To all whom it may concern:

Be it known that I, James W. Corington, of Faucett, Missouri, have invented certain new and useful Improvements in Breeding-Crates, of which the following is a specification.

My invention relates to breeding crates for hogs and embodies means for reliably holding a sow and means for adjusting her up or down as occasion demands.

The invention also embodies means for supporting the weight of the boar and means for adjusting him up or down should such adjustment be desirable.

In order that the invention may be fully understood, reference will now be had to the accompanying drawings, in which:

Fig. 1 is a side elevation of the apparatus.

Fig. 2 is an irregular, horizontal section on line II—II of Fig. 1.

Fig. 3 is a vertical cross section on line III—III of Fig. 1, with the gate removed.

Fig. 4 is a fragmentary side elevation of two movable frames and associated parts.

Fig. 5 is a fragmentary section on line V—V of Fig. 2.

In carrying out the invention, I employ a stationary frame 2 consisting of two skeleton sides 4 spaced apart and fixed upon a floor 5. The rear end of the frame 2 is open, while its forward end is provided with a gate 6 hinged at 8 and provided with a latch 10 to secure it in closed position. The rear portion of each side 4 slopes downwardly as indicated at 12 and the intermediate portion of each side 4 is provided with a channel bar or guide 14, in which slidable bars 16 and 18 are mounted.

The slidable bars 16 support an upper frame 20 consisting of a pair of longitudinal bars 22 secured to the lower portions of said slidable bars 16, and bows 24 spaced apart and firmly secured at their ends to said longitudinal bars 22. The upper portions of a number of the bows 24 are covered by an apron 26 consisting, preferably, of sheet metal.

The upper frame 20 is adjusted vertically through the intermediary of a hand lever 28, a crank 29, and a pair of links 30. The hand lever 28 is disposed adjacent to one of the sides 4 of the stationary frame 2, while the crank 29 is disposed adjacent to the opposite side 4 of the frame 2, and each is fixedly mounted at its lower end upon a transverse shaft 32 journalered in bearings 34 fixed to the under side of the floor 5, which is supported on transverse sills 36. One link 30 is connected by pivots 38 and 40 to the hand lever 28 and the adjacent side bar 16, and the other link 30 is connected by pivots 42 and 44 to the crank 29 and the companion side bar 16, respectively. The hand lever 28 is locked at any point of its adjustment through the intermediary of a latch 46 and a segment 48, which latter is fixed to the adjacent side of the floor 5.

50 designates a lower frame which is of similar construction to the upper frame 20 and coacts therewith in holding the sow.

Said lower frame 50 consists of a pair of longitudinal bars 52 firmly secured to the upper portions of the slide bars 18 and inverted bows 56, which are spaced apart and firmly secured at their ends to said bars 52. The rear ends 58 of the longitudinal bars 52 slope downwardly to prevent possible injury to the boar's front legs as he mounts upon the apron 26.

The lower frame 50 is raised and lowered by mechanism similar to that employed for raising and lowering the upper frame 20 and consists of a hand lever 58, a link 60, a shaft 62, a crank 64, and a link 66. The hand lever 58 and the crank 64 are fixed at their lower ends to the shaft 62 which extends transversely beneath the floor 5 and is journalered in bearings similar to the bearings 34. The link 60 is connected to the hand lever 58 and the companion slidable bar 18 by pivots 68 and 70, and the link 66 is connected to the crank 64 and the companion slidable bar 18 by pivots 72 and 74, respectively. The pivots 40 and 44 extend through longitudinal slots 76, and the pivots 70 and 74 extend through longitudinal slots 78 in the companion guides 14. The hand lever 58 is locked at any point of its adjustment by a latch 80 and a segment 82.

86 designates a pair of side engaging members disposed within the upper and lower frames 20 and 50, respectively, but mounted independently thereof on arms 88 slideably mounted in tubular guides 90, fixed to plates 92 firmly secured to the companion guides 14 and adjacent rods 98 of the sides of the stationary frame 2. The arms 88 are

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movable longitudinally in their respective guides 90 to adjust the members 86 toward or away from each other as desired, by bell-cranks 96 fulcrumed upon adjacent rods 98 of the sides 4.

The bell-cranks 96 at each side of the frame 2 are operably united by a connecting bar 100. One of said connecting bars 100 is operably connected to a crank 92, while the other is operably connected to a hand lever 104. The crank 92 is fixed to one end of a shaft 106, while the hand lever 104 is connected to the opposite end of said shaft 106, which extends transversely beneath the floor 5 and is journaled in bearings 108. The hand lever 104 is provided at its upper portion with a detent 110 for engagement with a notched sector 112 for the purpose of locking said hand lever at any point of its adjustment. The sector 112 is secured to a plate 114 firmly secured at one end to the companion guide 14 and at its opposite end to one of the rods 98 of the adjacent side 4 of the frame 2.

120 designates an adjustable platform adjacent to the rear end of the frame 2. One end of said platform rests upon the ground while its opposite end rests upon a pair of cam 122, fixed to a shaft 124 journaled in bearings 126 and extending transversely beneath said platform 120. The cam 122 and the shaft 124 are rocked to raise and lower the platform 120 by a lever 128, fixed to one end of said shaft 124 and provided with a latch 130 for engagement with a sector 132 to lock the lever 128 in any of its adjusted positions. The upper end of the platform 120 is provided with a pair of hooks 134 slidable engaging the vertical rear portions of the sides 4 of the frame 2.

In practice the lower frame 50 is lowered until the bows 56 rest upon the floor 5 while the upper frame 20 is raised so that a sow enters over the platform 120 can readily enter the crate. As the sow enters the crate its progress is checked by the gate 6 or if the sow is small its progress is checked by a beam (not shown) which is placed transversely through the frame 2 and permitted to rest upon the longitudinal stays 136, the object being to stop the sow when its hind feet have entered the space between the two rearmost bows 66. After the sow has reached the desired position, the lever 58 is manipulated to raise the lower frame 50 until the bows 56 engage the belly of the sow, while the lever 28 is manipulated to lower the frame 20 until the bows 24 engage the back of the sow. If the sow is small and its sides fail to bear against the members 86, the same are adjusted into engagement with the sides of the sow through proper manipulation of the lever 104. When thus engaged by the upper and lower frames 20 and 50, respectively, and the members 86 the sow is firmly held without injury thereto and if desired may be lifted to any desired elevation through proper manipulation of the levers 28 and 58.

The boar then enters and mounts upon the apron 96 which supports the major portion of his weight, the rest of the weight being sustained by his hind legs which rest upon the platform 120, whereby his hind quarters may be raised if desired through proper manipulation of the lever 128. The boar may also rest his fore feet on the upper surface of the longitudinal bars 52. After being bred the sow is released and permitted to pass out through the forward end of the crate.

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

1. In an apparatus of the character described, a stationary frame, a lower frame movable up and down in said stationary frame and embodying inverted bows to engage the underside of an animal, an upper frame movable up and down in said stationary frame and including bows to engage the back of the animal, mechanism for adjusting the movable frames independently of each other, and an adjustable platform at one end of the stationary frame.

2. In an apparatus of the character described, a stationary frame, vertically disposed guides at opposite sides of said stationary frame, vertically disposed members slidably mounted in said guides, longitudinal bars fixed to said members, inverted bows fixed to said longitudinal bars, mechanism for adjusting the slideable members up and down to cause the inverted bows to engage and disengage the underside of an animal, and an upper frame adjustable mounted and adapted to engage and disengage the back of the animal.

3. In an apparatus of the character described, a stationary frame, a lower frame movable up and down in said stationary frame and adapted to engage and disengage the underside of an animal, vertically-disposed guides at opposite sides of the stationary frame, members slidably mounted in said guides and carrying the lower frame, links pivotally connected to said slideable members, a crank connected to one of said links, a hand lever connected to the other link, and a transverse shaft upon which said crank and the hand lever are fixedly mounted, and an upper frame movable up and down in the stationary frame and adapted to engage and disengage the back of the animal.

4. In an apparatus of the character described, a stationary frame, means vertically movable in said frame for engaging and holding an animal, a pair of laterally movable members for engaging and disengaging
the sides of the animal, arms carrying said members, supports on the stationary frame and in which said arms are slidably mounted, bell-cranks for actuating said arms, connecting bars uniting said bell cranks in pairs, a crank operably connected to one of said connecting bars, a hand lever operably connected to the other bar, and a shaft extending transversely beneath the stationary frame and upon which the crank and said hand lever are fixedly mounted.

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

JAMES W. CORINGTON.

Witnesses:
F. G. Fischer,
L. J. Fischer.