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# UNITED STATES PATENT OFFICE.

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## STREET-SPRINKLER.

944,253.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that I, CHARLES F. BIERBACH, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Street-Sprinklers, of which the following is a specification.

My invention relates to improvements in street sprinklers.

10 The object of my invention is to provide a deflecting shield by which the water which would otherwise be distributed uniformly toward the right and left upon both sides and in rear of the sprinkling nozzles of the  
15 sprinkler, as heretofore constructed, will be all deflected in one direction toward the right or left, preferably toward the right, whereby two important objects are attained. First, by thus deflecting the water toward  
20 the right, it is prevented from being thrown or spattered upon persons or vehicles meeting or passing the sprinkler upon the left, as would otherwise be the case when turning toward the right when meeting a vehicle  
25 as is required by established custom. The second important object accomplished by deflecting the current of water toward the right, is due to the fact that the water thus directed will drive all light refuse material  
30 from the street into the gutter, whereby the work of manually removing the same is greatly diminished and the streets are much more quickly and thoroughly cleaned than  
35 by the ordinary appliances used for such purpose.

My invention is further explained by reference to the accompanying drawings, in which—

40 Figure 1 represents a rear view of an ordinary sprinkler tank provided with my water deflecting shield, part in section, and Fig. 2 is a transverse section of the deflecting shield in connection with the brush preferably used therewith.

45 Like parts are identified by the same reference figures in both views.

It will be understood that the vehicle, not shown, upon which the sprinkler tank is supported, is of ordinary construction. Also  
50 that the tank 1, water discharge ducts 2, 2, water controlling valves 3, discharge nozzles 4, valve rods 5, 5, the brush 6, brush supporting standards 7, and the means for manually operating said valves and brushes,  
55 are of the ordinary construction, and do not require further description.

My invention consists primarily in providing the discharge nozzles with an inclosing deflecting shield, by which the water which is discharged toward the left and rear  
60 of the sprinkler is deflected with the water from the other nozzles toward the right, whereby it has a tendency, as stated, to drive the refuse matter with which it contacts on the street toward and into the gutter. The  
65 deflecting shield comprises the vertically curved end wall 8, front wall 9, rear wall 10, top wall 11 and curved end wall 12. The end wall 8 terminates at the point 13 and the remainder of the bottom upon the right is  
70 left open, whereby the water is free to pass to the surface of the street below and whereby the water which would otherwise be discharged toward the left or rear of the  
75 sprinkler is caused to pass to the street directly beneath the mouth or lower side of the deflecting shield as previously stated. The deflecting shield is provided at its upper side with openings 14 for the reception of the  
80 lower ends of the discharge nozzles and the deflecting shield is supported from the end of the tank by the vertical brackets 15, 15, said brackets being connected with the deflecting shield by bolts 16 and with the tank  
85 by bolts 17. The brackets 15 are provided with two rearwardly projecting lugs 18, 18, and said lugs 18 are provided with apertures for the reception of the brush supporting  
90 standards 7, by which the brushes 6 are adjustably supported. 19 is a chain, by which the brush and its supporting standards 7 are retained in any desired point of adjustment.  
95 When using the deflecting shield, as shown, the branch apertures in the branch nozzle 20 are preferably closed, whereby the water is prevented from escaping therefrom.

It will be understood that the deflecting shield may, if desired, be reversed or changed, end for end, in which case the water will be deflected toward the left  
100 instead of toward the right, but for all ordinary purposes, it is preferably connected with the sprinkler so as to discharge toward the right, as indicated in Fig. 1. It will be understood that the standards 7 are slidably  
105 supported in the apertures of the lugs 18, whereby the brush 6 which is supported by said standards is free to move upwardly and downwardly to conform to the surface of the street over which it is being drawn, also  
110 whereby the brush will remain in contact with the ground regardless of the upward



and downward movement of the sprinkler tank or carriage with which it is connected.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with the discharge nozzles of a street sprinkler, of a deflecting shield closed at its sides and ends and open at its bottom, the end walls of the shield being both inclined in the same direction at an angle to the vertical and adapted to deflect the streams of water downwardly and toward one end of the shield.

2. The combination with the discharge nozzles of a street sprinkler, of a deflecting shield closed at its sides and ends and open

at its bottom, one end wall of the shield being curved downwardly and inwardly and the opposite end being inclined downwardly and outwardly, whereby the discharge streams of water are deflected downwardly and toward one end of the shield and whereby the side impact of the deflected water is adapted to force the debris of the street toward the gutter.

In testimony whereof I affix my signature in the presence of two witnesses.

CHARLES F. BIERBACH.

Witnesses:

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