

L. H. RUCH.
 PLOW ATTACHMENT.
 APPLICATION FILED JUNE 26, 1909.

955,210.

Patented Apr. 19, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

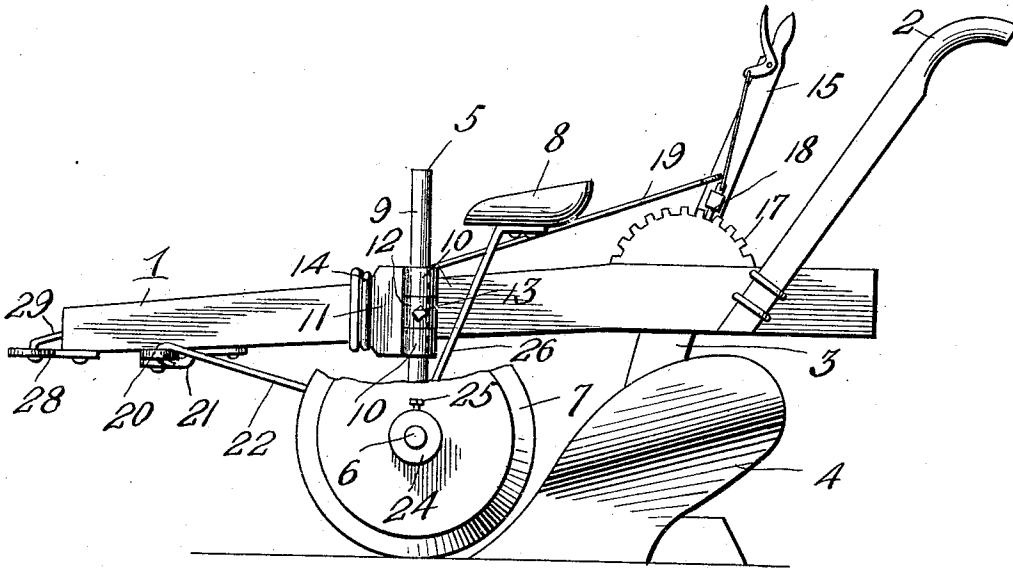
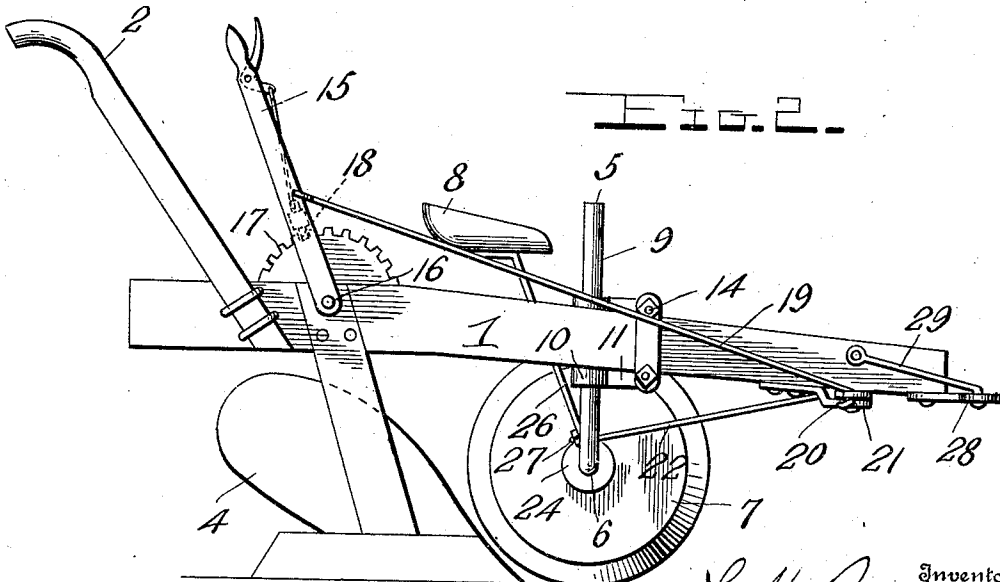


Fig. 2.



Witnesses

Chas. L. Griestauer.
 E. M. Ricketts

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By Watson E. Coleman

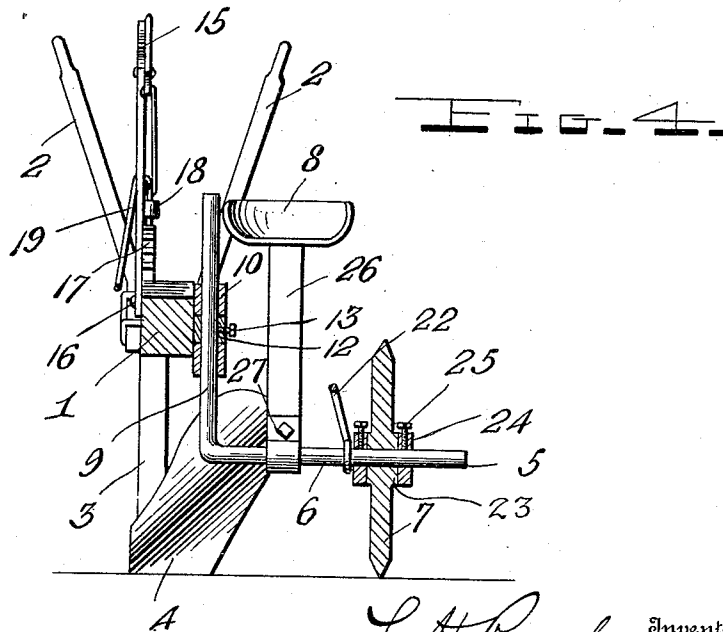
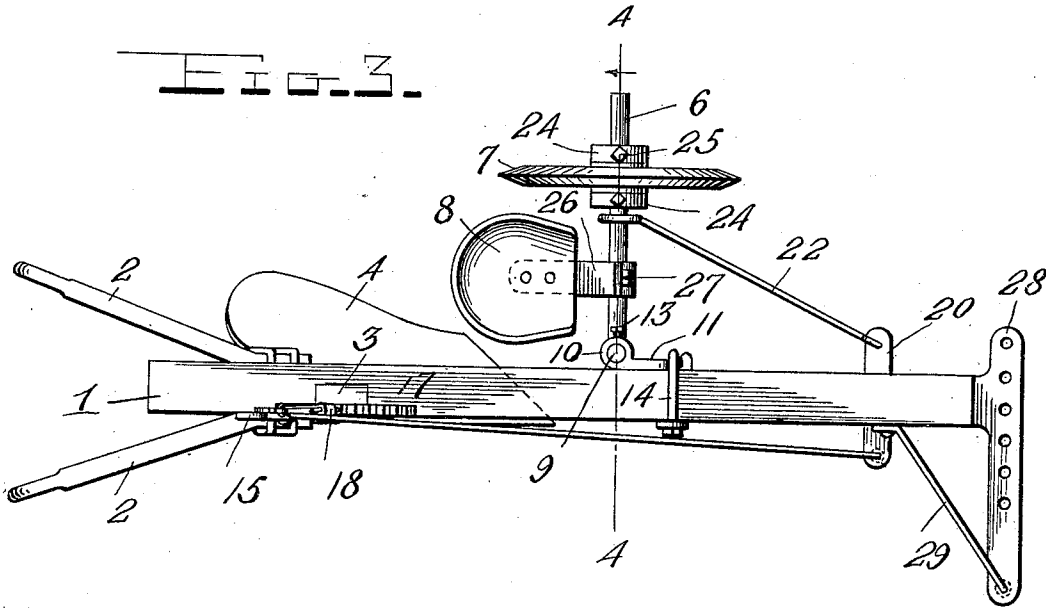
Attorney

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UNITED STATES PATENT OFFICE.

LEONARD H. RUCH, OF WINCHESTER, TENNESSEE.

PLOW ATTACHMENT.

955,210.

Specification of Letters Patent.

Patented Apr. 19, 1910.

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To all whom it may concern:

Be it known that I, LEONARD H. RUCH, a citizen of the United States, residing at Winchester, in the county of Franklin and State of Tennessee, have invented certain new and useful Improvements in Plow Attachments, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in plow attachments and more particularly one adapted both for guiding an ordinary walking plow and converting it into a riding or sulky plow.

The object of the invention is to provide an attachment of this character which will be simple and comparatively inexpensive in construction, easy to apply to ordinary plows and strong and durable in use, and which will effectively accomplish its intended purposes.

With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a plow having the invention applied thereto; Fig. 2 is a similar view of the same looking toward the opposite side; Fig. 3 is a top plan view; and Fig. 4 is a vertical transverse sectional view.

In the drawings 1 denotes the beam of an ordinary walking plow having the usual handles 2 and a downwardly and forwardly inclined standard 3, which latter carries the plow share 4.

My improved riding and guiding attachment comprises a substantially right angular shaft 5 having a horizontal portion 6 carrying a furrow disk or wheel 7, a driver's seat 8, and a vertically extending portion 9 which is rotatably mounted on one side of the beam 1 and also mounted for vertical adjustment. This mounting of the portion 9 of the angular shaft is effected by arranging it in spaced bearing eyes 10 of a bearing plate 11 and providing upon its portion between the eyes 10 a stop collar 12 which is adjustable on the portion 9 of the shaft by means of a set screw 13. The bearing plate or member 11 is secured to one side of the plow beam 1, preferably, by means of a U-shaped clamp 14 by means of which latter

the shaft 5 may be adjusted longitudinally on the beam.

The horizontal portion 6 of the angular shaft is held in adjusted position by means of a hand lever 15 fulcrumed at its lower end, as at 16, on the standard 3 and concentric with a segmental locking rack 17 with which co-acts a retractable pawl or dog 18 arranged on said lever. The intermediate portion of the lever is connected by a forwardly extending link 19 to a transverse lever 20 pivoted intermediate its ends in a bearing bracket 21 arranged on the bottom of the forward portion of the plow beam. The opposite end of the lever 20 is connected by a link 22 to the outer end of the horizontal portion 6 of the shaft 5. It will be seen that when the lever 15 is swung in a forward and rearward direction the horizontal portion 6 of the angular shaft is swung laterally so as to dispose the guide wheel 7 at the proper angle.

The wheel 7 may be of any form and construction but it is preferably in the form of a disk which runs in the furrow and has a sharp edge or periphery so that it will not readily leave the furrow. The hub 23 of this disk or wheel is made longitudinally adjustably on the portion 6 of the angular shaft by arranging it between two stop collars 24 which are held in adjusted position by set screws 25. The rider's or driver's seat 8 is also adjustably mounted on the portion 6 of the angular shaft by providing the lower end of its supporting spring 26 with a loop portion which receives said shaft and is held in adjusted position by means of a clamping bolt 27. When my attachment is used upon a plow the draft animals are preferably attached to a transversely extending clevis plate 28 having one end secured to the front end of the plow beam and its other end connected to one side of the same by a diagonal brace 29. Said plate 28 is formed with a longitudinal series of apertures in any one of which may be hooked the draft connection.

In operation, the wheel 7 travels in the furrow and at a depth corresponding to the depth of the bottom of the plow share, said wheel thereby guiding the plow and causing it to make a cut of uniform width without the necessity of being guided by means of the handles. Should the wheel run over any obstruction in the furrow the plow will

not be lifted out of the ground but merely tilted and owing to the sharp edge of said wheel, there will be little danger of the latter leaving the furrow. In turning the plow around at the end of the field, the driver dismounts and grasps the handles 2, then swings the entire device over upon the left hand side so that the normally horizontal end of the angular shaft or axle will be disposed in a vertical position and will serve as a pivot, the plow share, of course, being off of the ground. It will be noted that the weight of the rider will be on the wheel at all times except when the plow tends to jump out of the ground. The wheel may be used as a truck wheel to permit the plow to be easily moved from field to field, the same being accomplished by the driver dismounting, grasping the handles 2 and tilting the implement so as to lift the plow share out of the ground and throw the weight of the entire implement upon the wheel. By making the angular shaft 5 as set forth, it may be readily reversed when its horizontal portion or end has been worn.

While I have shown and described in detail the preferred embodiment of my invention, I wish it understood that I do not limit myself to the precise construction set forth and that various changes in the form, proportion and arrangement of parts and in the details of construction may be resorted to within the spirit and scope of the invention.

Having thus described the invention what is claimed is:

1. The combination with a plow, of a bearing, a clamp for adjustably securing

the same to the plow beam, an angular shaft having a vertical portion vertically adjustable and rotatably mounted in said bearing and a horizontal portion projecting laterally from one side of the beam, a furrow wheel mounted on said horizontal portion of the shaft, a rider's seat upon said horizontal portion of the shaft, a transverse lever pivoted to the forward portion of the plow beam, a link connecting said transverse lever to the horizontal portion of the angular shaft, a hand lever, a link connecting said hand lever to the transverse lever and means for locking said hand lever in adjusted position.

2. The combination with a plow, of a bearing secured to the plow beam, an angular shaft having a vertical portion rotatable in said bearing, and a horizontal portion projecting outwardly from the lower end of the vertical portion, a wheel upon said horizontal portion of the shaft, a driver's seat carried by said horizontal portion of the shaft, a transverse lever pivoted intermediate its ends on the plow beam, a link connecting one end of said lever to the horizontal portion of the shaft, a hand lever pivoted to the plow beam, a link connecting the hand lever to the other end of the transverse lever, and a pawl and rack locking device for said hand lever.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

LEONARD H. RUCH.

Witnesses:

B. ALEXANDER,
S. M. ALEXANDER, Jr.