

G. P. YOUMANS.
STANCHION.
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903,261.

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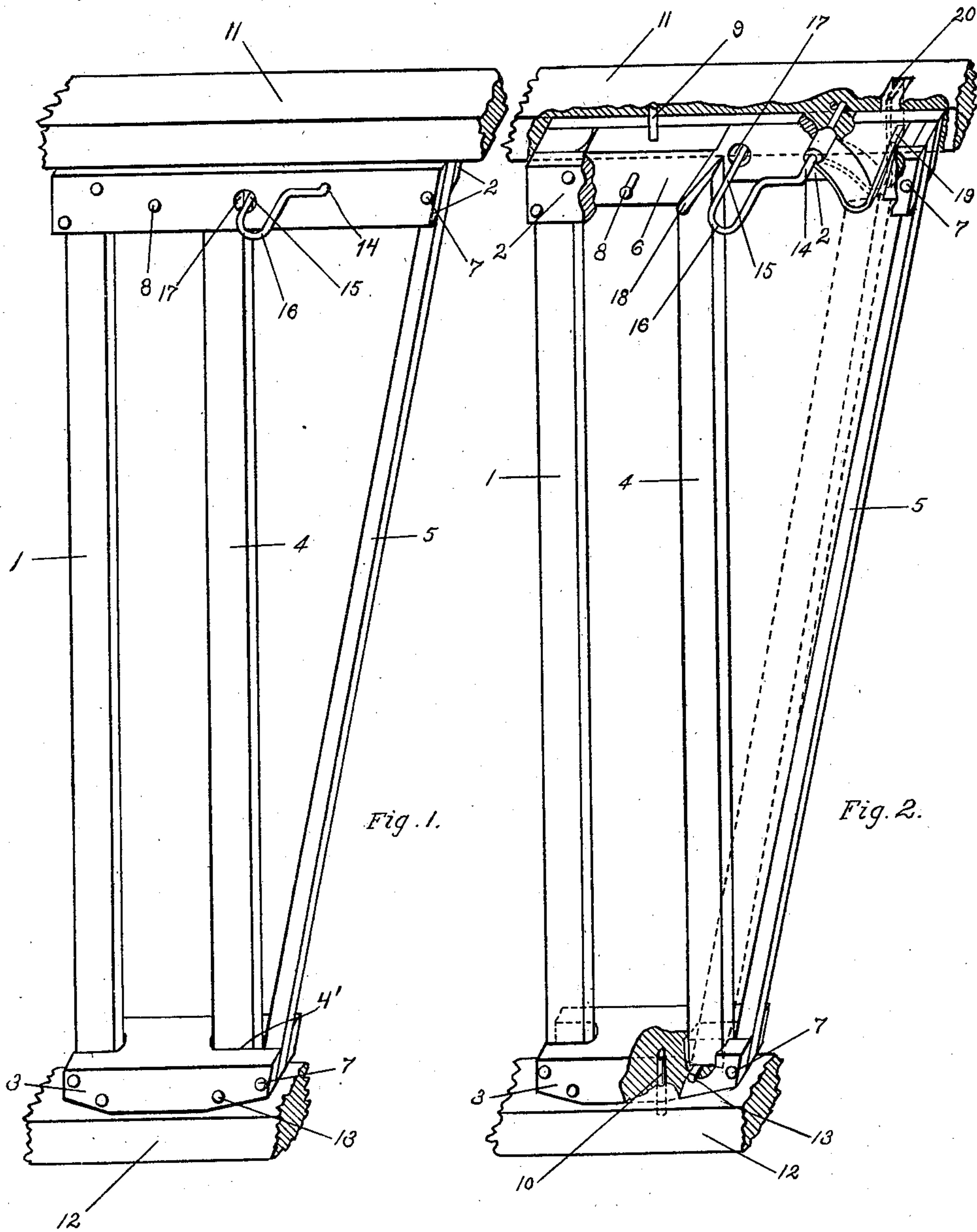


Fig. 1.

Fig. 2.

Witnesses

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STANCHION.

No. 903,261.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE P. YOUMANS, a citizen of the United States, residing at the village of Galesburg, county of Kalamazoo, State of Michigan, have invented certain new and useful Improvements in Stanchions, of which the following is a specification.

This invention relates to improvements in stanchions for cattle.

The main objects of this invention are: First, to provide an improved stanchion which is very strong and rigid and at the same time, one which is economical to produce. Second, to provide an improved stanchion which is automatically locked against swinging on its pivots by the opening of the swinging-bar, so that the stanchion is held in proper position for the cattle to take their positions therein.

Further objects, and objects relating to details of construction, will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure embodying the features of my invention is clearly illustrated in the accompanying drawing, forming a part of this specification, in which:

Figure 1 is a perspective view of my improved stanchion, the top and bottom rails being broken away. Fig. 2 is a similar perspective view, portions of the top and bottom rails and of the top and bottom cross pieces being broken away to show the relation of the parts and the open position of the swinging stanchion being indicated by dotted lines.

In the drawing, similar numerals of reference refer to similar parts throughout the several views.

Referring to the drawing, 1 represents the relatively fixed stanchion bar, to the upper end of which is rigidly secured the top cross piece, preferably made up of a pair of pieces 2, as clearly appears from the drawing. The bottom cross piece 3 is rigidly secured to the lower end of the fixed stanchion bar. The swinging stanchion bar 4 is arranged in a suitable slot 4' provided therefor in the bottom cross piece, it being preferably pivotally supported by resting on the supporting bolt 13. The supporting

bolt is arranged at the inner edge of the bar 4 so that the tendency of the swinging bar is to open that is, it is arranged on the inside of the center of the bar so that the bar falls outwardly when its upper end is released. This avoids the necessity of boring the lower end of the swinging stanchion to receive the pivot bolt. The swinging bar is held upon the pivot bolt 13 by the inclined brace bar 5, which is secured at its ends to the top and bottom cross pieces. This bar coacts with the fixed stanchion bar, making a strong and rigid frame, the parts being preferably secured together by the bolts 7. The stanchion is connected to the top and bottom supporting rails 11 and 12 provided therefor by means of pivots, as 9 and 10. The pivot 9 is preferably carried by the block 6 arranged between the pieces 2, forming the top cross piece, the block being secured to the pieces 2 by means of the bolt 8.

The latch 14 for holding the swinging bar in its closed position is preferably crank-like in form, being formed of an iron rod and having an engaging portion 15 arranged through holes 17 provided therefor in the top cross piece. The latch is preferably provided with a hand piece 16 for manipulating the same, the latch being pivoted in the top cross piece and having its engaging portion 15 projecting therethrough. The hand piece 16 is in the form of a projecting loop, as clearly appears from the drawing. The upper end of the swinging bar is beveled away at 18, so that it automatically lifts the latch when swung forward into position passing under the same, the latch dropping down to hold it in its closed position. On the latch is a V-shaped catch 19 arranged to be engaged by the swinging bar when the same is in its open position and elevated thereby to engage a hole 20 formed in the under side of the top rail 11, thereby locking the stanchion against revolution on its pivots and holding it in proper position for the cattle to take their place therein. When the swinging stanchion bar is swung forward to its closed position, this catch drops down and releases the stanchion, so that it is free to move on its pivots.

My improved stanchion is very simple and economical in structure, and, at the same time, is very strong and rigid and very durable.

Having thus described my invention, what

I claim as new and desire to secure by Letters Patent is:

1. In a stanchion, the combination with the top and bottom rails, the top rail having a notch therein, of a relatively fixed stanchion bar; a top cross piece secured thereto; a bottom cross piece secured to the lower end of said fixed bar; an inclined brace bar secured to said top and bottom cross pieces; a swinging bar seated in said bottom cross piece, with its upper end arranged to swing in the said top cross piece; a supporting bolt therefor arranged on the inside of the center of said swinging bar whereby the upper end of said bar will swing outwardly when released, said swinging bar being held in position on said supporting bolt by said brace bar; a latch for said swinging bar pivoted in said top cross piece; pivots carried by said top and bottom rails; a V-shaped catch mounted on the said latch adapted to be engaged by said swinging bar when in its open position, and engage thereby with the said notch in the said top rail, for the purpose specified.

2. In a stanchion, the combination with the top and bottom rails, the top rail having a notch therein, of a relatively fixed stanchion bar; a top cross piece secured thereto; a bottom cross piece secured to the lower end of said fixed bar; an inclined brace bar secured to said top and bottom cross pieces; a swinging bar pivotally mounted on said bottom cross piece with its upper end arranged to swing in said top cross piece; a latch for said swinging bar pivoted in said top cross piece; pivots carried by said top and bottom cross pieces for connecting the same to said top and bottom rails; a V-shaped catch mounted on the said latch adapted to be engaged by said swinging bar when in its open position, and engaged thereby with said notch in said top rail, for the purpose specified.

3. In a stanchion, the combination with the top and bottom rails, of a relatively fixed stanchion bar; a top cross piece secured thereto; a bottom cross piece secured to the lower end of said fixed bar; an inclined brace bar secured to said top and bottom cross pieces; a swinging bar seated in said bottom cross piece, with its upper end ar-

anged to swing in the said top cross piece; a supporting bolt therefor arranged on the inside of the center of said swinging bar whereby the upper end of said bar will swing outwardly when released, said swinging bar being held in position on said supporting bolt by said brace bar; a latch for said swinging bar pivoted in said top cross piece; and pivots carried by said top and bottom cross pieces for connecting the same to said top and bottom rails, for the purpose specified.

4. In a stanchion, the combination with the top and bottom rails, the top rail having a notch in the under side thereof, of a relatively fixed stanchion bar; top and bottom cross pieces secured to said fixed stanchion bar said top cross piece having a latch opening therethrough; a swinging stanchion bar pivoted on said bottom cross piece and arranged to swing in said top cross piece; a crank-like latch for said swinging bar pivoted in the said top cross piece having an engaging portion arranged through said latch opening in said top cross piece; pivotal connections for said top and bottom cross pieces to said top and bottom rails; a V-shaped catch mounted on said latch adapted to be engaged by said swinging bar when in its open position and engaged thereby with said notch in said top rail.

5. In a stanchion, the combination with the top and bottom rails, the top rail having a notch in the under side thereof, of a relatively fixed stanchion bar; top and bottom cross pieces secured to said fixed stanchion bar; a latch for said swinging bar pivoted in the said top cross piece; pivotal connections for said top and bottom cross pieces to said top and bottom rails; a V-shaped catch mounted on said latch adapted to be engaged by said swinging bar when in its open position and engaged thereby with said notch in said top rail.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

GEORGE P. YOUMANS. [L. s.]

Witnesses:

LUELLA G. GREENFIELD,
A. F. ADAMS.