No. 677,467. Patented July 2, 1901.

G. D. POTTER.

DUMPING BARROW.

(Application filed Nov. 30, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

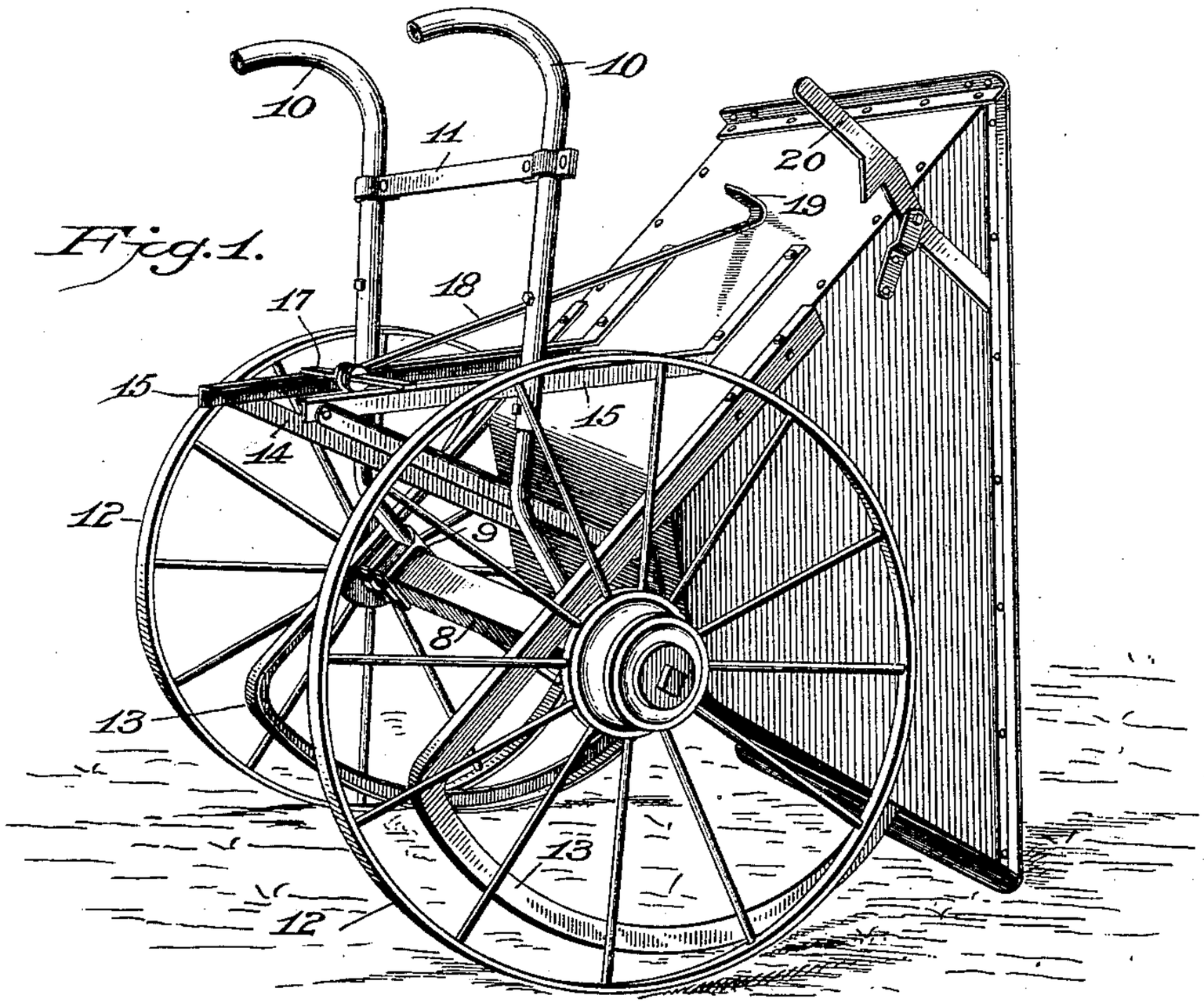

Fig. 2.

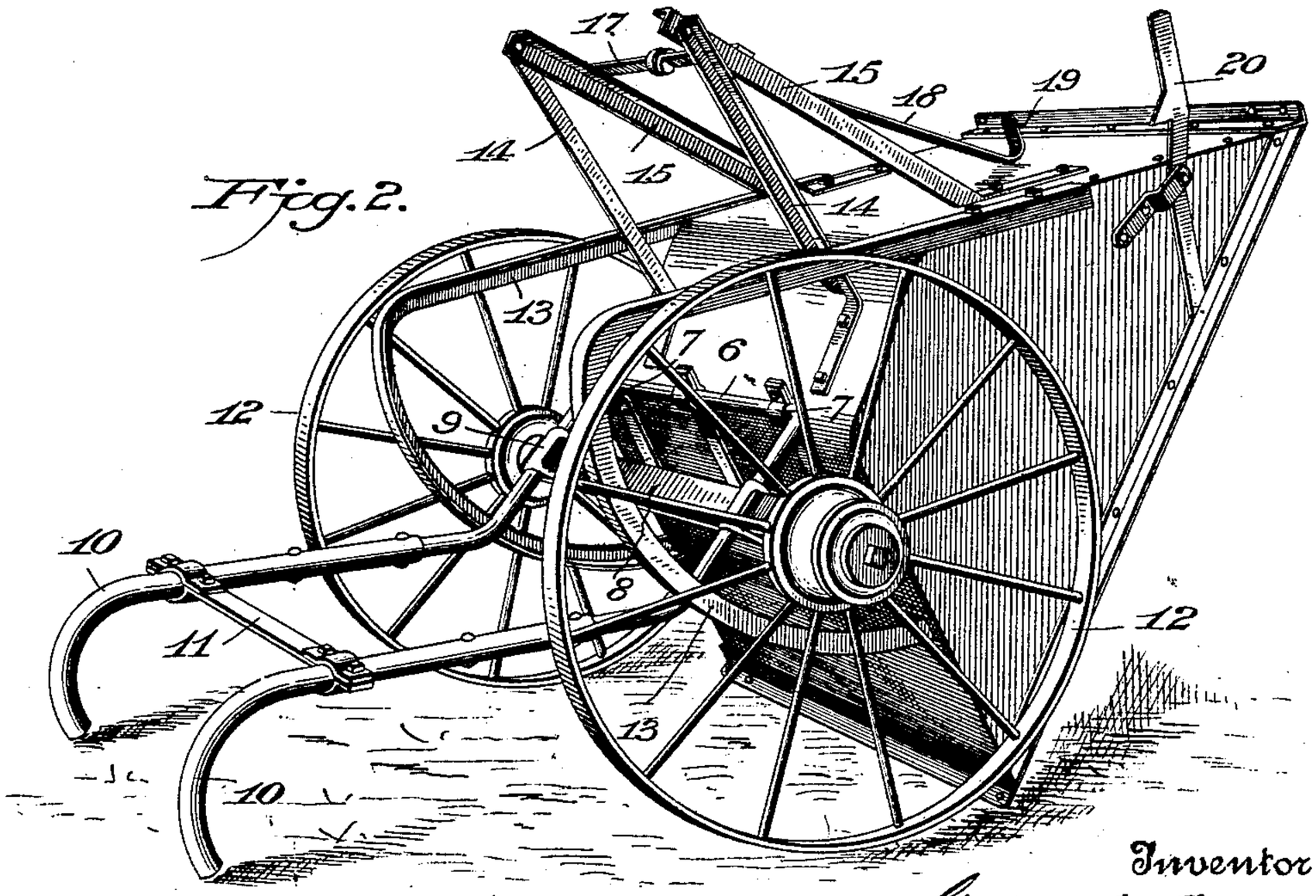

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Fig. 3.

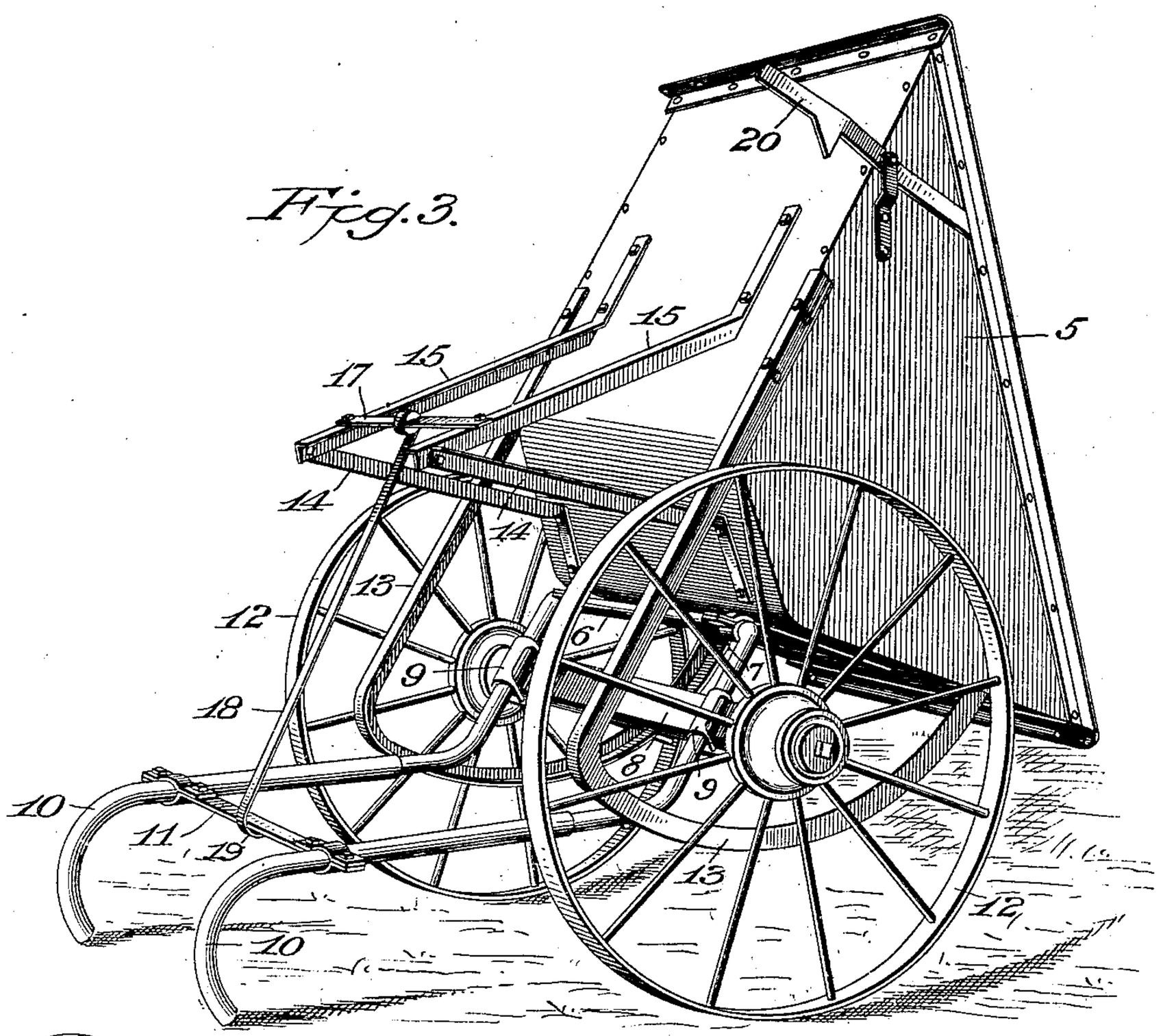
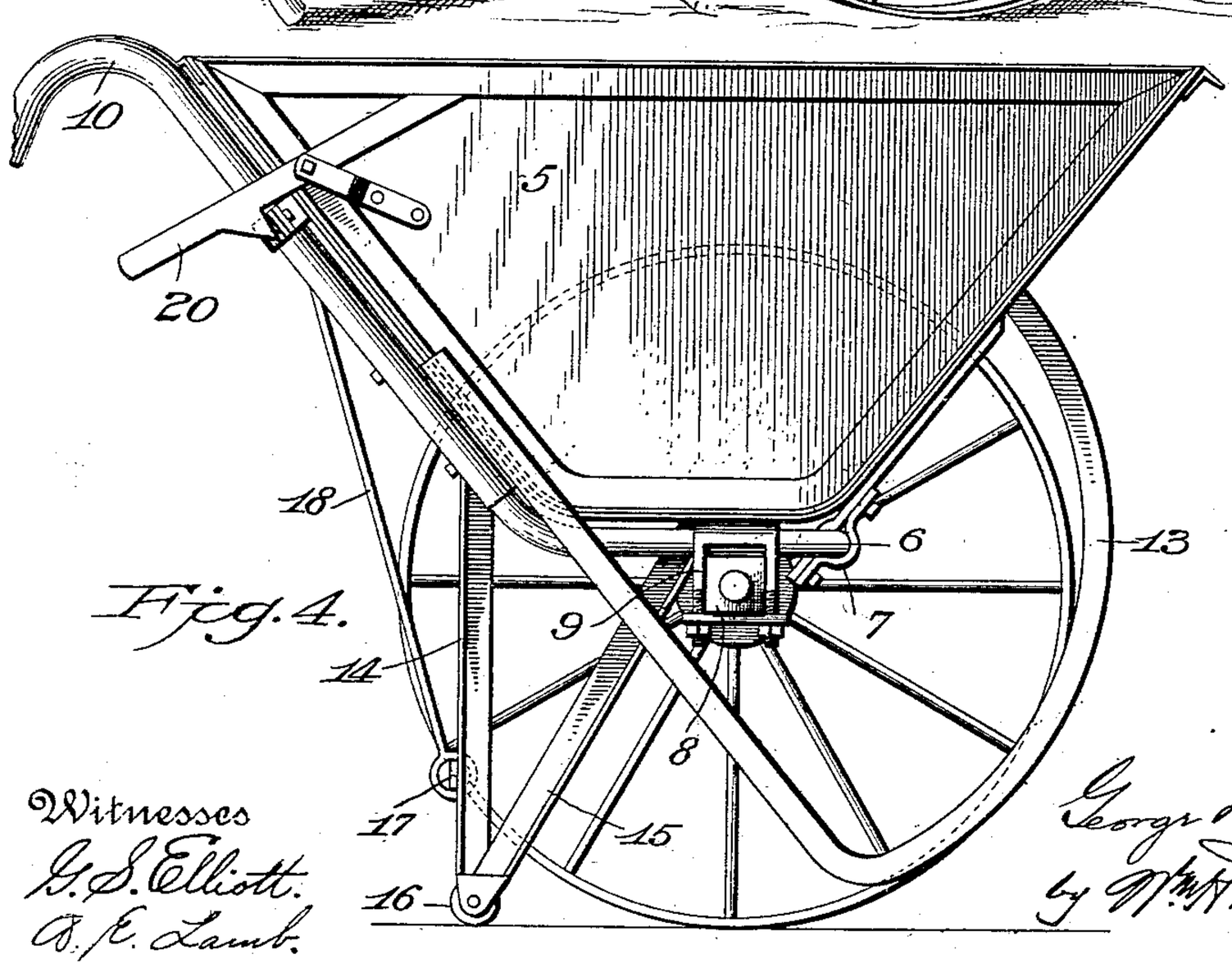


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE D. POTTER, OF WALLACE, IDAHO.

DUMPING-BARROW.

SPECIFICATION forming part of Letters Patent No. 677,467, dated July 2, 1901.

Application filed November 30, 1900. Serial No. 38,190. (No model.)

To all whom it may concern:

Be it known that I, GEORGE D. POTTER, a citizen of the United States, residing at Wallace, in the county of Shoshone and State of Idaho, have invented a certain new and useful Improvement in Dumping-Barrows, of which the following is a full, clear, and exact description.

The object of this invention is to provide a dumping-barrow for use especially in loading ore and other similar bulky material into railroad-cars. A peculiar necessity in loading cars to their capacity with material of this character is that a certain depth of material should be maintained throughout the car, and in the case of heavy ore this depth is from two to three feet. My barrow is especially designed to dump the material and pile it up to the required depth.

The invention comprises a body or tray of substantially V shape in cross-section, mounted upon a frame, which in turn is provided with rotating wheels for portability and with skids or "dead-wheels," upon which the body may be supported in dumping the load, all as I will proceed now more particularly to set forth and finally claim.

In the accompanying drawings, Figure 1 is a perspective view showing the first position of dumping, with the body resting on the skids. Fig. 2 is a perspective view showing the second position of dumping. Fig. 3 is a perspective view of the third position of dumping and at the beginning of the restoration of the body to normal horizontal position. Fig. 4 is a side elevation, also illustrating modifications.

The body or tray 5 may be made of sheet or plate steel or other material and in V or truncated pyramidal form inverted. The frame comprises a substantially U-shaped yoke 6, to the front end of which the body is secured by hinges 7. The limbs of this yoke are secured to an axle 8 by clips 9 or by other means, and the rear ends of these limbs are bent upwardly, and to them are secured the handles 10, and these upturned limbs and handles extend substantially parallel with the rear wall of the tray. The handles may be braced by a bar 11, suitably secured to them. The yoke and the handles may be made of metal tubing and bent into shape in any usual way. The axle is supplied with suitable wheels 12. To opposite sides of the body are applied the metal arcs 13 eccentrically with relation to the wheels and projecting forwardly relatively to the body. These arcs may be made of angle-iron or steel. To the rear of the body are applied the legs 14, which may be appropriately braced with bars 15 and which support the body in the horizontal position, and, as shown in Fig. 4, these legs may be supplied with caster-wheels 16. These legs may be connected by a brace 17, and to this brace is pivoted a reach 18, having its upper end formed as a hook 19, which when the parts are in normal horizontal position engages the cross bar or brace 11 of the handles. To the side of the body is pivoted a latch 20, which also hooks over the bar 11 of the handles.

It will be seen that when the barrow is in the upright position, Fig. 4, the dead-wheels do not reach the floor or other level and the wheels themselves support the body, and from a point a few inches above and forward of the lower rims of the wheels the dead-wheels are of a greater diameter than the wheels 12, and therefore project beyond the rims of said wheels 12.

The operation of the barrow is as follows: Wheeled to the dumping-point, the handles 10 are thrown upward by the operator, the barrow by this act being thrown over onto the skids or dead-wheels 13, with the front edge of the tray 5 resting on the floor or other level and the material constituting the load being partly dumped, as shown in Fig. 1. As the barrow is thrown over the latch 20 is automatically disengaged from the cross-bar 11 by the change of its center of gravity and the jar, and the handles are released from the tray, as seen in Fig. 1. The operator next forces the handles down to the floor, as in Fig. 2, and the front ends of said handles acting as a lever, with the axle 8 for a fulcrum, the tray is still further tilted and turned over, leaving the load dumped on the floor. The handles are then raised slightly from the floor, as in Fig. 3, and the reach 18 is turned down and hooked onto the cross-bar 11, when, upon again forcing the handles down, the tray is raised clear of the floor (still tilted) and the material is emptied clear of the same. The

barrow, now resting upon the revolving wheels, may be run back from the pile without dragging down the material. When clear of the pile, the operator throws the handles upward and forward, the handles and the reach 18 are thrown over against the tray, and the latch 20 engages automatically with the cross-bar 11, securing the tray to the handles, and the barrow is ready when turned down for another load.

It will be observed that the body of the barrow is hinged to the frame eccentrically with relation to the axle and that the frame therefore serves as a sort of lever for moving the body.

What I claim is—

1. A dumping-barrow, comprising a substantially U-shaped yoke, the rear ends of the limbs of which extend upwardly, handles applied to such upwardly-extended limbs, an axle provided with suitable wheels and to which axle the yoke is secured by its limbs, with its front end projecting forwardly beyond the axle, and a tray or body pivotally secured to said front end of the yoke, the said yoke and handles constituting a frame which is substantially parallel with the rear wall of the tray and is capable of being used to tilt the tray to discharge its load, as set forth.

2. A dumping-barrow, having a tilting body or tray, a frame to which said body or tray is pivoted, and a gravity-latch pivoted to the tray and adapted to automatically engage with the frame when the parts are in position for trundling and to be automatically disengaged from said frame when the tray is turned over or tilted, substantially as described.

3. In a two-wheeled barrow, the combination of a tray, a frame to which it is hinged, and dead-wheels or skids applied to the tray eccentrically with relation to the wheels, substantially as described.

4. In a two-wheeled barrow, the combination of a tray or body, a frame secured to the axle of the wheels and projecting forwardly and at its forward end pivotally connected with the tray, and skids or dead-wheels applied to the body eccentrically with relation to the wheels, whereby the tray or body may be tilted and raised from the floor or other level in its tilted position.

5. In a wheeled barrow, the combination of a frame, extending forwardly beyond the axle of the wheels and having the body hinged thereto and extending rearwardly and forming handles, and rear legs on the body provided with a movable reach adapted to engage with the cross-bar connecting the handles, substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand this 24th day of November, A. D. 1900.

GEORGE D. POTTER.

Witnesses:
L. N. SWIFT,
F. F. JOHNSON.