C. M. STEVENSON.

CATTLE STANCHION AND SUPPORT THEREFOR.

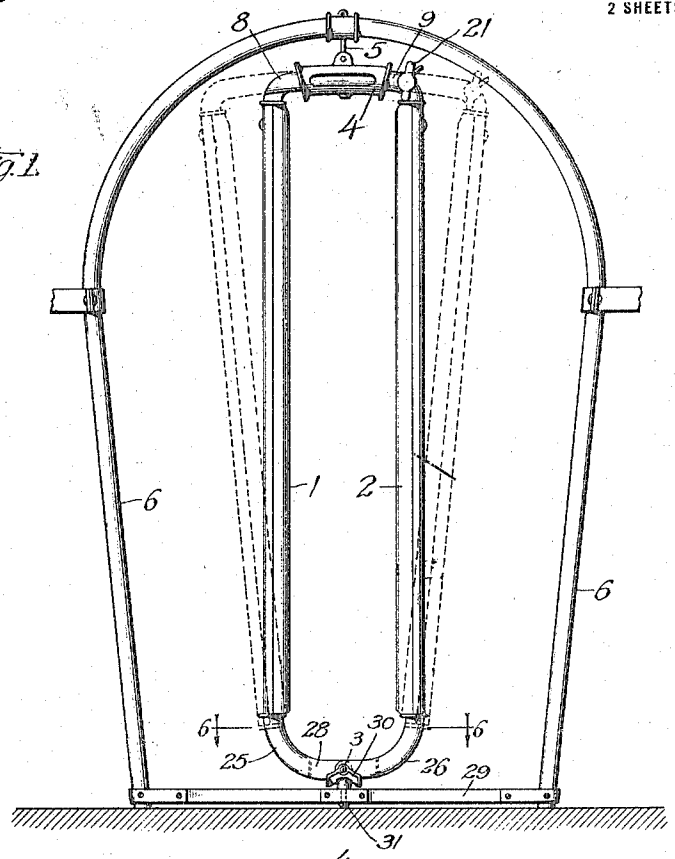
APPLICATION FILED MAY 28, 1917.

1,286,440.

Patented Dec. 3, 1918.

2 SHEETS—SHEET 1.

Fig. 1.



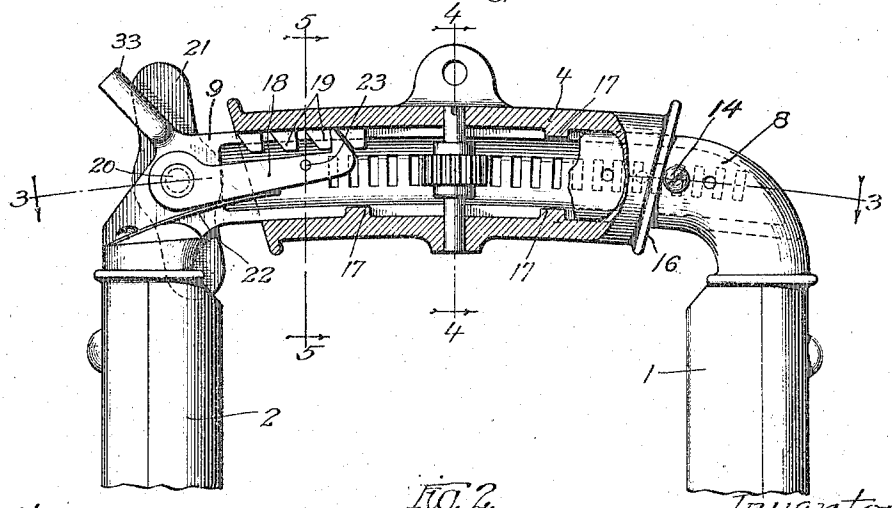


Fig. 2.

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2 SHEETS—SHEET 2.

Fig. 3.

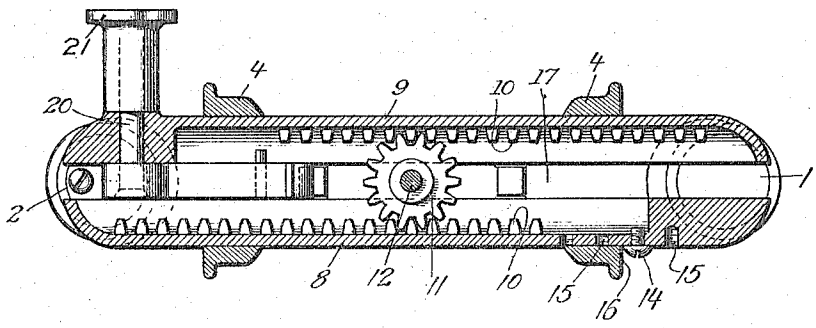


Fig. 4.

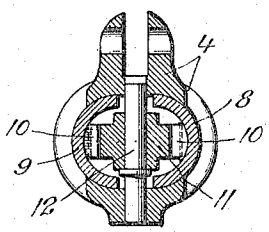


Fig. 5.

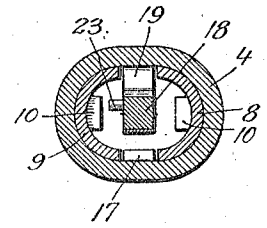
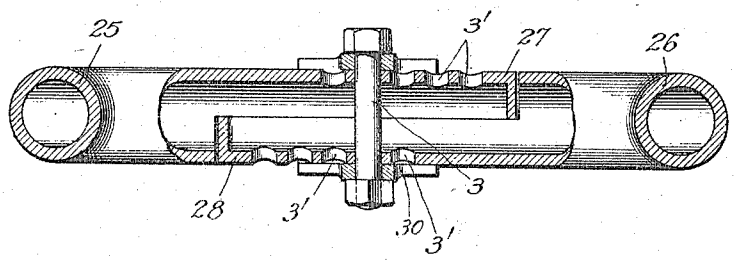


Fig. 6.



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UNITED STATES PATENT OFFICE.

CHARLES M. STEVENSON, OF ROCKFORD, ILLINOIS.

CATTLE-STANCHION AND SUPPORT THEREFOR.

1,286,440. Specification of Letters Patent. Patented Dec. 3, 1918.

Application filed May 23, 1917. Serial No. 171,459.

To all whom it may concern:

Be it known that I, CHARLES M. STEVENSON, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Cattle-Stanchions and Supports Therefor, of which the following is a description.

My invention belongs to that general class of devices known as stanchions, and relates particularly to an improved stanchion and supporting stall frame therefor, for use wherever found applicable. The invention has among its objects the production of a device of the kind described that is simple, convenient, durable, compact, ornamental, efficient and satisfactory. It has particularly as an object the production of an improved double acting stanchion, that is to say one in which the stanchion parts may be both opened and closed. With the construction herein described the opening or closing of one, or limiting the movement of one, or locking one, at the same time controls the other one. It also has among its objects the production of a support or stall frame for carrying the stanchion, which is so formed as to make the use of stop bars or the like unnecessary. The stanchion is adjustable for different sized stock in a simple and convenient manner. Many other objects and advantages of the construction herein shown and described will be obvious to those skilled in the art from the disclosure herein made.

To this end my invention consists in the novel construction, arrangement and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts,

Figure 1 is a view of a stanchion and supporting frame therefor, the front side of the same being shown;

Fig. 2 is a view of the opposite side of the stanchion head, a portion broken away to more clearly show the construction;

Fig. 3 is a sectional view taken substantially on line 3—3 of Fig. 2;

Fig. 4 is a sectional view taken substantially on line 4—4 of Fig. 2;

Fig. 5 is a sectional view taken substantially on line 5—5 of Fig. 2, and

Fig. 6 is a sectional view taken substantially on line 6—6 of Fig. 1, a portion broken away to show the construction.

Referring to the drawings, in which the preferred embodiment of the invention is shown, 1 and 2 represent the two stanchion frames or parts, which may be pivotally secured together at 3 in the manner hereinafter described, or in an equivalent way. The upper ends of the stanchions are slidably secured in a head bar or part 4, which is secured by means of a link 5, or equivalent connecting means, to the stall frame or stanchion support 6, or the equivalent, constructed in any desired manner. One part of the stanchion, as shown in part 1, is provided with an extending part 8, and the other part 2 with a similar extended part 9, at one side or above or below the other part, and each of the extending parts is formed with teeth 10, the parts constituting racks on the interior of the head. Arranged between the two parts 8 and 9, at the center of the head 4, is a gear or pinion 11, which is rotatably mounted on a shaft 12 carried by the head. The shaft is shown as extending vertically, but, of course, if the parts 8 and 9 are arranged one over the other, the shaft would extend horizontally. The gear 11 is arranged to engage with the rack teeth 10 on the two stanchion parts 8 and 9, so that as one part is moved its motion or movement will be transmitted by means of the gear to the other part, and move the same in the opposite or reverse direction.

The movement of the stanchion parts in closing may be controlled or limited in any desired manner. For the purpose I have shown a screw 14, which may be placed in any one of the holes 15, and which will cooperate with the face 16 at the end of the head 4, and limit the movement of the stanchion in closing. To lock the stanchion closed, or in operative position, I provide a latch 18, adapted to coöperate with and engage the desired lug or tooth 19 on the head, the latch being preferably pivotally secured to one of the stanchion parts. As shown it is pivotally secured to the end of stanchion part 2, on the part 9, by shaft 20, upon which may be arranged a handle 21. It will be noted that the end of the latch 18 and the teeth 19 at one side are beveled, so that the parts may be thrown or pushed together and locked without operating the handle. The particular tooth 19 engaged will, of course,

depend upon the position of the locking screw 14, or other limiting device. The latch is also shown with a pin 23, arranged to engage with the top or bottom of the side part 9, to limit the movement of the latch on its pivot or shaft 20. A spring 22 is shown for normally maintaining the latch in operative engaging position.

If desired, lugs 17 may be arranged on the head as shown, the same engaging with the edges of the parts 8 and 9, causing the same to run true in the head so that they do not bind.

As before mentioned, the lower ends of the stanchion, parts 1 and 2 may be anchored or secured in any suitable manner. As shown, the same are extended as at 25 and 26, the extensions being formed to overlap, as at 27—28. (See Fig. 6). The overlapping ends are pivotally secured together by the bolt or pin 3, extending through the desired holes 3′ in the two parts. The bolt 3 also secures the parts to a shackle 30, which is suitably secured to the stall frame or to the curb or floor of the barn. In the construction shown the shackle 30 is provided with a stud or lug 31, arranged to pivotally secure the shackle to a bar 29 connected to the frame parts 6. The construction and fastening of the bar 29 need not be entered into in detail herein, as this forms the subject-matter of a separate application.

It will be noted by referring to Fig. 1, that the frame or stall head 6 shown is substantially in the shape of a horseshoe, that is it is an inverted U with the legs converging or extending inwardly and supported at their free ends. When the stanchion parts 1 and 2 are thrown to the open position, as indicated by the dotted lines in Fig. 1, it will be noted that they lie substantially parallel with the sides 6—6, so that there is not sufficient space between the stanchion and the stall head into which the cattle can insert their heads. This makes the use of stops and like devices arranged to be positioned between the stall frame and the stanchion unnecessary, the animal placing its head centrally in the stall. The same also has an ornamental appearance and is exceedingly comfortable for the stock. While only one stanchion and stall are shown, it is obvious that others may be added thereto to the desired extent, and partitions arranged between them. It may also be noted that with the construction shown the stanchion frame 6—6, and base 29, may be set up at the factory and shipped as one unit, so that upon the installation of the frame 6—6 the stanchion is installed. Any other style of stall frame might be used with the stanchion shown.

When it is desired to open the stanchion, assume that it is shut as shown in Fig. 1, the handle 21 may be operated so as to release the part 8 and the stanchion opened. Movement of one will positively throw the other to open position. The same will be stopped or limited in opening by the forked part 33, engaging with the stall head frame, or by the parts 8 and 9 engaging the gear. Upon closing the parts and locking the cattle in the stanchion, it is only necessary to operate or move one of the stanchion parts into the closed position, and this will at the same time close the other, and the latch 18 will automatically lock them shut. By shifting the stop 14 in the head and adjusting the lower end by shifting the bolt 3 into a different hole 3′, the stanchion may be made to fit a large or small animal. By employing a plurality of teeth or lugs 19, the parts may, of course, be locked as desired.

Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention; hence I do not wish to be understood as limiting myself to the exact form, construction, arrangement or combination of parts herein shown and described, or uses mentioned.

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

1. In a stanchion of the kind described, two co-acting stanchion members, means for operatively securing the lower ends of said members, a head part arranged at the upper end of said members, each stanchion member having an extending part at its upper end projecting into said head, said extending parts spaced from each other and provided with teeth on their adjacent sides, lugs on the interior of said head for spacing and guiding said parts, a gear arranged between said extending parts, and in mesh with said teeth, said gear rotatably mounted in said head on a vertical axis, said head part provided with a plurality of teeth on the interior thereof, and means carried by the extending part of one stanchion member for engaging said teeth and locking the stanchion against opening.

2. The combination of a stall frame, consisting of a substantially inverted U-shaped part, with the legs of the part inclined toward each other and supported at the ends thereof, and a stanchion consisting of two co-acting members suitably secured at their lower ends, a head part carried by said stall frame, said stanchion members each having a part projecting into said head, and means arranged in said head for transmitting the movement of one stanchion part to the other, but in the opposite direction.

3. In a device of the kind described and in combination, a stanchion, consisting of two co-acting parts suitably anchored at their lower ends, means for slidably carry-

ing the upper ends of said stanchion members, comprising a head, a stall frame provided with means for carrying said head, said stall frame substantially U-shaped in form with the lower ends inclined inwardly toward each other, whereby when the stanchion parts are open the sides of the frame extend substantially parallel therewith.

4. The combination with a double acting stanchion of a supporting stall frame therefor, consisting of a substantially inverted U-shaped part supported at the free ends of the legs of the U, the legs of said part being bent inwardly toward each other at their lower ends, whereby the legs extend substantially parallel with the stanchion parts when in opened position.

5. The combination of a stall frame, consisting of a substantially U-shaped part, with the ends extending inclined toward each other and supported thereat, a stanchion, comprising two co-acting members suitably anchored at their lower ends, a head carried by said stall frame, said stanchion members each having a part at its upper end projecting into the opposite ends of said head, said parts spaced from each other and formed with teeth on the adjacent faces to constitute a rack, a pinion rotatably arranged in said head and in mesh with the teeth on said rack, means for locking said members in the desired position including a latch carried by one member, and arranged to engage said head, and means for operating said latch.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

CHARLES M. STEVENSON.

Witnesses:

L. C. ALLMAN,

GEO. F. WOOD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."