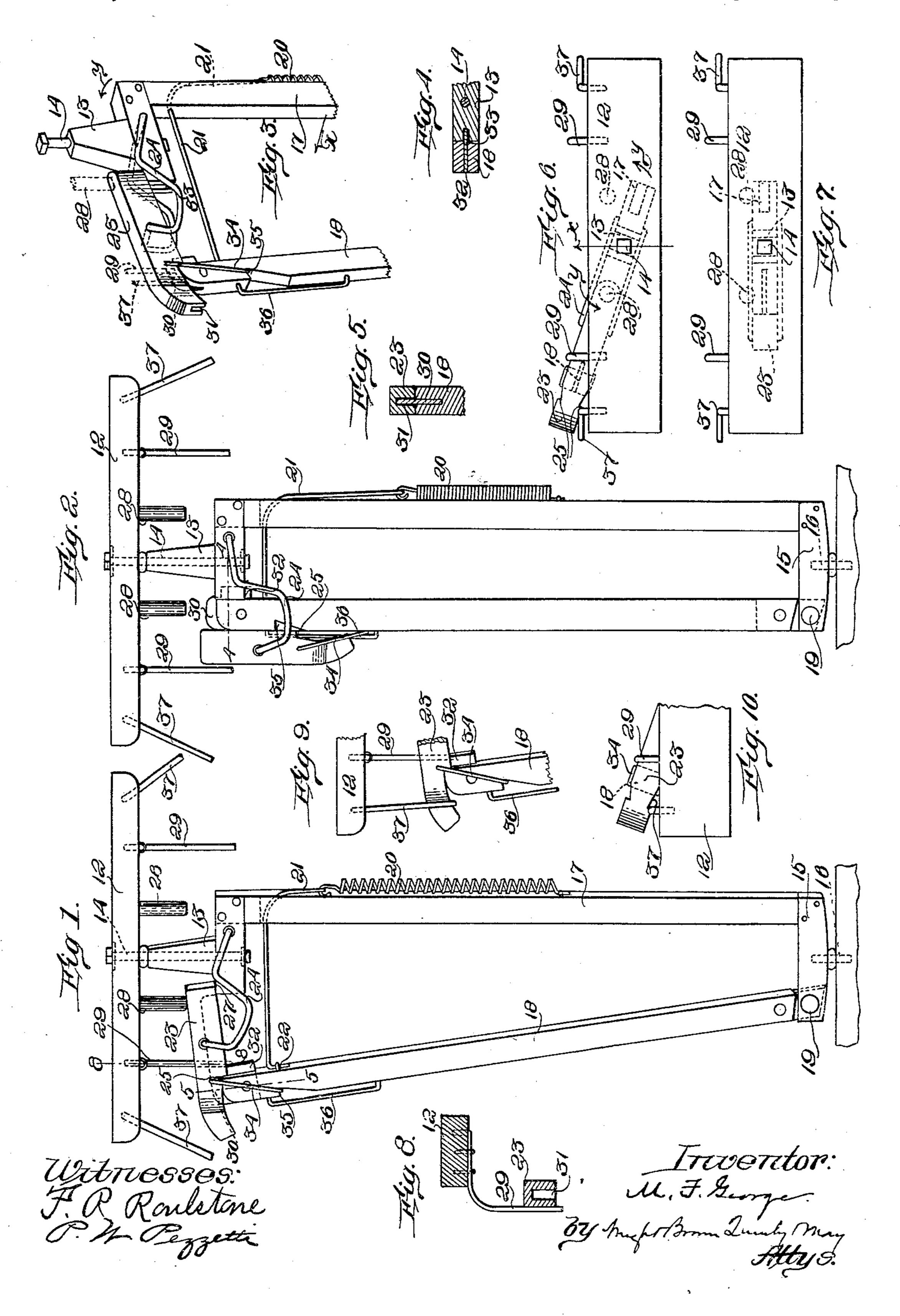
## M. F. GEORGE.

## CATTLE STANCHION.

APPLICATION FILED MAR. 29, 1909.

930,069.

Patented Aug. 3, 1909.



## UNITED STATES PATENT OFFICE.

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## CATTLE-STANCHION.

No. 930,069.

Specification of Letters Patent.

Patented Aug. 3, 1909.

Application filed March 29, 1909. Serial No. 486,465.

To all whom it may concern:

Be it known that I, MILLARD F. GEORGE, of Chelsea, in the county of Orange and State of Vermont, have invented certain new and useful Improvements in Cattle-Stanchions, of which the following is a specification.

This invention relates to a cattle stanchion which comprises head and foot blocks adapted to swing on vertical pivots in alinement with each other, and stiles forming the confining sides of the stanchion, one of the stiles being attached rigidly to the head and foot blocks, while the other stile is hinged to the 15 foot block and adapted to swing toward and from the opposite stile to open and close the stanchion.

The invention has for its object to provide a stanchion of this character in which the closing movement of the swinging stile shall be effected by the entrance of the animal's head and a portion of the body between the two stiles, the swinging stile being automatically moved to its closed position, so that a cow entering the stanchion will lock herself therein.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification,—Figure 1 represents a side view of a stanchion embodying my invention, the stanchion being open. Fig. 2 represents a view similar to Fig. 1, 35 showing the stanchion closed. Fig. 3 represents a perspective view of the upper portion of the stanchion body adjusted as shown in Fig. 1. Fig. 4 represents a section on line 4—4 of Fig. 2. Fig. 5 represents a section 40 on line 5—5 of Fig. 1. Fig. 6 represents an end view of the entire stanchion in the adjustment shown in Fig. 1. Fig. 7 represents a view similar to Fig. 6, showing the stanchion in the adjustment represented by 45 Fig. 2. Fig. 8 represents a section on line 8-8 of Fig. 1. Fig. 9 represents a view similar to a portion of Fig. 1, showing the adjustable stop hereinafter referred to in its operative position. Fig. 10 represents a top 50 view of the portion shown in Fig. 9.

The same reference characters indicate the same parts in all the figures.

In the drawings, 12 represents a fixed part of the stanchion, which I term a head plate,

the same being preferably composed of wood 55 adapted to be bolted or otherwise attached to an overhead support in a stable or tie-up.

The movable portion of the stanchion, which I term the stanchion body, is composed of a head block 13 connected by a pivot 60 bolt 14 with the head plate 12, a foot block 15 connected by a pivot bolt 16 with a supporting base such as a stable floor, the latter having a socket to receive the bolt, a body stile 17 rigidly attached at its ends to the 65 head and foot blocks, and a swinging stile 18, the lower end of which is pivoted or hinged at 19 to the foot block, the swinging stile being movable toward and from the body stile, and adapted to occupy an open 70 position, as shown in Figs. 1, 3, and 6, and a closed position, as shown in Figs. 2 and 7.

Means are provided for automatically moving the swinging stile to its closed position, said means as here shown, comprising 75 a spring 20 connected at one end with the body stile 17, and a flexible cord 21, or other connection, attached to the other end of the spring, and passing through an orifice in the body stile, one end of the said connection 80 being attached at 22 to the swinging stile. When the swinging stile is in its open position, the spring is extended and acts to move the swinging stile to its closed position, when the latter is released from engagement with 85 the locking means, hereinafter described.

23 represents a locking member which is preferably a wooden bar loosely connected with the head block 13 by a two-armed shackle 24, preferably formed as shown in 90 Figs. 1, 2, and 3, the shackle being loosely pivoted at one end to the head block and at the other end to the locking member. In the under side of the locking member is formed a notch 25 which is adapted to en- 95 gage the upper end of the swinging stile 18, the inner end of the locking member at the same time engaging one side of the head block 13, and resting on a shoulder 27 formed thereon. The locking member in this posi- 100 tion acts as a strut to hold the swinging stile in its open position against the stress of the spring 20.

28 represents a fixed detent attached to the head plate 12, said detent being a short stud 105 projecting downwardly from the head plate and adapted to bear on the upper side of the locking member 23, and hold the inner end

of said member down upon the shoulder 27 when the stanchion body is adjusted relatively to the head plate, as indicated in

Fig. 6.

It will be observed by reference to Fig. 6 that under this adjustment of the stanchion body, the body stile 17 is so projected that the shoulder or the thicker portion of the neck of an animal whose head is entering 10 the stile in the direction indicated by the arrow x (Figs. 3 and 6) will encounter the body stile before encountering any other portion of the stanchion body, and will therefore impart a partial rotation to the stanchion body 15 in the direction indicated by the arrows y-y. This movement of the stanchion body will remove the locking member 23 from under the detent 28, thus releasing the locking member, and permitting the spring 20 20 to move the swinging stile to its closed position, the loose connection between the locking member and the head block afforded by the shackle 24 permitting the inner end of the locking member to swing upwardly 25 under the pressure exerted on it by the spring until the notch 25 of the locking member is disengaged from the upper end of the swinging stile, the latter swinging under the locking member, which finally drops 30 against the outer side of the swinging stile, as shown in Fig. 2, thus confining the swinging stile in its closed position.

It will be seen from the foregoing that the stanchion body is automatically closed by 35 the animal entering it, so that the animal can be properly said to lock herself in, the space between the stiles when the stanchion body is closed, being so narrow as to prevent the withdrawal of the animal's head from be-

40 tween the stiles.

29 represents a fixed back stop rigidly attached to the head plate 12, and projecting downwardly therefrom in position to bear upon the back side of the locking member 23, 45 when the stanchion body is open and adjusted as shown in Figs. 1 and 6, said stop being preferably a bent metal rod formed and secured to the head plate as indicated in Fig. 8. The back stop 29 enables the stan-50 chion body to be adjusted to the predetermined position shown in Fig. 6, this being the position required to cause the detent 28 to engage the locking member 23. The movement of the stanchion body caused 55 by the contact of the animal with the body stile 17, moves the locking member 23 away from the back stop 29.

The upper end of the swinging stile 18 is provided with an upwardly projecting metal 60 tenon 30 adapted to enter a groove 31 formed in the under side of the locking member 23, thus preventing relative displacement of the locking member and the swinging stile when the latter is locked in its open 65 position. The upper end of the swinging

stile is also provided with a laterally projecting tenon 32 which enters a groove 33 formed in one end of the head block 13 when the swinging stile is in its closed position, provision being thus made for preventing 70 relative displacement of the swinging stile and the head block when the stanchion body is closed.

34 represents a swinging shackle which engages a notch 35 formed in the outer side of 75 the swinging stile, said shackle constituting a stop which limits the outward swinging movement of the swinging stile when the latter is locked in its open position.

36 represents a guide for the shackle 34, 80 said guide being attached to the swinging stile and extending across the notch 35 to prevent the shackle 34 from swinging loosely

away from the stile 18.

37 represents an adjustable front stop 85 which has a swinging connection with the head plate 12, and is adapted to be adjusted to bear on the outer side of the locking member 23, as shown in Figs. 9 and 10, when for any reason it is desired to prevent the 90 stanchion body from being closed by contact of an animal's body with the body stile 17. Normally, the adjustable stop 37 will be adjusted as indicated in Figs. 1, 2, 6, and 7, in which position it is inoperative.

I do not limit myself to the details of construction here shown and described, and the same may be variously modified without departing from the spirit of my invention.

Duplicates of the detent 28, and stops 29 100 and 37 are preferably provided, as shown in Figs. 1, 2, 6, and 7, to enable the position of the stanchion body to be changed to locate the swinging stile at the right hand side instead of at the left hand side, as here shown. 108

1 claim:

1. A swivel stanchion comprising a body having a body stile located at one side of the axis of the stanchion, and a swinging stile located at the opposite side of said axis, 110 means for automatically moving the swinging stile to its closed position, the body being partly rotatable by inward pressure against the body stile, and means for locking the swinging stile in its open position when the 118 body is in a predetermined position, said means being made inoperative by a rotary movement of the stanchion body from said position.

2. A swivel stanchion comprising a body <sup>120</sup> having a body stile located at one side of the axis of the stanchion, a swinging stile located at the opposite side of said axis, means for automatically moving the swinging stile to its closed position, a fixed back stop for pre- 12! venting a rotary movement of the body by inward pressure against the swinging stile, the body being rotatable by inward pressure against the body stile, and means for locking the swinging stile in its open position when 130

the body is in a position determined by said stop, said means being made inoperative by a rotary movement of the stanchion body

from said position.

3. A swivel stanchion comprising a body composed of pivoted head and foot blocks, a body stile rigidly attached thereto, and a swinging stile hinged to the foot block, means for automatically moving the swing-10 ing stile to its closed position, and a head plate adapted to be attached to an overhead support, and supporting the pivot of the head block, the stanchion body and head plate being provided with coöperating means 15 for locking the swinging stile in its open position and for causing the release of the swinging stile by a partial rotation of the stanchion body.

4. A swivel stanchion comprising a body 20 composed of a body stile, pivoted head and foot blocks rigidly attached thereto, the body stile being located at one side of the axis of the stanchion, and a swinging stile hinged to the bottom member and located at the op-25 posite side of said axis, the swinging stile being movable to open and close the stanchion, means for automatically moving the swinging stile to close the stanchion, means carried by the stanchion for locking the 30 swinging stile in its open position, and means for engaging and controlling the locking means according to the position of the stanchion, whereby, when the stanchion is adjusted for the reception of an animal's head, 35 pressure tending to partially rotate the stanchion on its axis will be exerted on the body stile by a shoulder of an animal whose head is entering the stanchion, said locking means being rendered inoperative by the said par-40 tial rotation of the stanchion to permit the closing movement of the swinging stile.

5. A swivel stanchion comprising a body composed of head and foot blocks mounted to swing on alined pivots, a body stile rigidly 45 attached to the said blocks and located at one side of the axis of the stanchion, a swinging stile hinged to the foot block and located at the opposite side of said axis, means for automatically moving the swinging stile to its 50 closed position, a locking member loosely connected with the stanchion and adapted to be interposed as a strut between the head block and the swinging stile when the latter is in its open position, and a fixed detent adapted to hold the locking member in its interposed position when the stanchion is adjusted for the reception of an animal's head, the locking member being separable from the detent by a partial rotation of the stanchion to permit the closing movement of the swinging stile, and adapted to hold the said stile in its closed position.

6. A swivel stanchion comprising a head plate adapted for attachment to an overhead support, a stanchion body composed of a

head block pivoted to the head plate, a foot block pivoted to a supporting base, a body stile rigidly attached to said blocks, a swinging stile hinged to the foot block, means for automatically moving the swinging stile to 70 its closed position, and a locking member loosely connected with the stanchion body and adapted to be interposed as a strut between the head block and the swinging stile, the head plate being provided with a 75 fixed back stop adapted to bear on the rear side of the locking member when the latter is in its interposed position, and prevent rotation of the stile body in one direction, and with a fixed detent adapted to bear on the so upper side of the locking member and confine the same in its interposed position, the stile body being movable by an animal's body to separate the locking member from the said back stop and detent and permit the closing 85 movement of the swinging stile.

7. A swivel stanchion comprising a body having a body stile located at one side of the axis of the stanchion, a swinging stile located at the opposite side of said axis, means for 90 automatically moving the swinging stile to its closed position, a locking member loosely connected with the stanchion body and adapted to engage the swinging stile and lock the same in its open position, means for 95 engaging and controlling the locking member according to the position of the stanchion, a fixed back stop adapted to bear on the back side of said locking member and prevent rotary movement of the body by inward pres- 100 sure against the swinging stile, and an adjustable front stop adapted to be removably located in position to bear on the front side of said locking member, and to coöperate with the back stop in preventing a rotary 105 movement of the stanchion body in either direction whereby the stanchion may be locked with the swinging stile in its open position.

8. A swivel stanchion body comprising 110 pivoted head and foot blocks, a body stile, a swinging stile, a spring for automatically moving the swinging stile to its closed position, a locking member adapted to be interposed between the head block and the swing- 115 ing stile to hold the latter in its open position, a fixed detent adapted to hold the locking member in its interposed position when the stanchion is adjusted for the reception of an animal's head, and a shackle pivoted to the 120 head block and to the locking member and loosely connecting said parts in such manner as to permit the locking member to be removed from its interposed position and adjusted to hold the swinging stile in its closed 125 position.

9. A swivel stanchion body comprising pivoted head and foot blocks, a body stile, a swinging stile having an end tenon and a side tenon at its upper end, means for automat- 130

ically moving the swinging stile to its closed position, a locking member loosely connected with the head block and having a longitudinal groove adapted to receive the end tenon, and a notch adapted to engage the upper end of the swinging stile, the head block being provided with a groove which receives the side tenon when the swinging stile is in its

closed position. 10 10. A swivel stanchion body comprising pivoted head and foot blocks, a body stile, a swinging stile, means for automatically moving the swinging stile to its closed position, a locking member adapted to be inter-15 posed between the head block and the swinging stile to hold the latter in its open position, and a shackle pivoted to the head block and to the locking member and loosely connecting said parts in such manner as to permit the 23 locking member to be removed from its interposed position and adjusted to hold the swinging stile in its closed position, the locking member being provided with a swinging shackle adapted to engage a notch in the

outer side of the swinging stile when the 25

latter is in its open position.

11. A swivel stanchion comprising a body stile, head and foot blocks rigidly attached thereto, a swinging stile hinged to the foot block, a spring connection between the two 30 stiles adapted to move the swinging stile to its closed position, means carried by the stanchion for locking the swinging stile in its open position against the stress of the spring when the stanchion is in a predetermined position, and means for engaging and controlling the locking means according to the position of the stanchion, whereby the swinging stile is released, and the spring is permitted to close it when the stanchion is moved from 40 said predetermined position.

In testimony whereof I have affixed my

signature, in presence of two witnesses.

MILLARD F. GEORGE.

Witnesses:
OSCAR F. ALLEN,
ARTHUR H. MOREY