

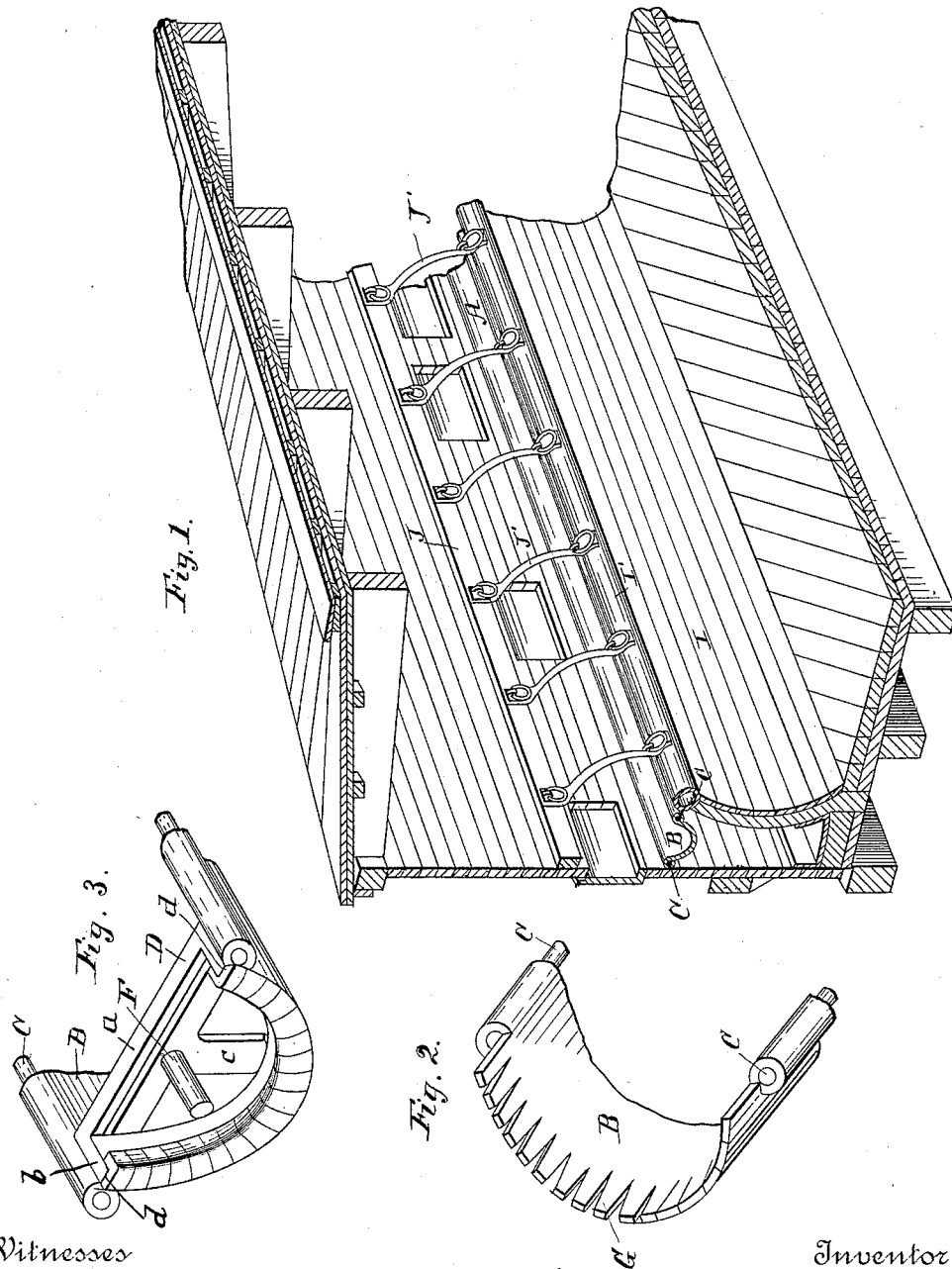
(No Model.)

G. D. BURTON.

FEED TROUGH FOR STOCK CARS.

No. 390,564.

Patented Oct. 2, 1888.



Witnesses

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FEED-TROUGH FOR STOCK-CARS.

SPECIFICATION forming part of Letters Patent No. 390,564, dated October 2, 1888.

Application filed January 3, 1888. Serial No. 259,735. (No model.)

To all whom it may concern:

Be it known that I, GEORGE D. BURTON, a citizen of the United States of America, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Feed-Troughs for Stock-Cars, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to an improvement in the feed and water troughs used in connection with stock-cars; and it consists in certain novel features of construction, which will be hereinafter fully described, and particularly pointed
15 out in the subjoined claims.

In the accompanying drawings, illustrating my invention, Figure 1 is a side elevation of a portion of the car-body with one side broken away to expose the interior, and showing the
20 situation of the feed-troughs within the same. Fig. 2 is a detail representation of the end of the trough with the head or bracing piece removed, and showing the extremity of the
25 trough-body formed with a series of notches. Fig. 3 is a detail representation showing the manner in which the head-piece and trough-body are secured together.

Like letters of reference designate like parts in the several figures.

30 Heretofore it was found in the construction of feed troughs for stock-cars, when bolts or rivets were used to secure the parts together which had their heads located on the interior
35 surface of the trough-body, that they would form obstructions to the free exit of the hay, meal, &c., from the trough in cleaning; as the same would clog and corrode the trough around the rivets, making it a very difficult matter to
40 remove it, and causing a great loss of time and the expenditure of unnecessary labor. Another disadvantage experienced when the feed trough was constructed in the manner
45 above set forth was in the rusting and wearing away of the rivets, due to the clogging of the dampened hay, &c., thereabout, which very often occurred, and in a comparatively short
50 space of time caused the troughs in certain instances to break down, and in any event interfered to an appreciable extent with the perfect working of the trough.

The primary object of my invention is to construct a feed-trough in which the above disadvantages will not be experienced, and which will therefore be more perfect in its operation, more durable in its construction, and at the same time capable of being most thoroughly cleansed in a considerably shorter space of time than heretofore possible. 55

The above objects are accomplished by the means illustrated in the accompanying drawings, in which A represents the feed and water trough, comprising the trough-body B, rolled or otherwise formed to the desired shape, the longitudinal rods or bars C, adapted to be embraced by the extremities of the trough-body, and the head or bracing pieces D, which are situated one at either end of the trough. 60 65

It will be quite obvious that the trough-body and the head-pieces can be formed of any suitable and desired material; but experience has
70 proven that galvanized iron is the most practicable for the purpose. The head-piece D consists of the horizontal bar *a*, the flange *b*, of a suitable size and shape to closely fit within the trough-body B, and the downwardly-extending arm *c*, serving to connect the parts *a* and *b*, and thus strengthening and bracing the device. 75

The opposite ends, *d*, of the trough-body are, as shown best in Fig. 2, extended out beyond the point of terminus of the rods C, and are formed with a series of notches, G, extending entirely around the same, the said notches being situated suitable distances apart. These extremities *d* of the trough-body B are
85 adapted to closely embrace two sides of the flange *b* of the head-piece D in such a manner that the said head-piece and trough-body will be securely held together. By forming these flanges with notches, as above set forth, the bending thereof into engagement with the head-piece will be greatly facilitated, while, as shown in Fig. 3, a practically solid and continuous outside edge is presented to view when they are bent into such engagement, there being no breaks caused by the notching of the metal. 90 95

F represents the journals for the trough, permitting the same to be reversed in order to empty its contents. These journals are preferred. 100

erably formed integral with the head-pieces D, and have their bearings in suitable supports in the main car-body.

The reversal of the trough in order to empty its contents is ordinarily effected by means of a cable or chain secured to the forward edge of the trough and extending back to some suitable point at the rear thereof, from which point it may be operated to cause the trough to tip toward the animals. Inasmuch as the above means for tipping the trough has been secured in former patents of mine it has been deemed unnecessary to show it herein.

Although I have herein shown and described these troughs as having journals permitting their being tipped, it will be quite obvious that I do not wish to be understood as limiting myself to such a construction. These journals form no part of the present invention; and I therefore reserve the liberty of dispensing with them and using the means set forth for securing the head-piece and trough-body together, in connection with feed-troughs of other characters—as, for example, those which are stationary and incapable of being tipped—without departing from the general spirit of the invention.

Referring to Fig. 1, which shows the manner in which the feed-trough may be supported within the car-body, a particular description of the parts is not necessary herein, as they have been shown and covered in certain of my former patents. Suffice it to say, then, that I represents the trough-support, which is preferably curved to prevent injury to the animals' limbs when the car is jolted, and is surmounted by a curved fastening-rail, I', upon which the

trough rests, and J' represents guard-rods for the troughs, having their upper extremities bolted or otherwise secured to a longitudinal beam, J, of the main car-body.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A feed-trough consisting of the trough-body, having its extremities embracing horizontal supports, and head or bracing pieces located at either end thereof, formed with a flange, such as *b*, adapted to be secured to the said trough-body and facing toward the ends thereof, and a journal immediately above the said flange, substantially as described, whereby the entire inner surface of the trough will be smooth, for the purposes set forth.

2. In a feed trough, the trough-body having flanges at either extremity, and the longitudinal rods or bars, such as C, in combination with the head or bracing pieces situated at the opposite extremities of the trough-body, and having outwardly-facing flanges adapted to be engaged by the flanges of the trough-body, substantially as shown, and for the purposes set forth.

3. In a feed-trough, the combination, with the trough-body, of head or bracing pieces situated at either end thereof, and formed with outwardly-extending flanges, for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEO. D. BURTON.

Witnesses:

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