A. CALLAHAN.

Farm-Gate.

No. 165,709. Patented July 20, 1875.

Fig. 1.

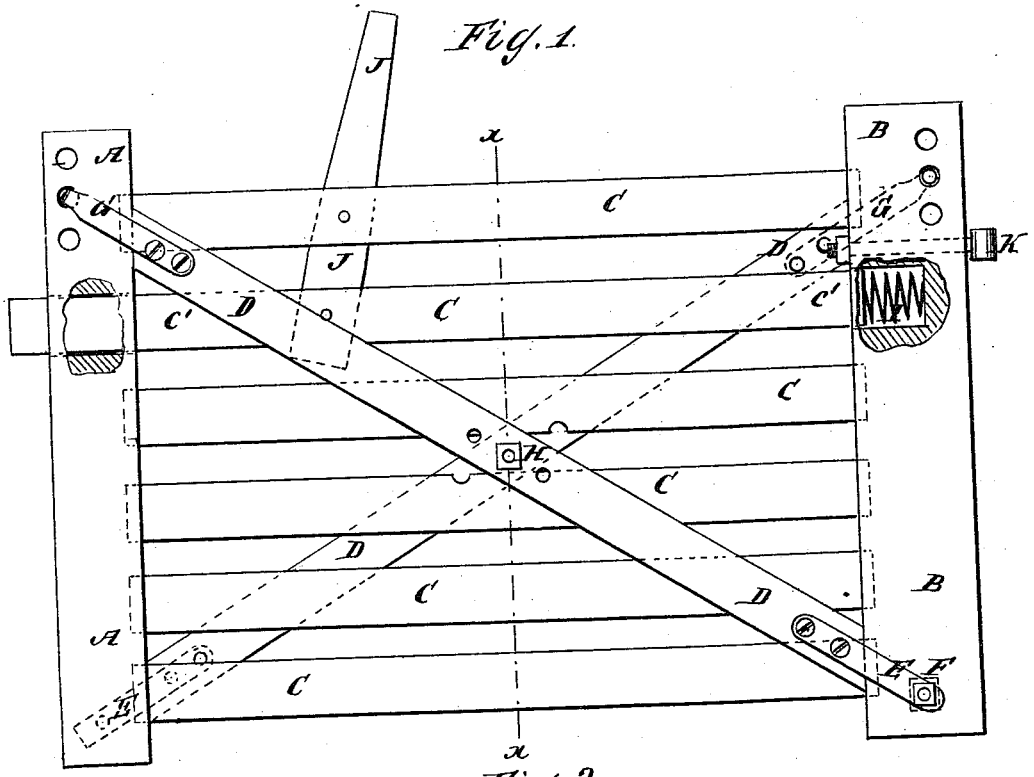
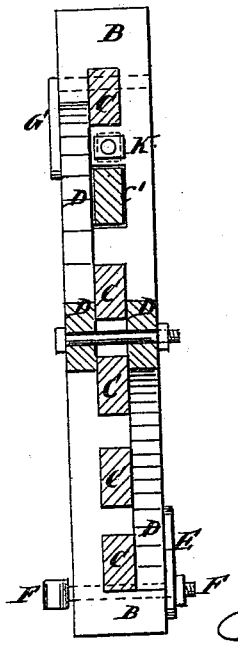


Fig. 2.



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AMOS CALLAHAN, OF MARYVILLE, TENNESSEE.

IMPROVEMENT IN FARM-GATES.

Specification forming part of Letters Patent No. **165,709**, dated July 20, 1875; application filed January 11, 1875.

To all whom it may concern:

Be it known that I, AMOS CALLAHAN, of Maryville, in the county of Blount and State of Tennessee, have invented a new and Improved Gate, of which the following is a specification:

Figure 1 is a side view of my improved gate, parts being broken away to show the construction. Fig. 2 is a vertical cross-section of the same, taken through the line *x x*, Fig. 1.

The invention consists in combining adjustable diagonal bars with a gate for the purpose of supporting its front end, and thus preventing or taking up sag, or adapting it to pass over an inclined or uneven surface, as hereinafter described.

A is the front or latch-end bar, and B is the rear or hinge-end bar, of the gate. In the inner sides of the bars A B are formed shallow mortises, to receive the ends of the longitudinal bars C, as shown in dotted lines in Fig. 1. D are inclined brace-bars, placed upon the opposite sides of the gates, and crossing each other and the longitudinal bars C diagonally, as shown in Fig. 1. To the lower ends of the brace-bars D are bolted metallic straps or plates E, the lower ends of which overlap the sides of the end bars A B, and are secured to said bars A B each with a single bolt. In the case of the rear end bar B the lower hinge F serves as a bolt for securing the lower end of the strap E. To the upper end of the brace D are bolted straps G, the upper ends of which overlap the sides of the upper ends of the end bars A B, and have hooks formed upon the said upper ends, which enter holes in the said end bars A B. Several holes are formed in the upper ends of the end bars A B, to receive the hooks of the straps G. The middle parts of the brace-bars D have holes formed through them to receive a bolt, H, by which they are secured to each other, clamping the longitudinal bars C between them, and preventing the hooks of the strap G from being drawn out of their holes without first loosening or detaching the said bolt H. As many holes are formed in the brace-bars D as there are holes in the upper parts of the end bars A B, so that the bolt H may be adjusted.

The above-described construction and arrangement of parts enable the front end bar A to be raised or adjusted higher, as occasion requires—for example, when the gate has sagged, or when the inclination of the ground surface, or presence of snow or other obstruction, renders it necessary.

The adjustment is made by changing the hooks G to the next hole above. The end bars A B remain parallel, whatever be the adjustment of the front bar A.

The second longitudinal bar *c'* from the top passes through a mortise in the front end bar A, and projects, to serve as a latch for fastening the gate. The latch *c'* is held forward, and at the same time allowed to yield in opening and closing the gate, by a coil-spring, I, inserted in a mortise in the rear end bar B, behind the rear end of the said latch-bar *c'*. This construction enables the gate to latch itself as it is swung shut. The latch *c'* is pushed back to unfasten the gate by a lever, J, pivoted to it and to the top longitudinal bar C, as shown in Fig. 1.

It will be observed that no bolts, nails, pins, or other fastenings are used for holding the various parts of the gate together except those connected with the brace-bars D.

This same construction may be used for doors, if desired.

In the case of gates, the lower hinge F is applied to the side of the rear end bar B, and the upper hinge K is applied to the rear side of said end bar, as shown in Figs. 1 and 2, so that the forward end of the gate may rise as the gates are opened, and so that the gates may swing shut automatically when released.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with horizontal bars C and vertical end bars A B, having holes at the top, as specified, of the diagonal crossed bars D, their central connecting-bolt H, the straps E, and hooks G, as shown and described, whereby said hooks may be adjusted to effect the adjustment of the front or latch end of the gate.

AMOS CALLAHAN.

Witnesses:
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E. W. TEDFORD.