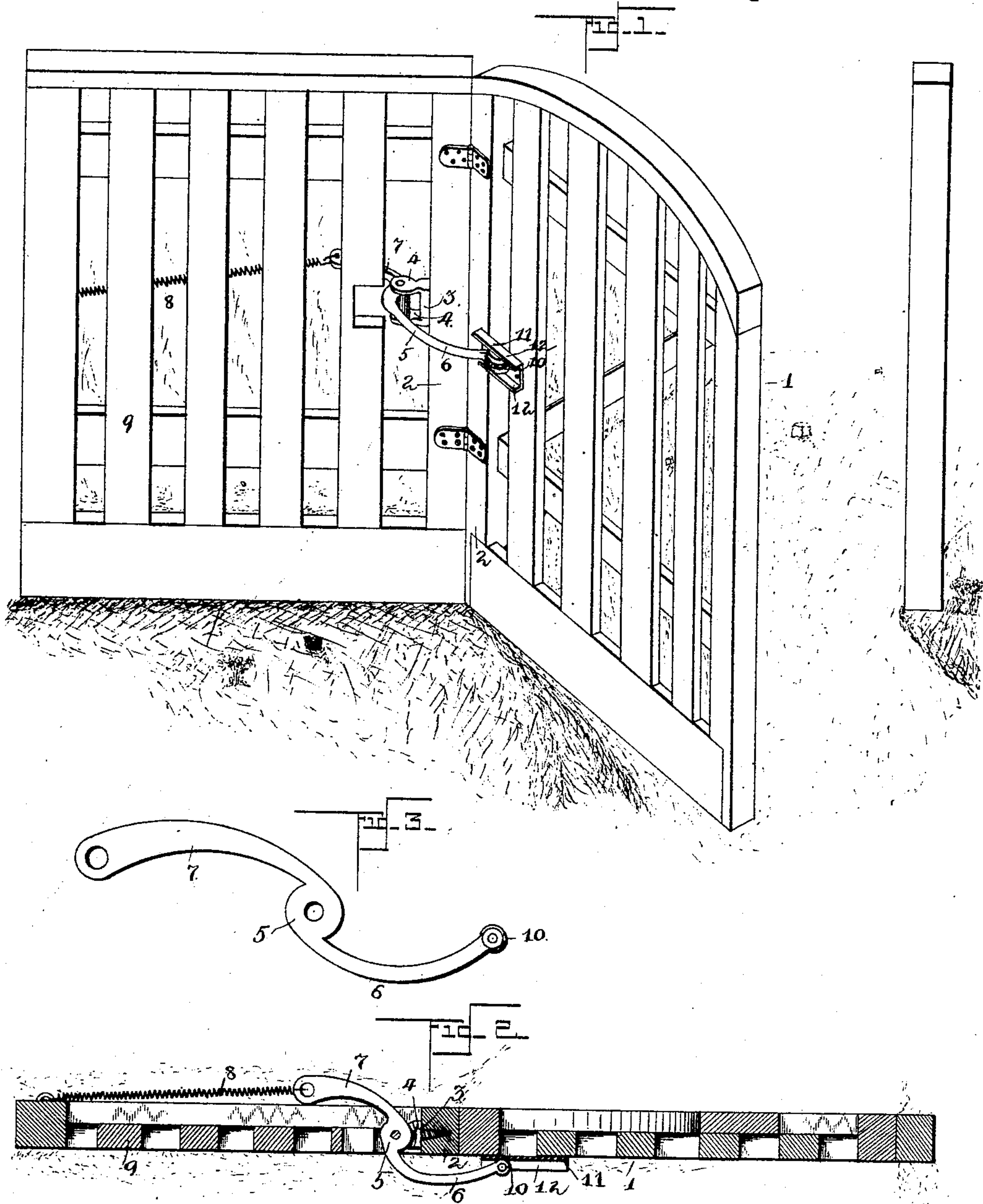


(No Model.)

J. D. HOVERMALE.
DOOR SPRING.

No. 435,498.

Patented Sept. 2, 1890.



Witnesses

Horace G. Sutz

J. G. Riley

Inventor

Jefferson D. Hovermale

By his Attorneys

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UNITED STATES PATENT OFFICE.

JEFFERSON D. HOVERMALE, OF SHARPSBURG, KENTUCKY, ASSIGNOR OF
ONE-HALF TO JOHN S. SHARP, OF SAME PLACE.

DOOR-SPRING.

SPECIFICATION forming part of Letters Patent No. 435,498, dated September 2, 1890.

Application filed February 28, 1890. Serial No. 342,067. (No model.)

To all whom it may concern:

Be it known that I, JEFFERSON D. HOVERMALE, a citizen of the United States, residing at Sharpsburg, in the county of Bath and State of Kentucky, have invented a new and useful Gate-Spring, of which the following is a specification.

The invention relates to improvements in gate-springs.

10 The object of the present invention is to provide a gate-spring or closer of simple and inexpensive construction adapted to readily close a gate and maintain it in that position and capable of a great amount of use without liability of its becoming broken or out of order.

20 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a gate provided with a spring for closing the same constructed in accordance with this invention, the gate being shown partially open. Fig. 2 is a horizontal sectional view. Fig. 3 is a detail view of the bell-crank lever.

Referring to the accompanying drawings, 30 1 designates a gate, to the hinge-post 2 of which is secured a bracket 3, that is provided with parallel ears or flanges 4, that are perforated and have pivoted between them a bell-crank lever 5, whose slightly-curved arms 6 and 7 extend in opposite directions and upon opposite sides of the fence. The arm 7 is perforated and has connected to it a spiral spring 8, that has its other end secured to a post of the adjacent fence 9, and the tendency 40 of the spring is to pull upon the arm 7 of the lever and normally keep the said arm in the direction of the fence, thereby throwing the arm 6, that extends beyond the hinge-post and engages the gate, in a similar direction to close the gate. The arm 6 of the lever 5

has its end bifurcated and is provided with a roller 10, that is pivoted in the opening at the end of the arm 6 and is adapted to engage a plate 11, that is secured to the gate, and enable the lever to move freely in closing the gate. The plate 11 is arranged horizontally along the gate a short distance from the hinge-post and is secured to two adjacent pickets, and has its side edges 12 bent up at right angles and forming a way for the end 55 of the lever. It will readily be seen that as the gate is opened the arm 6 of the bell-crank lever 5 will be thrown back and will carry the opposite arm 7 of the lever forward and distend the spring 8, which will, as soon as the pressure is withdrawn from the gate, return the arm 7 to its normal position and close the gate. The bracket 3 is provided with an integral screw or pin, by means of which it is secured to the hinge-post, and the adjacent 65 picket of the fence is recessed to afford a free and unobstructed movement of the parts.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will 70 readily be understood.

Having thus described my invention, I claim—

The combination of the bracket adapted to be secured to a hinge-post, the bell-crank 75 lever pivoted at a point intermediate of its ends in the bracket and having its arms arranged to extend upon both sides of the fence, one of said arms projecting beyond the hinge-post and engaging the gate, and the spring 80 secured to the other arm of the lever and designed to be secured to the fence, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 85 presence of two witnesses.

JEFFERSON D. HOVERMALE.

Witnesses:

J. W. SHANKLAND,
JOHN ALEXANDER.