

No. 745,826.

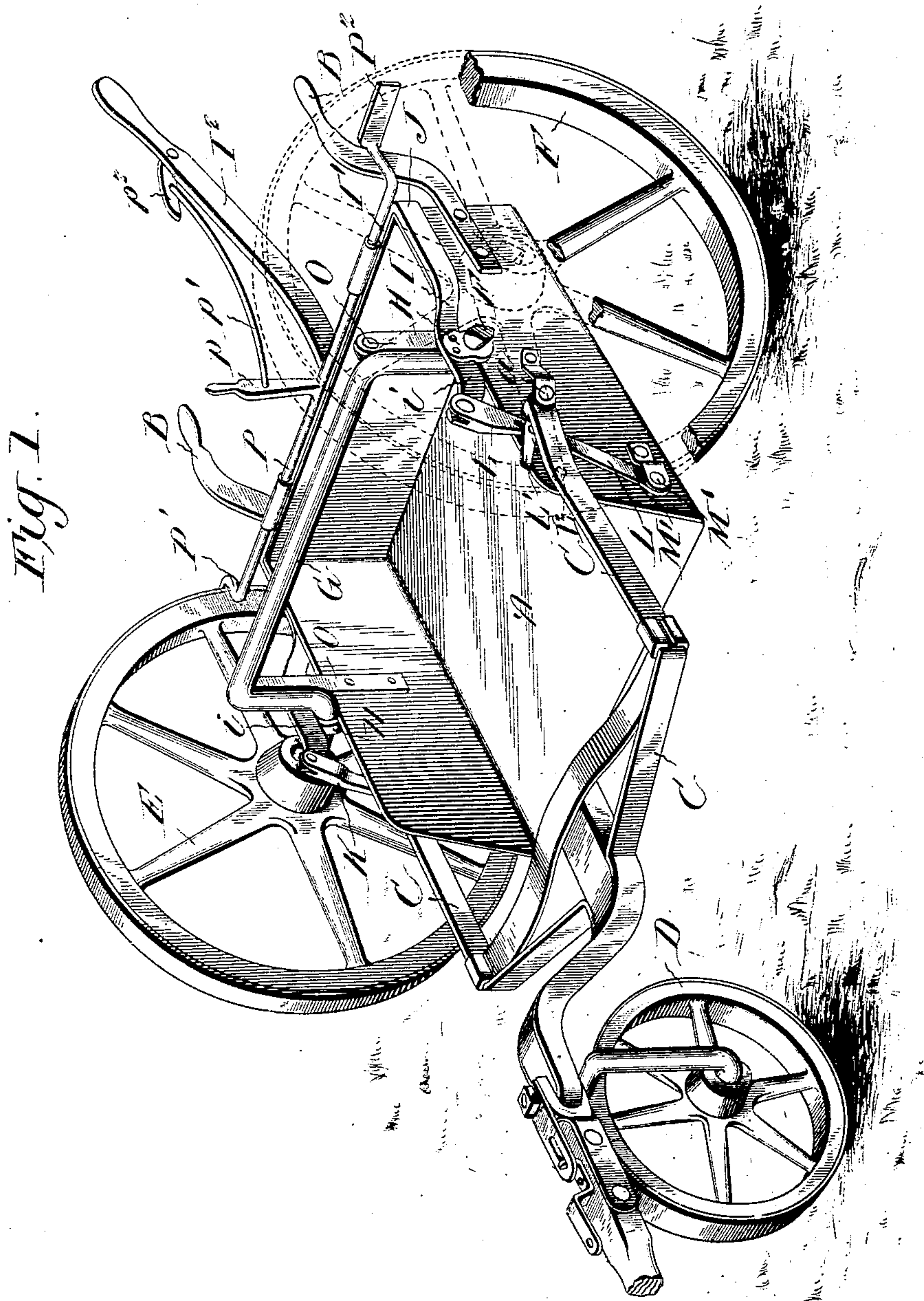
PATENTED DEC. 1, 1903.

J. J. GYLDENBORG.
WHEELED SCRAPER.

APPLICATION FILED APR. 21, 1903.

2 SHEETS—SHEET 1.

NO MODEL.



WITNESSES:

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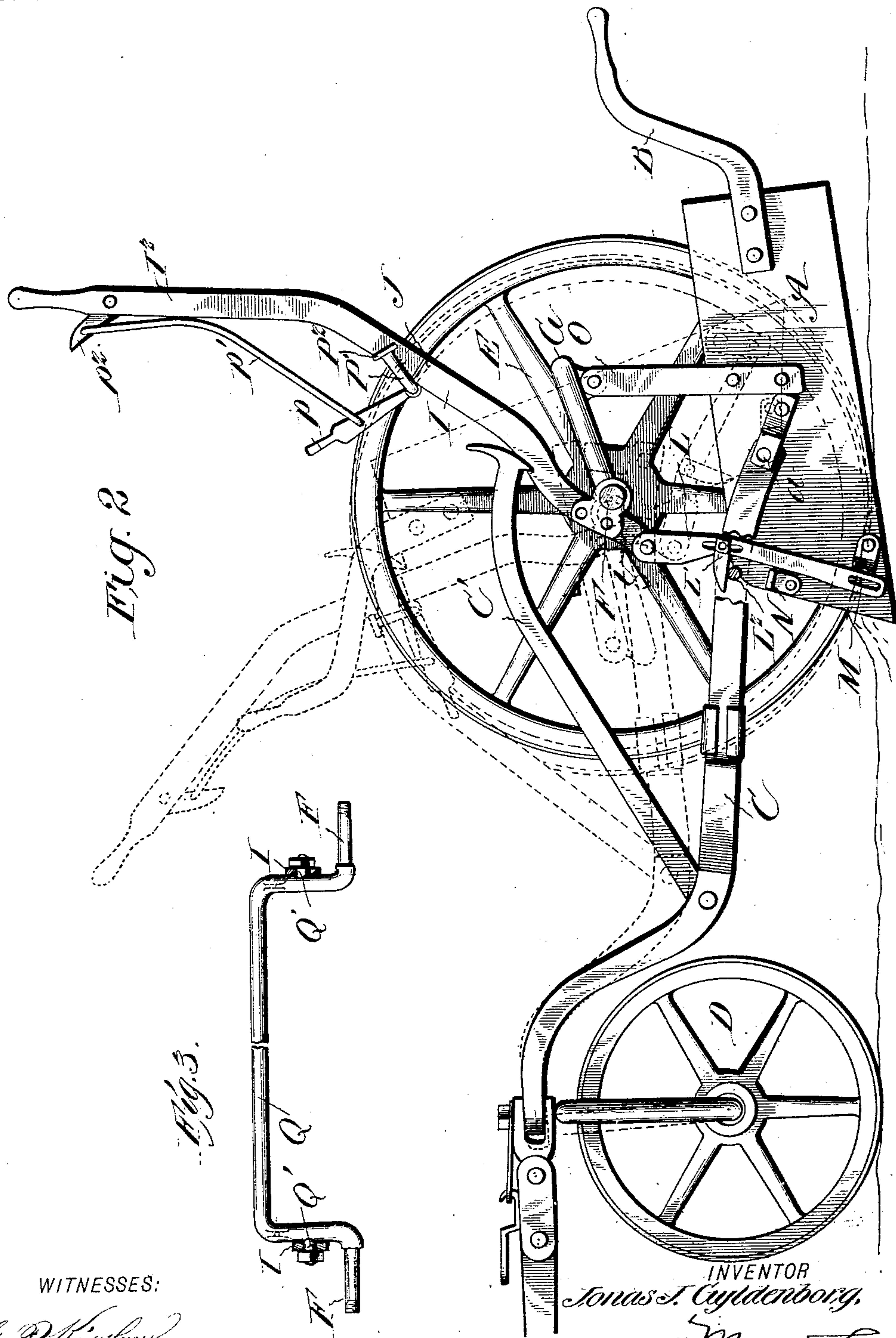
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2 SHEETS—SHEET 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JONAS J. GYLDENBORG, OF HILLHOUSE, MISSISSIPPI.

WHEELED SCRAPER.

SPECIFICATION forming part of Letters Patent No. 745,826, dated December 1, 1903.

Application filed April 21, 1903. Serial No. 153,631. (No model.)

To all whom it may concern:

Be it known that I, JONAS J. GYLDENBORG, a citizen of the United States, residing at Hillhouse, in the county of Coahoma and State of Mississippi, have made certain new and useful Improvements in Wheeled Scrapers, of which the following is a specification.

My invention is an improvement in wheeled scrapers, and has for an object to provide a scraper especially designed for use in building levees and other embankments and in which the scoop will ride high, will be easy to load in hard or soft material, can be easily dumped, can be lifted out of the ground by the draft of the team, will be simple in construction, strong, durable, and easily repaired; and the invention consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a scraper embodying my invention. Fig. 2 is a side elevation of the scraper, one of the wheels being removed; and Fig. 3 shows a somewhat-different construction of crank-axle.

My present invention is an improvement in that class of wheeled scrapers represented by the scraper shown in my Patent No. 713,982, granted November 18, 1902, the present invention simplifying the construction and providing for improved operations, as will be described.

The scoop A may be generally of the ordinary form, having the handles B at its rear end and pivoted near its front end at *a* to the rear end of the draft-frame C, the latter being supported at its front end on the pilot-wheel D, the draft-frame also carrying the latch C' for holding the parts in the position shown in Fig. 2.

The wheels E are on the spindles F of the crank-axle or arch G, and to the side arms of the said axle I joint at H the side bars I of the main lever J, the front arms *i* of the side bars of which lever are connected, by the links K and L, with the opposite sides of the scoop near the front end of the latter, the connection between the links and the scoop being slidable slightly by slotting the links at M to receive the bolts M', connecting them with the scoop, as shown in Fig. 2. The links K and L abut lateral lugs N on the scoop, so the

latter is held from rearward movement, and a forwardly-projecting arm L' in the link L overlies a projection L² on the draft-frame and prevents the front end of the scoop from dipping too far when the parts are in the position shown in Fig. 2.

The arched axle is connected in rear of the spindle-arms by the hangers O with the scoop, such hangers being rigidly secured to the scoop at points slightly in rear of the pivotal connection of the scoop with the draft-frame and being so arranged relatively to the other parts that when the scoop is in the position shown in Fig. 1 the hangers O will rest close against the rear sides of the upright portions of the arched axle, as shown in Fig. 1.

The main lever J has its side bars I connected at their rear ends by a cross-bar I', forming a bail to fit around the rear side of the scoop in the position of parts shown in Fig. 1. The lever-handle I² projects rearwardly from the middle of bar I'. The brake-bar P is journaled to the lever-bail and extends along the cross-bar I' and is provided at its ends with the crank-arms P', having the shoes P² to engage the wheels E. This bar P has a handle-lever *p*, which may be operated directly, if desired, and is connected by a link *p'* with a short operating-lever *p*² on the handle I² of the main lever near the handhold of said lever I², as shown in Figs. 1 and 2 of the drawings.

In full lines, Fig. 2, the scoop is shown with its several parts in position for filling the scoop. If when the scoop is filled the operator pulls the main lever down to the rear, it will lift the front end of the scoop from the ground, and as the team moves forward the direct draft on the scoop by the connection of the draft-frame therewith at *a* will pull the scoop forward, causing its hangers O to lift the axle arc to the position shown in Fig. 1, and the main-lever bail will fit down in rear of the upper edge of the scoop, as shown in Fig. 1, the scoop being thus held high above the ground, so it can be conveniently carried to any desired point.

The construction and arrangement of the brake-bar is important in that the first time that I throw the main lever up in unloading the scoop puts the arc of the axle in such a shape that it is a self-elevator. As soon as I

break the load from the ground I pull on the brake-bar with the main lever and stop the wheels from turning, so that the team has to load up from the ground of itself and put
 5 the main lever to its place ready to be latched or unlatched without any strain upon the man who is holding the main lever. When the wheel-scraper is loaded and ready for transportation to the place for dumping, the operator will hold the brake-bar, and the wheels
 10 will tip the load and dump it over. The second handle of the brake-bar can be held by the driver to hold the scoop down, so there will be no weight upon the neck of the team
 15 in going down steep sides of levees or railroad-embankments.

The connection with axle and main lever may be arranged to work on small rollers, forming an antifriction-bearing.

20 The hangers connected to the main lever and to the front part of the scoop have open slots M, forming a slide which helps the main lever to raise the arc of the axle and let the scoop down in position for loading, and the
 25 same slide makes the dip of the scoop catch on the hook L', so as to be connected to the hanger, and then can be moved up and down to catch the stopper of the pulling-frame.

The hook L, connected with the hanger, is
 30 adjustable, so it can be moved up and down to regulate the dip of the scoop in different material, such as sand, clay, gravel, or any other dirt.

In Fig. 3 I show a somewhat-different construction of crank-axle from that shown in
 35 Figs. 1 and 2. The axle shown in Fig. 3 provides for supporting the scoop above the spindle F. To this end the axle Q in Fig. 3 is provided above the spindles F with studs Q'
 40 for the main levers. This construction may be preferred when working in certain grounds to enable me to let the scoop down lower in loading and to raise it higher in traveling, as may be desirable when using the machine on
 45 soft or muddy ground.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The improvement in wheeled scrapers
 50 comprising the arched axle and its wheels, the scoop, the draft-frame connected with the scoop, the hangers fixed at their lower ends to the scoop and jointed at their upper ends to the arched axle and arranged to abut and
 55 lie against the rear sides of the arms of said axle in the elevated or carrying position of the scoop, the main lever having a bail to fit

around the rear side of the scoop and provided with a handle-lever, and having its side arms jointed to the axle and extending
 60 in advance thereof, the links connecting the front ends of the said arms with the scoop and slidably connected with the latter, the projections on the scoop to underlie the draft-frame, the projection on one of the connecting-links to abut a projection on the draft-frame, the brake-bar journaled to the main lever and having crank-arms provided with
 65 brake-shoes to engage the wheels, the handle-lever on the brake-bar, a brake-lever on the handle of the main lever, and a connection between the said handle-bar and brake-lever, substantially as set forth. 70

2. The combination of the draft-frame, crank-axle, the wheels, the scoop, the main lever jointed to the axle and connected at its front end with the scoop, hangers connecting the axle with the scoop, and the brake-bar carried by the main lever, and having shoes to engage the wheels, substantially as set forth. 75 80

3. A machine comprising the crank-axle having spindles and the studs above the spindles and providing pivotal supports for the main lever, the main lever pivoted at such
 85 points and in connection with the crank-axle, the scoop connected with the front end of the main lever, and supporting connections for the rear end of the scoop, substantially as set forth. 90

4. A scraper having a crank-axle, a scoop connected therewith, a main lever, operatively connected with the scoop, the wheels and the brake-bar carried by the lever and arranged to operate on the wheels, substantially as set forth. 95

5. The combination with the scoop and the crank-axle of the main lever and the links connecting the front end of the main lever with the scoop and slidably connected with
 100 the latter, substantially as set forth.

6. The combination of the crank-axle, the main lever, the scoop, links connecting the front end of the scoop with the front end of the main lever, and hangers fixed at their
 105 lower ends to the scoop and jointed at their upper ends to the axle and arranged to abut and lie against the rear side of the axle crank-arms in the carrying position of the scoop, substantially as set forth.

JONAS J. GYLDENBORG.

Witnesses:

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 J. A. GRADY.