

J. A. LA RUE.
SUBSOIL IRRIGATING IMPLEMENT.
APPLICATION FILED JAN. 10, 1913.

1,062,169.

Patented May 20, 1913.

2 SHEETS—SHEET 1.

Fig. 1

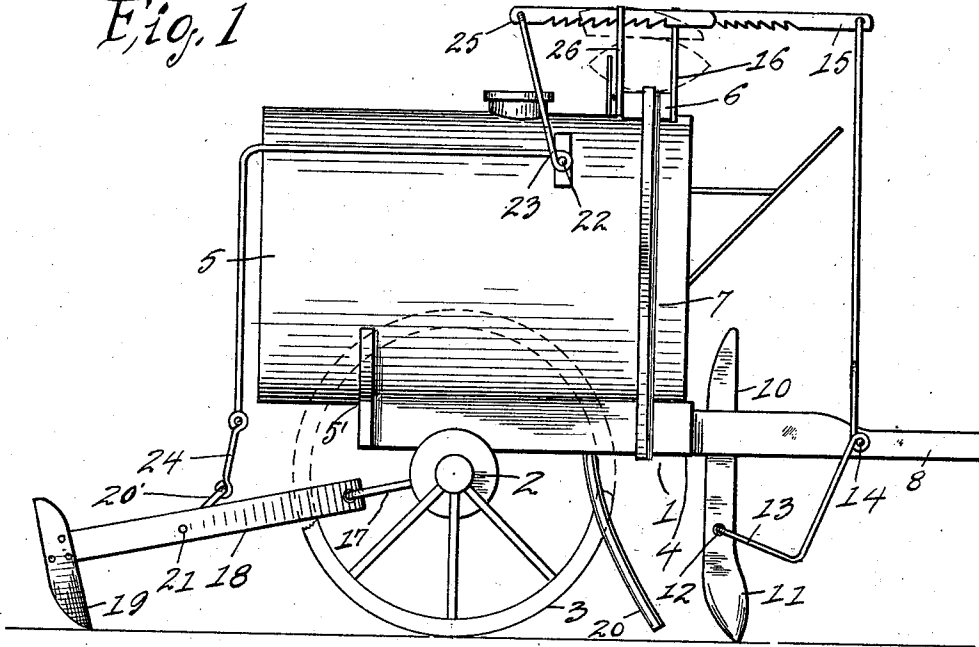
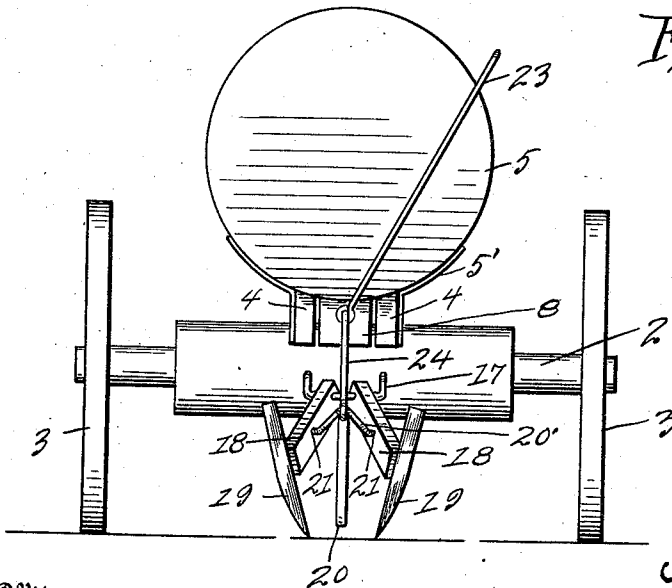


Fig. 2.



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2 SHEETS-SHEET 2.

Fig. 3.

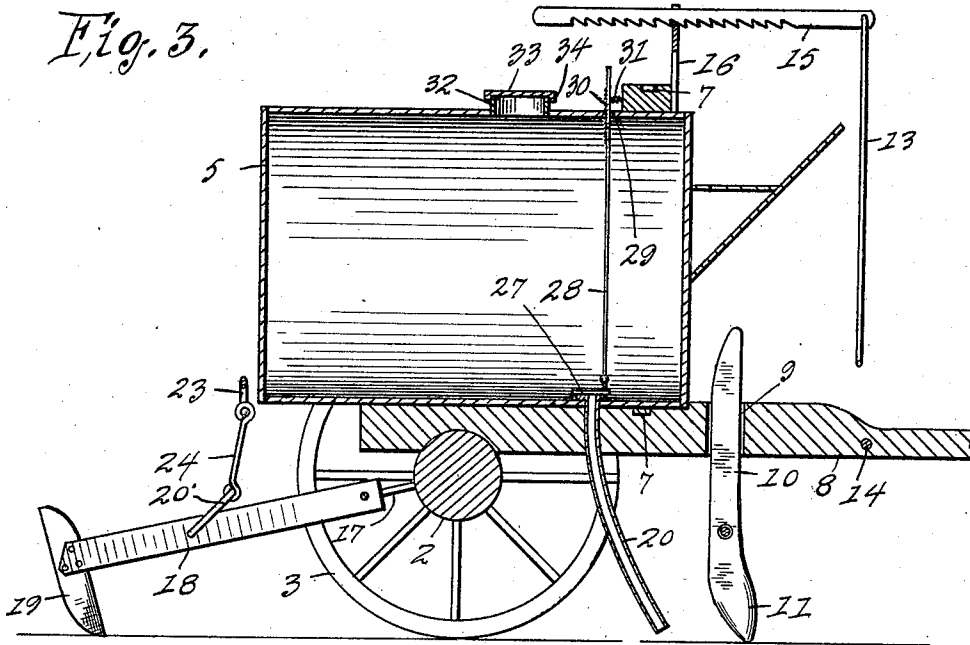
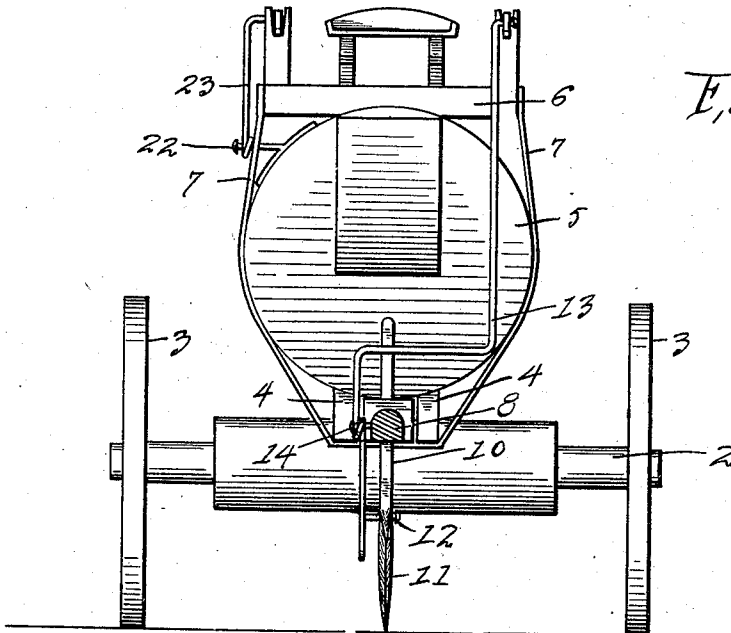


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOSEPH A. LA RUE, OF SALMON, TEXAS.

SUBSOIL-IRRIGATING IMPLEMENT.

1,062,169.

Specification of Letters Patent.

Patented May 20, 1913.

Application filed January 10, 1913. Serial No. 741,308.

To all whom it may concern:

Be it known that I, JOSEPH A. LA RUE, a citizen of the United States, residing at Salmon, in the county of Anderson and State of Texas, have invented certain new and useful Improvements in Subsoil-Irrigating Implements, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to new and useful improvements in sub-soil irrigators, and more particularly to an implement of this character, whereby the water is placed beneath the top of the soil, the object of the invention being to provide a cart or other vehicle having a plow point carried thereby and arranged in front of the discharge hose to open a furrow into which the water is discharged and having two shovel points in the rear of the discharge hose to cover the furrow after the water has been discharged therein.

Another object of the invention is to provide a cart of the above character which will possess advantages in points of efficiency and durability, is inexpensive to manufacture and at the same time is simple in construction and operation.

With the above and other objects in view, the invention consists in the novel features of construction and the combination and arrangement of parts to be hereinafter more fully described, pointed out in the claims and shown in the accompanying drawings, in which—

Figure 1 is a side elevation of an irrigating cart constructed in accordance with my invention. Fig. 2 is a rear elevation. Fig. 3 is a longitudinal sectional view, and Fig. 4 is a front elevation.

Referring more particularly to the drawings, 1 indicates the frame of the cart which is suitably mounted upon a shaft or axle 2 having the wheels 3 mounted upon each end thereof. Mounted upon the frame 1 are the spaced parallel beams 4 which are provided with an inwardly curved upper face upon which is mounted the tank 5. Secured to the other sides of the beams 4 are the curved brackets 5' which extend outwardly beneath the tank to securely support the same upon the beams. Arranged transversely across the upper side of the tank in the front end thereof is a beam 6 to which is secured the ends of a rod 7, the intermediate portion of said rod being disposed beneath the beams 4

and the ends thereof passing up on each side of the tank to prevent any lateral movement of the tank when resting upon the beams.

Pivotally secured between the forward ends of the beams 4 is a tongue 8 which is provided adjacent its pivot ends with a longitudinal slot 9 in which is slidably mounted a standard 10 of the plow point 11, said standard being provided with an opening 12 in which is arranged the lower end of a pivoted rod 13, the intermediate portion of which is pivotally mounted upon the point 14 secured to one side of the tongue 8. The other end of said rod is pivotally secured to the outer end of a lever 15 which is adjustably mounted upon the standard 16 secured to the front side of the beam 6 at one end thereof. Thus it will be seen that by the manipulation of the lever 15, the plow point 11 may be vertically adjusted so as to open the shallow or deep furrow.

Secured to the rear of the shaft or axle 2 at the intermediate portion thereof, is a U-shaped bracket 17, upon the intermediate portion of which is pivotally mounted the inner ends of the supporting bars 18, and secured to the outer ends of the bars 18 are the shovel points 19 which are adapted to be disposed on opposite sides of the furrow to close the same after the water has been discharged from the tank, through the pipe 20, into the furrow. Arranged between the supporting bars 18 is a V-shaped member 20', the ends of which are bent at substantially right angles and pivotally mounted within the openings 21 formed in said bars.

Pivotally mounted upon the tank, as shown at 22, is an operating rod 23, one end of which extends rearwardly and is bent at right angles, the lower end thereof being loosely connected to the V-shaped member 20' by means of the link 24 and the other end of said rod is pivotally connected to one end of the adjustable lever 25. The lever 25 is adjustably mounted upon the upper end of the bracket 26 which is secured to the rear side of the transverse beam 6 adjacent the end opposite the bracket 16. Thus it will be seen that the shovel points 19 may be quickly and easily adjusted or raised from the ground to permit of transportation of the cart from place to place.

The discharge of water from the tank 5, through the pipe 20, into the furrow is controlled by means of a pivoted valve member

27 which is opened and closed by means of a rod 28, said rod extending upwardly through an opening 29 in the upper side of the tank. One side of the opening 29 is provided with a sharp edge which is adapted to be engaged by the serrations 30 formed upon the rod adjacent the upper end so that the rod may be readily opened and closed and held at either position by means of the coil spring 31 which is arranged between the beam 6 and one side of the rod 28.

The tank 5 may be readily filled through an opening in the top side thereof which is surrounded by an annular flange 32 and is closed by means of a cover 33 having downwardly projecting flanges 34 adapted to engage over the outer edges of the flange 32.

From the above description, taken in connection with the accompanying drawings, it will be readily apparent that I have provided a simple and durable irrigating cart whereby water is discharged beneath the surface of the soil and then covered up so that it will not be quickly evaporated, thus retaining the moisture within the ground for a considerable length of time. It will also be apparent that the device is extremely simple in construction, and can be manufactured at comparatively low cost.

While I have shown and described the preferred form of my invention, it will be obvious that various changes in the details of construction, and in the proportions may be resorted to for successfully carrying my invention into practice without sacrificing any of the novel features or departing from the spirit of the appended claims.

Having thus described my invention, what is claimed is:—

1. In a device of the character described, the combination of an axle, wheels supporting the same, spaced parallel beams mounted upon said axle, a tank mounted upon said beams, a vertically adjustable plow point carried by said beams and disposed in front of the tank, a discharge pipe projecting downwardly from the tank at the rear of the plow point, means for controlling the outlet of water from the tank to the discharge pipe,

a U-shaped bracket having its ends secured to the rear of the axle, supporting bars having their inner ends pivotally mounted upon the intermediate portion of said bracket, shovel points secured to the outer ends of said bars, and means mounted upon the tank for raising and lowering said shovel points.

2. In a device of the character described, the combination of an axle, wheels supporting the same, spaced parallel beams mounted upon said axle, a tongue pivotally mounted between the forward ends of said beams and provided with a longitudinal slot, a standard adjustable within said slot, a plow point formed at the lower end of said standard, a rod having its intermediate portion pivotally mounted upon the tongue and its lower end pivotally secured to said standard adjacent the plow end, means for manipulating said rod to adjust the standards, a tank mounted upon said beams, a discharge pipe projecting downwardly from the tank at the rear of the plow point, and spaced shovel points adjustably mounted at the rear of the tank to close the furrow made by the plow point after the water has been discharged therein.

3. A device of the character described, including a shaft, supports therefor, beams mounted upon said shaft, a tank mounted upon said beams, a plow point carried by the beams and disposed in front of the tank, a discharge pipe projecting downwardly from the tank at the rear of the plow point, means for controlling the outlet of water from the tank to the discharge pipe, a U-shaped bracket having its ends secured to the rear of the shaft, supporting bars having their inner ends pivotally mounted upon the intermediate portion of said bracket, covering devices carried by the outer ends of said bars, and means for raising and lowering said covering devices.

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

JOSEPH A. LA RUE.

Witnesses:

JOHN F. MURDOCK,
ROBERT F. SMITH.