W. L. ROOT.

STALL.

APPLICATION FILED JAN. 28, 1911.

1,013,447. **Patented Jan. 2, 1912.**

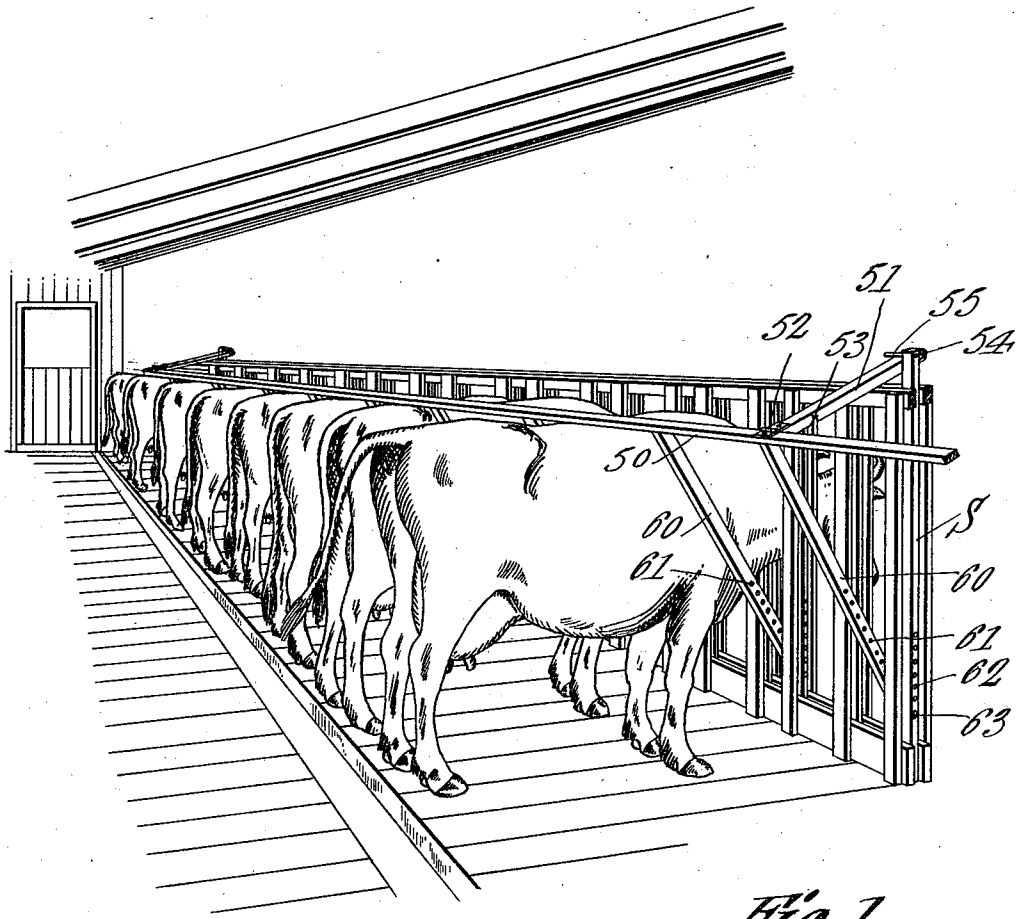

Fig. 1.

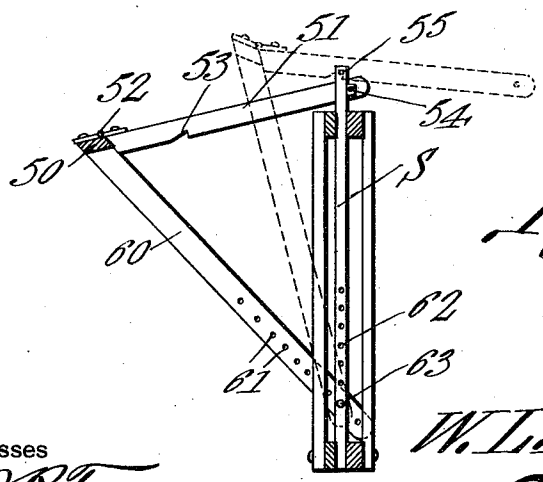

Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

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STALL.

1,013,447. Specification of Letters Patent. Patented Jan. 2, 1912.

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To all whom it may concern:

Be it known that I, WAYLAND L. ROOT, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented a new and useful Stall, of which the following is a specification.

This invention relates to animal husbandry, and more especially to stalls such as are used in stables particularly employed for dairy cattle; and the object of the same is to provide means for preventing the cow from performing her natural and disagreeable functions on the floor where she stands but back in a gutter provided for that purpose which is provided in all stables for dairy cows to keep them as clean and sanitary as possible.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a perspective view of a portion of a stable having the present improvements. Fig. 2 is a vertical section through a portion of the improved structure.

It is well known that a domestic animal humps her back in the act of evacuating or preceding the act of kicking. To avoid this latter means have been employed for preventing the rise of the hind-quarters, but my invention is designed to cause the cow to step back in the act of evacuation while the cow stands in the stall. The curved back of the cow comes in contact with the bar just back of the fore shoulder and in order for the cow to get the back in the natural curved shape she is forced to step back from this bar and get from under it in this way and drop the evacuation back in the gutter.

It is true that means are commonly provided for catching the evacuation but despite these means the cow often fouls the floor where she stands and in lying down she fouls her udders and from there gets into the milk pail so that there arises a double reason why the evacuation should not fall on the floor where the cow stands but in the gutter provided for that purpose. Yet it must be understood that any mechanical device which regulates the performance of natural though disagreeable functions should carry with it means whereby it can be thrown out of operative position when not absolutely needed.

With this end in view my invention consists broadly in mounting a beam across the back of the animal just back of the fore shoulder which is the part of her back that I observe is humped at a moment just preceding the act of evacuation and it consists further in means for permitting the swinging of this beam out of the way and for adjusting its height to accommodate it to different animals.

Referring now more particularly to the drawings, the beam 50 is secured across the upper ends by a plurality of bars 60 which have through them a series of holes 61 near their lower ends, and the stanchion S has a series of holes 62, while 63 is a pin or bolt engaging one of each series of holes so that by proper manipulation the beam 50 can be caused to stand at the desired height from the stall floor. For supporting said beam at the proper distance from the stanchion so that it shall stand over the center of the animal's back, I provide in this instance a bracing strip 51 hinged as at 52 to the beam 50 and preferably having a notch 53 in its under side near its hinge and the remote end of this strip passes through the stanchion S and carries a stop pin or bolt 54 to prevent the strip from falling too far forward. It is obvious that when this animal enters the stall, if she should push beneath the beam 50 the strip 51 might slip through the stanchion until she reached her place, after which the entire device would drop back to its proper position. When it is desired to raise this beam entirely out of the way, the pin 54 is removed and the upper end of the strip is carried around and over a catch pin 55 which consists of another pin through the stanchion, as indicated by the dotted arrow, and the entire device pushes upward until the notch 53 engages said catch. This form of my invention I find quite serviceable because, when one beam 50 and two bars 60 are provided for each animal, the latter may enter the stalls indiscriminately and the horns of each will doubtless push the beams 50 upward to the dotted position shown in

the drawing, but after the cows reach their proper places the devices will settle back over their backs automatically. Even if the strips 51 have been hooked up purposely, a dairyman passing later down the aisle beyond the stanchions S can unhook said strips and drop the beams 50 back to position and can also adjust the pins or bolts in the series of holes 61 and 62 so as to raise or lower the beams 50 as may be necessary to adapt each to the particular animal which stands beneath it, the bars 60 thereafter serving as partitions between the cows.

The uses and advantages of my improved device will now be obvious. The device may be thrown out of operative position in the manner described above, and when in operative position will yield a trifle as the cow enters her stall and will automatically drop back into place unless purposely hooked up by the dairyman. The manner of adjusting the height of the beam to the height of the back of the animal will be understood from the above description and it is of course clear that the device could be made in independent sections each acting for one animal alone. Also while the cow is being milked, if she should intend to kick her first impulse will be to hump her back, and here again the natural tendency is resisted by the beam, the workings of nature are regulated, kicking is prevented, and the milk pail is not upset nor the dairyman injured.

What is claimed as new is:

1. The herein described attachment for stalls, the same comprising a beam extending transversely across the stall above its floor and remote from its stanchion, the latter having an upright series of holes, a pair of bars supporting said beam and also having an upright series of holes, a pin engaging one of the holes in each series, and a strip leading from the beam and detachably engaging the stanchion.

2. The herein described attachment for stalls, the same comprising a beam extending transversely across the stall above its floor and remote from its stanchion, the latter having an upright series of holes, a pair of bars supporting said beam and also having an upright series of holes, a pin engaging one of the holes in each series, a strip hinged at one end to the beam and passing loosely at the other end through the stanchion, and a stop pin removably inserted through said last-named end behind the stanchion.

3. The herein described attachment for stalls, the same comprising a beam extending transversely across the stall above its floor and remote from its stanchion, the latter having an upright series of holes, a pair of bars supporting said beam and also having an upright series of holes, a pin engaging one of the holes in each series, a strip flexibly connected at one end with the beam, having a notch in its under side near said connection, and having a transverse hole through it near its other end, the latter passing loosely through the stanchion, a stop pin removably inserted in said hole behind the stanchion, and a catch pin across the stanchion with which said notch is detachably engaged.

4. The herein described attachment for stalls, the same comprising a beam extending transversely across the stall above its floor and remote from its stanchion, a plurality of bars whose upper ends support said beam, pivotal connections between their lower ends and said stanchion, a strip hinged at one end to the beam and passing loosely at the other end through the stanchion, and a stop pin removably inserted through said last-named end behind the stanchion.

5. The herein described attachment for stalls, the same comprising a beam extending transversely across the stall above its floor and remote from its stanchion, a plurality of bars whose upper ends support said beam, pivotal connections between their lower ends and said stanchion, a strip flexibly connected at one end with the beam, having a notch in its under side near said connection, and having a transverse hole through it near its other end, the latter passing loosely through the stanchion, a stop pin removably inserted in said hole behind the stanchion, and a catch pin across the stanchion with which said notch is detachably engaged.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WAYLAND L. ROOT.

Witnesses:

HARLOW W. DOOR,

W. D. MARTIN.