

M. W. FARBER.
Scraper.

No. 232,396.

Patented Sept. 21, 1880.

Fig. 1.

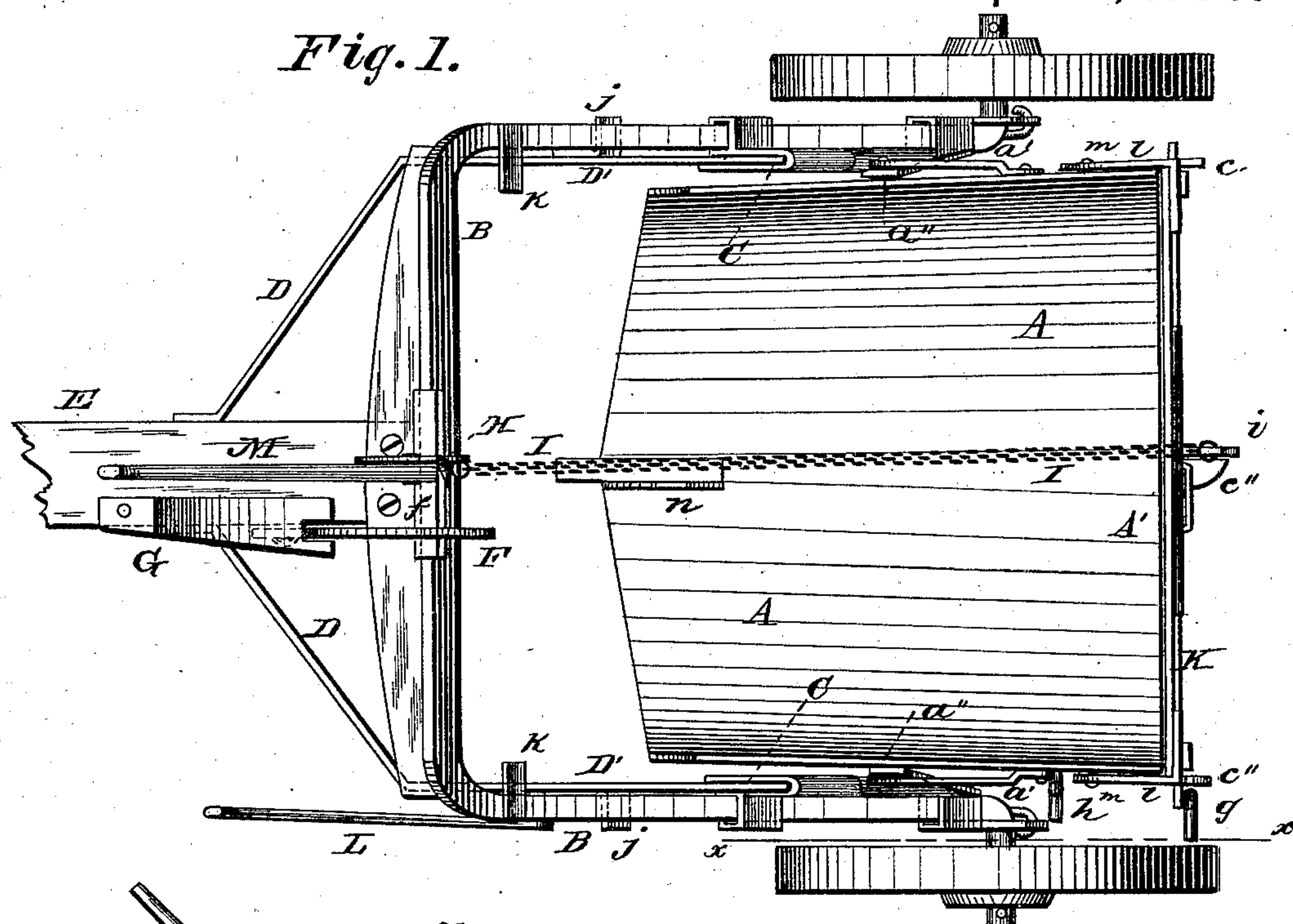
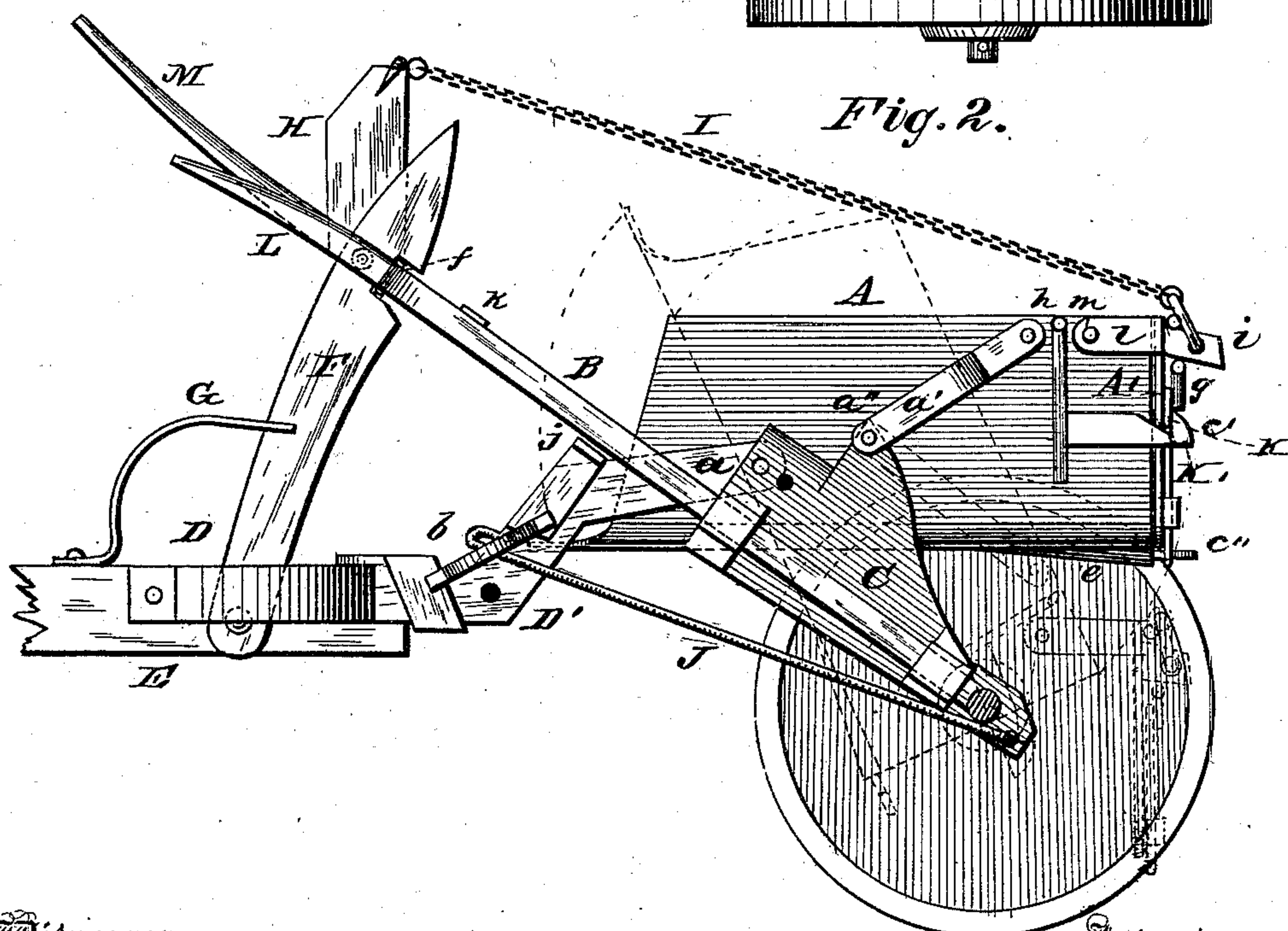


Fig. 2.



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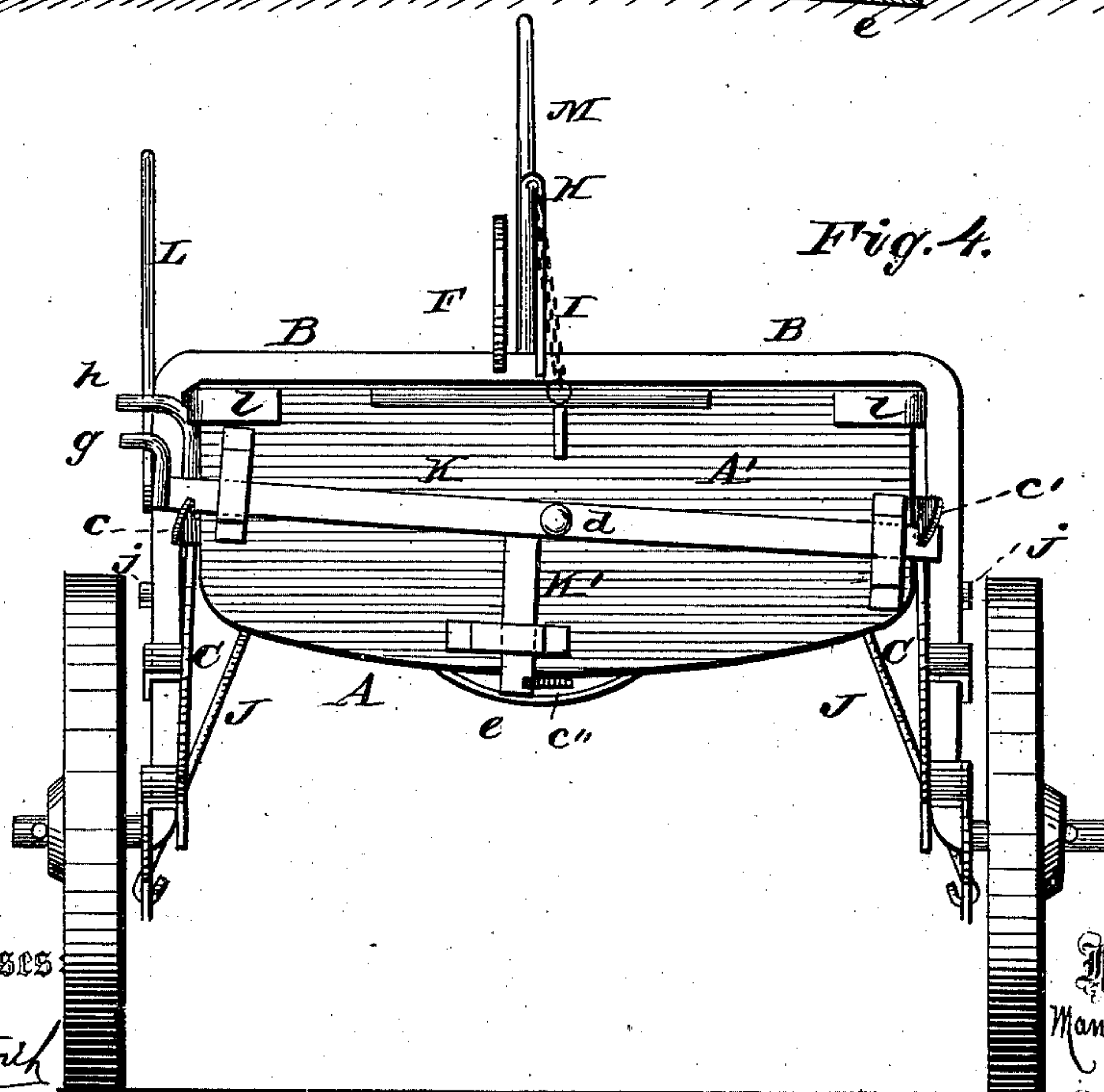
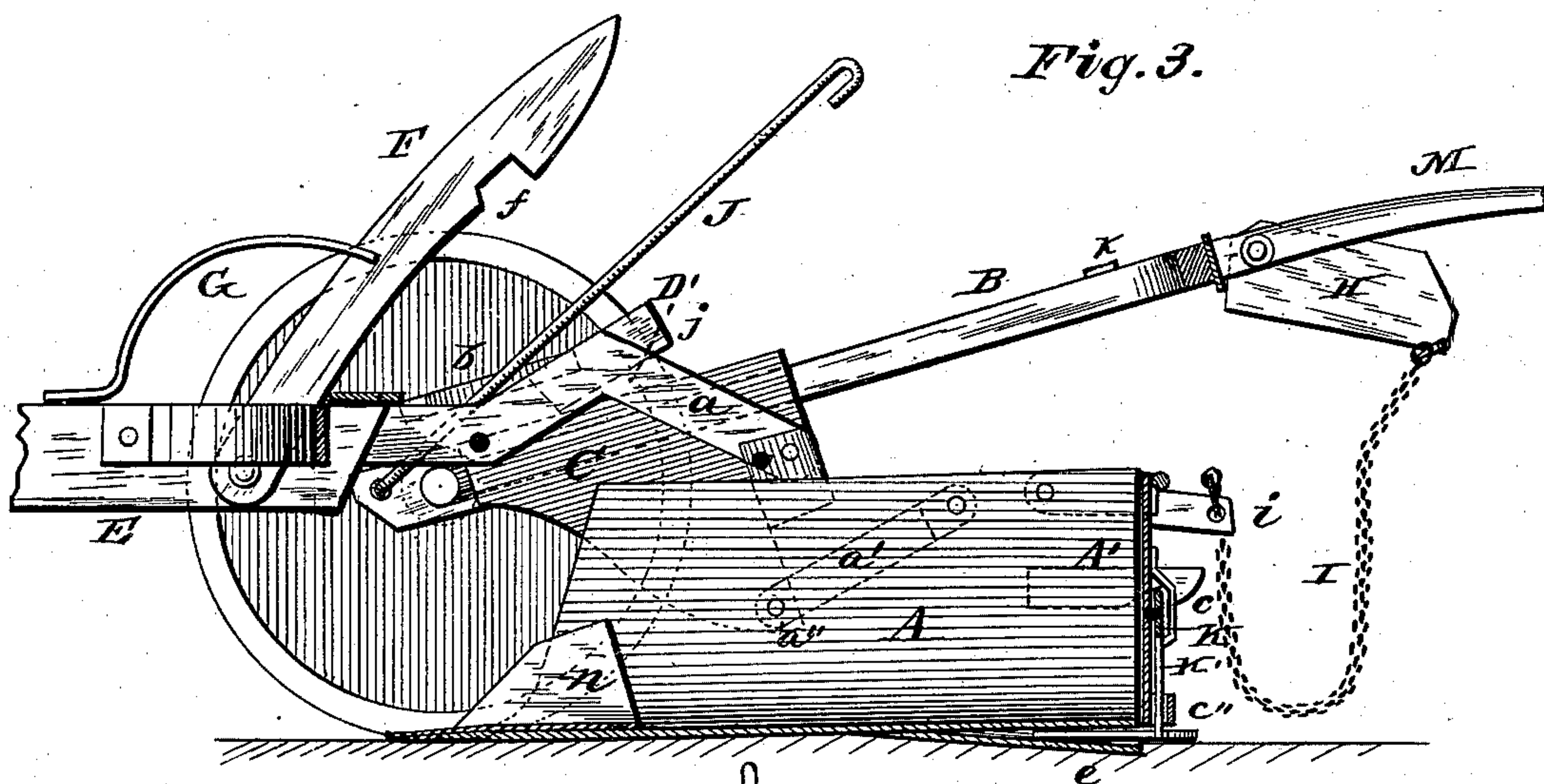
Per C. H. Watson & Co. Attorneys.

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2 Sheets—Sheet 2.

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UNITED STATES PATENT OFFICE.

MANNASSEH W. FARBER, OF MOUNT PLEASANT, IOWA, ASSIGNOR TO
RACHEL FARBER, OF SAME PLACE.

SCRAPER.

SPECIFICATION forming part of Letters Patent No. 232,396, dated September 21, 1880.

Application filed February 4, 1880.

To all whom it may concern:

Be it known that I, MANNASSEH W. FARBER, of Mount Pleasant, in the county of Henry and State of Iowa, have invented certain new and useful Improvements in Scrapers; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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 letters of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in wheel-scrapers, for the purpose of more conveniently loading and unloading and operating the several parts, as will be hereinafter more fully set forth.

In the annexed drawings, Figure 1 is a top or plan view of the scraper elevated for traveling with its load; Fig. 2, a side elevation of the machine in the same condition with the wheel removed at line *xx* of Fig. 1; Fig. 3, a longitudinal vertical section with the scraper lowered for receiving its load, and Fig. 4 a rear elevation with the scraper elevated, as in Fig. 1.

In the drawings, A indicates the scraper; A', the hinged tail-board; B, bent axle or frame; C, axle-plates; D D', braces; E, tongue or draft-pole; F, latch; G, spring for operating and holding the latch; H, arm or projection on the axle; I, chain connecting the axle with the tail-board; J, draft-braces; K K', lock-lever for tail-board; L M, handles; *a*, rear connection of the braces D D' with the plates C; *a'*, guide for holding the scraper when in the position shown in Fig. 3; *a''*, pivotal connection of the scraper with the plates C; *b*, guide for the rods J; *c c' c''*, tail-board catches; *d*, pivot of the lock-lever; *e*, guard for the lower tail-board catch; *f*, catch in latch F; *g*, handle for operating the latch-bar K; *h*, handle for tipping or otherwise managing the scraper; *i*, projection on upper edge of tail-board to which the chain I is attached; *l m*, hinge and pivot of the tail-board; *j k*, stops to limit the movement of the axle; *n*, cutter or divider at front point of the scraper.

The scraper is made of iron or steel, as shown;

but the sides may be made of wood, if desired. The front edge of the scraper is carried forward in the middle, tapering gradually toward the sides, as shown in Fig. 1. The forward point is provided with a cutter or divider, *n*, which divides the dirt or earth being scraped in. It also prevents the point from clogging with weeds or grass-roots, and it also assists in breaking up the earth and preventing it from sticking when used in wet places. The rear end of this scraper is wider than the front, having a gradual taper from front to rear, which taper prevents side friction while loading, and prevents the sticking of the load to the sides when it is to be dumped. I consider this feature important for the reasons stated. The bottom of the scraper is made in the form of an oval concave, as shown in Fig. 4, which form causes the scraper to run in the ground and load more easily, and also tends to keep the load in the middle. The rear end of the scraper is provided with a tail-board, A', made to fit its form, and is hinged at the upper edge by the strap-hinges *l*, which pass around under the sides, and are pivoted at *m*, as shown in Fig. 2. This form and arrangement of hinge throw the tail-board up when it is swung, so as to clear it from any earth in the scraper which might project above its sides and prevent the discharge thereof in case it should come in contact with the tail-board.

The tail-board is locked in position by the bar K, which has a downward-projecting arm, K'. This bar swings upon the central pivot, *d*, so that by raising it with the handle *g* it becomes disengaged from the catches *c c' c''* by a single movement, and is relocked in all three catches by a single downward movement at the handle *g*.

The under side of the scraper is provided with a projection or guard, *e*, which prevents the catch *c''* from being broken when loading the scraper. The tail-board is also provided at its upper edge with a rearward-projecting bar, *i*, to which the chain I is attached.

The scraper is pivoted to the plates C at *a''*. The plates C are made in the form shown, and are attached to the axle B by suitable sockets or clips.

The axle B is made with a long bend, as shown, so that when moved it will pass to the front or rear of the scraper without coming in contact therewith. Its lower ends are turned outward to form spindles for the wheels, which wheels may be common wagon-wheels, or may be specially made for this purpose.

The axle or plate C is made to extend a little to the rear of the wheel-spindles, and to this projection the draft-rods J are attached. These draft-rods extend forward through the opening made by the guide-plates *b*, or in other suitable manner, and their front ends are provided with hooks which engage with the bent part D' of the tongue-braces D, which support the draft-pole when the scraper is elevated for traveling or carrying a load, and becomes disengaged and slips through the guides when the scraper is thrown back for loading, as shown in Fig. 3.

The latch F is pivoted to the rear end or to one side of the draft-pole, as may be found convenient, and is held in place when locked by the spring G, which is also attached to the draft-pole. This latch is made strong, and holds the axle B in place when it is thrown forward to elevate the scraper, and holds it up.

The axle B is provided with stops *j*, which come in contact with the draft-braces when it is thrown forward, and it is also provided with stops *k*, which prevent the rear end of the scraper from rising too high while it is being loaded.

The axle is also provided with levers or handles L M, either of which may be used in elevating the scraper, and the handle or lever M may be used by the attendant to assist in keeping the axle down if the tendency of the rear end of the scraper to rise is too strong for the weight of the machine.

The machine may be provided, if desired, with a driver's or attendant's seat, or it may be operated from the ground.

In operation the scraper is thrown down and back, as shown in Fig. 3, for loading. When it has been filled, by being drawn forward the axle B is thrown over and forward into the position shown in Fig. 2, which movement, by reason of the peculiar construction of the plates C, elevates the scraper and carries it

forward so that its weight rests lightly forward of the wheel-spindles, giving it an easy draft and a light weight upon the team. The scraper is prevented from tipping backward when in this position by the chain I, and the draft is taken from the pivot *a''* and carried by the rods J, so that there is no strain upon the scraper-pivots. When the load is to be dumped the lock-lever K is swung upon its pivot so as to disengage it from the catches when the rear end of the scraper is carried down by its weight or pushed down by an attendant at the rear end, and as the chain I is attached to the arm *i* this movement of the scraper opens the tail-board, and by reason of the peculiar construction of the hinges *l* carries it up out of the way, so that the load is free to be discharged. The height or depth at which the scraper is to be operated may be in part regulated by the width of the plate C or by the diameter of the carrying-wheels.

It is evident that the plate C and axle B may be made in one piece, if desired.

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

1. The combination of the swinging axle B and plate C with the pivoted scraper A, substantially as specified.

2. The combination of the axle B with the rods J and braces D D', substantially as and for the purpose set forth.

3. The combination of the scraper A, plates C, axle B, rods J, and latch F, substantially as described.

4. The locking-bar K, having the arm K' and tail-board A', with the scraper A and catches *c c' c''*, substantially as specified.

5. The combination of the tail-board A', hinged as described, and having the rearward-projecting bar *i*, with the chain I, pivoted arm H, and axle B, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

MANNASSEH W. FARBER.

Witnesses:

LEONARD W. PARKER,
THEO. MILTONBERGER.