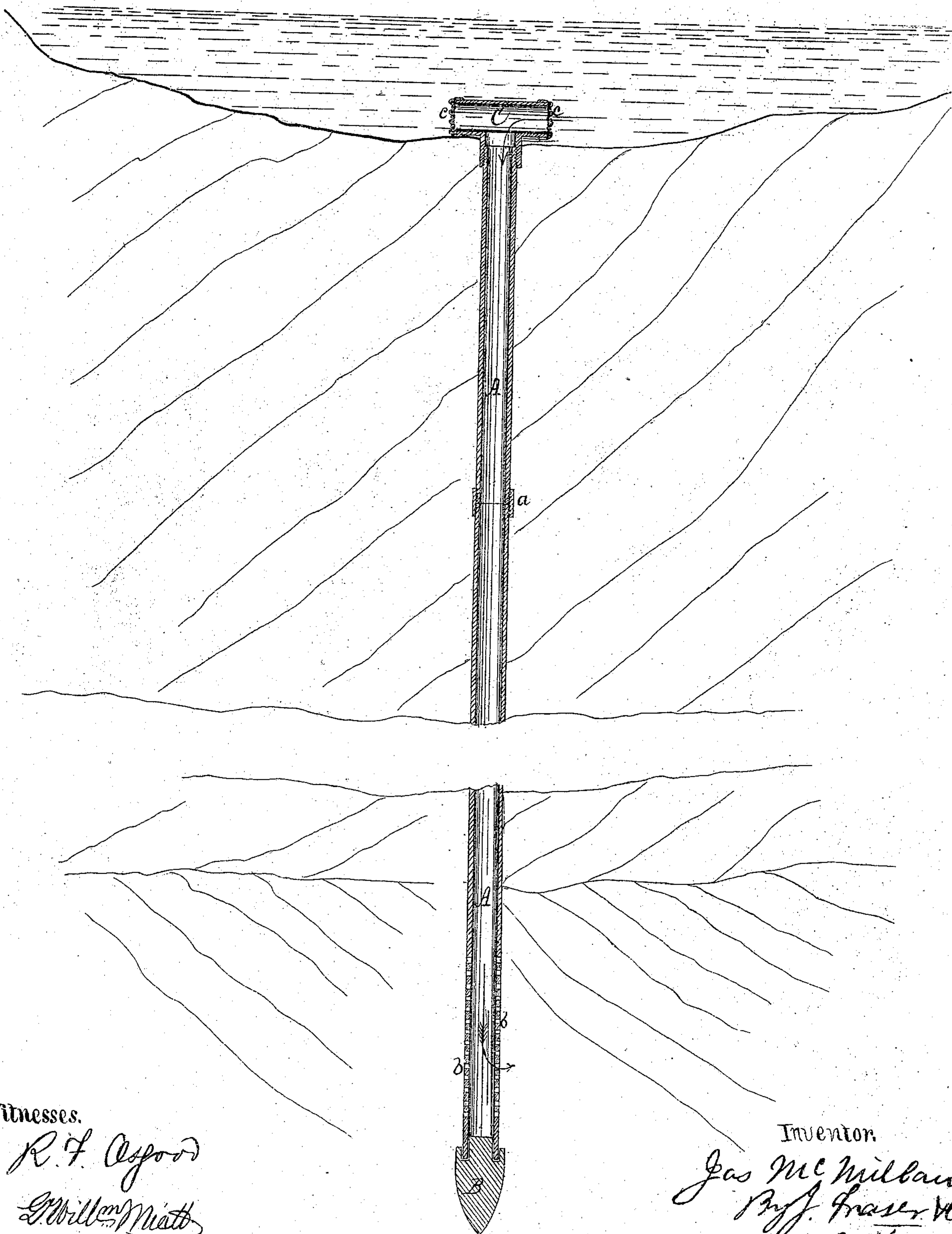


No. 106,709.

J. McMILLAN,
DRAIN TUBE.

PATENTED AUG. 23, 1870.

1870



Witnesses.

R. F. Asford
L. Willen Mott

Inventor.

Gas Mc Millan,
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Attys

United States Patent Office.

JAMES McMILLAN, OF PERINTON, NEW YORK.

Letters Patent No. 106,709, dated August 23, 1870.

IMPROVEMENT IN DRAIN-TUBES.

The Schedule referred to in these Letters Patent and making part of the same

I, JAMES McMILLAN, of the town of Perinton, county of Monroe, and State of New York, have invented a certain new method of Draining Land and Creating Water-Power, of which the following is a specification.

The nature of my invention consists in inserting pipe or tubing, of any diameter or material, into the earth, vertically or perpendicularly, for the purpose of draining land, carrying off surface and surplus water, draining cellars, and creating water-power, as set forth in the following specification and accompanying drawings, which are a part of the same.

My invention consists in combining with a drain-tube, driven into the earth, a screen, consisting of a cross-tube at the top, which is adjustable to different positions, to fit the channel or cavity in which it may be placed.

A A represent the sections of pipe or tube, which, as they are gradually driven into the earth, are united by ordinary couplings, *aa*. This tubing may be gas-pipe or other material, and of any desired size.

The lower end is provided with an ordinary driving-point, B, such as is used in well-tubing; also with perforations *bb*, for the discharge of the drainage, as hereinafter described.

I contemplate, in driving the tubing, the use of drive-rods, such as are shown in my patent on well-tubing, dated May 3d, 1870, in which case, if desired, when the tube is driven deep enough, the driving-point may be driven deeper, so as to leave the lower end of the tube open. In this case the perforations *bb* may, in some instances, be dispensed with; but the point B may be either fixed or loose, as circumstances require.

The upper end of the tubing has a screen or strainer, C, which consists of a short cross-head of tubing, screwed upon the main tube, and open at both ends, with the exception of a covering of wire-mesh, which strains the water that enters.

The advantage of this peculiar form of the strainer is, that it can be turned to any position, so that its length will rest longitudinally in any channel or depression in the surface to be drained, which is very desirable, in order to get the strainer as low as possible. This I claim as a special novelty in my invention.

The operation is as follows:

The tubing is driven down till the tests show that the water strata below have been reached. The screen or strainer C is then applied close to the surface to be drained, and the preliminary preparations are then complete.

The water from the surface sinks through the tube into the sub-strata, and soon entirely disappears, as there is no limit to the capabilities of the process.

It is not only useful in draining waste lands, but also in draining cellars, excavations, &c.

It may also be applied for discharging the water of water-powers, by simply making the tubing of proper size to accommodate the volume, downward, as the discharge is diffused so quickly in the sub-strata that no appreciable rise takes place.

This arrangement differs from ordinary well-tubing, not only in forming a connection simply between the surface and the water strata, but also in having the top of the tube located close down to the drainage surface, and especially in the application of the strainer C. Well-tubing has nothing of the kind.

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

The strainer, consisting of the cross-tube C, capable of adjustment vertically and angularly, when combined with the main tube A A, in the manner and for the purposes specified.

JAMES McMILLAN.

Witnesses:

GEO. FRAUENBERGER,
C. T. LEADLEY.