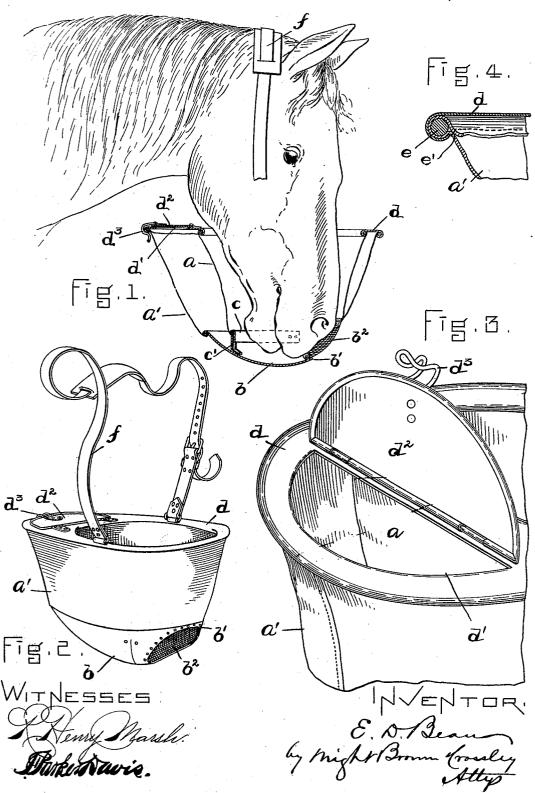
## E. D. BEAN. FEED BAG.

No. 513,865.

Patented Jan. 30, 1894.



## UNITED STATES PATENT OFFICE.

EDWARD D. BEAN, OF ARLINGTON, MASSACHUSETTS.

## FEED-BAG.

SPECIFICATION forming part of Letters Patent No. 513,865, dated January 30, 1894.

Application filed April 7, 1893. Serial No. 469,409. (No model.)

To all whom it may concern:

Be it known that I, EDWARD D. BEAN, of Arlington, in the county of Middlesex and State of Massachusetts, have invented certain 5 new and useful Improvements in Feed-Bags, of which the following is a specification.

This invention relates to an improvement in feed-bags, for use in feeding animals when

a feed-trough is not at hand.

The object of the present invention is to provide, in a simple and durable construction, a bag whose side walls are composed of flexible material, and whose top and bottom are composed of rigid material, the space between 15 the flexible walls constituting a feed-chamber and communicating with the bottom of the

A further object is to provide a rigid bottom, in which a foraminous space may exist 20 and have a location which will bring it opposite the nostrils of the feeding animal.

To these ends, the invention may be said to consist in certain novel features of construction and combination of parts, which will be 25 fully described hereinafter and pointed out in the claims.

Reference is to be had to the annexed drawings, and to the letters and figures marked thereon, forming a part of this specification, 30 the same letters designating the same parts or features as the case may be, wherever they

Figure 1 shows a sectional view of the bag, represented as attached to a horse's head. 35 Fig. 2 shows a perspective view of the bag. Fig. 3 shows a perspective view of the rear top portion of the bag, on an enlarged scale. Fig. 4 shows a detail sectional view, on an enlarged scale, illustrating the manner of at-40 taching the flexible walls of the bag to the rigid top rim.

The sides of the bag are composed of an inner and an outer wall, a and  $\tilde{a'}$ , composed of canvas or other suitable flexible material, and 45 forming between them an annular chamber

for receiving the feed.

The bottom of the bag is composed of rigid material, such as galvanized iron, and is dished, so as to form a trough or bowl b, into 50 which the feed contained in the annular cham-

with a front side b', in which is a foraminous space  $b^2$ , so located as to be directly in front of the nostrils of an animal feeding from the

The animal will take the feed from the trough or bowl b, as it falls upon or into the same from the feed chamber. The communication between the feed chamber and the trough or bowl is restricted, as will be pres- 60 ently described, so that the feed will not pass into the bowl any faster than it is consumed, and the foraminous space  $b^2$  will not be obstructed by the feed, but will always remain open so that the animal may breathe freely 65 through the same.

A rigid band c, of the same material as the bottom, or of any other suitable material, has its two ends fastened to the bottom, near the front of the same, and this band extends 70 around the bottom, with its lower edge separated therefrom sufficiently to leave a restricted opening, through which the feed in the annular feed chamber may pass into the trough or bowl b. The central portion of the 75 band is supported in any suitable manner, as by a leg c', and fastened to the bottom of the trough.

The top of the annular feed chamber is closed by a rim d, formed of suitable rigid 80 material, to the edges of which the upper edges of the flexible walls a and a' are connected. An opening d' is formed in the rim d, at such a place that it will come under the animal's throat when the bag is in its operative position. A lid  $d^2$  is hinged to the rim, and closes the said opening, a suitable fastening device, such as the resilient hasp  $d^3$ , being attached to the door and adapted to take over the edge of the rim and hold the door closed. The 90 annular chamber may be supplied with feed through the opening d', by first releasing the hasp  $d^3$  and raising the door. The flexible walls a and a' are connected with the rigid bottom, the band c and the rigid rim d, by a 95 novel construction, which is best illustrated in the detail view, Fig. 4. The flexible material is carried around a wire e, and stitched together, as at e'. The rigid material, as the rim d, is spun around the flexible material 100 where it surrounds the wire. This construcber may pass. Said rigid bottom is formed I tion insures a strong and durable connection

between the flexible walls and the rigid parts of the bag, and is also productive of a neat

exterior appearance.

By constructing the rigid bottom so that 5 it may contain the foraminous space through which the animal may breathe, a rigid support for the strands forming the interstices of such foraminous space is provided.

The bag will be provided with suitable 10 means, such as a strap f, by which to attach it to the head of the animal to be fed from

Having thus explained the nature of the invention and described a way of construct-15 ing and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, it is declared that what is claimed is-

1. A feed-bag, comprising in its construc-20 tion a rigid dished bottom having a front side in which is a foraminous space, a band having its ends fastened to the said bottom near the front thereof and extending around the bottom with its lower edge separated there-25 from, a support for the middle of said band,

flexible inner and outer walls forming between them an annular chamber and fastened at their lower edges to the edges of the bottom and the band respectively, and a rigid rim closing the top of the annular feed cham- 30 ber and having means of inlet to said chamber.

2. A feed-bag, comprising in its construction flexible inner and outer walls forming between them an annular feed chamber and 35 their upper edges secured around wires, a suitable bottom with which said walls are connected, and a rigid strip closing the top of the annular chamber and its edges taking over the flexible walls where they surround 40 the wires.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 25th day of February, A. D. 1893.

EDWARD D. BEAN.

Witnesses:

ARTHUR W. CROSSLEY, A. D. HARRISON.