

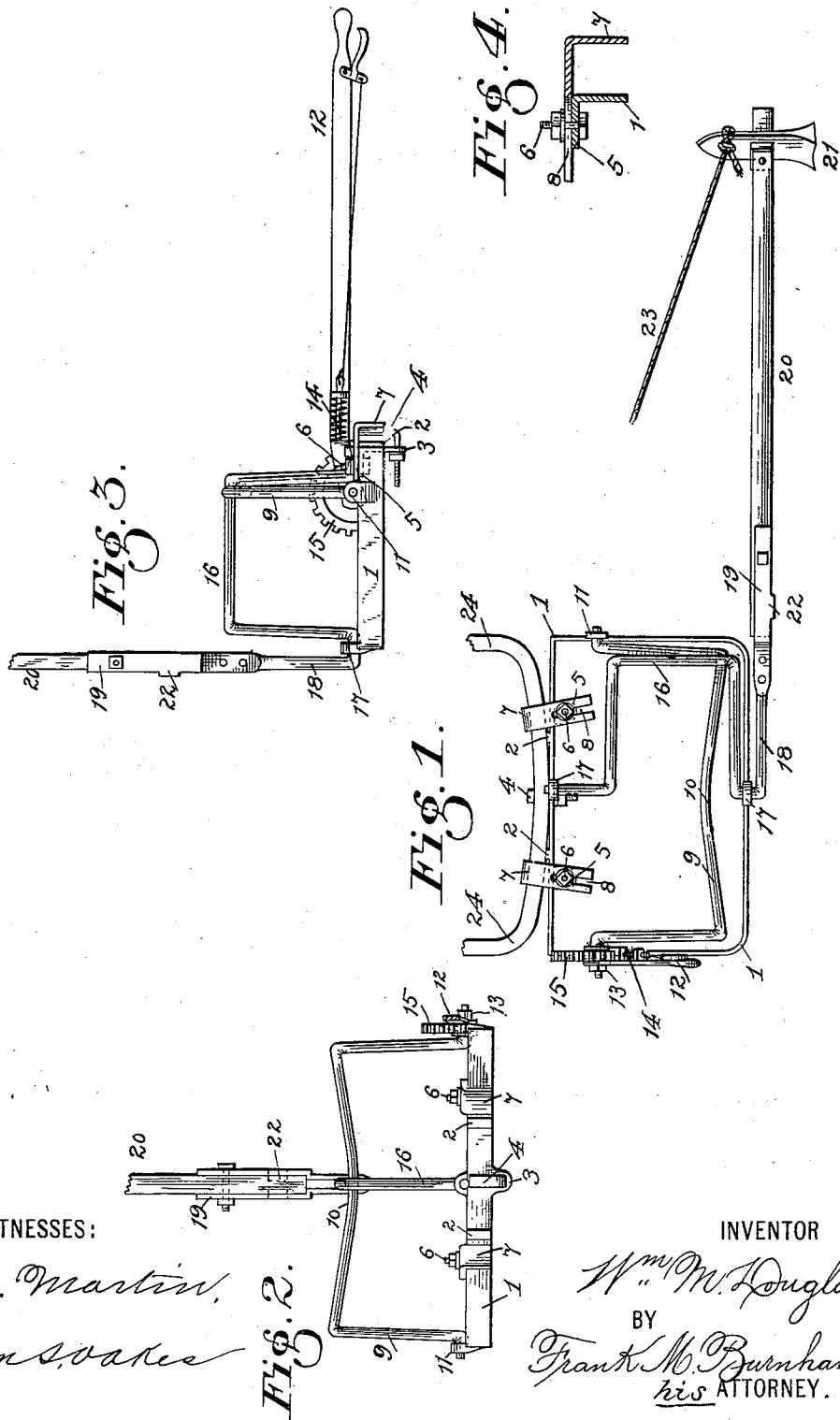
No. 607,021.

Patented July 12, 1898.

W. M. DOUGLAS.
CORN ROW MARKER.

(Application filed Apr. 15, 1898.)

(No Model.)



WITNESSES:

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Fig. 2.

INVENTOR

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UNITED STATES PATENT OFFICE.

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CORN-ROW MARKER.

SPECIFICATION forming part of Letters Patent No. 607,021, dated July 12, 1898.

Application filed April 15, 1898. Serial No. 677,647. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. DOUGLAS, a citizen of the United States, residing at Fletcher, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Corn-Row Markers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in that class of corn-row markers for corn-planters which are constructed with a movable marker arm or shaft extending beyond the machine, to the outer end of which the marking attachment is secured; and it consists of certain peculiar and novel features of construction and new combination of parts, as will be more fully described hereinafter and pointed out in the subjoined claims, in accordance with the statute in such cases made and provided therefor.

The objects of this invention are to so construct a corn-row marker as to be easily operated and controlled so as to avoid all obstructions—such as stumps, trees, or boulders—or when making a turn at the end of the row to be able to turn close to and yet avoid all fences without the driver being annoyed or losing time by dismounting; also, to so construct a corn-row marker that while it is susceptible of being readily attached to or detached from corn-planter frames, which may be square, round, or of various shapes, can be quickly and cheaply manufactured.

Referring to the accompanying drawings, illustrating my invention, and in which similar numerals of reference indicate like parts throughout the several views, Figure 1 is a plan view of my improved corn-row marker. Fig. 2 is a front elevation of the same with marker-arm raised, and Fig. 3 is a side elevation of same in the position shown in Fig. 2. Fig. 4 is an enlarged detail view.

In the said drawings the numeral 1 indicates the frame of my improved marker, which I preferably construct rectangular in form and provided at its forward portion with two

bearing-lugs 2 and at a point midway of its side portions with a depending lip 3, having an opening which receives the stem of an up-turned clip 4, said stem being screw-threaded and carrying a washer and nut, so as to allow said clip to adjustably grasp corn-planter frames of various sizes. Said forward portion of the frame is further provided with two flanged lips 5, (see Fig. 4 and dotted lines in Figs. 1 and 3,) having openings through which passes a bolt 6, carrying a washer and nut. Each of said flanged lips support a downwardly-turned clip 7, having a slot 8 at its rear end, which receives the bolt 6, carrying the washer and nut, by which means the said clips 7 are allowed to adjustably grasp corn-planter frames of various sizes, and in connection with the bearing-lugs 2 and the central clip 4 permits of my improved marker being readily attached to or detached from the frame 24 of an ordinary corn-planter (a portion of said corn-planter frame for the purpose of illustration being shown at 24 in Fig. 1,) no matter whether the said corn-planter frame is square or oval in form. The lower rock-shaft 9 is slightly bent or formed with a central depression 10 and is journaled in bearing-boxes 11, located on each side of the marker-frame, and has keyed to one end (preferably on the left side of the marker-frame) a lever 12, (which is retained in position by a nut 13 or otherwise,) having a spring-pawl 14, adapted to engage the teeth of the ratchet-bar 15, said lever 12 being located in close proximity to the seat of the driver and when operated in the usual manner will raise or lower said lower rock-shaft 9. The upper rock-shaft 16 is journaled in bearing-boxes 17, located on the front and rear portions of said marker-frame and extend transversely of and over and above lower rock-shaft 9, the rear portion or end of said rock-shaft 16 terminating in an extension or arm 18, provided with the bifurcated or forked end 19, in which is held by means of a bolt the marker arm or shaft 20, provided with any ordinary and suitably-formed marking attachment 21. The bifurcated end 19 is formed with small flanges or lips 22, and a rope 23 being connected to the said marking attachment 21, which the driver preferably ties or fastens to his seat, so that when it is desired to raise the marking-arm

20 to avoid an obstacle or for the purpose of throwing the marker-arm and marking attachment to the other side of the corn-planter when the planter is turned and a new row started it will be readily understood that when said marker-arm 20 is in an upright position said flanges or lips 22, bearing firmly against its lower end, will prevent said marker-arm from falling or toppling over forward, while said rope 23, attached to the marking attachment and being tightly controlled by the driver, will prevent said marker-arm 20 from falling backward.

When it is desired to raise the marker-arm to an upright position, all that is necessary is to force the lever down in the usual manner, which will thus cause said lower rock-shaft to turn in its bearing-boxes and to rise, thus forcing said upper rock-shaft, which rests upon said lower rock-shaft, to turn in its bearings and rise to an upright position also and rest in the depression 10 in lower rock-shaft, when the marker-arm will stand up straight, as shown in Figs. 2 and 3. By forcing the lever down hard and then bringing said lever up quickly to an upright position the lower rock-shaft will drop down flat, as will also the upper rock-shaft; but said upper rock-shaft will thus have been swung or thrown from one side of the marker-frame to the other, and the marker-arm and marking attachment will also have been thrown to the other side of the corn-planter and the parts will assume a similar position to that shown in Fig. 1, and as the planter is drawn over the ground the marking attachment will trace or cut the desired line in the ground in the usual manner.

It will of course be understood that I do not limit myself to the exact style or form or position of any of the various parts of my improved corn-row marker, as they may be somewhat varied without departing from the spirit of my invention—as, for example, when so desired, the marker-frame and its clips may be dispensed with, and the ratchet-bar, lower rock-shaft and lever, and upper rock-shaft may be applied or attached to the frame of an ordinary corn-planter direct, so as to make the swing or throw underneath and below said corn-planter frame, (so as to avoid the driver's seat,) in which case the extension 18 should be bent in a simple shoulder at the rear bearing-box, so that the marker-arm will always swing in an upward vertical sweep the same as when attached to the marker-frame.

Having thus described my corn-row marker, what I claim as new and useful and as my invention, and desire to secure by Letters Patent, is—

1. In combination with a corn-planter; a

corn-row marker comprising a frame; an upper rock-shaft journaled in suitable bearings mounted on said frame and terminating in a bent arm or extension, to which is connected a marker-arm provided at its end with a marking attachment; a lower rock-shaft—(resting underneath and supporting said upper rock-shaft)—said lower rock-shaft journaled in bearings mounted on said marker-frame and provided with means for throwing said lower rock-shaft up or down thereby throwing said upper rock-shaft up or down so as to vertically swing said marker-arm and marking attachment from one side to the other of the corn-planter; substantially as specified.

2. A corn-row marker comprising a marker-frame provided with a ratchet-bar; an upper rock-shaft journaled in suitable bearings mounted on said frame and having a bent arm or extension to which is connected the marker-arm, carrying at its end the marking attachment; a lower rock-shaft resting beneath and supporting said upper rock-shaft—the said lower rock-shaft journaled in suitable bearings mounted on the said frame and having attached to one end a lever and pawl to engage said ratchet-bar, said lever adapted to throw said rock-shafts up or down so as to vertically swing said marker-arm and marking attachment from one side over to the other side, substantially as specified.

3. The combination with the frame of a corn-planter; of a corn-row marker, comprising a marker-frame provided at its front with lugs and adjustable clips—(so as to adjustably connect it to said corn-planter frame)—said marker-frame further provided at its side with a ratchet-bar; an upper rock-shaft suitably journaled to said marker-frame and formed at its end in a bent arm or extension to which is connected the marker-arm provided at its end with a marking attachment; a lower rock-shaft resting beneath said upper rock-shaft, the said lower rock-shaft suitably journaled to said frame, and having attached to one end a lever and spring-pawl to engage said ratchet-bar, said lever adapted to throw said rock-shaft up or down thereby throwing said upper rock-shaft up or down at the same time so as to vertically swing the said marker-arm and marking attachment from one side over to the other side of the corn-planter, substantially as specified.

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

WILLIAM M. DOUGLAS.

Witnesses:

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LEONARD H. SHIPMAN.