June 24, 1930. P. E. ERICKSON 1,768,310

IRRIGATING SYSTEM

Filed May 1, 1928

Fig. 1.

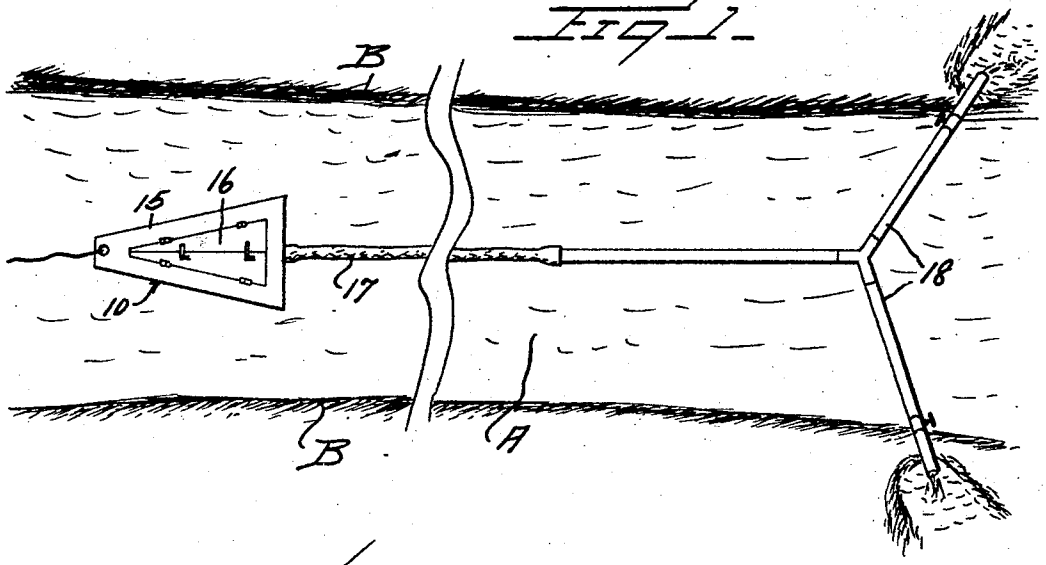


Fig. 2.

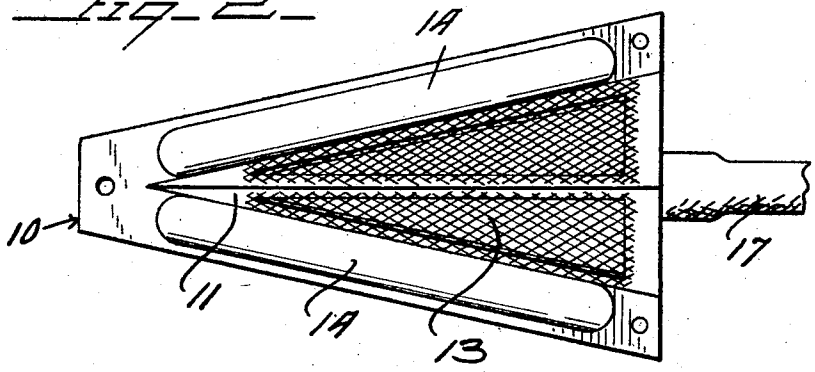


Fig. 3.

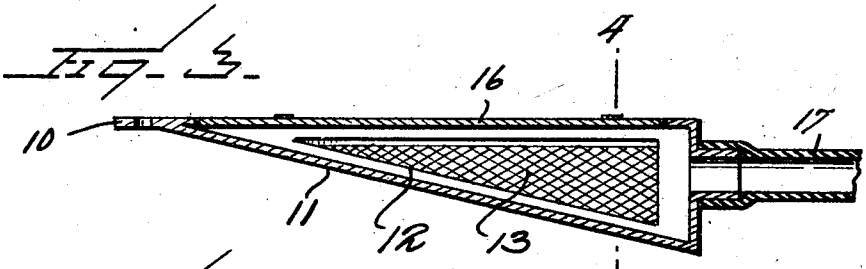
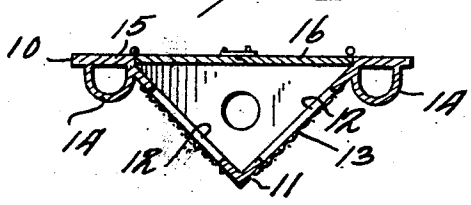


Fig. 4.



Inventor

P. E. Erickson

By Watson E. Coleman

Attorney

Patented June 24, 1930 1,768,310

UNITED STATES PATENT OFFICE

PAUL E. ERICKSON, OF SCANDIA, KANSAS

IRRIGATING SYSTEM

Application filed May 1, 1928. Serial No. 274,306.

This invention relates to irrigating systems and particularly to irrigating systems of that character wherein an inlet member is disposed up-stream at such a distance that water flowing into the inlet member may flow down-stream through suitable piping and then laterally to suitable irrigating ditches, sluices or the like.

The general object of the present invention is to provide a very simple irrigating means of this character which will do away with the necessity of building a dam or pumping water up from a river, and which will eliminate the filling up of ditches from floods.

My invention is illustrated in the accompanying drawings wherein:—

Figure 1 is a plan view of my irrigating system;

Fig. 2 is an underside plan view of the raft or floating intake;

Fig. 3 is a longitudinal sectional view thereof;

Fig. 4 is a transverse sectional view thereof.

In these drawings A designates a stream having the banks B. At any suitable distance up-stream there is disposed a float or equivalent body designated generally 10. This, as illustrated, has a downwardly convergent bottom portion 11, perforated or otherwise apertured at 12, and this aperture or perforations being covered by a wire screen 13. Attached to the bottom of this float or raft and preferably on the underside thereof, are the tubular air chambers 14. These may be of any suitable character and constitute pontoons. The top of the float or raft is formed by a deck 15 having two doors 16 whereby the space between the doors and the screen may be cleaned whenever necessary.

Extending from the end of the chamber formed by the downwardly convergent portions 12 is a pipe 17 which is preferably flexible and which extends down-stream to the point where irrigation is desired and there connects with transverse pipes 18 which extend over the banks B of the stream and discharge water onto the land either into irrigation ditches, sluices or the like. Of course, the distance at which it is necessary to locate the raft or float depends entirely upon the pitch of the river or stream as it is necessary that the intake opening of the raft shall be located at a height at least equal to the crest of the river banks. The boat, raft, or float is to be anchored in the river in any suitable manner so as to permit the float or raft 10 to rise and fall with the rise and fall of the river without, however, moving down-stream to any extent.

I do not wish to be limited to the details of construction and arrangement of parts herein shown as it is obvious that many changes might be made therein without departing from the spirit of the invention as defined in the appended claims. Thus, for instance, I have illustrated the raft or intake member as being tapered up-stream as well as having a convergent bottom, thus causing the inlet openings to extend at an inclination to the flow of the current. This I regard as preferable but I do not wish to be limited to this particular construction of the raft or other floating body.

I claim:—

1. An irrigating system of the character described including a buoyant structure formed with a longitudinally extending chamber approximately triangular in cross section, the chamber having a flat upper wall and two downwardly and medially extending bottom walls, the bottom walls extending downward and rearward and being provided with longitudinally extending inlet openings, a pipe leading down-stream from the large end of the chamber and including a flexible section and a laterally extending irrigating pipe leading from the flexible section over a bank of the stream, and means for anchoring the floating structure at such a point up-stream that the chamber is disposed on a level higher than the highest point of said irrigating pipe.

2. An irrigating system including a buoyant structure comprising a flat deck having doors and having floats, a chamber formed beneath said deck, the chamber being triangular in cross section, the side walls of the

chamber extending downward and rearward from the deck and having screen inlet openings extending longitudinally of the side walls, the said floats being disposed beneath the deck laterally of said chamber, a pipe leading down-stream from the large end of the chamber and having a flexible section, and a laterally extending irrigation pipe leading from the first named pipe over a bank of the stream, and means for anchoring the floating structure at such a point up-stream that the chamber is disposed on a level higher than the highest point of said irrigating pipe.

In testimony whereof I hereunto affix my signature.

PAUL E. ERICKSON.