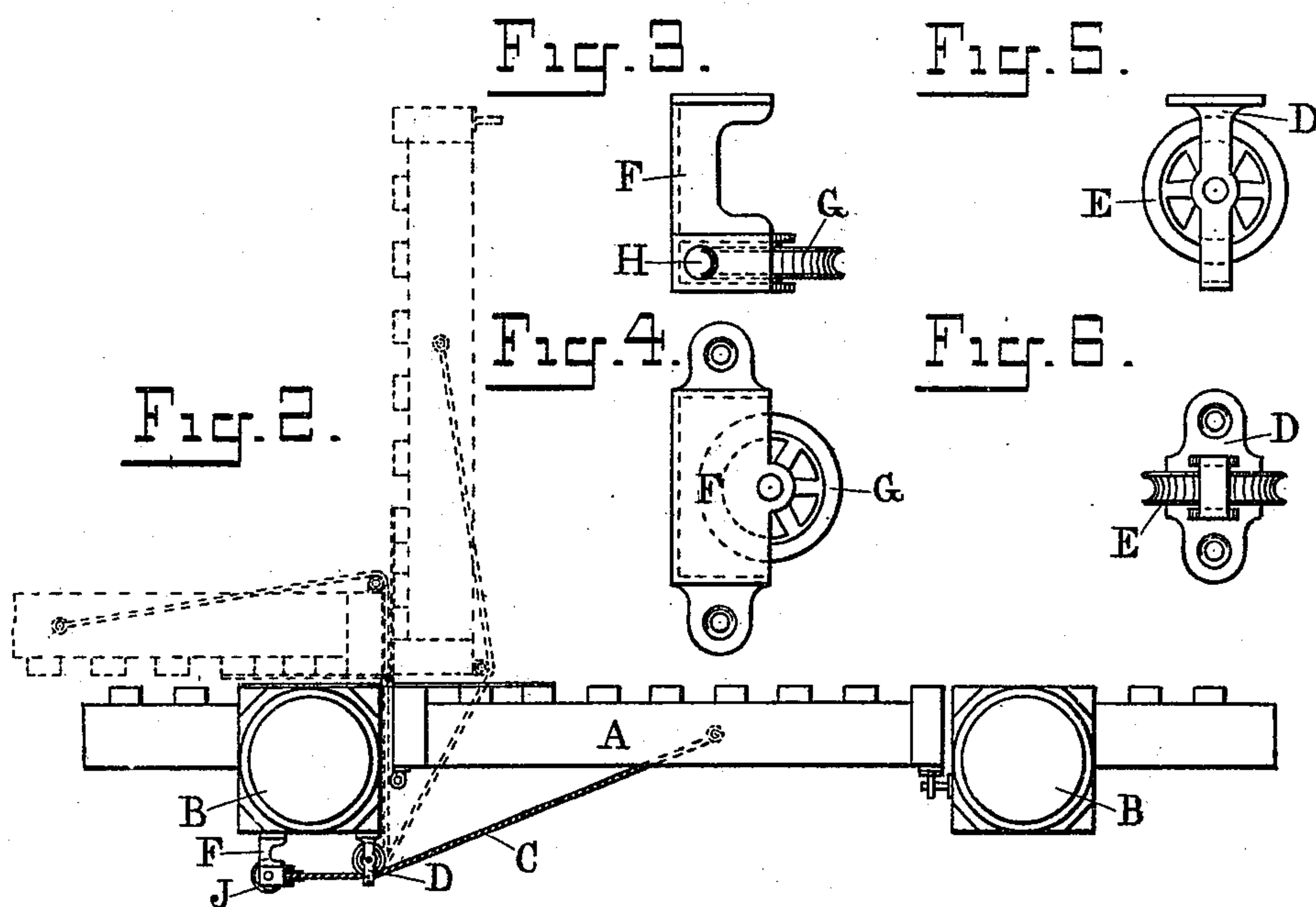
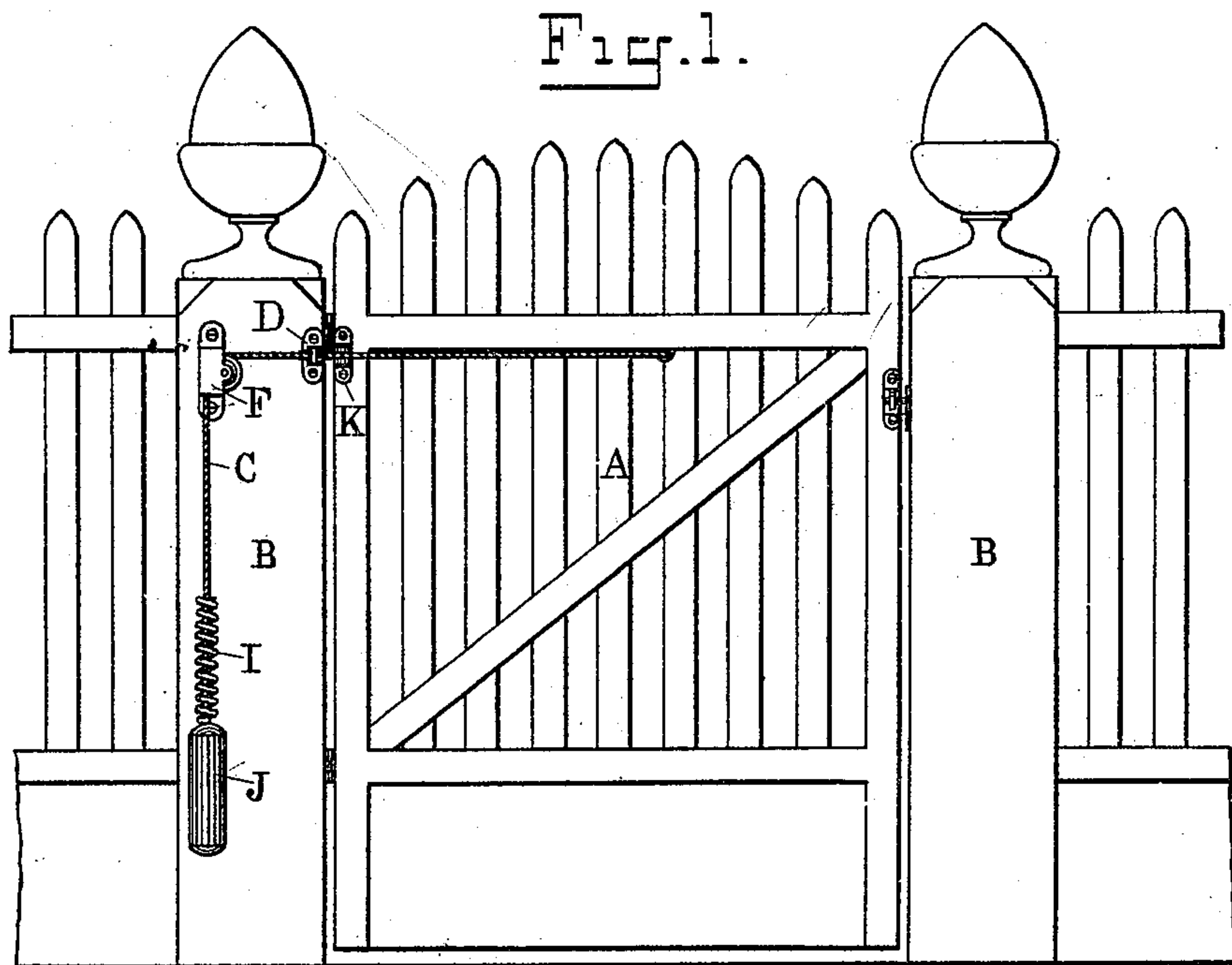


(No Model.)

B. W. EDDY.  
GATE CLOSING DEVICE.

No. 516,802.

Patented Mar. 20, 1894.



Witnesses

R. A. McAdory  
J. B. Barley

Inventor

Benjamin W. Eddy  
By his Attorney P. Byrne



# UNITED STATES PATENT OFFICE.

BENJAMIN WILLIAM EDDY, OF EAST LAKE, ALABAMA.

## GATE-CLOSING DEVICE.

SPECIFICATION forming part of Letters Patent No. 516,802, dated March 20, 1894.

Application filed October 2, 1893. Serial No. 486,973. (No model.)

*To all whom it may concern:*

Be it known that I, BENJAMIN WILLIAM EDDY, a citizen of the United States, residing at East Lake, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Gate-Closing Devices; 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 relates to improvements in that class of devices which are attached to a gate or door to keep it closed; and the objects of my improvement are, first, to provide a device of that kind, which will be simple in all its parts, and easily attached to any gate, a device that can be cheaply manufactured, and will not be liable to get out of order, by the usual opening and closing of the gate to which it is attached; second, to provide a gate, or door closing device, that will close the gate from any position to which it is opened, thereby insuring the closing of the gate at all times, regardless of the carelessness of the person passing through; third, to provide a gate or door closing device which will have unequal power at different positions when the gate is opened, the greatest power being exerted when the gate is thrown back against the fence, the power gradually decreasing as the gate is closed, and finally closing without shock, or jar, sufficient to injure the gate, or gate post. I attain these objects by the mechanism and arrangement of the parts, illustrated in the accompanying drawings, in which—

Figure 1, is a vertical view of a gate and parts of a fence, with my closing device attached. Fig. 2, is a top view of the same, the dotted lines showing the gate when open, and when opened back against the fence. Fig. 3, is a top view of a covered guide pulley, for the weight rope, or chain to operate in. Fig. 4, is a front view of the same, when attached to the post. Fig. 5, is a top view of an additional guide pulley for the weight rope, or chain. Fig. 6, is a front view of the same, when attached to the post.

Similar letters refer to similar parts throughout the several views.

The gate A can be of any of the usual forms, no special construction being required, and it is hung to one of the posts B, B, by any of the usual kinds of plain hinges used for such purposes; the fence and gate being made of wood, iron, or any other material generally used for fences.

On the under side of the top rail of the gate, or at any other desirable place, I attach a wire rope, chain or other flexible cord C, it can be secured to the gate in any suitable manner, no special device being necessary; a metallic guide pulley D, having a horizontal sheave E journaled in the frame is secured to the gate post B, the pulley is placed on a horizontal line with the part of the gate to which the rope, or chain is attached, on the same line is placed a covered metallic guide pulley F, the guide pulley F is made of any suitable metallic substance, and when attached to the post the sheave G journaled in the frame stands in a vertical position, on a line with the rope, or chain C, the sheave of the guide pulley F is inclosed in a cover extending partly over the top and bottom, the cover is provided at top and bottom with apertures to allow the rope, or chain to pass through, one of them being shown at H, the pulley provided with two apertures permits its use on the right, or left hand side of the gate. The rope or chain C is passed through the guide pulleys D and F, the end of the rope or chain extending downward through the aperture in the under side of the cover, a coiled spring I is placed upon the rope or chain, and the end of the rope, or chain made fast in any suitable manner to a metallic weight J, the spring resting on the head of the weight; a metallic roller K as shown, or of any other suitable construction, is placed on the corner of the gate hanging stile, the roller prevents the rope, or chain from binding on the corner of the gate when opened, and allows the gate to operate with less friction.

When a gate with my closing device is opened it draws the weight up by the rope, or chain, and when the gate is at an angle of about forty-five degrees, the coiled spring I comes against the cover of the pulley F which compresses the spring as the gate is opened back against the fence, thereby increasing

the force to pull the gate for closing. As the gate closes, when it reaches the forty-five degree angle the spring ceases to act, the weight closing the gate the remaining distance, and  
5 as the rope or chain as the gate closes comes more in line with the fence, the pull of the weight lessens, so that the gate closes without shock sufficient to injure it.

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

The combination with a gate of a weighted

rope or chain attached to the gate and running through a guide on the gate post, and a coiled spring surrounding the rope or chain 15 immediately above the weight, substantially as described.

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

BENJAMIN WILLIAM EDDY.

Witnesses:

JNO. D. ELLIOTT,  
H. D. LYMAN.