G. R. PROCTOR.

UNIVERSAL REGULATOR FOR IRRIGATING.

APPLICATION FILED SEPT. 30, 1911.

1,054,986. Patented Mar. 4, 1913.

Fig. 1.

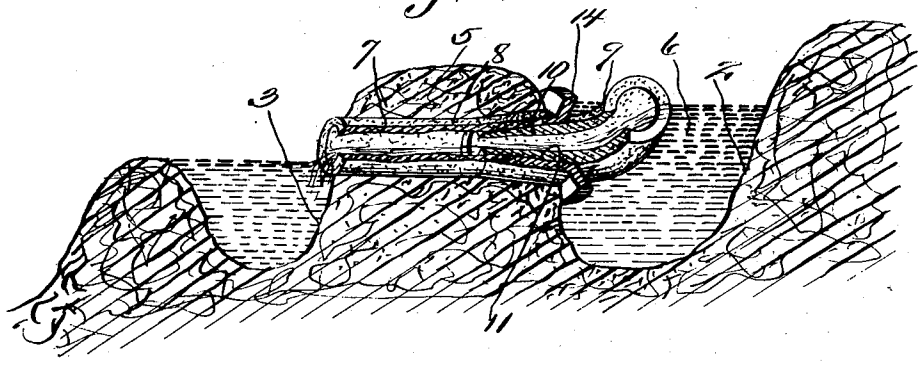


Fig. 2.

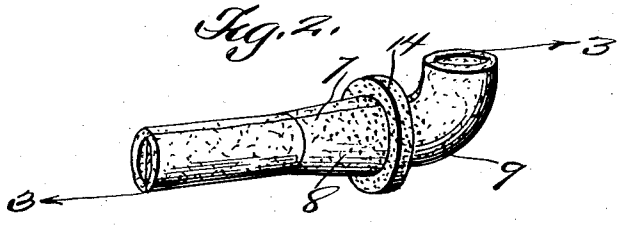


Fig. 3.

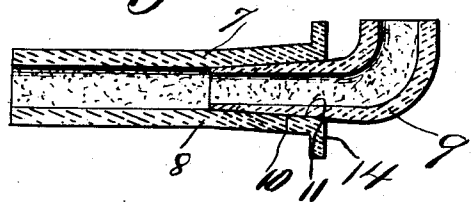
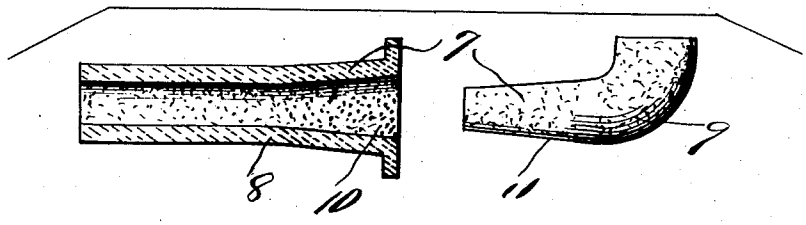


Fig. 4.



Witnesses

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UNIVERSAL REGULATOR FOR IRRIGATING.

1,054,986. Specification of Letters Patent. Patented Mar. 4, 1913.

Application filed September 30, 1911. Serial No. 652,054.

To all whom it may concern:

Be it known that I, GEORGE RAPPEEN PROCTOR, a citizen of the United States, residing at Grand View, in the county of Owyhee and State of Idaho, have invented a new and useful Universal Regulator for Irrigating; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention belongs to the art of irrigation, and it particularly pertains to a new and useful fluid regulator to be used in lieu of "tap boxes" and "headgates" which are now used.

The primary object of the invention is to provide a device of this nature, for regulating the flow of water from the "supply" ditch into the "feed" ditches, and other purposes.

A further object of the invention is to provide a fluid regulator for use in irrigation, comprising two parts swiveled together, one part being in the form of a tubular member having an inwardly tapering inlet portion and a cylindrical outlet portion, while the other part is in the form of a tubular elbow, adapted to be received frictionally into the tapering portion of the first-named part. The first-named or stationary part is designed to be arranged approximately horizontally, as shown in Figure 1 of the drawing while the other part may be adjusted so as to regulate the flow of the fluid from the "supply" ditch into the "feed" ditches. The elbow part may be turned so as to entirely cut off the supply of fluid.

This fluid regulator may be made of wood or other fiber, metal, glass, crockery or similar material. However, the device is to be made preferably from cement or the like.

A feature of the invention is the provision of an annular flange extending about one end of the stationary part, so as to obviate the possibility of the fluid flowing along the outside surface of the part, and washing the irrigator out of the bank, thereby producing a break in the ditch bank or hill. This is a very common occurrence with all "tap boxes," and the object of this invention is to overcome this difficulty.

The drawing discloses only one form of the invention, but in practical fields this form may necessitate alterations, to which the applicant is entitled, provided the alterations are comprehended within the scope of what is claimed.

The invention comprises further features and combination of parts, as hereinafter set forth, shown in the drawings and claimed.

In the drawings:—Fig. 1 is a view showing the application of the improved fluid regulator, for irrigating various lands. Fig. 2 is a perspective view of the fluid regulator. Fig. 3 is a sectional view on line 3—3 of Fig. 2. Fig. 4 is a view showing the two parts separated, so as to illustrate the manner in which they are held together.

Referring more essentially to the drawings, 2 denotes the "supply" ditch, and 3 designates the "feed" ditch. Between the "supply" ditch and the "feed" ditch, the land is formed into a raised portion or hill 5. The main supply of irrigating fluid is shown at 6. The object of this device is to transfer a measured portion of the fluid from the "supply" ditch 2 into the "feed" ditch and thence to the corrugated land to be irrigated. This has been accomplished by wooden "tap boxes" and "headgates" and similar devices, but they have been found to be impracticable in a number of respects. In the present instances, the irrigating fluid is transferred by a new and useful fluid regulator designated by the character 7. This regulator 7 comprises two parts or sections 8 and 9 one being provided on its interior at the inlet end with a tapering wall 10, while the other part 9 is in the form of any elbow. One end of this elbow has its exterior tapered, as shown at 11, and designed to fit telescopically and frictionally within the tapering portion of the stationary section or part 8. Thus it will be seen that when the elbow part 9 is adjusted in various positions, the same is held in such positions by friction. This elbow part may be adjusted, so as to permit only a mere trickle of the fluid to pass through the regulator, or it may be variously adjusted to permit any quantity of fluid up to its full capacity. One end of the section 8 is provided with an annular flange 14. This flange is designed purposely to prevent the water or fluid from flowing along the outside surface of the section 8, and washing the irrigator out of the bank, thereby producing a break in the ditch bank. This flange is arranged close to the bank, as will be observed in the drawings. By turning the elbow part substantially vertically, the

flow of the fluid may be entirely cut off, but throwing the same at various angles to one side or the other, the fluid is allowed to pass through the regulator.

From the foregoing, it will be noted that there has been produced a novel, efficient, simple and effective irrigating device, several of which may be arranged at various points, between "supply" ditches and the "feed" ditches, so as to irrigate high and low lands. Furthermore, it will be observed that there has been produced a practical form of irrigating apparatus.

The invention having been set forth, what is claimed as new and useful is:

1. As an article of manufacture, a tubular member comprising a cylindrical outlet portion and an inwardly tapering inlet portion, said member being adapted to be arranged substantially horizontal in a raised portion between a "supply" ditch and a "feed" ditch; an elbow having a tapering end received frictionally and telescopically in the inwardly tapering inlet portion of said member and adapted to be held therein by the pressure of the fluid in the "supply" ditch, the elbow adapted to regulate the flow through said tubular member; and means formed integrally with the inwardly tapering inlet portion of said member to prevent dislodgment of same from between the "supply" and the "feed" ditch.

2. The combination with a "supply" ditch and a "feed" ditch having an embankment between them, of an irrigation fluid regulator, comprising a tubular member consisting of a cylindrical outlet portion and an inwardly tapering inlet portion arranged transversely of the embankment with the inlet portion adjacent the "supply" ditch, said inlet portion having an annular flange to engage the embankment to prevent the fluid from flowing along the outside surface of said member and washing out the embankment from about said member, thereby producing a break in the embankment; and an elbow having a tapering end received and held frictionally and telescopically in the tapering inlet portion of said member by the pressure of the fluid in the "supply" ditch, said elbow being adjustable to regulate the flow through said tubular member.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE RAPPEEN PROCTOR.

Witnesses:

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