

(No Model.)

F. W. HUBBARD.
WHEELED SCRAPER.

No. 332,532.

Patented Dec. 15, 1885.

FIG. I.

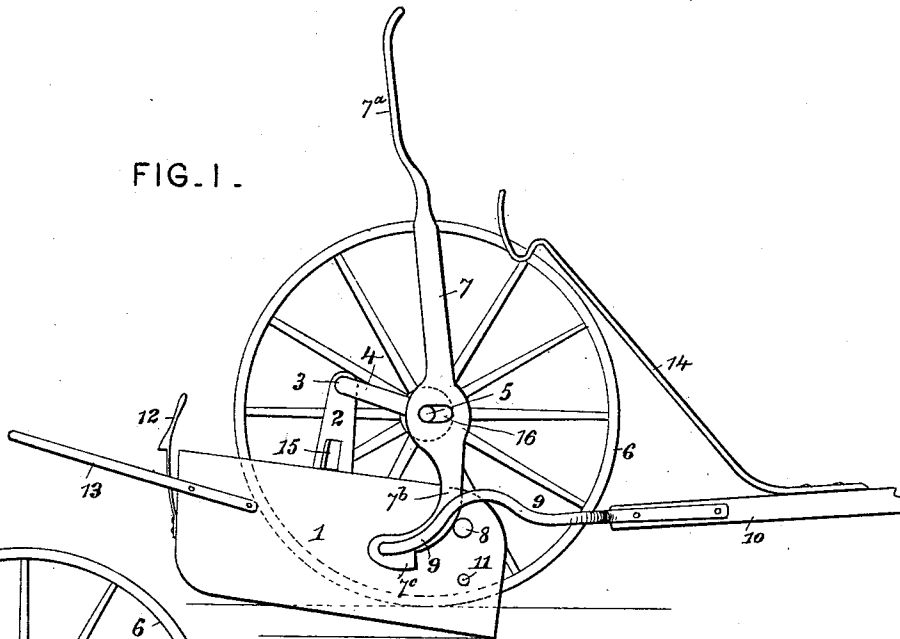


FIG. II.

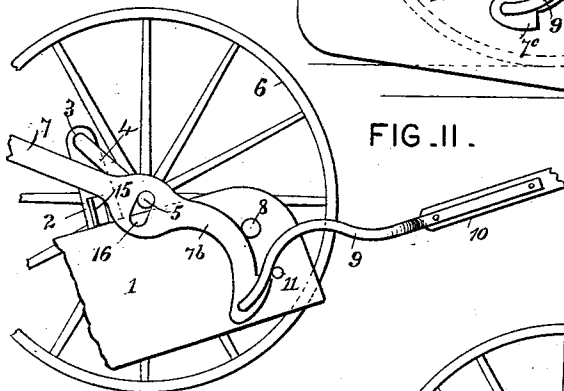
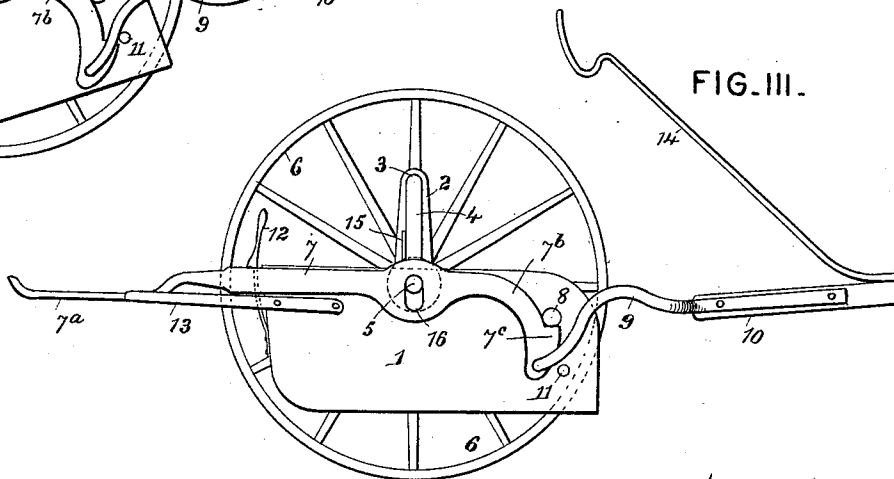


FIG. III.



Attest:

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UNITED STATES PATENT OFFICE.

FRED W. HUBBARD, OF COLUMBUS, OHIO, ASSIGNOR TO THE KILBOURNE
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WHEELED SCRAPER.

SPECIFICATION forming part of Letters Patent No. 332,532, dated December 15, 1885.

Application filed June 18, 1885. Serial No. 169,092. (No model.)

To all whom it may concern:

Be it known that I, FRED W. HUBBARD, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a new and useful Improvement in Wheeled Scrapers, of which the following is a specification.

This invention relates to a wheeled scraper having the customary crank-axle for lifting the scraper-bowl from its filling to its carrying position, the operating parts being so constructed and arranged that the yoke portion of the axle rises in lifting the bowl by a forward movement, so that the lifting is imparted by a nearly direct pull of the team.

The invention consists in constructing the operating-lever with curved ends to engage with studs on the scraper-bowl, and connecting the draft-hounds with the curved ends of the said lever in such a manner that while the lever is in vertical position a direct pull is imparted to the scraper for filling it, and when the lever is drawn backward the bearing between the curved ends of the operating-lever and the draft-studs on the scraper-bowl is thrown out of the direct line of draft, so as to lift the front of the scraper-bowl, and subsequently the entire bowl, supplemental studs being provided to afford a vertical fulcrum-point for the hounds, by which the scraper-bowl is balanced and a lifting force applied to its rear end, as hereinafter described.

In order that the invention may be clearly understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure I is a side elevation of the improved scraper with one wheel removed, showing the parts in filling position. Fig. II is a similar view showing the scraper-bowl partially lifted, and Fig. III is a similar view showing the parts in carrying position.

The scraper-bowl 1 is provided with hangers 2, by which it is suspended from the central or yoke part, 3, of a crank-axle, having arms 4 and wrists 5, on which are formed journals for the carrying-wheels 6. On these wrists 5 are fulcrumed the arms 7 of the operating-lever, which are united at their upper rear extremities in a handle, 7^a. The

lower or forward extremities of the lever-arms 7 are curved, as shown at 7^b, and have hinged to them the draft-hounds 9, which are connected in front to a tongue, 10, in customary manner. The curved ends 7^b of the lever-arms engage with studs 8 on the sides of the scraper-bowl, so as (when the combined levers are in vertical position, as shown in Fig. I) to impart a direct forward pull to the bowl, or, if desired, a slight downward pressure, and when said levers are drawn partially down, as shown in Fig. II, an upward pressure for lifting the bowl, and when the levers are in horizontal position, as shown in Fig. III, engaging beneath the studs to afford a positive support thereto. A second pair of studs, 11, are provided in front and below the draft-studs 8, which, when the combined levers are drawn backward, as illustrated in Fig. II, form a fulcrum for the draft-hounds 9, so as to lift the scraper-bowl by the power of the team, until the rotation of the axle is arrested by the contact of stop-lugs 15 with the crank-arms 4. In order to facilitate the movement of the combined levers 7 to change the position of the hounds 9 and the curved lever ends 7^b relatively to the studs 8, each member of the yoke-lever is provided with transverse slots 16, by which they are mounted on the journals 5. A spring-catch, 12, on the rear of the bowl engages with the transverse connecting-arm of the levers 7 when these are drawn down to horizontal position, and at the same time studs 8 rest on the shoulders 7^c at the forward ends of the levers, so that the loaded bowl is supported in front and behind. One or more rigid handles, 13, project backward from the scraper-bowl, for tipping it or working it, as may be necessary, while in action.

A spring-catch, 14, connected with the tongue, holds the scraper-bowl in dumping position when the said bowl is partially inverted for this purpose, by lifting on its rear end in customary manner by means of the hand-lever 7^a when engaged with the spring-catch 12. As is common with this class of machines, the dumping is effected by thus lifting on a rear lever to a sufficient extent to throw the nose of the scraper in contact with the

the ground, when the power of the team inverts it sufficiently for discharging its contents.

5 Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

10 1. In a wheeled scraper having a crank-axle, a yoke-lever, to which the hounds are attached, fulcrumed on the axle-arms and having curved ends bearing under studs on the sides of the scraper to lift the front by the power of the team when thrown out of the center or line of draft, substantially as set forth.

2. In a wheeled scraper having a crank- 15 axle, the combination of a yoke-lever fulcrumed on the arms of said axle, and having curved ends to which the hounds are connected, and studs, one receiving the forward draft on the scraper, and the other serving as 20 a fulcrum for the hounds, to assist in lifting the scraper, as explained.

FRED W. HUBBARD.

Witnesses:

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A. E. TRUMBULL.