No. 702,686. Patented June 17, 1902.

J. M. ALLEN.

FEED TROUGH.

(Application filed Nov. 5, 1901.)

(No Model.)

Fig. 1.

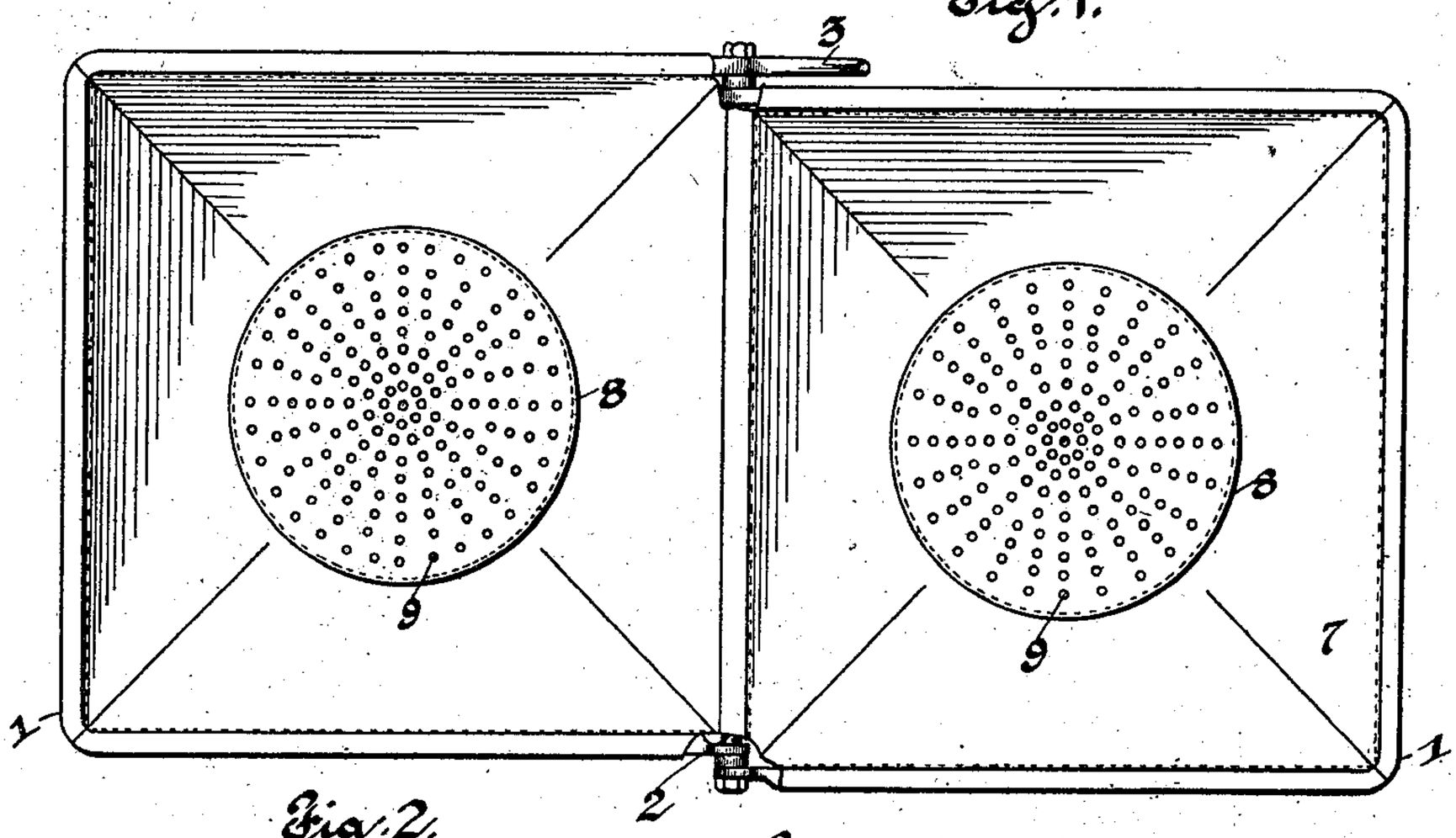


Fig. 2.

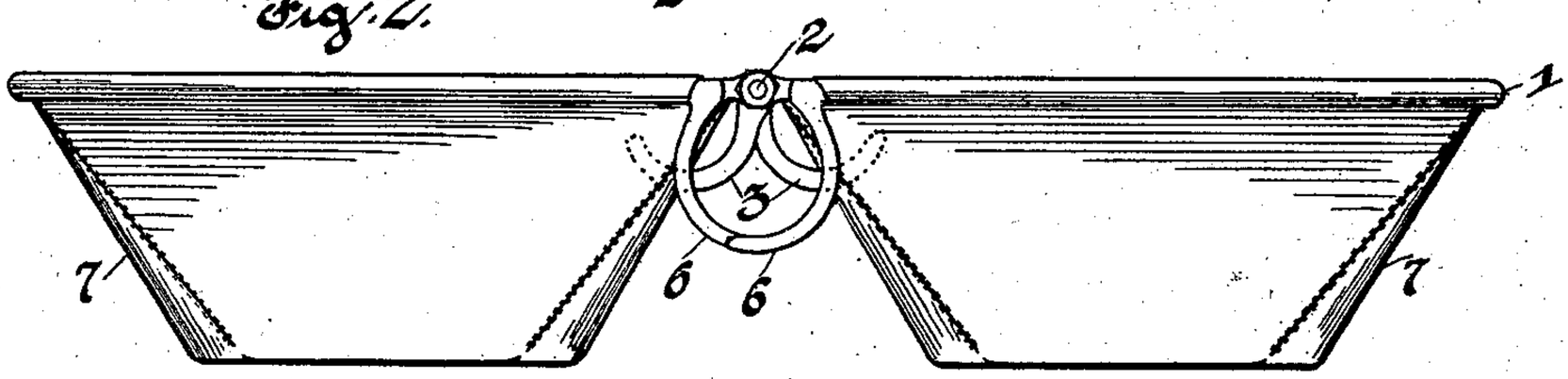
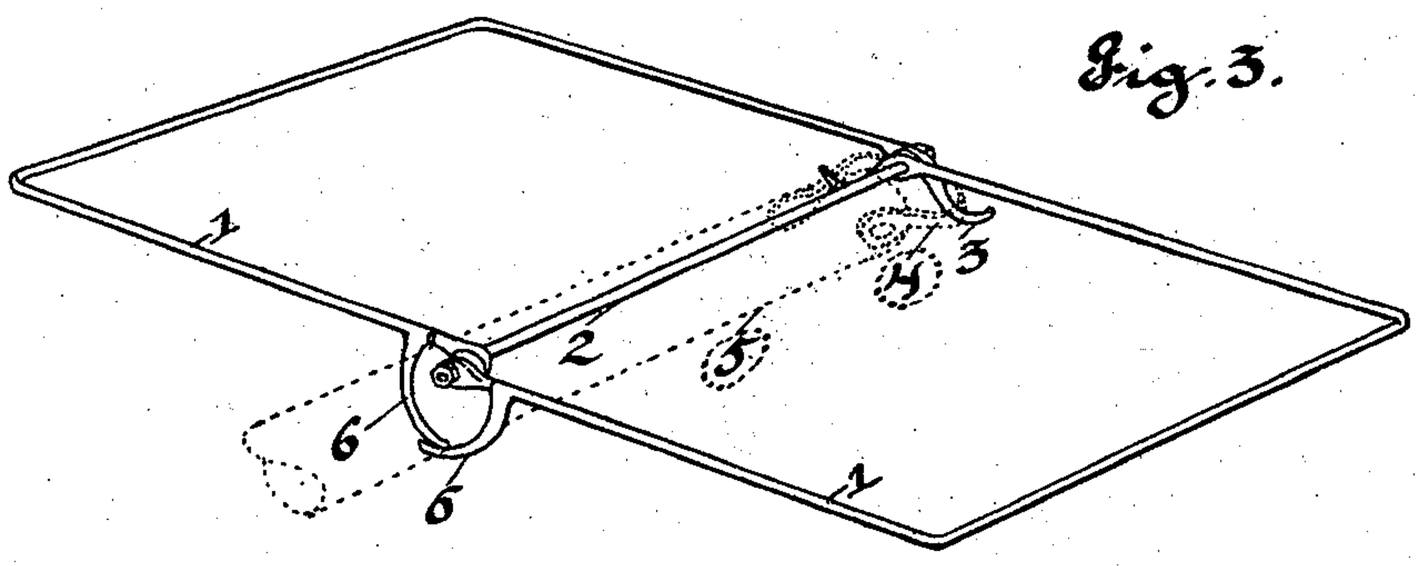


Fig. 3.



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UNITED STATES PATENT OFFICE.

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FEED-TROUGH.

SPECIFICATION forming part of Letters Patent No. 702,686, dated June 17, 1902.

Application filed November 5, 1901. Serial No. 81,202. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. ALLEN, of the city of St. Louis, Missouri, have invented certain new and useful Improvements in Feed-Troughs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to feed-troughs; and it consists of the novel construction, combination, and arrangements of parts hereinafter shown, described, and claimed.

One object of this invention is to provide a feed-trough constructed of suitable devices whereby it may be attached to a vehicle-tongue and upheld thereby adjacent to the horses' heads.

Another object is to provide a feed-trough with suitable attachments for supporting it to the vehicle-tongue and constructed so that it can be readily removed therefrom and folded away.

A further object is to provide a feed-trough composed of suitable frames hinged together and provided with a number of hooks or clamps, whereby it can be readily fastened upon the vehicle-tongue, and a collapsible receptacle carried by each of said frames, so that when the frames are removed from the vehicle-tongue and folded away together the said receptacle can be compressed and made to occupy very little space.

Other objects and advantages will appear from the following detailed description, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view showing the trough opened. Fig. 2 is a rear view of the trough removed from the vehicle-tongue. Fig. 3 is a perspective view showing the frames attached to the vehicle-tongue, the latter being indicated by broken lines.

In the construction of my improved feed-trough, as shown, I provide two frames 1, each composed of a rod bent into suitable form and having their ends hinged upon a connecting-rod 2. I have shown the frames 1 rectangular in form; but of course they may be made in any other suitable form adapted to the purposes of my invention.

At the front or outer end of the connecting-rod 2 each of frames 1 is provided with a suitable curved hook 3, adapted to engage in the usual ring or loop 4, attached to the front end of the vehicle-tongue 5. It will be seen that when the two frames are folded together the hooks 3 will be closed—that is, they will be brought as near together as it is possible to bring them—so that they may readily be passed through the ring or loop 4. When so applied, the frames 1 are opened from each other and rest horizontally above the end of the vehicle-tongue, as shown. The said hooks 3 are then engaged around the under side of the ring or loop 4, and thereby prevent the frames 1 from turning or otherwise becoming displaced.

The frames 1 at their inner sides are provided with curved arms 6, which form a ring when the frames 1 are opened, as shown in Fig. 3, and engage around the vehicle-tongue, forming a clamp which securely holds the said frames 1 in position coöperating with the hooks 3.

Each of the frames 1 carries a receptacle or trough 7, composed, preferably, of some flexible material, such as canvas, and provided with a suitable bottom 8, also composed of flexible material, but preferably somewhat stiffer than the part 7. I have found that leather is well adapted to this purpose; but of course I do not desire to be restricted to any one material in the construction of either the bottom or the sides of the trough. The bottoms of the troughs are preferably provided with a number of perforations 9, through which the dust and fine particles of foreign substances may pass when the grain or feed is placed in the troughs.

In use the trough is applied as shown in Fig. 3, with the hooks 3 interlocking with the ring or loop 4 on the vehicle-tongue. The said hooks are passed through the ring or loop, as above described, before the receptacles are opened away from each other, and when the said receptacles are opened the hooks 3 engage under the ring or loop 4 and the curved arms 6 clamp firmly upon the tongue, thereby securely holding the trough in position. When the feed is placed in the receptacles, the fine particles of dust, &c., find outlet through the perforations 9. To remove the

trough, the two receptacles are folded together, bringing the frames 1 in substantially the same plane, thereby releasing the arms 6 from around the vehicle-tongue and disengaging the hooks 3 from the ring or loop 4. The flexible sides 7 and bottoms 8 of the receptacles may then be compressed or collapsed, so that the trough will then occupy very little space and may be conveniently handled and moved from place to place.

I claim—

1. In a feed-trough, the two frames 1 each composed of a rod bent into suitable form; the connecting-rod 2 hinging said frames together; the curved hooks 3 extending from the front ends of the frames, and adapted to engage the loops of the vehicle-tongue; said hooks being adapted to fold together when the frames are folded so that they may be readily passed through the loop of the vehicle-tongue; and said hooks being adapted to spread out when the frames are spread out as required to hold the feed-trough in position; the curved arms 6 extending from the rear ends of the frames as required to form a ring, and engage the vehicle-tongue when the frames are spread open for use; thus holding the feed-trough in position upon the tongue; and a suitable material attached to said frames and forming troughs or receptacles for the feed.

2. In a feed-trough, suitable frames hinged together; hooks extending from the forward ends of said frames; said hooks being adapted to fold together and pass through the loop of the wagon-tongue when the frames are folded and to spread out as required to engage the loop of the wagon-tongue and hold the frames in position; curved arms extending from the rear ends of the frames and together forming a ring to engage and encircle the wagon-tongue to hold the ends of the frames in position; and suitable material attached to said frames to form troughs or receptacles for the feed, substantially as submitted.

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

JOHN M. ALLEN.

Witnesses:
ALFRED A. EICKS,
JOHN D. RIPPEY.