No. 643,550. Patented Feb. 13, 1900.

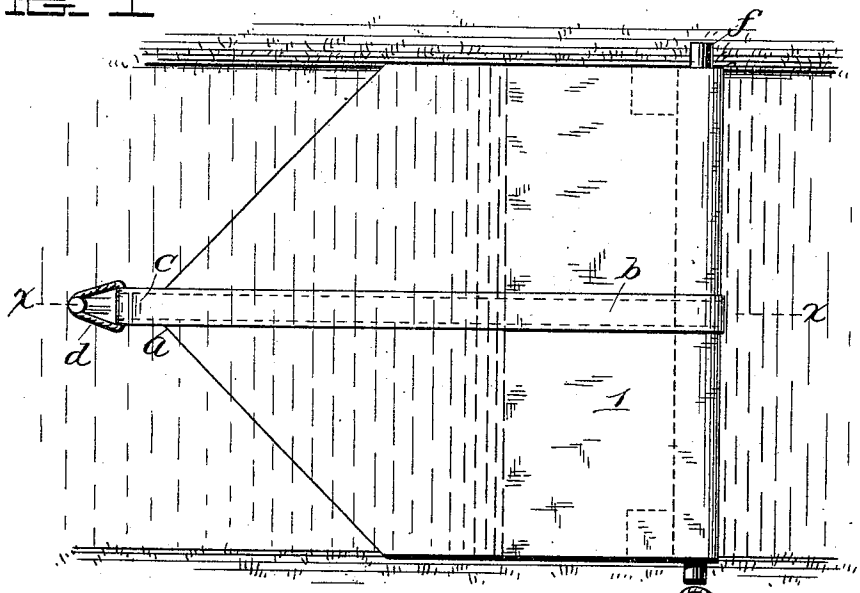
L. L. SMITH.

IRRIGATION OF ARID LAND.

(Application filed Dec. 7, 1899.)

(No Model.)

FIG. 1



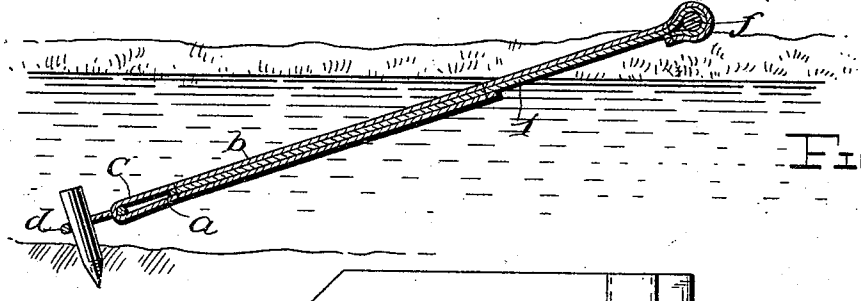
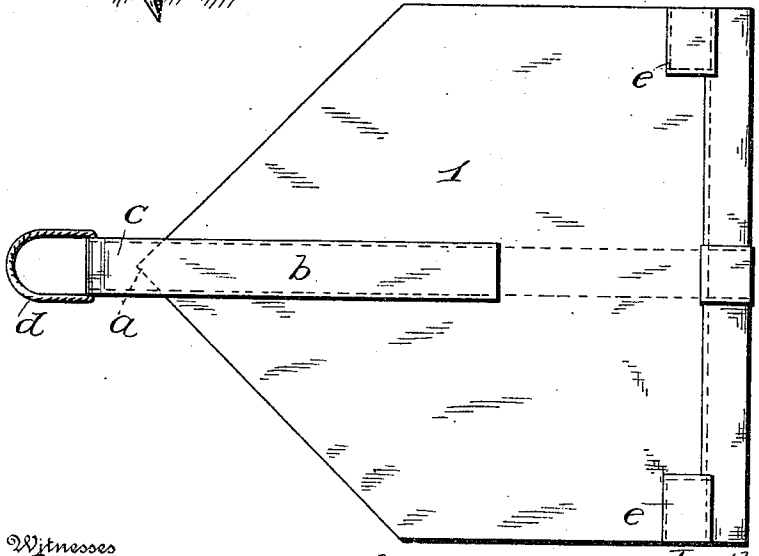


FIG. 2

FIG. 3



Witnesses
D. L. Jenkins.
A. Wilson

Inventor
Luther L. Smith
by A. B. Wilson & Co.
Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LUTHER LEE SMITH, OF AUGUSTA, MONTANA.

IRRIGATION OF ARID LAND.

SPECIFICATION forming part of Letters Patent No. 643,550, dated February 13, 1900.

Application filed December 7, 1899. Serial No. 739,522. (No model.)

To all whom it may concern:

Be it known that I, LUTHER LEE SMITH, a citizen of the United States, residing at Augusta, in the county of Lewis and Clarke and State of Montana, have invented certain new and useful Improvements in Irrigation of Arid Lands; and I do 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.

The invention relates to the irrigation of arid lands.

The object of the invention is to provide means for raising the water in a creek or ditch and causing it to flow over the banks thereof upon the land to be irrigated.

To this end the invention consists in certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a view illustrating my invention in use. Fig. 2 is a longitudinal sectional view on the line *x x*, Fig. 1. Fig. 3 is an enlarged view of the dam removed.

In the drawings the same reference characters indicate the same parts of the invention.

1 denotes the dam, which is preferably made of waterproof material. One edge of the dam—the rear edge—is formed with a hem, while the side edges converge and meet at a point *a*.

b denotes a longitudinal strengthening-strip sewed to the body of the dam and formed at its forward end with a loop *c* to receive a ring *d*.

e denotes reinforcing-strips secured to the dam at its rear end to strengthen the hem and prevent it from pulling out.

f denotes a pole which is inserted through said hem. The pole is to be of a length corresponding to or greater than the width of the stream in which the device is placed.

In use the ring is connected to a stake which is driven into the bed of the stream, and the pole is spread across the stream and rests upon its banks. By thus obstructing the stream the flowing water will rise and flow over the banks of the stream and irrigate the land immediately contiguous thereto.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of my invention will be readily appreciated without requiring an extended explanation. It will be seen that the device is simple, may be made at small cost, and is exceedingly well adapted for the purpose for which it is designed, and it will of course be understood that various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of my invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

A dam consisting of a piece of flexible waterproof material having a hem at one end and having its side edges converging, a reinforcing-strip extending centrally of the piece of fabric and formed with a loop, a ring engaging said loop and adapted to be staked to the stream-bed, and a pole located within said hem and adapted to extend from bank to bank of the stream in which the dam is placed, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

LUTHER LEE SMITH.

Witnesses:
C. C. COVINGTON,
FISK G. ELLIS.