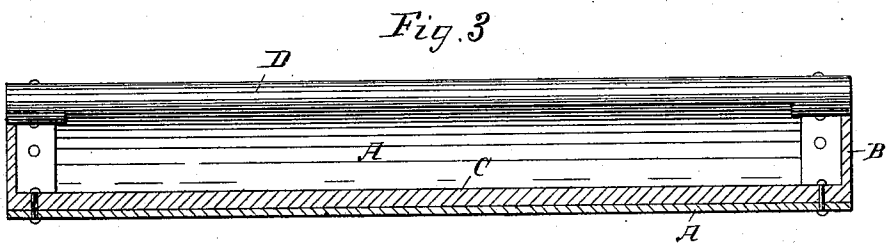
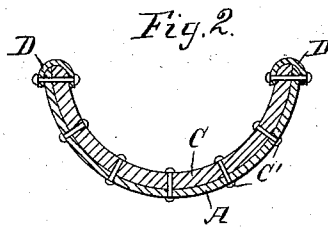
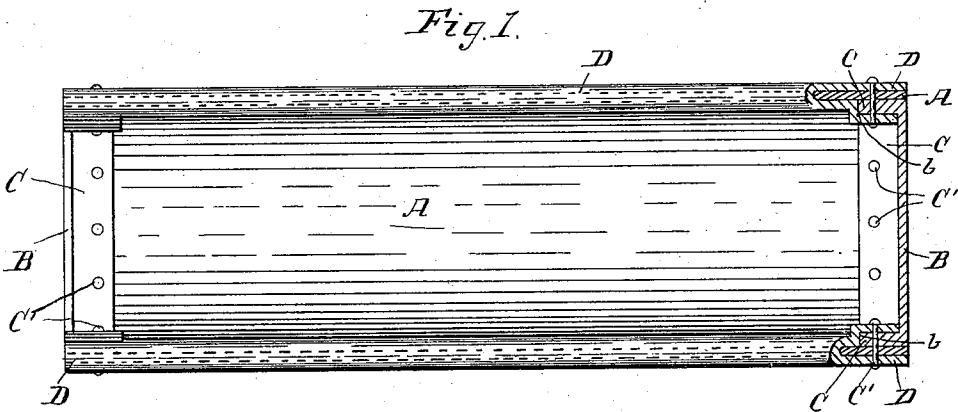


(No Model.)

G. D. BURTON.
FEED TROUGH.

No. 406,425.

Patented July 9, 1889.



WITNESSES:

Charles J. Stockman
H. W. [Signature]

George D. Burton
Inventor

By *ms* Attorney in fact
Morris J. Toole

UNITED STATES PATENT OFFICE.

GEORGE D. BURTON, OF BOSTON, MASSACHUSETTS.

FEED-TROUGH.

SPECIFICATION forming part of Letters Patent No. 406,425, dated July 9, 1889.

Application filed May 22, 1888. Serial No. 274,746. (No model.)

To all whom it may concern:

Be it known that I, GEORGE D. BURTON, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Feed-Troughs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to an improvement in feed-troughs; and it consists in certain novel features of construction, hereinafter described, and particularly pointed out in the subjoined claim.

In the accompanying drawings illustrating the invention, and in which similar letters of reference designate like parts, Figure 1 is a top plan view of a portion of a feed-trough constructed after the plan herein to be set forth, and having the corners of the same shown in section to disclose the means for securing the parts together, and Figs. 2 and 3 are, respectively, a transverse and a horizontal section of the same.

Referring to the drawings, A represents a trough rolled or otherwise formed to a suitable shape, and B represents the head of the same secured to the trough in any suitable manner.

When feed-troughs are used in cars designed for the transportation of live-stock, practical experience has demonstrated the advantages of constructing them with as little weight as possible, for an obvious purpose, and at the same time having sufficient strength to be able to resist shocks or jars incident to railway travel. In order to meet these requirements the trough-body A is constructed of thin metal—as, for example, steel or malleable iron—as is likewise the head-pieces B. These head-pieces B are shown as constructed with flanges C having perforations to receive rivets C', serving to secure the same to the trough-body; but I do not wish to be understood as limiting myself to this particular means of securing these parts together, as any other suitable means may be adopted without departing from the spirit of the invention.

The head-pieces B may, if desired, be constructed with journals having their bearings

in the main frame of the car, in case the trough is used in connection with a stock-car, in which event the trough will be capable of being reversed in order to more readily and easily empty its contents; but inasmuch as these journals form no part of my present invention it has been deemed unnecessary to show them therein.

When the trough-body is constructed of thin metal it will be quite obvious that sharp edges will be presented which would be liable to cut or otherwise injure the animals in the event of the same coming into contact therewith, when the car is jolted, causing them to lose their balance, or when one animal becomes restless, crowding and pushing the others. It will further be obvious that the trough-body is very liable to become bent or warped, due to the striking against it of the animals. It therefore becomes desirable to provide means preventing the experience of the above disadvantages, and in order that the weight of the trough will not be materially increased thereby, it is desirable that such experiences shall be prevented by the same device. U-shaped binding-strips D are therefore provided extending longitudinally of the feed-trough from end to end and embracing the tops of the trough-body and the head-pieces, as shown. In order that the said binding-strips D will be capable of being secured to the head-pieces B, the inner side of their extremities are bent to the form shown in Fig. 1, and designated by the letter *b*, and the said extremities at their inner sides are cut off a suitable distance to accommodate the vertical portion of the said head-piece. It will thus be seen that the portion *b* of the binding-piece corresponds in form to that of the head-piece, and that it is adapted to be secured to the flange C thereof. Any suitable means may be employed for securing this binding-piece to the trough; but rivets are preferably employed as being well adapted to the purpose in every respect. These binding-rods will obviously strengthen the trough, preventing bending of the same, and will also serve to protect the animals, preventing them from becoming cut or otherwise injured.

Having now described the construction, objects, and advantages of my invention, what I believe to be new, and desire to secure

by Letters Patent, and what I therefore claim,
is—

5 A feed-trough consisting of a curved body,
heads having flanges curved to conform to
the shape of the body, and binding-strips sub-
stantially semi-cylindrical in shape covering
the edges of the body, the inner sides of the
ends of said strips being bent to cover the

flanges of the heads and secured to the body
and flanges, as set forth. 10

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

GEO. D. BURTON.

Witnesses:

E. A. FREEMAN,
WILLIAM H. NASH.