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REFUSE WAGON.

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2 SHEETS—SHEET 1.

INVENTOR

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ATTORNEYS

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To all whom it may concern:

Be it known that I, LEOPOLD F. SCHOLZ, a subject of the Emperor of Austria-Hungary and a resident of the city of New York, 5 borough of Manhattan, in the county and State of New York, have invented a new and Improved Refuse-Wagon, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in wagons for collecting refuse, such as ashes or the like, and particularly relates to the specific means for dumping the material from the barrels into the wagon, without creating any dust or scattering any of the refuse.

An object of this invention is to provide a refuse wagon with a dumper for upsetting the cans or barrels containing the refuse, so that the contents thereof will enter the wagon, said wagon embodying an inclosed casing, so that the dust from the refuse will not pass out into the air surrounding the wagon.

A further object of this invention is to provide a refuse wagon with a dumper normally locked in a predetermined position, adapted to be automatically released by the placing of cans or barrels on the wagon, to be dumped, so that these cans or barrels will be automatically upturned and the contents thereof deposited in the wagon.

These and further objects, together with the construction and combination of parts, will be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a fragmentary side view in elevation, partly broken away to show the underlying structure; Fig. 2 is a perspective view of the dumper, per se, detached from the wagon; Fig. 3 is a detail transverse section, showing the dumper in its position before upturning the barrels or cans; Fig. 4 is a view similar to Fig. 3, showing the cans upset in the act of depositing the refuse into the body of the wagon; Fig. 5 is an enlarged detail transverse section showing the locking mechanism for securing the dumper in position, with the means for releasing the same; Fig. 6 is a fragmentary horizontal section showing the releasing means for the lock which holds the dumper in a normal non-dumping position; Fig. 7 is a rear view of the body of the wagon, partly broken away to show the underlying parts; and Fig. 8 is a detail view of the step running along the side of the wagon.

Referring more particularly to the separate parts of this invention as embodied in the form shown in the drawings, 1 indicates a truck of the wagon, which may comprise a chassis 2, axles 3 fixed to the chassis or frame, and wheels 4 rotatably mounted on the axles 3.

Mounted on the truck 2, so as to be capable of tilting relative thereto, to dump the refuse therefrom, there is provided a wagon body 5, which may consist of an inclosed casing having an outlet 6 normally closed by a door 7, through which the contents of the wagon may be dumped. This door 7 may be locked closed by a lock lever 47.

Any suitable mechanism for elevating the wagon body to a dumping inclination may be provided, such as that indicated at 8.

The wagon body 5, as stated above, is preferably almost entirely inclosed, and is provided with an extension 9 at the upper part thereof, in which is located on the side thereof an opening 10 extending longitudinally of the wagon body, through which the barrels or cans to be emptied can be inserted. For the purpose of supporting the barrels in juxtaposition to this opening 10, there is provided a shelf 11, which extends partly within and partly without the wagon body, as more particularly indicated in Figs. 3 and 4.

For the purpose of upsetting and dumping the cans or barrels, indicated at 95, after once having been inserted in the wagon body, there is provided a dumper 13, which is shown in the form of a rotor rotatably mounted in the casing of the wagon body. This rotor is provided with a platform 14, which in the position shown in Fig. 3 extends in line with the shelf 11, so that the cans or barrels 12 can be readily slid from the shelf 11 to the platform 14. The rotor or dumper 13 is provided at one or both ends with fly-wheels 15, which, it will be noted, are eccentrically weighted at 16, so that they tend normally to assume the position indicated in Fig. 4.

The dumper, however, may be locked in the position indicated in Fig. 3 by a latch 17, which engages under the edge of the shelf.
11, and is normally held in this position by means of a spring 18, which engages a bar 19 slidingly mounted on the platform 14 and connected to the latch 17 by means of a bolt 20, which passes through a slot 21 in the platform 14. It will be noted that inasmuch as the bar 19, which may be termed a tripper, is slidingly mounted on the platform 14, when one or more barrels are shoved in contact therewith and force exerted thereon, they will move from the position shown in full lines in Figs. 5 and 6 to the position shown in dotted lines. This movement will release the latch 17 from engagement with the shelf 11, so that the rotary dumper 18 will automatically rotate under the eccentric weight 16, and upturn the barrels 12, so that the ashes or other refuse matter contained therein may fall into the body of the wagon. It is to be noted that the barrels or cans themselves are prevented also from falling into the body of the wagon by a guard bar 22, which is secured to the dumper or rotor 13 and extends longitudinally of the same in parallel spaced relation from the platform 14. In order that the rotor, in turning from its non-dumping to its dumping position, may seal the opening 10, so that the ashes or other dirt cannot pass from the interior of the wagon to the outside air, the rotor or dumper 13 is provided with a circumferential cylindrical partition 23, which extends for substantially two-thirds of the circumference of the rotor or dumper 13. The dumper is open for the remainder of the distance, to permit the insertion of the cans or barrels 12 in the rotor. To further cut off communication between the interior and exterior of the body portions of the wagon, there is provided a partition 24, which extends from one of the terminations of the partitions 23 to juxtaposition to the platform 14. The rotary dumper 13 may be thrown from its dumping position to its erect position by a lever or hand-crank 25 of any suitable size and form.

In order that the operator may conveniently reach the shelf 11, in placing the barrels into the dumper 13, there is provided a step 26, which extends longitudinally of the truck 1, along the side thereof, and is hinged to the truck so as to be capable of swinging from the dotted-line position indicated in Fig. 8 to the full-line position, where it rests on the axles 3 of the truck.

The operation of the device will be readily understood when taken in connection with the above description. In driving along the road, the rotor or dumper 13 is in the position illustrated in Fig. 4, with the opening 10 closed by the partition 28. When the operator comes to a point where he desires to empty some cans or barrels into the wagon, before leaving the seat he rotates the crank 25, so as to bring the rotor into the position illustrated in Fig. 3, where the latch 17 will automatically lock it in this erect position, preventing the normal tendency of the eccentric weight 16 from returning it to the dumping position. One or more barrels or cans to be emptied can then be placed on the platform 14, with the aid of the step 26, which is swung down to its horizontal position, so that the operator can have access to the shelf 11 without any trouble. If there are a plurality of barrels to be emptied, the last one can be shoved clear back until it moves the bar 19 to its most retired position, whereby the latch 17 will be withdrawn from engagement with the shelf 11. The eccentric fly-wheels 15 then operate to automatically rotate the dumper until it assumes a position corresponding to that shown in Fig. 4, when the contents of the barrels will be deposited in the body of the wagon, without danger of any of the dust or dirt flying out of the wagon onto the street or into the air. The rotary dumper can then be returned to the position occupied in Fig. 7, to remove the cans or barrels therefrom. When the wagon becomes full, it can be tilted in any usual manner, and the contents thereof dumped out through the outlet 6 after the gate 7 has been opened.

While I have shown one embodiment of my invention, I do not wish to be limited to the specific details thereof, but desire to be protected in various changes, alterations and modifications which may come within the scope of the appended claims.

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

1. The combination with a casing having an opening in the side thereof, of a dumper movably mounted in said casing, means for automatically moving said dumper, a lock for preventing the automatic movement of said dumper, and a tripper for said lock, adapted to be actuated by the placing of cans or barrels to be emptied into said casing, on said dumper.

2. The combination with a casing having an opening in the side thereof, of a dumper movably mounted in said casing, means for automatically moving said dumper, a lock for preventing the automatic movement of said dumper, and a guard for preventing the falling of said barrels into said casing.

3. The combination with a casing having an opening in the side thereof, of a shelf arranged in juxtaposition to the bottom of said opening and extending partly within and partly without said casing, a dumper rotatably mounted in said casing, said
dumper having a platform adapted to extend in alinement with said shelf, and a
cylindrical partition for closing said opening when said dumper is in its dumping po-
sition.

4. The combination with a casing having an opening in the side thereof, of a shelf ar-
nanged in juxtaposition to the bottom of said opening and extending partly within
and partly without said casing, a dumper rotatable mounted in said casing, said dumper having a platform adapted to extend in alinement with said shelf, a cylindrical par-
tition for closing said opening when said dumper is in its dumping position, a latch for locking said dumper in its erect position, and a tripper for tripping said latch so as to permit it to swing to its dumping position.

5. The combination with a casing having an opening in the side thereof, of a dumper rotatably mounted in said casing, said dumper having a plurality of partitions adapted to cut off communication between the interior and the exterior of said casing through said opening, one of said partitions being located circumferentially of said dumper, and the other of said partitions extending at an angle to said last-mentioned partition, eccentically-weighted fly-wheels connected to said dumper, adapted to automatically rotate the same from an erect position to a dumping position, and additional means for manipulating said dumper.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LEOPOLD F. SCHOLZ.

Witnesses:
H. WHITING,
J. P. DAVIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."