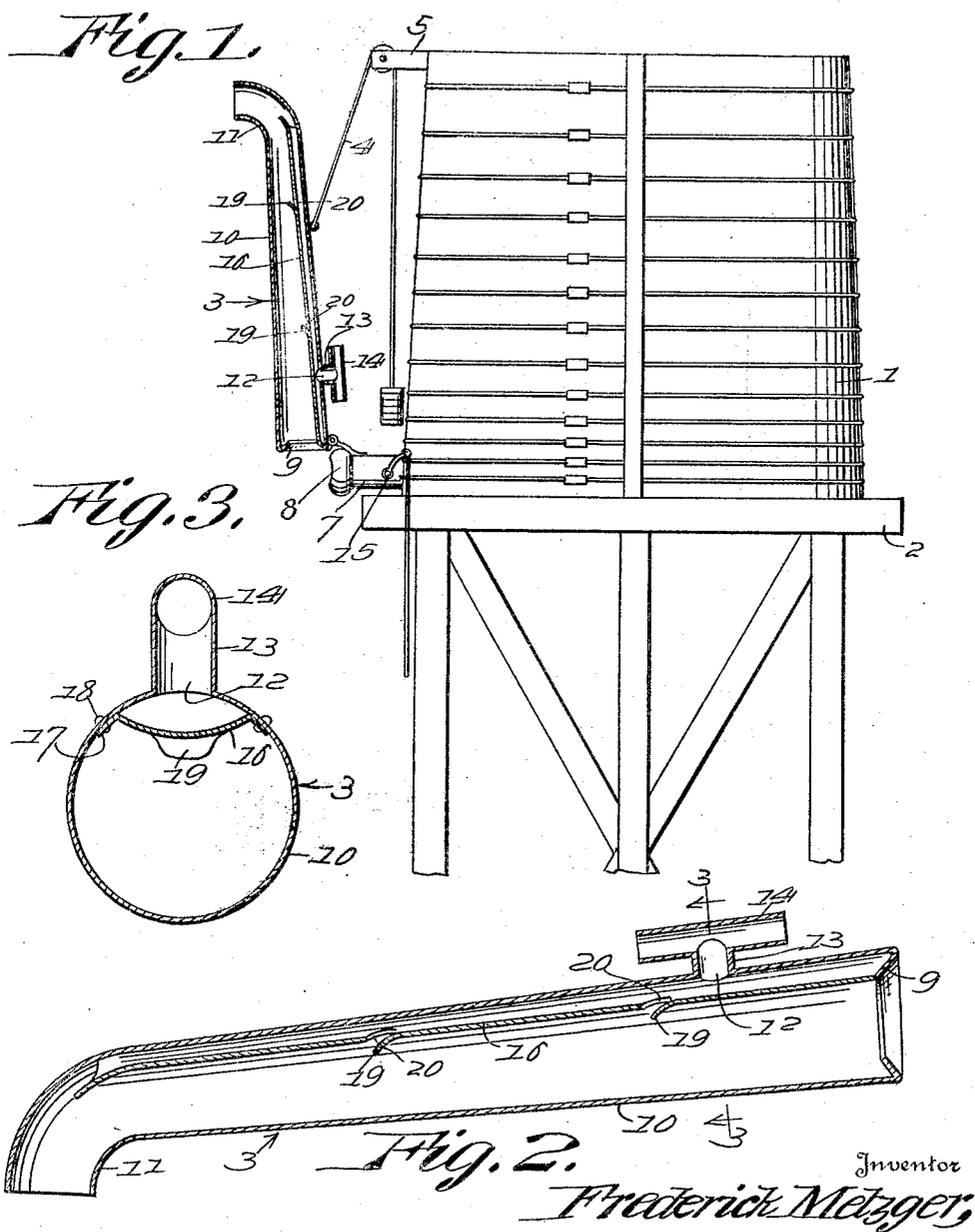


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 SPOUT FOR RAILROAD WATER TANKS.
 APPLICATION FILED SEPT. 7, 1917.

1,275,964.

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To all whom it may concern:

Be it known that I, FREDERICK METZGER, a citizen of the United States, residing at Hondo, in the county of Medina and State of Texas, have invented certain useful Improvements in Spouts for Railroad Water-Tanks, of which the following is a specification, reference being had therein to the accompanying drawing.

The present invention has reference broadly to improvements in that class of inventions known as railroad water tanks and more particularly relates to a spout therefor.

The invention has for its principal aim and object to provide a device of the above character wherein the construction of the conducting spout permits of the entire discharge of water therefrom subsequent to shutting off the valve means which controls the flow of water from the tank and thereby prevents a waste of water when the spout is swung into a raised position.

More particularly this invention embraces the provision of a water tank wherein the spout thereof is designed so as to assure of a suction of air into the spout in order that the air will force the water from the spout subsequent to closing the valve means in the tank.

Among the other aims and objects of this invention may be recited the provision of a device of the character described with a view to compactness, and in which the number of parts are few, the construction simple, the cost of production low and the efficiency high.

Other improvements and novel details of the construction and arrangement of the various parts of the apparatus will be brought out more in the description to follow, which for a clear understanding of the invention should be considered in connection with the accompanying drawings forming a part hereof, and wherein is disclosed for the purpose of illustration a convenient and satisfactory embodiment of the invention. It is to be noted in this connection that minor changes in the construction and arrangement of parts may be made without departing from the principle of operation of the various parts.

The invention is clearly illustrated in the accompanying drawings, in which:

Figure 1 is a vertical section of the in-

vention mounted on a water tank and shown in a raised position;

Fig. 2 is an enlarged longitudinal sectional detail of the spout in a lowered position;

Fig. 3 is a transverse section taken on line 3—3 of Fig. 2 in the direction in which the arrows point.

Similar characters of reference are employed in all the above described views, to indicate corresponding parts.

Referring now, more particularly, to the accompanying drawings there is provided a tank 1 mounted on a suitable trestle support 2. The improved spout 3 is shown movably and operably connected to the tank and is preferably held in a raised position by means of a cable 4 one end of which is connected to the spout and this cable is trained through a beam 5 which extends from the tank while a weight 6 is connected to the opposite end thereof and acts as a counter-balance for the spout when in a raised position.

The preferred means for operably connecting the spout to the tank consists in the provision of a hollow goose neck 7 arranged in communication with the tank 1 and adjacent the bottom thereof while on the outer end thereof is formed a head 8 and which is designed to seat against a frusto-conical valve seat 9 mounted at the inner end of the spout.

In the present instance the improved spout consists of a tubular body 10 in the outer end of which is formed an elbow 11. This spout is provided adjacent its inner end with an opening 12 in which is fitted a shank or depending portion 13 of a T-joint 14 which acts as a cowl for the spout for a purpose that will presently appear.

With a view toward providing the improved means for assuring of the entire discharge of water from the spout subsequent to shutting off the valve means 15 which controls the passage of water therefrom a partition 16 is employed and is preferably arcuate in cross section. Arcuate flanges 17 are formed on the marginal edges of the partition while suitable fastening devices 18 serve as a means for removably securing the partition longitudinally of the inner surface of the body adjacent the top thereof when it is in a lowered position as indicated in Fig. 2. As is apparent this partition forms an air passage. This partition desirably extends from the seat 9 to the elbow 11 and is in com-

munication with the T-joint 14 through the instrumentality of the opening 12. Tongues 19 are struck from the partition at uniformly spaced intervals leaving openings 20 in the partition and these tongues are inclined downwardly and in the direction of the flow of water through the spout so that they will act as deflectors in assuring of the passage of water through the spout in creating a suction of air through the T-joint and thence through the partition to cause an entire discharge of water from the spout subsequent to shutting off the valve means and preparatory to moving the spout into a raised position. By this arrangement it will be appreciated that a waste of water is prevented which ordinarily would occur about the goose neck if the improved means were not employed.

It is thought in view of the foregoing description that a further detailed description of the operation of the invention is entirely unnecessary. Likewise it is believed that the advantages of the invention will be readily apparent.

As many changes could be made in the above construction and many apparently widely different embodiments of this invention could be made without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limited sense.

Having thus fully described this inven-

tion, what is claimed as new and desired to be secured by Letters-Patents, is—

1. A spout for railroad tanks including a hollow body having an opening adjacent one end thereof, a cowl mounted in the opening, a partition extending longitudinally throughout the body and providing an air passage, and deflecting tongues struck out from the partition and inclined in the direction of the flow of water through the body so as to assure of a creation of suction through the cowl and the air passage into the body.

2. A spout for railroad tanks including a tubular body having an elbow end and a frusto-conical valve seat mounted in the inner end of the body and adapted to be universally connected to a water tank, the body being provided with an opening adjacent the inner end, a T-joint fitted in the opening and acting as a cowl, a partition arcuate in cross section and secured longitudinally of the inner surface of the body approximately throughout the length thereof and providing an air passage, and deflecting tongues struck downwardly from the partition and arranged at an inclination in the body and in the direction of the flow of water through the spout to assure of the creation of suction through the T-joint and the air passage subsequent to shutting off the flow through the spout and preparatory to moving the spout in a raised position.

In testimony whereof I affix my signature.
FREDERICK METZGER.