June 5, 1923.

1,457,636

D. E. SHRAUGER

FARROWING RAIL BRACKET

Filed Feb. 6, 1923

Fig. 4.

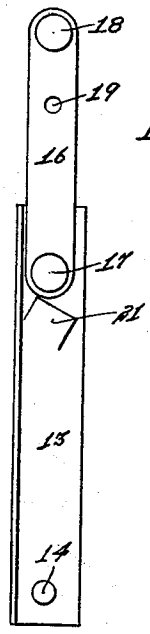


Fig. 5.

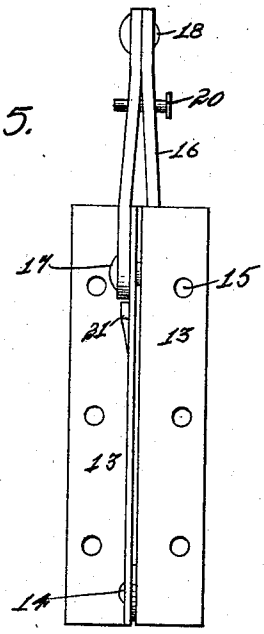


Fig. 3.

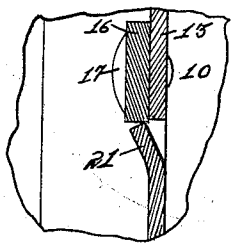


Fig. 1.

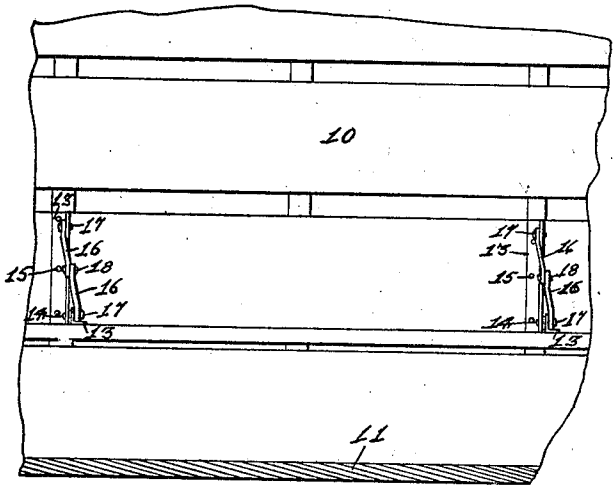
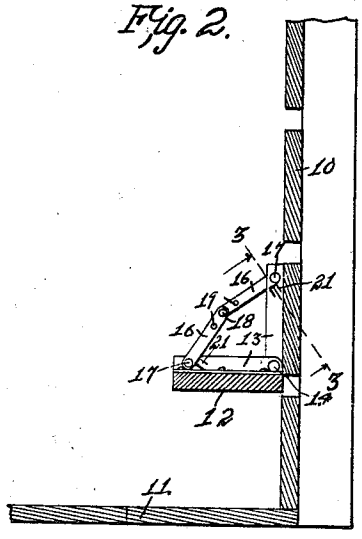


Fig. 2.



Inventor

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UNITED STATES PATENT OFFICE.

DARIUS E. SHRAUGER, OF ATLANTIC, IOWA.

FARROWING-RAIL BRACKET.

Application filed February 6, 1923. Serial No. 617,225.

To all whom it may concern:

Be it known that I, DARIUS E. SHRAUGER, a citizen of the United States, and a resident of Atlantic, in the county of Cass and State of Iowa, have invented a certain new and useful Farrowing-Rail Bracket, of which the following is a specification.

There has been considerable loss of young pigs born in hog houses occasioned by the sow crowding the young pigs against a side wall of the hog house and crushing or suffocating them, and numerous attempts have been made to provide protective rails to extend out from the side of the hog house wall spaced above the floor far enough to permit young pigs to get under the rail and to prevent the sow from crushing the pigs against the side wall.

The object of my invention is to provide a bracket device to be attached to the side wall of a hog house and to support a rail, which, in its normal condition, will project inwardly from the wall in a substantially horizontal position to prevent the sow from lying close to the wall and to give the young pigs an opportunity to escape being crushed or suffocated by moving through the space under the rail.

More specifically it is my object to provide a farrowing rail of this character of simple, durable and inexpensive construction that may be readily, quickly and easily fitted in position by unskilled workmen, and after it is fitted, it will be normally supported in position extended substantially horizontally inwardly from the hog house wall at a point spaced above the floor to protect the young pigs from the sow, and may also be permanently secured readily, easily and quickly to position folded flat against the wall when not in use; and

Further in this connection it is my object to provide a device of this character in which, when the sow is rooting under the rail, the rail will readily and quickly be elevated so that it will not furnish any opposition to the rooting activities of the sow, and will hence not be torn loose from its fastening by such rooting, but will immediately descend after being elevated and strike the sow upon the nose, so that after a few attempts of rooting the rooting operations will be discontinued and thereafter the device will remain in its normal position for use.

My invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which:

Figure 1 shows a side elevation of my improved farrowing rail device applied to the wall of a hog house above the floor.

Figure 2 shows a vertical, sectional view of the same.

Figure 3 shows an enlarged detail, sectional view taken on the line 3—3 of Figure 2.

Figure 4 shows a side elevation of one of the supporting brackets in position for holding the rail flat against the wall; and

Figure 5 shows a front edge view of the same with a pin inserted to lock the supporting bracket in said position.

Referring to the accompanying drawings I have used the reference numeral 10 to indicate a hog house side wall, and 11 the floor thereof. The farrowing rail is indicated by the numeral 12 and preferably comprises a board of substantially the same length as the side wall to which it is to be applied. For each rail there are two supporting brackets, and each bracket comprises two like bracket members each formed of a structural angle bar indicated by the numeral 13. These two members are placed together with two of the flat sides thereof in engagement, and these two sides are hingedly connected with each other by means of a rivet 14 so connected that the parts may freely move at said pivot point. The opposite sides of each bracket member are provided with screw openings 15 by which they may be secured respectively to a side wall and the farrowing rail.

Each bracket also comprises two supporting bars, both of which are of the same construction. Each is preferably made of a single piece of strap metal 16, one end of each is hinged to one of the bracket members at the end opposite from the pivot point 14 by means of a rivet 17, and the two adjacent ends of the supporting bars are hingedly connected together by the rivet 18. Both of these supporting bars are preferably bent, as clearly shown in Figure 5, so that each bar has a part resting flat against the adjacent surface of the bracket member and a part inclined toward the other brace member, and a part at the top, as shown in Fig-

ure 5, to lie flat against the adjacent supporting bar member, and each of these supporting bar members is formed with an opening at 19 designed to receive a pin 20, by which the device may be locked in position with the rail parallel with the hog house wall.

In order to support the farrowing rail in position so that it may be freely elevated at all times by a rooting movement of a sow, I have provided on each of the bracket members 13 a lug 21 preferably formed by cutting and bending a portion of the bar itself, and these lugs are so positioned with relation to the pivotal points of the supporting bars that when the farrowing rail is in a substantially horizontal position, as shown in Figure 2, these supporting bars will stand in substantially the same position as shown in Figure 2. That is to say, out of alinement with each other, and in such position that the outer end of the farrowing rail may be freely elevated at all times and without causing the supporting bars to form a lock, such as would be the case if they were permitted to assume a position in line with each other or a position in which their hinged connection with each other was below a line drawn through the upper and lower hinged points of the supporting bars.

In practical use the brackets are provided in pairs and one is secured to the inner surface of the hog house side wall adjacent to each end thereof, by screws or nails at a point spaced above the floor, then a board is provided of substantially the same length as the wall to which the brackets are secured, and of the same width as one of the bracket members, and this board is then secured by nails or screws to the bracket members that are not connected to the wall, and when this has been done the device is ready for use.

I have found that without a rail of this character it frequently happens that young pigs are crushed or smothered when the sow lies down close to one of the side walls of a hog house, and that by providing a rail of this character a hog cannot lie down so close to the side wall as to thus injure young pigs.

I have also found that if a rail of this character is permanently supported in position for use, it is practically impossible to support the rail firmly enough to prevent it from being torn loose by the sow during what might be termed rooting operations, and in this connection I have found by experiment that a rail of this character may be made amply strong enough to support the weight of a sow if she attempts to lie on it, and yet the same rail will be quickly torn loose by the sow during rooting operations. However, by means of my improved rail I have found that the sow will root under the rail and raise it, but that as soon as it is raised, it will immediately fall again and strike the sow's snout, and after a very few operations of this character, the sow will thereafter stay away from the rail and not attempt to root under it; and hence at all times after it is installed the young pigs will have a way of escape if the sow should attempt to crowd them against the side wall, and that the sow cannot lie down so close to the side wall as to crush or smother the young pigs.

I claim as my invention:

1. An improved farrowing rail bracket comprising two bracket members hinged together at one end and two supporting bars each hinged at one end to the end of the adjacent bracket member opposite the hinged joint thereof and said supporting bars being hinged together, and means for limiting the movement of the ends of said supporting bars that are hinged together so that they cannot reach a position in alinement with each other.

2. An improved farrowing rail device comprising in combination two brackets each formed of a piece of structural angle bar hinged together at one end, and two supporting bars each formed of a single piece of strap metal and each hinged at one end to one of the bracket members and hinged together at their adjacent ends, each of the said bracket members being formed with a lug so positioned as to limit the movement of the supporting bars so that they cannot reach a position in alinement with each other, and a farrowing rail secured to one member of each bracket designed to normally project inwardly from a side wall above a floor.

3. An improved farrowing rail device comprising in combination two brackets each formed of a piece of structural angle bar hinged together at one end, and two supporting bars each formed of a single piece of strap metal and each hinged at one end to one of the bracket members and hinged together at their adjacent ends, each of the said bracket members being formed with a lug so positioned as to limit the movement of the supporting bars so that they cannot reach a position in alinement with each other, a farrowing rail secured to one member of each bracket designed to normally project inwardly from a side wall above a floor, said supporting bars each being provided with openings designed to receive a pin, said openings being so arranged that when the farrowing rail is moved to a substantially vertical position said openings will be in alinement, and a pin inserted therein to hold the farrowing rail in position parallel with the adjacent side wall, for the purposes stated.

Des Moines, Iowa, January 6, 1923.

DARIUS E. SHRAUGER.