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C. O. LESHER

FILLER FOR THE PANELS OF ANIMAL PENS

Filed Aug. 2, 1926

FIG. 1.

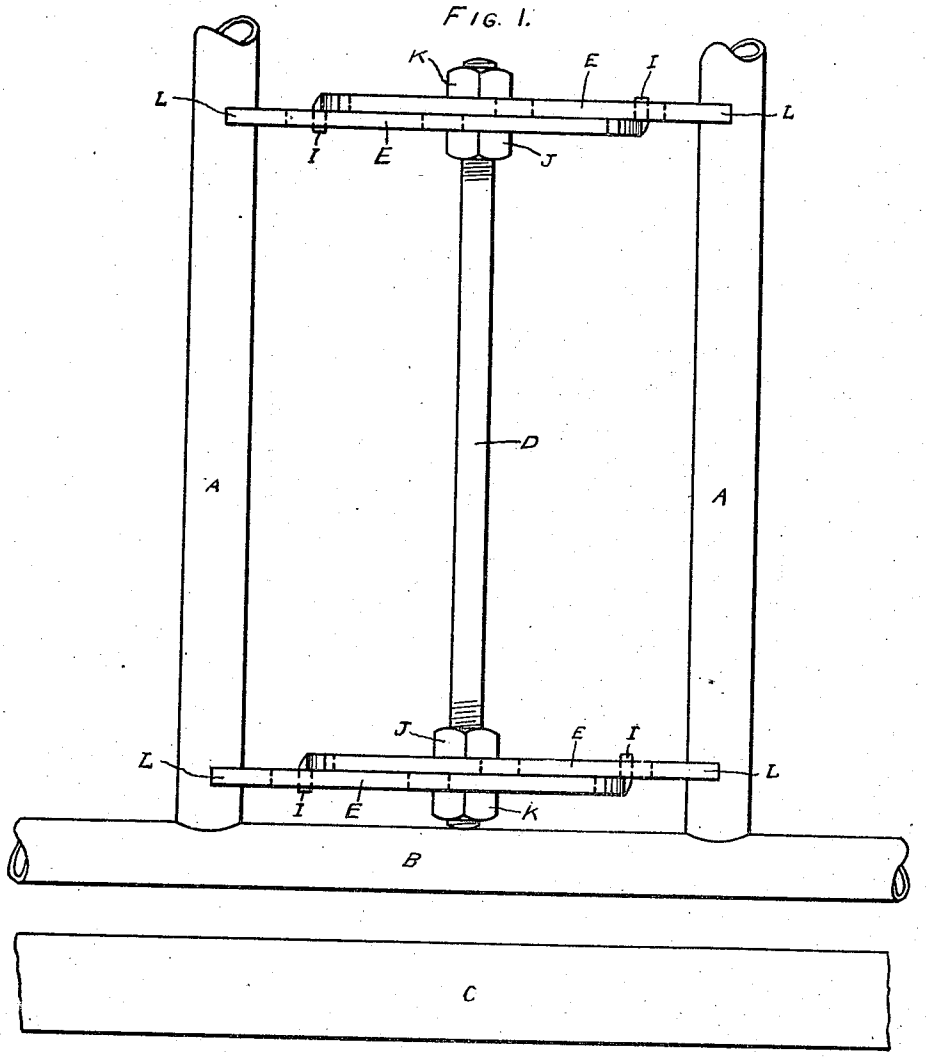


FIG. 2.

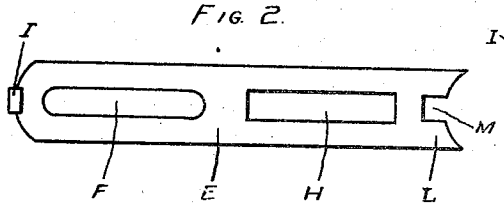
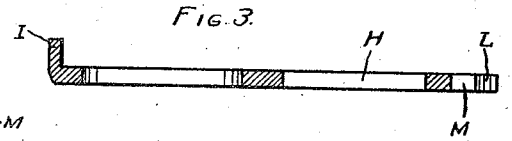


FIG. 3.



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UNITED STATES PATENT OFFICE.

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FILLER FOR THE PANELS OF ANIMAL PENS.

Application filed August 2, 1926. Serial No. 126,393.

My invention relates to fillers for reducing the spaces between the vertical bars in the panels of pens designed at times to hold large and small animals, such as full grown hogs and little pigs, and to prevent the little ones from getting out of the pen through the spaces between the bars of the panel, the fillers being adapted to be readily set in place when needed, and to be easily removed when not needed; and it consists of a central vertically disposed member to be placed in the bottom of each space between the adjacent vertical bars of the panels of the pen, which member is provided at its upper and lower ends with horizontally disposed adjustable arms, the outstanding ends of which are adapted to be adjusted to suit the different widths which the adjacent vertical bars may be set apart, thereby always contacting firmly with the said adjacent vertical bars, and thus reducing the spaces between the bars at least one half. It further consists of an improvement in the details of construction which will be hereafter described and set forth in the claims.

In the accompanying drawings, forming a part of this specification, Fig. 1 is a side view of the lower portion of one of the spaces between the adjacent vertical bars of the panel for a pen of the kind described, showing one of my fillers in place and also some lower connections which will be later described. Fig. 2 is a longitudinal view of one of the horizontal arms which are used to hold the fillers in place. Fig. 3 is a vertically disposed section drawn lengthwise through the center of Fig. 2.

Referring to the drawings, A represents a pair of the vertical bars of a panel, the lower portions of which are shown in Fig. 1, and which are preferably of tubular material. B is a bottom rail to which the lower ends of the vertical bars A are usually connected, and which are also preferably tubular. C represents a curb which is generally constructed on the floor (not shown) upon which the pen is placed. As known to those skilled in the art, the corner posts of the pen (also not shown) are connected to the ends of the bottom rail B, and their lower ends are set in the curb C when a curb is used, or they may be set in the floor on which the pen is placed when the curb is not used. It will also be understood that to complete the panel, additional vertical bars will have to be used which are not shown in the drawing.

D is the principal member of the filler. It is preferably made of a rod of iron or steel with threaded ends and two threaded nuts on each end. E represents horizontally disposed so called arms, preferably made of flat straps of metal of the proper width and thickness for the necessary strength. These arms are provided with elongated slots F and H, the former of which preferably has rounded ends, and the latter, rectangular ends. They are also provided with laterally disposed lugs I on the end having the slot F, and a concaved recess on the opposite end. There are four of these arms and they are arranged in pairs with the lug I of one arm inserted in the slot H of the other arm.

As heretofore stated, the member D is provided at each end with a pair of threaded nuts which are lettered J and K. When the arms are lapped together in pairs and the nuts K are removed, the ends of the member D are inserted in the slots F which are more or less opposite each other according to the adjustment of the arms. When the nuts K are replaced the arms will be held in place on the ends of the member D and before the nuts K are tightened they can be readily adjusted so their outstanding ends L will accurately contact with the adjacent bars A, even if the different spaces between said bars should vary to a considerable extent. The lugs I being inserted in the adjacent slots H, the arms lapped together will be held in alignment, and when the nuts K are tightened the outstanding ends L will be held in rigid contact with the bars A.

When cylindrical tubes are used for the bars A, the outstanding ends L should be made concave to fit them, but when other shapes are used the ends L should be made to fit the contour of the shape used. It is also advisable to form a notch M in the center of the ends L, as most plainly shown in Fig. 2. When this is done the pressure of the ends against the adjacent bars A will be more at the edges than in the center, and the arms will be held more firmly in contact with the adjacent bars A. Also, when the end having the lug I is made convex, the lug, before it is bent to one side, can be cut out of the notch M, and both ends of the arms can be cut out of a strap of metal without loss and at one operation of a press.

My invention, while efficient in all respects, is very simple and inexpensive to manufacture. It is easily and quickly set in place and as easily and quickly removed. It is essential that the parts supporting the member D in place be made adjustable because, with the utmost care, the adjacent bars A cannot always be set exactly the same distance apart, and, with the least variation in the width of the space, if rigid parts were used to hold the member D in place, they would either fit too tightly or too loosely to hold it properly in place. The adjustability of the parts E, which I call the arms, is an important feature of my invention. The ends of the slot F are preferably made rounding to better fit the contour of the member D when closely adjusted thereto, and the ends of the slot H, rectangular to better fit the lugs I when in close contact therewith.

What I claim and desire to secure by Letters Patent is—

1. In fillers for the spaces between the vertical bars in the panels of animal pens, the combination of a vertically disposed centrally located member, horizontally disposed arms arranged in pairs and adjustably connected to the upper and lower ends of the centrally located member, said arms having their outstanding ends adapted to contact with the adjacent vertical bars of the panel, and means to hold said pairs of arms securely on the upper and lower ends of the central member and also in rigid contact with the adjacent vertical bars.

2. In fillers for the spaces between the vertical bars in the panels of animal pens, the combination of a vertically disposed centrally located member, horizontally disposed arms arranged in pairs and lapped on each other, and means to adjustably connect said arms to the upper and lower ends of the central member, the outstanding end of each arm being adapted to contact securely with the adjacent bar of the panel and to thus hold the central member rigidly in place in the space between the adjacent bars of the panel.

3. In fillers for the spaces between the vertical bars in the panels of animal pens, the combination of a vertically disposed centrally located member, horizontally disposed arms arranged in pairs and lapped on each other, and provided with elongated slots, a laterally disposed lug on one end of each arm, said lug being adapted to enter and slide in the adjacent slot in the other arm, whereby the arms may be securely held in alignment and adjusted on each other, the outstanding ends of the arms being adapted to contact with the adjacent bars of the panel, and means to adjustably connect one of the lapping pairs of arms to the upper end of the central member, and the other pair of lapping arms to the lower end of said member.

4. In fillers for the spaces between the vertical bars in the panels of animal pens, the combination of a vertically disposed centrally located member, horizontally disposed arms arranged in pairs and lapped on each other, said arms each being provided with a pair of elongated slots, one slot adjacent each end of the arm, one of said slots having rounded ends, and the other having rectangular ends, the ends of the arm having the rounded slot being provided with a laterally extended lug and the ends of the arms having the rectangular slot being provided with a central recess, the lateral lugs being adapted to enter and slide in the rectangular slots, and means to adjustably connect the lapped pairs of arms to the upper and lower ends of the central member, whereby the outstanding recessed end of each arm may be brought into rigid contact with the adjacent bars of the panel.

5. In a device of the character described, the combination of a vertically disposed member centrally located between adjacent vertical bars of a panel for an animal pen, and having threaded upper and lower ends, a pair of correspondingly threaded nuts placed on said threaded ends, the pairs of adjustable lapped together arms having mating slots located centrally therein, one of the pairs of arms being placed between the nuts on the upper end of the central member, and the other pair between the nuts on the lower end of the member, said ends of the central member being passed through said mating slots, whereby the arms may be horizontally adjusted and their outstanding ends may be held in rigid engagement with the adjacent vertical bars, thus materially reducing the open space between the bars of the panel.

6. In a device of the character described, the combination of a vertically disposed member centrally located between adjacent vertical bars of a panel for an animal pen, and having threaded upper and lower ends, a pair of correspondingly threaded nuts placed on each of said threaded ends, the pairs of adjustable lapped together arms having mating slots located centrally therein, and each arm being provided with a laterally disposed lug at one end and a substantial recess at the other, the ends of the central member being passed through central slots in the arms, and each pair of lapped together arms being adjustably held on said member by the nuts on the ends of the member.

Fairfield, Iowa, July 30, 1926.

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