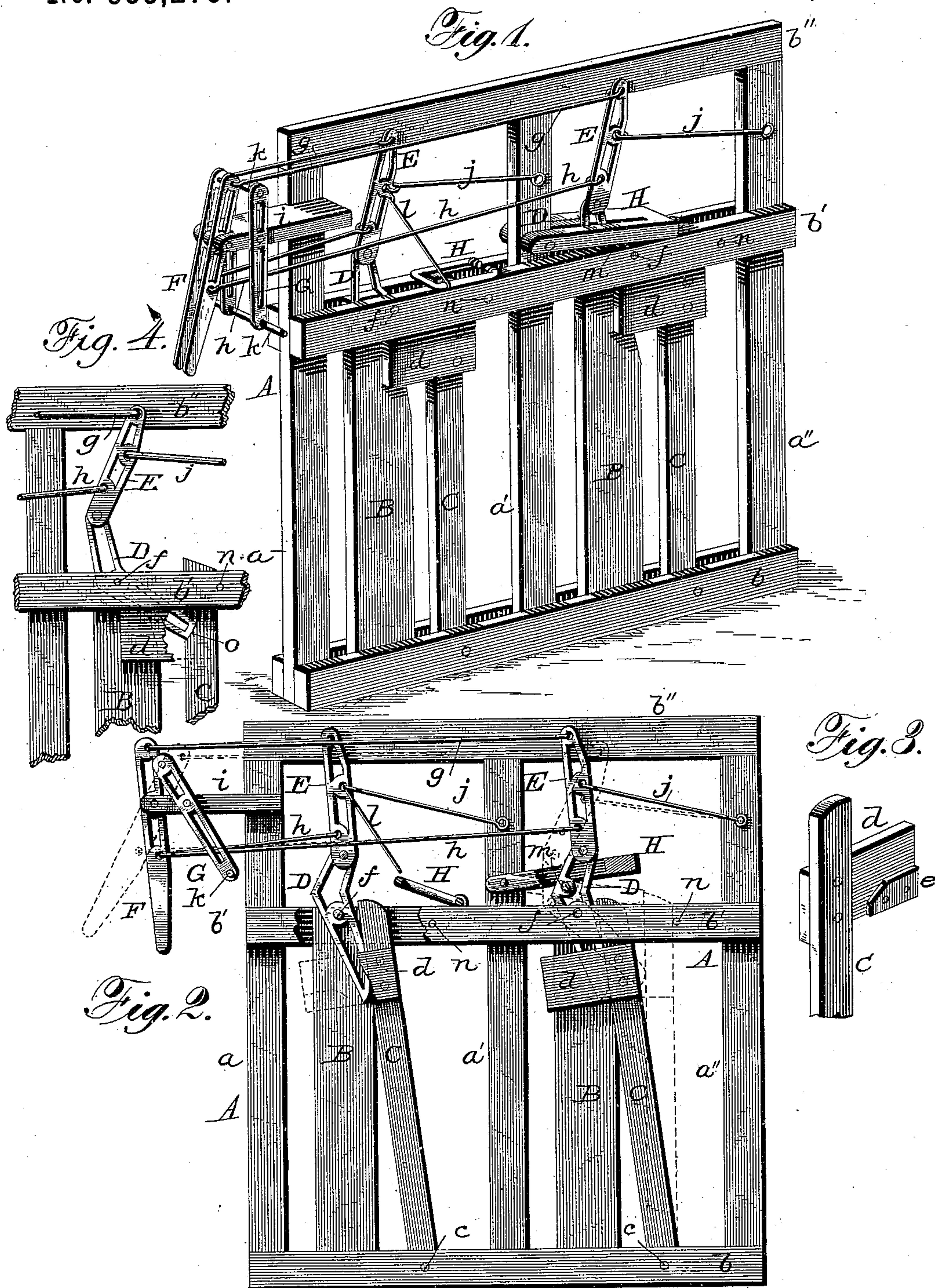


(No Model.)

D. J. BARNES.
CATTLE STANCHION.

No. 333,275.

Patented Dec. 29, 1885.



WITNESSES:

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UNITED STATES PATENT OFFICE.

DAVID J. BARNES, OF FORT ATKINSON, WISCONSIN.

CATTLE-STANCHION.

SPECIFICATION forming part of Letters Patent No. 333,275, dated December 29, 1885.

Application filed August 13, 1885. Serial No. 174,276. (No model.)

To all whom it may concern:

Be it known that I, DAVID J. BARNES, of Fort Atkinson, in the county of Jefferson and State of Wisconsin, have invented certain new and useful Improvements in Cattle-Stanchions, of which the following is a specification.

My invention relates to cattle-stanchions; and it consists in various features, hereinafter set forth, whereby the cattle may be individually or collectively released without entering the stalls.

In the drawings, Figure 1 is a perspective view of my improved device; Fig. 2, a face view of the same, partly in section, showing the stanchions opened; Fig. 3, a view illustrating a certain detail; and Fig. 4, a view illustrating a modification, whereby the lever which moves the movable stanchion-post is made to serve also as a latch or fastening therefor.

The object of my invention is to provide means whereby each stanchion may be operated independently of the others, locked and unlocked positively, and whereby all may be operated simultaneously. This I accomplish by the construction shown in the drawings, in which A indicates a strong framing, constructed generally within a barn or other inclosure, (not shown,) the said framing consisting of uprights *a a' a''* and cross-beams or timbers *b b' b''*.

B' indicates the stationary and *C* the movable stanchion-post, the latter pivoted at its lower end by a bolt, *c*, to the sill *b*, and guided at its upper end by the timbers or sills *b'*, as is now commonly done.

As shown in Figs. 2 and 3, the movable posts *C* are provided near their upper ends with a block, *d*, which has on its rear face a lug or shoulder, *e*. The block may be made entirely of metal, or it may be of wood, and the lugs or shoulders secured thereto or formed thereon, as most convenient.

At the upper end of the stationary posts *B* are elbow-levers *D*, pivoted at *f*, the levers *D* extending downward between the posts *B* and the block *d*, as shown in Fig. 2. The lower end of the lever *D* is rounded off and bears at one edge against the post *C*, and at the other edge against the lug or shoulder *e*. When the lever *D* is rocked upon its pivot *f*, its curved face, riding against the edge of the post *C*, moves

the latter over to the position indicated by dotted lines in Fig. 2; but when rocked in the reverse direction it bears against the lug or shoulder *e* and moves the post *C* in the opposite direction. It will thus be seen that the lever *D* actuates the post *C* positively in both directions.

Pivotaly connected with the top of the lever *D* is a second lever, *E*, connected at its ends by rods *g* and *h* with a hand-lever, *F*, which latter is pivoted to the framing *A*, or to an arm, *i*, secured thereto, as shown in Figs. 1 and 2. The lever *E* is fulcrumed between its ends upon a rod, *j*, pivoted at one end to the upright, and it will be seen that any movement of the hand-lever *F* will cause a corresponding movement of the lever *E*, except in so far as the latter is raised or lowered bodily by reason of its being attached to the upper end of the lever *D*. Of course, as the upper end of the lever *D* moves in an arc of a circle, the lever *E* must have a corresponding rise and fall, and hence I provide the movable fulcrum-rod *j* for said lever *E*, as above mentioned. Each of the levers *E* is provided with the movable fulcrum *j*, connecting-rods *g h*, and an operating-lever, *F*. In some cases, where the ceilings are low, it may be found advisable to omit the lever *E* and attach the operating-rods directly to the top of the lever *D*.

It will be observed that each set of levers *D E F* is wholly independent of the remaining sets, and that either can be operated without in any way affecting the others. This is a feature of importance, for the reason that it is often desirable to release or open one particular stanchion only. In order that all, however, may be opened simultaneously, and by manipulation of a single lever, I provide a lever, *G*, which is pivoted to the arm *i*, and has at its upper and lower ends connecting cross-bars *k*, as shown in Fig. 1, extending in front of all the levers *F* of the series. As the lever *G* is rocked upon its pivot, the upper end of the cross-bar *k* will come in contact with the upper ends of all the levers *F* and rock the latter upon their pivots simultaneously and equally; or, if moved in the reverse direction, the lower cross-bar, *k*, will come into contact with the lower ends of the levers *F* and move them in

the other direction. All of the levers F should of course be pivoted in the same line, so as to have a common center of motion.

In order to lock the stanchion-posts C in position, I use a pivoted link, H, which in one case is shown as operated by the lever D and abutting against the posts C, and in the other by the lever E and engaging over the end of the post C, as shown in Figs. 1 and 2. When the open link H is used, I attach a rod, *l*, to the lever E, at a point between its ends, as is shown in the left-hand side of Fig. 2, the rod *l* being attached at its lower end to the link, and serving to raise and lower the latter when the lever is rocked. When the lever F is rocked, it causes a slight rise of the lever E, and this in turn raises the link H off the top of the post C, the movement of the lever D not materially affecting the post C during this short interval. By the time, however, that the link is raised sufficiently to allow the post C to rock upon its pivot, the lever D will have moved far enough to engage the lug *e*, and will then move the post C to the position indicated in Fig. 2. Where the link H abuts against the edge of the post C, as in the right-hand side of Fig. 2, it is operated through the agency of a pin or stud, *m*, upon the lever D, above its pivotal point. It will be seen that as soon the lever D is rocked the stud *m*, riding upon the under side of the link H, will raise the latter at its free end, as indicated in Fig. 2, the movement of the post C by the lever D being in this case so timed that the link will be raised clear of the post C before the latter is moved.

The levers F and G may be placed outside of the building, so that all the stanchions can be operated without entering the building. This is especially important in case of fire; but even when placed within the building the apparatus enables the attendant to release the cattle without entering the stalls, and is thus conducive both to safety and to cleanliness.

In order to prevent the bar C from falling over too far when in its closed position I provide the beam or bar *b'* with a stop-pin, *n*, as shown in Figs. 1 and 2, and against which the bars C rest in their closed position.

Instead of employing a separate latch, as in

Figs. 1 and 2, I propose in some cases to provide the movable post C with a notch, *o*, and to so fashion or form the end of lever D that it shall enter said notch as the post reaches its vertical position, and that it shall lock said post, as shown in Fig. 4. When thus constructed, the end of the lever D will move out of or into the notch *o* at the commencement or finish of the movement of lever D in one or the other direction, and thus unlock or lock the post C, as required.

Having thus described my invention, what I claim is—

1. In combination with a series of cattle-stanchions, independent operating-levers connected with the respective movable posts or members thereof, and a controlling-lever to act upon and simultaneously operate all of said levers.

2. In combination with the movable member or post of a cattle-stanchion, operating-levers and a catch or fastening for said movable member connected with and operated by one of said levers, substantially as set forth.

3. In combination with frame A, stationary post B, and movable post C, the lever D, pivoted to the frame A, and serving to positively rock the post C upon its pivot in both directions.

4. In combination with frame A, posts B C, and lever D, the levers E F, connected as shown, and serving to operate the post C and its locking device.

5. In combination with frame A and posts B, bar or post C, provided with plate *d* and lug *e*, elbow-lever D, pivoted to the frame, and extending at its lower end between the post C and the lug *e*, and means for rocking said lever D.

6. In combination with frame A and posts B C, lever D, mounted in said frame, lever E, connected to the latter and provided with movable fulcrum *j*, hand-lever F, rods *g h*, connecting the levers E F, and trip or catch H, connected with and operated by one of said levers, substantially as described and shown.

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Witnesses:

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S. A. CRAIG.