J. T. FOSTER.

GATE AND DOOR LATCHES AND ROLLERS.

No. 191,417. Patented May 29, 1877.

Fig. 1

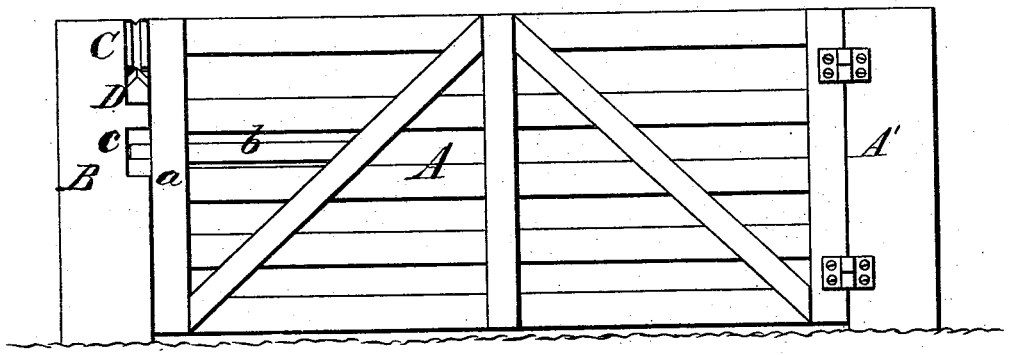


Fig. 2

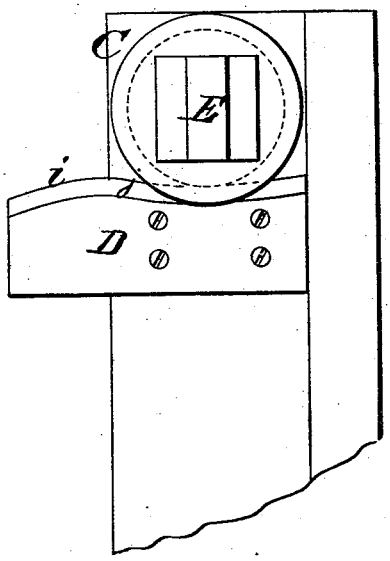


Fig. 3

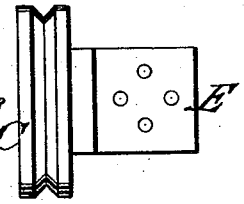


Fig. 4

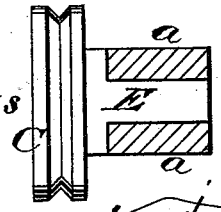
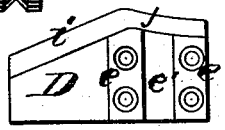


Fig. 5



Witnesses

Mary J. Utley.

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UNITED STATES PATENT OFFICE.

JOHN TYLER FOSTER, OF OLIVE GREEN, OHIO.

IMPROVEMENT IN GATE AND DOOR LATCHES AND ROLLERS.

Specification forming part of Letters Patent No. **191,417**, dated May 29, 1877; application filed November 14, 1874.

To all whom it may concern:

Be it known that I, JOHN T. FOSTER, of Olive Green, in the county of Noble and State of Ohio, have invented a new and valuable Improvement in Stay for Gates and Barn Doors; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a front elevation of a gate, having my stay attached. Fig. 2 is a plan view of my stay, and Figs. 3, 4, and 5 are detail views of the same.

This invention has relation to means for preventing gates from sagging; and it consists in certain improvements in gates hereinafter more fully set forth.

In the annexed drawings, A designates a gate of any well-known construction, which is hinged to a post, A′, and provided with a latch, *b*, which engages in a recess, *c*, formed in a post, B. One of the sides, forming the recess *c*, is beveled, so that the gate will fasten automatically when it is swung shut.

C designates a wheel, having an annular groove in its periphery, which wheel has its bearing on a stud, *s*, fixed into the head of a T-shaped block, E. This block E, which may be constructed of cast metal, is rigidly secured by means of screw-bolts between the two pickets *a a*, (shown in Fig. 4,) at any suitable point between the upper and lower ends of these pickets.

D designates a guide and support for the free end of the gate, which guide also serves as a stay for preventing the gate from sagging.

The piece D is alike on both sides, and it is constructed with two vertical tenons, *e e*, on each side, between which is a groove, *e′*. The upper edge of the piece D is partly inclined, as shown in Figs. 2 and 5 at *i*, and partly concave, as shown at *j*, and in a cross-section this edge is beveled, so as to leave a ridge for entering the groove in the wheel C.

It is important to have the piece D rigidly and substantially secured to the post B, for the reason that this piece is subjected to great strain and shock, and to this end the post B is recessed, as shown in Fig. 6, so that the tenons *e e* will be embedded into the wood.

It will be seen that in the act of closing the gate the grooved wheel C will roll up the inclined edge of the piece D, and be received upon the highest point of this piece. The ridge or upper edge of the piece D, entering the groove in the periphery of the wheel C, will tie the gate to the post B, and prevent the two posts, as well as the gate, from sagging or getting out of truth.

I am aware that a gate-fastener, consisting of a bracket, cap, and wheel, as shown in Letters Patent granted Frank Ketcham, dated August 14, 1866, No. 57,152, has heretofore been employed, and I therefore lay no claim to such invention; but

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

In a farm-gate having a lifting-latch, the grooved pulley C having a T-shaped shank, in combination with the pickets *a* fastened in the recesses of the shank, and the guide-support D having the inclined double-beveled edge *i* and concave *j*, substantially as described, and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN TYLER FOSTER.

Witnesses:
JAMES M. DALZELL,
J. F. SINCLAIR.