No. 646,280. Patented Mar. 27, 1900.

M. T. HANCOCK.

ROTARY PLOW.

(Application filed Jan. 23, 1900.)

(No Model.) 3 Sheets—Sheet 1.

Fig. 1.

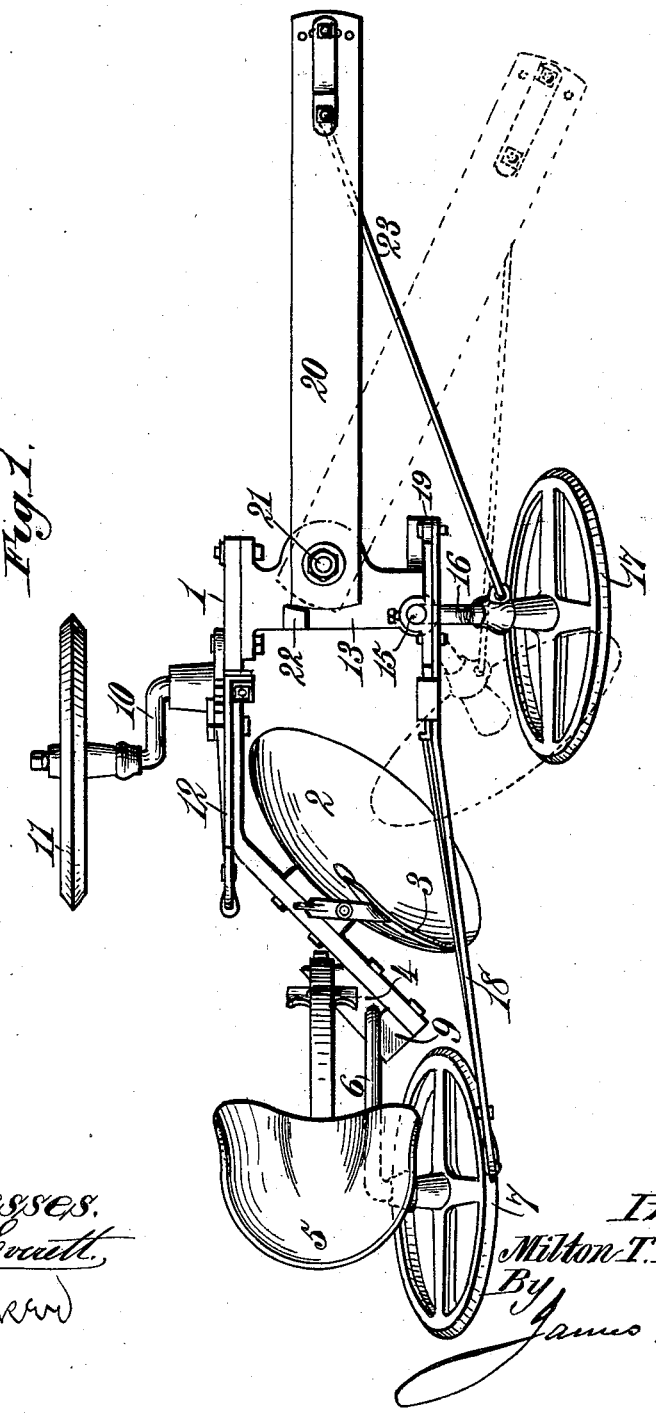

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Fig. 2.

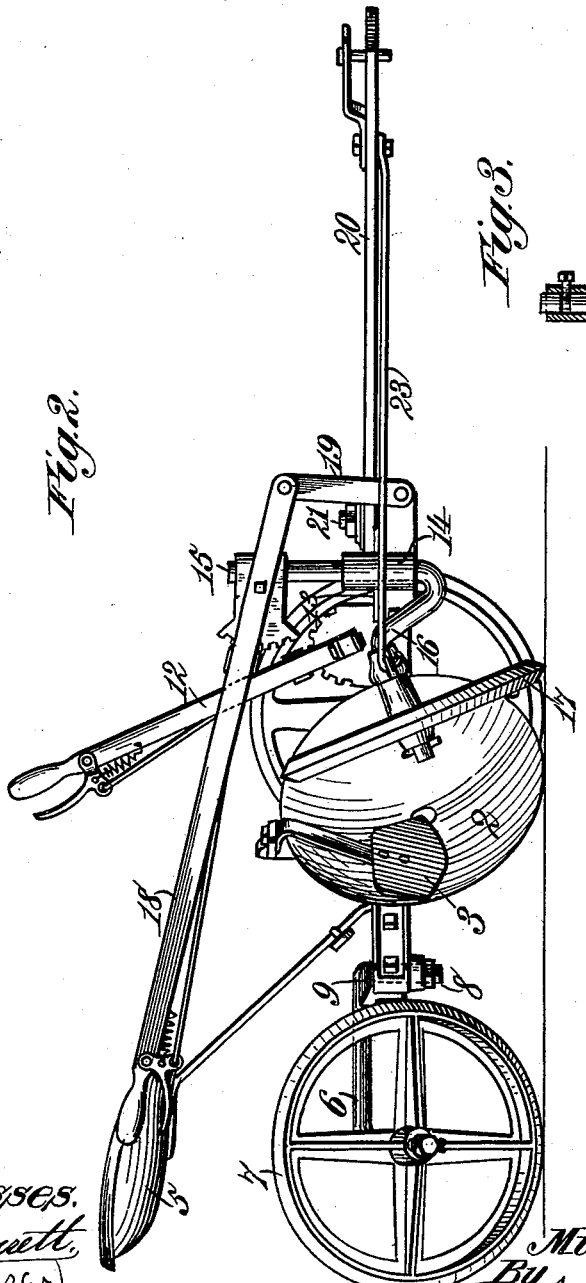
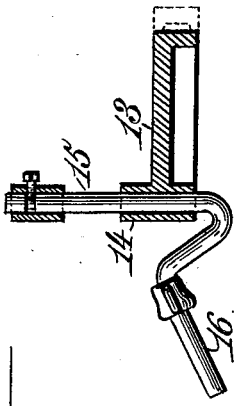


Fig. 3.



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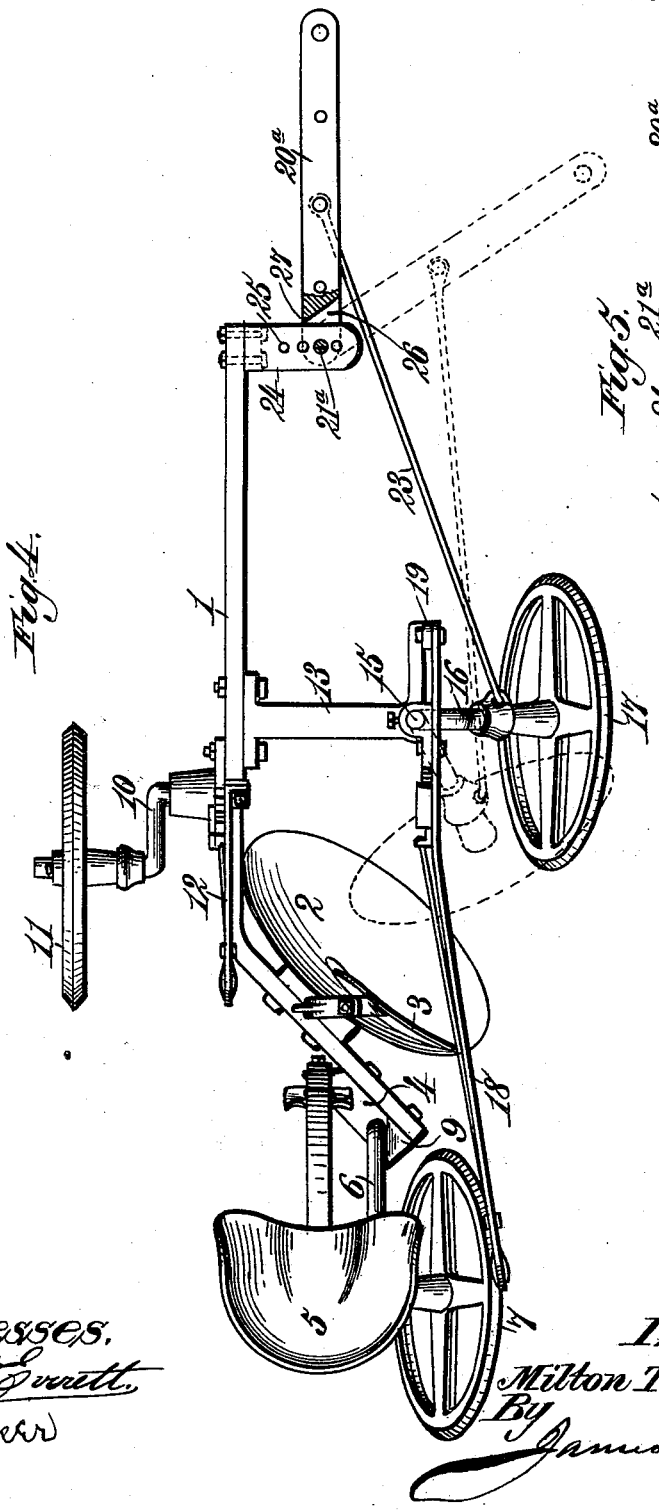

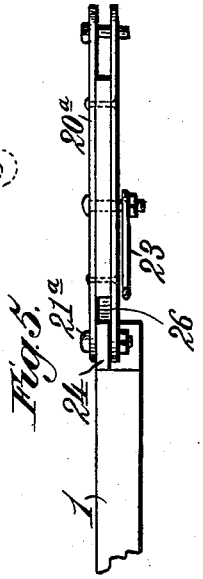

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UNITED STATES PATENT OFFICE.

MILTON T. HANCOCK, OF SHREVEPORT, LOUISIANA.

ROTARY PLOW.

SPECIFICATION forming part of Letters Patent No. 646,280, dated March 27, 1900.

Application filed January 23, 1900. Serial No. 2,489. (No model.)

To all whom it may concern:

Be it known that I, MILTON T. HANCOCK, a citizen of the United States, residing at Shreveport, in the parish of Caddo and State of Louisiana, have invented new and useful Improvements in Rotary Plows, of which the following is a specification.

This invention relates to rotary plows of that class in which the plowing is to be done by means of a plowing-disk rotatably mounted and at a suitable angle upon a portion of the plow beam or frame; and it is a principal object of my invention to mount the front furrow-wheel on a pivotal axle connected by a draft-rod to a swinging tongue at the forward end of the plow-frame in such manner as to permit a short turn of the plow to the right by the natural draft of the team when pulled in that direction, thus greatly facilitating a short turn to the right.

Other features and advantages of my invention will appear from the construction and combination of parts in a rotary plow, as hereinafter more particularly described.

In the annexed drawings, illustrating the invention, Figure 1 is a plan of my improved rotary plow. Fig. 2 is an elevation of the same viewed from the right-hand side. Fig. 3 is a sectional detail view showing the manner of mounting the pivotal axle of the front furrow-wheel. Fig. 4 is a plan of a slightly-modified construction, in which the main portion of the beam or plow-frame is extended farther to the front and supports at or near its forward end a bracket to which the swinging tongue is adjustably connected, the front furrow-wheel being carried on a pivotal axle that is mounted on a bracket at the rear of the bracket from which said swinging tongue is supported, the said swinging tongue being connected by a draft-rod with the pivotal axle of the front furrow-wheel, the same as in Figs. 1 and 2. Fig. 5 is a side elevation of the front portion of the main plow-beam and connected swinging tongue, the same as in Fig. 4.

In both forms of plow construction, Figs. 1 and 4, the reference-numeral 1 designates the main portion or beam of the plow-frame. This main part of the plow-frame has its rear portion inclined to the right, as shown, for convenience in mounting the rotary plow-disk 2 thereon at a suitable angle. On this portion of the main frame or beam there is also mounted a scraper 3, provided with suitable means for adjusting it in required relation to the rotary plow-disk. A block or offset 4 may be bolted or otherwise secured to the rear portion of the main frame or beam, as shown in Figs. 1 and 4, to provide for conveniently supporting the seat 5 and also to afford a point of pivotal attachment for a rear beam-section 6, having thereon an axle for a rear carrying-wheel 7 of the plow. It will be understood that the rear beam-section 6 is pivotally connected with the main beam-section 1 through the block or offset 4 by means of any suitable pivot-pin 8, Fig. 2, which is preferably formed by turning down the forward end portion of said rear beam-section. A stop 9, Figs. 1, 2, and 4, is provided to limit the swing of the rear beam-section to the right while leaving it free to swing to the left in turning the plow in that direction.

On the left-hand side of the main frame or beam 1 there is carried a bent axle 10, on which is mounted a wheel 11, and this axle 10 is partially rotatable by means of a lever 12, to be used in adjusting the position of said axle when regulating the depth of furrow.

To the right-hand side of the main frame or beam section 1 there is bolted or otherwise secured a bracket or frame 13, that projects laterally to the right, as shown in Figs. 1 and 4. This bracket or frame 13, may be of any suitable form or construction and is secured to the main frame or beam 1 on its right-hand side at a point in advance of where the bent axle 10 is connected with the left-hand side of said main frame or beam. On the right-hand end of the bracket or frame 13 there is a vertical sleeve 14, Figs. 2 and 3, to pivotally receive the vertical arm 15 of a bent pivotal axle 16, on which the front furrow-wheel 17 is mounted. There is connected with this axle a suitable lever 18, the forward end of which connects by a link 19 with said bracket or frame 13 for use in adjusting said axle when required in regulating the depth of the furrow. As shown in Figs. 1 and 2, there is pivotally attached to the bracket-arm 13 of the main beam or frame 1 a forwardly-extended

tongue-section 20, which may be preferably constructed from any suitable resilient material. The rear end of this tongue-section 20 may be pivotally connected with said bracket-arm 13, as shown in Figs. 1 and 2, by means of a pivot-bolt 21, in such manner as to be capable of swinging freely to the right by the natural draft of the plow in turning the team to the right; but the swing of said tongue-section to the left is limited by any suitably-located stop 22, Fig. 1, so that after the plow has been turned to the right the said tongue-section 20 will resume its proper position in the direct line of draft when the team again goes forward. In order to cause the pivotally-mounted front furrow-wheel 17 to turn or pivot freely to the right by the natural draft of the team when pulled in that direction, there is pivotally connected with the swinging tongue 20, at a suitable point thereon, the front end of a draft rod 23, the rear end of which is pivotally connected with the pivotally-mounted axle 16 of the front furrow-wheel. It will be obvious that by means of a construction of this kind a short turn of the plow to the right will be readily caused by the natural draft of the team when pulled in that direction through the connection of the swinging tongue 20 with the pivotally-mounted axle of the front furrow-wheel.

Instead of arranging the main frame or beam 1 and the swinging tongue 20 in the manner shown in Figs. 1 and 2 there may be adopted a construction such as shown in Fig. 4. In this case the front end of the main frame or beam 1 is extended forward, and there is bolted or otherwise secured to the right-hand side of its forward end a bracket-arm 24, Figs. 4 and 5, preferably having therein a series of holes 25 for pivotal connection of a tongue-section 20^a, which may be shorter than the tongue-section 20. (Shown in Figs. 1 and 2.) This tongue-section 20^a will have pivotally attached thereto the forward end of the draft-rod 23, the rear end of which is pivotally connected with the pivotally-mounted axle 16 of the front furrow-wheel 17 in the same manner and for the same purpose as already described with reference to Figs. 1 and 2. As shown in Figs. 4 and 5, the rear end of the tongue-section 20^a is bifurcated or provided with a horizontally-arranged slot 26, the rear end of which is open to embrace the bracket-arm 24 for pivotal connection therewith through a pivot-bolt 21^a, while the forward closed end of said slot is cut diagonally in such manner as to permit the tongue 20^a to swing freely to the right hand by the natural draft of the team when pulled in that direction. The left-hand side of the front diagonal wall of this slot 26 will serve as a stop at 27 to limit the swing of the tongue 20^a to the left, when said tongue resumes its normal position in the direct line of draft as the team moves forward after the turn. The forward end of the tongue-section 20 or 20^a in both forms of construction may be arranged in any suitable manner for the attachment of the necessary draft connections or devices.

It will be obvious that whether the laterally-swinging tongue-section is pivotally connected with the same bracket-arm, as 13, that supports the pivotally-mounted front furrow-wheel 17, as shown in Figs. 1 and 2, or with a separate bracket-arm, as 24, Figs. 4 and 5, the effect will be the same in enabling the front furrow-wheel to pivot to the right, so as to make a short turn through the natural draft of the team when pulled in that direction, the swinging tongue in either case being connected through a draft-rod 23 with the pivotally-mounted axle 16 on which said front furrow-wheel 17 is carried. Obviously the front furrow-wheel 17 and its pivotal axle 16 may be pivotally connected with the plow-frame in various ways, it being only essential that this pivotal axle should be connected by a draft-rod with a laterally-swinging tongue, so arranged that through the natural draft of the team when pulled to the right the plow will be better enabled to make a short turn in that direction. The several pivotally-connected parts of the plow-frame are so arranged and provided with proper stops that the plow can be readily turned either to the right or left, as may be required.

What I claim as my invention is—

1. A rotary plow provided with a laterally-swinging tongue, a front furrow-wheel mounted on a pivotal axle, and a draft-rod connecting the pivotal axle of said furrow-wheel with said swinging tongue, thereby permitting a short turn of the plow to the right by the natural draft of the team when pulled in that direction.

2. In a rotary plow, the combination of a main frame having a swinging tongue-section, a front furrow-wheel having its axle pivotally mounted on the plow-frame, and a draft-rod connecting the said axle of the furrow-wheel with said swinging tongue-section, whereby a short turn of the plow to the right is effected by the natural draft of the team when pulled in that direction.

3. In a rotary plow, the combination of the main frame having a bracket-arm projecting laterally to the right and provided with a vertical sleeve, the front furrow-wheel having its axle provided with a vertical arm pivotally mounted in said sleeve, a laterally-swinging tongue-section pivotally connected with the main frame, and a draft-rod connecting the said axle of the front furrow-wheel with said swinging tongue, to permit a short turn of the plow to the right by the natural draft of the team when pulled in that direction.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

MILTON T. HANCOCK.

Witnesses:
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JAMES L. NORRIS.