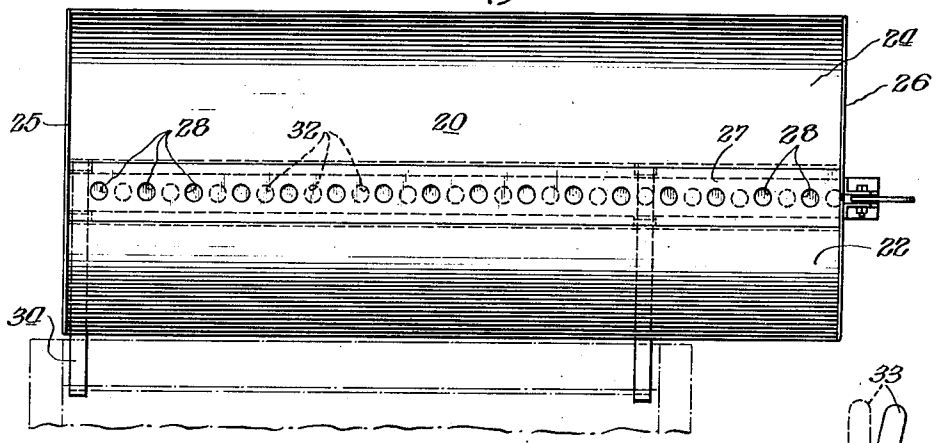
June 19, 1951 F. STEVENS 2,557,704

SALT SPREADING APPARATUS FOR ATTACHING TO ROAD VEHICLES

Filed Jan. 16, 1947

Fig. 1



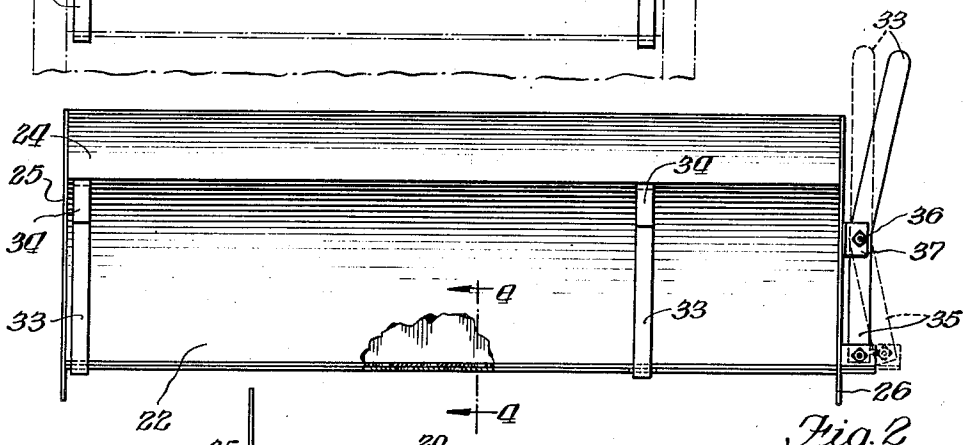


Fig. 2

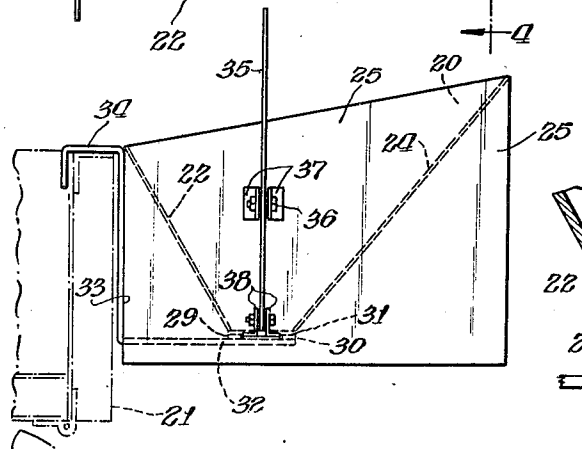


Fig. 3

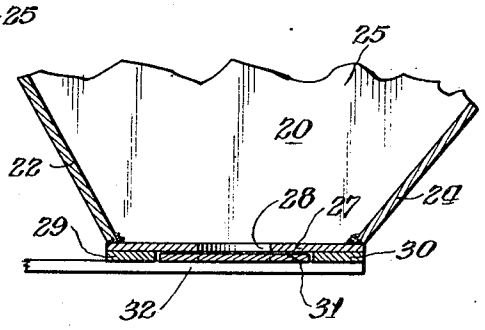


Fig. 4

INVENTOR.
Floyd Stevens
BY
Archibald D McKellar
Attorney.

Patented June 19, 1951

2,557,704

UNITED STATES PATENT OFFICE

2,557,704

SALT SPREADING APPARATUS FOR ATTACHING TO ROAD VEHICLES

Floyd Stevens, Grand Rapids, Mich., assignor to International Salt Company, Incorporated, Scranton, Pa., a corporation of New Jersey

Application January 16, 1947, Serial No. 722,442

2 Claims. (Cl. 222—181)

1

The invention relates to improvements in devices for scattering granulose material over a predetermined area such as a roadway or the like, but more particularly to devices of this kind which are adapted to be used in combination with land vehicles for the distribution of crushed stone, cinders, rock salt or similar substances used to increase traction for automobiles, or for the purpose of melting snow or ice hazards to road travel; and has for its objects the provision of a device of this character which will be simple of construction, economical to manufacture and highly efficient in use.

Other objects will appear hereinafter.

The invention consists in the combinations and arrangements of parts hereinafter described, and will be best understood by reference to the accompanying drawings forming a part of this specification, and in which

Figure 1 is plan view of such a device embodying the invention;

Figure 2 is a rear elevation having a fragmentary part of a side removed to illustrate a portion of the bottom in section;

Figure 3 is an end view of the device as mounted on the tail gate of a truck body, a fragmentary part of the truck being shown in dotted line; and

Figure 4 is an enlarged view of the fragmentary section taken on line 4—4 of Figure 2.

The embodiment of the invention illustrated in the drawings comprises a bin 20 formed of suitable metal plates welded at their joints, having a low front wall 22 and a higher rear wall 24 arranged in downwardly and inwardly converging relation, and end walls 25 and 26 secured at their inner sides to the ends of the said front wall 22 and said rear wall 24 in parallel and spaced relation. The bin 20 is provided with a bottom 27, joined at its edges to the sides of the end walls 25 and 26 and to the bottom edges of the converging walls 22 and 24. Said bottom 27 is provided with a plurality of circular openings 28 of even size and spacing and placed longitudinally thereof, as best shown in Figure 1.

Suitable bars 29 and 30 are secured to the under and outer edges of the bottom 27 in spaced and parallel relation forming a groove and guide means for a slidable closure 31. The closure 31 is provided with holes 32 spaced and arranged to register with the openings 28 at one end of said groove and to close said bottom 27 when arranged in opposite position. The slidable closure 31 is held in place by bracket bars 32 arranged horizontally and welded to the bars 29 and 30, as best

2

shown in Figures 2 and 3. The said bracket bars 32 are integrally formed with vertical arms 33 which are provided at their upper ends with suitable hooks 34 adapted to be hooked over the tail gate 21 of a truck, as shown in Figure 3. By this arrangement the bin 20 may be detachably mounted to the tail gate of a truck or the like. It is to be noted that the hooks 34 are placed in spaced relation to each other at a distance about equal to the width of the truck body; that the said hooks 34 are so placed that the left side of bin 20 extends outwardly beyond the adjacent side and that the opposite side of the bin 20 extends only to approximately the edge of the truck body. By this arrangement the material scattered will fall over an area to the left of the truck path so as to cover the center of a two-lane highway while following the beaten trail.

The device is provided with a closure control means comprising a lever 35 mounted intermediate its end to a pivot carried by companion brackets 37. The lower end of the lever 35 is pivoted to companion brackets 38 which are attached to the upper and outer end of the closure 31 by a pivot 39, the lever 35 being so fitted as to allow the closure 31 to reciprocate substantially in a horizontal straight line, as will be readily understood.

By the manual operation of the lever 35 when the device is in use, the amount of material scattered may be varied to suit conditions and circumstances. To avoid the wasting of material by distributing excess amounts over that needed, or insufficient amounts where it is needed, it is desirable that the lever 35 be constantly under the free manual control of an operator. When in use it is desirable to have the truck loaded with suitable materials which may be used in combination in different ratios, depending on the varying demands necessitating their use.

While I have illustrated and described a practical and efficient way of carrying my invention into use, this is capable of many variations and modifications without departing from the true invention thereof. I therefore do not wish to be limited by the precise details set forth, but desire to avail myself of such combinations and arrangement of parts as may fall within the spirit and scope of the appended claims.

I claim:

1. In combination for use with a road vehicle having a tank body open at its top; a substantially vertical rear wall on said tank body extending rearwardly beyond the perimeter of the rear

wheels of said vehicle; a detachable bin body open at its top having a pair of spaced and parallel rectangular end walls; a narrow front wall extending downwardly and inwardly, secured at its ends between said rectangular end walls; and a wide rear wall extending upwardly and outwardly in spaced relation with said front wall and secured at its ends between said rectangular end wall; a flat bottom secured to the bottom edge of said narrow front wall and the bottom edge of said rear wall and to said parallel end walls, there being a plurality of circular openings in said flat bottom arranged longitudinally thereof; guide bars secured to said bottom in longitudinal and spaced relation; a pair of bracket bars secured to said guide bars at their under side to form a support for said bin at its bottom, there being a space between said bracket bars and said bottom and between said guide bars; a flat closure slidably mounted in juxtaposition below said bottom having a plurality of openings in spaced positions arranged and adapted to be moved into and out of regulation with the circular openings in the said bottom; lever means pivotally connected at its lower end to the outer end of said closure, and pivoted intermediate its end to suitable brackets secured

externally of and on one of said end walls; and a hook means formed integrally with each of said bracket bars for suspending said bin at the rear of said tank body, at substantially the top level of said tank body.

2. The construction specified in claim 1 in which the hook means and said bracket bars are arranged at one end of said bin, and another arranged in spaced relation with the other end of said bin, the said hooks being slidable transversely of said vehicle on the upper edge of the rear of said body.

FLOYD STEVENS.

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