

(No Model.)

R. E. ISMOND.

STOCK CAR.

No. 354,552.

Fig. 1. Patented Dec. 21, 1886.

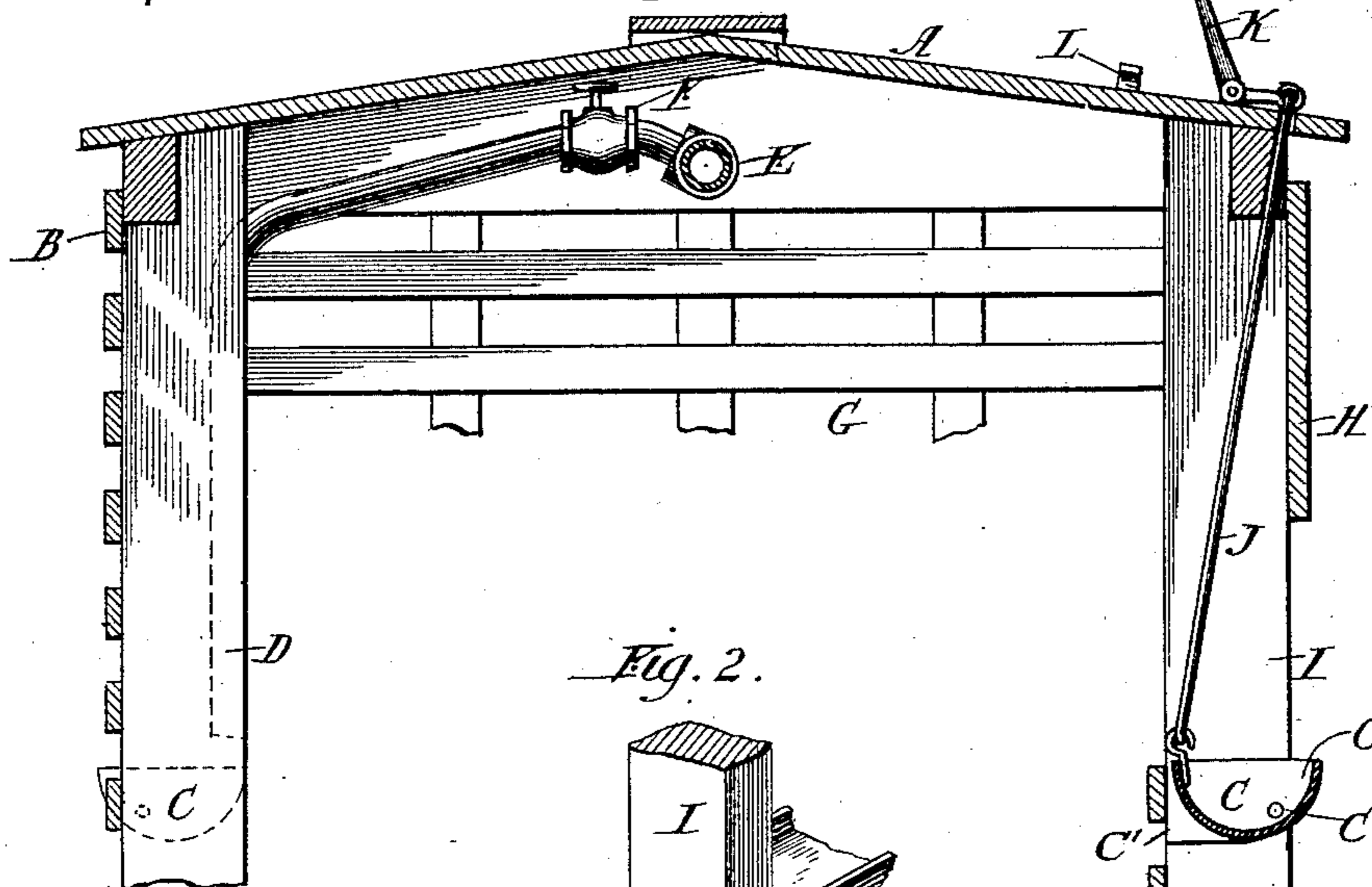


Fig. 2.

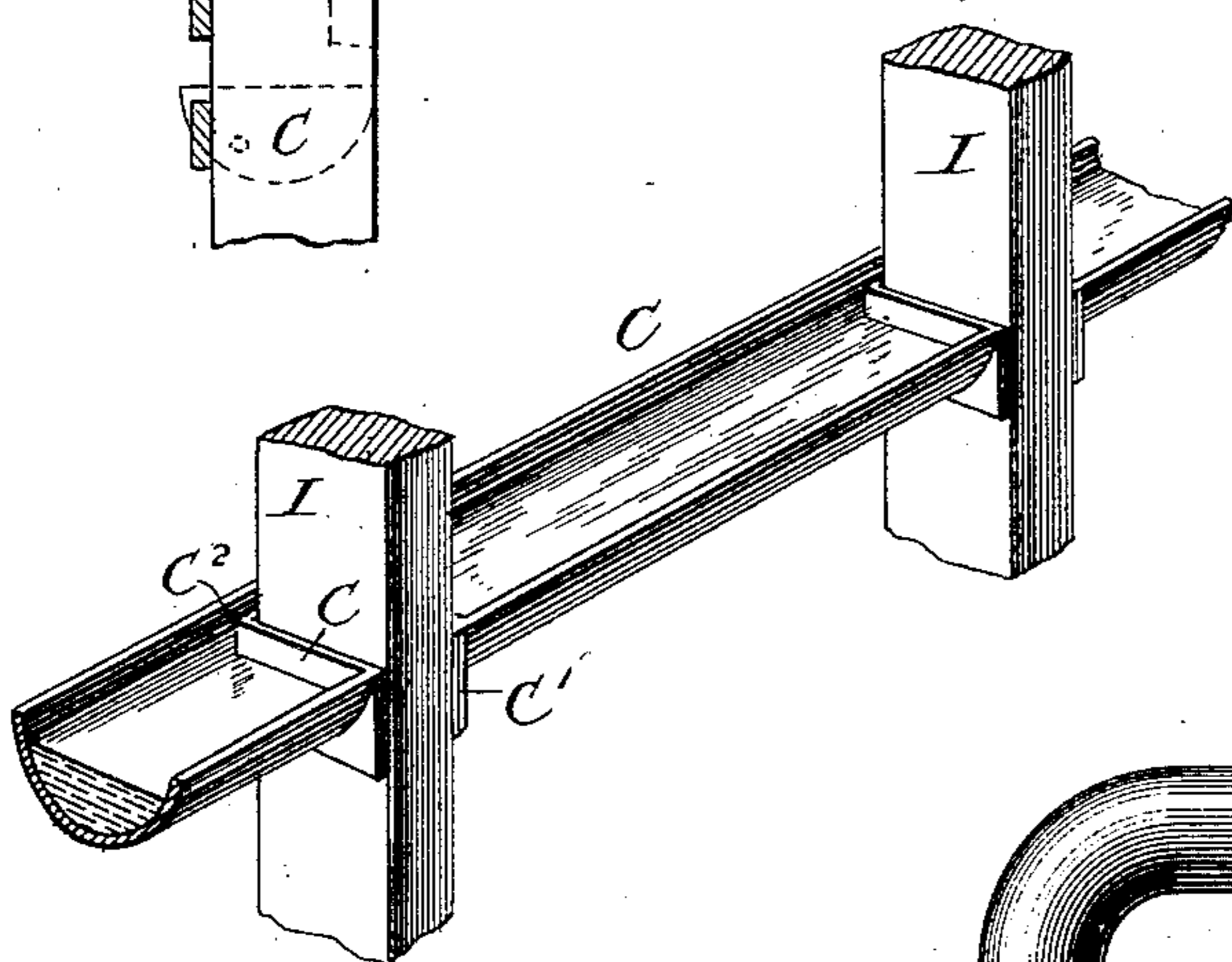


Fig. 4.

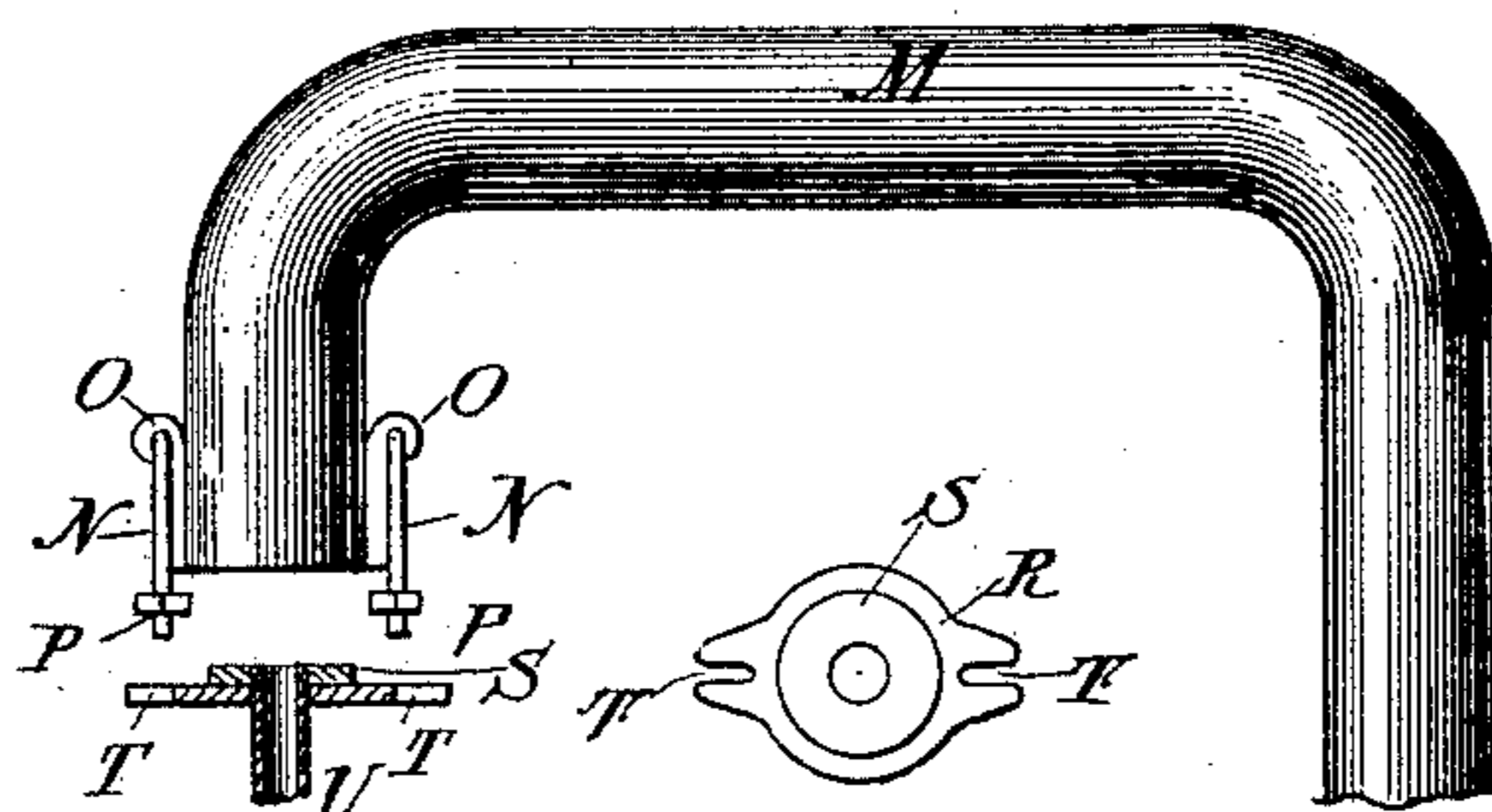


Fig. 3.



Fig. 5.

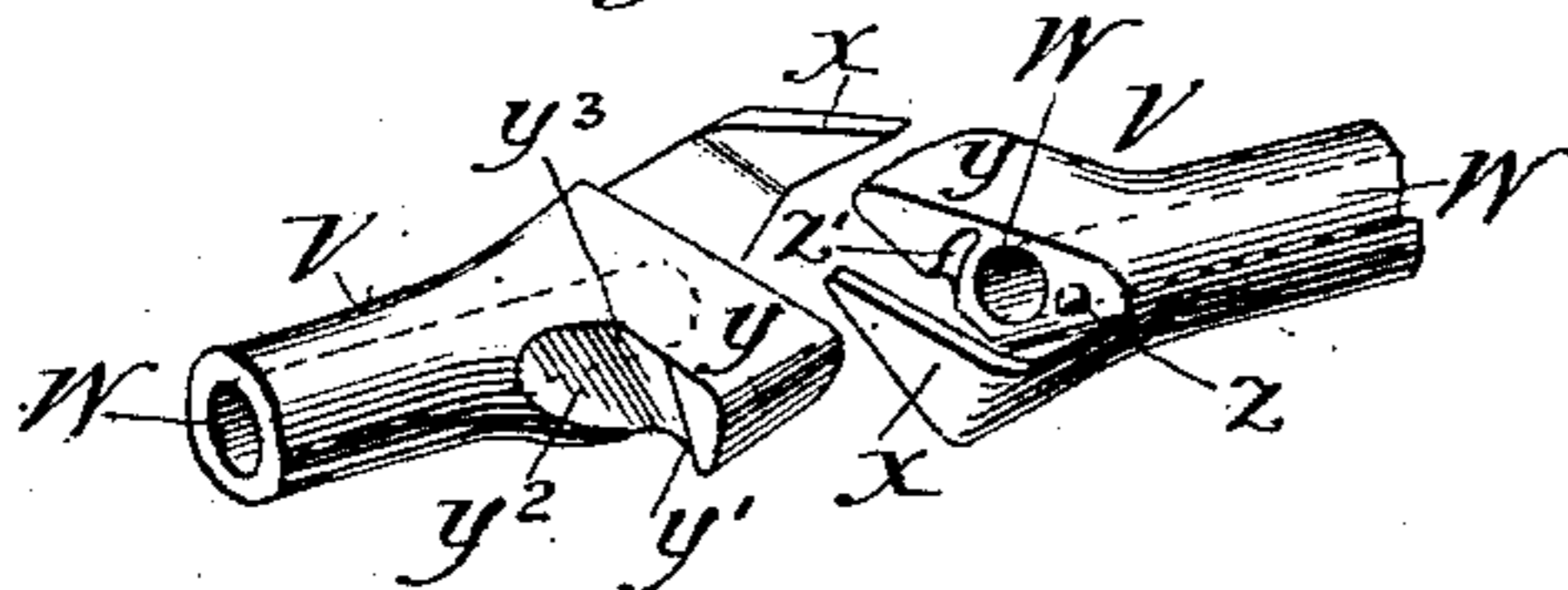
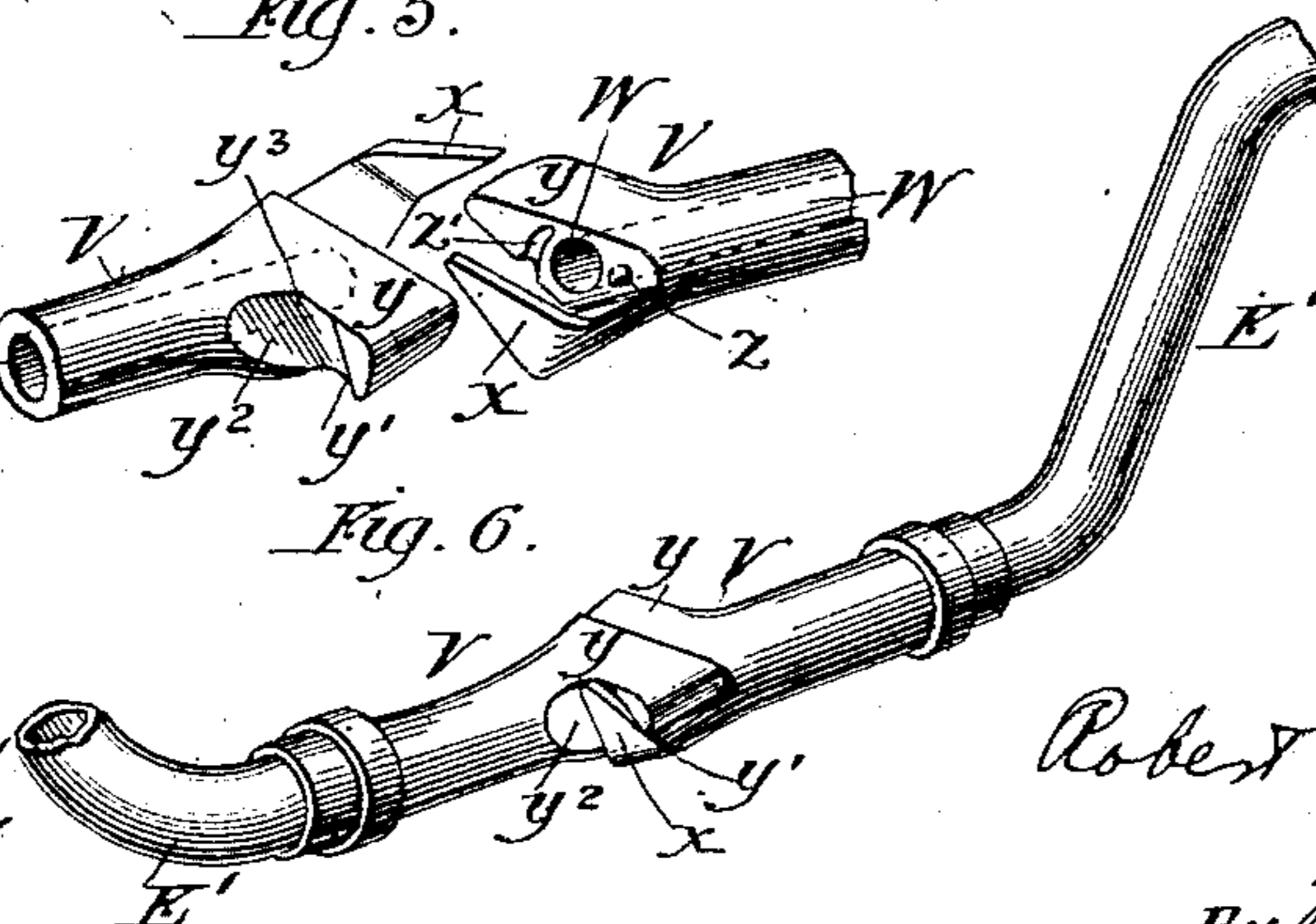


Fig. 6.



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ROBERT E. ISMOND, OF CHICAGO, ILLINOIS.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 354,552, dated December 21, 1886.

Application filed January 14, 1886. Serial No. 188,609. (No model.)

To all whom it may concern:

Be it known that I, ROBERT E. ISMOND, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Stock-Cars and Attachments, of which the following is a specification.

My invention relates to cars used for the transportation of live stock, and has for its objects to provide means for supplying the cars with water, so that the pipes will not be liable to freeze, and so that they can be easily connected with the stand or supply pipe. I attain these objects by the mechanism illustrated in the accompanying drawings, wherein—

Figure 1 is a cross-section of a part of a car. Fig. 2 is a detail of the troughs; Fig. 3, a detail of the main water-supply pipe; Fig. 4, a detail of the stand-pipe and attachment. Figs. 5 and 6 are details of the coupling.

Like parts are indicated by the same letters in all the figures.

A is the top of a stock-car; B, the side slats thereof; C, the compound water-trough; D, the trough-supply pipe for water; E, a valve in the same located, as shown, so to give a fall in each direction; E, the main supply-pipe for the car, which is connected by the hose-piece E' to the coupling which joins two cars and is elevated at its middle, as shown in Fig. 3.

G are the end slats of the car.

H is the side board of the car.

I I are side posts of the car; J, a rod leading from the inner edge of the trough to the top of the car, where it connects with the elbow-lever K. L is a hook to engage this lever.

C' is a casting, saddle shaped, and inclosing the post I, to which it is hinged or journaled, as at C².

C² is narrow way connecting the sections of the trough C, and they may be made continuous with the sections, or they may be composed of the casting C'.

M is a stand-pipe; N N, rods hanging from eyes O O at the mouth of the pipe.

P P are nuts on the bolts or rods.

R is a plate having the elastic disk S and the slots T T and the piece of hose-pipe U.

V V are fac-simile hose-coupling pieces. Each has the passage W, the point or claw X, the projection Y, the shoulder Y', the incline

Y², the lug Z, and the curved groove Z', and the straight groove Y³.

E' E' are hose-pieces extending, one from each of two adjacent cars, and secured each at one end to the main water-supply pipe of a car, and at the other to a hose-coupling piece.

The use and operation of my invention are as follows: The compound trough, made up of the sections, saddles, and connecting-ways, as shown, is secured in place, so that the sections of the trough will be between, but in the same plane with the side posts of the car. The saddles are hinged to the posts, each to the post which it incloses, at a point near the bottom of the connecting-way. It is then connected at its inner edge by the hook to the rod which passes through the top of the car, and is connected with the elbow-lever. When this lever is operated, it can be made to tilt and thus empty the troughs, and if its end is hooked down it will then hold the trough in a tilted position. The water is discharged at any point into the compound trough at one or more places. I have shown the devices adapted to deliver the water into but one section, and as the water rises in that of course it overflows and fills the other sections. The discharge-pipe in this case I prefer to connect with the main pipe at the center of the latter. This main pipe is provided with an elevated center, the better to permit it to free itself from water when out of use. The supply-pipe passes up from the main pipe to a valve which controls it, and thence down to the trough. Thus it is the better able to free itself from water when out of use, and the valve may be used to cut off from the main supply. The stand-pipe is provided with vertical straps on each side to strengthen it. If it is strong enough they could be dispensed with. These straps carry eyes, through which pass swinging pendent bolts carrying at their lower ends nuts adapted to move on screw-threads. The slotted disk-bearing plate is then provided, and it may be carried with the stock-car, if desired. When the water system of the car is to be attached to the stand-pipe, the plate is inserted between the pendants, and the bolts are then drawn tight by the nuts, so as to make a tight joint. The coupling with the car system is then effected in the usual manner.

The coupling device which I use to couple

the cars, and also to make connections with the hose-piece on the disk-bearing plate or elsewhere, as desired, is shown in the drawings.

- 5 Great difficulty is experienced on account of the freezing of the water supply pipes in a stock-car, and in the coupling and means for connecting the system with the stand-pipe. I have sought to cure these difficulties by a direct-flow coupling, by using the stand-pipe
10 without a secondary pipe therefrom, and by making the car system easy to free of water.

I claim—

1. In a stock-car, a main water-supply pipe
15 running longitudinally with the car, and elevated at its middle part, so as to give a fall toward each end.

2. In a stock-car, the combination of a main supply-pipe, and a trough-supply pipe lead-
20 ing therefrom, and having a valve therein which is so situated as to give an immediate fall therefrom toward each end of the pipe.

3. In a stock-car, a compound water-trough composed of a series of sections connected by narrow ways and castings hinged to the posts
25 of the cars.

4. In a stock-car, the combination of compound troughs with rods which connect to the inner edge of the troughs and pass thence to the roof of the car, where they are attached
30 to the lever devices which operate them to tilt the trough.

5. In a stock-car, a compound water-trough composed of sections which lie between the posts, and narrow connecting-ways which pass
35 the posts, said trough being hinged so as when tipped to discharge outwardly.

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Witnesses:

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