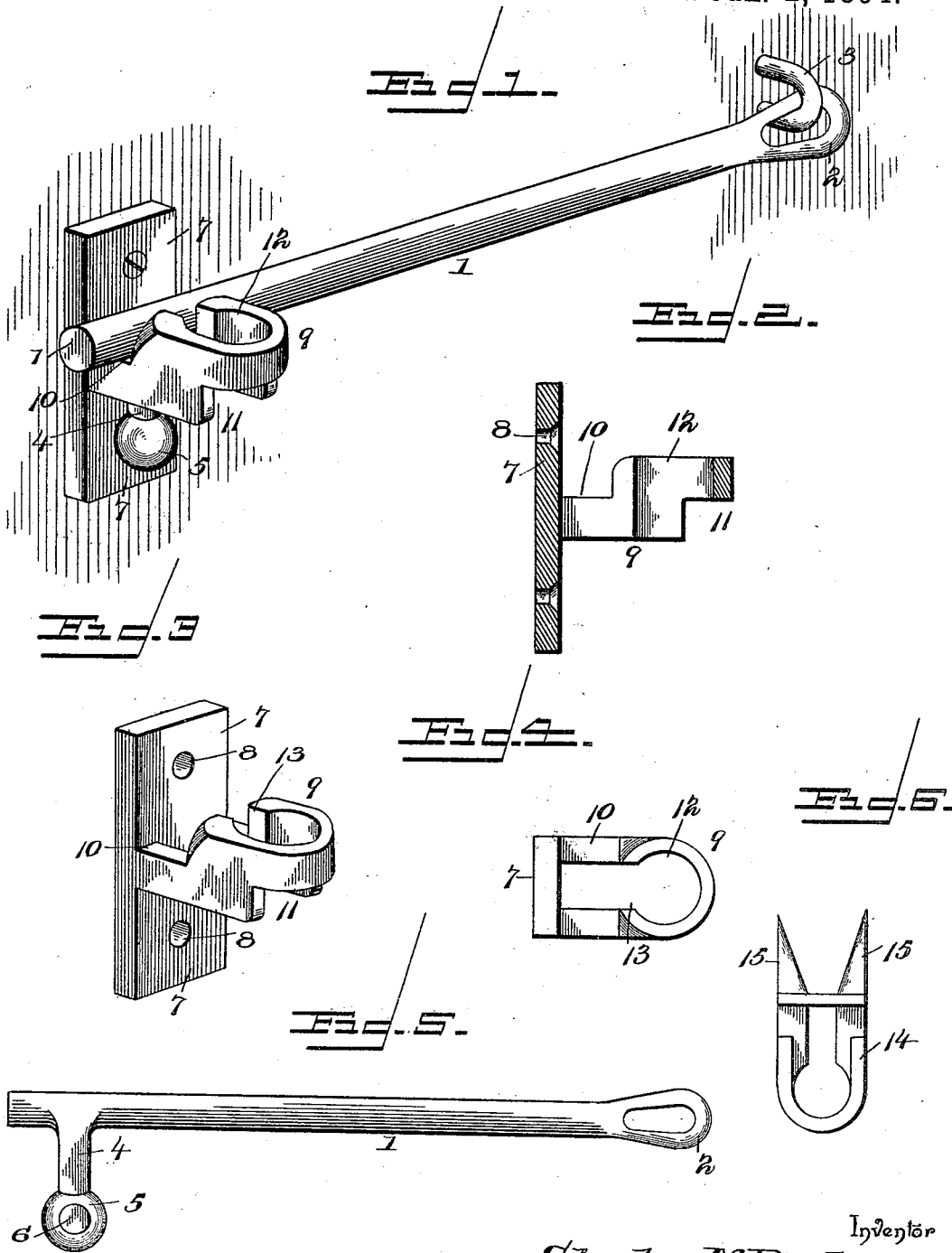


(No Model.)

S. N. PARK.
LATCH.

No. 511,907.

Patented Jan. 2, 1894.



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

STAATS N. PARK, OF BLOOMSBURY, NEW JERSEY.

LATCH.

SPECIFICATION forming part of Letters Patent No. 511,907, dated January 2, 1894.

Application filed September 14, 1893. Serial No. 485,503. (No model.)

To all whom it may concern:

Be it known that I, STAATS N. PARK, a citizen of the United States, residing at Bloomsbury, in the county of Hunterdon and State of New Jersey, have invented a new and useful Latch, of which the following is a specification.

My invention relates to improvements in latches; the objects in view being to produce a latch designed for any ordinary use upon a door, gate, &c., and to be so constructed as to be incapable of being accidentally opened by the wind, jarring of the door or gate, or by cattle; and, furthermore, to so construct the latch as to adapt it for general use, easy application, to render it simple and cheap and adapted to be operated with facility.

With these and other objects in view the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claims.

Referring to the drawings—Figure 1 is a perspective view of a latch constructed in accordance with my invention, the same being locked. Fig. 2 is a vertical transverse sectional view through the catch. Fig. 3 is a detail in perspective of the catch. Fig. 4 is a plan view. Fig. 5 is a detail of the latch. Fig. 6 is a plan view of a modified construction of catch.

Like numerals of reference indicate like parts in all the figures of the drawings.

The latch-bar 1 is preferably cylindrical in cross-section, and has its outer end flattened and provided with an eye 2, which is designed to be engaged loosely by a staple 3 for connecting it to the door or gate. Near its opposite end the latch-bar 1 is provided upon its under side with a right angularly disposed arm 4, which terminates at its lower end or extremity in a ball 5, preferably flattened on its inner side, as indicated at 6. A securing-plate 7, having perforations 8 for the reception of screws, is adapted to be secured to the door-frame or latch-post of a gate, and the same is provided upon its front face with a forwardly disposed U-shaped frame 9. This frame or bracket 9 is, near its rear end or adjacent to the plate 7, provided with transversely opposite notches or recesses 10, and in advance of the same, upon its under side is cut away as indicated at 11. The plate

or bracket is provided with a key-hole slot or opening extending vertically therethrough and therefore consists of a circular eye 12, which merges at its rear side into or communicates with a narrow neck 13 having parallel sides.

If desired, as illustrated in Fig. 6, in lieu of the plate 7, I may extend the terminals 14 of the U-shaped plate or bracket and point the same as at 15, whereby the catch is in the nature of a staple and is designed to be driven into a post or other object to which the door or gate is located.

This completes the construction of the device, whose operation is as follows:—The door or gate having been swung closed the latch is elevated so that the ball 5 thereof is directly over the eye 12, after which the said latch-bar is lowered so that the said ball rests within the cut away portion 11 of the catch. The ends of this cut away portion prevent the ball of the latch from moving inward, so that the latch swinging in the arc of a circle, the center of which is the ball, clears the upper shoulders of the recess 10 until it gains access to said recess wherein it lies, after which the latch is rotated or rocked, the ball swinging inward from the cut away portion 11 and engaging under the terminals of the plate or bracket. It will now be seen that the arm 4 of the latch-bar is within the narrow neck 13 of the opening in the plate or bracket, and that the head being larger than the said neck will prevent the latch from being elevated. Furthermore, the extreme width of the plate or bracket is somewhat greater than the length of the arm 4 from the bar 1 to the upper side of the ball 5, so that any attempt to move the latch outward while the arm is in a vertical position will be resisted by the end-walls of the recesses or notches 10. Such disengagement can be accomplished only by a reversal of the method employed to effect the engagement, and the disengagement is effected, first, by rotating the latch-bar so that the ball 5 swings forward into the recess 11 and thence swinging the latch-bar forward, the ball serving as the pivot point until the arm 4 is directly within the eye 12, when it will be obvious that the latch-bar may be elevated, thus withdrawing the ball from engagement. From the foregoing description, it will be

seen that I have provided a very simple latch, but one which is capable of being locked when so desired against any accidental disengagement by mischievous cattle, or by vibrations of the gate caused by the wind. It will be seen that the locking feature of the latch need not necessarily in ordinary use be employed, but the arm and ball simply dropped through the eye, but when desired to secure the door or gate against any possible tampering therewith or accidental opening, the locking feature will be found extremely useful and efficient.

The device is simple, readily manufactured and applied, and costs but little.

I do not limit my invention in the precise details of construction herein shown and described, but hold that I may vary the same to any degree and extent within the knowledge of the skilled mechanic.

Having described my invention, what I claim is—

1. The latch-bar adapted to be connected loosely at one end with a gate or door and provided near its free end with an arm disposed at a right angle thereto and terminating in an enlarged head, combined with the

catch having a key-hole slot, and adapted to be secured to a gate-post or door-frame the neck of the slot being adapted for the passage of the arm and the enlarged part of the slot for the reception of the head of the arm, substantially as specified.

2. The latch-bar adapted at one end to be loosely connected with a gate or door and provided near its opposite end with a depending arm terminating at its lower extremity in an enlarged ball, combined with a catch having a key-hole slot formed thereon, the eye of which is adapted to receive the ball and the neck of which the arm, the upper side of said catch near its inner end being recessed at 10 and the under side near its front end recessed at 11, the greatest width of the catch exceeding slightly the length of the arm of the latch-bar, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

STAATS N. PARK.

Witnesses:

CHAS. S. SHINER,
LOUIS ANDERSON.