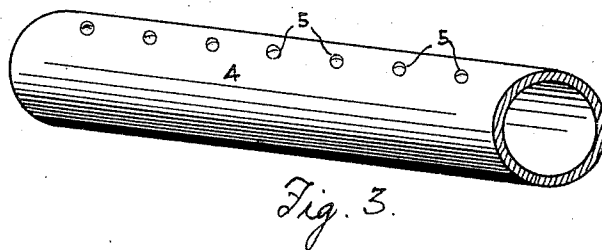
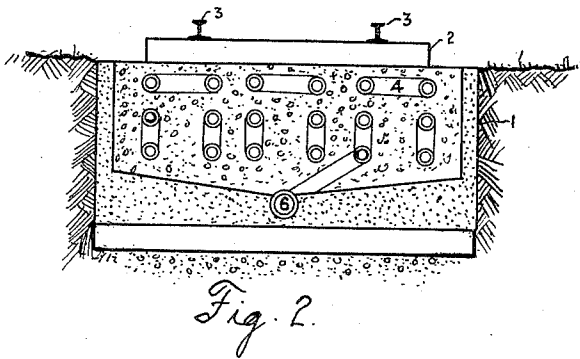
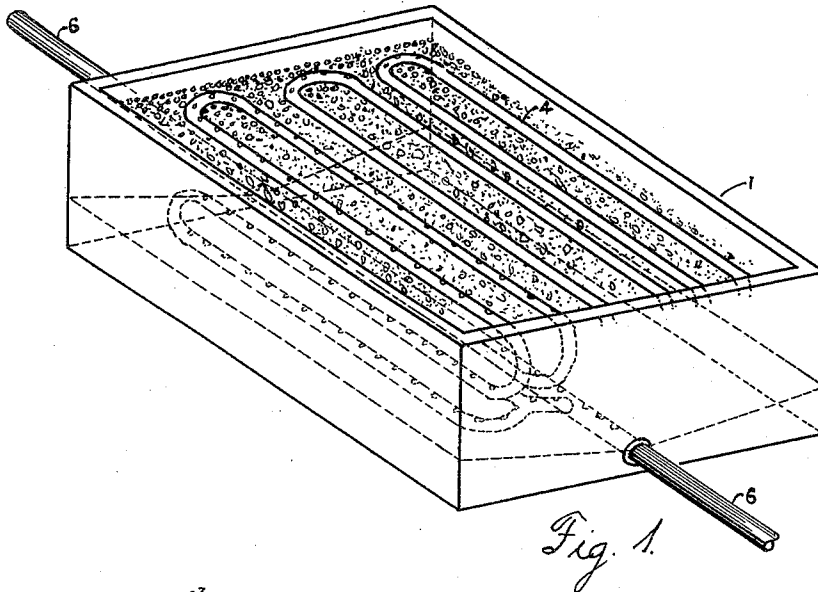


W. M. McKNIGHT.
DRAIN BOX FOR RAILWAY CROSSINGS.
APPLICATION FILED JUNE 3, 1912.

1,051,344.

Patented Jan. 21, 1913.



WITNESSES:
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WILLIAM M. McKNIGHT, OF HOUSTON, TEXAS, ASSIGNOR OF ONE-HALF TO A. M. CHAMBERS, OF HOUSTON, TEXAS.

DRAIN-BOX FOR RAILWAY-CROSSINGS.

1,051,344.

Specification of Letters Patent.

Patented Jan. 21, 1913.

Application filed June 3, 1912. Serial No. 701,120.

To all whom it may concern:

Be it known that I, WILLIAM M. McKNIGHT, a citizen of the United States, residing at Houston, in the county of Harris and State of Texas, have invented certain new and useful Improvements in Drain-Boxes for Railway-Crossings, of which the following is a specification.

My invention relates to new and useful improvements in drain boxes for railway crossings.

The object of the invention is to provide a device of the character described which is designed to be placed under the tracks of a railway crossing for the purpose of draining off the water which may fall upon said tracks and thus keeping the ties and rails thereof dry; and it is the further object of the invention to provide a base or foundation for the crossing which will be firm and yet which will have a certain amount of resiliency.

With the above and other objects in view, the invention has particular relation to certain novel features of construction and arrangement of parts, an example of which is given in this specification and illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of the crossing drain box. Fig. 2 is a sectional end view thereof, and Fig. 3 is a section of the drain pipe.

Referring now more particularly to the drawings wherein like numerals of reference designate similar parts in each of the figures, the numeral 1 refers to a box which should be constructed preferably of concrete and which is usually considerably greater in length and breadth than in depth. The walls of this box should be of considerable thickness, preferably at least six inches and it is of a length and breadth such that the ties 2, upon which the rails 3 of the crossing are laid, will not reach to the side walls thereof but will fall short of said side walls at each end and will be supported by the contents of the box, as shown in Fig. 2. Arranged within this box is a plurality of pipes 4 which coil around from top to bottom thereof so that the coils will be distributed through the box and in the upper sides of these pipes are a plurality of perforations 5 through which the water caught in the box percolates into the pipes. Along the longitudinal center of the bottom of the box and

almost completely buried in the concrete from which said bottom is formed, is a drain pipe 6 and the bottom of said box on each side of said pipe inclines slightly toward the pipe. This pipe 6 also has a row of perforations along its upper side and the water caught in the bottom of the box drains through said perforations into said drain pipe. The pipes 4 also communicate with this drain pipe and discharge the water received by them into the same.

The water received by the drain pipe 6 is discharged into a suitable cesspool or gutter whichever may be most convenient.

The box 1 is filled with gravel or some similar material which holds the coiled pipes in position and which will allow the water to readily percolate through and at the same time form a substantial and resilient foundation for the crossing, and the box is buried in the ground underneath the track so that its top will be flush with the surface of the ground.

What I claim is:—

1. A device of the character described composed of retaining walls and a pipe coiled within said walls and having perforations along the upper side thereof, a drain pipe with which the said first mentioned pipes communicate and a filler within said retaining walls.

2. A device of the character described including a suitable box and a loose filler therefor, a pipe coiled within the box having a plurality of perforations in the upper side thereof, and a drain pipe arranged along the bottom of said box and leading from the box, with which said coil pipe communicates.

3. A device of the character described including a suitable box composed of concrete or some similar material, a drain pipe extending along the longitudinal center of the bottom of said box and partially buried in said bottom, a loose filler for said box, a coil pipe arranged within the box and extending through said filler and communicating with said drain pipe, said coil pipe being provided with a plurality of perforations along the upper side thereof.

4. A device of the character described including a suitable box composed of concrete or some similar material, a drain pipe extending along the longitudinal center of the bottom of said box and partially buried in

said bottom, and having a plurality of perforations along the upper side thereof, a loose filler for said box, a coil pipe arranged within the box and extending through said
5 filler and communicating with said drain pipe, said coil pipe being provided with a plurality of perforations along the upper side thereof.

10 5. A device of the character described including a box open at the top and having the sides of its bottom sloping toward the longitudinal center thereof, a drain pipe extending along the longitudinal center of said bottom and partially buried therein and hav-

ing a row of perforations along the upper 15 side, a coil pipe arranged within said box and having a row of perforations along its upper side and communicating with said drain pipe and an open filler in said box 20 through which the said pipe coils.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM M. McKNIGHT.

Witnesses:

MAY MONTGOMERY,
MAUDE ROBERTS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
