

(No Model.)

W. R. CHISHOLM.  
IRRIGATING APPARATUS.

No. 299,347.

Patented May 27, 1884.

Fig. 1

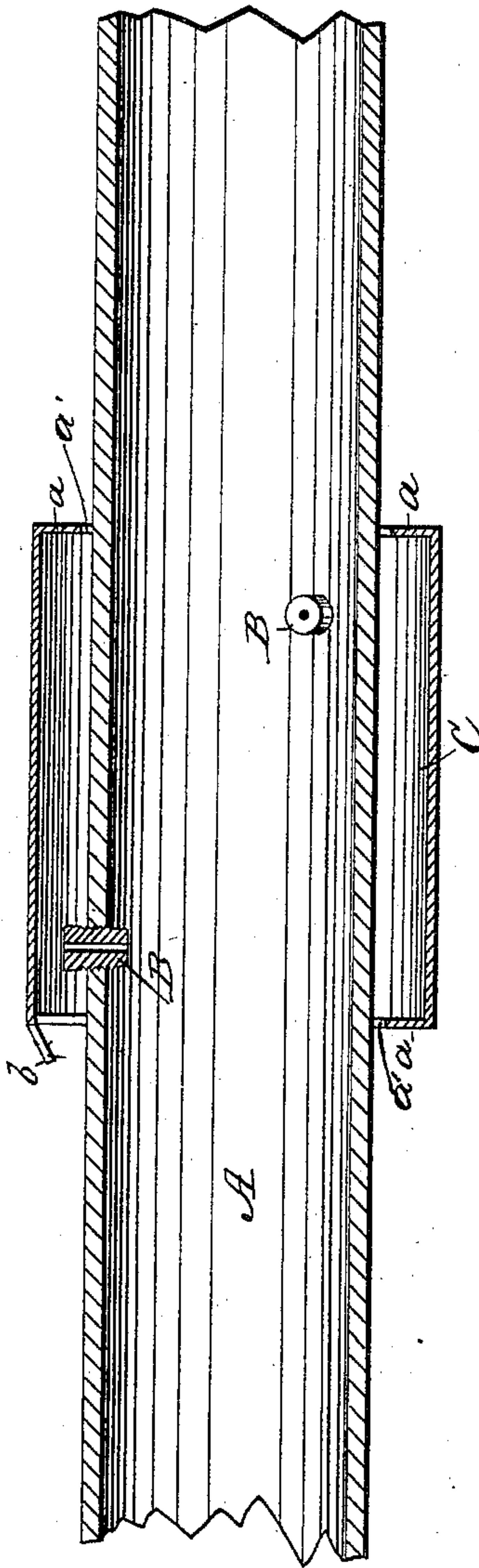
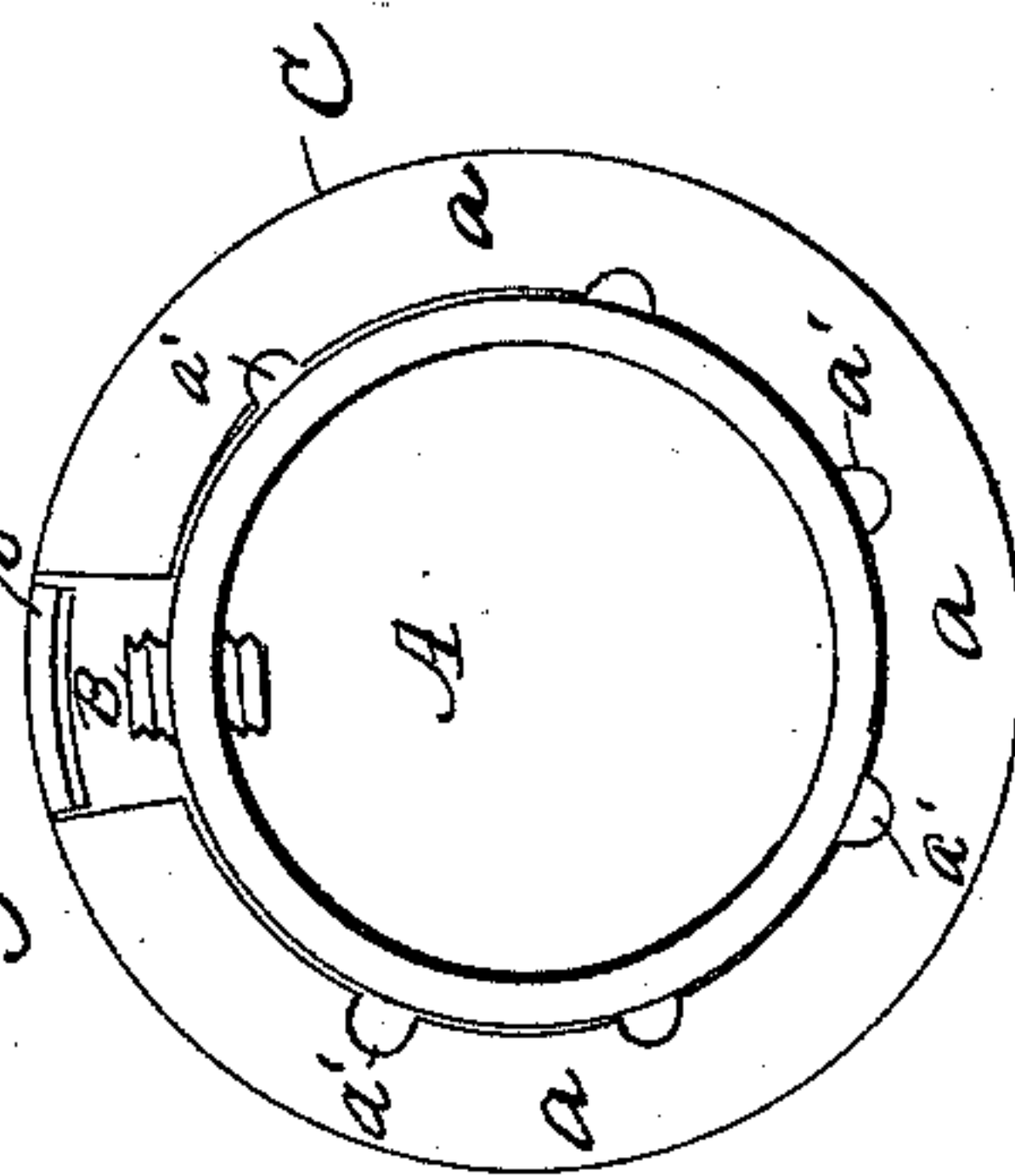


Fig. 2



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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ALBERT L. McLANE, OF SAME PLACE.

## IRRIGATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 299,347, dated May 27, 1884.

Application filed September 19, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM R. CHISHOLM, of Laredo, in the county of Webb and State of Texas, have invented a new and useful Improvement in Irrigating Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

10 Figure 1 illustrates a longitudinal section of my improved irrigating apparatus. Fig. 2 is an end view of the same.

This invention pertains to improvements in irrigating apparatus, having for its object to 15 prevent the choking or obstructing of the nozzles and to effect the proper distribution of the water; and it consists of the combination and construction of parts, substantially as hereinafter described and claimed.

20 In the organization of my invention I employ a water conduit or pipe, A. Transversely through this pipe, at proper intervals apart, are made holes, (only one being shown,) into each of which is inserted a short pipe or nozzle, 25 B. The nozzle projects a short distance both inward and outward from the sides of the pipe A, to prevent any accumulation of rust, dirt, or other extraneous substances on the conduit, around the nozzles, from obstructing the lat- 30 ter. The apertures in the nozzles may be varied in size to accommodate the pressure of the water, being larger for a low pressure and smaller for a high pressure. Upon the pipe or conduit A is placed a supplementary pipe

or casing, C, of sufficient diameter to inclose 35 the outwardly-projecting portions of the nozzles B, and to provide sufficient space between the ends of said portion of the nozzles to permit the free passage of the water from the latter into said casing, whence it passes out of the 40 casing through passages or outlets *a'* in the inner edges of flanges, *a*, formed upon the ends of the casing. The supplementary pipe or casing C prevents the obstruction of the nozzles by the outside dirt or earth. The flange 45 or casing at one end of the casing or pipe C is slitted, so as to permit a portion, *b*, thereof to be turned back to allow the passage of the nozzle or nozzles B as the pipe C is slipped on or off the conduit A, the portion *b* being re- 50 turned to its former position when the casing C is in position. The water passing from the casing C penetrates the surrounding soil, and thus effects its irrigation.

What I claim, and desire to secure by Letters Patent, is— 55

In an irrigating apparatus, the inner water-pipe having the nozzles projecting from the inner and outer surfaces of said pipe, in combination with the outer pipe or casing inclos- 60 ing the outer ends of the nozzles, said outer pipe or casing having water passages or apertures in its ends, substantially as shown and described, and for the purpose set forth.

WILLIAM R. CHISHOLM.

Witnesses:

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