(No Model.) 2 Sheets—Sheet 1.

J. H. WILLIAMS.

FEED BAG.

No. 476,952. Patented June 14, 1892.

FIG. 1

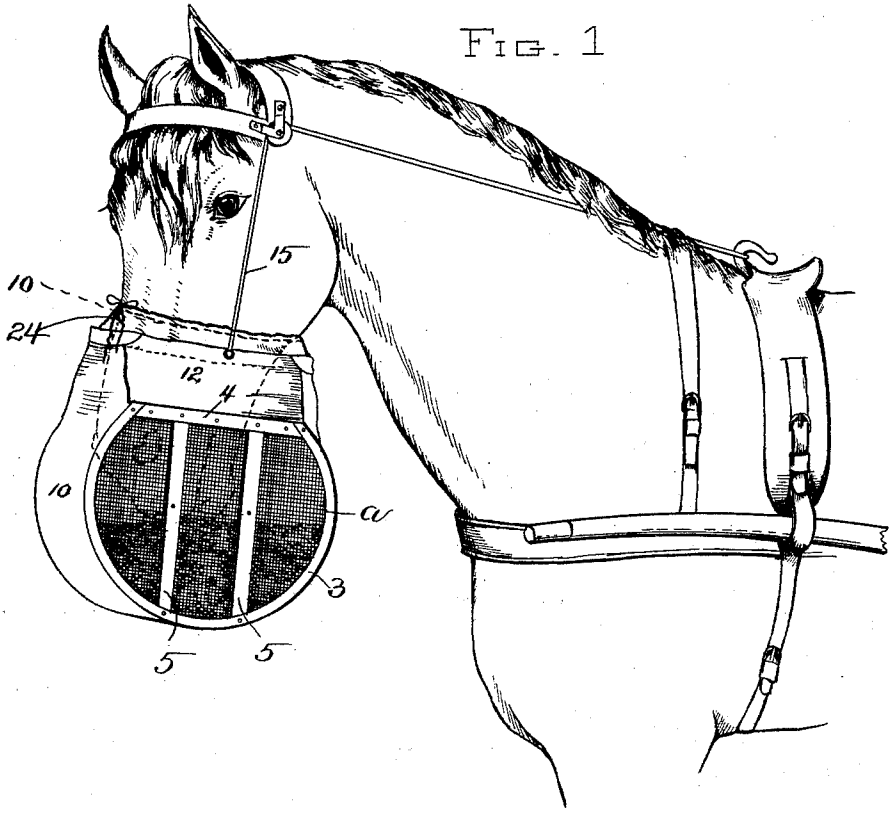
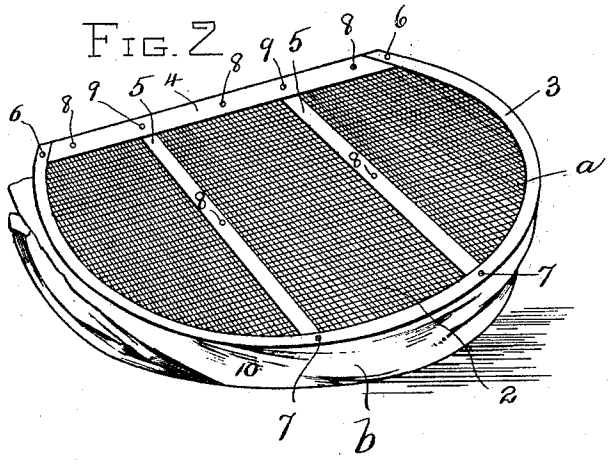


FIG. 2



WITNESSES.
A. D. Harrison
P. A. McShane

INVENTOR.
J. H. Williams
by Wright Brown Quinby & Otty

(No Model.) 2 Sheets—Sheet 2.

J. H. WILLIAMS.

FEED BAG.

No. 476,952. Patented June 14, 1892.

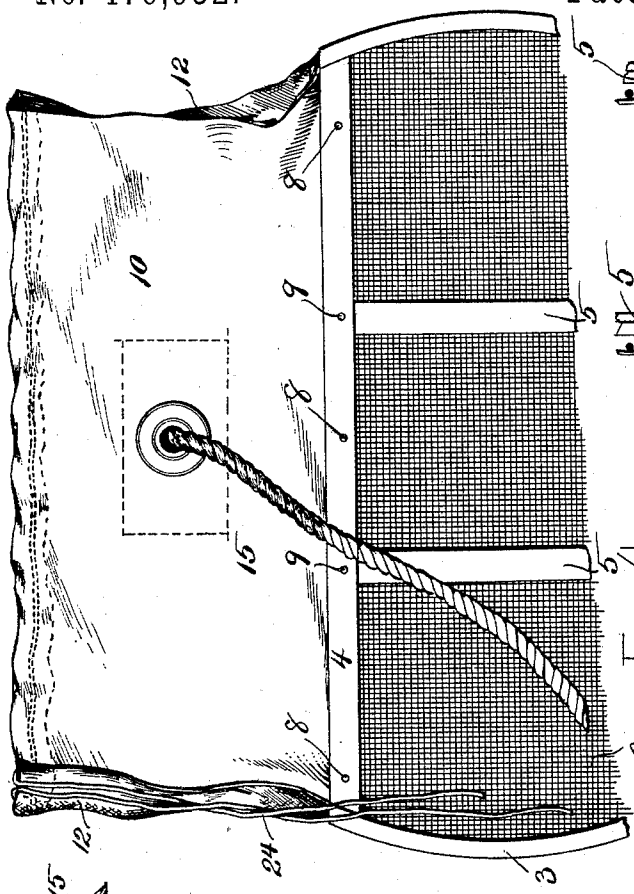


FIG. 4

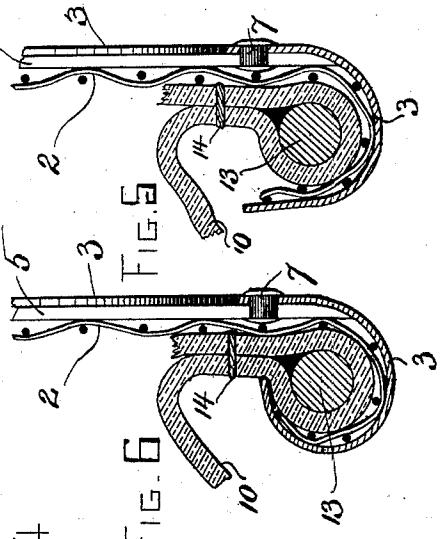


FIG. 5

FIG. 6

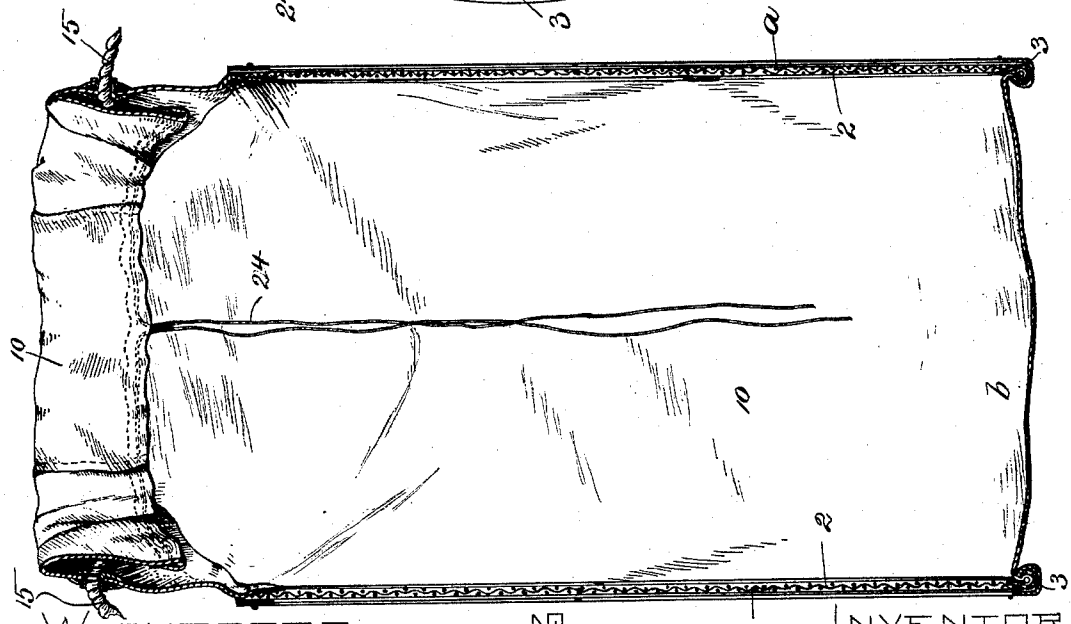


FIG. 7

WITNESSES.
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B. A. McShane.

INVENTOR
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UNITED STATES PATENT OFFICE.

JOHN H. WILLIAMS, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE WILLIAMS FOLDING FEED BASKET COMPANY, OF SAME PLACE.

FEED-BAG.

SPECIFICATION forming part of Letters Patent No. 476,952, dated June 14, 1892.

Application filed July 13, 1891. Serial No. 399,294. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. WILLIAMS, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Feed-Bags, of which the following is a specification.

This invention relates to feed-bags for application to the heads of horses for feeding purposes, such as shown in my patent, No. 432,006, dated July 8, 1890, in which portions of the bag are composed of wire-cloth side pieces, which enable the air to have free access to the interior of the bag.

The invention has for its object to improve the construction of the bag shown in said patent with respect to strength, simplicity, and durability; and to these ends the invention consists in the improvements which I will now proceed to describe and claim.

In the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of my improved feed-bag in use. Fig. 2 represents a perspective view of the same folded. Fig. 3 represents a transverse section of the bag. Fig. 4 represents a side elevation of the upper portion of the bag; and Figs. 5 and 6 represent enlarged sectional views of a portion of the bag, showing the manner of connecting the component parts thereof.

The same letters and numerals of reference indicate the same parts in all the figures.

My improved feed-bag is composed of two general parts, viz., the ventilating sides *a* and the flexible connecting body *b*, to which said sides are secured, said body being composed of canvas or other suitable flexible material. Each side piece *a* is composed of a sheet 2 of wire-cloth, which is preferably cut in the form of a disk truncated or cut away at one side, and a frame which supports and holds said sheet 2 in position, said frame being composed of a curved marginal piece or binding-strip 3, which is originally made U-shaped in cross-section, as shown in Fig. 5, a straight marginal or top piece or strip 4, extending from one end of the binding-strip 3 to the other, and cross-pieces 5 5, which extend from the top strip 4 across the wire sheet 2 to the binding-strip 3. The binding-strip 3 constitutes a curved trough, which receives the curved edge of the sheet 2, the ends of the strip 4, and the lower end of each of the strips 5. The ends of the strip 4 are connected by rivets 6 6 with the outer side of the curved binding-strip 3, and the lower ends of the strips 5 are connected by rivets 7 7 with the same side of the binding-strip 3. The wire-cloth sheet 2 is secured by rivets 8 8 to the strips 4 and 5 5. The wire-cloth sheet is further attached to the frame by the rivets 9 9, which secure the upper ends of the strips 5 5 to the top strip 4.

The body *b* is composed of a flexible strip 10 of practically uniform width, engaged, as presently described, with the binding-strips constituting the margins of the ventilating side pieces and the top or mouth-strips 12 12, the lower edges of which are secured to the top strips 4 of the side pieces by the rivets 8 9, the ends of said mouth-strips 12 being stitched to the end portions of the strip 10. To the edges of the strip 10 are secured two curved wire rods 13, which are contained in pockets which are formed by turning over the edges of the strip 10, as shown in Figs. 5 and 6. The size and curvature of the rods 13 enable them to be inserted in the trough formed by the binding-strip 3 when the latter is in the open condition shown in Fig. 5.

In connecting the parts of the feed-bag the wire sheets 2 are first inserted in the curved trough-shaped marginal or binding strips 3, and the wired edges of the cloth strip 10 are inserted in the strip 3, all as shown in Fig. 5. The inner edge of the strip 3 is then bent inwardly, as shown in Fig. 6, said strip being thus caused to closely confine the edges of the wire sheet 2 and of the cloth strip 10 around and upon the stiffening-wire 13. The cloth strips 12 are then united to the top strips 4 of the side pieces by means of the rivets 8 9, said rivets also securing the upper edges of the wire sheets both to the top strips 4 and cloth strips 12.

It will be observed that the upper portion of the cloth body constitutes a valance projecting above the ventilating side pieces and adapted to be drawn closely around the animal's head at a point above its mouth, said

valance being preferably provided with a draw-string 24, as shown in Figs. 3 and 4. A supporting rope or cord 15 may be attached to the upper edge of the valance, as shown in Figs. 1, 3, and 4.

It will be observed that the improved feed-bag above described is very strong and durable and is adapted to be made largely by machinery, but little hand-work being required. The ventilating side pieces, formed as shown, afford large areas for the admission of air to the interior of the bag, by which the horse is enabled to breathe freely while feeding. It will be seen that the strips 4 and 5 are stay-strips, which keep the curved binding-strip 3 and the wire-cloth side sheets 2 in place. If desired, the strips 5 may be omitted, or only one strip 5 or more than two of said strips may be employed. The bag may have but one ventilating side piece instead of two.

I claim—

1. In a feed-bag, a ventilating side piece comprising the curved trough-shaped metal binding-strip 3, one or more stay-strips secured thereto, and a wire-cloth sheet having its margin inserted in the trough of the binding-strip 3, combined with the flexible body-piece 10, having a curved marginal stiffening-wire, the said body-piece and wire sheet having their edges bent round the said stiffening-wire and inserted in the trough of the binding-strip and secured by the compression of the binding-strip, as set forth.

2. In a feed-bag, a ventilating side piece comprising the curved trough-shaped metal binding-strip 3, one or more stay-strips secured thereto, and a wire-cloth sheet having its margin inserted in the trough of the binding-strip 3, combined with the flexible body-piece 10, having a curved marginal stiffening-wire, the said body-piece and wire sheet having their edges bent round the said stiffening-wire and inserted in the trough of the binding-strip and secured by the compression of the binding-strip, and the mouth-strips 12, projecting above the ventilating side pieces, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 8th day of July, A. D. 1891.

JOHN H. WILLIAMS.

Witnesses:
C. F. BROWN,
A. D. HARRISON.