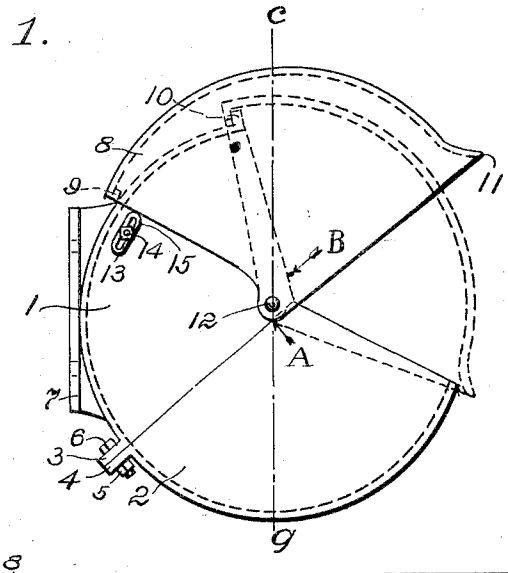
J. I. IBLINGS.

AUTOMATIC STOCK SALTING DEVICE.

APPLICATION FILED JAN. 15, 1912.

1,081,235. Patented Dec. 9, 1913.

Fig. 1.



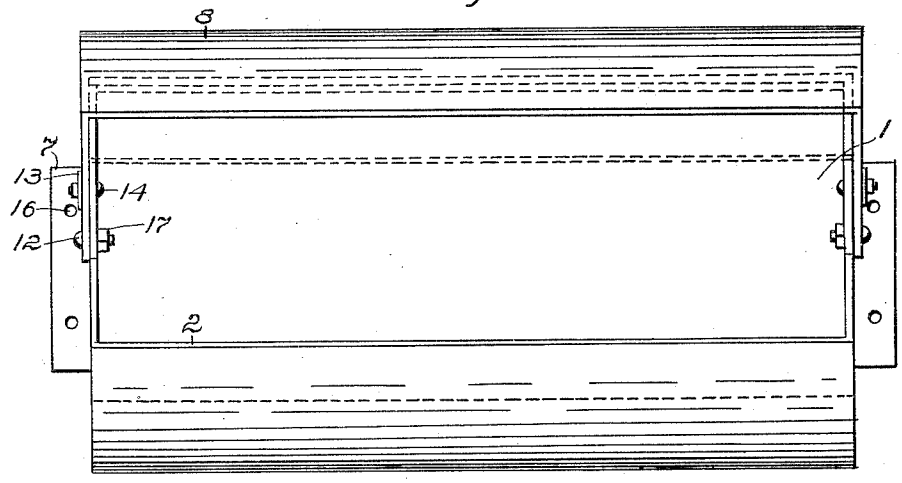


Fig. 2.

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UNITED STATES PATENT OFFICE.

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AUTOMATIC STOCK-SALTING DEVICE.

1,081,235. Specification of Letters Patent. Patented Dec. 9, 1913.

Application filed January 15, 1912. Serial No. 671,260.

To all whom it may concern:

Be it known that I, JOHN I. IBLINGS, a citizen of the United States of America, and a resident of Cedar Falls, Blackhawk county, Iowa, have invented certain new and useful Improvements in Automatic Stock-Salting Devices, of which the following is a specification.

My invention relates to improvements in automatic stock-salting devices, and the object of my improvement is to provide a salt-receptacle with a hinged cover which will automatically return to re-cover the opening in said box, when said cover has been displaced by any force and then released.

Another object is to so contrive the forms and relations of the said box and cover, that the cover will seal the opening in the box when closed thereover to prevent the entry of rain or other extraneous material.

These objects I have accomplished by the means which are hereinafter described and claimed, and which are illustrated in the accompanying drawings, in which:

Figure 1 is an end elevation of my said improved automatic stock-salting device, with the cover raised, the dotted lines representing the cover in its lowered and covering position. Fig. 2 is a front elevation of the parts shown in Fig. 1.

Similar numerals of reference denote similar parts throughout the several views.

I am aware that different stock-salting devices have been heretofore published intended to effect an automatic readjustment of the covering means when the said means have been first displaced and then released, but I have not found any such means operative, and thus have adopted the form here shown and described.

The box is formed of two hollow counterpart castings 1 and 2 whose edges register, and which are secured together by means of bolts 6 and nuts 5 which fasten together their registering orificed lugs 3 and 4 projecting from their rear edges of junction. The part 1 of the box thus formed has an integral lug on each end, projecting laterally in line with each other, said lugs 7 having bolt-holes 16 for use in securing the box to a side-wall or other supporting-means.

The general form of the box is that of a hollow cylinder with closed ends, a part being left open at the upper front part and ends. A swinging cover 8 is formed as a segment of a cylindrical body, hollow, and of a little greater diameter than the box body, in order to move freely thereover when being opened. It will be noticed that said cover has end pieces which overlap the ends of the box, outside of and parallel thereto, and that the angle of each overlapping end is pivoted to the end of the box adjacent to it, at a point eccentric to the actual center point A of the box. The pivot pintle used for this purpose is a short bolt 12 secured in a seat-opening in the end of the box by means of a nut 17. It will also be noticed that the center of the arc forming the inner wall of the cover 8 lies at the point marked B in Fig. 1., that is, forward of the pivot 12 of said cover. The result is, that the distance from the pivot 12 to the rear edge of the cover is less than the distance from said pivot to the forward edge thereof. This arrangement causes the rear edge of the cover 8 when the cover is rocked back to its rear limit, to engage the outer surface of the box-part 1, preventing further backward movement. For purposes of adjustment, however, I have placed on the ends of the box-part 1 a movable slide 13, mounted slidably by means of its slot 15 on the outer end of a bolt 14 passed through the wall of the box and fixed in a desired position by a nut. This adjustment is usually necessary only to correct any misfit in the parts due to some irregularity in the castings, since the cover 8 is generally stopped at the proper limit of movement by its engagement with the outer surface of the box.

The pivoting of the cover 8 at the point indicated, also has the effect of producing a large clearance of the cover when rocked backward. The cover has a forwardly projecting lip 11, which when the cover is down projects beyond the line of the box far enough to permit a beast to push it to raise the cover. The cover being thus raised, there is sufficient room between the cover and box to permit the animal to have access to a deposit of salt therein, and when satisfied, and the cover released, it infallibly and automatically drops to its closed position as indicated by the dotted lines in Fig. 1.

The forward upper edge of the opening in the box has a longitudinal flange 10 which serves not only as a stop in engaging a similar flange 9 on the under rear part of the cover 8, but such flanges coöperate when

the cover is in its lowered position to seal the joint at that place and prevent the seepage of rain or dust therethrough into the box. No rain or dust can work into the box from the other parts of the joints on account of their positions and overlapping at the junctions.

It is obvious that the cover 8 must always and automatically return to its closed or down position over the opening in said box, because its center of gravity is always located forward of its pivotal points 12. For that reason, whenever lifted and then released, it will automatically return to its closed position, induced thereto by gravity, since the mass of the cover is so adjusted that its larger part is always forward of said pivots.

If the cover were not so pivoted and formed relative to its pivots and said box, there would be no certainty that the cover could always automatically return to its closed position, and thus the contents of the box might become deteriorated or leached away.

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

An automatic stock-salting device, comprising a cylindrical trough with closed ends and opening upwardly and to one side, an arcuate cover with integral ends fitted over said trough and its ends and pivoted to the trough-ends eccentrically to lift up from the trough in spaced relation when swung open thereover, the upper longitudinal edge of the trough having an outwardly-projecting rib, and the rear edge of said cover having an integral inwardly-directed rib, said ribs contacting when the cover is closed over the opening of the trough to seal the joint therebetween, a slide-piece adjustably secured to one end of said trough and adapted to act as an adjustable stop for said cover, said trough being formed of two connected sections having fitting longitudinal edges, said sections having abutting longitudinal outwardly-directed flanges along their fitting joint, and means for detachably securing said flanges and sections together, one of said sections having an integral bracket orificed to permit of its being secured to some supporting-body.

Signed at Waterloo, Iowa, this 26th day of Dec. 1911.

JOHN I. IBLINGS.

Witnesses:
WIRT P. HOXIE,
GEO. C. KENNEDY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."