(No Model.)

D. N. STOCK.

FEED BAG SUPPORT.

No. 488,850. Patented Dec. 27, 1892.

Fig. 1

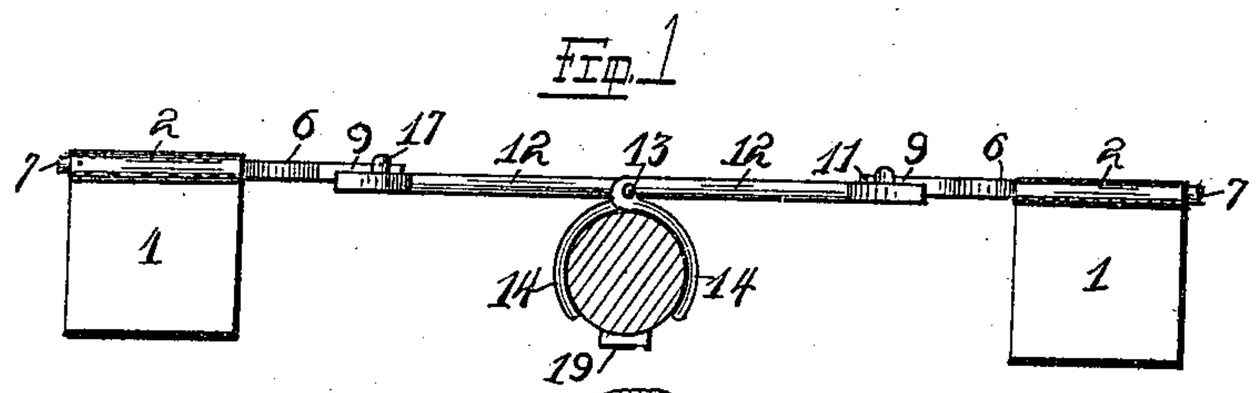


Fig. 2

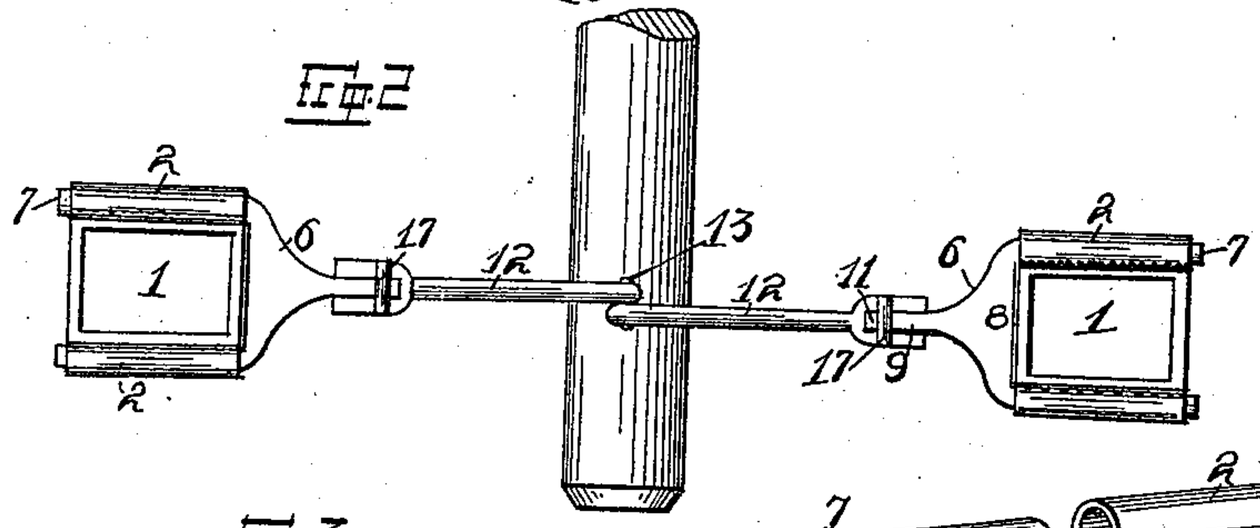


Fig. 3

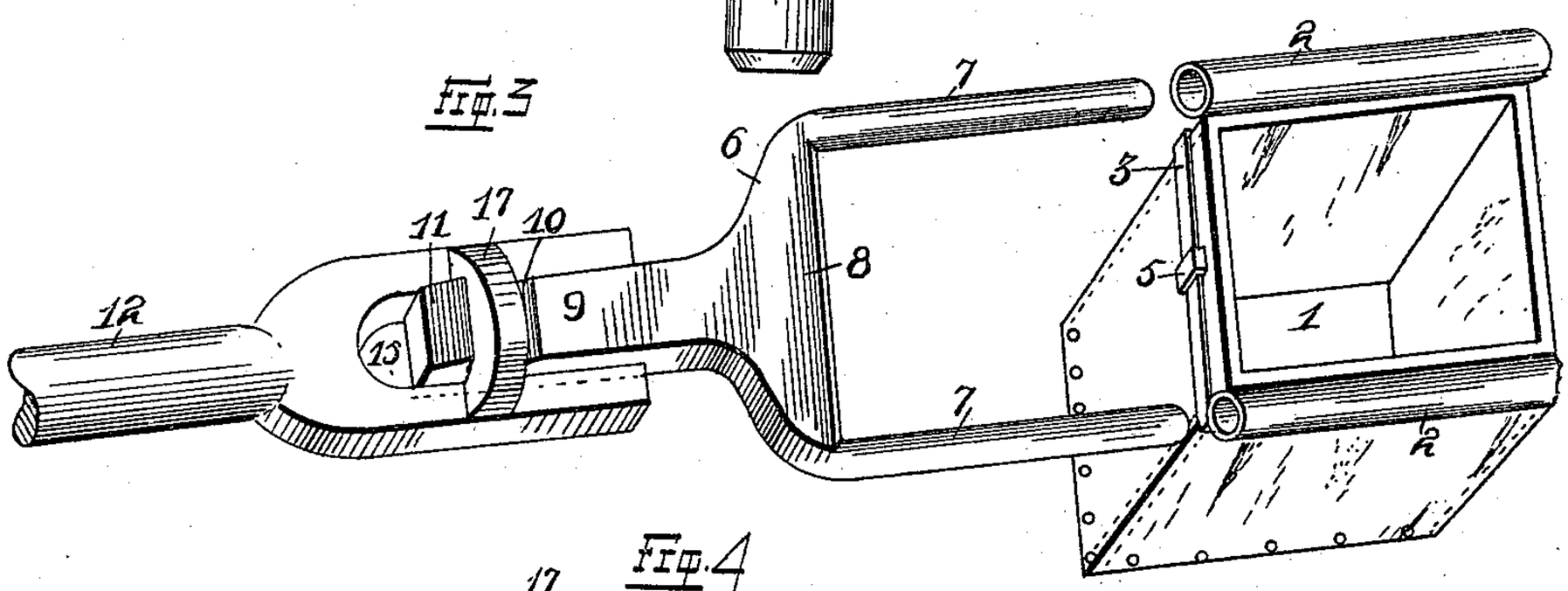


Fig. 4

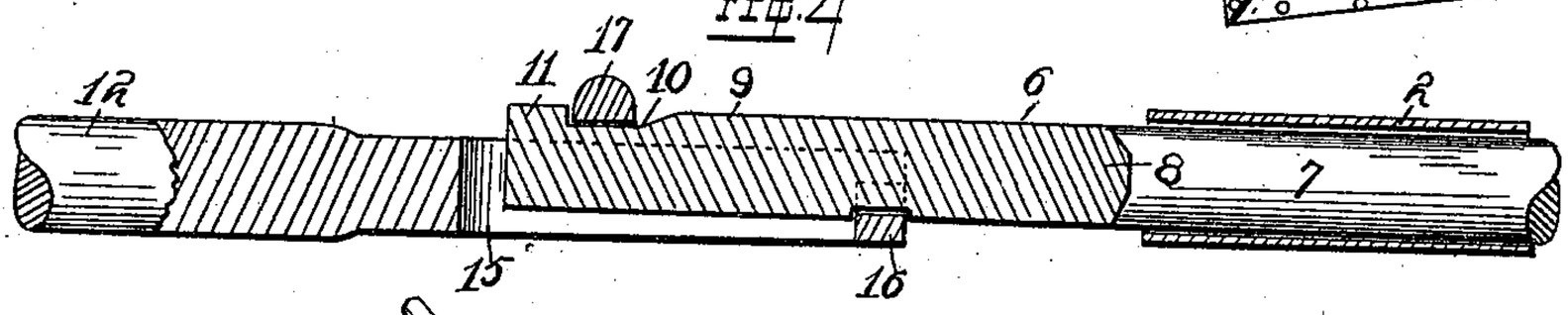


Fig. 5

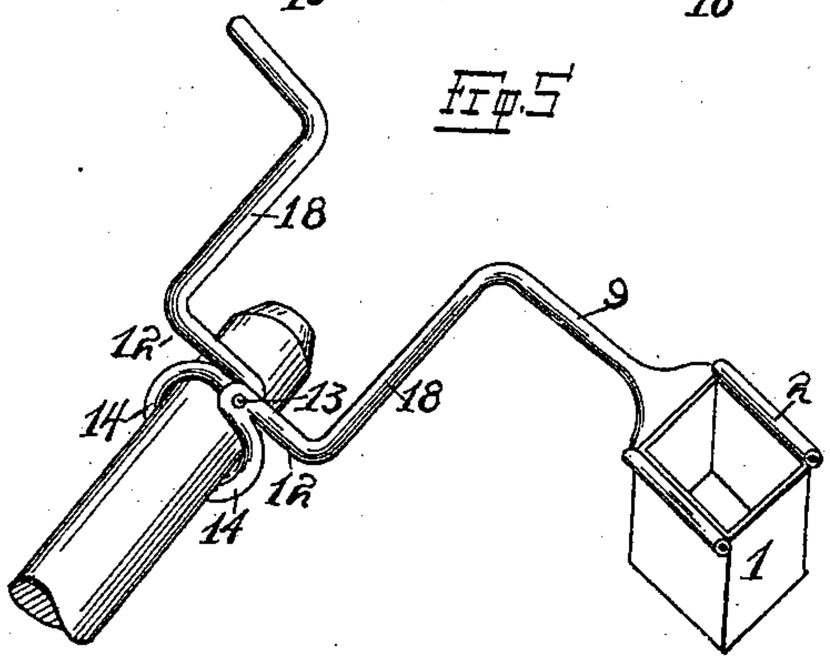
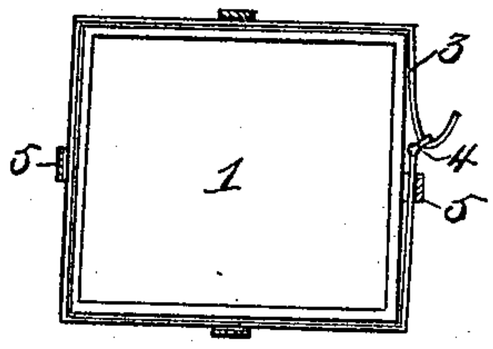


Fig. 6



Witnesses
Alfred A. Eicks
Herbert S. Robinson

Inventor
Denis N. Stock
By his Attorneys
Higdon & Higdon & Langan

UNITED STATES PATENT OFFICE.

DENIS N. STOCK, OF ST. LOUIS, MISSOURI.

FEED-BAG SUPPORT.

SPECIFICATION forming part of Letters Patent No. 488,850, dated December 27, 1892.

Application filed May 19, 1892. Serial No. 433,567. (No model.)

To all whom it may concern:

Be it known that I, DENIS N. STOCK, of the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Feed-Bags and Means for Supporting the Same While in Use, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to "feed bags" of the kind commonly known as nose bags, and consists in the novel construction, combination and arrangement of parts hereinafter specified and claimed.

In the drawings: Figure 1 is a sectional elevation, showing my invention applied to a wagon pole. Fig. 2 is a top plan view of same. Fig. 3 is an enlarged perspective view of a feed bag and its supporting parts, with portions broken away. Fig. 4 is a sectional side elevation of a supporting arm and adjacent parts, with portions broken away. Fig. 5 is a perspective view, with parts broken away, showing a modified construction of supporting arms, for use on short wagon poles, and Fig. 6 is a top plan view of one of the feed bags or boxes, showing the loops on the closing straps, in section.

The object of my invention is to provide an improved feed bag or box which can be normally carried in the wagon or carriage and when desired for use be quickly applied to the wagon or buggy pole so as to project, one bag or box on either side of said pole, directly beneath the noses of the animals.

1 indicates the removable feed bags or boxes, and as I contemplate using two of them at one time, and as both are constructed in an identical manner, I will confine my description to one of them. The bag 1 may be made of any suitable material adapted for the purpose, such, for instance as heavy cotton duck, and it may be provided with either a canvas or wooden bottom.

2. 2 indicate parallel supporting loops located on and attached to opposite sides of the feed bag and secured in position in any suitble manner, by means of stitches, or rivets. These loops may be formed of leather, or they may be formed of ordinary rubber hose cut to a length corresponding to the length of one side of the bag and attached to the opposite sides of the bag adjacent its open upper end.

3 indicates a leather strap provided with a suitable buckle 4 and ordinary strap-loops 5, which is secured about the open upper end of the bag, by means of rivets or stitches and the function of which is to close the mouth of the bag when desired, in order to prevent exit of the feed in handling the bag before attachment to the pole of the vehicle. In some cases I may use an ordinary "draw string" or cord in lieu of this closing strap; or I may simply tie an ordinary cord or string about the mouth of the bag, and the operation of each will be about the same. (See Fig. 5.)

6 indicates a detachable supporting frame for the feed bag or box, so constructed as to hold the mouth of the bag in an open position during use, and the same consisting of three separate arms which are preferably cast integral of iron, but which may of course be made separately and secured together in any suitable way. For instance, the arms may be of wood, or of wrought iron rods fashioned into about the shape now to be described.

7 indicates parallel opposite arms having their outer ends free and their inner ends formed upon or secured to a body portion 8, which holds said arms at a determinate distance apart. Projecting inwardly from said body portion 8, and also formed integral therewith, or secured thereto in some way, is the locking arm 9 which is provided with a depression 10 and an elevation or hook 11 upon its upper surface adjacent its inner end.

12 indicates a supporting arm, which is adapted to be engaged by the locking arm just described as will be fully explained further on. Two of these supporting arms are made use of, and they are adapted to be secured upon the pole preferably in the manner now to be described, although of course they may be secured in such position in any known manner, such as by means of a leather strap, or by tying with a cord or string. At a point adjacent the inner ends of the supporting arms 12, said arms are perforated for the passage of a hinge-pin or pivot 13, and

their ends are then bent so as to form clamping-jaws 14 which are fashioned to fit the outer surface of the pole—that is, they are provided with curved clamping-jaws and said arms are hinged or articulated together adjacent their inner ends. (See Figs. 1 and 2.) The outer end of each supporting arm 12 is enlarged and provided with an aperture or perforation 15, which extends in a longitudinal direction so as to form a socket in which the locking arm 9 rests when in position for use.

16 indicates a cross bar extending across the socket 15 at the outer end of same, and upon which a locking-arm 9 rests by reason of gravity.

17 indicates another cross-bar, formed upon or secured to the enlarged portion of the supporting arm and upon the upper surface thereof and extending transversely across the socket therein. The cross-bar 17 is located at some distance from the outer terminal of the arm 12, and forms a portion of a "gravity lock," the function of which is hereinafter stated.

The devices I have heretofore described are adapted to be applied to vehicle poles of the usual length, that is poles of such length as to project some little distance in front of the neck-yoke bar (in case a neck-yoke is used), or of such length as to project a sufficient distance forward to permit the feed bag supporting devices to be attached to the pole and permit the animal's access thereto. In case the pole is too short for the above purpose, as it is sometimes found in farmer's wagons, I make use of the modified construction shown in Fig. 5, in which I show the supporting arms 12 bent at an angle and extended forward so as to provide an extension 18, and the inner ends of the locking-arms 9 are attached to the forward portions of said extensions in any suitable manner. This may be done in the manner above described, or it may be done as shown in Fig. 5, in which the extensions 18 and the arms 9 are shown integral. By means of these forward extensions 18 the feed bags or boxes may be applied to comparatively short vehicle poles, and the said bags or boxes still be located conveniently to the horses' heads.

The operation is as follows: When it is desired to attach the feed bags in position upon the pole, for the purpose of feeding the animals, the clamping-jaws 14 are first made to encircle the pole near its forward end, as shown in Fig. 1, and then as soon as the operator releases the parts, the weight of the arms 9 and 12 and contiguous parts, will cause said arms 12 to gravitate downwardly with considerable force, depending upon the length of the arms and the distance the bags 1 are located from said pole, and this action will cause the clamping-jaws to firmly grip the pole on opposite sides, and so automatically retain the entire device in proper position. This forms what I term a "gravity-clamp." With the several parts in the position shown in Fig. 1, each of the animals of a two-horse team may have ready access to the feed bag.

This invention is especially applicable to two-horse teams, although it is clear that by cutting off one of the supporting arms 12 I may do away with one of the feed bags and its supports, and thereby produce a device suitable for one horse, and in such case the clamping-jaws 14 would be made to engage one of the shafts of the vehicle at a suitable point to permit the horse's nose to reach the bag, in feeding. In order to place the locking-arm 9 in position, it is only necessary to insert its free end in the socket 15, until the projection or hook 11 passes the cross-bar 17, when upon releasing the said arm 9 the weight of its outer portion will gravitate downward, and cause the said hook 11 to pass up behind said cross-bar, and cause the depression 10 in the upper surface of said locking-arm to be engaged by said cross-bar, and so prevent withdrawal of said arm 9 from said socket, and securely lock the adjacent parts to each other. What I have just described I may term a "gravity-lock."

In Figs. 1, 2, and 5 I have shown a feed bag in proper position upon the parallel arms 7, 7, and in Fig. 3 I have exhibited one removed therefrom. When it is desired to place the feed bag upon the arms 7, 7 such operation may be quickly performed by reason of said arms always being at the proper distance apart. The loops 2 are to be slid upon the arms 7, 7, one loop upon each arm, and they will retain such position during the feeding operation, by reason of friction of their internal surfaces against the external surface of said arms. From the above it will be seen that I have produced an improved feed bag and means for supporting the same, by means of which a team of two horses, or a single horse, may be fed while standing in harness hitched to the vehicle, without the aid of any other support.

Heretofore some feed bags have been attached, directly to the horse's head and thereby supported during the feeding operation. In such cases unless breathing apertures are provided in the bag adjacent its bottom, breathing of the animal has been interfered with to a considerable extent or the animal has been compelled to reach to the ground and rest the bag thereon, or throw its head up in air in its endeavors to reach the food in the bag. When animals are eating out of ordinary wooden boxes, or out of troughs, they have wasted a great deal of grain and food by throwing it out of said boxes or troughs, and by overturning same, thereby scattering the grain in the mud upon the ground wasting the food, and depriving the animal of its food so wasted. By my improved construction of feed bags and supports, the above objections are in a great measure obviated, and form a combination of conveniences for both man and beast—that is, the combi-

nation of a gravity clamp, the gravity lock and the feed bags, each of which may be quickly detached from each other and again put together, economizing in time of the operator, in storage space and in food saved.

When the device is not in use the parts may, as before stated, be removed from the pole or shaft, separated, and stored away in very small space, in or about the wagon bed or buggy.

I desire to call attention to the fact that in using my device it is altogether unnecessary to unhitch the animal or animals and turn them around so they may have access to the ordinary feed box in rear of the wagon-bed.

No matter where the animal and vehicle may be, my improved devices may be quickly put in place and the animals fed while standing in harness hitched to the vehicle.

In order to limit the rotary movement of the clamping-jaws 14 upon the pole or shaft, I locate upon the under surface of said pole or shaft a stop-lug or projection 19, with which the free ends of said jaws will come in contact when the feed bag upon either side is depressed sufficiently far in the judgment of the operator. This stop-lug may be of any suitable form. This stop-lug may or may not be used, as the preference of the operator may dictate. The device above described is simple in operation, effective in use, and low in cost.

I do not desire to limit myself to the exact construction of supporting arm and connections, which I here show, as it is evident their forms may be changed by an ordinary mechanic, without departing from the scope of my invention.

What I claim is:

1. In a feed-bag support, the combination of two arms provided at their opposing ends with reversely-curved members 14, said arms being each provided with an aperture located in the angle formed by the straight and curved portions of said arms, and a pivot pin 13 passing through both of said apertures and pivotally securing said arms together; substantially as and for the purpose set forth.

2. In a feed-bag support, the combination, with a horizontal arm having a bifurcated free end, and cross-bars 16 and 17 connecting the parallel members of said bifurcated end, the cross-bar 17 being located in rear of said cross-bar 16 and in a higher plane, of a detachable bag-supporting arm comprising a member 9 provided with depressions coinciding with and adapted to respectively receive the cross-bars 16 and 17; substantially as and for the purpose set forth.

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

DENIS N. STOCK.

Witnesses:
ALFRED A. EICKS,
ED LONGAN.