

J. V. SMITH.
METHOD OF DRAINING PONDS OR WET LANDS.
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1,355,066.

Patented Oct. 5, 1920.

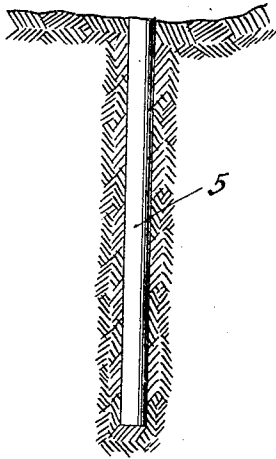


Fig. 1.

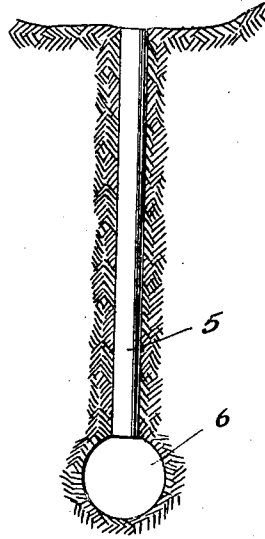


Fig. 2.

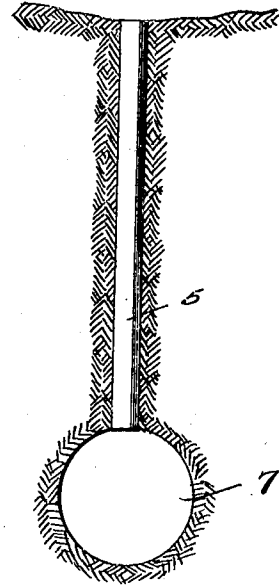
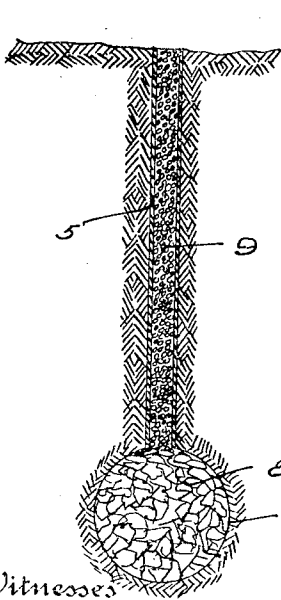


Fig. 3.

Fig. 4.



Witnesses
R. A. Thomas

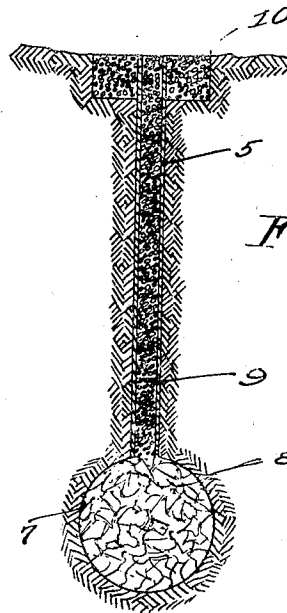


Fig 5

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METHOD OF DRAINING PONDS OR WET LANDS.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JACOB V. SMITH, a citizen of the United States, residing at Mason City, in the county of Mason and State of Illinois, have invented new and useful Improvements in Methods of Draining Ponds or Wet Lands, of which the following is a specification.

This invention relates to a method of draining ponds and low lands from water accumulation thereon.

With my method I sink one or a number of pipes a determined depth in the place to be drained, thereafter insert in said pipe or pipes a quantity of explosive, such as dynamite, explode the latter so as to form a pocket at the end of the tube or tubes, the earth disturbed by the explosion forming the pocket opening the veins in the earth, so that the water flowing through the tube into the pocket will be drained in the earth. After the pocket has been drained the tube or tubes have inserted therein small rock or stone which partly fills the tubes and wholly fills the pocket, and upon the top of such rock or stone I insert a filler of gravel, and thereafter I may dig a basin around the mouth of the tube and fill this with rock or stone to hold the tube firm as well as to serve as a basin to prevent the entrance of sediment through the neck of the tube.

In the drawings:

Figure 1 shows a tube driven into the earth in a low land or pond to be drained;

Fig. 2 is a similar view showing conditions when a small quantity of dynamite or other explosive has been exploded in the bottom of the tube;

Fig. 3 is a similar view showing conditions when a larger amount of dynamite has been exploded in the pocket formed by the first charge of explosive;

Fig. 4 is a view showing the pocket and tube filled; and

Fig. 5 is a view showing a trough dug around the mouth of the tube and filled to provide a support for the mouth of the tube and a sediment basin for the said mouth of the tube.

As disclosed in Fig. 1 of the drawings, I sink a pipe or tube 5 of any desired length in the ground. Through the tube I insert first a small quantity of dynamite or other explosive, which when exploded forms at the lower end of the tube a comparatively small pocket 6. Thereafter I insert through

the tube into the pocket 6 a larger charge of dynamite which when exploded provides a larger pocket 7. The explosion of the larger charge of dynamite opens the pores of the earth, permitting the water to flow through the tube 5 into the pocket 7 and to pass therefrom through the pores of the earth, thus draining the land. After a sufficient time has been permitted for the complete drainage I insert through the mouth of the tube first a filler of comparatively large stone or broken rock 8 and upon the top of this a filler of gravel 9. These fillers permit of any additional accumulation of water finding an outlet through the pores of the earth at the pocket 7. In order to provide a sediment basin or drainage as well as to support the outer end or mouth of the tube, I dig therearound a trough and fill the same with broken rock as indicated by the numeral 10 in Fig. 5 of the drawings.

My improved method will be found especially desirable in reclaiming water covered lands. While I have described the explosive as dynamite, it is, of course, to be understood that I am not to be restricted to any particular class of such explosives. Also, in lieu of ordinary metallic pipes or tubes, other hollow elements may be employed which may be formed of material other than metal.

Having thus described the invention, what is claimed as new, is:—

1. The method of draining ponds and low lands by first forcing a pipe or tube through the lowest part of the surface to be drained, to arrange the outer end of the said pipe flush with the ground surface, thereafter inserting an explosive charge through the tube and exploding the same to provide a pocket at the lower end of the tube and to disrupt the surface of the ground below said tube to open the pores thereof, and thereafter to insert and explode an additional charge to further disrupt and enlarge the pocket formed by the first explosion, and thereafter to insert in said tube and pocket a filler of broken stone or rock and gravel.

2. The method of draining ponds and low lands by first forcing a pipe or tube through the lowest part of the surface to be drained, to arrange the outer end of the said pipe flush with the ground surface, thereafter inserting an explosive charge through the tube and exploding the same to provide a pocket at the lower end of the tube and to disrupt

the surface of the ground below said tube to
open the pores thereof, thereafter to insert
and explode an additional charge to fur-
ther disrupt and enlarge the pocket formed
5 by the first explosion, thereafter to insert
in said tube and pocket a filler of broken
stone or rock and gravel, and thereafter dig

a trench around the mouth of the tube and
fill the same with loose rock to provide a
support for the mouth of the tube and a 10
sediment basin for the tube.

In testimony whereof I affix my signature.

JACOB V. SMITH.