

A. W. ADIX AND G. W. HAGLUND.
HOG BREEDING CRATE.
APPLICATION FILED FEB. 18, 1919.

1,340,357.

Patented May 18, 1920.

4 SHEETS—SHEET 1.

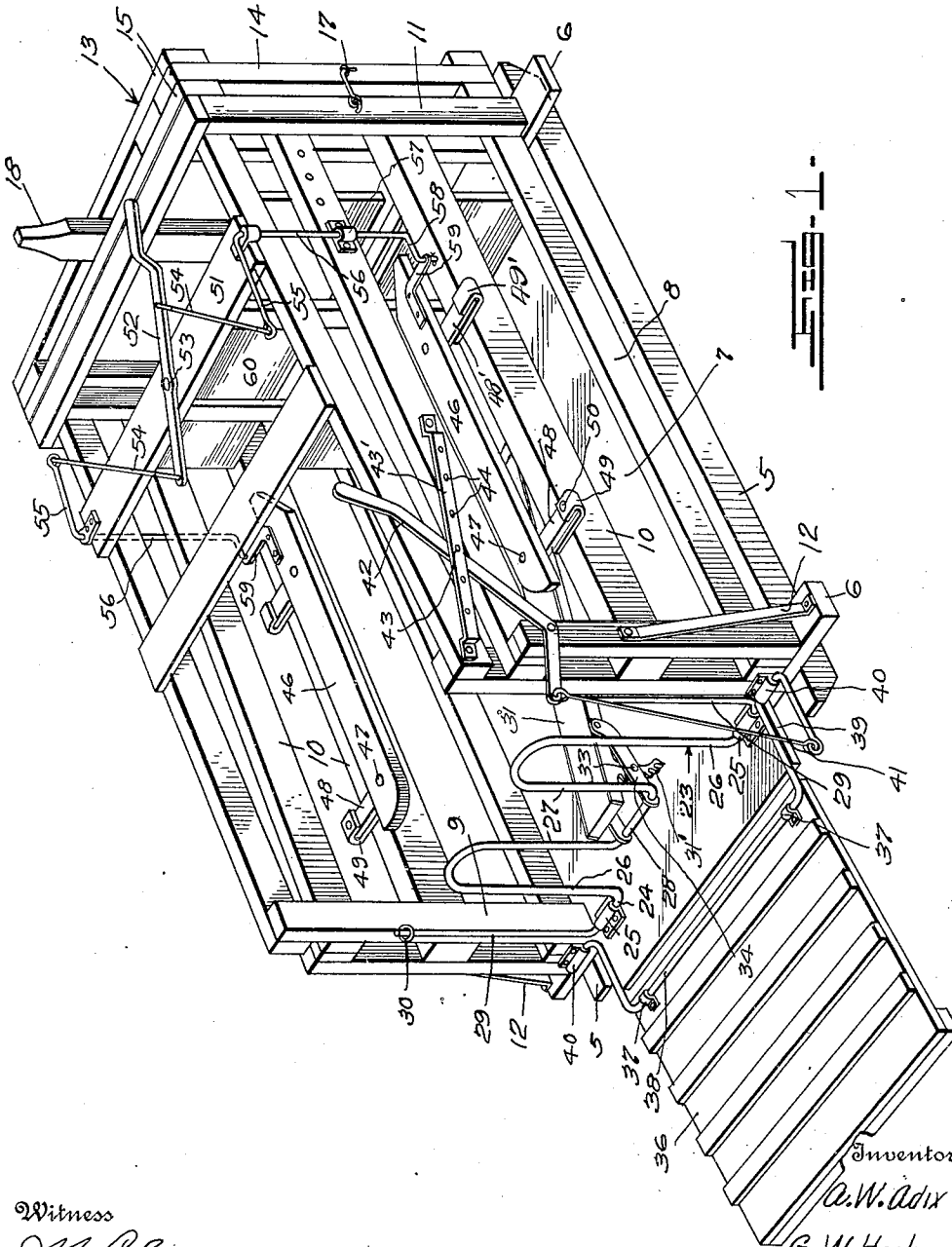


FIG. 1.

Witness

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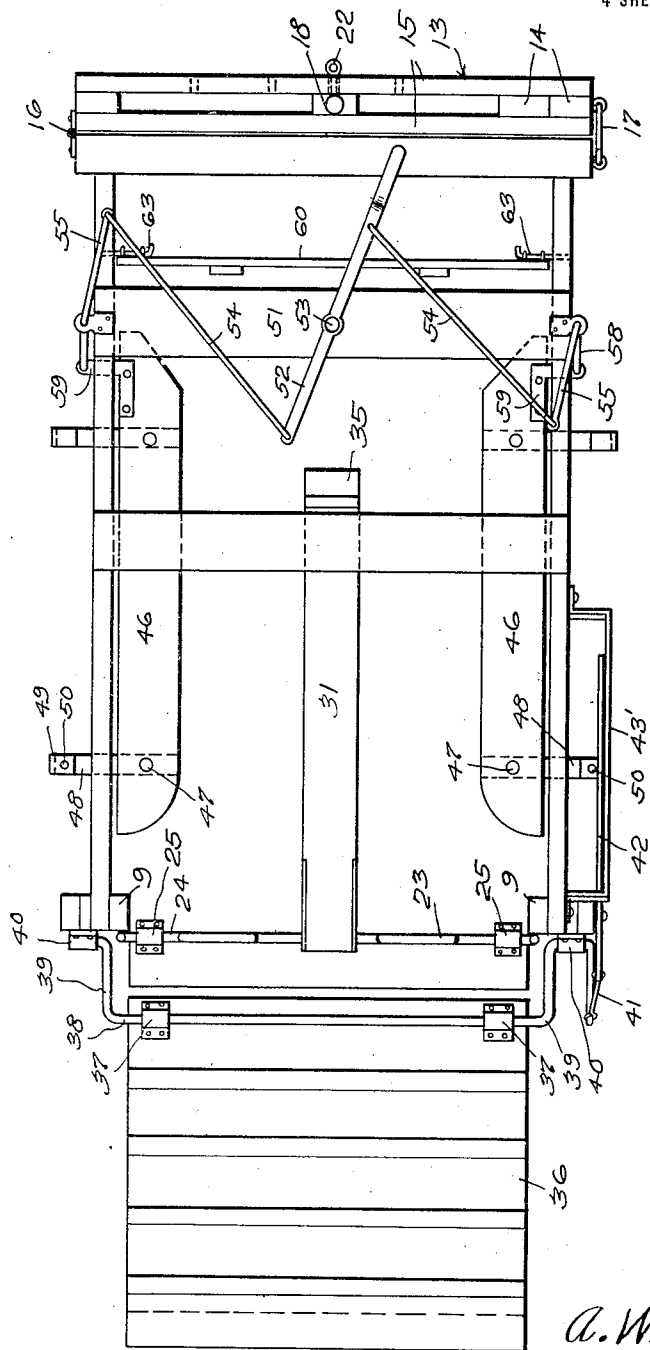


FIG. 2.

Witness

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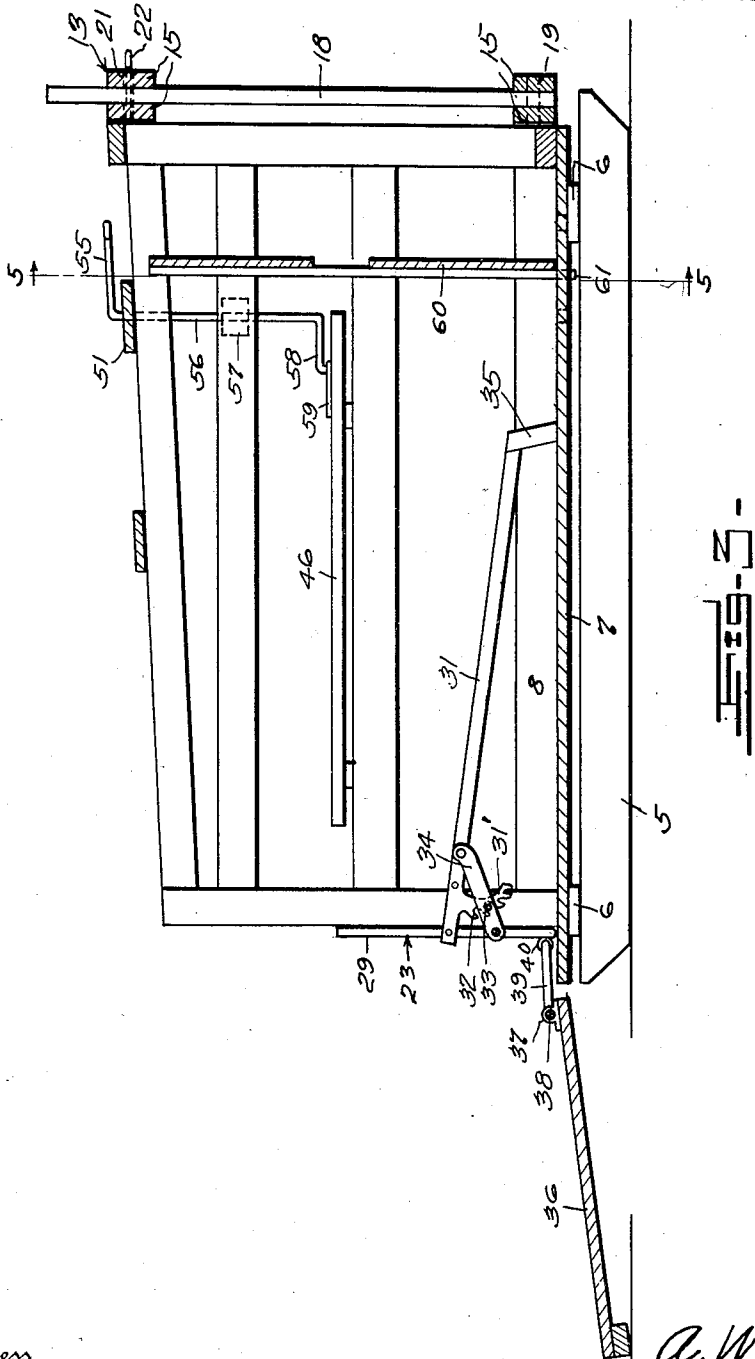
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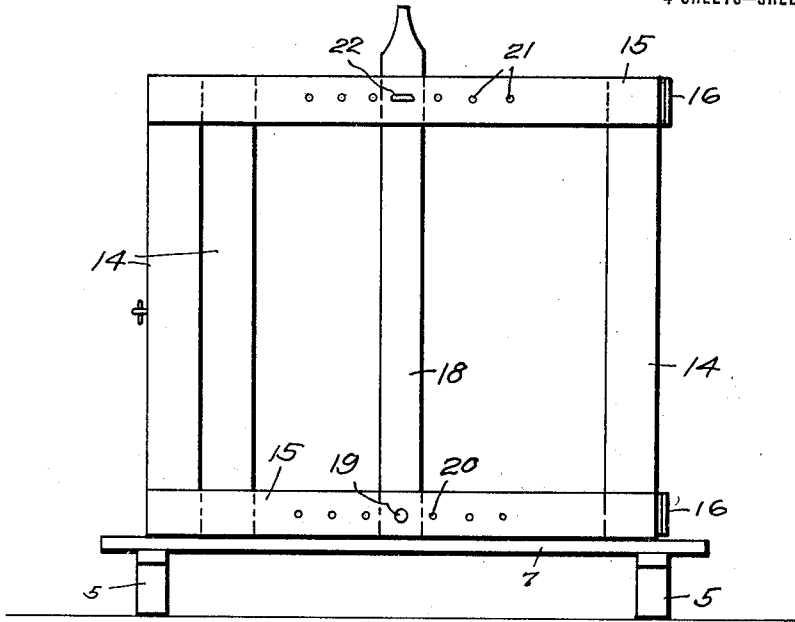


FIG. 4 -

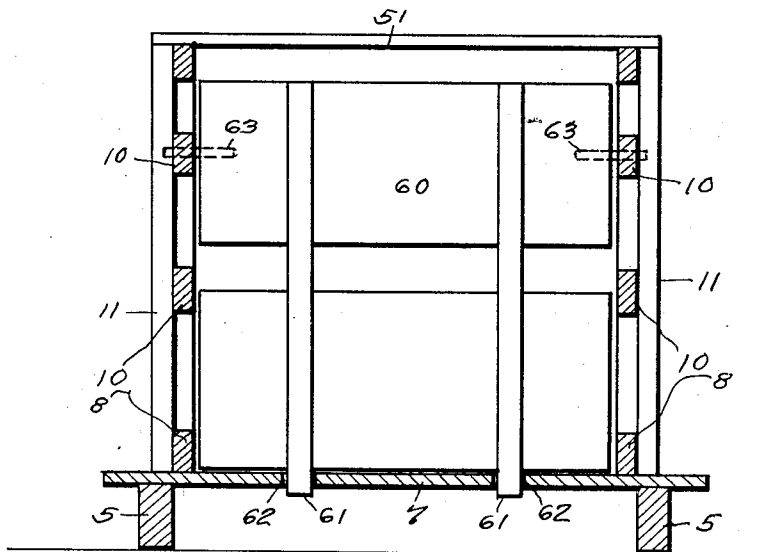


FIG. 5 -

Witness

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UNITED STATES PATENT OFFICE.

ALBERT W. ADIX AND GEORGE W. HAGLUND, OF BOONE, IOWA.

HOG-BREEDING CRATE.

1,340,357.

Specification of Letters Patent.

Patented May 18, 1920.

Application filed February 18, 1919. Serial No. 277,855.

To all whom it may concern:

Be it known that we, ALBERT W. ADIX and GEORGE W. HAGLUND, citizens of the United States, residing at Boone, in the county of Boone and State of Iowa, have invented certain new and useful Improvements in Hog-Breeding Crates, of which the following is a specification.

Our invention relates to improvements in hog breeding crates.

An important object of the invention is to provide a crate of the above mentioned character, which has a large range of adjustment to facilitate breeding between animals of different sizes.

A further object of the invention is to provide apparatus of the above mentioned character, which is adapted to be converted into apparatus for use in ringing hogs, de-horning sheep or the like.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of the specification, and in which like numerals are employed to designate like parts throughout the same:

Figure 1 is a perspective view of a crate embodying our invention;

Fig. 2 is a plan view of the same;

Fig. 3 is a central vertical longitudinal sectional view through the same;

Fig. 4 is a rear end elevation of the apparatus, and

Fig. 5 is a transverse sectional view taken on the line 5—5 of Fig. 3.

In the drawings, wherein for the purpose of illustration is shown a preferred embodiment of our invention, the numeral 5 designates longitudinal rails or runners, having transverse bars 6 disposed upon and secured to the rails 5. Secured to the transverse bars 6 is a bottom 7, and sides 8 are arranged upon the bottom. These sides embody inner vertical posts 9, to which are secured horizontal rails 10, as shown. These posts 9 are secured to the bars 6 and outer vertical bars 11 are arranged upon the exterior of the rails 8 and are secured thereto and to the posts 9. Braces 12 serve to connect the bars 11 and bars 6.

The forward end of the crate is closed by a gate 13. This gate comprises vertical strips 14, with horizontal strips 15, arranged upon opposite sides thereof, near their upper and lower ends, and suitably secured there-

to. The gate 13 is secured to the crate by hinges 16, to swing in a horizontal plane. This gate may be held in the closed position by a latch 17, as shown. Arranged between the pairs of upper and lower bars 15 is a lever 18, the lower end of which is apertured to receive a pin 19, adapted to be inserted in a selected pair of openings 20, as shown. Openings 21 are formed through the upper strip 15, to receive a removable pin 22, to contact with the lever 18 and hold it in an adjusted position. This lever may serve to cover the opening of the door, when diagonally arranged, or it may serve as the adjustable element of a stanchion, to hold the head of a hog, sheep or the like from being withdrawn from the exterior of the door, when its neck is passed through the opening at one side of the lever 18.

The rear end of the crate is adapted to be partly closed by a vertically swinging support-gate 23. This support-gate 23 is formed of a rod bent to provide horizontal portions 24, journaled in bearings 25, secured to the bottom 7. This rod is further bent to form inverted U-shaped portions 26, and a depending U-shaped portion 27, centrally arranged, and depending as shown. This U-shaped portion has a transverse portion 28, for a purpose to be described. At its ends the rod has cranks 29, and these cranks are adapted to be received in pivoted links 30, and are thereby held against displacement.

The numeral 31 designates a belly-board to engage beneath the belly of the female hog, to support her. This belly-board has segmental racks 31', rigidly secured to the rear end of the same and depending therefrom, such racks having notches 32, to receive a bolt 33, detachably secured to links 34. These links are pivoted at their upper ends to the belly-board, and at their lower ends to the portion 28, as shown. It is thus seen that vertically adjustable means is provided to connect the rear end of the belly-board and the portion 28. At its forward end the belly-board 31 is provided with a depending leg 35, rigidly secured thereto.

The numeral 36 designates a rear platform, having straps 37 secured to its inner end. These straps pivotally receive a rod 38, carrying U-shaped cranks 39, pivoted in bearings 40, which are rigidly secured to the sides of the crate. Links 41 are pivoted to the outer portions of the cranks 39, and

have pivotal connection with bell-crank levers 42, pivoted at 43. Any suitable means may be employed to hold the bell-crank lever 42 in adjustment, and for this purpose it operates in a guide 43', having apertures 44, to receive a removable pin, to be placed in advance of the bell-crank lever. It is thus seen that means are provided to vertically adjust the rear platform 36, which supports the rear legs of the male hog. This rear platform may also be swung to a more or less vertical position, serving as an end gate, when the apparatus is used as a crate, and may be locked in this vertical position by any suitable means.

The numeral 46 designates horizontal foot-rests, to support the front feet of the male hog. These foot-rests have pivotal connection, as shown at 47, with links 48. These links are pivoted within straps 49, as shown at 50, to swing horizontally. The free ends of the foot rests are supported by arms 48' secured thereto and resting on brackets 49' carried by the sides of the crate. The foot-rests are therefore adjustable horizontally and laterally, and in their lateral adjustment may contact with the sides of the female hog, to prevent her lateral displacement.

Transverse strips 51 are secured to the top of the crate, and a lever 52 is pivoted to one of them, as shown at 53. This lever has pivotal connection with links 54, pivoted to cranks 55, formed upon the upper end of rock-shafts 56, arranged in bearings 57. At their lower ends these rock-shafts have cranks 58, pivoted to brackets 59, rigidly secured to the foot-rests 46, as shown.

We provide a take-up-door 60, which may be disposed in the forward portion of the crate, forwardly of the foot-rests to take care of the female hogs of different lengths. This take-up-door is provided at its lower end with extensions 61, to enter notches 62, formed in the bottom 7. Bolts 63 carried by the take-up-door, near its top, enter notches in the sides of the crate. It is thus seen that the take-up-door may be adjusted longitudinally of the crate, and removed therefrom, if desired.

In the use of the apparatus, the support gate 23 is swung to a horizontal position and rests on the rear platform 36. The female hog may now be driven into the crate, subsequently to which the support-gate 23 is swung to the vertical position. This operation moves the belly-board 31 upwardly. The support-gate 23 prevents the hog from

backing out of the crate, while forward movement may be controlled by the take-up-gate. The foot-rests are now adjusted to prevent lateral movement of the female hog. The rear legs of the male hog are supported by the platform 36 and his front feet by the members 46.

The apparatus may also be used for ringing hogs or dehorning sheep or the like. For this purpose, the lever 18 serves as a stanchion to hold the neck of the animal.

It is to be understood that the form of our invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size, and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described our invention, we claim:—

1. In apparatus of the character described, a crate, a belly-board extending longitudinally thereof, a support-gate pivoted to the rear end of the crate, separable means connecting said belly board and the support gate to permit independent adjustment of the board with relation to the gate, and to adjust said belly board relative to the crate when the support gate is adjusted.

2. In apparatus of the character described, a crate, a belly-board extending longitudinally thereof, a support-gate pivoted to the rear end of the crate, links pivotally connected with the rear portion of the belly-board to be angularly adjusted with relation thereto and having pivotal connection with the support-gate and means to lock the links to the belly-board.

3. In apparatus of the character described, a crate, a belly-board extending longitudinally thereof, a support-gate pivoted to the rear end of the crate, links pivoted to the rear portion of the belly-board to be angularly adjusted with relation thereto and pivoted to the support-gate, toothed segments secured to the rear portion of the belly-board, and a pin carried by the links and adapted to engage with the toothed segments.

In testimony whereof we affix our signatures in presence of two witnesses.

ALBERT W. ADIX.

GEORGE W. HAGLUND.

Witnesses:

AGNES PETERSON,
MINNIE A. GEHR.