April 21, 1925. 1,534,241

C. E. NICHOLS

STOCK DRENCHER

Filed Nov. 24, 1923 2 Sheets-Sheet 1

Fig. 1.

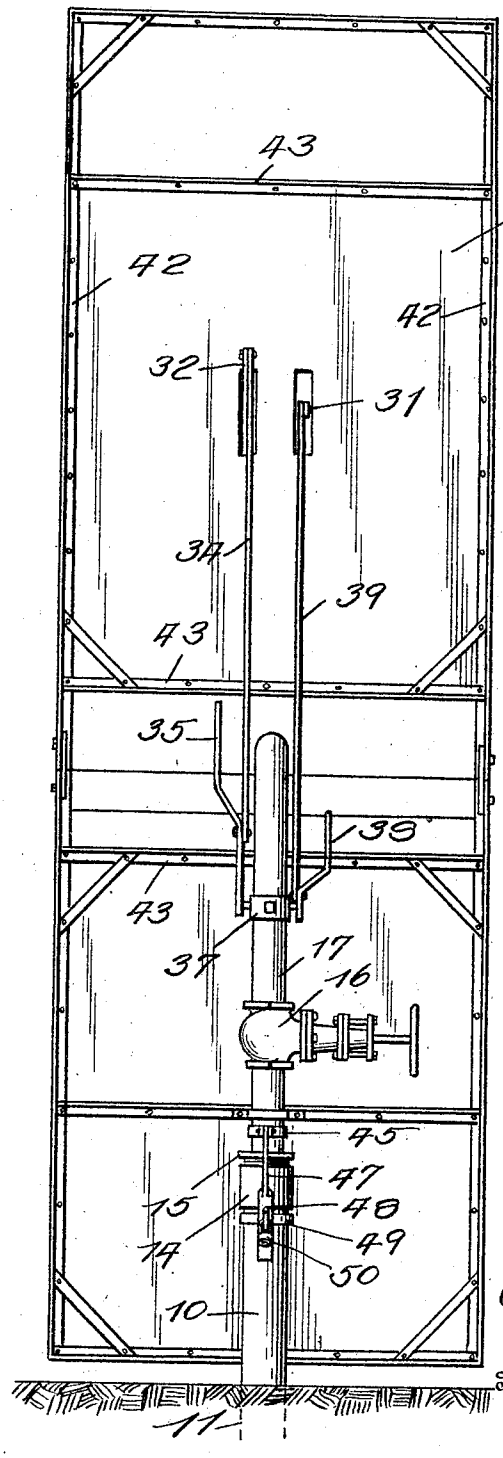
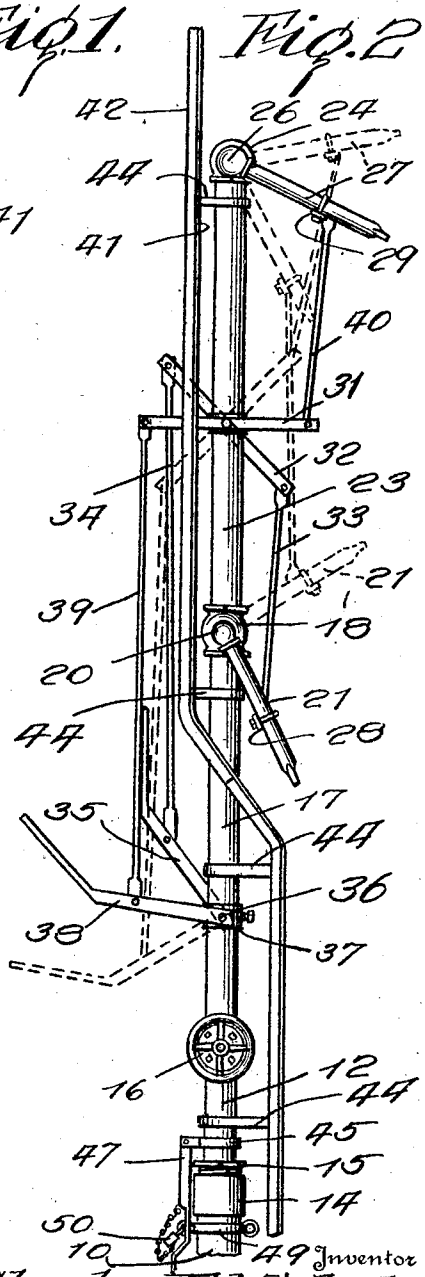


Fig. 2.



Inventor

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Fig 3

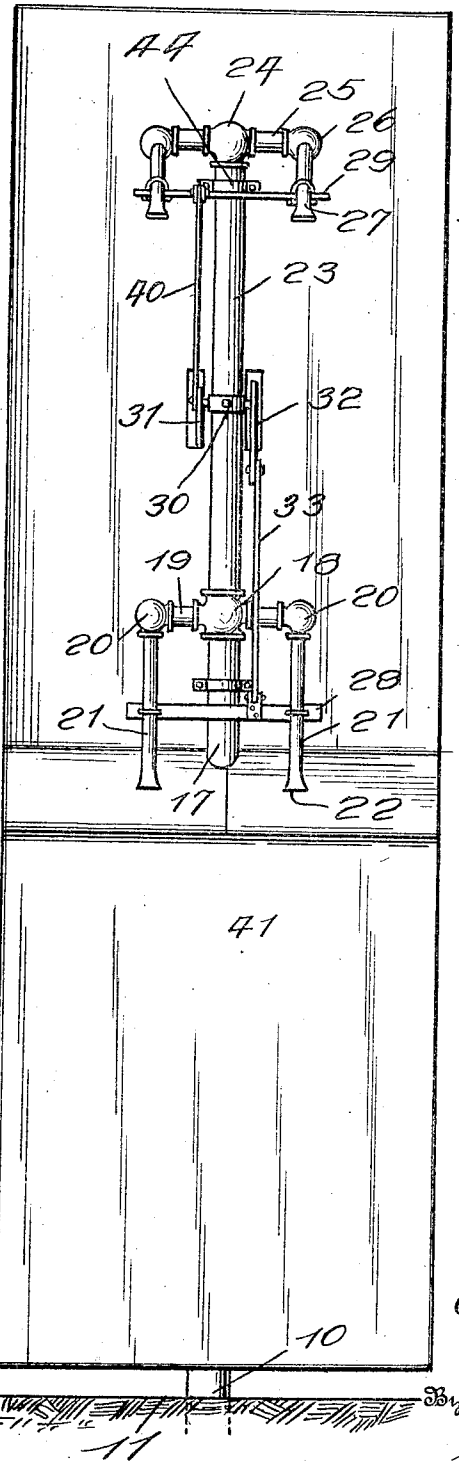


Fig. 4.

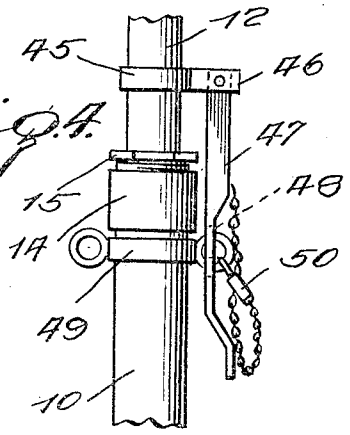
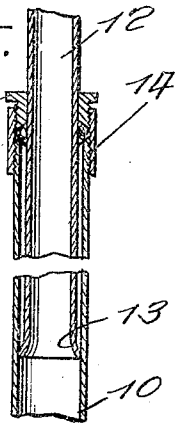


Fig. 5.



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Patented Apr. 21, 1925. 1,534,241

UNITED STATES PATENT OFFICE.

CHARLES E. NICHOLS, OF BELLEFONTAINE, OHIO.

STOCK DRENCHER.

Application filed November 24, 1923. Serial No. 676,798.

To all whom it may concern:

Be it known that I, CHARLES E. NICHOLS, a citizen of the United States, residing at Bellefontaine, in the county of Logan and State of Ohio, have invented certain new and useful Improvements in Stock Drenchers, of which the following is a specification.

This invention relates to devices used on railroads for drenching or watering livestock in transit in stock cars.

At the present time there is used for this purpose a rather cumbersome construction made of wood and pipe and this as a rule is so constructed that it is necessary to place it on the outside of the track on account of there not being sufficient clearance between the tracks.

One of the objects of the present invention is to provide a drencher of an improved character which is adapted to be placed between two tracks and which is so constructed as to drench a car on either track and at the same time provide for sufficient clearance.

A further object is to provide a construction of this character which can be locked in a safe position when not in use so that when locked it cannot possibly project out into the way of a car, and which is further so constructed that an operator standing on the ground may discharge two diffused streams of water to each deck of a double deck stock car at the same time or discharge all four streams in a direction to reach any part of a single deck car. this adjustable construction being such that the operator is enabled to deliver the water at any desired angle.

A still further object is to provide a construction of this character which is rotatable on a vertical axis so that it may be used between two tracks and will drench cars on either track.

Another object is to provide a device of this character with a shield which protects the operator from being splashed, which is constructed entirely of metal and which is, therefore, more durable than the old type of stock drencher.

Other objects will appear in the course of the following description.

My invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a rear elevation of a stock drencher constructed in accordance with my invention;

Figure 2 is a side elevation of the stock drencher shown in Figure 1 and showing the position of the nozzles in dotted lines;

Figure 3 is a front elevation of the stock drencher shown in Figures 1 and 2;

Figure 4 is a fragmentary detail elevation of the standpipe and riser pipe with the means for holding the two pipes in locked relation;

Figure 5 is a vertical sectional view of the standpipe and riser pipe.

The stock drencher constructed in accordance with my invention comprises a stand pipe 10 whch is constructed of four-inch pipe, it being understood, of course, that the pipe may be of any suitable dimension, this pipe extending down through a concrete or other base 11 and being connected to a source of water. This pipe section 10 may be threaded so as to be connected to a supply pipe and is to be set in concrete preferably, but may be supported on timbers embedded in the ground.

Disposed within the stand pipe 10 is a riser pipe section 12. The lower end of this section, which is inserted within the stand pipe 10, is outwardly flared, as at 13, so as to bear against the inner face of the four-inch stand pipe and hold the pipe section 12 erect. The upper end of the stand pipe is exteriorly screw-threaded and engaged therewith is a collar 14 interiorly screw-threaded to receive a packing nut or gland 15. This construction, it will be seen, permits the riser pipe to be rotated within the stand pipe 10. The pipe section 12 has in it a valve 16 whereby passage upward through this pipe section may be checked or controlled, and above this valve there is a pipe section 17 which at its upper end terminates in a cross fitting 18 having the laterally extending nipples 19 terminating in elbows 20. Extending downward from these elbows 20 are depending nozzles 21 having flattened outlets 22. The reducing elbows 20 may rotate upon the nipples 19 but the nipples may rotate within the cross fitting 18, but in either case the nozzles 21 are mounted for oscillation in a vertical plane.

Extending upward from the cross fitting 18 is a pipe section 23 which terminates at its upper end in a cross 24 having laterally projecting nipples 25, reducing elbows 26, and the nozzles 27 which are formed exactly as the nozzles 21. Extending across

beneath the nozzles 21 is a cross bar 28 having U-bolts engaging the nozzles and extending across the nozzles 27 is a cross bar 29 also attached to these nozzles by U-bolts. Mounted upon a collar 30 fast upon the pipe section 23 are levers 31 and 32. These levers are disposed on opposite sides of the pipe section 23. The lever 31 is connected by a connecting rod 40 to the cross bar 29 and a connecting rod 39 is connected to the rear end of the lever 31, and the rear end of the lever is connected by the connecting rod 39 to a handle 38 which is pivoted at 36 upon a collar 37 held in place upon pipe section 17 by means of a set screw. This handle 38 is in the form of a lever and intermediate its ends is pivoted to the connecting rod 39. When this handle is depressed it will be obvious that the outer end of the lever 31 will be raised and this will shift the upper discharge nozzles upwardly, and when the handle 38 is raised it will depress these discharge nozzles 27. By shifting the lever, the discharge nozzles may be adjusted at any desired point. The lower set of discharge nozzles 21 are operated by a second lever 35 also pivoted upon the collar 37, this lever being connected by a connecting rod 34 to the lever 32 which has its outer end connected by a connecting rod 33 to the cross bar 28. Thus by operating the second handle 35, the pair of nozzles 21 may be adjusted, and it will be noted that the discharge nozzles 21 are capable of independent adjustment from the discharge nozzles 27.

In order to prevent an operator from becoming splashed with water while manipulating the handles 35 and 38, I provide a shield, designated generally 41. This shield extends upward in front of the pipe sections 10 and 12 and at a point just above the collar 37, the shield is angularly bent, the pipe section 17 extending through an opening in this angularly bent portion, and then the shield extends upward to a point above the upper set of discharge nozzles. This shield may be made of a plurality of sections riveted or bolted together if desired and I do not wish to be limited to the particular construction of the shield. This shield is made of galvanized sheet iron and is supported by means of a frame 42 of angle iron. The frame is braced by cross bars 43 at intervals and to certain of these cross bars 43 a strap 44 is attached which embraces the pipe sections 12, 17 and 23 so that this shield is mounted upon the rotatable riser pipe and oscillates with this riser pipe as the riser pipe is shifted in one direction or the other. The shield is, of course, long enough so as to come down below the upper end of the stand pipe but clear of the ground or floor, is high enough to extend above the upper spray, and the shield is, of course, wide enough so as to fully protect the operator from getting wet.

The riser pipe is held against oscillation and in correct position by means of a combined handle and locking device. This comprises a strap 45 which embraces the riser pipe and has two outwardly extending ears 46. Pivoted between these ears is the handle 47 flattened at its lower end and slotted, as at 48. Surrounding the stand pipe below the collar 14 is a strap 49 having outwardly projecting eyes adapted to pass through the slot 48 in the handle when the handle is in a vertical position. When the handle is in a vertical position with one of the eyes passed through the slot, a locking device of any suitable character, either a padlock or a snap hook, this locking device being designated 50, may be passed through the eye, thus locking the handle from being raised unauthorizedly or accidentally. When the handle is fastened as described, the spray pipes are disposed in planes parallel to the tracks so that none of the mechanism will project out in such position as to be struck by a train on either of the tracks. When the device is unlocked, however, for use, obviously the riser pipe may be oscillated and turned around to any desired position so as to discharge a stream of water through the several nozzles.

If in the installation of this device to serve only one track, it is desirable to do away with the oscillating feature on account of there being no need of it, the riser pipe 12 may be extended downwardly through the concrete or other base 11 and directly connected to a source of water, thus eliminating the outside flaring 13 of the riser pipe 12 and eliminating the collar 14 and packing nut or gland 15 as shown in Figures 4 and 5.

It will be seen that the type of stock drencher which I have described and which is illustrated is made up of standard pipe and fittings, forgings, angle irons, and sheet metal. The upper nozzles may be used for discharging water into upper double deck cars, while the lower nozzles discharge water into the lower decks of these cars, or all four nozzles may be used to reach any part of a single deck car. Obviously the operator by manipulating the levers can shift the upper nozzles and lower nozzles into any desired angular relation. The mechanism can be placed between two tracks and will drench cars on either track but has the same clearance as a Poage water column. By the locking mechanism illustrated the drenching mechanism may be locked in safe position when not in use. The operator, it will be seen, stands on the ground to operate this drencher and does not have to climb onto any platform. At the same time the operator is entirely protected from being splashed.

I claim:—

1. A stock drencher adapted to be disposed beside a track and including a vertical pipe rotatably supported at its lower end and connected to a source of water, a nozzle carried by said pipe and projecting out therefrom, and mounted for oscillation on and relative to the pipe, a shield mounted upon pipe for rotation therewith and extending longitudinally with the pipe and disposed behind said nozzle and extending above and below the same, and manually operable means carried by the pipe and disposed behind said shield for imparting oscillation to the nozzle and thereby controlling the direction of discharge.

2. A stock drencher adapted to be disposed between two tracks including a vertical pipe mounted for oscillation on a vertical axis and connected to a source of water, a plurality of sets of nozzles carried by the pipe and oscillatably mounted thereon, a shield carried by the pipe and extending downward behind said nozzles, and manually operable means disposed behind the shield for controlling the flow of water through the nozzles and for oscillating said nozzles.

3. A stock drencher adapted to be disposed beside a track including a vertical pipe, a pair of nozzles mounted upon the upper end of the pipe for oscillation in a vertical plane, a pair of nozzles mounted below the first named pair for oscillation in a vertical plane, and means for independently shifting said nozzles comprising independent handles each operatively connected to a pair of nozzles.

4. A stock drencher adapted to be disposed beside a track including a vertical pipe, a pair of nozzles mounted upon the upper end of the pipe for oscillation in a vertical plane, a pair of nozzles mounted below the first named pair for oscillation in a vertical plane, means for independently shifting said nozzles comprising independent handles each operatively connected to a pair of nozzles, and a shield carried upon said pipe and extending downward behind said nozzles and in front of said operating means.

5. A stock drencher adapted to be disposed beside a track and including a vertical stand pipe, a riser pipe having rotatable engagement with the standpipe and extending upward therefrom, the riser pipe at its upper end being formed with laterally extending branches having a downwardly extending set of nozzles, the nozzles being mounted for oscillation in vertical planes, the riser pipe below the first named nozzles being provided with laterally extending branches having a set of nozzles mounted for oscillation in vertical planes, a shield extending downward behind the upper portion of the riser pipe and behind said nozzles and below the lower set of nozzles extending forward of the riser pipe and then downward, and handles operatively supported by the riser pipe and disposed behind said shield and operatively connected to the sets of nozzles whereby the nozzles may be oscillated.

6. A stock drencher adapted to be disposed beside a track and including a vertical standpipe, a riser pipe having rotatable engagement with a standpipe extending upward therefrom, the riser pipe at its upper end being formed with laterally extending branches having a downwardly extending set of nozzles, the nozzles being mounted for oscillation in vertical planes, the riser pipe below the first named nozzles being provided with laterally extending branches having a set of nozzles mounted for oscillation in vertical planes, a shield extending downward behind the upper portion of the riser pipe and behind said nozzles and below the lower set of nozzles extending forward of the riser pipe and then downward, handles operatively supported by the riser pipe and disposed behind said shield and operatively connected to the sets of nozzles whereby the nozzles may be oscillated, and means for locking the riser pipe in either of two adjusted positions.

7. A stock drencher adapted to be disposed beside a track and including a vertical standpipe, a riser pipe having rotatable engagement with the standpipe and extending upward therefrom, the riser pipe at its upper end being formed with laterally extending branches having a downwardly extending set of nozzles, the nozzles being mounted for oscillation in vertical planes, the riser pipe below the first named nozzles being provided with laterally extending branches having a set of nozzles mounted for oscillation in vertical planes, a shield extending downward behind the upper portion of the riser pipe and behind said nozzles and below the lower set of nozzles extending forward of the riser pipe and then downward, handles operatively supported by the riser pipe and disposed behind said shield and operatively connected to the sets of nozzles whereby the nozzles may be oscillated, means for locking the riser pipe in either of two adjusted positions including a handle operatively supported for pivotal movement upon the riser pipe and normally depending parallel to and below the upper end of the standpipe, the handle having a slot, and means mounted upon the standpipe and extending outward and adapted to be received in said slot.

8. A stock drencher of the character described adapted to be disposed between tracks and including a vertical standpipe connected to a source of water, a riser pipe rotatably mounted within the standpipe and

carrying at its upper end a pair of nozzles, the nozzles being mounted for movement in vertical planes and carrying below the first named pair of nozzles a second pair of nozzles mounted for oscillation in vertical planes, independent manually operable means for shifting said nozzles vertically, a shield mounted upon and rotatable with the riser pipe, said shield extending upward behind said nozzles and below the lower pair of nozzles extending downward and forward and then downward beyond the upper end of the standpipe, a valve disposed behind said shield for controlling the flow of water through the riser pipe, and means for rotating the riser pipe and locking the riser pipe in position with the shield extending parallel to the tracks.

In testimony whereof I affix my signature.

CHARLES E. NICHOLS.