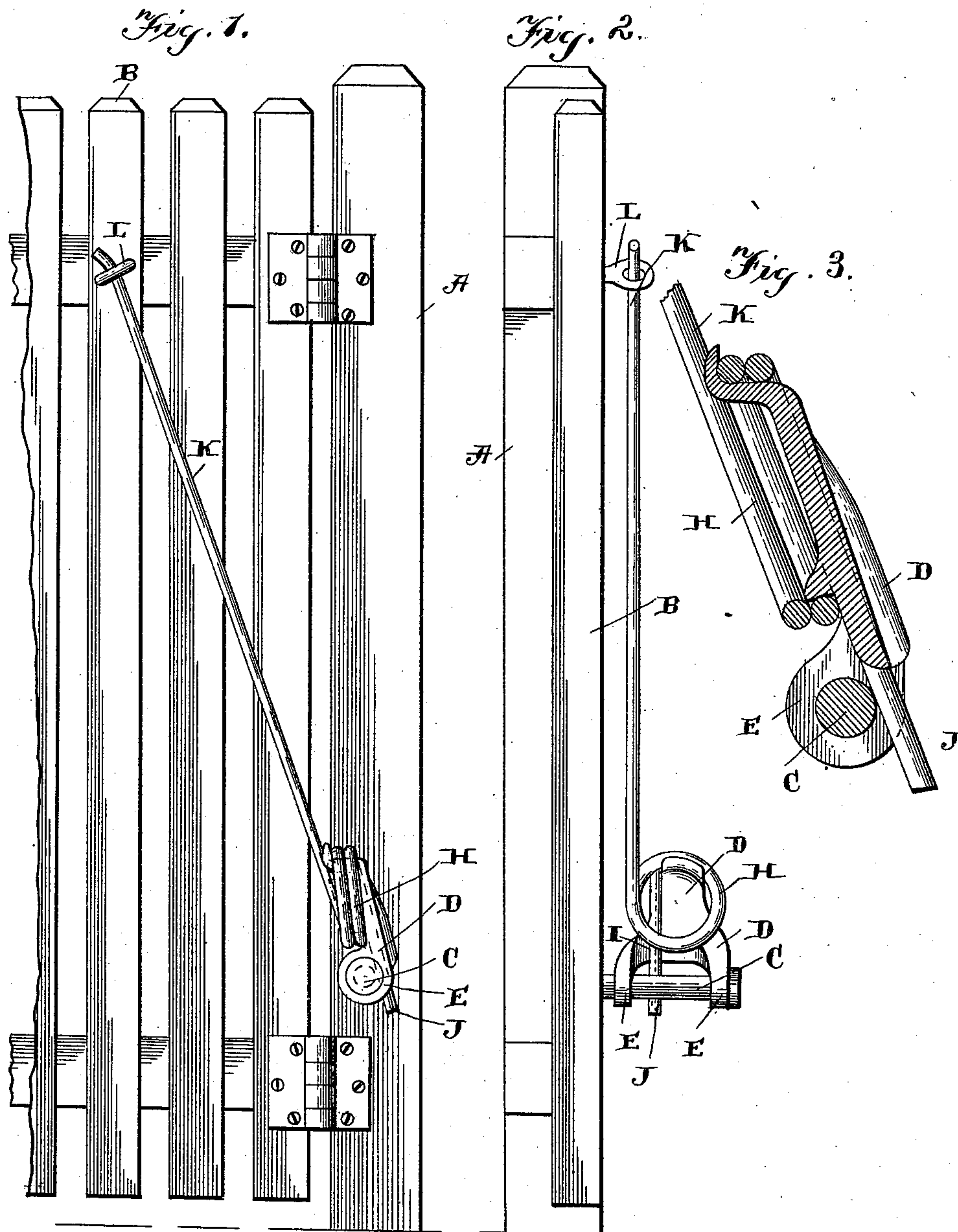


(No Model.)

J. J. LARIMER.  
GATE SPRING.

No. 536,881.

Patented Apr. 2, 1895.



Witnesses  
Geo. E. French  
James W. Smith

Inventor  
John J. Larimer  
By Lehmann, Pattison & Nesbit  
Attorneys



# UNITED STATES PATENT OFFICE.

JOHN J. LARIMER, OF CRAB TREE, PENNSYLVANIA.

## GATE-SPRING.

SPECIFICATION forming part of Letters Patent No. 536,881, dated April 2, 1895.

Application filed December 3, 1894. Serial No. 530,733. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN J. LARIMER, of Crab Tree, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Gate-Springs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improved gate spring; and the object of the same is to provide a spring of simple and improved construction for the purpose of holding the gate either open or closed as may be desired.

The invention consists in the novel features of construction hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a portion of a gate in a closed position with my improved spring applied thereto. Fig. 2 is an edge view of the same. Fig. 3 is a sectional view of the spring coil and the head upon which it is placed.

A designates the gate post to which the gate B is hinged in the ordinary manner. A pin or bolt C is driven into or otherwise secured to the post, the same extending at right angles to the front face thereof, and mounted upon this pin is the head D the same being made revoluble by eyes E through which the said pin extends. The upper portion of the head is substantially circular in form with the upper and lower curved flanges about which the spring coil H is arranged. A channel I is cut in the inner side of the head and down through this channel extends the lower straight end J of the spring, its extremity engaging behind pin C. The arm K of the spring is curved upward from the inner side of the coil as shown and is confined at its extremity in the eye L on the outer side of the gate.

With the gate in a closed position it will be seen that the pressure of the spring coil will be to hold it from opening as any tendency to swing backward the gate will necessarily in-

volve the drawing out of the arm K and consequently the contraction of the coil. This however may be readily accomplished by a pull to open the gate, the head being afforded the requisite turning movement on the pin C. If however the part of the gate where the eye L is secured is turned past the center, or in other words, over a vertical line drawn from the projecting pin C then the tendency of the spring will be to open the gate as far as possible and hold it thus opened the exertion of the spring being exactly the same in this case as when holding the gate closed.

The spring is very simple and cheap in construction and may be very readily applied to gates whether erected with the spring in view or not.

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

1. An improved gate spring comprising the diagonally arranged spring arm K coiled between its ends, a pivoted carrier for the lower end of the said arm which holds said end rigid with the coils, and the loose connection between the free end of the arm and the swinging gate, substantially as shown and described.

2. The combination of a gate, a gate post, a head having a pivotal support on the post and adapted to turn at right angles to the base to which it is secured, and a spring secured at one end to the said turning head and at its opposite end to the gate, substantially as shown and described.

3. The combination of a gate, a gate post, a head adapted to turn upon a suitable support upon the gate post, a spring coiled about the head and suitably secured thereto, and a connection between the spring and the gate, substantially as shown and described.

4. The combination of a gate, a gate post, a head supported by the post and adapted to turn thereon, lugs on one side of the head, a spring provided with a coil arranged around the said lugs with the ends of the spring suitably secured to the head, and a connection between the opposite end of the spring and the gate, substantially as shown and described.

5. The combination of a gate, a gate post, a

pin projected from the post, a head mounted  
and adapted to turn thereon, a spring pro-  
vided with a coil which is arranged around  
the head, a channel upon the inner side of the  
5 head through which the end of the spring is  
adapted to extend so as to be positioned be-  
hind the said pin projecting from the post,  
and a connection between the other end of the

spring and the gate, substantially as shown  
and described. 10

In testimony whereof I affix my signature  
in presence of two witnesses.

JOHN J. LARIMER.

Witnesses:

W. W. BROWN,  
A. B. TREESE.