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TENNIS COURT MARKER

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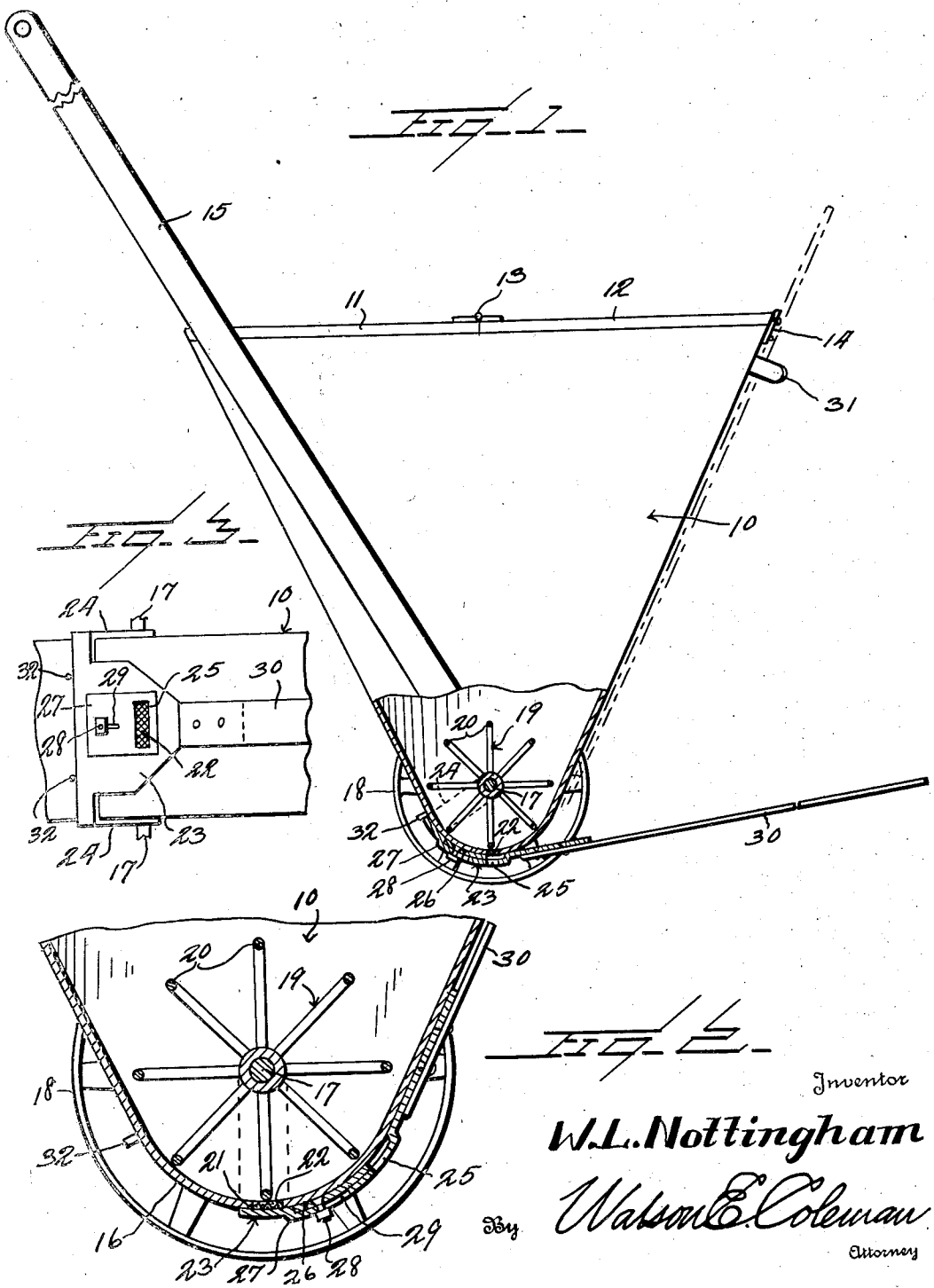


Fig. 1

Fig. 4

Fig. 5

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TENNIS COURT MARKER

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4 Claims. (Cl. 275—2)

This invention relates to marking devices and more particularly to a marker for use in marking a straight line on plane surfaces for the purpose of designating the boundaries of playing courts or fields, such as tennis, baseball or other games.

An object of this invention is to provide a marker wherein a dry marking means in the form of a powder or the like, such as lime, may be used and spread evenly in a straight line along the surface of the ground, the marker also including means to guide the device in a straight line along the ground.

Another object of this invention is to provide a marker of this character wherein the guide means also serves as a releasing member for permitting the discharge of the powder on the ground as the device is moved thereover and for checking or cutting off the supply of powder when the guide means is moved into inoperative position.

The above and various other objects and advantages of this invention will in part be described and in part understood from the following detailed description of the present preferred embodiment, the same being illustrated in the accompanying drawing wherein:—

Figure 1 is a detail side elevation partly broken away and partly in vertical section of a device constructed in accordance with the embodiment of this invention, showing the device in operative position.

Figure 2 is an enlarged fragmentary vertical section showing the device in inoperative position.

Figure 3 is a fragmentary bottom plan of the device.

Referring to the drawing wherein like numerals of reference designate corresponding parts throughout the several views, the numeral 10 designates generally a hopper or receiver which is adapted to contain a powder to be applied to a plane surface such as the surface of the ground and is preferably a white powder such as lime or the like. The receiver 10 has a top 11 and a closure 12 hinged, as at 13, and the closure 12 is held in closed position by means of a hook 14. A handle structure 15 is secured to the receiver 10 and extends upwardly therefrom and is of a suitable length so that the device may be moved over the surface of the ground. Preferably the receiver or hopper 10 is substantially V-shaped in vertical section with the divergent end lowermost and the divergent end of the hopper 10 is of arcuate construction, as at 16, the purpose for which will be hereinafter described. A shaft or axle 17 extends through the lower portion of the hopper or receiver 10 and wheels 18 are secured to the shaft 17 on opposite sides of the receiver 10 and are adapted to rotate this axle or shaft 17.

The shaft 17 has secured thereto within the hopper or receiver 10 an agitator generally designated as 19, comprising a plurality of blades 20 which are secured to the shaft or axle 17 and in the present instance, these blades 20 are in the form of substantially U-shaped members radially carried by the shaft 17 so that the powder within the receiver 10 will be agitated at the lower or discharge end of the receiver 10. The receiver 10 has a discharge opening 21 in the lower or convergent end thereof and a screen or sifting member 22 is disposed across the opening 21 so as to sift the material which is being discharged through the discharge opening 21 and not permit any lumpy material to pass through the opening 21.

The axle 17 is disposed on the axis of the curvature 16 and a curved closure member or plate 23 slidably engages the lower end of the receiver 10 and is provided with upwardly extending arms 24 which are journaled on the shaft 17, the arms 24 being disposed on the outside of the hopper 10 and intermediate the side wall of the hopper 10 and a wheel 18. The arms 24 permit rocking movement of the closure plate 23 relative to the discharge opening 21. This plate 23 has a discharge opening 25 therethrough and preferably a gate or closure adjusting member 26 is carried in a recessed portion 27 of the plate 23 and is shiftable in a manner to constrict the discharge opening 25 of the plate 23. A bolt 28 is carried by the plate 26 and is disposed through a slot 29 in the offset portion 27 and holds the plate 26 in its adjusted position so as to regulate the quantity of powder being discharged through the openings 21 and 25 when the opening 25 registers with the opening 21. An elongated guide member 30 is secured to one end of the plate 23 and is adapted to, when in inoperative position, engage against the front side of the receiver 10 and to be held in this position by means of spring clips 31. A pair of stop pins 32 are carried by the hopper or receiver 10 on the rear side thereof for engagement with the rear edge of the closure 23 when the closure 23 is swung into open position.

In the use and operation of this device, the desired material of any suitable color is placed in the hopper or receiver 10 by opening the closure 12, and when the receiver 10 has been filled, the

device may be rolled over the surface of the ground to the desired point whereupon the closure lever or guide member 30 may be swung forwardly and downwardly, which movement will also swing the closure 23 into open position with the opening 25 registering with the opening 21. In this position, the lever 30 will be gravitatingly held in a position substantially parallel with the surface of the ground and will project forwardly of the device in a manner whereby the person grasping the handle structure 15 can guide the device with the wheels 18 straddling a string or slightly obscure line. When the desired mark has been made, the lever or guide member 30 can be swung upwardly or, if desired, the entire receiver 10 and the handle structure 15 may be rocked forwardly on the axle or shaft 17 so as to bring the spring clips 31 into engagement with the lever or guide member 30. When the lever 30 is engaged with the spring clips 31, the plate 23 is in closed position with the discharge opening 25 therethrough out of register with the discharge opening 21 in the hopper or receiver 10.

It is, of course, understood that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of this invention without departing from the spirit thereof, such changes and modifications being restricted only by the scope of the following claims.

What is claimed is:—

1. A marker as set forth comprising a hopper having a discharge opening in the bottom thereof, a shaft journaled in the hopper adjacent the lower end, wheels on said shaft, a closure engaging the hopper at the bottom thereof, means for mounting the closure for movement to open or close said discharge opening, and means carried by said closure for holding the closure in closed or open position, said latter means when the closure is in open position projecting forwardly of the hopper and constituting a guide means.

2. A marker as set forth comprising a hopper, a handle secured to the hopper and extending upwardly therefrom, said hopper having a discharge opening in the bottom thereof, wheels rotatably supported by the hopper, said hopper having a curved lower portion, an arcuate closure, means for supporting said closure for movement relative to said discharge opening, and a combined closure operating member and guide member secured to said closure, said member gravitatingly holding the closure in opened position and extending forwardly of the hopper when the closure is in opened position and disposed substantially parallel to the surface over which the hopper is moving.

3. A marker as set forth comprising a hopper, a handle structure secured to the hopper and extending upwardly therefrom, said hopper having a discharge opening in the bottom thereof, said bottom being arcuate in configuration, wheels rotatably carried by said hopper, an agitating means disposed within the hopper, an arcuate closure, means for swingably supporting said closure for movement relative to said discharge opening, a combined closure operating member and guide member secured to said closure, and means for holding said combined member in inoperative position, said combined member when in operative position holding the closure in closed position and when in open position gravitatingly holding the closure in open position and extending forwardly of the hopper and in a plane substantially parallel to the surface over which the hopper is being moved.

4. A marker as set forth comprising a hopper having a discharge opening in the bottom thereof, said bottom being of arcuate configuration, a shaft journaled in the hopper adjacent the bottom thereof, an agitating means carried by said shaft for agitating a powdered marking means disposed within the hopper, a screen disposed across the discharge opening, an arcuate closure plate having a discharge opening engaging the arcuate bottom of the hopper, means engaging the shaft for supporting said plate for movement into either open or closed position, a guide member secured to the closure plate and projecting forwardly of the hopper when the closure is in open position, and means carried by said closure plate for controlling the quantity of material passing through the discharge opening.

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