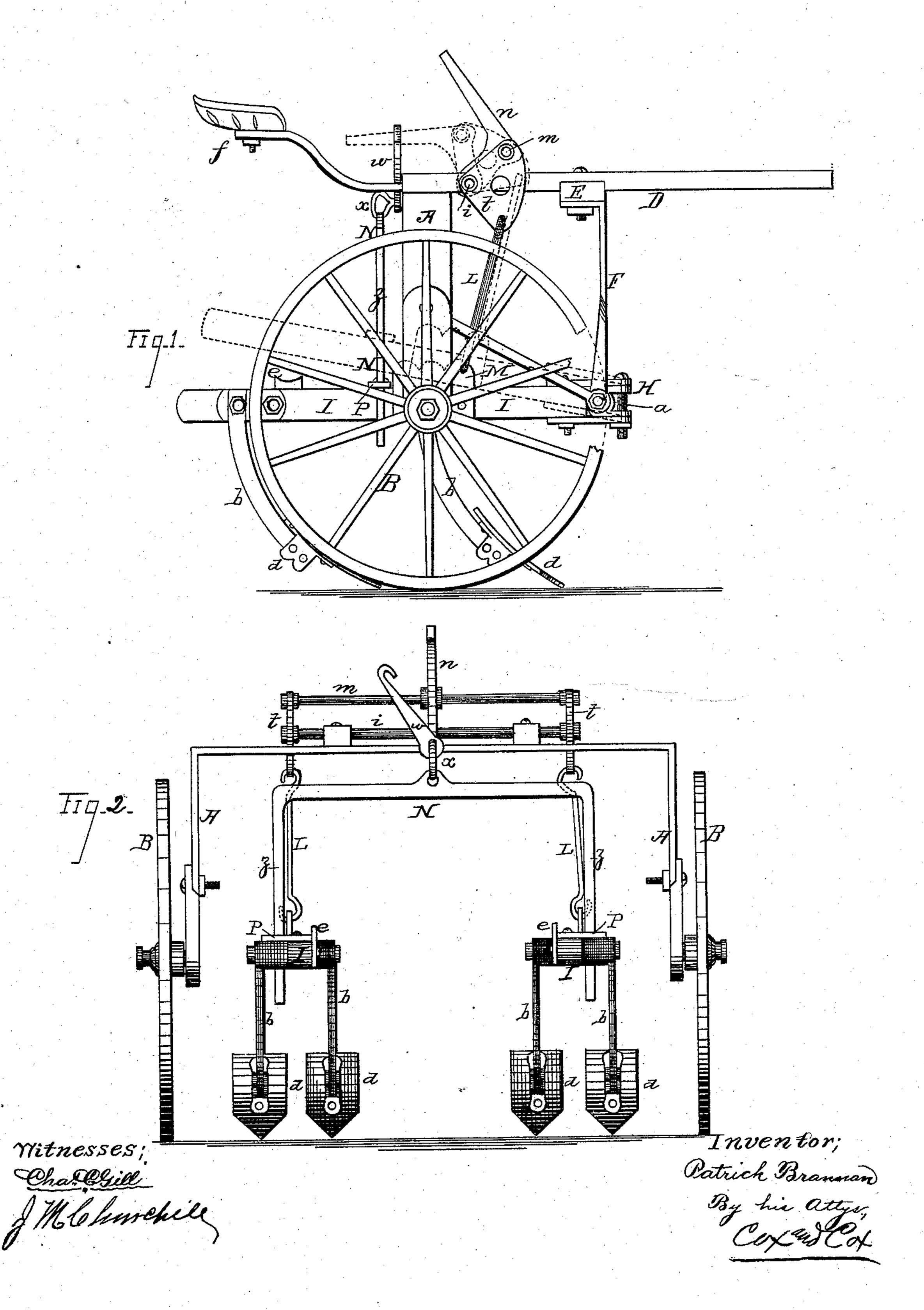
P. BRANNAN.
Corn-Plow.

No. 224,639.

Patented Feb. 17, 1880.



## United States Patent Office.

## PATRICK BRANNAN, OF FREEPORT, ILLINOIS.

## CORN-PLOW.

SPECIFICATION forming part of Letters Patent No. 224,639, dated February 17, 1880.

Application filed September 3, 1879.

To all whom it may concern:

Be it known that I, Patrick Brannan, of Freeport, in the county of Stephenson and State of Illinois, have invented a new and useful Improvement in Corn-Plows, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to an improvement in corn plows; and it consists in the devices here in after described and claimed for effecting and controlling the elevation of the beams carry-

ing the plowshares.

The object of the invention is to provide an effectual means for elevating the plow-beams, which means is durable, is in such position that it can be readily actuated by the driver, and operates in conjunction with a rocking frame which prevents the swinging laterally of the plow-beams, but at the same time allows them sufficient motion to fully accomplish their object.

The construction and operation of the invention will be set forth in detail hereinafter, and the arrangement of its parts is shown in the accompanying drawings, in which—

Figure 1 is a side view of a device embodying the elements of the invention, the dotted lines showing the plow-beams elevated and the altered position of the elevating devices. 30 Fig. 2 is an end view of the invention.

In the accompanying drawings, A represents the frame of the plow, mounted on the wheels B, and having at its front portion the tongue D, which extends forward and is sup-35 plied upon its under portion, in front of the frame A, with a cross-bar, E. Upon the ends of the cross bar E are secured the dependent hangers F, in the lower forked ends of which are pivoted the shoes H upon horizontal axles, 40 and to these shoes H are pivoted, by means of vertical bolts a, the front end of the plowbeams I, as shown. Thus the plow-beams may have an oscillatory movement, either vertically upon the shoes H or laterally upon the bolts 45 a, and, consequently, can be elevated when passing over a road or at other times, when desired, or be moved laterally to avoid a stump, stone, or other obstruction.

The plow-beams I extend toward the rear 50 between the wheels B, one beam being on each side of the machine, and each suitably provid-

ed on opposite sides with the standards b, carrying the plowshares d. The shares d are attached to their standards by means of shoes, whereby they may be adjusted according to 55 the will of the operator.

The standards b may be of any suitable construction and secured to the plow-beams I in

any desirable manner.

Upon the inner side of each plow-beam, ad- 60 jacent to its rear end, is secured a stirrup, e, by means of which the driver from his seat f, secured centrally to the frame A and extending over the plows, can push the plows deeper into the ground or guide them around an ob- 65 struction with his feet.

In the front portion of the machine, immediately in front of and in close proximity to the driver's seat, is journaled the shaft i, which is connected with the shaft m at its center by 70 the shank of the lever n, and at each end by the quadrantal-shaped plates t, the shaft i entering the quadrants at the point of radius and the shaft m at the upper end of the arc described by the plate. The shaft m is not 75 secured in the frame, and, when impelled by the movement of the lever n, has, with the quadrants t, an oscillatory movement upon the shaft i. In the lower ends of the plates or quadrants t are hooked the links or connect- 80 ing-rods L, which extend downward and connect with the plow-beams I through the plates M, secured upon the sides of the said beams about their central portions, and having a series of apertures, in any of which the lower 85 end of the rods or links L may be inserted, and thus, as they are connected at either the front or rear of the plates M, the height or depression of the plow-beams is controlled.

When the lever n is drawn rearward by the 90 driver the shaft m and plates t turn upon the shaft i, being drawn upward and over the same. This upward movement of the shaft m and plates t is communicated to the connecting-rods L and plow-beams I, which are 95 likewise elevated. To retain the plow-beams in this elevated position it is simply necessary to stay the lever n by the hook w, which is pivoted to the rear of the frame A and is supplied for that purpose. When the plows are thus 100 elevated the machine may be transported from place to place without affecting the soil. Af-

ter the field has been reached, and it is desired to plow the ground, the hook w is loosened from the lever n, when the weight of the plow-beams I will cause the shaft m and quadrants t to turn downward and from over the shaft i, thereby lowering the plowshares to the ground. If the plows do not dig deep enough, the driver, by pressing on the stirrups e, can push them farther into the ground.

Upon the rear side of the frame A is secured an eye, x, in which is freely hung the frame N, which consists, in detail, of a horizontal cross-bar having each end, z, bent vertically downward, as shown. The vertical ends z of the frame N pass downward through slots in the plates P, secured upon the upper surface of each plow-beam, and thus keep the plows properly separated and prevent their swinging laterally when elevated; but at the same time a slight movement is permitted them, so that they may effectually pass through the ground.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The shaft i, journaled in bearings in front 25 of the driver's seat, the movable shaft m, separated from and connected with the shaft i at its center by the shank of lever n and at each end by quadrants t, the lever n, and hook w, in combination with the connecting-rods L 30 and plow-beams I, substantially as set forth.

2. The shaft *i*, journaled in bearings in front of the driver's seat, in combination with the movable shaft *m*, separated from and connected with the shaft *i* at its center by the 35 shank of lever *n* and at each end by the quadrants *t*, the lever *n*, hook *w*, rods L, plow-beams I, and suspended frame N, substantially as specified.

In testimony that I claim the foregoing im- 40 provement in corn-plows, as above described, I have hereunto set my hand this 5th day of August, 1879.

PATRICK BRANNAN.

Witnesses:
John Curran,
Geo. Wolf.