

F. T. ENGLISH.
STOCK FEEDING APPARATUS.
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931,742.

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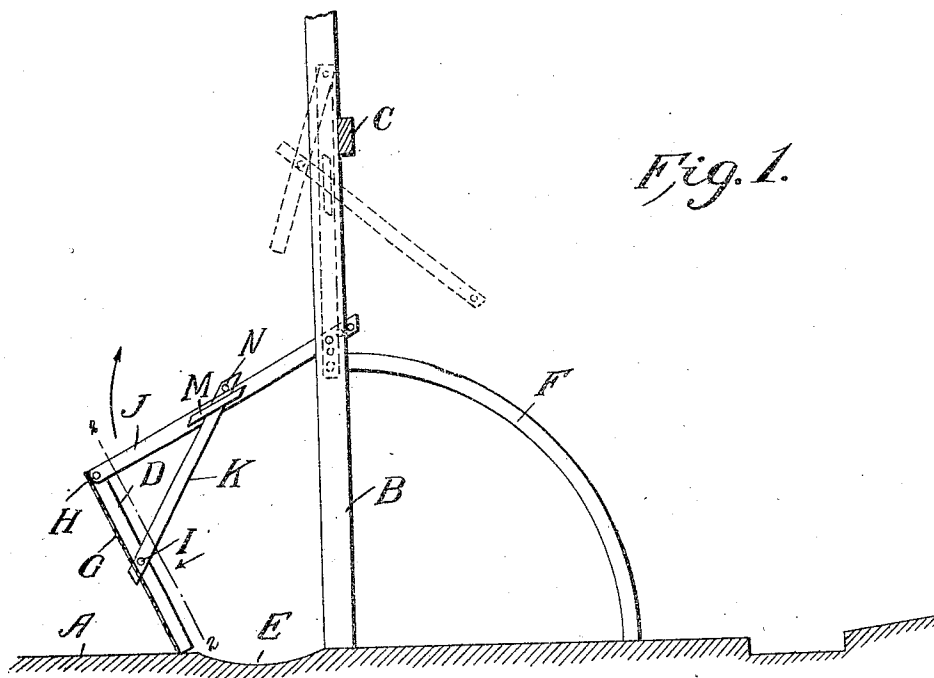


Fig. 1.

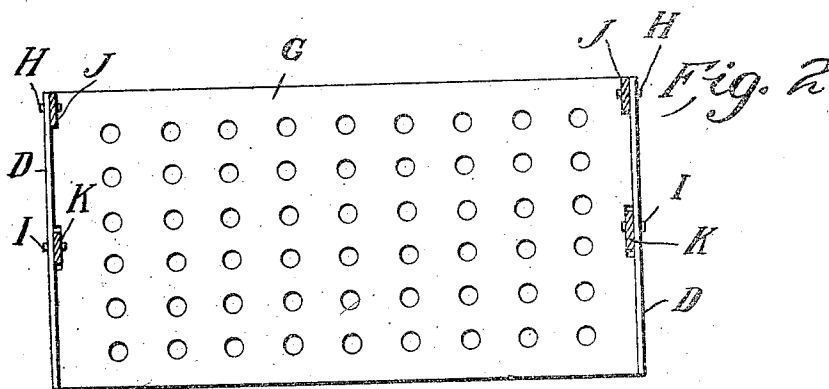


Fig. 2.

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UNITED STATES PATENT OFFICE.

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STOCK-FEEDING APPARATUS.

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To all whom it may concern:

Be it known that I, FRANK T. ENGLISH, citizen of the United States, residing in Queenstown district, in the county of Queen Annes and State of Maryland, have invented certain new and useful Improvements in Stock-Feeding Apparatus, of which the following is a specification, reference being had therein to the accompanying drawing.

In feeding dairy cows it is desirable, for sanitary reasons, to secure the greatest possible degree of cleanliness, and to replace ordinary troughs and the like by devices affording no lodgment for bits of food and such that they may be readily flushed after each feeding and thus be kept in the best sanitary condition. With this end in view cement floors are used and are formed with a slight depression extending continuously in front of a long line of cows secured side by side. The feed for all is placed in this depression, which may be swept or flushed out at any time. A difficulty with this plan is that the cows in eating throw some portions of the feed forward out of the depression and beyond their reach, and this must be pushed back from time to time by attendants. To avoid this, I provide broad sheets of suitable material which are set on edge at the proper distance in front of the cattle, to prevent the feed from being thrown forward, and which when not needed are swung up above the heads of the cows, leaving the floor and depressions therein entirely free from obstructions to sweeping or washing.

In the accompanying drawings, Figure 1 is a side elevation of devices embodying my invention. Fig. 2 is a section on the line 2-2, Fig. 1, looking to the left.

In these figures, A represents a cement floor, B, one of a series of alining upright posts, braced by curved bars F, respectively, C a beam connecting the posts and usually supporting the upper end of ordinary stanchions, not shown. The cement floor is formed with a trough-like depression E, immediately in front of and parallel to the line of posts, so that anything thereon may be conveniently swept or washed into the depressions E, to be then carried along the latter and ultimately removed therefrom.

To prevent feed from being thrown too far from the cows, a sheet G, preferably nearly equal in length to the distance between consecutive posts, is set on edge upon

the floor, at that side of the depression most distant from the posts, with each of its ends secured to bars D which are hinged or pivotally secured at H, I, to the end of each of two bars J, K. The pivots H of the bars J are at or near the upper edge of the sheet, while the pivots I are at some distance from that edge. The opposite ends of the bars J are pivoted to the posts, respectively, so that the sheet may be swung upward above the heads of the cows and between the posts, the bars in that case passing the vertical line of their pivots and resting against the beam C, where they remain by reason of gravity, or where they may also be secured in any suitable way. The free end portion of each bar K slides in an oblique loop M on the side of the corresponding bar J. The upper edge of the sheet may be swung toward the plane of the bars J until the sheet makes but a small angle therewith, the sheet turning on the pivots H and the bars K sliding in their loops, and the movement being limited by the binding of the bars in their loops, or, if desired, by stops N on the bars. When the sheets are thus folded and swung upward to the position shown in dotted lines, they are obviously entirely out of the way and the floor and depression may be swept or washed as readily as though no such devices were provided. For convenience, each sheet may serve for two stalls, being in that case light enough to be quickly raised or lowered by any attendant.

The sheet G is usually made of light, preferably perforated, metal, but the construction is readily varied, and the material is not necessarily metal.

What I claim is:

1. In devices of the class described, the combination with a floor and posts rising from the floor, of bars pivoted to the posts at some distance above the floor to swing upward and normally extending downwardly forward therefrom, of a sheet of suitable material secured at its upper edge to the lower ends of the bars with its opposite edge normally resting upon the floor.

2. In devices of the class described, the combination with a floor and posts rising therefrom, of bars pivoted to the posts, respectively, and normally extending downwardly forward therefrom, and a rigid sheet of suitable material hinged to the lower ends of the bars with its edge nor-

mally resting upon the floor, and adapted to fold toward said bars and to be swung upward with said bars, leaving the floor clear.

3. In devices of the class described, the combination with a floor having a trough-like depression, of posts alongside said depression, bars pivoted to the posts above the floor to swing upward to approximately vertical positions between them and downward therefrom over said depression, and a rigid sheet hinged at its upper edge to the free ends of said bars, to fold toward their plane.

4. In apparatus of the class described, the combination with a rigid sheet adapted to rest edgewise upon a floor, of bars pivoted at their ends to opposite ends, respectively, of said sheet, whereby the sheet may swing toward the plane of the bars, and brace bars pivoted to the sheet in like manner, at some distance from the pivots of the bars first mentioned, and having their free end portions slidingly held in ways upon the cen-

tral portions, respectively, of the bars first mentioned.

5. The combination with a floor and two vertical posts rising therefrom and provided above the same with a stop extending laterally from one toward the other, of two bars between the posts and pivoted to them, respectively, to project in front thereof and to swing into approximately vertical position determined by said stop, a downwardly extending sheet hinged to the free ends of the bars to rest with its lower edge upon the floor when the bars are in their lower position and to fold approximately into the plane of the bars at other times, and rigid sliding braces limiting the folding and unfolding movements of the sheet.

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

FRANK T. ENGLISH.

Witnesses:

J. LOUIS EVANS,

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