

(No Model.)

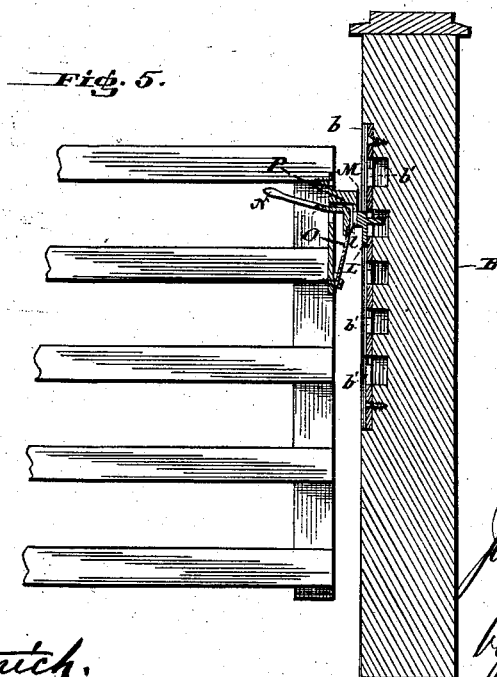
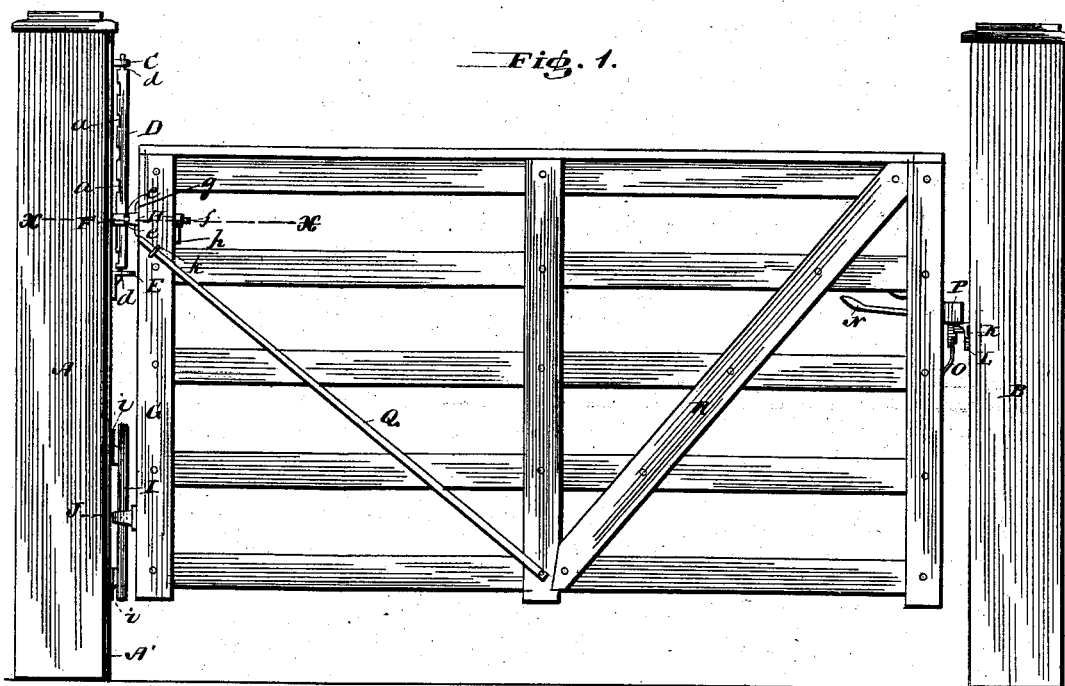
2 Sheets—Sheet 1.

J. E. BLACKBURN.

GATE.

No. 260,643.

Patented July 4, 1882.



WITNESSES:

Wm. H. Dieterich
A. M. Long

INVENTOR.

Jacob E. Blackburn
by Louis Hagger & Co
ATTORNEYS.

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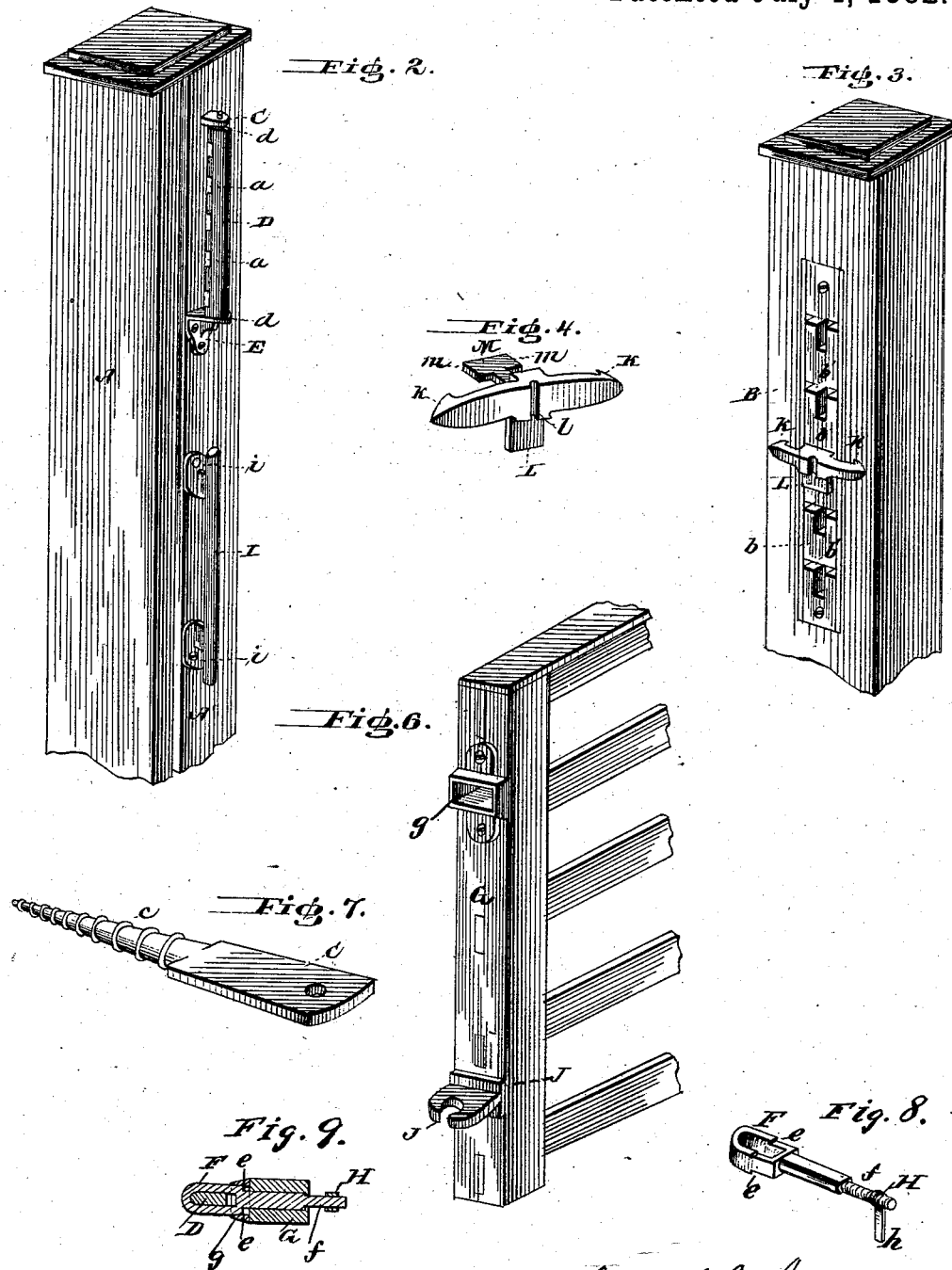
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UNITED STATES PATENT OFFICE.

JACOB E. BLACKBURN, OF FREDERICKTOWN, OHIO.

GATE.

SPECIFICATION forming part of Letters Patent No. 260,643, dated July 4, 1882.

Application filed April 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, JACOB E. BLACKBURN, of Fredericktown, in the county of Knox and State of Ohio, have invented certain new and useful Improvements in Gates; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation of my improved gate. Fig. 2 is a perspective detail view of the hinge-post with its appurtenances, on an enlarged scale. Fig. 3 is a similar view of the latch-post with its adjustable latch-bearing and holding-plate. Fig. 4 is a perspective view of the latch-bearing detached. Fig. 5 is a sectional view of the front end of the gate with its spring-latch and latch-cap. Fig. 6 is a perspective view of the rear end of gate. Fig. 7 is a detail view of the upper bearing for the pivoted hinge-bar. Fig. 8 is a perspective detail view of the adjustable shouldered hinge-loop F detached from the gate; and Fig. 9 is a horizontal sectional view through the said loop, hinge-bar, and gate-bar on the line indicated by the letters *x x* in Fig. 1.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to swinging gates; and it consists in the construction and arrangement of parts of the hinge, substantially as hereinafter more fully described, for the purpose of working, elevating, fastening, and preventing sagging of the gate to which my improvement is applied.

In the accompanying two sheets of drawings, A represents the hinge-post, and B the latch-post.

C is a bearing which is cast upon or made in one piece with a screw, *c*, which is screwed into post A near its top.

D is a flattened bar, of cast-iron or wrought-iron, about two feet and two inches (more or less) long between its top and bottom shoulders, *d d*, by which pintles are formed, the upper one of which is inserted into the top bearing, C, while the bottom one is stepped into a bracket or rest, E, which is fastened upon the

post by suitable wood-screws. The flattened bar D has a series of "shifts" or notches, *a a*, extending between its shoulders, which are adapted to receive a casting composed of a flattened loop, F, having a screw-threaded shank, *f*, and shoulders *e e*. The loop F rides upon bar D, and is of such a width that it will fit into any one of the notches *a*.

Upon the end piece, G, of the gate is screwed a small casting, *g*, which is made with a rectangular slot or opening adapted to fit the shouldered end of the loop F, which may be tightened up against it by means of a nut, H, having a handle, *h*, which said nut works upon the outer end of the threaded shank *f*, that is inserted through a bore made in the end post, G.

By loosening the nut H shank *f* may be withdrawn some distance through its bore, thereby releasing loop F from that of the notches *a* with which for the time being it is engaged, and enabling it to be slid up or down upon bar D, according to whether it is desired to raise or lower the gate. The proper elevation of the latter having been determined, the loop F is again interlocked by tightening up the nut H *h* with its appropriate notch in bar D.

I is an iron bar, cast with top and bottom rests, *i i*, by which it is screwed upon post A. This bar is of round iron, and is clasped by an open loop, J, the shank of which is inserted through the end post of the gate and nutted thereto, so as to hold it rigidly in position. By making this loop open it is prevented from "binding" upon bar I, on which it rides, as its ends may be spread a little, if desired, and thus cause it to be moved easily up or down upon the bar.

Instead of fastening the several parts C, E, and I upon or in the post, they may be attached to a board or plank of suitable length, width, and thickness, as shown at A', which is in turn fastened to the post by the screws of the several parts, which should project a sufficient distance on the other side of the board for that purpose.

The latch-post B has a longitudinal mortise or recess, which is faced with a flanged plate, *b*, having a series of T-shaped slots, *b' b'*. The latch-bearing, which is preferably made of cast-iron, consists essentially of three parts, cast in one piece—viz., the rounded part or bear-

ing proper, (marked K,) which has a transverse groove or notch, *l*, in its middle, a plate, *L*, which extends from the middle of said part in a downward direction, and another plate, *M*, extending back of part *K* at right angles to plate *L*, and made with shoulders *m m*, one on each side.

The latch-bearing, constructed as above described, may be inserted into any one of the T-shaped slots *b'*, and held in place therein by passing the shank or narrow part of plate *M* in front of the shoulders *m m* down into the stem or vertical slot of its appropriate opening *b'*, the shoulders preventing the withdrawal of the bearing from the slot, while the bottom plate or extension, *L*, impinging upon the face of the flanged plate *b* and confined between its flanges, prevents tilting of the device and holds it in its proper position for engaging with the latch.

The latter is operated by a handle, *N*, and spring *O*, and is confined at its upper end within a cup-shaped cap, *P*, which serves the triple purpose of forming a rest for the front end of the gate, (upon the rounded part *K* of the latch-bearing,) of confining the play of the spring-latch, and of protecting the latter, in a measure, from snow or dirt.

The gate is prevented from sagging by a pair of iron rods, *Q*, which extend obliquely from the head of the gate to the middle of its bottom, to which their lower ends are fastened by a bolt passing through them both, and also through the bottom rail or rails and vertical middle brace of the gate. The flattened upper ends of the brace-rods are bent or doubled around the end post, *G*, underneath the casting *g*, and held in place by staples *k*. At the opposite end of the gate are the brace-boards

R, which are secured on the gate by bolts or nails and at their lower ends stepped into the lower end of the vertical middle brace.

This gate, it will be seen, can be adjusted between its posts so as to keep it clear of snow or other obstructions in the road. It can be elevated to such a height that fowls and small stock may pass under it, and, whatever its position, it cannot be thrown from its hinges by stock passing under it. After each adjustment of the hinge-loop *F* the latch-bearing *K L M* is of course adjusted at a corresponding elevation in one of its slots *b'*, so as to hold the gate in its proper horizontal position between posts *A* and *B*.

The rest or bracket *E*, into which the lower end of bar *D* is pivoted, may be cast with or upon a screw in like manner as the top bearing, *C*, and thus screwed into the face-plank *A'* and post *A*, instead of fastening it thereto by separate screws.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a gate, the adjustable hinge-loop *F*, having screw-threaded shank *f* and shoulders *ee*, nut *H*, having handle *h* for turning it, and the gate having perforated end post, *G*, and hollow casting *g*, adapted to receive and fit the shouldered end of loop *F*, constructed and combined substantially as and for the purpose herein shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JACOB E. BLACKBURN.

Witnesses:

WM. COUTER,
L. B. ACKERMAN.