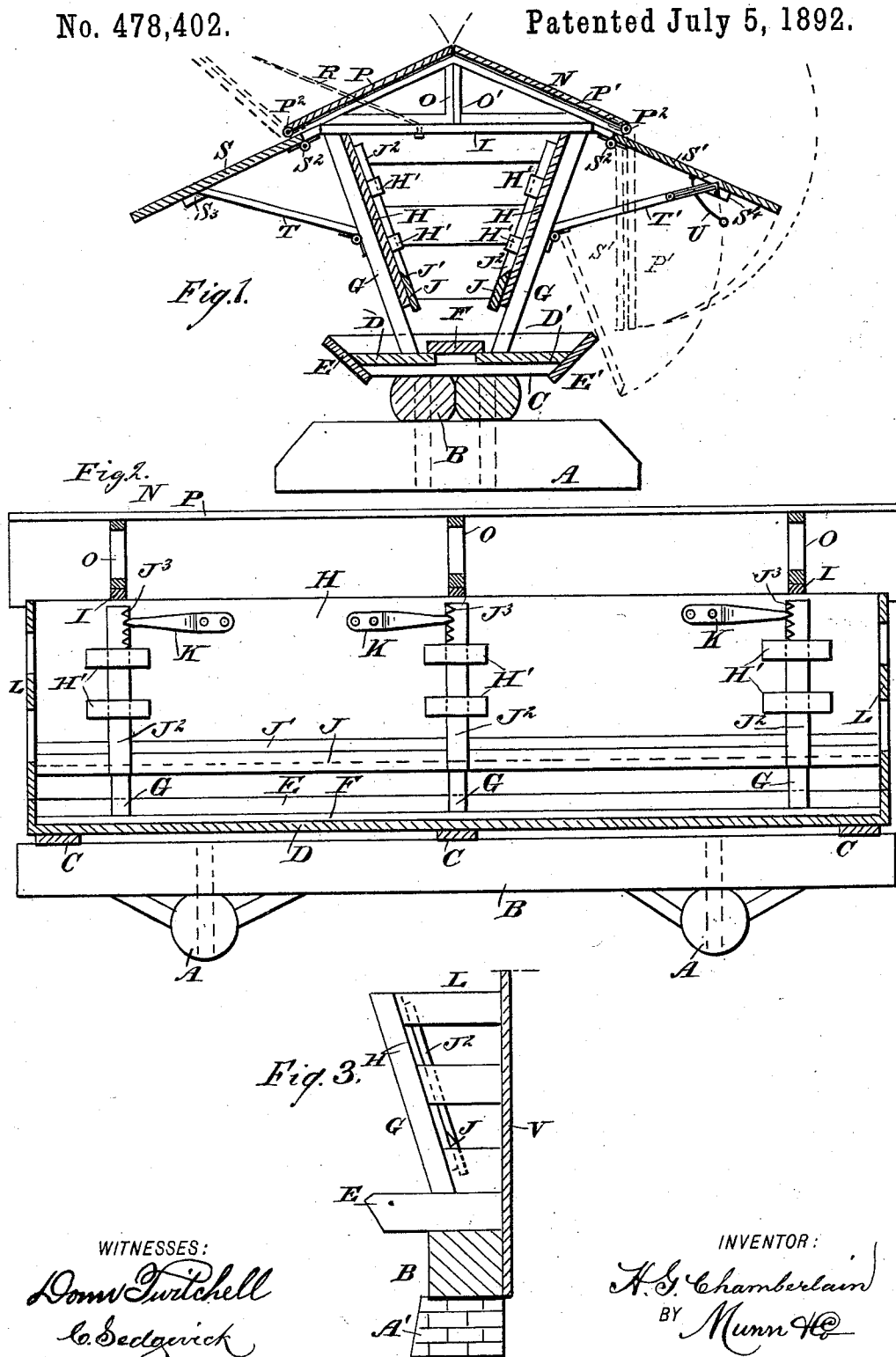


(No Model.)

H. G. CHAMBERLAIN.
STOCK FEEDING RACK.

No. 478,402.

Patented July 5, 1892.



WITNESSES:

Domw Twitchell
C. Sedgwick

INVENTOR:

H. G. Chamberlain
BY Munn & Co
ATTORNEYS

UNITED STATES PATENT OFFICE.

HENRY G. CHAMBERLAIN, OF RIDGEWAY, WISCONSIN.

STOCK-FEEDING RACK.

SPECIFICATION forming part of Letters Patent No. 478,402, dated July 5, 1892.

Application filed June 23, 1891. Serial No. 397,178. (No model.)

To all whom it may concern:

Be it known that I, HENRY G. CHAMBERLAIN, of Ridgeway, in the county of Iowa and State of Wisconsin, have invented a new and Improved Stock-Feeding Rack, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved stock-feeding rack designed for use in farm-yards, stables, pastures, &c., which is simple and durable in construction, adapted to supply various kinds of feed, such as grass, fodder, grain, roots, hay, &c., and which is arranged to conveniently permit the stock to feed, at the same time preventing any waste of the material fed.

The invention consists of certain parts and details and combinations of the same, as will be described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a transverse section of the improvement. Fig. 2 is a longitudinal section of the same; and Fig. 3 is an end view, with parts in section, of a modified form of the improvement.

The improved stock-feeding rack is provided with two or more transversely-extending foundation-beams A, on which rest the longitudinally-extending beams B, spiked or otherwise secured to the transverse beams A. On top of the longitudinal beams B is arranged a series of transversely-extending bottom rails C, supporting the longitudinally-extending bottom boards D and D', forming the bottom for the feed-troughs, and carrying at their outer edges and ends inclined sides E and E', forming the fronts of two troughs, one at each side of the rack. The inner ends of the bottom boards D and D' are covered by a longitudinally-extending center-board F, which divides the feed equally between the two troughs formed on the sides of the rack.

From the longitudinal boards D D' extend upward and outward sets of posts G, fastened in any suitable manner on the said boards or passing through the same onto the longitudinal beams B to be fastened thereon in any convenient way. On the insides of the posts G are

secured the longitudinally-extending sides H, forming the sides for the rack proper, the distance between the lower edges of the said boards and the longitudinal board F forming the opening for the feed to pass to the two troughs and the sides of the rack. The upper ends of the several sets of posts G are connected with each other by a transverse bar I, so as to hold the several parts together.

In order to regulate the amount of feed permitted to pass through the opening leading to the two troughs, sliding feed-gates J are provided, fitted to slide in suitable bearings arranged on the boards H and adapted to increase or diminish the opening between the edges of the boards H and F, so that more or less feed passes to the said troughs.

Each of the feed-gates J is formed at its upper edge with a bevel J' for the passage of the feed, the said gate being also provided with a series of upwardly-extending arms J², mounted to slide in suitable bearings H', arranged on the inner sides of the boards H. The upper end of each arm J² is provided in one edge with notches or teeth J³, adapted to be engaged by a spring-pawl K, secured to the respective board H and serving to hold the feed-gate J' in the desired place to regulate the amount of feed passing to the troughs. The ends of the boards H are connected with each other by transverse slats L, as is plainly shown in Fig. 2.

The roof N of the rack is arranged in such a manner that it can be conveniently opened for placing the feed in the rack and can also be extended, so as to form shelter for the stock feeding at the side troughs of the rack. For these purposes the roof N is provided above each cross-bar I with the triangular sections O and O', each forming a peak, on which rests the roofs P and P' proper, formed in the shape of doors and hinged at P² to the lower or outer ends of the peaked sections O and O'.

In order to place the material to be fed into the rack, the roof proper P' is swung into a vertical position, as illustrated in dotted lines at the right of Fig. 1, while the other roof P is swung into an open inclined position, also shown in dotted lines in Fig. 1, and held in the position by means of a cord or rope R, fastened by one end to one of the transverse

bars I and by its other end to the inside of the roof-door P. The cord or rope R is of such length as to conveniently hold the roof-door P open in the manner shown and described. The material is pitched into the rack from that side having the door swung into a vertical position, the other door preventing the material from being thrown over the opposite side.

On the under sides of the sections O and O', close to the hinges P², are arranged the extension-roofs S and S', respectively hinged to the outer ends of the said sections O and O' by hinges S². When the extensions S S' are in position, they extend in line with the doors P P', resting on top of the sections O and O'. The extensions S S' are held in place by means of braces T T', respectively hinged to the posts G and engaging with their free ends lugs S³ and S⁴, respectively fastened to the under side of the extensions S and S'. In order to lock the braces in position, a locking device U of any approved construction is provided, said device consisting, preferably, of a hook pivoted on the respective boards and engaging a pin on the corresponding lug.

When the material is to be placed in the rack through the open roof, as previously described, the extension S' is placed in a vertical position, as shown in dotted lines in Fig. 1, the brace T' being unlocked and swung downward to rest on the upper edge of the side E' of the troughs. The extension S' then swings of its own accord into a vertical position, and when the roof-door P' is swung into a lowermost position for opening this part of the roof then the two parts S' and P' are close together, as shown in dotted lines in said Fig. 1.

In the construction shown in Fig. 3 the device is adapted for use in stables or along a wall V. Only one trough is then needed and the roof is preferably omitted. The foundation, instead of being formed of beams A, is formed of stone or brick work A', as illustrated in said figure. Otherwise the construction remains substantially the same.

It is understood that when the extensions S and S' are in position to form continuations of the roof then the stock feeding at the said troughs is completely sheltered from sun, rain, snow, &c.

By having the adjustable gates J any desired material may be placed in the rack to be fed to the stock through the said troughs, the said gates permitting but a certain quantity to be passed out into the said troughs. Thus hay and grass fodder, as well as roots and grain, can be dispensed to the stock, the gates J be-

ing properly adjusted, according to the nature of the material to be fed. It will be seen that no waste of material is liable to occur, as the animals have to draw the feed from the opening controlled by the respective gate J. The material extending through the respective side trough has to be pulled out of the same before it can possibly drop onto the ground.

By having the solid sides H hay-seed or other loose material in the feed is not likely to drop through the rack onto the fleece of sheep feeding at the troughs, and thus the wool of the sheep is kept clean from hay-seed and like material contained in the feed.

It will further be seen that a rack of this construction is as well adapted for stable use as for pastures, and when used for the latter purpose it also furnishes shelter for the animals, as previously described.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A stock-feeding rack comprising side troughs, posts projecting upward and outward from the said troughs, side boards held on the said posts, gates permitted to slide on the lower ends of the said side boards to increase or diminish the opening between the said side boards and provided with toothed arms, spring-pawls engaging the said toothed arms, a roof held on the said posts, the said roof comprising peaked sections supported on cross-bars attached to the said posts, roof-doors hinged to the lower or outer ends of the said sections to swing down into a vertical position, and extension-roof doors hinged to the peaked sections and supported on braces hinged to the said posts, substantially as shown and described.

2. A stock-feeding rack comprising side troughs, posts projecting upward and outward from the said troughs, side boards held on the said posts, gates permitted to slide on the lower ends of the said side boards to increase or diminish the opening between the said side boards, and a dividing-board between the troughs, a roof held on the said posts, the said roof comprising peaked sections supported on cross-bars attached to the said posts, roof-doors hinged to the lower or outer ends of the said sections, and a cord or rope having one end attached to one of the said roof-doors and the other end to one of the cross-bars to limit the outward swinging motion of the said roof portion, substantially as shown and described.

HENRY G. CHAMBERLAIN.

Witnesses:

W. J. EVANS,
PEARCE ROBERTS.