

(No Model.)

2 Sheets—Sheet 1.

J. P. LUYSTER.

APPARATUS FOR SCRAPING AND HEAPING SNOW

No. 368,404.

Patented Aug. 16, 1887.

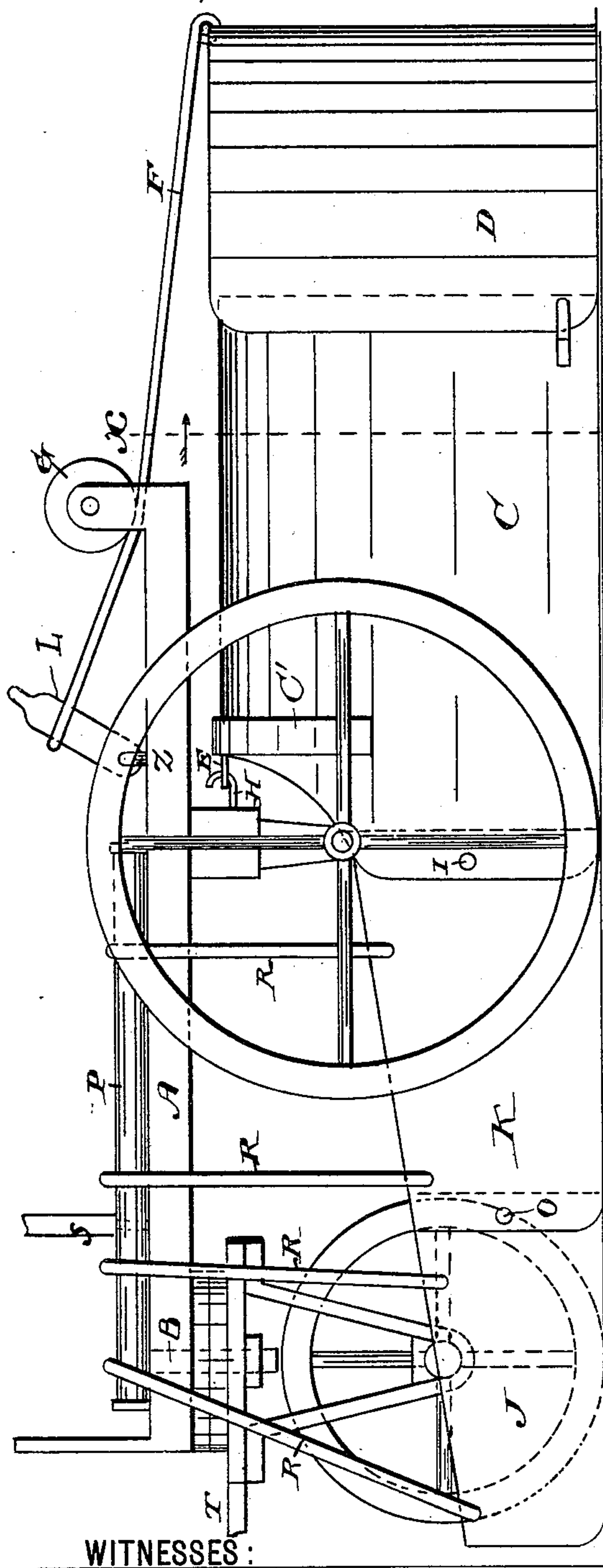


Fig. 1.

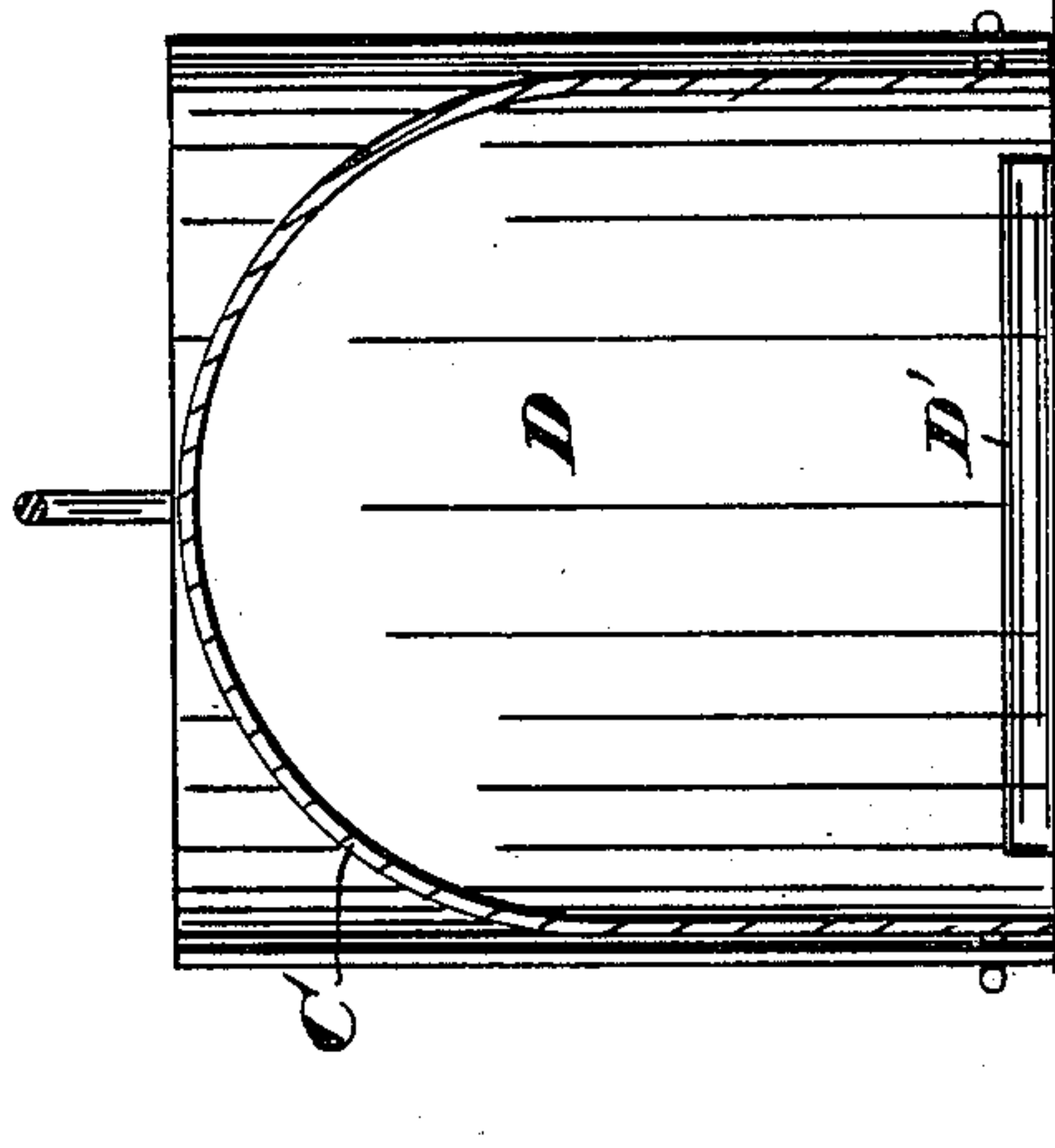


Fig. 3.

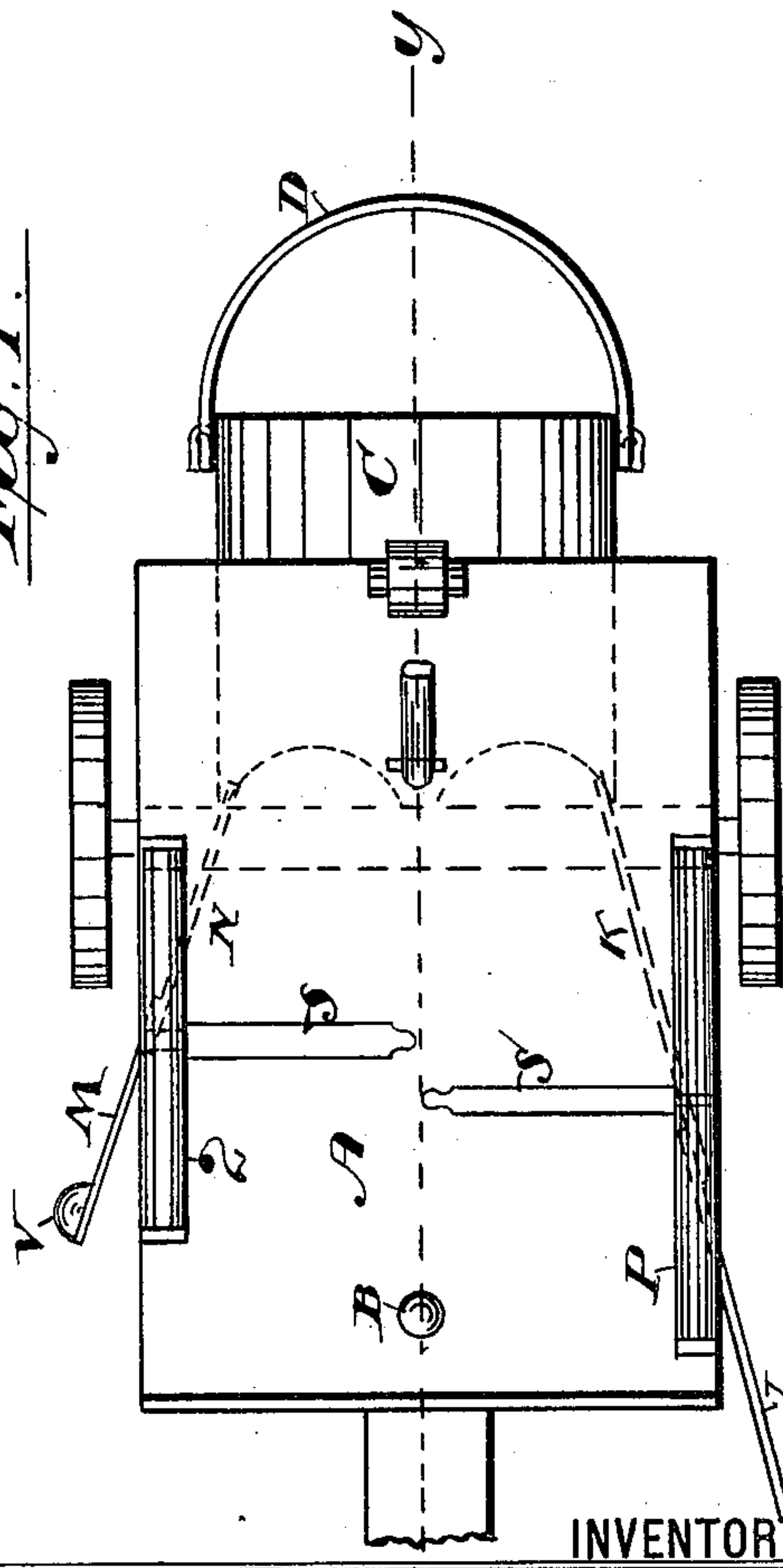


Fig. 2.

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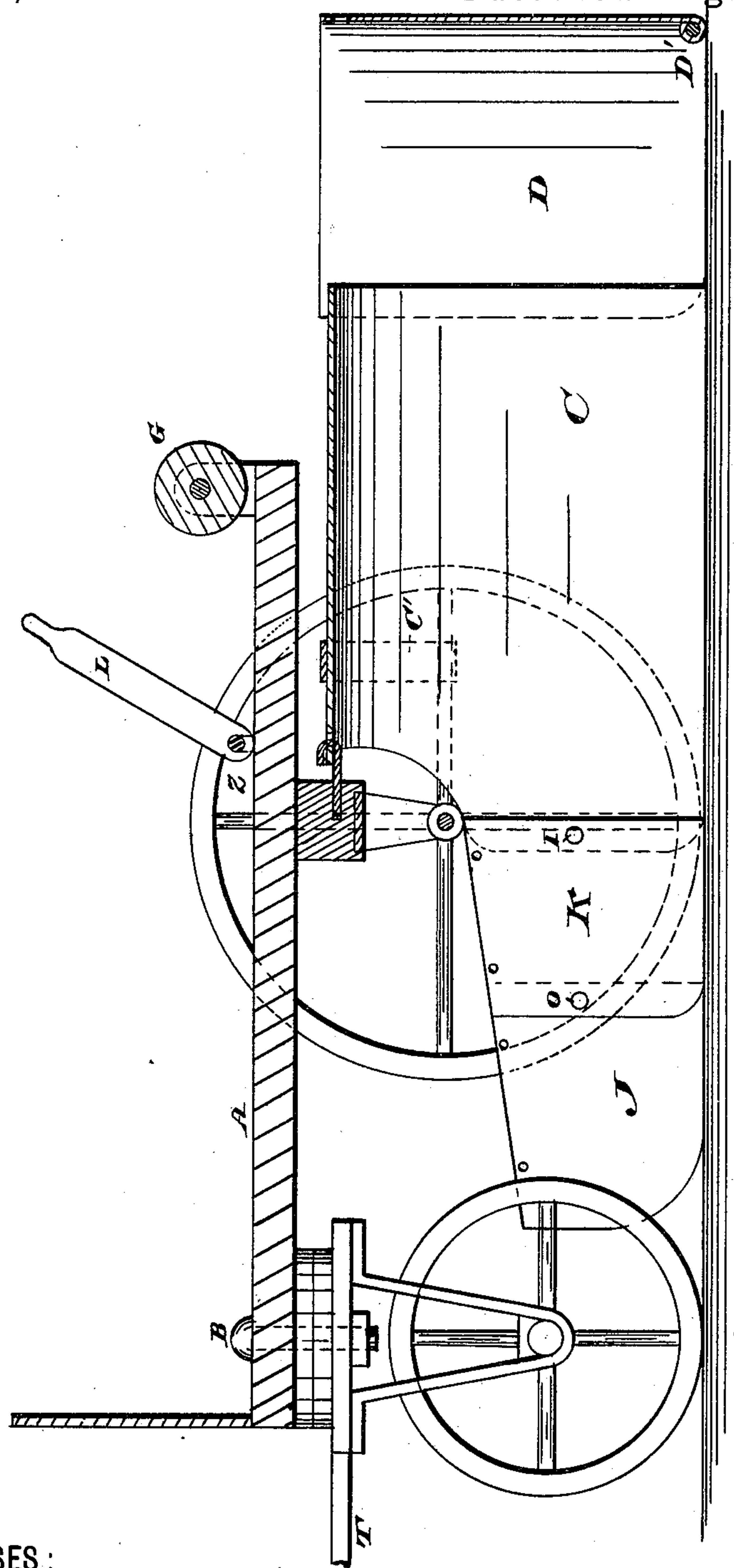


Fig. 4.

WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN P. LUYSTER, OF NEW YORK, N. Y.

APPARATUS FOR SCRAPING AND HEAPING SNOW.

SPECIFICATION forming part of Letters Patent No. 368,404, dated August 16, 1887.

Application filed May 11, 1887. Serial No. 237,796. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. LUYSTER, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Apparatus for Scraping and Heaping Snow; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as 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 letters of reference marked thereon, which form a part of this specification.

In said drawings, Figure 1, Sheet 1, represents a side elevation of the improved device. Fig. 2 is a top or plan of the same, and Fig. 3 is a section through line X of Fig. 1; and Fig. 4, Sheet 2, is a vertical longitudinal section through line Y of Fig. 2.

The object of this invention is to facilitate the removal of snow from streets, and especially from railway-tracks, and from thoroughfares where travel is most likely to be impeded by its presence. To this end I propose by my machine to scrape the snow together rapidly and deposit it in heaps preparatory to loading it upon suitable trucks and removing it or melting it, or disposing of it in any other way preferred.

Referring to the accompanying drawings, A represents a platform mounted upon a three-wheeled truck, the front wheel of which is arranged to turn upon a pivot, B, to facilitate the turning of the truck in any direction. Suspended to the rear of the truck, by means of a hook and eye, H E, is a U-shaped sheet-iron scraper composed of two sections, C D, the rear section of which is hinged to the forward section, as indicated in Figs. 1 and 4. A cable, F, is secured to the back end of the scraper, and passes under a pulley, G, attached to the rear end of the platform A, and is connected to a lever, L, the lower end of which is also attached to the platform, as at Z, as indicated in Figs. 1 and 4, by means of which the rear section of the scraper may be raised and lowered, as indicated, to deposit the snow in heaps, as will be understood upon reference to the aforesaid figures. Pivoted to the forward end of said scraper, as at I, are wings,

also formed in sections J K M N. These sections are also pivoted together, as at O, as will be clearly understood by reference to Figs. 1 and 4.

The object of this construction is to allow the said sections to move vertically when they come in contact with obstructions or uneven surfaces in the streets. Said wings diverge from the points where they are secured to the scraper, so that their outer ends are as wide apart as the rear wheels of the truck, or they may be even wider, if desired, and are connected with rollers P Q, Figs. 1 and 2, attached to the sides of the platform by means of suitable ropes or chains, R, by means of which said wings are prevented from spreading apart, and by which, also, they may be raised or lowered, as desired, by simply turning said rollers, each of which is provided with a lever, S, for the purpose, as will be understood by reference to Figs. 1 and 2. Said levers L and S may be operated by the driver or by an assistant, as will be understood. The truck is provided with a suitable pole, T, so that it may be drawn by a team of horses.

One of the wings, as will be observed by reference to Fig. 2, is shorter than the other, and is provided with a rounded projection, V, to prevent any injury thereto should it come in contact with the curb of the sidewalk.

The machine is operated as follows: When a sufficient amount of snow has been collected in its forward movement, the rear section of the scraper is drawn upward by means of the cable, and the snow collected in the scraper is released and deposited in a heap, and as the truck moves forward said rear section is again dropped to the position shown in Figs. 1 and 4 and the operation repeated. In this way snow can be gathered in heaps in front of depots and anywhere else along the highways very rapidly, and may then be removed in any way that is desired.

It will be observed that the rear section, D, of the scraper is rounded at the bottom, as at D', which facilitates its passing over any obstruction in the street without injury. It will also be observed by reference to Figs. 1 and 4 that the sections of the scraper may be strengthened, if desired, by suitable strengthening-ribs, as C'.

Having thus described the invention, what I claim as new is—

1. A machine for scraping and heaping snow, combining therein a truck, a scraper 5 comprising sections, as C D, and wings, as J K M N, and means, as F G L and P Q R S, for raising and lowering the same, substantially as herein set forth.

2. In a machine for heaping and scraping 10 snow, the combination of a scraper composed of two sections, as C and D, hinged together and to the truck, as described, a cable, as F, secured to the rear end of said scraper and connected with the lever L, attached to the plat- 15 form of said truck, and arranged and adapted to operate substantially as and for the purposes set forth.

3. The combination, with a scraper, as C and D, hinged to a truck, as described, of a 20 cable, as F, pulleys, as G, and a lever, as L, arranged and adapted to operate substantially as and for the purposes set forth.

4. The combination, with a suitable truck and a scraper, as C D, hinged thereto, of wings, as J K M N, hinged or pivoted thereto, and 25 means, as R P Q, for holding said scraper in position and for raising and lowering the same, substantially as described, for the purposes set forth.

5. The combination, with a suitable truck 30 and a scraper, as C and D, hinged thereto, of wings, as J K M N, hinged or pivoted thereto, and means for preventing the said wings from spreading, substantially as set forth.

In testimony that I claim the foregoing I 35 have hereunto set my hand this 1st day of April, 1887.

JOHN P. LUYSTER.

Witnesses:

OLIVER DRAKE,
CHARLES H. PELL.