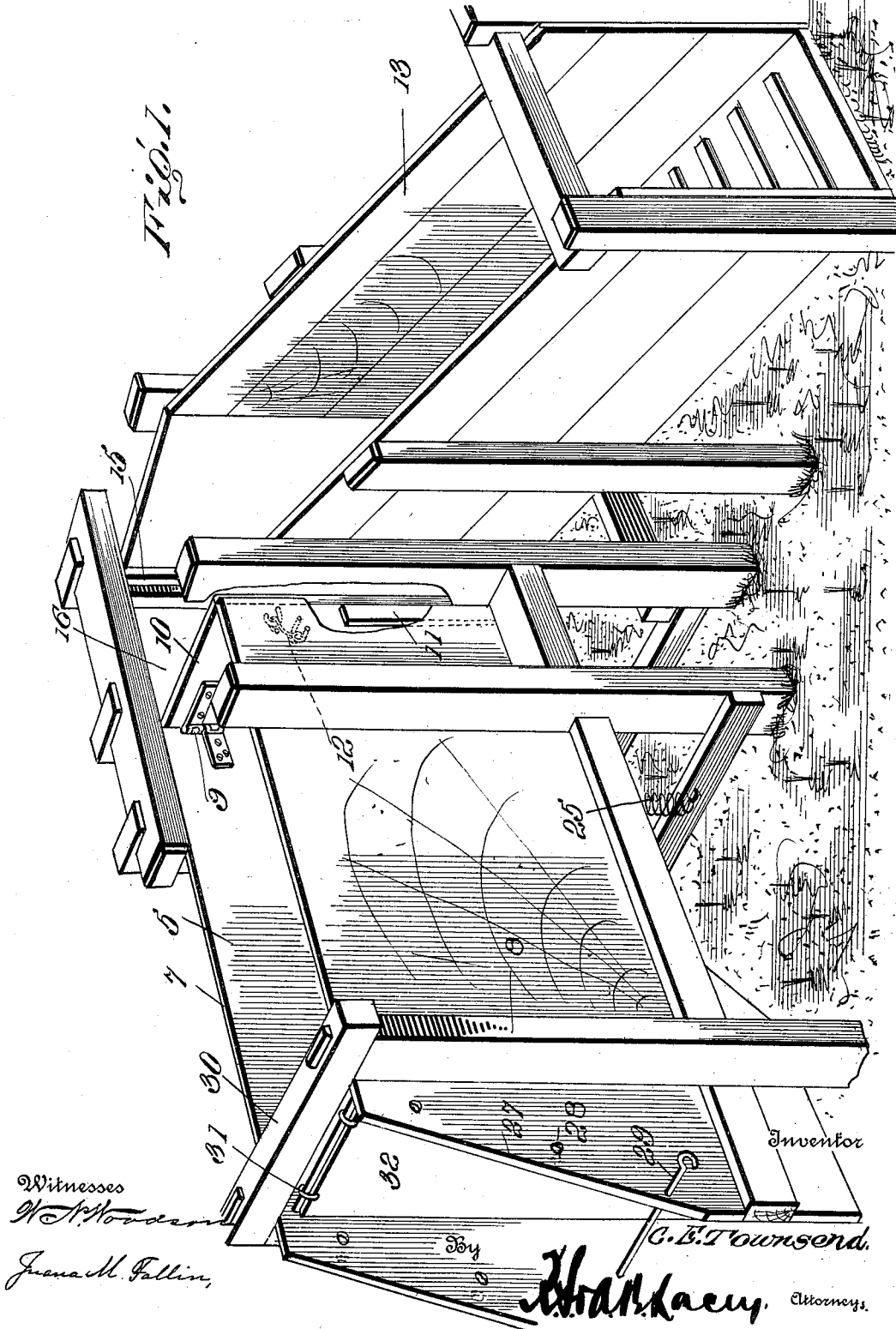


C. E. TOWNSEND.
COMBINATION DIPPING AND LOADING CHUTE.
APPLICATION FILED MAY 14, 1910.

981,330.

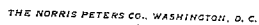
Patented Jan. 10, 1911.

2 SHEETS—SHEET 1.



981,330.

2 SHEETS-SHEET 2



UNITED STATES PATENT OFFICE.

CHARLES E. TOWNSEND, OF DECATUR COUNTY, KANSAS.

COMBINATION DIPPING AND LOADING CHUTE.

981,330.

Specification of Letters Patent. Patented Jan. 10, 1911.

Application filed May 14, 1910. Serial No. 561,475.

To all whom it may concern:

Be it known that I, CHARLES E. TOWNSEND, citizen of the United States, residing in Decatur county, Kansas, near Lebanon, in the county of Redwillow and State of Nebraska, have invented certain new and useful Improvements in Combination Dipping and Loading Chutes, of which the following is a specification.

This invention relates to combined loading and dipping appliances and has for its object the provision of a comparatively simple and thoroughly efficient device of this character, by means of which hogs, sheep and other animals may be readily loaded into a wagon or directed into a tank containing a dipping solution.

A further object is to provide a combined dipping and loading appliance including a horizontally disposed run-way having an inclined run-way or approach leading thereto, said horizontal run-way being provided with a pivoted section for dumping the animals into the dipping tank.

A further object is to provide the horizontal run-way with angularly disposed doors, one of which is movable to open position to permit the passage of hogs from the inclined run-way to a wagon or other vehicle, while the other door forms a closure for the entrance to said horizontal run-way.

A still further object of the invention is generally to improve this class of devices so as to increase their utility, durability and efficiency.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

For a full understanding of the invention and the merits thereof, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of a combined loading and dipping appliance constructed in accordance with my invention; Fig. 2 is a vertical sectional view of the horizontal run-way, the pivoted section of said run-way being shown in full lines in normal position and in dotted lines in tilted position; Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 2; Fig. 4 is a detail transverse sectional view taken

on the line 4—4 of Fig. 2; Fig. 5 is a detail perspective view of a portion of the horizontal run-way showing the construction of the locking member for the vertical movable door.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The combined loading and dipping appliance forming the subject matter of the present invention comprises a horizontally disposed run-way 5 including a stationary platform 6 having vertically disposed walls secured thereto and to which are fastened in any suitable manner spaced uprights 8, which latter serve to support the platform 6 in elevated position.

Pivotaly mounted at 9 within the horizontal run-way 5, is a door 10, which forms a closure for the entrance to said run-way, the inward movement of said door being limited by a vertically disposed stop or cleat 11. A hook or similar fastening device is secured to one face of the door and adapted to engage a keeper fastened on one of the side walls of the run-way for the purpose of locking the door in closed position.

Disposed at right angles to the run-way 5, is an inclined run-way or approach 13, there being an opening 14 arranged opposite the upper end of the inclined approach 13 and through which hogs or other animals are loaded into a wagon or other vehicle. Disposed on opposite sides of the door opening 14 are spaced cleats 15, between which is slidably mounted a gate or closure 16. Secured to the exterior face of the gate 16, is a locking member 17 preferably formed of a single piece of metal having its upper end curved laterally to form a spring catch 18 adapted to bear against the upper end of one of the guiding cleats 15 for the purpose of locking the door in closed position.

The side walls of the inclined run-way 13 at the upper end of the latter, are cut-away to produce oppositely disposed shoulders 19 adapted to rest on the platform 6, there being spaced brackets 20 secured to the bottom of the inclined run-way 13 and provided with laterally extending lips which rest on the platform 6 and serve to assist in retaining the run-way in position thereon.

Attention is here called to the fact that the inner face of the sliding gate or closure 16 is spaced from the inner face of the adja-

cent side wall 7 to form a chamber or compartment 21 for the reception of the pivoted door 10 when the latter is moved to open position. By this arrangement, when the door 10 is moved to open position, the outer face of the door will be disposed in longitudinal alinement with the inner face of the adjacent side wall 7 so as not to offer any obstruction to the passage of the animals when entering the horizontal run-way 5.

Pivotally mounted at 22 between the side walls 7 of the run-way 5, is a movable platform or section 23 for directing hogs or other animals into a tank 24 containing a dipping solution. Secured to the rear end of the movable platform or section 23 is one end of a coil spring 25, the opposite end of which is secured to one of the transverse beams 26 of the supporting frame, thus to normally and yieldably support the movable platform 23 in horizontal alinement with the stationary platform 6.

The side walls of the horizontal run-way 5 are projected longitudinally beyond the adjacent standard 8 and are inclined or beveled at 27, there being spaced openings 28 formed in the projecting ends of the side walls for the reception of a transverse rod 29. The forward set of standards 8 are connected by a transverse beam 30 to which is pivotally connected at 31 a swinging door 32, the latter being normally held by gravity in contact with the free end of the movable platform 23.

When loading hogs, sheep or other animals into a wagon or similar vehicle, the inclined run-way is positioned on the stationary platform 6, in the manner before stated, after which the pivoted door 10 is moved to closed position and the sliding door 16 moved downwardly so as to expose the door opening 14, thus to permit the hogs to pass from the inclined run-way 13 across the platform 6 and through the opening 14 into a wagon without danger of the animals entering the horizontal run-way 5. When it is desired to dip the hogs, the sliding door 16 is moved to closed position and the pivoted door 10 swung laterally within the compartment 21 so as to permit the animals to enter the horizontal run-way 5. As the animals step upon the pivoted platform 23, the latter will be tilted downwardly, thus directing the hogs into the dipping tank 24, the swinging end gate 32 being forced outwardly into engagement with the transverse stop rod 29 by impact with the animals and movable by gravity into engagement with the adjacent end of the pivoted platform when the latter assumes its normal position.

By inserting the transverse stop rod 29 in the different openings 28, the throw or pivotal movement of the swinging gate 32 may be controlled at will.

While I have shown and described a

spring for returning the pivoted platform 23 to normal position, it will of course be understood that a weight may be employed with equally good results for this purpose, without departing from the spirit of the invention.

Having thus described the invention, what is claimed as new is:

1. The combination with a run-way, of an approach leading thereto, a door disposed opposite the approach, and a door forming a closure for the entrance to the run-way, one of said doors being movable to open position when the other is closed.

2. The combination with a run-way, of an approach leading thereto, a pivoted platform disposed within the run-way, a door arranged opposite the approach, and a door forming a closure for the entrance to the run-way, one of said doors being movable to open position when the other is closed.

3. The combination with a horizontal run-way having a stationary platform, of an inclined run-way having portions thereof cut-away to produce oppositely disposed stop shoulders adapted to rest on said stationary platform, brackets secured to the bottom of the inclined run-way and resting on the platform between said shoulders, a door formed in the horizontal run-way opposite the inclined run-way, and a door forming a closure for the entrance to said horizontal run-way.

4. The combination with a horizontal run-way having a stationary platform, of an inclined run-way disposed at substantially right angles to the horizontal run-way and resting on said platform, there being an opening formed in one wall of the horizontal run-way opposite said inclined run-way, a door slidably mounted within the opening and spaced from the inner wall of the horizontal run-way, to form a chamber, a pivoted platform forming a portion of the bottom of the horizontal run-way, and a door forming a closure for the entrance to said horizontal run-way and movable to a position within said chamber.

5. The combination with a horizontal run-way having a stationary platform, of a pivoted platform forming a portion of the bottom of the run-way, a spring operatively connected with the pivoted platform for normally holding the latter in horizontal alinement with the stationary platform, an inclined run-way resting on the stationary platform, there being an opening formed in the horizontal run-way opposite the inclined run-way, cleats secured to the horizontal run-way at said opening, a door mounted for vertical movement between said cleats and spaced from the inner wall of the run-way to form a chamber, a locking member secured to said sliding door and adapted to engage the upper end of one of the cleats for locking the door in closed position, a pivoted

door forming a closure for the entrance to the horizontal run-way and movable to open position within said chamber, a pivoted end gate normally resting against the free end
5 of the platform, and a transverse stop rod for limiting the swinging movement of the pivoted end gate.

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

CHARLES E. TOWNSEND. [L. S.]

Witnesses:

W. S. LANGMADE,
I. K. HUBER.