To all whom it may concern:

Be it known that I, James Andrew Bradshaw, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in Rotary Water-Distributers, of which the following is a specification.

My invention relates to improvements in rotary water distributors which, while particularly adapted for use in connection with sprinklers, such as used for spraying lawns, can be utilized in any situation where a joint or connection is desired which is proof against water, dirt or leakage, and which permits a rapid revolution without the use of a lubricant.

The leading object of my invention is the provision of a device which will be operated or rotated by the force of the water and which will rotate with ease and great rapidity to insure a proper spraying and distribution, and which will dispense with lubricating and have a very long life or lasting property.

Another object of my invention is the provision of a device having a joint or connection which will not require a lubricant, but which will rotate with ease, which can be produced at a very small price, which will be capable of use in many situations and which generally from every point of view will prove thoroughly efficient and practical.

With these objects in view, my invention consists of a device of the character and for the purpose stated embodying novel features of construction and combination of parts, substantially as disclosed herein, it being understood that I reserve the right to use the improvements in any situation where they will properly perform their functions, and also that I may make any changes which fall within the scope of the appended claims.

In order that the detailed construction and the operation of my improvements may be fully understood and its many advantages be appreciated, I have shown in the accompanying drawings an embodiment of my invention.

Figure 1 represents a side elevation of a rotary water distributor constructed in accordance with my invention. Fig. 2 represents a central sectional view thereof. Fig. 3 represents a top plan view of the complete device, and Fig. 4 represents an elevation of the main parts or members constituting my invention, shown detached or separated.

Referring by numerals to the drawings, in which similar characters are used to designate like parts in all the views, the numeral 1 designates the sleeve or connection having at its upper end a lateral flange 2, and provided with the exterior thread 3, for connection with the supply, the flange 2, confining the upper collar or member 4, having a flange 5, and an upper ball groove 6, which acts in conjunction with the ball-groove 7, of the lower collar or member 8, which thus provides a complete track for the balls 9, 70 the said collar or member 8, having exterior threads 10, also flanged portion 11, and upper reduced edge 12, fitting against the flange 5 of member 4.

From this construction it will be noted that the sleeve or connection is flanged and confines the upper and lower collar members, and that between said members is provided a ball track in which are disposed the ball bearings, and fitted upon the threads 10 of said member 3, is the threaded ring member 13, which also is provided with exterior threads 14, with which engage the interior threads 15, upon the band or rim 16, of the hood or cap 17, said hood or cap being formed with a series of threaded openings 18, receiving the threaded ends 19, of the series of water distributing tubes 20, each being provided with spraying nozzles 21.

From this construction it will be understood that the sleeve is connected to the water supply by means of its threaded portion and the water entering the sleeve under usual pressure, imparts a rapid rotation to the hood with its distributing tubes to suitably spray the water, and that the hood and also the members 8 and 13 are rotated with the hood and by reason of the ball bearing connection between the member 8 and the member 4, such rotation in a rapid and smooth manner is permitted, and also that the joint or connection cannot possibly be affected by dust, dirt or the entrance of water, and also entirely dispense with the use of a lubricant.

As before stated, the main feature of my invention resides in the joint or connection, and while it is particularly useful in con-
nection with such devices as shown, it may be used with efficiency in any manner where it would perform its functions in a practical manner.

5 I claim:

1. A device of the character described, consisting of a hood member carrying distributing pipes and formed with a flange having interior threads, a ring fitting within said member having flanges on its upper and lower ends respectively extending in opposite directions and having screw threads on each face of its vertical wall, a connecting sleeve having a threaded lower end and a lateral flange upon its upper end fitting against the upper flange of said double flanged ring, and a pair of collars fitted together and surrounding the upper end of the connecting sleeve below the flange thereof, said collars being formed with a ball track, and balls fitting in said track to form a ball bearing service connection between the sleeve and hood.

2. A device of the character described, consisting of a member formed with a flange having interior threads, a ring fitting within said member having flanges on its upper and lower ends respectively extending in opposite directions and having screw threads on each face of its vertical wall, a connecting sleeve having a threaded lower end and a lateral flange upon its upper end fitting against the upper flange of said double flanged ring, and a pair of collars fitted together and surrounding the upper end of the connecting sleeve below the flange thereof, said collars being formed with a ball track, and balls fitting in said track to form a ball bearing service connection between the sleeve and said member.

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

JAMES ANDREW BRADSHAW.

Witnesses:

E. C. BLACKBURN,
M. L. COFFMAN.