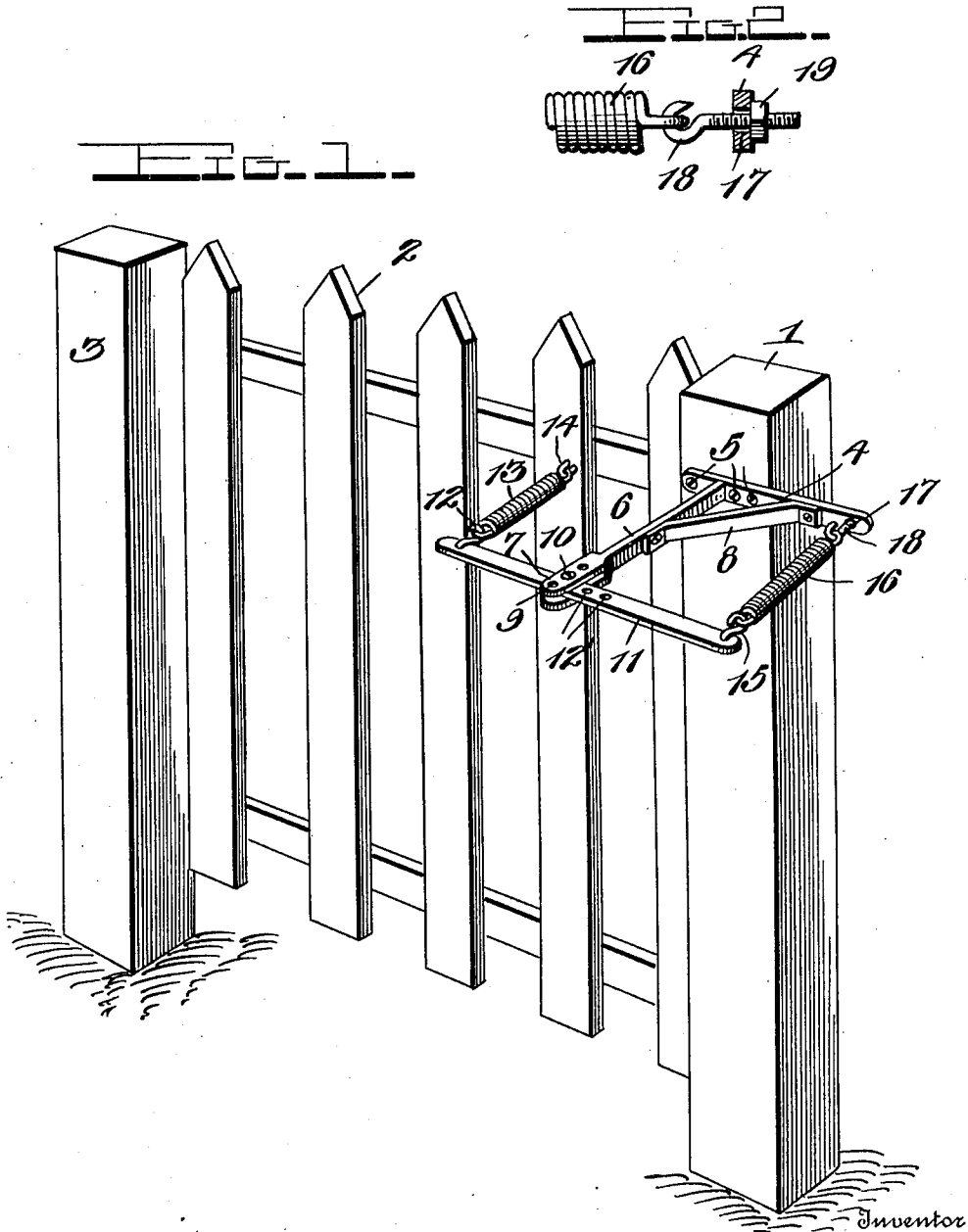


F. W. MOCK.
 SPRING FOR GATES, &c.
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1,019,822.

Patented Mar. 12, 1912.



Witnesses

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UNITED STATES PATENT OFFICE.

FREDERICK W. MOCK, OF MILROY, INDIANA.

SPRING FOR GATES, &c.

1,019,822.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FREDERICK W. MOCK, a citizen of the United States, residing at Milroy, in the county of Rush and State of Indiana, have invented certain new and useful Improvements in Springs for Gates, &c., of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to new and useful improvements in gates and more particularly to a closer therefor, and my object is to provide a device of this character which, when applied to use, will normally retain the gate in closed position, and which will permit the gate to be readily opened, when desired.

A further object of the invention resides in providing a device having a pivotal member thereon and a pair of spring members in connection with said pivotal member, one of said spring members being engaged with the gate, while the other is engaged with a stationary object, and a still further object of the invention resides in providing means for the adjustment of the tension of said springs so as to necessitate a greater or lesser amount of energy to open the gate.

Another object of the invention resides in providing a device which may be readily applied to any gate or other swinging member now in use, and a still further object resides in providing a device which is extremely simple and durable in construction, inexpensive to manufacture, and one which is very efficient and useful in operation.

With these and other objects in view, my invention consists in the novel features of construction, combination and arrangement of parts as will be hereinafter referred to and more particularly pointed out in the specification and claims.

In the accompanying drawing forming a part of this application, Figure 1 is a perspective view of the device applied to use, and, Fig. 2 is a detail section through the bar having the spring engaged therewith.

In carrying out my invention, I shall refer to the drawing in which similar reference characters designate corresponding parts throughout the several views and in which—

1 indicates a gate post or the like, to which is hinged or otherwise pivotally secured thereto, a gate member 2, the swinging or free end of said gate being adapted to con-

tact with the opposed gate post 3, and mounted on the post 1 adjacent its upper end, is a bar or elongated plate 4, said plate being removably secured thereon by means of the bolts or screws 5. The bar or plate 4 projects a short distance beyond the post 1, and said bar is provided adjacent its secured end with an arm 6 extending at right angles to the general trend of the same, the free end of said arm being bifurcated, as shown at 7, the purpose of which will be hereinafter and more particularly described, while a bracing arm 8 has one end secured to said arm 6, and the other end of the same is secured to said bar adjacent its projected end, whereby it will be seen that the arm 6 will be securely braced in its position at right angles to the bar 4. The bifurcated end 7 of said arm 6 is provided with a plurality of registering openings 9, through which is disposed a bolt or pin 10, and pivotally mounted on said pin or bolt between the bifurcations, is a lever or arm 11. The one end of said lever or arm 11 has pivoted therein, a hook member 12 which engages one end of a strong coil spring 13, the opposite end of said coil spring being engaged with a similar member 14 on the gate 2, and the opposite end of said lever or arm 11 is also provided with a pivoted hook member 15 which engages one end of an additional coil spring 16. Extending loosely through an opening 17 adjacent the extended end of the bar 4, is the shank of a hook member 18, which hook member is engaged with the opposite end of the spring member 16, and said shank has the free end thereof threaded and engaged by a nut 19 beyond the opposite face of the bar 4. From this construction, it will be seen that the pivoted member has indirectly engaged therewith, a pair of spring members, one of which engages a stationary object, while the other engages the swinging object, whereby said swinging object will be normally retained in its closed position, and when it is desired to open the same, considerable energy must be placed thereon by either a pull or a push upon said gate to open the same, and when the pressure or pull is released therefrom, said gate will be returned to its normal position. The amount of pressure or pull that is required to be placed upon the gate or swinging member to open the same, may be increased or decreased by the movement of the pivoted member 11 with respect to the bifurcated

end of the arm 6, that is, when it is desired to increase the tension of the springs, said pivoted member is adjusted so that the pin 10 extends through the outer of the series of openings 9, and vice versa when it is desired to decrease the tension of said springs. It will further be seen that the tension of the spring 16 may be adjusted by the adjustment of the nut 19 on the threaded end of the shank of the hook 18, and a further adjustment may be made by the movement of the pivotal point with respect to the ends of the arm or pivoted member 11, and to this extent, a plurality of openings 12 are provided in said pivotal member, whereby there may be a greater or lesser amount of leverage between the pivotal point and the hooks 12 and 15, as desired.

From the foregoing description, it will be seen that a simple, inexpensive and efficient means has been provided for accomplishing the objects of the invention, but while the elements herein shown and described are well adapted to serve the functions set forth, it is obvious that various changes in form proportion and in the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the principles of the invention.

What I claim is:—

1. The combination with a post and a swinging member carried thereon; of a bar secured to one face of said post, an arm carried with the bar and extending at right angles thereto, an additional arm pivotally and adjustably mounted on the free end of the first referred to arm, a pair of spring members carried on the ends of said additional arm, said spring members being also, respectively, engaged with said swinging member and said bar, and means for the adjustment of the tension of one of said spring members.

2. The combination with a post, and a swinging member carried thereon; of a bar secured to said post, an arm carried by said bar, the free end of which is bifurcated, an additional arm pivotally mounted between

the bifurcations of the last referred to arm, a pair of spring members carried on the ends of said last referred to pivoted arm, said spring members being also, respectively, connected to said swinging member and bar, and means for the adjustment of said pivotal arm on the first referred to arm.

3. The combination with a post, and a swinging member carried thereon; of a bar secured to said post, an arm carried on said bar, the free end of which is bifurcated, an additional arm pivotally carried between the bifurcations of the last referred to arm, a spring member carried at one end of said last referred to arm, said spring member being also connected to said swinging member, an additional spring member carried on the opposite end of said pivotal arm, the opposite end of said last referred to spring member being connected to said bar, means for the adjustment of the tension of the last referred to spring member, and additional means for the adjustment of said pivotal member on the first referred to arm.

4. The combination with a post, and a swinging member carried thereon; of an angular supporting bracket carried on said post, one arm of said bracket having its free end bifurcated, an arm pivotally mounted between the bifurcations of the arm of said bracket, means for the adjustment of said pivotal arm on the bracket, hook members pivotally mounted at the ends of said pivotal arm, a pair of spring members having one of their ends engaged with said hook members, the opposite ends of said spring members being, respectively, engaged with said swinging member and the opposite arm of the angular bracket, and means for the independent adjustment of one of said spring members.

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

FREDERICK W. MOCK.

Witnesses:

WYLLIE L. McKEE,
JOSEPH S. MICHOEL.