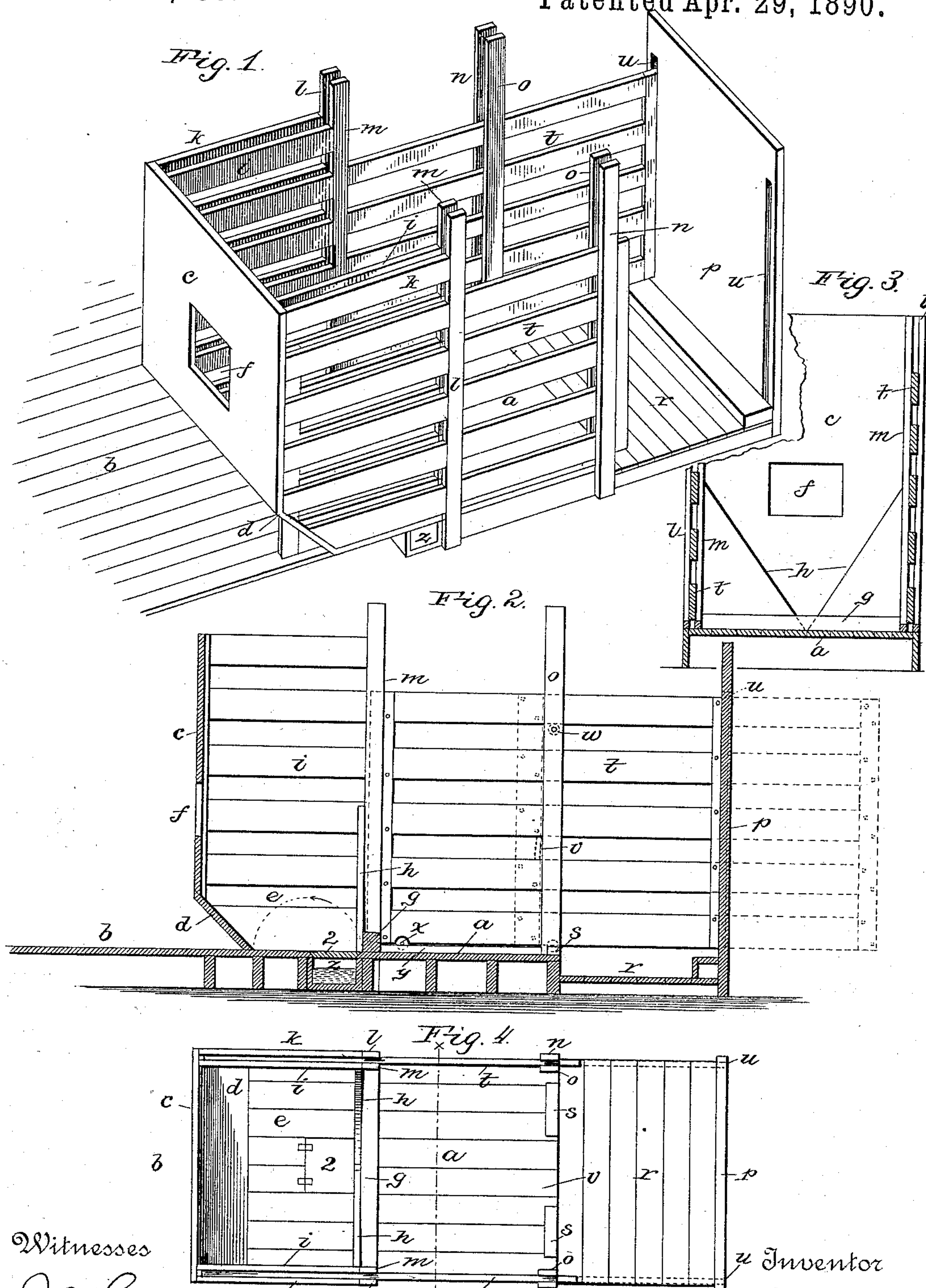


(No Model.)

J. LIGON.
CATTLE STALL.

No. 426,456.

Patented Apr. 29, 1890.



Witnesses

J. W. Garner,
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Inventor
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UNITED STATES PATENT OFFICE.

JOHN LIGON, OF CLOVER LICK, WEST VIRGINIA.

CATTLE-STALL.

SPECIFICATION forming part of Letters Patent No. 426,456, dated April 29, 1890.

Application filed July 18, 1889. Serial No. 317,941. (No model.)

To all whom it may concern:

Be it known that I, JOHN LIGON, a citizen of the United States, residing at Clover Lick, in the county of Pocahontas and State of West Virginia, have invented certain new and useful Improvements in Cattle-Stalls; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in cattle-stalls; and it consists in the peculiar construction and arrangement of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a cattle-stall embodying my improvements. Fig. 2 is a vertical longitudinal central sectional view of the same. Fig. 3 is a vertical transverse sectional view of the same, taken on the line *xx* of Fig. 4. Fig. 4 is a top plan view of the same.

My improved stalls are designed to be arranged in series side by side in the usual manner, but in the drawings I only show one of my stalls.

The main portion *a* of the stall-floor is in the same plane with the barn or stable floor *b* and level therewith. The boards which compose the said floor run longitudinally in the stalls, as shown. The head or inner end of the stalls *c* has at its lower edge an inclined board *d*, which is arranged transversely in the head of the stall and forms the front end of the manger *e*. In the head *c* is an opening *f*, through which feed may be placed in the manger for the animal. A sill *g* is arranged transversely on the floor at the outer end of the manger and a pair of boards *h*, which have their opposing inner edges inclined upward and outward, are secured on the floor and on the inner side of the sill. The sides of the manger are formed by inner and outer walls *i k* of slats, which also form the partition-walls between the manger part of the stalls. The said walls of slats are sustained in position by pairs of vertical uprights *l m* and the head *c*, to which they are nailed

or otherwise suitably secured. At the outer edge of the floor *a* are pairs of vertical uprights *n o*, which are in line with the uprights *l m*, respectively, as shown. The lower or outer end *p* of the stall forms one wall of the barn or stable and is at a suitable distance from the uprights *n o*, the said uprights being nearly midway between the end or wall *p* and the uprights *l m*. The floor *r*, at the lower end of the stall, is on a lower plane than the floor *a*, and the boards which constitute the said floor *r* are arranged transversely across the stall and parallel with the wall or end *p* to facilitate the removal and handling of the manure with a shovel or scraper.

Doors (not shown) may be made in the wall *p*, through which to throw the manure when cleaning the stall, or trap-doors may be made in the floor *r* for the same purpose, if the barn or stable is provided with a basement.

When the animal is eating from the manger, his fore feet are on the floor *a*, close up to the sill *g*, and his hind feet are on the floor *a*, also in front of cleats *s*, and the animal also lies down in this position; hence it follows that the droppings fall upon the lower floor *r* and not on the floor *a*, thus rendering it comparatively easy to clean the stall. Suitable litter may be placed on the floor *r*, if desired, to hold the liquid and solid droppings.

In order to form holds for the animal's feet to assist it in rising, I provide cleats *s*, which are nailed transversely on the floor *a*, at the outer edge thereof, having spaces to allow urine from cattle to flow to lower floor or gutter *r*.

Arranged between the pairs of uprights and adapted to slide between the same and the pairs of walls of slats, are gates *t*, which are slightly more than equal to two-thirds the length of the stall. Said gates may be moved forward to the head *c* in order to open the ends of the lower floor *r* and permit the animal to enter the stall from the same. The gates are shown in this position in Fig. 4, and one of the gates is shown in this position in Fig. 1. The gates may also be moved out to the wall *p* to cut off communication between the stalls, as shown in Figs. 1 and 2, the outer ends of the gates when in this position entering vertical openings *u* in the wall *p*. By moving the gates outward to the position shown

in dotted lines in Fig. 2, the sides of the stall between the manger and the lower end of the floor *a* may be opened to permit the animal to leave the stall by way of the floor *a*, and thereby prevent him from backing on the manure on the floor *r*.

It will be understood from the foregoing that the gates are adapted to slide in and out through the wall *p*, which forms the lower end of the stalls.

In order to enable the stall to be cleaned when the animal is in the same, the animal is driven forward in the stall until his fore feet rest on the floor or bottom of the manger, and a bar or rod *v* (shown in dotted lines in Figs. 2 and 4) is inserted transversely between the slats of the gates and on the front sides of the uprights *n o* in a position behind the animal to prevent him from backing. To facilitate the movement of the gates the upper rails of the same are supported on rollers *w*, which are journaled between the uprights *n o*, and under the lower rails of the gates at their front ends are rollers *x*, which move upon the floor *a*, and are directed between guides *y*. When the gates are moved forward to the position shown in Fig. 4, their lower front corners project beyond the inclined board that forms the front end of the manger, as shown in Fig. 1, thereby serving to clear away any feed which may have fallen between the slat walls over the ends of the manger and shove the same out upon the floor *a* within the head of the stall or into feed-room.

A trough *z* is arranged transversely under the mangers of the series of stalls to conduct water to the animals, and in the bottoms of the mangers are trap-doors 2, which, when

opened, enable the animals to drink from the trough, as will be readily understood.

Having thus described my invention, I claim—

1. The stall having the manger on the level of the floor, the uprights at the sides of the stall midway between the manger and the rear end of the stall, and the sliding gates, forming, together with the end walls of the manger, the sides of the stall and adapted to be moved forward across the ends of the manger (to open the space in rear of the uprights) and to be moved rearward, (to open the space between the uprights and the end walls of the manger,) for the purposes set forth, substantially as described.

2. The stall having the manger, the water-trough below the manger, and the door in the bottom of the manger, substantially as described.

3. The stall having the manger, the floor *a* level therewith, the lower floor *r* in the rear part of the stall, the wall *p*, forming the rear end of the stall, the double walls forming the sides of the manger, the uprights in line with said walls and situate between the manger and the wall *p*, and the gates forming the sides of the stall and adapted to move forward between the double walls and rearward to and beyond the rear wall *p*, all arranged substantially as described.

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

JOHN LIGON.

Witnesses:

J. W. GARNER,
CHAS. A. BEACH.