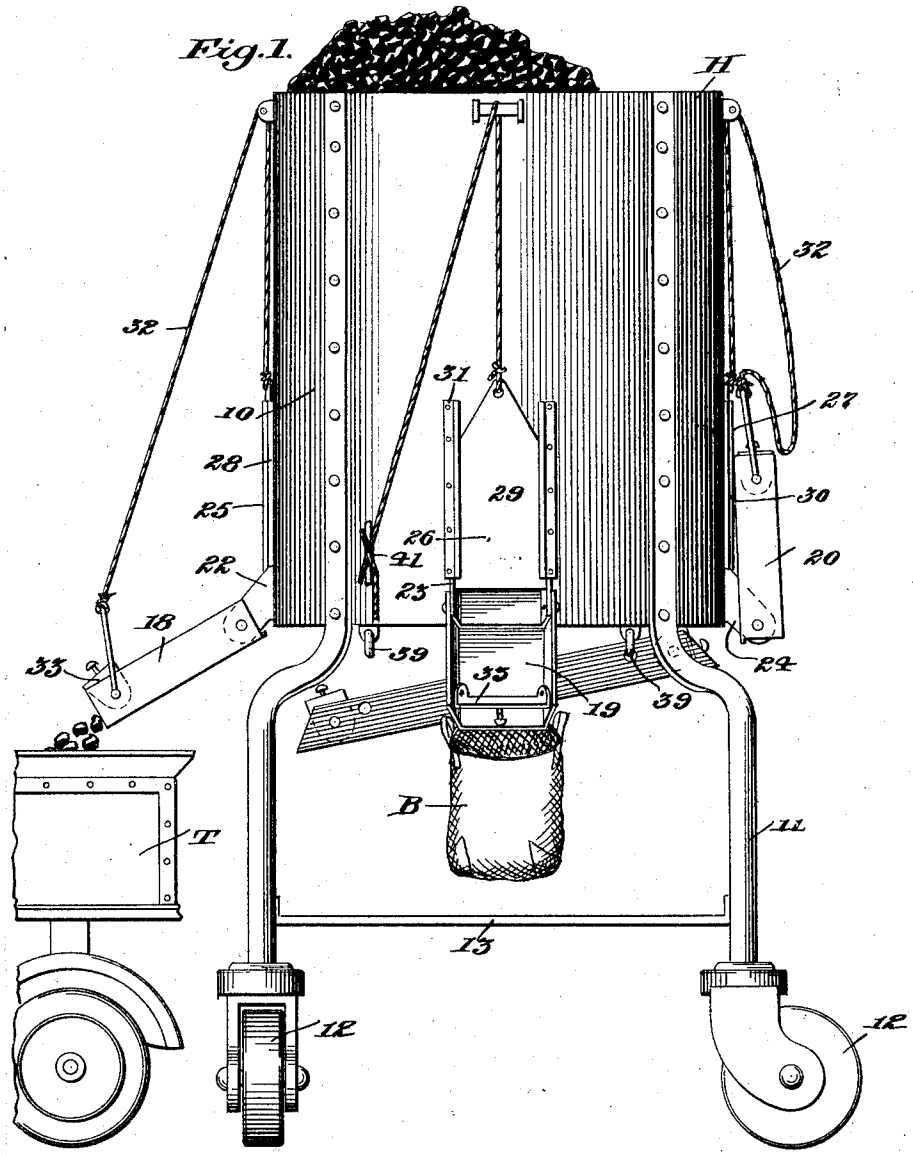
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Fig. 1.



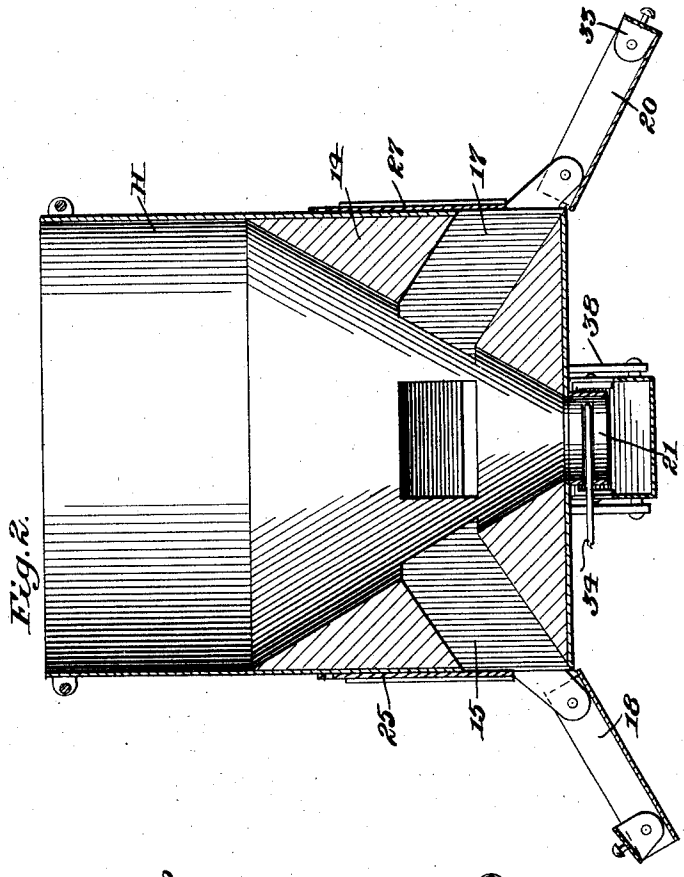
Inventors:

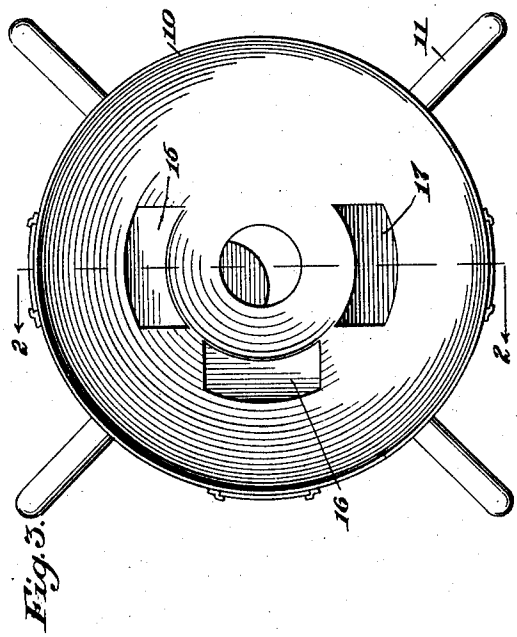
John Rose Meccia
William Reynolds

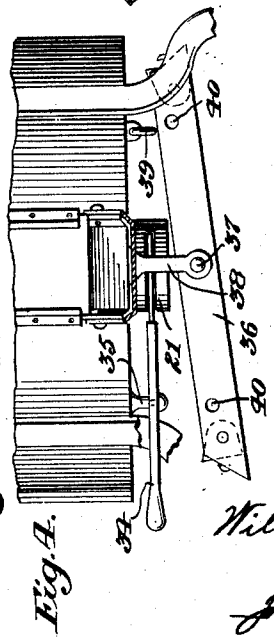
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Inventors:
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Patented Jan. 21, 1930

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UNITED STATES PATENT OFFICE

JOHN B. MECCIA AND WILLIAM REYNOLDS, OF CHICAGO, ILLINOIS

HOPPER

Application filed February 11, 1929. Serial No. 339,215.

This invention relates to a device for loading small quantities of materials such as coal, sand, cement, and the like, on trucks and into bags. One of the primary objects is to provide an improved portable device of this type to facilitate the aforementioned loading operations.

This apparatus is primarily characterized by a cylindrical bin or hopper mounted upon a wheeled frame to enable the device to be readily moved about. A further object of this invention is to provide a structure of this character which will be of durable construction, simple of operation, and particularly adapted for the purposes outlined.

A still further object is to permit the simultaneous loading of materials into a truck, into bags, and if desired the unloading of the surplus materials onto a pile on the ground or into a container.

Further and other advantages will be better apparent from a detailed description of the invention in connection with the accompanying drawings, in which—Figure 1 is an elevation of the device. Figure 2 is a section on the line 2—2 of Figure 3. Figure 3 is a plan view of the invention. Figure 4 is a detailed view.

Referring to the drawings, the reference character H designates the hopper generally, which is characterized by a cylindrical bin 10, supported on legs 11, the legs being secured to the bin by riveting. Each of the legs carries a ground wheel 12, which may be mounted in ball bearings (not shown) so as to permit expeditious movement of the bin from place to place. In order to produce a rugged device capable of withstanding rough usage, the legs may be braced as by rods 13.

The interior of the bin has a reinforced bottom section 14, defining a substantially inverted cone-shaped bottom. Extending through the reinforced section are three passageways marked 15, 16, and 17. The passageway 15 terminates in a chute 18; the passageway 16 in a chute 19; and the passageway 17 in a chute 20. The apex of the cone-shaped interior terminates in a cylindrical passageway 21. Each of the chutes 18, 19, and 20 is hinged to brackets 22, 23, and 24, respectively, said brackets being riveted to the side of the bin. The reference characters 25, 26, and 27, designate closures for the passageways, said closures being characterized by vertically movable panels 28, 29, and 30, said panels moving in guideways such as 31, (see Fig. 1). The panels may be raised and lowered as by cables 32. Each of the chutes 18, 19, and 20, has a hinge door at the lower end thereof as 33.

The cylindrical passageway 21 is closed by a panel 34 slidable on a bar 35, secured to the bottom of the bin. Beneath said passageway is a chute 36 hinged on pivot pins 37 to brackets 38 also secured to the bottom of the bin adjacent to and on opposite sides of the passageway. The bottom of the bin also carries two sets of cleats 39 adapted to be fitted into two sets of apertures 40 at each end of the chute 36.

The device may be operated as follows: Referring to Figure 1, it may be assumed that it is desired to load some of the material in the bin into a truck T. The driver or his helper lowers the chute 18 which at the same time permits the panel 28 to be raised and the coal or other material to pass into the chute 18 which may then be emptied into the truck by raising the door 33. If it is desired to load the material into bags such as B, an operator raises the panel 29 by pulling on the cable 32, said cable being unfastened from a cleat such as 41. The material passes into the chute 19 and the bags may be conveniently filled by operating the door 33. The chute 20 may be operated as is the chute 18. In the event it is desired to empty the bin 10, the panel 34 is moved to an open position and the material then passes into the chute 36 which may be adjusted about the pivot pins 37 and fastened in position by insertion of the cleats 39 in the apertures 40 so that the material once in the chute will pass either to the right or the left in Figure 1, depending on which set of cleats 39 and apertures 40 are selected.

From the above description it is thought to be apparent that the device is capable of a wide variety of uses which will be obvious

to one skilled in the art to which this invention appertains.

Having described our invention, we claim:

A hopper comprising a cylindrical bin having a reinforced inverted cone-shaped bottom and having inclined passageways leading through said bottom, said passageways terminating in openings in the side of the bin, an additional passageway at the apex of said bottom, panels slidable on the side and bottom of said bin and normally closing said openings, chutes hinged to the side and bottom of the bin and located adjacent said openings and means for operating said panels.

In testimony whereof we have hereunto affixed our signatures.

JOHN B. MECCIA. [L. S.]
WILLIAM REYNOLDS. [L. S.]