E. CROWLEY.

GATE SPRING.

APPLICATION FILED FEB. 12, 1914.

1,099,490.

Patented June 9, 1914.

Fig. 1

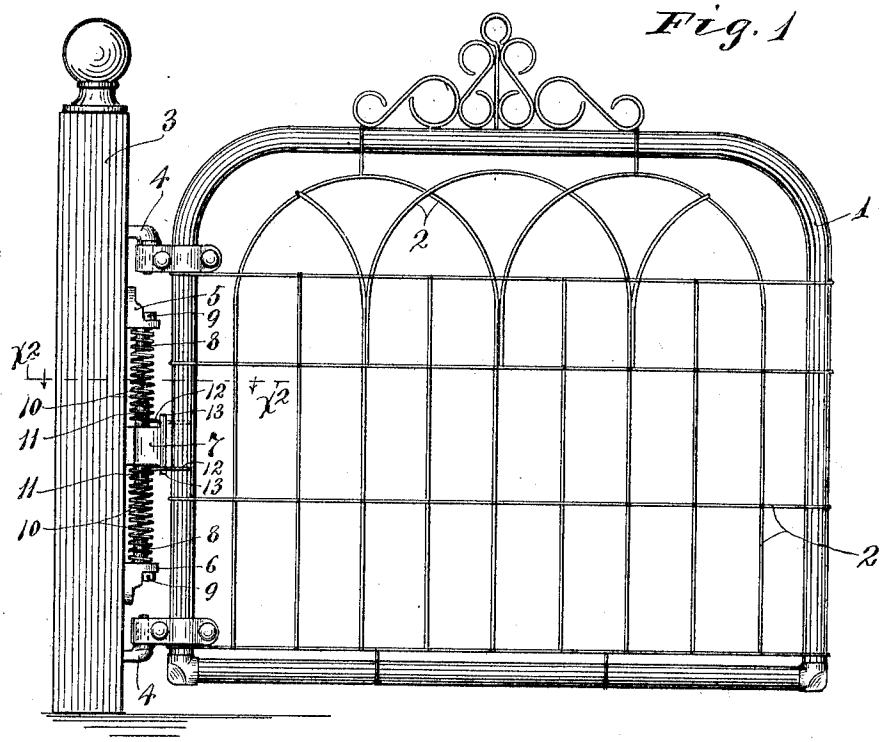
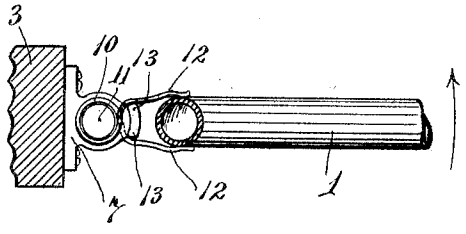


Fig. 2



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UNITED STATES PATENT OFFICE.

EDWIN CROWLEY, OF MINNEAPOLIS, MINNESOTA.

GATE-SPRING.

1,099,490. Specification of Letters Patent. Patented June 9, 1914.

Application filed February 12, 1914. Serial No. 818,255.

To all whom it may concern:

Be it known that I, EDWIN CROWLEY, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, 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 appertains to make and use the same.

My invention has for its object to provide an extremely simple and highly efficient spring for double-swinging gates, especially designed for use with my "gate latch," disclosed and claimed in my co-pending application, filed February 10, 1913, under Serial Number 747,393.

To the above end, generally stated, the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings: Figure 1 is a view in elevation, showing the improved spring applied to a gate and a gate-post; and Fig. 2 is a detail view on an enlarged scale, with some parts sectioned on the line x^2 x^2 of Fig. 1.

The gate shown comprises a rectangular marginal frame 1 and a woven wire panel 2 secured to said frame. This gate is secured to a gate-post 3 by a pair of hinges 4, for double-swinging action. For holding the gate closed, a latch, preferably of the construction shown in my above identified application, may be used, but, for the purpose of this case, it is not thought necessary to illustrate the same.

Upper, lower and intermediate brackets 5, 6 and 7, respectively, are vertically spaced, one above the other, between the hinges 4, and rigidly secured to the post 3. Rotatively mounted in the brackets 5 and 6 is a pair of inwardly projecting headed studs 8, secured in different positions, with respect to the brackets 5 and 6, by pins 9 passed through radial perforations in the heads of the studs 8. Rigidly secured to the inwardly projecting studs 8 is a pair of reversely acting axially alined coiled springs 10. The inner ends of these springs 10 are loosely telescoped onto a pair of reversely projecting studs 11 integrally formed on the upper and lower faces of the bracket 7. The inner ends of the springs 10 terminate in lateral extensions 12, which engage opposite vertical edges of a pair of stops 13, and hold said springs under tension. These stops 13 are integrally formed with the bracket 7, and extend parallel with the studs 11. Obviously, by adjusting the studs 8 in the brackets 5 and 6, the springs 10 may be placed under any desired tension. Outward of the stops 13, the spring extensions 12 engage opposite sides of the vertical member of the gate to which the hinges 4 are secured, as best shown in Fig. 2. These spring end extensions 12 normally hold the gate centered.

When the gate is opened in the direction of the arrow marked on Fig. 2, the spring end extension 12, on the side of the gate which is swung outward, is moved away from its stop 13, and becomes operative to return the gate to its normal or centered position. During this movement of the gate, the other of said springs is held in a normal position by the engaged stop 13, but becomes operative at the return movement of the gate, to again center the same. When the gate is swung in a reverse direction from that just described, the action of said springs will also be reversed.

The above described device, while extremely simple, and of small cost to manufacture has, in actual usage, proven highly efficient for the purpose had in view.

What I claim is:—

1. The combination with a gate, and a gate-post to which said gate is hinged, for double-swinging action, of upper, lower and intermediate anchor brackets secured to said gate-post, and a pair of reversely acting coiled springs anchored, at their outer ends, to said upper and lower brackets, and loosely seated, at their inner ends, on said intermediate bracket, and having laterally projecting ends engaging opposite sides of said intermediate bracket and opposite sides of said gate.

2. The combination with a gate, and a gate-post to which said gate is hinged, for double-swinging action, of upper, lower and intermediate anchor brackets secured to said gate-post, said intermediate bracket having oppositely projecting studs and stop lugs, a pair of reversely acting coiled springs adjustably secured, at their outer ends, to said

upper and lower brackets, and with their coiled inner end portions loosely surrounding the studs on said intermediate bracket, the inner ends of said springs terminating in lateral outwardly projecting extensions engageable with opposite sides of said stop lugs and opposite sides of said gate.

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

EDWIN CROWLEY.

Witnesses:
EMILY MAY KING,
HARRY D. KILGORE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."