W. D. DOLAN.

HOG RINGING CHUTE.

APPLICATION FILED MAY 7, 1915.

1,166,450.

Patented Jan. 4, 1916.

2 SHEETS—SHEET 1.

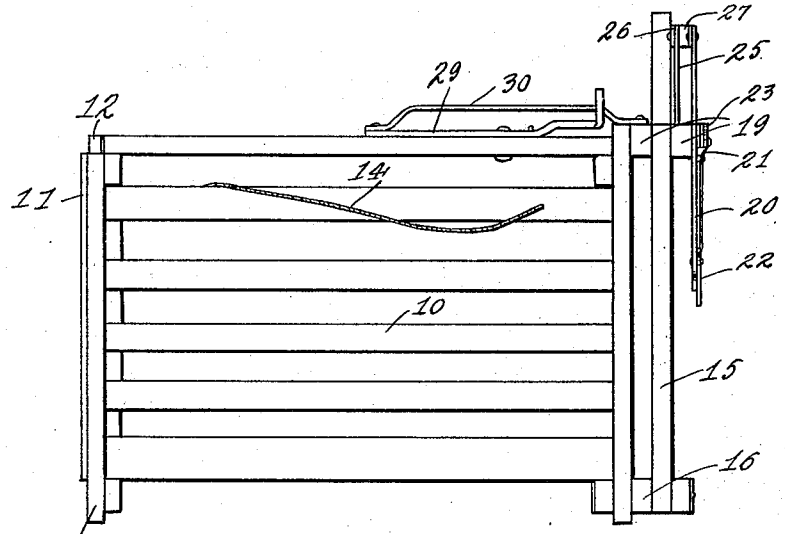

Fig. 1.

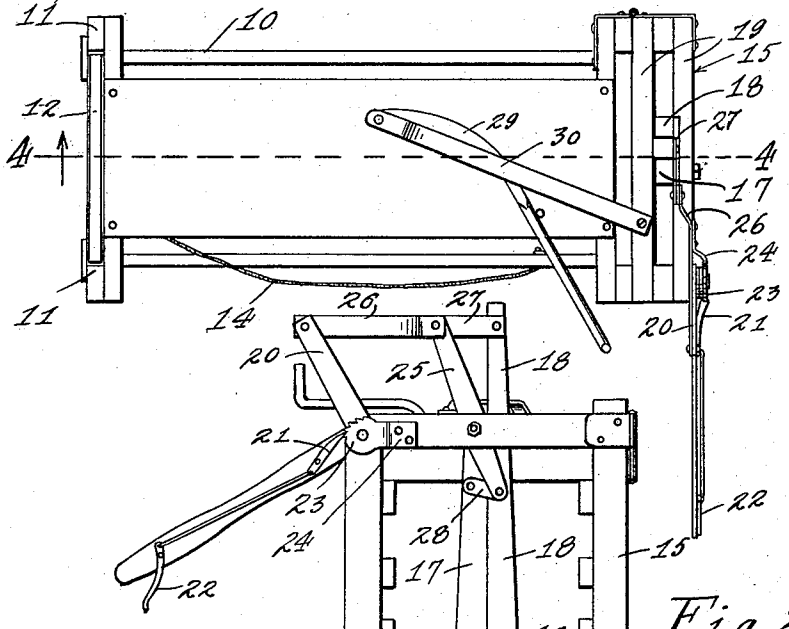

Fig. 3.

Fig. 2.

Witnesses

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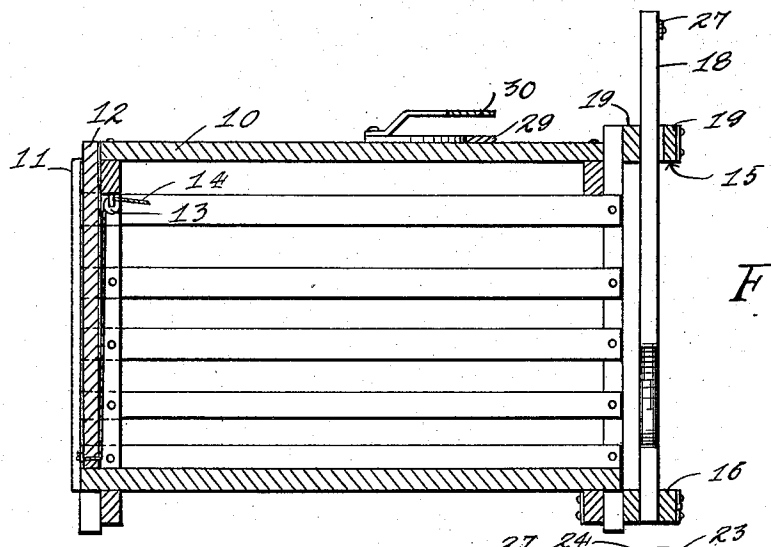

Fig. 4.

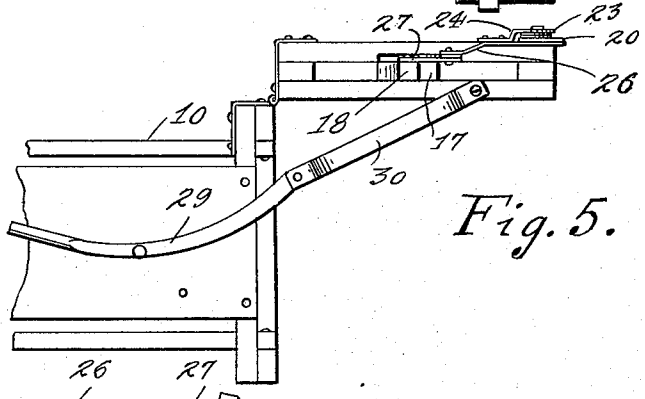

Fig. 5.

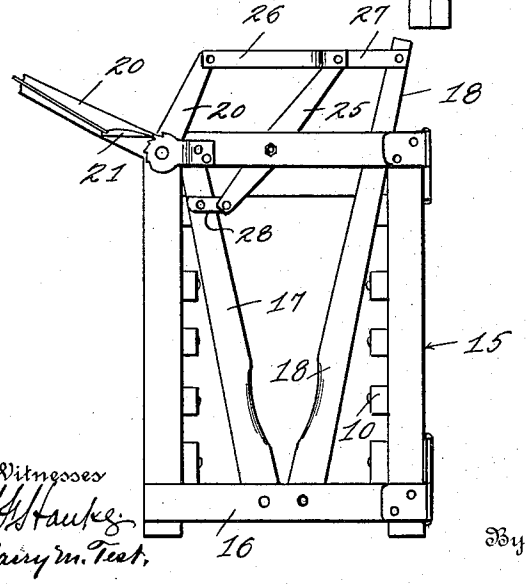

Fig. 6.

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UNITED STATES PATENT OFFICE.

WALLACE D. DOLAN, OF LINN TOWNSHIP, CEDAR COUNTY, IOWA.

HOG-RINGING CHUTE.

1,166,450. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed May 7, 1915. Serial No. 26,619.

To all whom it may concern:

Be it known that I, WALLACE D. DOLAN, a citizen of the United States, residing in Linn township, in the county of Cedar, State of Iowa, have invented certain new and useful Improvements in Hog-Ringing Chutes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in hog ringing chutes.

One object of the invention is to provide a novel and simple device of this character in which a hog can be driven and trapped so that a marking ring can be easily placed through its nose.

Another object is to provide a device of this character which is of such construction that after the nose has had the ring applied a hog can be quickly and easily released from the device.

Other objects and advantages will be apparent from the following description when taken in connection with the accompanying drawing.

In the drawing: Figure 1 is a side elevation of a hog ringing chute made in accordance with my invention, Fig. 2 is an end view showing the releasing gate, Fig. 3 is a top plan view, Fig. 4 is a vertical longitudinal sectional view on the line 4—4 of Fig. 3, Fig. 5 is a top plan view of the releasing end of the chute showing the gate in open position, and Fig. 6 is an end view showing the stanchion bars spread apart.

Referring particularly to the accompanying drawing, 10 represents a crate having one end provided with vertical guides 11 in which is mounted a vertically slidable entrance door 12. In the top of the chute between the guides is a pulley 13, over which passes a rope 14 having one end secured to the bottom of the door 12 and the other end extending toward the opposite end of the crate where it is conveniently secured so as to be within reach of the operator. Hinged to one side of the exit end of the crate or chute is a door 15, this door comprising an open frame in the center of the bottom 16 of which are pivoted the two stanchion bars 17 and 18, said bars extending vertically between the member 19 of the upper side of the frame, as clearly shown. Pivotally connected to the upper corner of the free end of the door is a bell crank lever 20 the horizontal portion of which is provided with a pivoted pawl 21 connected to a hand lever grip 22, this pawl being arranged to engage the teeth of a stationary ratchet wheel 23 carried by the bracket 24 which supports the bell crank.

Pivoted centrally between the upper members of the door frame and extending above and below is a lever 25, and connected to the upper end of this lever are the inner ends of a pair of levers 26 and 27 said links having their other ends pivotally connected respectively to the vertical portion of the bell crank and to the upper end of the stanchion bar 17. The lower end of the lever 25 is pivotally connected to the other stanchion bar 18 by means of a link 28.

Pivotally mounted on the top of the chute adjacent the door is a curved lever 29, one end being pivotally connected to one end of a link 30 which has its other end pivotally connected to the upper edge of the door adjacent the free end thereof, the curvature of this lever is such that when it is swung in one direction its pivotal connection with the link 30 will move past the center of the pivotal mounting of said lever so that the door can not be pushed open but by merely swinging the lever on its pivot the link will cause the door to swing wide open and permit the hog to readily escape from the chute.

In the operation of the device the cord 14 is pulled to raise the door 12 and permit the hog to be driven into the chute. After the hog is in the chute, the door is permitted to drop. It will of course be understood that the stanchion bars are swung into open position so that the hog will strike its head therebetween in an effort to escape. Immediately that the hog strikes its head between the stanchion bars the bell crank is rocked to draw the stanchion bars into clamping engagement with the hog's head, the engagement of the pawl with the ratchet wheel holding the same against movement into open position. The animal is thus securely held so that a ring can be placed through its nose. After the ring has been placed in its nose the lever 29 is swung on its pivot to open the door and permit the hog to escape from the chute.

What is claimed is:

In a hog ringing chute, a pen having a horizontally swinging exit door at one end, means for opening and closing the door, a

pair of vertically disposed stanchion bars pivotally mounted in the lower portion of the door, one of the stanchion bars extending above the top of the door, a centrally pivoted vertical lever mounted on the upper end of the door and having its lower end pivotally connected to the other stanchion bar, a bell crank lever pivoted to the upper corner of the free edge of the door, a link connected to one arm of the bell crank and to the upper end of the vertical lever, and a second link pivotally connected to the upper end of the other stanchion bar above the door and to the upper end of the vertical lever.

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

WALLACE D. DOLAN.

Witnesses:
W. M. ZIMMERMAN,
JOHN AURACHER.