

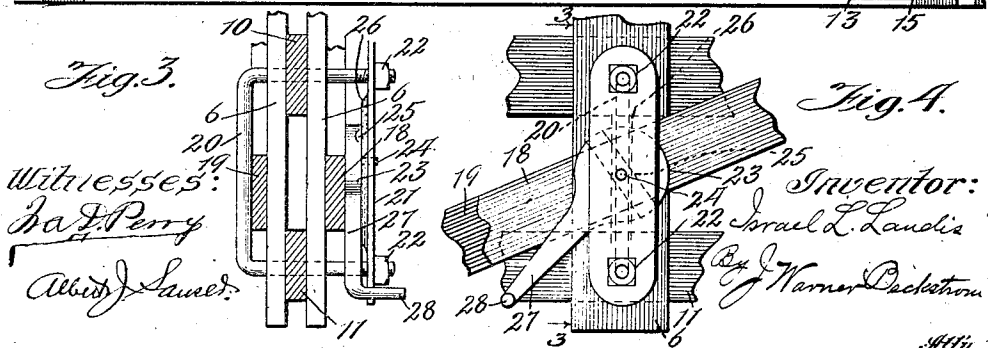
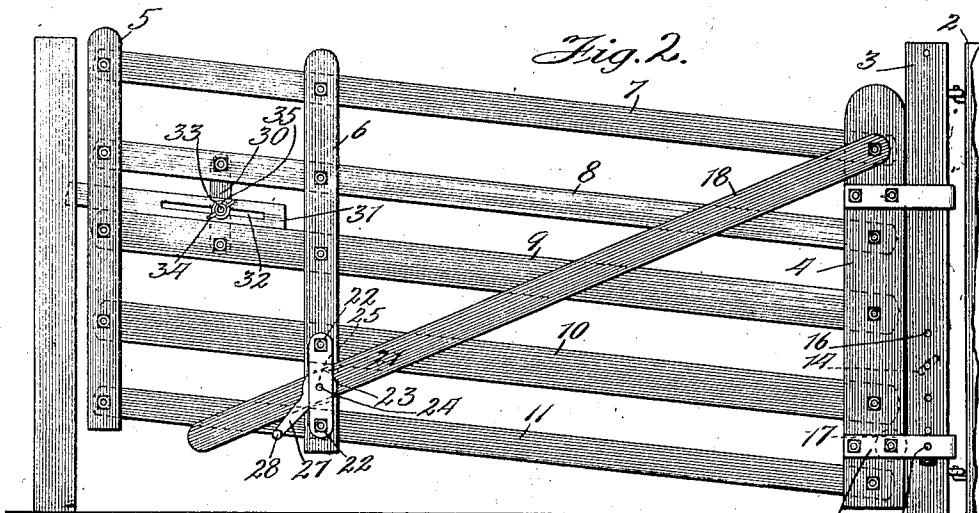
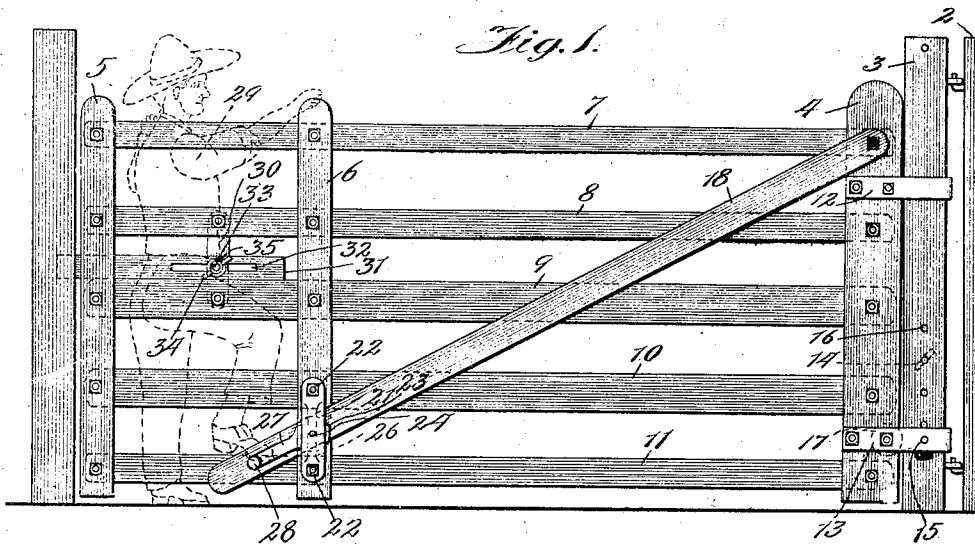
I. L. LANDIS.

GATE.

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948,229.

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UNITED STATES PATENT OFFICE.

ISRAEL L. LANDIS, OF CHICAGO, ILLINOIS.

GATE.

948,229.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ISRAEL L. LANDIS, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Gates, of which the following is a specification.

My invention relates to swinging vertically and angularly adjustable gates, and has particular reference to gates adapted for farm inclosures where the same gate is to be used as a closure against both large and small stock and yet adjustable to permit the passage of small stock only.

The object of my invention is to provide an improved construction for a gate of this class to the end of securing better support for the gate and more convenient operation or adjustment thereof without thereby increasing the complexity or number of parts.

With the above-named objects in view the invention consists in the novel construction, combination and arrangement of parts, all as hereinafter described, illustrated in the drawing and particularly pointed out in the appended claim.

In the drawing—Figure 1 is a side elevation of a gate embodying my invention. Fig. 2 shows the gate in a different position. Fig. 3 is an enlarged detail view representing a section of the gate which includes the foot-operated locking mechanism. Fig. 4 illustrates the same parts as Fig. 3, but in a vertical plane at right angles to the vertical plane of Fig. 3.

Referring in detail to the several views, 2 represents the usual fixed gate post, 3 a swinging sub-post which is hinged to the fixed post, 4 and 5, the end battens of the gate proper, 6 intermediate battens, and 7, 8, 9, 10 and 11, the horizontal bars or rails which are pivoted to the battens. The battens are in pairs embracing both sides of the horizontal rails in the manner shown in Fig. 3. The battens 4, are slidable vertically against the contiguous face of the sub-post 3 and are provided with oppositely mounted plates 12 and 13, which are identical on both sides of the battens and are bolted through the latter. The free ends of these plates are bent partly over the lateral face of the sub-post so as to leave a space between the bent over ends of each pair of plates so the hinges between sub-post and fixed post may pass, or be passed, between said ends and limit the movement of said battens.

against said post to a longitudinal one only, limited only by the stop pins, one at the top and an adjustable one at the bottom end. Said battens are supported in any desired position by means of a pin 14 which is inserted through holes 15 in the plates 13 and holes 16 in the sub-post 3. Between the battens 4 and near the heel of the gate is mounted an anti-friction roller 17. The frame of the gate is held rigidly in its rectangular form shown in Fig. 1 and in its different oblique forms, one of which is shown in Fig. 2, by means of a double diagonal brace bar, 18, 19, which is pivotally connected at its upper end with the battens 4. At its lower extremity said brace is slidable longitudinally between the outer faces of the battens 6 and a clamping device. The latter comprises a clip 20, plate or strap 21, 75 and nuts 22 threaded on the clip. Normally the function of the clip and its strap is merely that of an adjustable guide for the lower end of the diagonal brace bar.

In conjunction with the clip and strap I have provided a convenient and instantaneously operable cam-disk 23 which is inserted between the strap 21 and brace-bar 18 and pivoted at 24 in the strap. Diametrically across the face of the disk 23 is a recess 25 with sloping sides and in the inner face of the strap is a rib or projection 26 which fits into the recess 25. By means of the nuts 22 the parts embraced by the clip and strap are adjusted into substantially contacting proximity to each other, but not so as to prevent free sliding movement of the brace-bars. When the parts are so adjusted the brace may be tightly clamped against the frame of the gate by turning the disk with the aid of a lever 27 extending therefrom. This crowds or forces the rib out of the channel or recess 25 and in between the face of the disk and the strap, thus causing a close frictional engagement between the brace bars and the gate sufficiently to hold the slidable end of the brace immovable with respect to the frame of the gate. In order to save the operator the trouble of stooping down to manipulate the lever, the latter is provided with a treadle or foot piece 28 which is shown in the form of a crank pin extending at right angles from the end of the lever. The clamp is tightened by stepping on this pin as shown by the figure 29 in the first view, where the cam is shown in its unclamped position, or with the rib in the

recess 25. In Fig. 2 the lever is shown moved downward and the clamp tightened on the brace. Release from the last named position is effected by placing the operator's
5 toe underneath the pin 28 and lifting instead of depressing the lever.

The gate is also provided with an improved latching device which consists of a cross-bar 30 bolted to the horizontal rails 8
10 and 9 and a slide bar 31 having a slot 32 therein which is engaged by a bolt 33 passing through the cross-bar 30. The head of the bolt engages the rear face of the cross-bar and a thumb-nut 34 and washer 35 are
15 arranged on the forward face of the latch bar 31. Tightening of the thumb-nut clamps the latch bar against the cross-bar and holds the former in a fixed position. By pivoting
20 the brace-bar to the battens 4, instead of the sub-post, the bracing of the gate is not varied by the vertical adjustment of the gate on the sub-post. The engagement of the pin

14 with the straps and perforations 16 effects a positive support, both upward and downward, of the gate relative to the sub-post. 25

I claim as my invention—

The combination with a vertically and angularly adjustable gate having a brace-bar 18 pivoted at its upper end and having an imperforate and free lower end, of a lever-
30 operated clamping device for said lower end, said device comprising a relatively adjustable clip and strap and a cam-disk 23 between said strap and brace-bar which is operable to loosen or tighten its hold upon said
35 lower end of brace bar.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ISRAEL L. LANDIS.

Witnesses:

ALBERT J. SAUSER,
M. C. ALLEN.