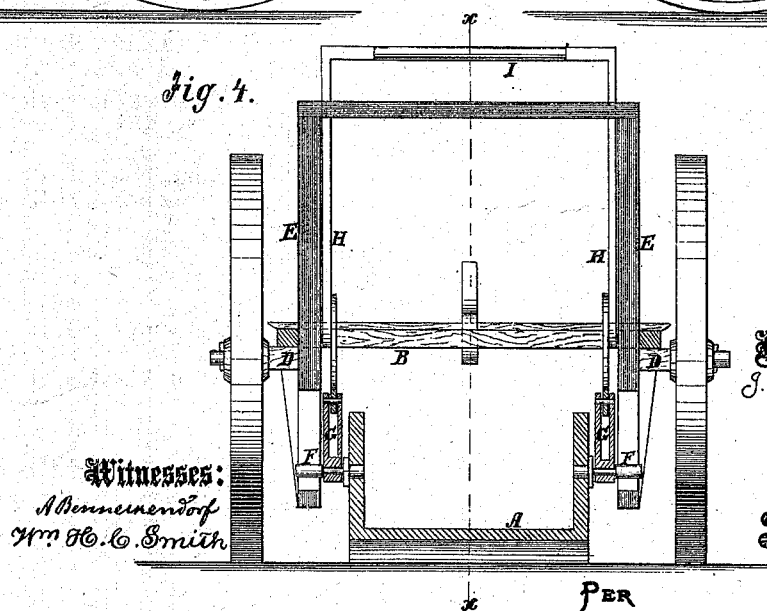
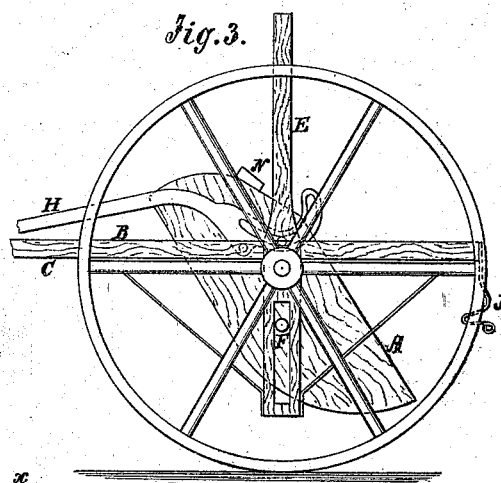
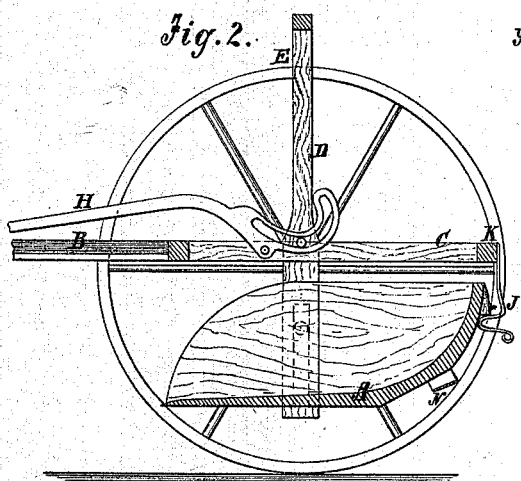
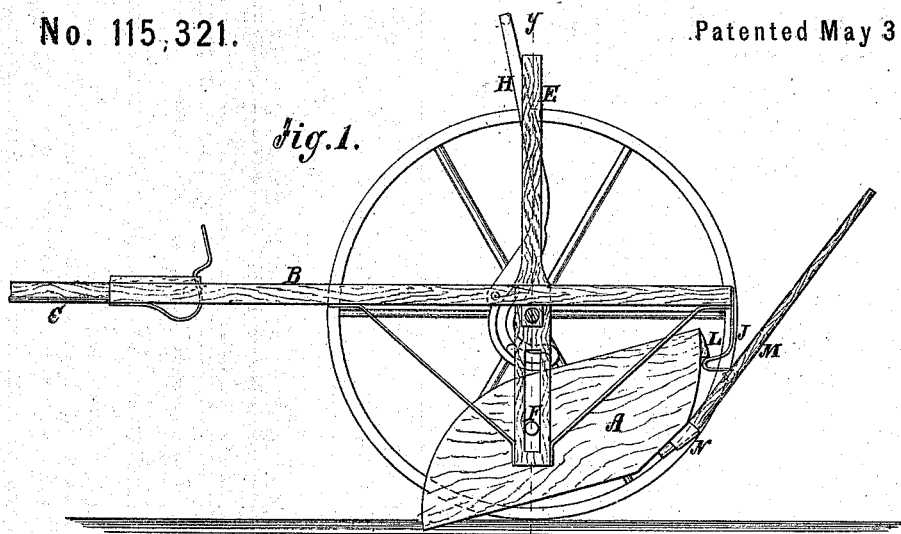


J. B. HULBERT.

Improvement in Self-Loading and Dumping-Carts.

No. 115,321.

Patented May 30, 1871.



Inventor:
J. B. Huebert.

Mumf
Attorneys.

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UNITED STATES PATENT OFFICE.

JEROME B. HULBERT, OF HERMON, NEW YORK.

IMPROVEMENT IN SELF-LOADING AND DUMPING CARTS.

Specification forming part of Letters Patent No. 115,321, dated May 30, 1871.

To all whom it may concern:

Be it known that I, JEROME B. HULBERT, of Hermon, in the county of St. Lawrence and State of New York, have invented a new and useful Improvement in Self-Loading and Dumping Cart; 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 make and use the same, reference being had to the accompanying drawing forming part of this specification.

The object of this invention is to provide convenient means for removing earth and gravel in the construction of embankments, and in excavating, and for all purposes for which the machine may be adapted; and it consists in a box or scraper and frame-work and attachment thereto, supported on wheels, the scraper being made to load and dump itself as the wheels move forward, the arrangement and operation being as hereinafter more fully described and specified.

In the accompanying drawing, Figure 1 represents a side view with one wheel off, showing the box or scraper as being loaded. Fig. 2 is a vertical section of Fig. 4, taken on the line *x x*, showing the scraper filled and as being transported or moved. Fig. 3 is a side view, showing the scraper reversed and the earth dumped. Fig. 4 is a vertical section taken on the line *y y* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the scraper or box of the cart. B is a platform, supported on the shafts C C. D D are the axles or arms of the wheels supported beneath the shafts by the uprights E E. The lower portions of the uprights E E (which uprights are rigidly attached to the shafts) are slotted, as seen in the drawing. F F are trunnions, firmly attached to the sides of the scraper, from which the scraper is suspended and on which it turns. G G are links which take hold of the trunnions between the sides of the scraper and the uprights, as seen in Fig. 4. H H are slotted cam-levers, the form of which cams is seen in Fig. 2. These cam-slots receive the upper ends of the links. The outer ends of these cam-levers are connected

together by the bar I, by means of which the levers and cams are operated simultaneously by the driver, who stands on the front part of the platform. J is a spring-catch on the cross-piece K, (which connects the rear ends of the shafts together,) which catch supports the rear of the scraper or balances it on the trunnions. L is a lug on the back of the scraper, which engages with the catch. M is a lever (one or more) inserted into a socket or sockets, N, on the rear end of the scraper, by means of which the scraper may be guided or kept steady by an attendant in loading and carrying. These levers are readily slipped out when the scraper is to be reversed or dumped.

When the scraper is to be loaded the bar I is raised, as seen in Fig. 1, which action carries the trunnions down the cam-slots in the levers H H and lowers the edge of the scraper. A forward movement loads the scraper. When so loaded the bar I is brought down, as seen in Fig. 2. The rear of the scraper now rests upon the catch J, and may be supported and kept steady by means of the lever or levers M. In this condition the scraper with its load may be transported any required distance.

When it is desired to dump the load the bar I is again raised, which lowers the edge or blade of the scraper so that it will catch in the ground; but as the forward motion of the cart is continued the effect is to reverse the scraper or turn it over and dump the load, as seen in Fig. 3.

The earth leaves the scraper as the latter is moving forward, it is consequently leveled off as it is deposited.

In this example of my invention, it will be seen that the apparatus is adapted to horsepower; but I do not confine myself to any particular kind of motive power. It may be operated by a locomotive or traction steam-engine adapted to common roads, the latter of which I design to use.

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

1. The trunnions F F, in combination with

the cam-levers H H, arranged to operate substantially as and for the purpose described.

2. The slotted upright frame E E, cam-levers H H, bar I, platform B, and spring-catch J, in combination with the box or scraper A, and with a cart arranged to operate substantially as and for the purposes described.

The above specification of my invention
signed by me this 21st day of February, 1871,
JEROME B. HULBERT.

Witnesses:

GEO. W. MABEE,
T. B. MOSHER.