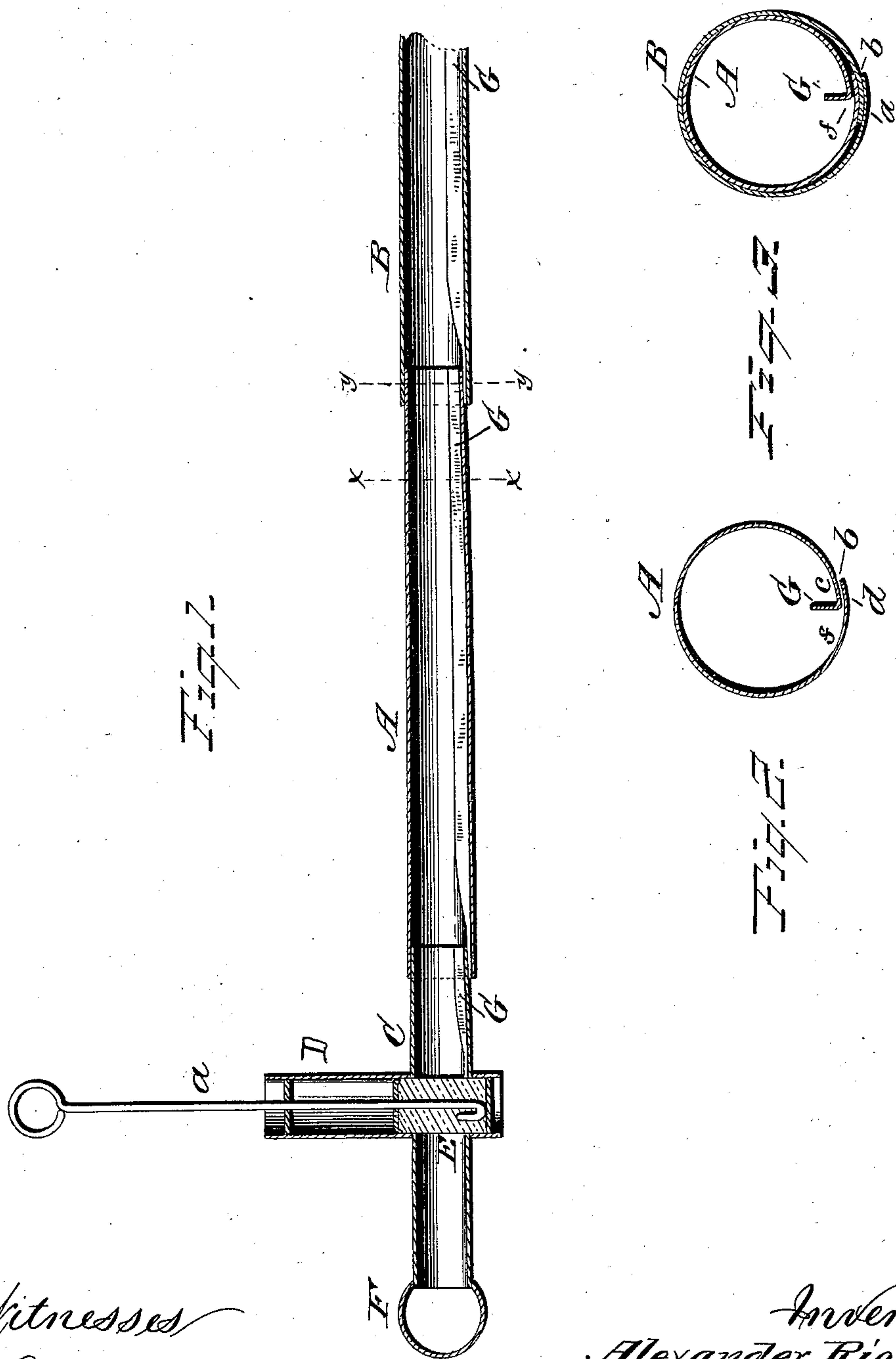


(No Model.)

A. RICHTER.  
IRRIGATING PIPE.

No. 547,501.

Patented Oct. 8, 1895.



Witnesses  
J. Williamson  
Wm. Bowers.

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# UNITED STATES PATENT OFFICE.

ALEXANDER RICHTER, OF HOLLYROOD, KANSAS.

## IRRIGATING-PIPE.

SPECIFICATION forming part of Letters Patent No. 547,501, dated October 8, 1895.

Application filed June 13, 1895. Serial No. 552,680. (No model.)

*To all whom it may concern:*

Be it known that I, ALEXANDER RICHTER, a citizen of the United States, residing at Hollyrood, in the county of Ellsworth and State of Kansas, have invented certain new and useful Improvements in Irrigating-Pipes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has for its object to improve the construction of that class of pipes which are laid below the surface of the ground and used for the purpose of irrigating the land, whereby the discharge of water will be uniform throughout the length of the pipe and a too great flow prevented, thus materially facilitating the proper irrigation of the land for the production of crops and for other purposes.

The invention consists of an irrigating-pipe constructed substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings is a longitudinal section of a line of irrigating-pipe embodying my invention; Fig. 2, a cross-section, on an enlarged scale, taken on line *x x* of Fig. 1; Fig. 3, a sectional view, on an enlarged scale, taken on line *y y* of Fig. 1.

In describing my invention I have shown one of many arrangements of pipes that may be successfully used for the purpose of irrigation, and only sufficient to clearly illustrate the particular construction of the pipe necessary to give a clear understanding of the invention, the arrangement of pipes, their couplings, valve-connections, distributing-pipe, and connections being capable of many changes or modifications without departing from the essential feature of the invention.

In the accompanying drawings, A B represent two sections of an irrigating-pipe embodying my invention, any number of such pipes being used to extend below the surface of the ground and to any distance and direction found desirable. These pipe-sections are coupled together in any preferred manner, but it is desirable in the present instance to insert one end of the section into the end of the adjoining section, as shown in Fig. 1 of

the drawings. The section C of the line of pipe is coupled to the section A in a similar manner and is provided with an upright valve-cylinder D, in which works a suitable valve E, provided with a valve-rod *a* for operating it to close off the water from the irrigating-pipe or turn on the supply, as found necessary. To the section C is connected the distributing-pipe F, which may, if desired, have an inlet-pipe communicating therewith and leading from any source of water-supply, this being left entirely with the person who lays the pipe. The two adjoining edges *c d* of the irrigating-pipe overlap each other, but a space is left between them for the discharge of the water, as shown at *b*, and above referred to. The deflecting-flange G materially strengthens and stiffens the overlapping edge of the metal from which the pipe is constructed. These irrigating pipe-sections may be of any suitable diameter and length and may be formed of galvanized iron or of any other metal found desirable.

It has been previously stated that any suitable coupling may be used to connect the several pipe-sections together, but the most simple means of making a connection between the sections is to solder one end of the section and leave the adjoining end of its fellow section unsoldered and free to contract when the soldered end is slipped over it. Both the ends of each section could be soldered, but it would require pipe-sections of different diameters in order to form a connection between the various sections by slipping the end of one within the end of the adjoining or fellow-section.

Soldering one end of the pipe sections possesses an advantage, in that it prevents such end from spreading and enlarging the discharge-opening, which would result in increasing the volume of water passing out of the pipe, and thus the ground above the pipe would be too wet on account of absorbing an over-supply of water.

The supply to the distributing-pipe F may be taken from a lake, spring, pump, tank, or from any other means found most convenient, and there may be various changes or modifications in the general construction of the pipe and its connections as would come within ordinary mechanical skill.

Having now fully described my invention,



what I claim as new, and desire to secure by Letters Patent, is—

As a new article of manufacture, an irrigating pipe made from a sheet of galvanized  
5 sheet iron which has its edges soldered or fastened together at one end only, so that the opposite end can be compressed to enter the soldered end of the next adjoining section, and which is provided with a longitudinal

flange along the inner edge of the sheet, substantially as shown.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ALEXANDER RICHTER.

Witnesses:

N. C. SMITH,  
W. W. MAZE.