J. A. Park,

Gate Latch.

No. 62,061. Patented Feb. 12, 1867.

Fig. 2

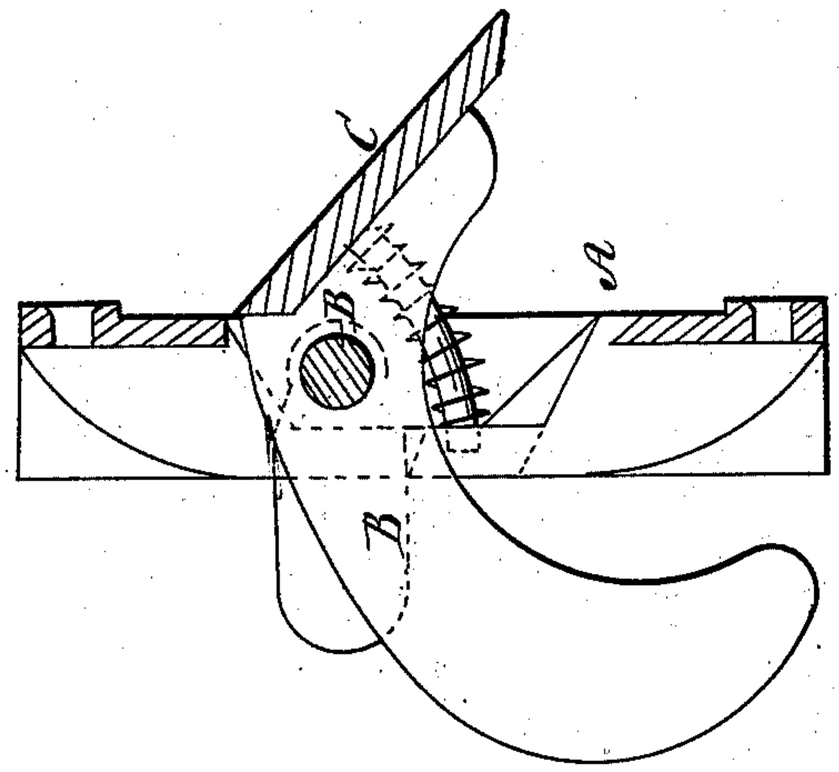
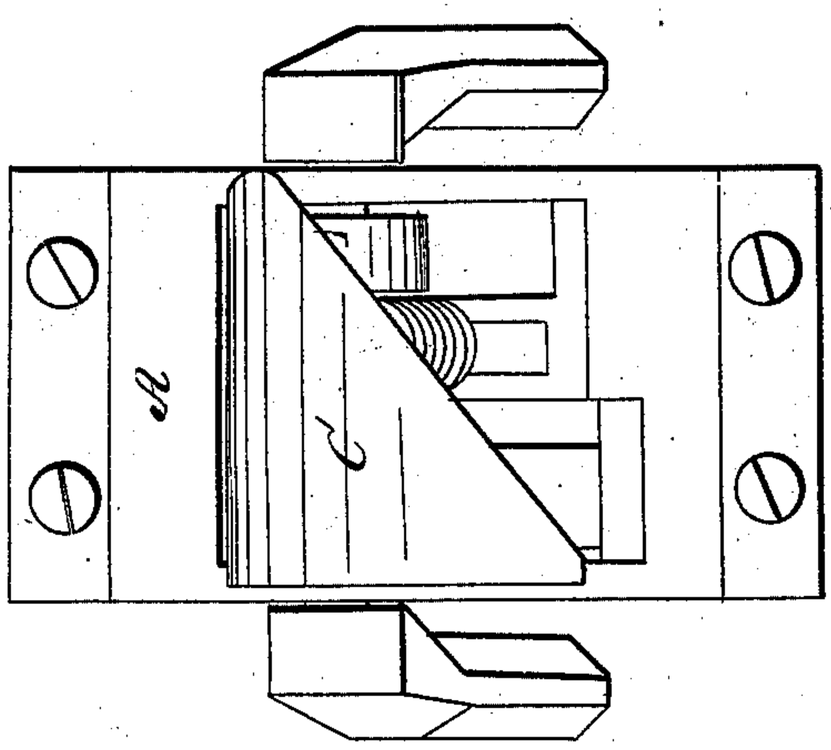


Fig. 1



United States Patent Office.

J. A. PARK, OF LANSING, MICHIGAN.

Letters Patent No. 62,061, *dated February* 12, 1867.

IMPROVEMENT IN DOOR AND GATE LATCHES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. A. PARK, of Lansing, Ingham county, Michigan, have invented a new and improved Self-Acting Gate or Door Latch; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and to the letters of reference marked thereon.

This invention consists of a novel and improved form of latch, which may be made of wood or metal, according to the size desired and the place in which it is to be used. It is adapted to use on gates or doors of any size, as it may be constructed of any size. It is a simple, cheap, and efficient latch; self-adjusting with or without the use of springs, as an aid or independent. In its use on gates and out-building doors liable to sag, it is particularly efficient and lasting. In its use on inside house doors, it excels, especially on doors liable to swell and shrink; they may also be closed with greater ease.

In the annexed drawing, A represents a metallic plate, to which the latch is connected, and by means of which the latch may be secured to the gate, door, or post to which it is intended to be applied. This plate is provided with screw-holes, to thereby secure it perpendicularly in its place of use; also with three slots or openings through it, near its centre, (the uses of which will appear hereinafter;) and also with two lugs or ears in which openings or journal-boxes are formed for the reception of the latch-shaft. B represents the latch-shaft, which forms a part of the latch, or is so secured that it acts as a part of it, and has its bearings in the ears above described in the plate A. The ends of the shaft B may be allowed to project to receive the knobs, as shown in the drawings. C represents the latch, and is shown in the drawings in triangular form. (However, the line forming the hypothenuse of the triangle may curve either inward or outward from the extremities of its base and perpendicular.) This latch is provided with two lugs or ears on its inner surface at the base of its triangle, (allowing the centre of the shaft B to be the base.) These ears are provided with openings, into which the latch-shaft is secured, (when the latch-shaft is not cast on the latch.) One of these ears is extended or has cast upon it a metallic, or weight of its own substance, which is shown in the drawings in curved form, but may be of any form to suit in the place in which it is to be used. This weight may be cast upon either ear, or even upon the shaft B, but in any case it must be heavy enough to overbalance the latch C to operate it independently. This weight part, if maed in proper shape, (long,) will act as well cast on the extremity of the lower end of the latch. D, in the drawings, represents the weight. On the inner side of the latch C a pin may be cast, as shown in the drawings, which plays through a slot spoken of in the plate A, and around which is a spiral spring, which will operate the latch as an aid, or independent of any weight, by pressing the lower extremity of the latch from the plate A, thereby angling it from the post to which it is hung as much as is needed. The latch has its edge bevelled so as to allow the door to close easily, as the latch, being thus bevelled, is easily pushed to a perpendicular with the post on which it is hung, and thereby allow the door to pass to its place, at which time the latch is caused to fall or spring in position to hold it shut. The plate A may be dispensed with, in most cases, as an old method of hanging arrangement by staples which are driven into the post so as to form a substitute for journal-boxes, into which the shaft B may work, instead of casting a plate which must be screwed fast. The latch may be secured so as to operate exactly the same by staples. The knobs, when secured on the shaft C, when allowed to project, as shown in the drawings, will of themselves act also as weights, and, if heavy enough, will dispense with any other aid in the operation of the latch. Almost any kind of arrangement will answer behind which the latch must catch to hold the arrangement shut, upon which it operates. A mortise, in which it may catch a bevelled strip of iron, or board covered with sheet iron, bevelled so as to allow the latch to pass easily, or, if a mortise is used, the part behind which it catches must be bevelled and covered with sheet iron, or other hard substance, to prevent the wood from wearing away where it comes in direct contact with the latch by constant use.

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

The arrangement of the plate A with the latch C and shaft, with weight D, with or without the spring, when constructed in the manner substantially as herein set forth.

J. A. PARK.

Witnesses:

S. D. NEWBRO,

E. P. NEWBRO.