

E. CARLIN.

Improvement in Mangers.

No. 127,563.

Patented June 4, 1872.

Fig. 1.

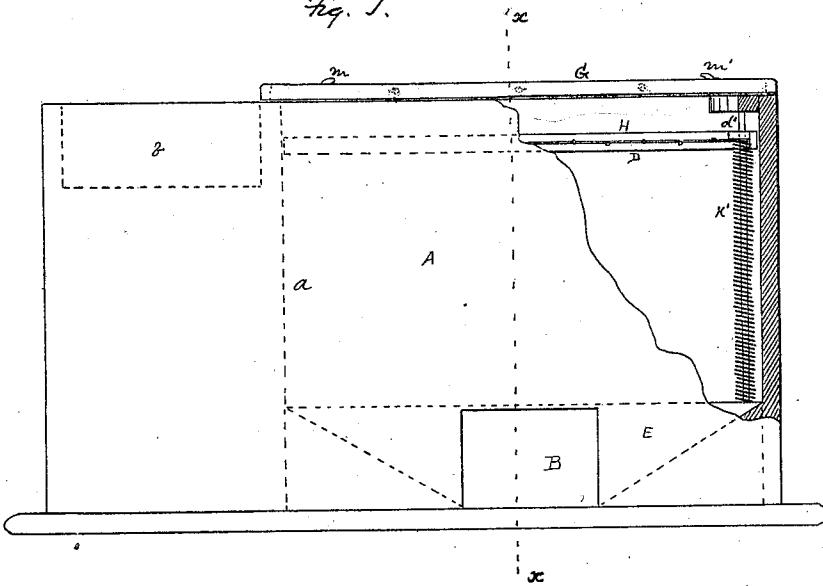


Fig. 2.

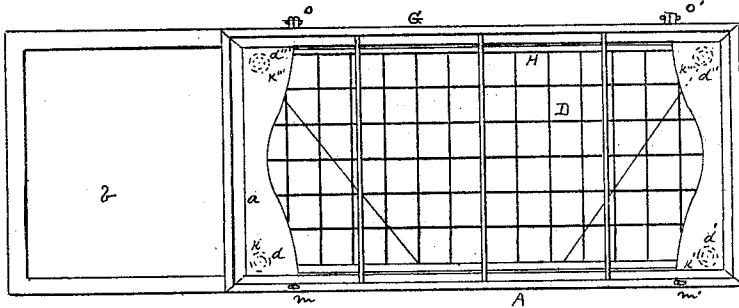
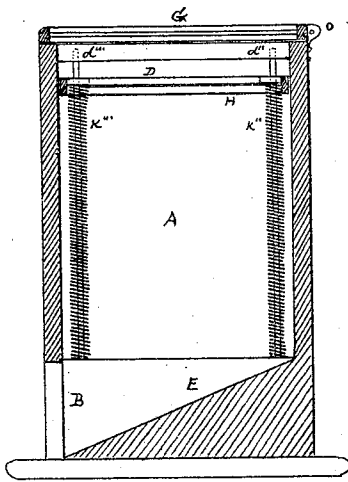


Fig. 3.



WITNESSES
W. M. Whitney
Thos. Fay

INVENTOR
Edward Carlin by
Sam'l. S. Boyd
att'y

UNITED STATES PATENT OFFICE.

EDWARD CARLIN, OF THE UNITED STATES ARMY.

IMPROVEMENT IN MANGERS.

Specification forming part of Letters Patent No. 127,563, dated June 4, 1872.

To all whom it may concern:

Be it known that I, EDWARD CARLIN, of the United States Army, have invented a new and useful Improvement in Mangers, of which the following is a full, clear, and exact description, reference being had to the annexed drawing making a part of this specification, in which—

Figure 1 represents a front elevation of my invention with a portion broken out. Fig. 2 represents a top plan of same. Fig. 3 represents a transverse section of Fig. 1 at *x x*.

Similar letters indicate like parts.

In mangers as commonly constructed there is great waste of the hay, by reason of the horse drawing it out and trampling upon it, and the hay is often very injurious from the great amount of dust and fine particles in it which are inhaled by the horse, and which, when he thrusts his head deep into the manger, are often of great injury to his eyes, which are naturally more or less moist. To remedy these objections, and to provide a manger which, while perfectly accessible to the animal, will not allow him to thrust his head too far into it or to draw the hay therefrom, and which, by the very operation of feeding, will thoroughly sift the hay, is the object of my invention, the same being an improvement on the manger patented to T. Moore, April 17, 1866.

A, Figs. 1 2 3, represents the manger, constructed of any desired form or size or material, and divided by a transverse partition, *a*, so as to form a box, *b*, Figs. 1 2, at one end, which serves as a feed-box, being made shallow, as indicated in the first figure. The bottom of the manger proper is made sloping, as seen in Figs. 1 3, forming, as it were, a chute, *E*, leading to the opening *B*, Figs. 1 3. This opening may be either in the front or back of the manger, the chute being arranged to correspond, and in practice, where it is practicable, I prefer to have it in the back, as then the impurities in the stall will be less likely to affect the hay, and fresh air may be made to enter the manger for ventilation. A sieve or wire-grating, *D*, Figs. 1 2 3, made of sufficiently-close meshes to retain the hay, is attached to a frame, *H*, made to fit the interior of the

manger so that it may move freely up and down upon four guiding-rods, *d d' d'' d'''* Fig. 2, *d'* Fig. 1, *d'' d'''* Fig. 3, placed in the four corners of the manger. The frame rests upon spiral springs *k k' k'' k'''* Fig. 2, *k'* Fig. 1, *k'' k'''* Fig. 3, encircling the guide-rods *d d'*, &c. Over the manger, and attached to it by hinges *o o'* Fig. 2, *o* Fig. 3, and spring-catches *m m'* Figs. 1 2, is a frame-cover, *G*, the bars of which are far enough apart to allow the horse to reach the hay, and yet near enough to each other to prevent him from tossing it out of the manger on the floor. The cover is raised when the manger is filled, and then closed before the horse is allowed to feed.

It is evident that the fine particles and dust will naturally pass through the sieve, which is continually agitated by the action of the horse in plucking the hay, so that the very operation of feeding is, by the aid of the spring-supports, converted into a means of cleansing the contents of the manger. The animal need never thrust his head deep into the manger, as the pressure of the springs will always keep the hay within easy reach.

As this manger is not, of course, adapted to hold grain, I have, as described, formed in one end the feed-box, to be used whenever it is desirable to give the animal grain.

I do not claim there is any novelty in using a perforated manger, or in supporting the same on springs, or in the mere use of rods as guides for encircling spiral springs, as such rods have been used in various devices hitherto; but

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the manger *A*, sieve *D*, springs *k k'*, &c., and guiding-rods *d d'*, &c., all constructed and arranged substantially as shown and specified.

2. The combination of the manger *A*, cover *G*, sieve *D*, springs *k k'*, &c., guiding-rods *d d'*, &c., and chute *E*, all constructed and arranged substantially as and for the purpose shown and specified.

EDWARD CARLIN.

Witnesses:

SAML. S. BOYD,
C. M. WHITNEY.