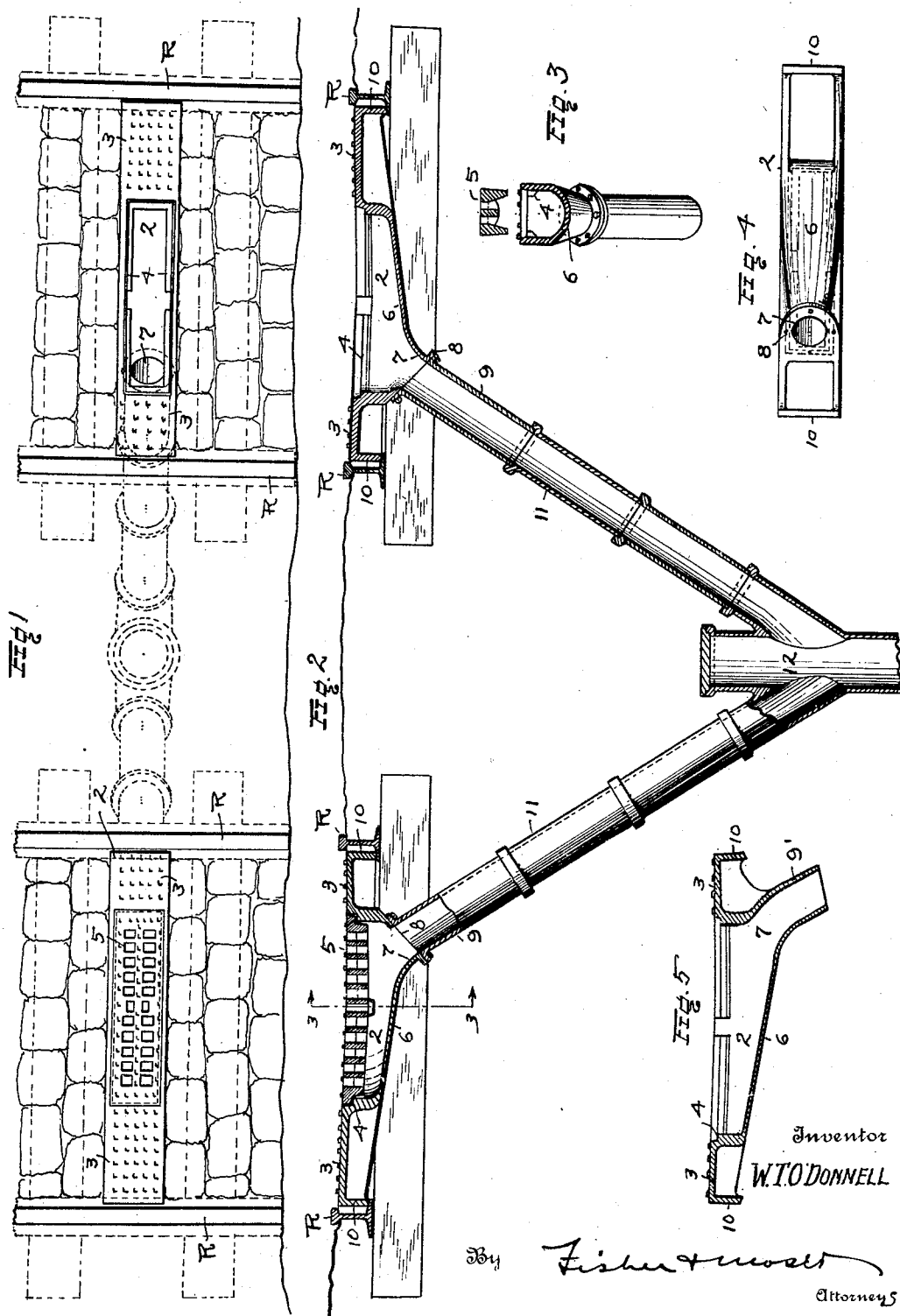


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 TRACK DRAIN.
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TRACK DRAIN.

1,408,134.

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To all whom it may concern:

Be it known that I, WALTER T. O'DONNELL, a citizen of the United States, residing at Lakewood, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in a Track Drain, of which the following is a specification.

This invention relates to track drains, and the general object of the invention is to provide a drain box for railway tracks which are paved. As constructed the drain box promotes rapid flushing and draining through an inclined discharge opening and connection at one end of the box and through a straight sloping drain pipe without abrupt crooks or elbows at the box, thereby preventing clogging and making the drain pipe accessible for inspection and cleansing from the center of the track, and permitting complementary drain boxes to be used in double tracks with separate drain pipes converging on straight lines from the separate drain boxes to a single sewer pipe located centrally between the double tracks.

In the drawing accompanying this application, Fig. 1 is a plan view of a short stretch of a double-track street railway embodying a pair or set of my improved drain boxes arranged oppositely therein, and Fig. 2 is a vertical cross section of the tracks and drain boxes and their sewer connections.

Fig. 3 is a vertical section of one drain box on line 3—3 of Fig. 2, showing the grid cover raised and unseated. Fig. 4 is a bottom view of one of said drain boxes. Fig. 5 is a sectional view of a slightly modified form of the invention.

I am aware of the use of drain boxes for street railways wherein a sewer connection is made with an outlet centrally located within the bottom of the box and with which it is necessary to use an elbow to effect a sewer connection, especially when the main sewer pipe is at one side of the track. To overcome vital objections in the actual use of such drain boxes and their connections I provide a drain box 2 of cast metal which is relatively narrow and long and comprises flat studded top ends 3 sloping slightly toward the middle chamber portion of the box which has a depressed border seat 4 for a removable open grid or cover 5. The bottom 6 of the box is inclined downwardly be-

ginning at one end and terminating in a rounded outlet 7 at its opposite end where a flanged flat face 8 is formed at a reverse inclination to the sloping bottom 6 so that a separate short straight pipe extension 9 may be bolted thereto at a vertical inclination with the axis thereof extending toward the middle or center of the open upper side of the box. In Fig. 5, outlet extension 9' is shown as integral with the box, but I prefer using a separable extension affixed to a short flanged outlet for several practical reasons.

A depending apron or flange 10 is also provided at each end of the box which is adapted to rest upon the base flanges of the railroad rails R to support the box substantially flush with the pavement, and the bottom 6 is preferably rounded transversely (see Fig. 3) to facilitate drainage and prevent accumulation of matter therein.

When two such drain boxes are placed oppositely in a double track railway the outlet ends are placed at the inner sides of the tracks facing each other so that separate sewer pipe connections 11—11 may be extended on straight converging lines to and within a stand-pipe or a main sewer connection 12 located centrally beneath and between the pair of tracks.

The line of discharge from each drain box being direct and straight to the sewer, each line of pipe can be inspected, reached and cleaned with facility and despatch by merely removing cover 5, and no accumulation of matter or clogging of the box will occur with the inclined outlet 7 arranged and constructed as shown.

What I claim is:

1. A track drain, comprising a relatively long and narrow box having an open top and a sloping bottom with a vertically-inclined outlet extending axially toward the center of the open top at an acute inclination to a perpendicular line to facilitate the making of a sewer pipe connection on a straight line extending toward the center and upper open side of said box, and a removable grid for said box.

2. A relatively narrow and long track drain, comprising a cast-metal box having depending supporting walls at its opposite ends and a sloping bottom extending lengthwise of the box and terminating in a round outlet at one end of said box, said outlet be-

ing extended toward the end of the box and downwardly at an inclination to permit a sewer pipe connection to be made therewith on a straight line extending toward the middle upper side of said box.

3. An elongated drain box for railway tracks, having a partly open and partly studded closed top with depending supporting-flanges at opposite ends thereof and provided with a rounded bottom sloping downwardly toward one end and terminating in a round outlet and extension projected downwardly at an acute inclination to per-

mit a straight sewer connection to be made on a vertically-inclined line. 15

4. In combination, a double track railway having separate drain boxes oppositely disposed between the parallel tracks thereof, each box having a vertically-inclined outlet at its bottom, and separate sewer pipe connections extending from said outlets on straight converging lines to a common discharge connection located centrally between said double tracks. 20

WALTER T. O'DONNELL.