H. L. FERRIS.

STANCHION.

APPLICATION FILED NOV. 29, 1909.

999,364. Patented Aug. 1, 1911.

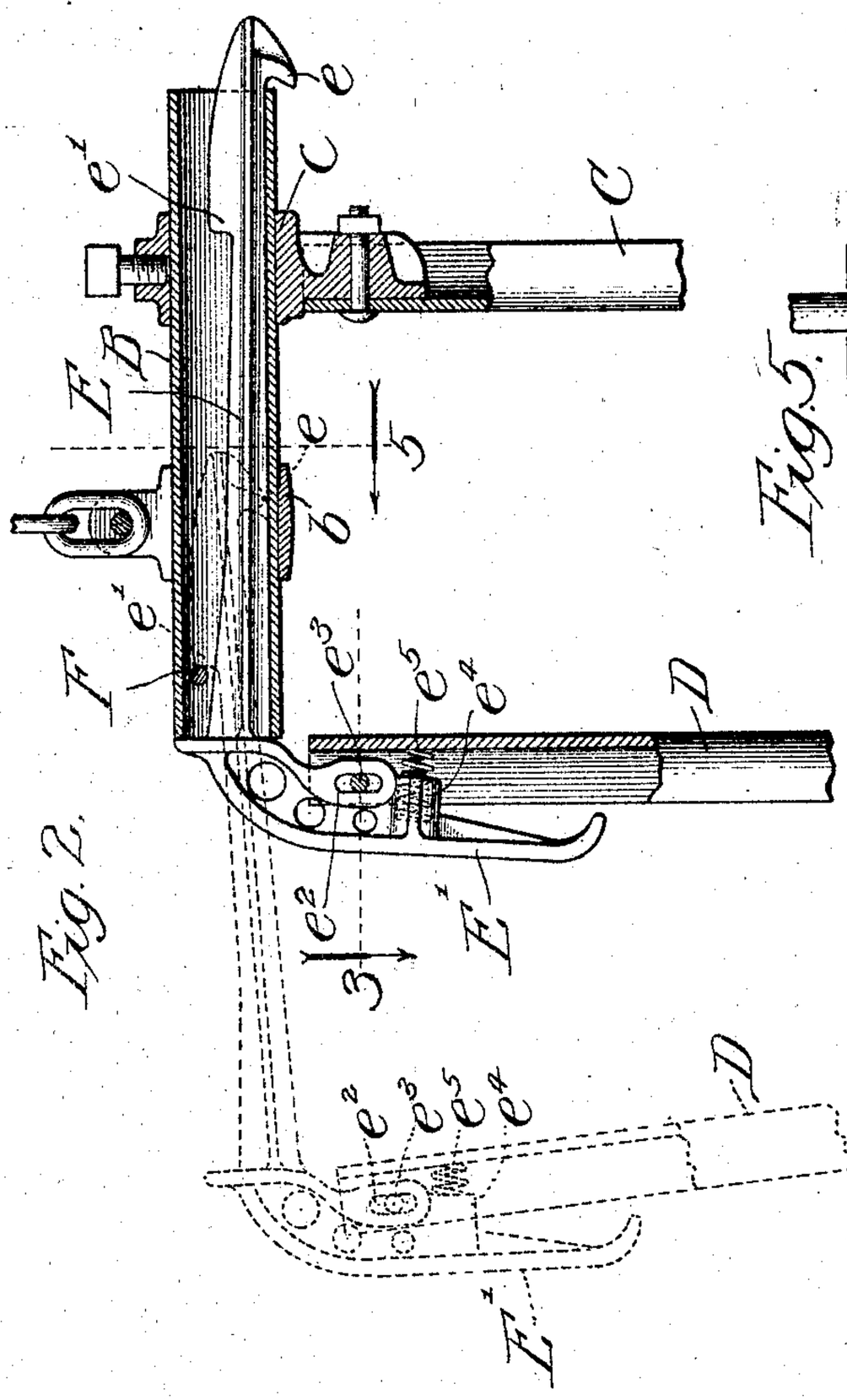

Fig. 2.

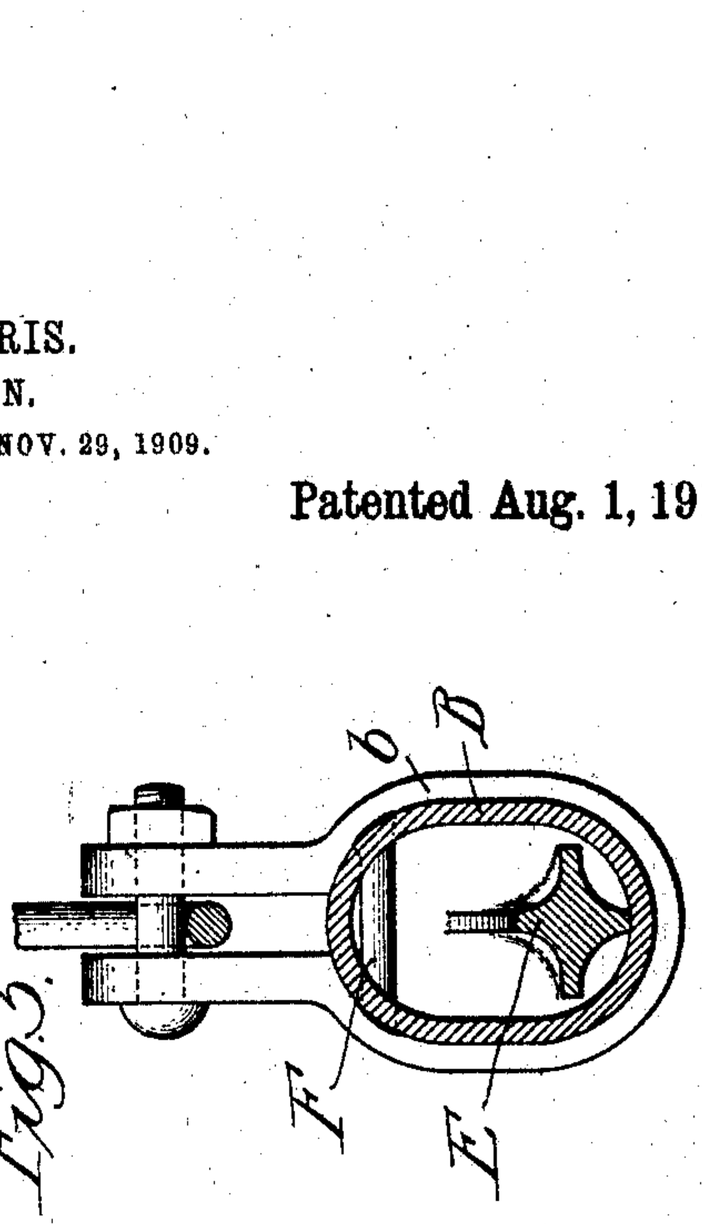

Fig. 5.

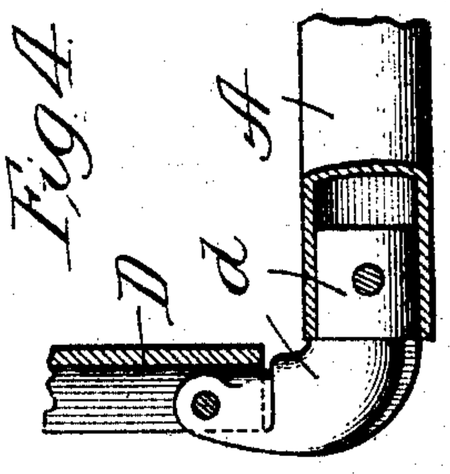

Fig. 4.

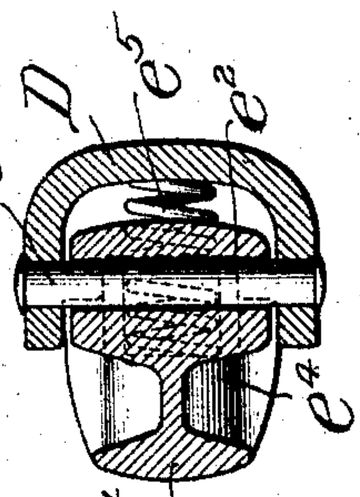

Fig. 3.

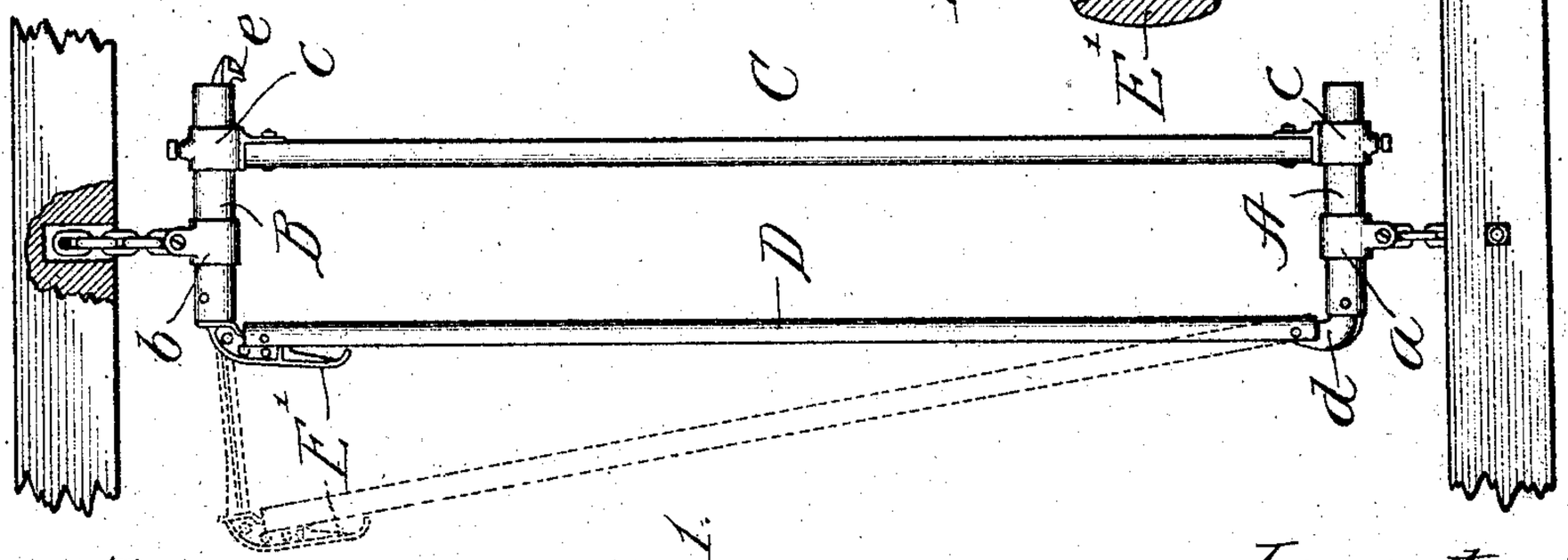

Fig. 1.

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UNITED STATES PATENT OFFICE.

HENRY L. FERRIS, OF HARVARD, ILLINOIS, ASSIGNOR TO HUNT, HELM, FERRIS & COMPANY, OF HARVARD, ILLINOIS, A CORPORATION OF ILLINOIS.

STANCHION.

999,364. Specification of Letters Patent. Patented Aug. 1, 1911.

Application filed November 29, 1909. Serial No. 530,414.

To all whom it may concern:

Be it known that I, HENRY L. FERRIS, a citizen of the United States, residing at Harvard, in the county of McHenry and State of Illinois, have invented a new and useful Improvement in Stanchions, of which the following is a specification.

My invention relates to new and useful improvements in stanchions, and is fully described and explained in the specification and shown in the accompanying drawing, in which—

Figure 1 is an elevation of my improved stanchion showing the position which the parts occupy in use, and, in addition, in dotted lines, a movable side in its open position; Fig. 2 is a detailed transverse section of the upper portion of the stanchion, the closed position being indicated in solid lines and the open position in dotted lines; Fig. 3 is a section on the line 3 of Fig. 2; Fig. 4 is a detailed view of the pivot at the lower portion of the movable member, the frame being broken away in central section for the purpose of illustrating the parts; and Fig. 5 is a section on the line 5 of Fig. 2.

Referring to the drawings, A and B are tubes which form the bottom and top, respectively, of the stanchion. The tubes carry brackets *a*, *b*, respectively, to which are secured the supporting chains of the stanchion, and the said brackets are adjustable upon their respective tubes in order that the stanchion may be at all times properly balanced, whatever be the position of its stationary, but adjustable, sides.

C is the stationary side of the stanchion, the same being formed of an outwardly facing metal channel beam of U-shaped cross section secured to the top and bottom of the stanchion by bracket *c*, held in place by set screws and capable of adjustment to accommodate the stanchion to animals of different sizes. As this stationary side is adjusted it will be obvious that the center of gravity of the stanchion will be shifted, and it is to permit the stanchion to be supported at all times in line with the center of gravity that the brackets *a*, *b* are made adjustable.

D is the movable side of the stanchion, which is made in the form of an outwardly-opening channel bar, the corners of which are rounded so that the bar is of U-shape in cross-section, in order that no sharp corners shall be brought in contact with the necks of the animals held by the stanchion. The pivotal support of the movable side of the stanchion is furnished by a bracket *d*, right-angled in form, one end of which is introduced into the corresponding end of the bottom-tube A of the stanchion, and the other end of which is turned up and pivoted between the flanges of the movable member D of the stanchion.

Within the tube B at the top of the stanchion lies a locking-bar E, at the end of which is a downwardly-turned hook *e* and which is provided, at a distance from that hook, with an upwardly-projecting shoulder e^1. The locking-bar is provided with a downwardly-extending handle E^1, which is slotted at e^2, a pin e^3 extending through said slot and being secured between flanges of the channel-bar which forms the movable member D of the stanchion. The handle E^1 is cast with a bore e^4 which receives within it a spring e^5, the tendency of which is to rotate the locking-bar and its handle about the pivot formed by the pin e^3 in such a direction as to press the free end of the locking-bar downward, and when the handle is depressed it will be evident that the spring will be compressed and the hooked end of the locking-bar raised. The tube B is traversed near that end adjacent to the movable member of the stanchion by a pin F in position to be engaged by the shoulder e^1 upon the locking-bar.

The operation of the device will now be readily apparent. When the device is closed, pressure upon the handle will disengage the hook at the end of the locking-bar from the end of the upper member of the stanchion with which it normally engages, permitting the movable member of the stanchion to be swung outward laterally, so that an animal's head can pass between the side members of the stanchion, either in entering or leaving. The device can be closed with the greatest ease by simply pushing the movable member inward, and in such closing the locking-bar will, of course, be continuously guided by the tube within which it lies, so that no manipulation is necessary in closing the stanchion except to push the movable member. The engagement of the pin F with the shoulder upon the locking-bar obviously prevents the movable member from swinging open too far.

The device is advantageous because of its

simple construction, because of the adjustable features embodied in it, and because the locking-mechanism is entirely closed and is continuously guided by the inclosing-tube from its open position to its closed position. It is thus apparent that no matter how loose-jointed the pivots of the stanchion may become with wear, and, of course, the pivot is so designed as to resist wear as long as possible, the upper or free end of the movable side of the stanchion is always guided independent of the pivots, so that one hand will always open and close the stanchion by a single and simple manipulation.

I realize that considerable variation is possible in the details of construction of my improved device, without departing from the spirit of my invention, and I do not intend, therefore, to limit myself to the specific form herein shown and described.

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

In a stanchion, tubular top and bottom bars, slidable brackets on said bars, a side bar connected to said brackets, means for securing said brackets in adjusted position, a second side bar pivoted at its lower end to the bottom bar, a locking bar adapted to pass through said top bar and having a handle portion mounted on said side bar and having slot and pin connection therewith and provided at its forward end with a hook adapted to engage the outer end of the top bar, a shoulder in the rear of said hook, a stop adjacent the forward end of said top bar wherewith said shoulder is adapted to engage in the withdrawal movement of said locking bar, a spring-carrying bore on said handle located below its slotted connection with the side bar, a spring in said bore, whereby the hook end of said locking bar is caused to engage the outer end of the tubular top bar, and to be disengaged therefrom when said handle is depressed, for the purpose set forth.

HENRY L. FERRIS.

In presence of—
SAM E. MAY,
W. A. DILLEY.