J. J. TAIT.

GAGE LEVER MECHANISM FOR PLOWS.

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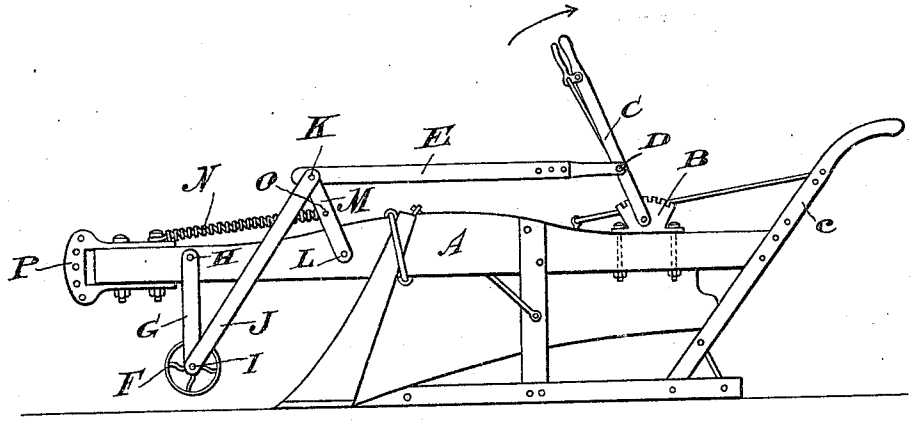
960,435. Patented June 7, 1910.



Witnesses
Wm. S. Jordan
N. Langfield.

Inventor,
James J. Tait,
by Egerton R. Case,
Atty.

UNITED STATES PATENT OFFICE.

JAMES JOHNSTONE TAIT, OF MEOTA, SASKATCHEWAN, CANADA.

GAGE-LEVER MECHANISM FOR PLOWS.

960,435. Specification of Letters Patent. Patented June 7, 1910.

Application filed September 7, 1909. Serial No. 516,623.

To all whom it may concern:

Be it known that I, JAMES JOHNSTONE TAIT, a subject of the King of Great Britain, residing at Meota, in the Province of Saskatchewan, Canada, have invented certain new and useful Improvements in Gage-Lever Mechanism for Plows, of which the following is a specification.

My invention relates to improvements in gage-lever mechanism for plows, and the object of my invention is to provide a device of the class described by means of which I can regulate the depth it is desired to plow, without stopping the team, and the construction of my invention will be hereinafter more particularly described, and the parts I claim as new will be pointed out in the claim forming part of this specification.

The drawing shows a side elevation of an ordinary wooden frame brush-plow provided with my gage-lever mechanism.

A is the beam of the plow and *c* the handles thereof. Suitably secured to the beam A near its rear end is a quadrant B to which is pivoted a lever C. Pivoted by the bolt D to the lever C is a thrust bar E.

F is the gage-wheel mounted between a pair of depending arms G pivoted by the bolt H to the beam A.

I is the axle on which rotates the gage-wheel F. Mounted on each end of the axle I are a pair of link bars J which are pivoted by the bolt K to the forward end of the thrust bar E. Also pivoted on each side of the beam A by the bolt L are link-bars M through the upper ends of which pass the bolt K. As before mentioned, there are a pair of arms G, a pair of link bars J, and a pair of link-bars M, on each side of the beam A, but in the drawing only one set of these different pairs of arms and bars have been illustrated, as the illustration of the other set of arms and bars is not necessary for the full comprehension of this invention.

N is a coiled spring connecting the link-bars M with the forward end of the beam A. One end of the coiled spring N passes over the bar O which couples the pairs of link bars M together between their ends. The beam A is of course provided with any suitable clevis P.

The position of the parts shown in the drawing is such as to permit the plow to turn the shallowest possible furrow. When the lever C is thrown in the direction indicated by arrow, the gage wheel F and arms G are, through the connections before described, thrown backward around the bolt H, thereby raising the gage-wheel F farther from the ground and permitting a deeper furrow to be turned by the plow.

As is well known, the shape of the plowshare enables the plow to be run into the ground, and as the spring N exerts pressure against the link-bars M and through the link-bars J against the gage-wheel F, it will be understood that when the operator desires to raise the plowshare up so as to turn a shallower furrow, this spring, through the parts just described adds additional power to the power generated by the operator through the lever C, thereby enabling the operator to easily position the gage-wheel F, that is, throw it around its bolt H nearer to the ground, so that the furrow to be turned will be of the desired depth.

By means of the bolt D the thrust-bar E is pivoted to the lever C, and this construction prevents any play between this thrust-bar and said lever. There is no looseness in any of the pivoted joints, and by making my gage-lever mechanism stiff, the gage-wheel F will not have unnecessary play.

By means of my invention the operator can regulate his plow so as to turn a deep or a shallow furrow without the necessity of having to stop and adjust any of the parts by means of a wrench or equivalent device.

My invention is particularly useful in connection with a brush plow, because in plowing the prairie, when one comes to scrub land the plow can be adjusted at once so as to turn a deeper furrow in the scrub land than is necessary to be turned in the clean prairie.

While my invention is more particularly designed for use in connection with brush plows, still I do not confine myself to essentially using the same with this class of plow.

What I claim as my invention is:

In a plow, the combination with the beam thereof, of a gage-lever mechanism comprising a depending arm pivoted near the forward end of said beam; a gage-wheel journaled in the lower end of said depending arm; a link-bar pivoted to said depending arm; a thrust-bar to which the upper end of said link-bar is pivoted; a second link-bar pivoted to said beam and to which the first-mentioned link-bar and said thrust-bar are

pivoted; a quadrant carried by said beam and placed near its rear end; a lever associated with said quadrant and to which said thrust-bar is connected, and a coiled spring connected with said beam near its front end, and also connected with the link-bar to which said thrust-bar is pivoted.

In testimony whereof I have affixed my signature in presence of two witnesses.

JAMES JOHNSTONE TAIT.

Witnesses:
W. J. WHITE,
A. M. OLDING.