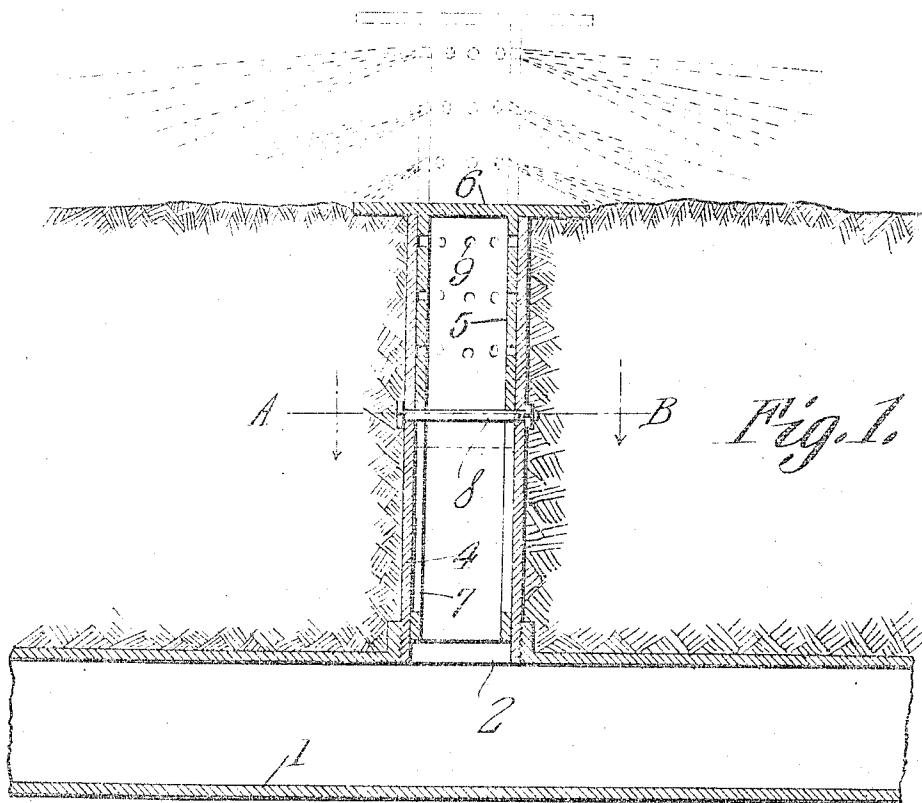


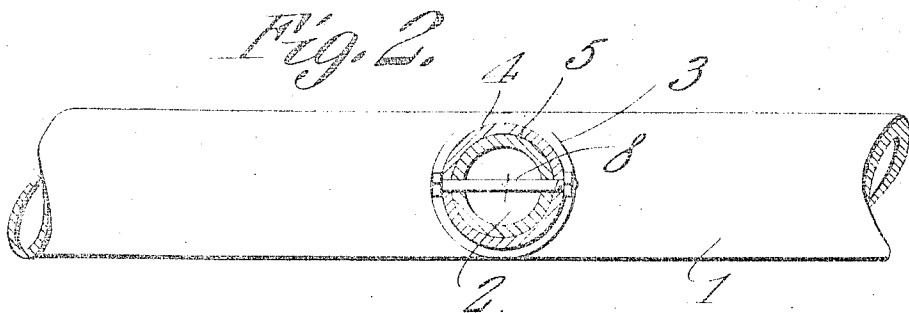
H. M. CHEEK.  
 IRRIGATING APPARATUS.  
 APPLICATION FILED SEPT. 17, 1909.

971,879.

Patented Oct. 4, 1910.



*Fig. 1.*



*Fig. 2.*

Witnesses  
*[Signature]*  
 Herbert D. Lawson.

Inventor  
 Henry M. Cheek.  
 By *[Signature]*  
 Attorney.

# UNITED STATES PATENT OFFICE.

HENRY M. CHEEK, OF LITTLE ROCK, ARKANSAS, ASSIGNOR OF ONE-HALF TO JOHN A. FRETWELL, OF LITTLE ROCK, ARKANSAS.

## IRRIGATING APPARATUS.

971,879.

Specification of Letters Patent.

Patented Oct. 4, 1910.

Application filed September 17, 1909. Serial No. 518,250.

To all whom it may concern:

Be it known that I, HENRY M. CHEEK, a citizen of the United States, residing at Little Rock, in the county of Pulaski and State of Arkansas, have invented a new and useful Irrigating Apparatus, of which the following is a specification.

This invention relates to apparatus for flushing streets, alleys and the like, for irrigating agricultural land, and for similar purposes, and one of the objects of the invention is to provide means for utilizing nozzles which are normally located below the surface to be flushed or irrigated but which, when subjected to the pressure of water supplied thereto, are automatically shifted above such surface and operate to direct a plurality of jets downward onto the surface of the street or ground and in the vicinity of the nozzles.

A further object is to provide a device of this character, which is simple in construction, can readily be placed in position, and will not easily get out of order.

A further object is to provide a nozzle of novel form having improved means for limiting the movement thereof, said nozzle being arranged to automatically assume its normal position when relieved of the pressure of water therein.

With these and other objects in view, the invention consists in the novel details of construction and combination of parts hereinafter more fully described and pointed out in the claim.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings Figure 1 is a vertical section through a portion of the apparatus embodying the present invention, the position of the nozzle when subjected to water pressure, being indicated by dotted lines. Fig. 2 is a section on line A-B of Fig. 1.

Referring to the figures by characters of reference, 1 designates a supply pipe designed to be placed underground and provided at any desired intervals with outlet openings 2 surrounded by interiorly screw threaded flanges 3. These flanges are designed to be engaged by tubular extensions 4 projecting upwardly from the pipe 1 to a point close to the surface of the street or ground to be operated on. A tubular nozzle 5 is slidably mounted within the tube 4 and is provided at its upper end with a cap

6 which may be in the form of a disk of any preferred transverse contour, the disk being preferably so shaped as to lie flush with the surface beneath which the pipe 1 is laid. The nozzle 5 is provided at diametrically opposed points with longitudinal slots 7 through which extends guide bolt 8. This bolt projects through opposed portions of the tube 4 and is secured in place in any preferred manner as by means of a nut. That portion of the nozzle 5 located above the slots 7 is provided with the desired number of apertures 9 preferably arranged in series, the apertures of the lower series being extended at such angles as to direct jets of water downward onto the surface in the immediate vicinity of the tube 4. The next series of apertures 9 above the series first mentioned is preferably at such an angle to the vertical as to direct jets of water to points located at greater distances from the tube 4 than the lower jets and this arrangement of the apertures is followed out to the upper end of the nozzle so that when the jets of water are discharged from the nozzle a wide area will be covered by them.

It is of course to be understood that the pipe 1 is provided with any desired number of guide tubes or extensions 4, these being placed at suitable intervals. Moreover the normal position of the cap 6 is upon the upper end of the guide 4 thereunder and flush or substantially flush with the surface to be acted upon.

When it is desired to use the apparatus, water under pressure is directed into the pipe 1 and forces the various nozzles 5 upwardly until the movements thereof are limited by the lower end walls of the slots 7 coming into contact with the guide bolts 8. As soon as the nozzles are forced upward in this manner the water will be discharged in jets through the apertures 9 and the surrounding surface will thus be thoroughly flushed or irrigated.

It will be seen that this apparatus is especially adapted for use in cleaning thoroughfares, because when it is not in operation the caps 6 can lie flush with the surface of the streets and thus offer no hindrance to traffic. When the water pressure is removed from the pipe 1 the various nozzles 5 will of course drop by gravity to their normal positions.

It is of course to be understood that va-

rious changes may be made in the arrangement of the parts without departing from the spirit or sacrificing the advantages of the invention.

5 What is claimed is:

Apparatus of the class described including a distributing pipe, a branch pipe of uniform internal diameter extending perpendicularly from the distributing pipe and  
10 constituting a guide and guard, a cylindrical nozzle fitted snugly, and slidably mounted within the branch pipe and having a plurality of discharge orifices disposed radially in the nozzle, there being diametrically opposed longitudinal slots within the nozzle  
15 and adjacent the lower end thereof, a di-

ametrically disposed guide bolt extending through the slots and secured within the branch pipe, said bolt constituting means for limiting the movement of the nozzle  
20 within the branch pipe, and a cap upon the upper end of the nozzle normally bearing upon the upper end of the branch pipe and extending laterally beyond said pipe.

In testimony that I claim the foregoing as  
25 my own, I have hereto affixed my signature in the presence of two witnesses.

HENRY M. CHEEK.

Witnesses:

N. OTTENHEIMER,  
T. H. BROWN.