

Nov. 13, 1923.

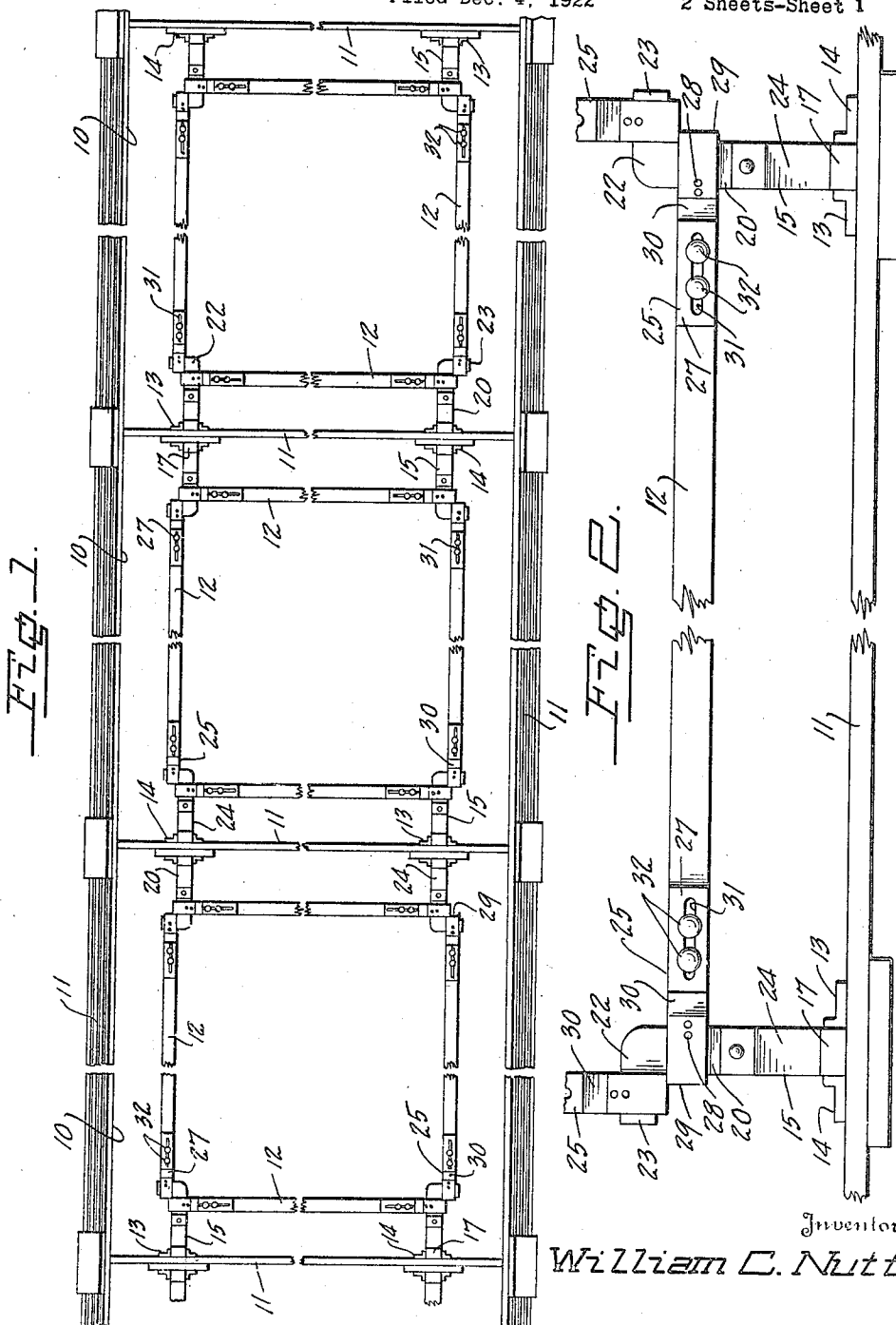
1,473,970

W. C. NUTT

FARROWING PEN

Filed Dec. 4, 1922

2 Sheets-Sheet 1



Inventor

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Fig.

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Nov. 13, 1923.

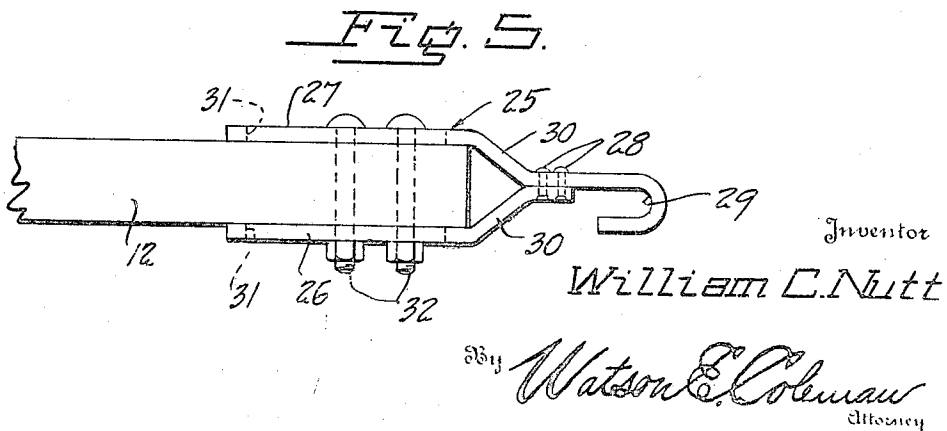
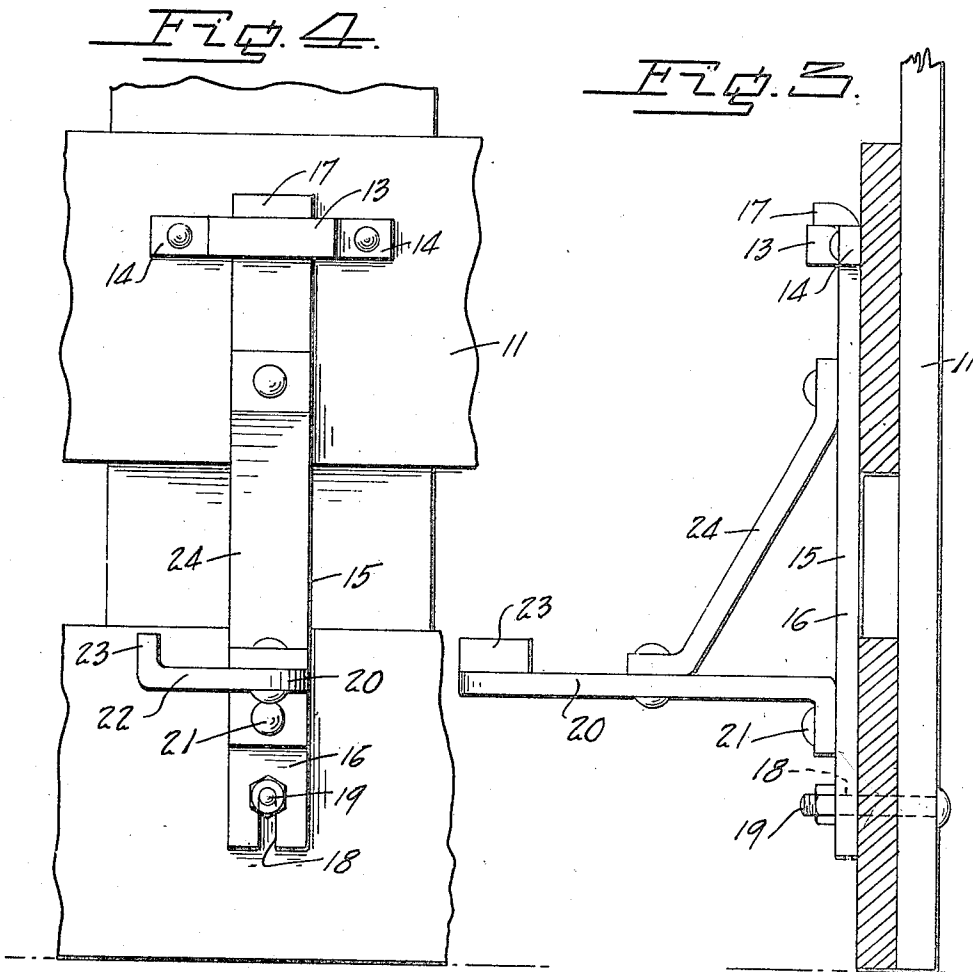
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2 Sheets-Sheet 2



UNITED STATES PATENT OFFICE.

WILLIAM C. NUTT, OF CASTANA, IOWA.

FARROWING PEN.

Application filed December 4, 1922. Serial No. 604,781.

To all whom it may concern:

Be it known that I, WILLIAM C. NUTT, a citizen of the United States, residing at Castana, in the county of Monona and State of Iowa, have invented certain new and useful Improvements in Farrowing Pens, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in farrowing pens and the like and more specifically to means for attaching thereto guard rails to prevent crushing of young pigs by the sow.

An important object of the invention is to provide a device of this character by the provision of attachments to the ordinary pen which in no way interfere with the use of the pen or obstruct the space thereof, guard rails for use during farrowing periods may be readily attached to the pen.

A further object of the invention is to provide a device of this character having removable brackets, the brackets being so constructed that a minimum number thereof are employed for supporting the guard rails.

A still further object of the invention is the provision of a novel form of bracket particularly adapted for use in mounting these guard rails.

These and other objects I attain by the construction and arrangement shown in the accompanying drawings wherein for the purpose of illustration is shown a preferred embodiment of my invention and wherein like reference characters designate like parts throughout.

In the drawings:—

Figure 1 is a plan view of a series of pens constructed in accordance with my invention;

Figure 2 is a fragmentary top plan view of the bracket and guard rail;

Figure 3 is a side elevation of the bracket, the pen wall being in section;

Figure 4 is a front elevation of the construction shown in Figure 3; and

Figure 5 is a fragmentary detail of the hook.

Referring now more particularly to the drawings, the numeral 10 designates pens or crates, a plurality of which are illustrated, each substantially rectangular in form and embodying vertical side walls 11. In large brooding establishments these pens are made in series and substantially square, a dividing wall between adjacent pens forming a side

wall of each thereof. These side walls, as is well known to those familiar with hog breeding, afford sufficient resistance to permit a crushing of young pigs by the sow when leaning against the wall and this crushing often results in large losses particularly where a sow is raising her first brood.

I have found that by the use of guard rails 12 spaced vertically from the floor of the pen and substantially paralleling the side walls 11 in spaced relation thereto the young pigs are permitted to move away from the mother sufficiently to prevent this crushing. These guard rails if permanently secured to the side walls are ordinarily difficult of removal. In accordance with my invention, I provide upon each of the four side walls 11 adjacent one end thereof, bracket loops 13 substantially U-shaped in form and provided at the ends of the arms of the U with attaching portions 14 through which securing elements may be extended for engagement with the walls of the pen. The numeral 15 designates brackets, each comprising a vertical strip 16 having at its upper end a hook portion 17 adapted to engage through the U-shaped bracket loop 13 and to be vertically disposed against the side wall of the pen with the angular portion 17 thereof resting upon the bight portion of the bracket loop. The lower ends of the vertical strips are provided with furcations 18 adapted for the reception of securing elements 19 which are permanently inserted in the wall of the pen. These securing elements are in the form of bolts extending through the wall of the pen and engaging in the slot and are arranged a distance, vertically spaced from the bracket loop 13 with which they are associated, less than the length of the vertical strip 16. In engaging the vertical strip 16 with its associated bracket loop, the strip is first arranged approximately horizontally so that the angular portion 17 may be engaged beneath the bight of the loop and is then rotated to engage this angular portion over the bight. At this time the strip may be moved vertically to permit engagement of the bolt or securing element 19 in the lower end of the furcation 18, subsequently to which release of the strip will permit the same to move downwardly until the angular portion 17 engages against the bight of the loop to limit such downward movement. The nut of the securing element 19 then being tightened, the vertical strip 16 is securely held

against movement. The removal of these vertical strips is, of course, accomplished by a reversal of the operation just described.

Each vertical strip 16 has extended outwardly therefrom at right angles and into the pin, a horizontal supporting member 20 having one end secured to the vertical strip, as at 21, and the free end thereof provided with an angular portion 22 arranged in the same plane thereas and directed toward the angularly disposed wall 11 of the pen connecting with the end of the wall to which the bracket is attached and next adjacent the bracket. This angular portion is provided upon its extremity with an upturned end 23, the purpose of which will presently appear. To support and rigidify the supporting members 20, a brace 24 is secured thereto at its lower end and has its upper end attached to the vertical strip 16.

The side bars 12 are provided upon each end thereof with bracket engaging members 25 each comprising a hooked member having its body furcated and longitudinally adjustable upon the end of the side bar 12 to which it is attached. In the present instance these members are constructed by employing a pair of strips 26 and 27, the strip 26 being of less length than the strip 27, and being secured thereto adjacent one end thereof, as indicated at 28. This end of the strip 27 is provided with a flat hook portion 29. The strips 26 and 27 diverge, as indicated at 30, adjacent their point of attachment thereof and have their body portions in substantial parallelism and slotted, as indicated at 31. Through the end of the side bar 12 bolts 32 are extended, having their ends operating in the slots 31. It will be seen that by loosening these bolts, the bracket engaging members 25 may be adjusted longitudinally upon the bars to compensate for any slight inequality in the length of the sides of the pen.

As hereinbefore stated, a bracket 15 is attached to each side wall of the pen, the brackets being located upon corresponding ends of the side walls. The side bars 12 are engaged with these brackets by loosening the bracket engaging bars 25 thereof and engaging the hook portion of the bracket engaging members with either the supporting portion 20 or the angular portion 22 thereof, dependent upon the location of the bracket. For example, of the meeting ends of two side bars, one will have its hook 29 engaged with the supporting member 20 exteriorly of the lower end of the brace 24 whereas the other will have its hook 29 engaged with the angular portion 22 of the same bracket. Movement of the hook portions 29 upon the bracket will be prevented in the first case against movement toward the wall by the lower end of the brace 24 and movement away from the wall by the

angular portion 22. In the second case, movement away from the wall will be prevented by the support 20 and toward the wall by the angular end portion 23 of the angular portion 22. After the side bars 12 are in position, the bolts 32 may be tightened to secure them and prevent disengagement of the hooks 29 from the bracket 15.

From the foregoing it is believed to be obvious that by use of an attaching bracket constructed in accordance with my invention, the side bars may be very easily applied to the pen and removed therefrom. It will furthermore be obvious that the brackets themselves being readily removable will not require any permanent space in the pen. Many changes being possible in the construction of the brackets and bracket attaching members as hereinbefore described, I do not limit myself to the specific structure thereof except as hereinafter claimed.

I claim:—

1. In combination with the side walls of a farrowing pen and side bars paralleling each of said side walls in spaced relation to the walls and the floor of the pen, of a bracket attached to each of the side walls adjacent one end thereof, the brackets being arranged at corresponding ends of the side walls, the side bars embodying adjustable end portions adapted for detachable engagement with said brackets, each of said brackets extending outwardly from the wall to which it is attached and being provided at its end with a portion directed toward a further side wall of the pen connecting with the side wall to which it is attached at that end of the last named side wall at which the bracket is attached.

2. In a bracket for the purpose described and in combination with a side wall of a farrowing pen, a loop secured to the wall of the farrowing pen, a vertical strip provided at its upper end with a portion adapted to be directed through said loop and to overlie and engage the same, a securing element carried by the wall and engageable with the lower end of said vertical strip, and a supporting member secured at one end to the strip and extending outwardly therefrom and provided at this free end with an angular portion arranged in the same plane thereas.

3. In a bracket for the purpose described and in combination with a side wall of a farrowing pen, a loop secured to the wall of the farrowing pen, a vertical strip provided at its upper end with a portion adapted to be directed through said loop and to overlie and engage the same, a securing element carried by the wall and engageable with the lower end of said vertical strip, and a supporting member secured at one end to the strip and extending outwardly therefrom

and provided at this free end with an angular portion arranged in the same plane
thereas, said securing element being spaced
from said loop a distance less than the
5 length of said vertical member, said vertical
member being vertically shiftable through
said loop when engaged therein and being
provided at its lower end with a slot in
which said securing element engages.

10 4. The combination with a farrowing pen,
of brackets secured to the side walls of the
farrowing pen and having horizontal por-

tions arranged at right angles to their as-
sociated walls, and side bars extending in-
termediate said brackets and each provided 15
at each end thereof with a hooked member
having its body furcated for the reception
of the side bar and longitudinally adjust-
able upon the side bar, the hooks of said
members engaging said brackets. 20

In testimony whereof I hereunto affix my
signature.

WILLIAM C. NUTT.