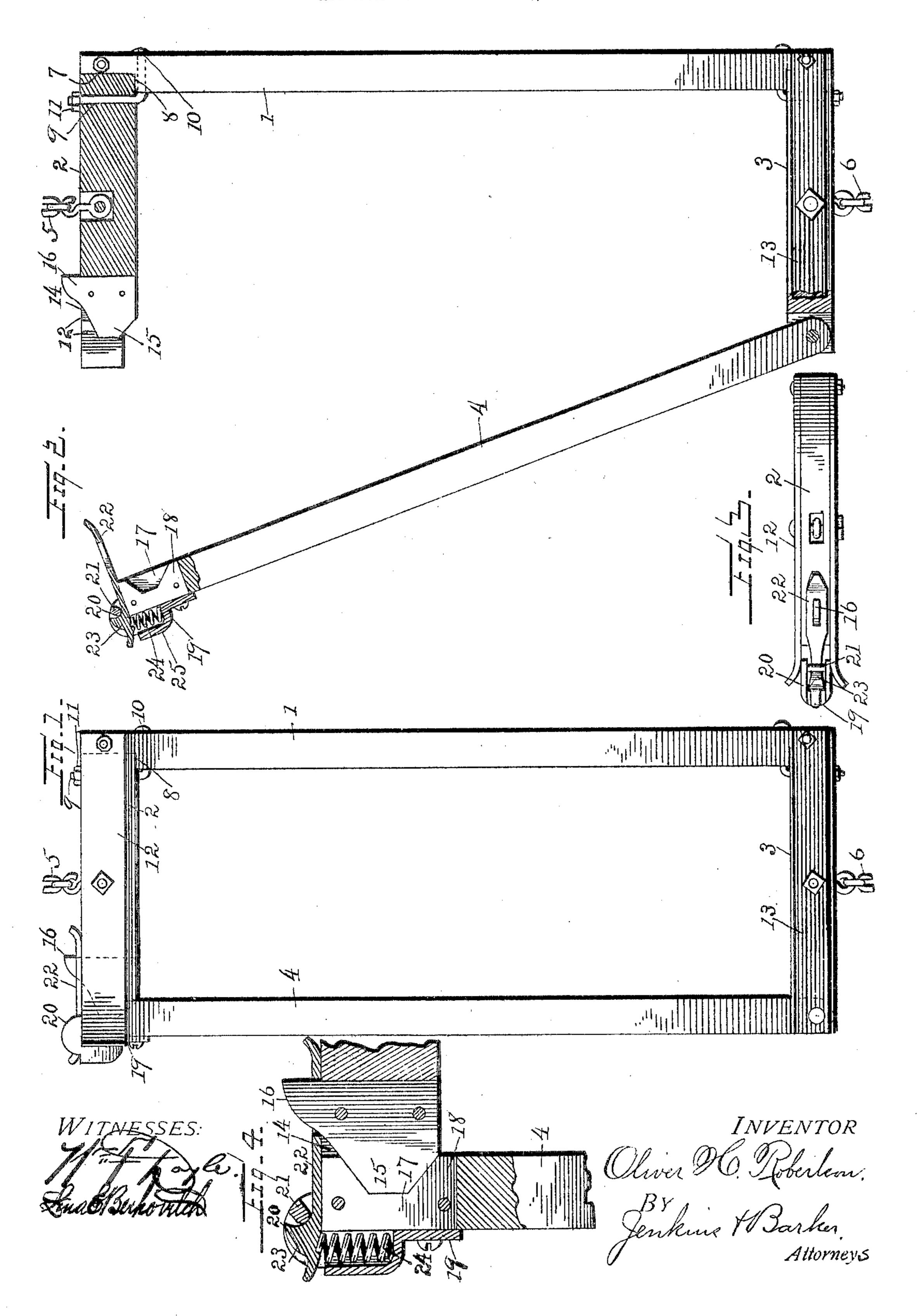
O. H. ROBERTSON.
STANCHION.
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UNITED STATES PATENT OFFICE.

OLIVER H. ROBERTSON, OF FORESTVILLE, CONNECTICUT.

STANCHION.

No. 804,621. Specification of Letters Patent.

Patented Nov. 14, 1905.

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To all whom it may concern:

Be it known that I, OLIVER H. ROBERTSON, a citizen of the United States, and a resident of Forestville, in the county of Hartford and 5 State of Connecticut, have invented a new and Improved Stanchion, of which the following

is a specification.

My invention relates to the class of devices employed for securing animals, as cattle, in 10 stalls or like places and more especially to devices of this class which are rigid to a certain extent, but have a flexible support; and the object of my invention is to provide such a device the frame of which shall be extremely rigid and firm, and a further object is to provide a device of this class that while being extremely cheap in manufacture shall possessall the desirable features as to strength and durability.

20 In the accompanying drawings I have illustrated a preferred form of device showing the physical embodiment of my invention.

In the drawings, Figure 1 is a view in elevation of a stanchion embodying my inven-25 tion and with the parts closed. Fig. 2 is a like view, but with the swinging neck-bar moved to one side and with parts broken away to show construction. Fig. 3 is a top plan view of the device. Fig. 4 is a detail view, 3° on enlarged scale, showing the swinging neckbar and top cross-bar at the point of engagement, with parts broken away to show construction.

In the accompanying drawings the numeral 35 1 denotes the rigid neck-bar, 2 the upper cross-bar, 3 the lower cross-bar, and 4 the swinging neck-bar of a stanchion, embodying

my invention.

The device as a whole is suspended by a 4° flexible connection, as a chain 5, and the lower end has a certain freedom of swinging movement permitted by a flexible connection, as a chain 6, the flexible connection 5 being secured, as to a beam or rafter, overhead and 45 the flexible connection 6 being secured as to

the floor of a stall.

The rigid neck-bar 1 is firmly secured at its opposite ends to the upper and lower crossbars 2 and 3, and the swinging neck-bar 4 is 5° pivoted, as to the lower cross-bar 3, and is adapted to removably engage the upper crossbar 2. This is a common form of construction in devices of this class; but it is essential that the connections shall be such as to pro-55 vide an extremely rigid structure, so that the device shall not break down at the corners,

but shall maintain at all times perfect rigidity. In order to firmly secure the rigid neck-bar to the upper and lower cross-bars, the neckbar is cut away, as at 7, forming shoulders 8, 60 upon which the cross-bars rest. A bolt 9 extends through each of the cross-bars and at the inner surface is bent at an angle and passes through the neck-bar. This bolt may be secured to the outer edge of the neck-bar in any 65 suitable manner, in the form herein shown a head 10 being employed and a nut 11 affording means of securing the opposite end of the bolt at the outer surface of the cross-bar. It will be obvious that any form of fastening 7° means for the bolt may be employed. This form of connection affords a ready means of assembling the device, and the parts may be assembled in a manner to secure the full benefits of the fastening device, the bolt being 75 passed through the neck-bar and then bent at the proper angle, and the cross-bar being inserted in place on the bolt and properly seated in the recess of the neck-bar. An important feature of this connection resides in the sim- 80 plicity with which the parts may be assembled and especially in the construction which enables the full advantage of the fastening means to be secured.

The bottom and top cross-bars each include 85 metallic straps 12 13, located on opposite sides of the main part of the cross-bar, which is preferably constructed of wood. These straps project beyond each end of each crossbar, the rigid neck-bar being located between 9° these straps and secured as by means of bolts. The end of the swinging neck-bar is also located between the projecting ends of the straps, being pivoted at its lower end, as shown in the drawings. The space between 95 these metallic straps on the upper cross-bar and beyond the end of the main part forms a recess in which the end of the swinging neckbar is located in its closed position. The main portion of the upper cross-bar has a 100 slot 14, in which is located a catch and supporting-plate. This plate includes an extension forming a support 15 and a projection forming a catch 16, this projection being located above the upper surface of the cross-bar. 105

The swinging neck-bar has a slot 17, formed in its upper end, in which a socket-plate 18 is located, this plate having a socket for the reception of the extension or support 15 from the catch and supporting-plate located on the TIO upper cross-bar. A latch-case 19 is located on the upper end of the swinging neck-bar

and has ears 20 overlying the upper end of the neck-bar. A keeper 21 extends between the ears 20, and a latch 22 is located between the end of the bar and the keeper 21. A 5 horn 23 retains the latch in position, the bearing of the latch on the upper end of the neck-bar and against the keeper 21 forming a pivot. A spring 24 is located in the springcasing 25 of the latch-case and holds the latch 10 normally in a closed position. When the neck-bar 4 is swung into place, the latch engaging the inclined surface of the catch 16 is raised and the opening 26 in the latch engages the catch. The extension 15, projecting into 15 the opening 17, forms a firm support for the swinging neck-bar against downward movement, this construction providing an extremely stiff joint at this point.

What I claim as my invention, and desire to

20 secure by Letters Patent, is—

1. In a stanchion, in combination with upper and lower cross-bars, a neck-bar, a connection between the neck-bar and a cross-bar including a joint formed with the meeting 25 ends of the neck-bar and cross-bar located to oppose both a lateral and a lengthwise movement of each of the bars, and a bolt extending through and tightly held within the neckbar and bent to extend along the edge thereof 3° and pass through the cross-bar and secured at its opposite ends at the edges of each of said bars.

2. In a stanchion, in combination with upper and lower cross-bars, a neck-bar, a con-35 nection between the meeting ends of the neckbar and a cross-bar including a shoulder on one of said parts for receiving the other part, and a bolt extending through and tightly held within the neck-bar and bent to extend along 4° the edge thereof and passed through the cross-bar, and secured at its opposite ends at the edges of each of said bars.

3. A stanchion including a cross-bar and a neck-bar, a connection between the meeting 45 ends of the neck-bar and the cross-bar, including a shouldered cut in the neck-bar to receive the end of the cross-bar, and a bolt extending through and tightly held within the neck-bar and bent along the edge thereof to pass 5° through the cross-bar and secured at its opposite ends at the edges of each of said parts.

4. In a stanchion, in combination with crossbars united by a rigid neck-bar, a swinging neck-bar pivotally secured to one of the cross-55 bars, a catch and a support located upon one of said parts, a recess in the opposite bar for engagement of the support, and a latch supported upon one of said bars for engagement with the catch.

5. In a stanchion, in combination with up-60 per and lower cross-bars united by a rigid neck-bar, a swinging neck-bar pivotally connected to one of the cross-bars, a support and a catch on one of said parts, a recessed plate 65 located in a slot on the opposite bar to re-

ceive the support, and a latch to engage the catch.

6. In a stanchion, in combination with upper and lower cross-bars united by a rigid neck-bar, a support and a catch located in a 70 recess in the upper cross-bar, a socket-plate located in a recess in the swinging neck-bar, and a latch mounted on the swinging crossbar to engage said catch.

7. In a stanchion, in combination with up- 75 per and lower cross-bars united by a rigid neck-bar, a swinging neck-bar pivoted to one of the cross-bars and adapted to engage the opposite cross-bar, a catch, a latch-case including a keeper, a latch located between the 80 keeper and the part on which it is supported and adapted to engage the catch to unite the

swinging neck-bar and cross-bar.

8. In a stanchion, in combination with upper and lower cross-bars united by a rigid 85 neck-bar, a catch-plate secured to the upper cross-bar, a swinging neck-bar pivotally connected to the lower cross-bar, a latch-case secured to the swinging neck-bar and including a keeper, and a latch interposed beneath the 90 end of the swinging neck-bar and said keeper

in position to engage said catch.

9. In a stanchion, in combination with upper and lower cross-bars united by a rigid neck-bar, a connection for a neck and cross 95 bar including a support and a catch-plate located in a recess in one of said parts, a socketplate located in a recess in the other part, a latch-casing secured to one of said parts and including a keeper, and a latch located be- 100 tween the keeper and the part supporting the casing and adapted to engage said catch.

10. In a stanchion, in combination with upper and lower cross-bars connected by a rigid neck-bar, a swinging neck-bar pivotally con- 105 nected to one of the cross-bars, a fastening for said neck and cross bar including a supporting-plate secured to one of the bars and including a tapered extension and a catch, a socket-plate located in a recess in the other 110 bar and having a socket corresponding in shape to said extension, and a latch adapted to engage said catch.

11. In a stanchion, in combination with upper and lower cross-bars, a neck-bar rigidly 115 secured to said cross-bars by a bolt extending through a cross-bar and a neck-bar and secured at its ends at the edges of each of said parts, a swinging neck-bar pivotally secured to one of the cross-bars, a support and a catch 120 mounted in a recess in the opposite cross-bar, a socket-plate secured in the recess in the swinging neck-bar and having a socket to engage the support, and a latch mounted on the swinging neck-bar to engage said catch.

12. In a stanchion, in combination with upper and lower cross-bars, a rigid neck-bar secured to the cross-bars by a joint including a shouldered part receiving the end of the opposite part, and a bolt extending through a 130

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cross-bar and a neck-bar and secured at each end at the edges of each of said bars, a support and a catch mounted in a recess in one of the cross-bars, a swinging neck-bar pivotally supported by one of the cross-bars, a socket-plate secured in a recess in the swinging neck-bar and having a socket fitted to receive said support, a latch-case secured to the swinging neck-bar and including a keeper, and a latch interposed between said keeper and the end of said neck-bar to engage said catch.

13. In a stanchion, in combination with cross-bars, united by a rigid neck-bar a swinging neck-bar pivotally secured to one of the cross-bars, a catch supported by a plate upon one of said parts and a support mounted upon a plate on said part, a recess in the opposite bar for engagement of said support, and a latch supported upon one of said bars for engagement with said catch.

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14. In a stanchion, in combination with

cross-bars united by a rigid neck-bar, a swinging neck-bar pivotally secured to one of the cross-bars, a catch located on a plate in a recess in one of said bars, a support located on a 25 plate in said recess, a recessed plate located in a slot on the opposite bar to receive said support, and a latch to engage said catch.

15. In a stanchion, including a cross-bar and a neck-bar, a connection between the meeting 30 ends of the neck-bar and cross-bar including a shouldered cut made in the meeting edge of one of said parts and forming a shoulder for the reception of the other part, a bolt extending through and tightly held in the neck-bar 35 and bent along the edge thereof to enter the cross-bar, and secured at its opposite ends at the edges of each of said bars.

OLIVER H. ROBERTSON.

Witnesses:

ARTHUR B. JENKINS, LENA E. BERKOVITCH.