

E. S. Alvord,

Stanchion.

No. 102904.

Patented May 10, 1870.

Fig 1

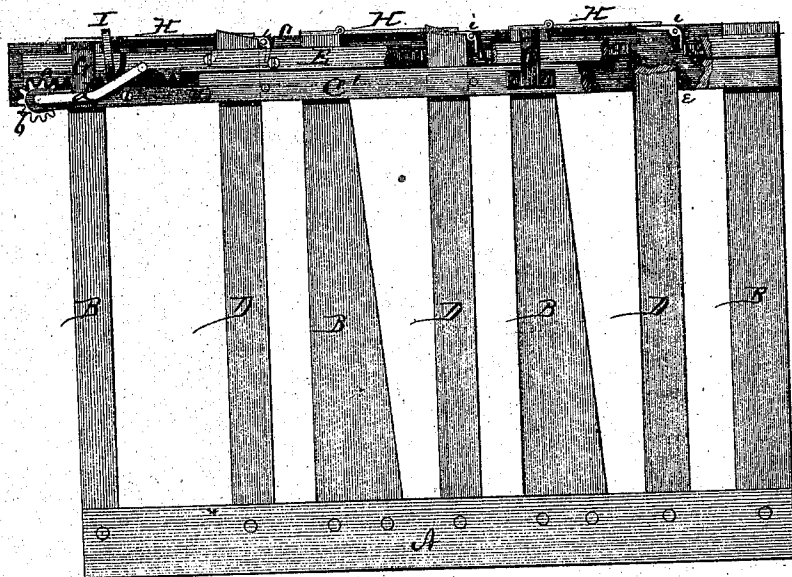


Fig 2



Witnesses
Harry King
Co. L. Over

Inventor,
E. S. Alvord
per
Alexander Mason
Attys.

United States Patent Office.

ELIJAH S. ALVORD, OF HARMONY, NEW YORK.

Letters Patent No. 102,904, dated May 10, 1870.

IMPROVEMENT IN STANCHIONS FOR SECURING CATTLE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ELIJAH S. ALVORD, of Harmony, in the county of Chautauqua and in the State of New York, have invented certain new and useful Improvements in Stanchions for Securing Cattle; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a stanchion for securing cattle, so that all or any number may be let out at any time.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a front view, and

Figure 2 is a plan view of a section of my invention.

The stanchion is to be placed at the entrance to the stalls, and is constructed in the following manner:

Two beams or bars, A, are placed at the bottom or floor, and between them is secured a series of uprights, B B, which is wider at the bottom than at the top, or may be of the same width.

The upper ends of the uprights B B are secured between bars C C', the outer one of which, C', is narrower, and does not reach up to the upper edges of said uprights.

Between the bars A A, and about the center of the space between the uprights B B, are pivoted other upright bars D D, the upper ends of which pass between the upper horizontal bars C C', but are not secured to either of them.

On top of the bar C' is placed a sliding bar, E, which moves sidewise in guides G G, and is at one end provided with a small rack-bar, a, which gears with a pinion, b, mounted on a shaft between the ends of the bars C and C', said pinion being turned by a crank, d, so that the sliding bar E may by this means be moved to either side.

The pivoted bars D D are held in a vertical position by pins e on one side, and by a hinged leaf, H, on the other, or the side toward the crank d. At and under the outer ends of the leaves H H are pivoted bent levers i i.

On the inner side of the sliding bar E, and on each

side of each of the pivoted bars D, is placed a spring, o, which projects inward so as to strike the bar D, if the sliding bar is moved in either direction, and also strike the lever i, so as to raise the leaf H.

A spring, I, secured to the horizontal bar C', holds the crank d, when not desired to turn the same.

It will readily be seen that, by turning the crank d, the springs o o on the side of the bars D D farthest from the crank first raise the levers i i sufficient to lift the leaves H H, to allow the same springs to move the said bars D D to one side, when the cattle can be put in or let out all at once.

By pressing the spring o on the side of the stanchion D nearest the crank, it will enable the operator to let out either of the cattle separately, and, when the rest are let out, the said spring will pass the stanchion, and then it is ready to shut that one with the rest. Or by pressing the spring on the other side of the stanchion, he can put up either one separately, and the spring will also adjust itself.

The springs o o may be entirely pressed in and drawn through the bar E, and held by pins so that one or more cattle may be left in the stable, and the others taken out and put in at pleasure.

Having thus fully described my invention,

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

1. The arrangement of the pinion or cog-wheel b, crank d, spring I, and rack-bar a, for operating the sliding bar E, substantially as and for the purposes herein set forth.

2. The sliding bar E, with springs o o, for working the stanchions D D, substantially as and for the purposes herein set forth.

3. The spring o, elbow or lever i, and leaf or latch H, all constructed and arranged to operate substantially as and for the purposes herein set forth.

4. The combination and arrangement of the frame A B C C', stanchions D D, sliding bar E, rack a, pinion b, crank d, spring I, springs o o, levers i i, and leaves H H, all constructed and operating substantially in the manner and for the purpose herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 9th day of September, 1869.

ELIJAH S. ALVORD.

Witnesses:

MORRIS NORTON,
ARDILLO WELLMAN.