

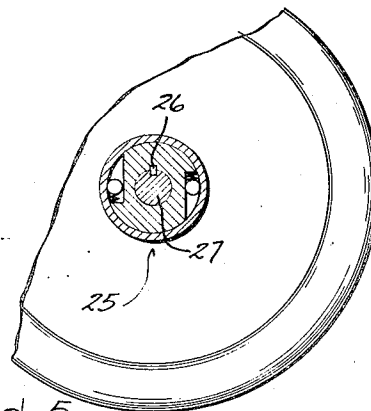
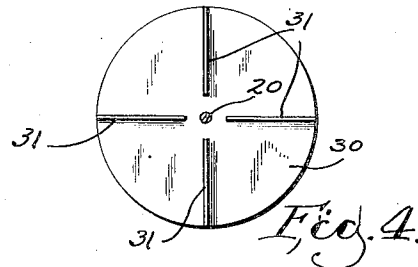
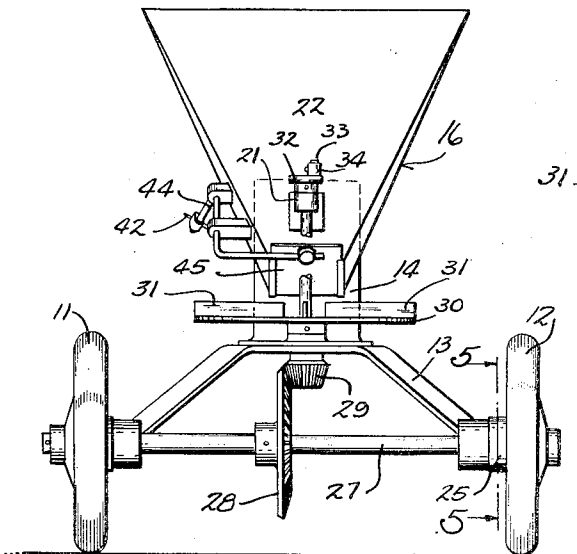
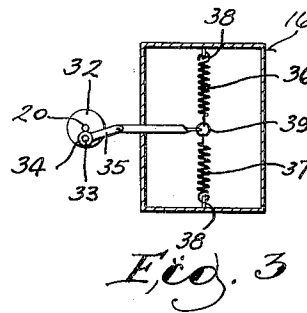
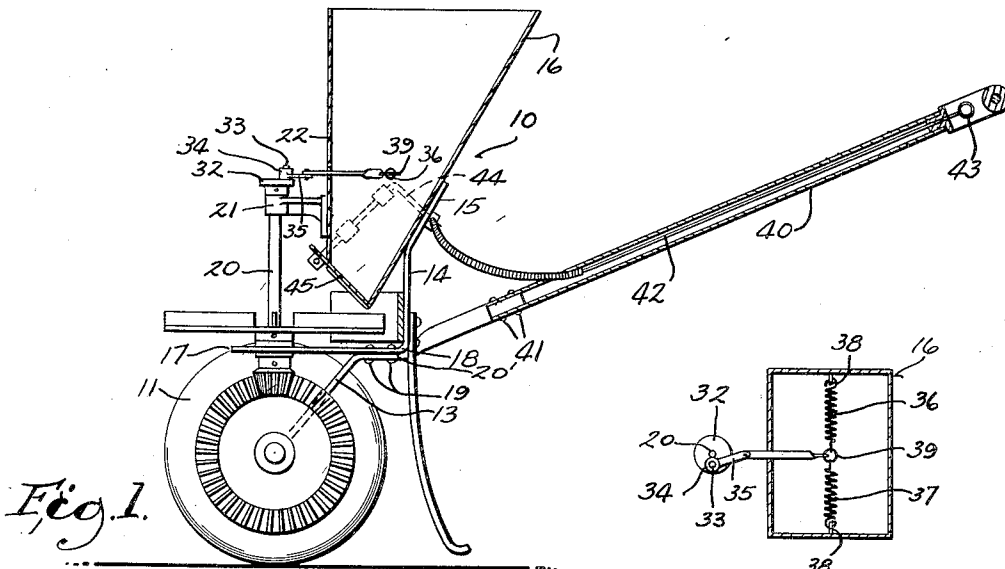
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2,553,403

DISTRIBUTING HOPPER AND AGITATOR

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DISTRIBUTING HOPPER AND AGITATOR

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1 Claim. (Cl. 259—101)

1

This invention relates to improvements in distributing machines, and more particularly to a novel distributing machine of the type adapted to spread lime or the like, as in the operation of liming barn floors.

An object of the invention is to provide a device of the type which will be simple and economical to operate.

Another object of the invention is to provide a machine of the type which may be manually pushed in use with a minimum of effort on the part of the user.

Other and further objects of the invention will appear as the description proceeds, reference being had to the accompanying drawing, in which:

Fig. 1 is a side view partly in elevation and partly in section of a distributing machine embodying my invention.

Fig. 2 is a front view in elevation of the machine.

Fig. 3 is a plan view of the agitating screen and the actuating mechanism therefor.

Fig. 4 is a plan view of the distributing disc.

Fig. 5 is a fragmentary view of one of the wheels showing the ratchet mechanism in section.

Referring more particularly to the drawings, the numeral 10 refers to the device generally, having a pair of running wheels 11 and 12, a frame 13, and a bracket 14 having a rearwardly inclined upper end 15 supporting a hopper 16. The lower portion 17 of bracket 14 is horizontally disposed, and at its rear portion 18 is secured by bolts 19 to the horizontal portion 20' of the frame 13. The frontal portion 17 of bracket 14 journals the vertical shaft 20 at its lower end, for free rotation, and the said shaft 20 is journaled by a bracket 21 adjacent the upper end of shaft 20, the said bracket 21 being horizontally extended and fixed to the front 22 of hopper 16.

The wheel 11 runs free, but wheel 12 has an over-riding clutch 25 of conventional type connected by pin 26 to the axle shaft 27 which carries fixed thereon the ring driving gear 28 which is meshed with the bevel driven gear on the lower end of the vertical shaft 20, the latter being fixed to said driven gear 29. A circular distributing disk 30 is keyed to shaft 20, and carries on the upper side thereof the cleats 31. The upper end of shaft 20 has fixed thereto the turntable 32 which latter is provided with the eccentric pin 33 engaging the eye 34 on link 35 connected with the agitator springs 36 and 37 which latter are connected to the interior of the hopper 16 by means of the eyes 38, and to each other and to the link mechanism 35 by means of the ring 39.

A tubular handle 40 is fixed by rivet or other means 41 to the rear end of the frame 13, and

2

houses a pull cable 42 having a hand-grip 43. The lower or front end of cable 42 is connected with the lever 44 which is operable to lift a vertically slidable gate 45 in the front lower end of the hopper 16.

In operation, the hopper 16 is filled with the material to be distributed, and may be moved forwardly on wheels 11 and 12 to actuate the gears 28 and 29 in turn actuating the disk 30 and the turntable 32 which then operates the spring agitator. The operator pulls the hand-grip 43 to pull the cable 42, opening by means of lever 44, the gate 45, this action regulating the amount of the material to be dropped onto the revolving disk 30 which latter will project the said material in a horizontal arc, frontally of the machine 10.

It will be understood that the device is capable of many modifications in structure and design, without departing from the spirit of the invention, within the scope of the appended claim.

Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States, is:

In a device of the character described, a hopper, a pair of eyes oppositely disposed interiorly thereof, a pair of coil springs each fixed to one eye, a ring centrally connecting said springs to normally retain them in a horizontal plane, a connecting rod attached to said ring passing through an aperture in said hopper in horizontal alignment with said springs, and means exteriorly of said hopper for horizontal reciprocation of said connecting rod and springs to agitate the contents of said hopper.

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