May 3, 1955 A. F. STEEN 2,707,655

STOP DEVICES FOR TRAVELING LAWN SPRINKLERS

Filed Aug. 21, 1953 2 Sheets-Sheet 1

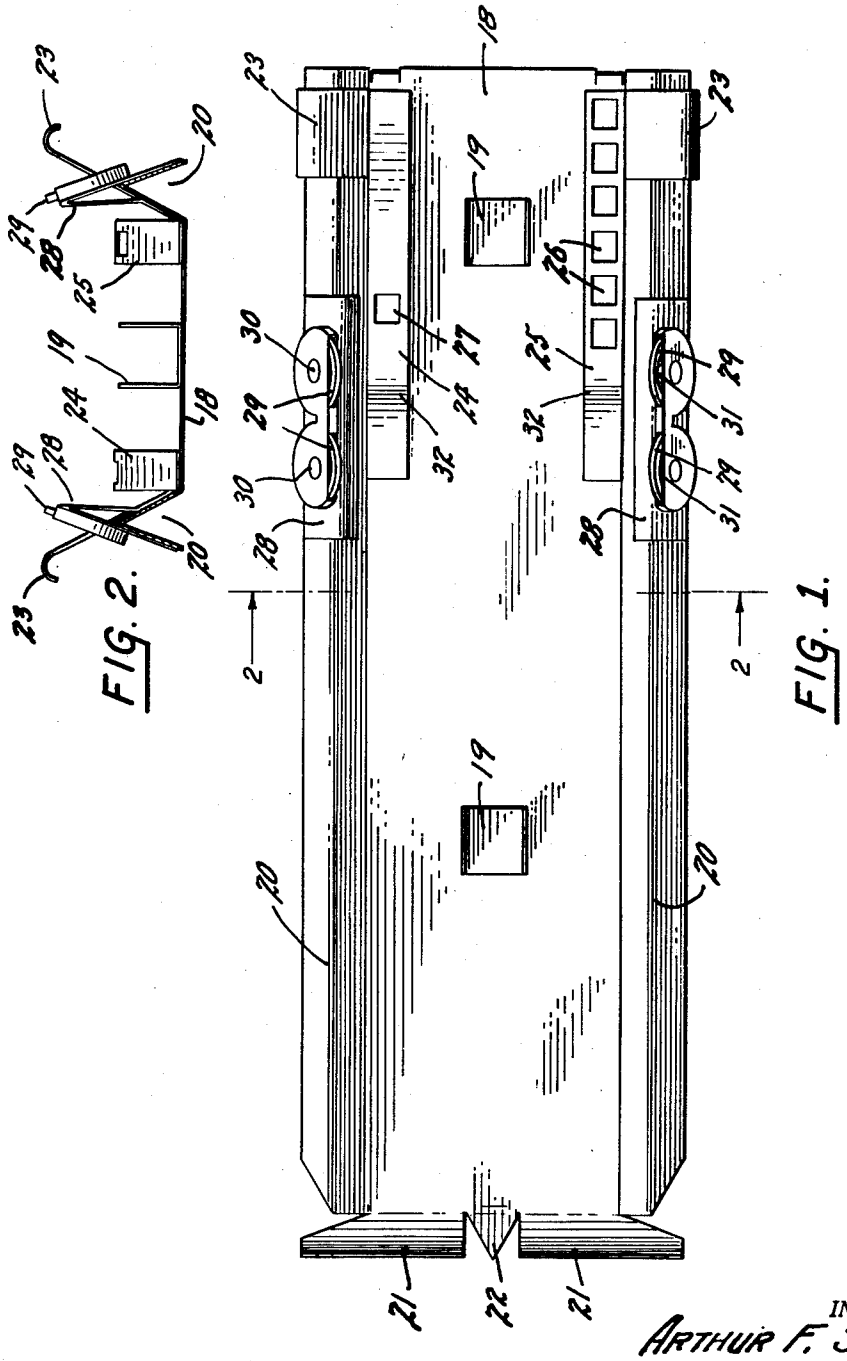


FIG. 1.

FIG. 2.

INVENTOR.
ARTHUR F. STEEN
BY
ATTORNEY

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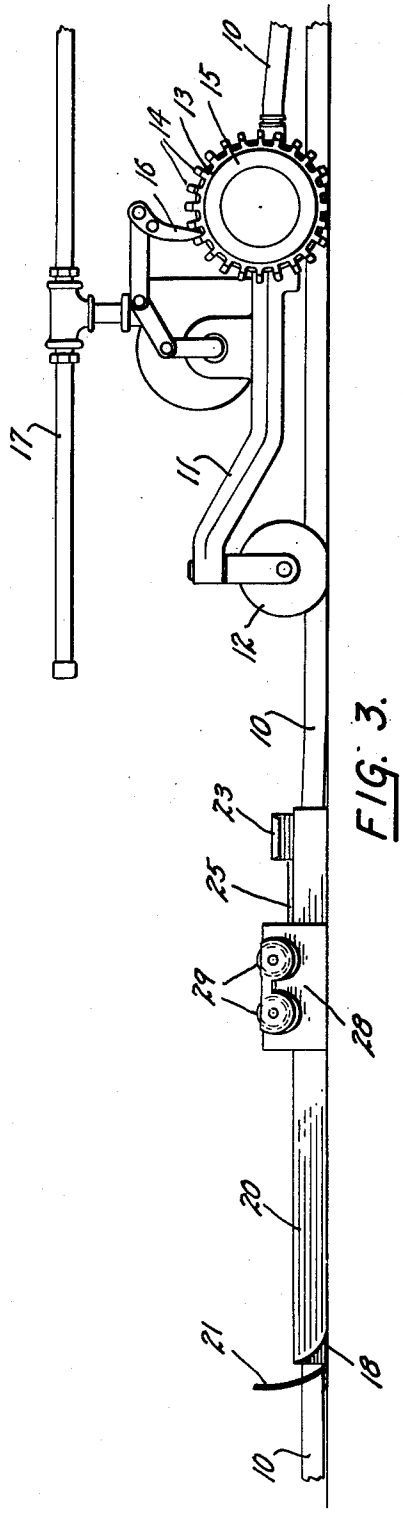


FIG. 3.

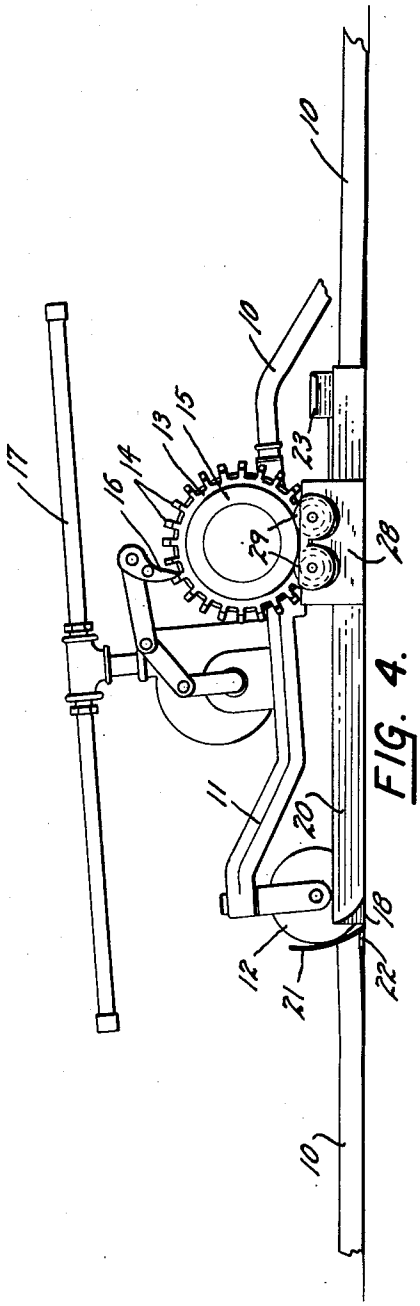


FIG. 4.

INVENTOR.
ARTHUR F. STEEN
BY
ATTORNEY

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STOP DEVICES FOR TRAVELING LAWN SPRINKLERS

Arthur F. Steen, Denver, Colo.

Application August 21, 1953, Serial No. 375,684
4 Claims. (Cl. 299—50)

This invention relates to a stop device for lawn sprinklers of the type having a water actuated mechanism for causing the sprinkler to travel along a garden hose as it sprinkles.

The principal object of this invention is to provide a stop device which can be positioned at any desired point in the path of a traveling sprinkler and which when engaged by the sprinkler will stop further forward travel thereof.

The invention is more particularly designed for use on sprinklers of the type which travel along the water hose as they sprinkle and has for one of its objects the provision of a device which can be positioned at any desired point along the hose and which will stop the travel of the sprinkler at the desired point without stopping the operation of the sprinkler.

Other objects and advantages reside in the detail construction of the invention, which is designed for simplicity, economy and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention, reference is had to the accompanying drawing which forms a part hereof. Like numerals refer to like parts in all views of the drawing and throughout the description.

In the drawing:

Fig. 1 is a plan view of the improved sprinkler stop device;

Fig. 2 is a cross-section therethrough, taken on the line 2—2, Fig. 1;

Fig. 3 is a side view, illustrating a conventional traveling sprinkler approaching the improved stop device; and

Fig. 4 is a similar view illustrating the sprinkler stopped by the device.

In the drawing, a conventional lawn or garden hose is indicated at **10** and the elements of a conventional traveling sprinkler attached thereto are designated by numeral as follows: main frame **11**; grooved guide wheels **12**; drive wheels **13**, provided with ratchet traction teeth **14**; circular wheel weights **15**, wheel actuating ratchet **16**; and rotating sprinkler head **17**.

The rotation of the sprinkler head **17** actuates the ratchet **16** to cause the latter to engage the teeth **14** so as to force the entire springler along the hose **10** guided by the grooved guide wheel **12**. The circular wheel weights **15** are secured to and project outwardly from the drive wheels **13**. The wheel weights serve a double purpose in that they limit the distance the drive wheels enter the turf and they provide weight on the drive wheels for firm traction engagement.

This invention comprises a flat base plate **18** of sheet metal or the like provided with hose clips **19** along its medial line. The longitudinal sides of the base plate **18** are bent upwardly and downwardly to form inverted V-shaped guide edges **20**. The base plate is provided with an upturned forward extremity **21** having a central hose notch positioned above a ground engaging point **22**. Two flaring sprinkler aligning arms **23** extend upwardly and outwardly from each of the side guide edges **20** adjacent the rearward or entering extremity of the base plate.

Two track bars **24** and **25** are secured to the floor plate **18** immediately inside of the guide edges **20** at the entering extremity of the floor plate. The track bar **25** is provided with a plurality of tooth openings **26** and the

other track bar **24** is provided with a single tooth opening **27** in staggered relation to the openings **26**.

A roller plate **28** is secured to each of the side edges **20** and inclines inwardly corresponding to the incline of the side edge. Each of the plates **28** carries two spaced-apart idler rollers **29** journalled about roller shafts **30** upon suitable inclined supporting bars **31**. The rollers project upwardly and inwardly above the top edges of the roller plates **28**.

In use, the hose **10** is positioned in the notch of the forward extremity **21** and in the hose clips **19** so as to extend medially of the base plate **18**. The sprinkler gradually approaches the base plate and the guide wheel **12** travels forwardly therealong. The drive wheels **13** enter upon the track bars **24** and **25** guided by the aligning arms **23** and the ratchet teeth **14** of one wheel engage the openings **26** therein. The guide wheels now travel up the incline of the track bars and forwardly to a position in alignment with the first rollers **29**. The track bars at this point are inclined downwardly, as shown at **32** to allow the circular wheel weights **15** to rest upon and between the pairs of rollers **29**, as shown in Fig. 2. At this time the guide wheel **12** contacts the upturned extremity **22** and the drive wheels continue to rotate without further forward movement of the sprinkler frame **11**.

It will be noted that although the stop device has stopped forward movement of the frame **11**, it does not stop rotation of the sprinkler head **17** since the drive wheels may continue to rotate without tractive effort.

While a specific form of the improvement has been described and illustrated herein, it is to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what is claimed and desired secured by Letters Patent is:

1. A stop device, for a traveling lawn sprinkler of the type having two oppositely positioned, toothed drive wheels each carrying a concentric, circular wheel weight and a guide wheel arranged to travel along a garden hose to guide said sprinkler therealong, comprising: a base plate adapted to be positioned beneath said hose at any desired point therealong to receive both drive wheels of the traveling sprinkler; medially positioned hose-engaging means on said base plate adapted to engage said hose and maintain said base plate in alignment therewith; and means on said floor plate positioned to place said drive wheels in a non-tractive position when said wheels reach a predetermined position over said plate.

2. A stop device for lawn sprinklers as described in claim 1 having a pair of idler rollers supported at each side of said base plate and positioned to receive said wheel weights and support said drive wheels above and out of contact with said base plate without retarding rotation of the latter.

3. A stop device for lawn sprinklers as described in claim 2 having inclined track means mounted on said base plate and positioned to receive and elevate said drive wheels sufficiently to place said wheel weights on said rollers.

4. A stop device for lawn sprinklers as described in claim 3 having an upwardly-turned, forward extremity on said base plate against which the guide wheel of said sprinkler will rest when the drive wheels thereof are supported by said rollers.

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