

Aug. 22, 1933.

P. C. MacRAE ET AL
HIGHWAY MARKER

1,923,632

Filed Nov. 16, 1931

2 Sheets-Sheet 1

Fig. 1.

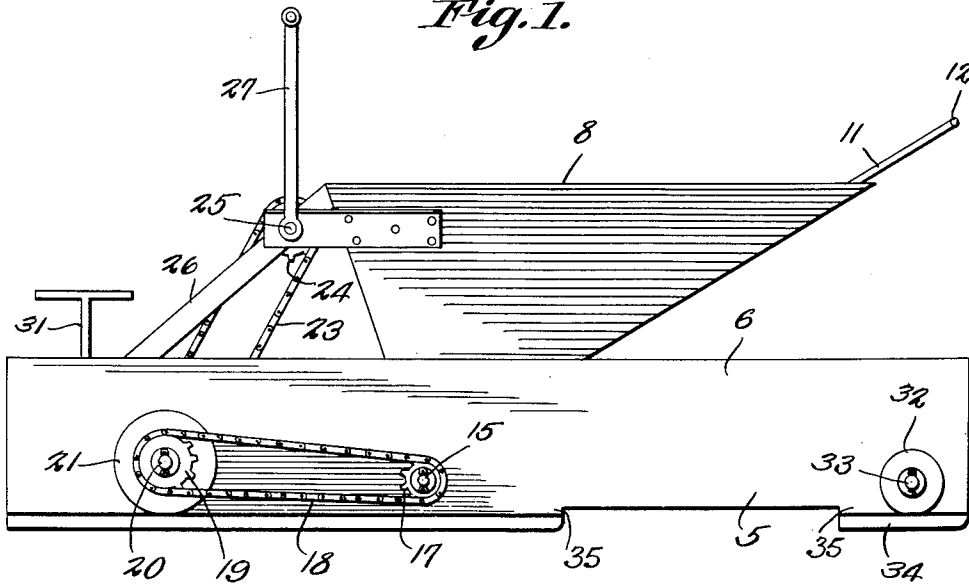
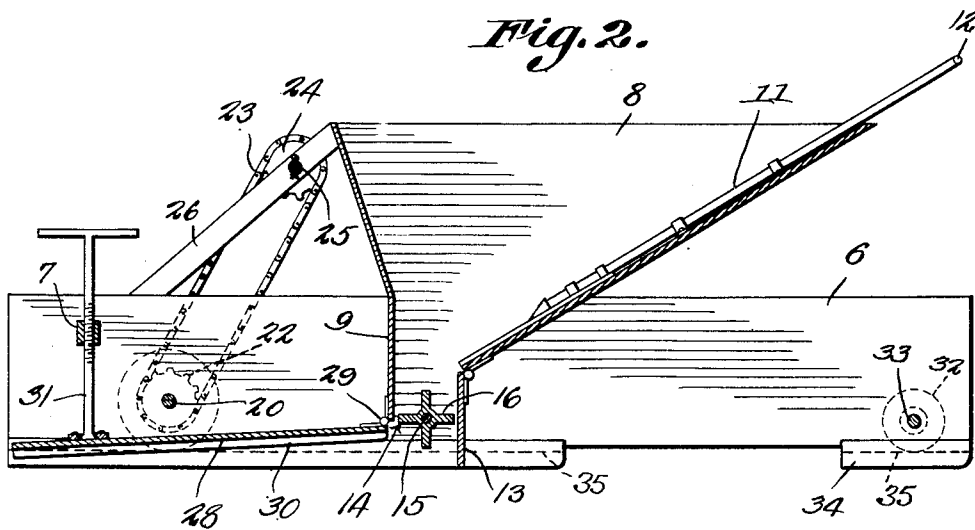


Fig. 2.



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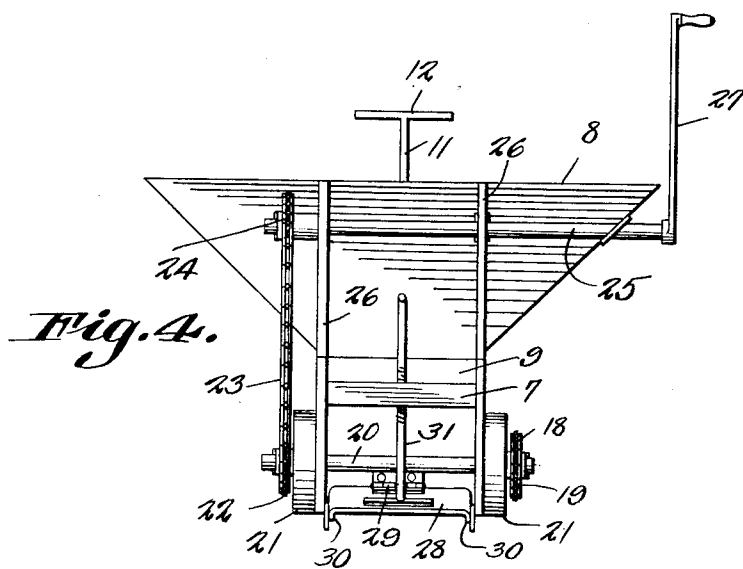
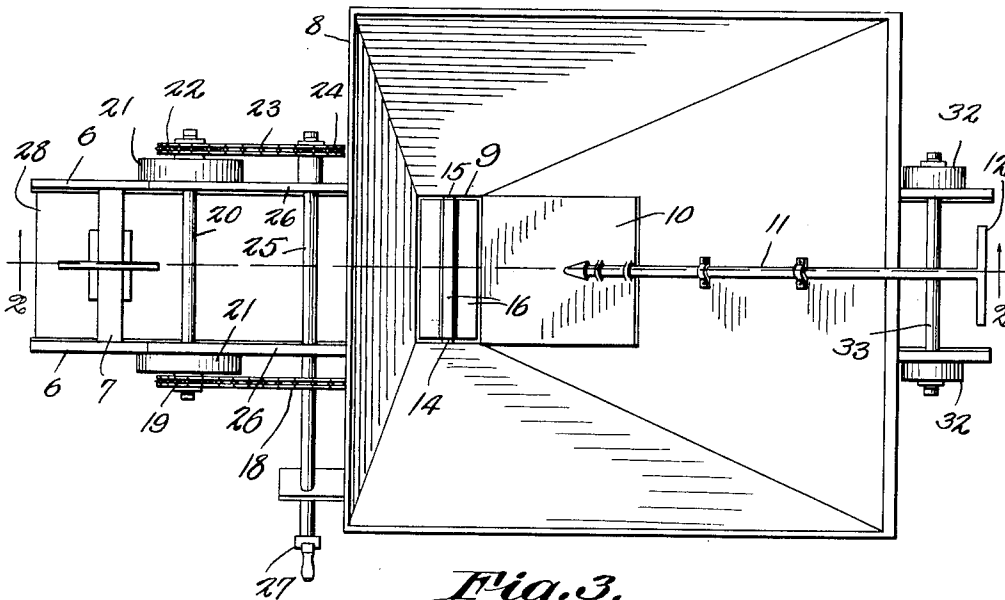
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UNITED STATES PATENT OFFICE

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HIGHWAY MARKER

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Seattle, Wash.Application November 16, 1931
Serial No. 575,312

7 Claims. (Cl. 94-45)

This invention relates to a device designed for use in forming lines along highways, to define traffic lanes.

An important object of the invention is to provide a device of this character for spreading concrete or similar plastic material used in marking road surfaces, in such a way that the edges of the line constructed by the added concrete, will be even and regularly formed.

Another object of the invention is to provide a device of this character including agitating means at the mouth of the hopper of the device, to insure against the plastic material held in the hopper, clogging the passage of the material from the hopper.

A further object of the invention is to provide means for cutting off the flow of plastic material from the hopper, while the device is being moved from place to place.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawings:

Figure 1 is a side elevational view of a device constructed in accordance with the invention.

Figure 2 is a longitudinal sectional view taken on line 2-2 of Figure 3.

Figure 3 is a plan view of the device.

Figure 4 is a rear elevational view of the device.

Referring to the drawings in detail, the body portion of the device is indicated generally by the reference character 5, and embodies side members 6 of like construction, the side members 6 being held in spaced relation at the rear thereof, by means of the bar 7.

The reference character 8 designates the hopper which has a delivery spout 9 disposed between the side members 6 of the body portion 5, the hopper being disposed substantially intermediate the ends of the body portion, as clearly shown by the drawings.

Positioned within the hopper 8, is a sliding closure 10, which is of a construction to completely close the delivery spout, when the device is being moved from place to place thereby preventing the material held within the hopper, from passing through the delivery spout.

A rod 11 connects with the sliding closure 10, and is formed with a cross bar 12 at its free end, the cross bar 12 providing a handle, whereby the rod and closure 10 connected therewith, may be readily operated to open or close the delivery spout.

Hingedly connected to the front wall of the hopper 8, is a gate 13, which is adapted to prevent the cement from moving forwardly, as it is fed from the hopper through the delivery spout.

Operating within the mouth of the delivery spout, is a splasher or spreader 14, which is mounted on the shaft 15, disposed in bearings formed in the mouth of the delivery spout. This wheel also includes spaced longitudinal ribs 16, which pick up the cement or plastic material, and feeds the same evenly through the delivery spout.

The shaft 15 extends beyond the body portion 5, where it is provided with a sprocket 17 over which the chain 18 operates, the chain 18 also operating over the sprocket 19, mounted on the axle 20, that is also journaled in the bearings formed in the side members 6.

Wheels 21 are mounted on the axle, and support the rear of the body portion, the wheels resting on the road surface adjacent to the recess being filled with cement.

At the opposite end of the axle 20 is a sprocket 22 over which the chain 23 operates, which chain also moves over the sprocket 24 carried on the shaft 25. This shaft 25 is journaled in bearings formed in the angular brace bars 26 that connect with the hopper and side members 6 of the body portion.

A crank handle 27 is mounted on one end of the shaft 25 so that an attendant may rotate the shaft 25 to transmit movement to the wheels 21 to cause the device to be propelled along the road surface being marked.

Mounted between the side members 6 of the body portion, is a plate 28, which is substantially long, the plate having connection with the delivery spout 9, through the medium of the hinge 29.

The side edges of this plate 28, are turned downwardly providing longitudinal flanges 30 which are narrow so that they will ride within the groove in which the cement is being spread, preventing the cement from spreading over the road surface to cause an irregular line.

An adjusting screw 31 has connection with the plate 28, and may be operated to adjust the plate 28 with respect to the road surface over which the machine is moving.

The front end of the device is supported by the wheels 32 mounted on the axle 33, the wheels resting on the road surface adjacent to the recess being filled with cement. At the front end of the device are spaced depending flanges 34 while flanges 35 are secured to the side members 6. These flanges 34 and 35 contact with the side walls of the recess being filled with concrete to guide the device and hold the device against lateral movement, thereby insuring a line being formed with straight edges.

We claim:

1. A machine for filling a groove formed in a road surface, with plastic material in the formation of a traffic line, comprising a body portion, flanges extended below the lower edges of the body portion and fitted within the groove, guiding the body portion as the body portion moves along the groove, a hopper for feeding material to the groove, and a pivoted spreader carried by the body portion and movable over the material fed from the hopper, for spreading and packing the material into the groove.

2. A machine for filling a groove formed in a road surface, with a plastic material in the formation of a traffic line, comprising a body portion, means on the body portion for engaging the walls of the groove to hold the body portion against lateral movement with respect to the groove, a hopper for feeding material from the body portion, and a pivoted member mounted on the body portion and movable over the material as it is fed into the groove, for spreading and packing material in the groove.

3. A machine for filling a groove formed in a road surface, with a plastic material in the formation of a traffic line, comprising a body portion, means carried by the body portion and engaging the walls of the groove for guiding the body portion along the groove, means on the body portion for feeding plastic material from the body portion, and a pressure controlled

member operating within the groove and passing over the material fed into the groove, for packing and spreading material in the groove.

4. A machine for filling a groove formed in a road surface, in the formation of a traffic line, comprising a body portion, a hopper supported by the body portion and adapted to deliver material into the groove, and a pivoted spreader operating within the groove and adapted to spread material fed into the hopper.

5. A machine for filling a groove formed in a road surface, in the formation of a traffic line, comprising a body portion, a hopper forming a part of the body portion and adapted to feed material into the groove, and a pivoted spreader of a width to fit within the groove for spreading material throughout the entire width of the groove.

6. A machine for filling a groove formed in a road surface, with a plastic material in the formation of a traffic line, comprising a body portion, a hopper for feeding material from the body portion, a pivoted member of a width to engage the side walls of the groove to spread material throughout the width of the groove, and means for adjusting the free end of the pivoted member, and holding the free end of the pivoted member within the groove.

7. A machine for filling a groove formed in a road surface, with a plastic material in the formation of a traffic line, comprising a body portion, a hopper supported by the body portion for delivering material into the groove, a pivoted member movable within the groove for spreading material fed into the groove, and an adjusting screw connected with the pivoted member and supported by the body portion for holding the free end of the pivoted member against vertical movement.

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