No. 814,665. PATENTED MAR. 13, 1906.

E. O. BAYLOR.

GATE LATCH.

APPLICATION FILED JUNE 14, 1905.

2 SHEETS—SHEET 1.

Fig. 1

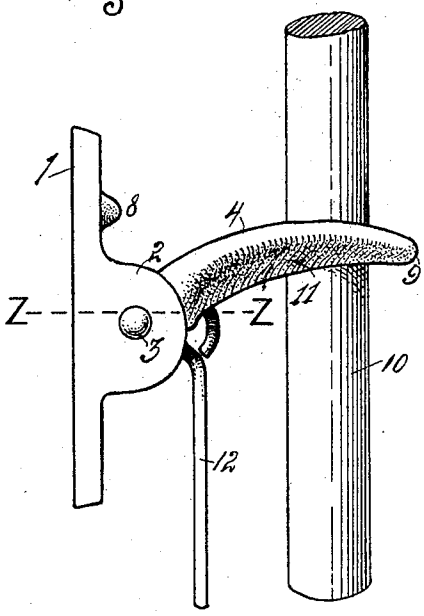


Fig. 3.

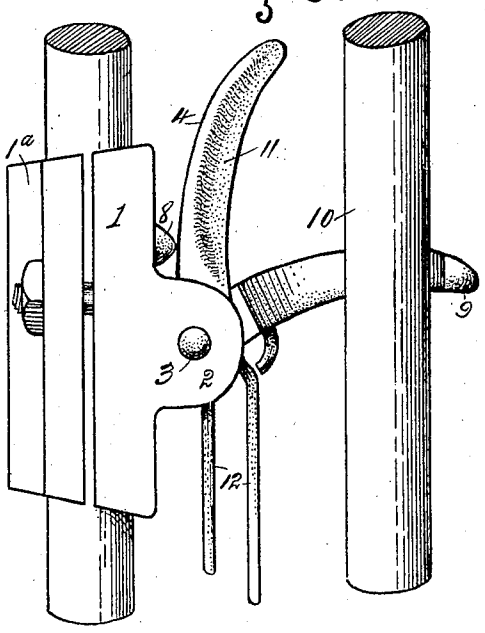


Fig. 2

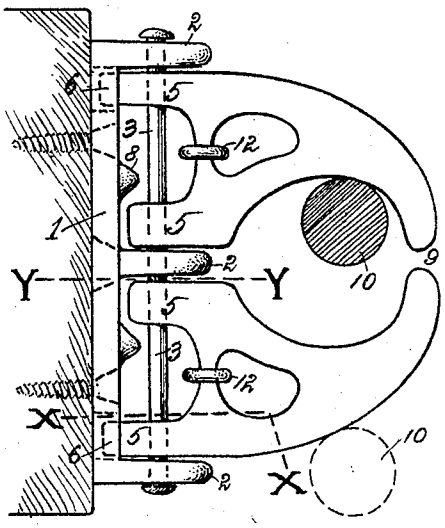
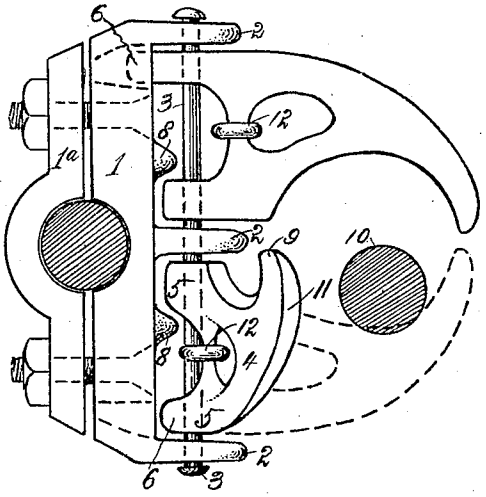


Fig. 4



Witnesses

M. L. Marks.

Louise Marks.

Inventor:

Elwood O. Baylor,

By Wilson Hall His Atty.

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GATE LATCH.

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2 SHEETS—SHEET 2.

Fig. 5.

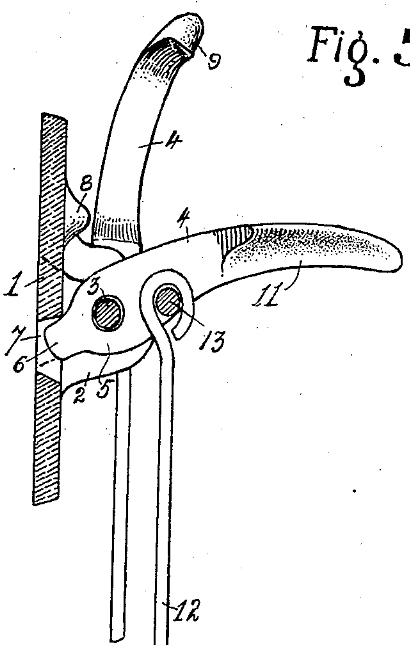


Fig. 7.

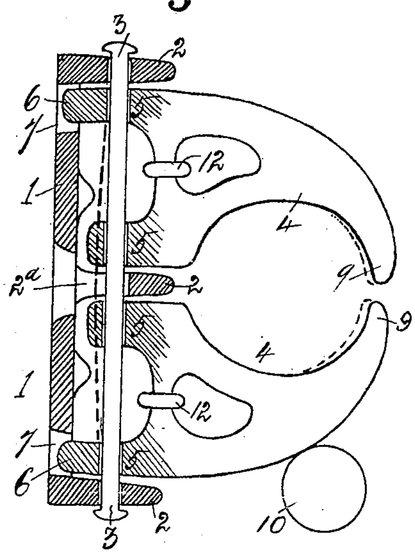


Fig. 6.

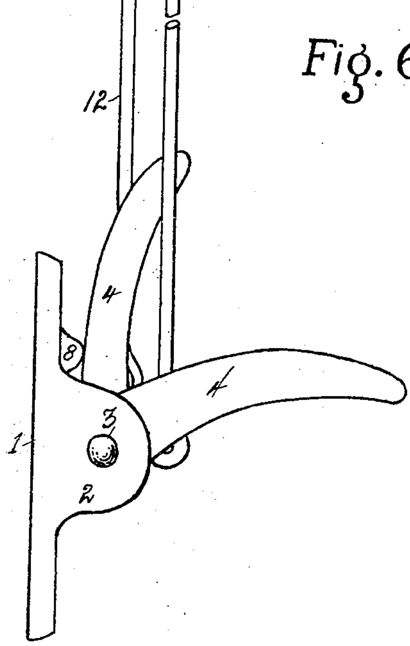
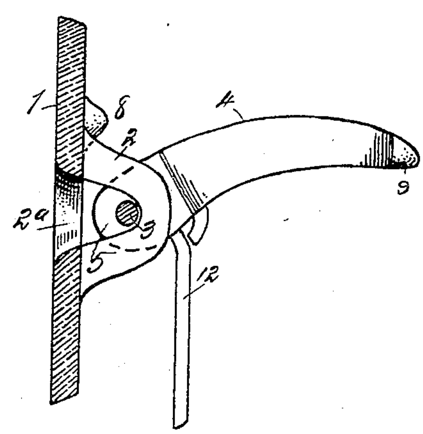


Fig. 8.



Witnesses

M. L. Marks.

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Inventor:

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UNITED STATES PATENT OFFICE.

ELWOOD O. BAYLOR, OF ADRIAN, MICHIGAN.

GATE-LATCH.

No. 814,665. Specification of Letters Patent. Patented March 13, 1906.

Application filed June 14, 1905. Serial No. 265,197.

To all whom it may concern:

Be it known that I, ELWOOD O. BAYLOR, a citizen of the United States, residing at Adrian, in the county of Lenawee and State of Michigan, have invented certain new and useful Improvements in Gate-Latches; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

With the introduction of wire fences wire gates, woven on comparatively light metal frames, came into use. While these frames are ordinarily strong enough, the gates are not rigid, and a high gate provided with this sort of frame if fastened by a latch near the top or near the middle may be sprung enough at the bottom for an animal to get through, or a strong animal may spring the gate away from the latch, or the jarring of the gate may cause the latch to open. On double gates this difficulty is increased. To overcome this difficulty, it frequently becomes necessary to resort to ropes or chains and to tie the gate shut—a most unsatisfactory method.

My invention relates to and its object is to provide means for overcoming the difficulties here indicated and to provide a latch which cannot be loosened by springing or shaking the frame, but which will permit the gate to be readily opened in either direction if desired.

A further object of my invention is to provide a latch which will invariably automatically catch and hold the gate when it is swung closed.

A further object of my invention is to provide a latch of which several may be used, one above another, all being connected so that they operate together as easily as one latch.

A further object of my invention is to provide a latch which when engaged serves as effectually as a link in a chain.

A further object of my invention is to furnish a gate-latch which shall be cheap, simple, strong and durable, and which by slight changes in the latch-plate may be used either for single or double gates.

I attain these objects by means of the devices and arrangement of parts hereinafter described and shown, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my gate-latch closed around the bar of a gate; Fig. 2, a plan view of the same, the latch in this instance being secured to a wooden gate-post; Fig. 3, a side elevation of my gate-latch clamped to one of the bars of a double gate with one of the hooks, hereinafter referred to, thrown up; Fig. 4, a top plan view of my latch attached to a double gate with one of the hooks partly raised. Figs. 5 and 6 show a side elevation of an upper and a lower latch, the upper latch being in section on line x x, Fig. 2, the two latches being connected by rods, as hereinafter described, to secure the simultaneous action of both latches; Fig. 7, a bottom plan view in section on line Z Z, Fig. 1; and Fig. 8 is a sectional side elevation on line Y Y, Fig. 2.

Like numerals of reference indicate like parts throughout the drawings.

In the drawings, 1 is a plate having holes therethrough for the reception of screws by means of which the plate may be secured to a gate-post, as in Fig. 2, or for the reception of bolts, as in Fig. 3, by means of which and a clamping-plate 1^a the plate 1 may be securely attached to a stout bar or rod. The plate is provided on one side with three horizontally-projecting lugs 2, pierced transversely for the reception of a pivot rod or pintle 3.

4 4 are latches bifurcated at their inner ends to form arms 5 5. One pair of these arms is disposed between the central lug and one of the outer lugs, and the other pair of arms is disposed between the central lug and the other outer arm. The arms 5 are pierced horizontally to receive and are pivoted upon the pintle 3. One of each pair of arms 5 is extended, as at 6, into an opening or recess 7 in the latch-plate, the parts 6 and 7 forming a stop which limits the downward swing of the latch and which supports the latch normally at about the angle to the horizontal shown in Fig. 5 in the lowered latch.

8 8 are stops upon the outer face of the plate which prevent the latches from being raised so high that they will not fall by their own weight.

The outer extremities of the latches 4 are curved inwardly toward each other, so that their points 9 nearly touch. The two oppositely-curved adjoining margins of the latches

form a space for the reception of the side bar or rod 10 of the gate. The outer under side of the members 4, which will now be termed the "latch-hooks," are beveled or curved downwardly and inwardly, as at 11.

It will be seen that the latch-hooks point normally slightly upwardly and that their beveled or rounded surfaces lie directly in the path of the side bar or a corresponding member of the gate. Now when the gate swings against either of the latch-hooks the wedge-like action of the contacting surfaces will lift the latch-hook upon its pivot, permitting the bar to pass against the hook-like side of the other latch. At this instant the hook-latch, which forms a stop to limit the swing of the gate beyond its closed position, which has been lifted, drops into place and the bar of the gate is embraced and secured by both the encircling hooks. Now the gate cannot be swung in either direction unless one of the latch-hooks is raised manually. Either of the latches may be readily so lifted by pressing the gate-bar against the other latch, as in Fig. 2, so that the free latch may clear the gate-bar. The gate may now be swung past the raised latch. The curved form of the latch prevents it from lifting when the gate is pressed against the inner side of the latch-hook, and the harder the gate is pressed the tighter it is locked.

In Fig. 7 it will be seen that the hole through the middle lug 2 is elongated, as at 2^a. This permits the pintle 3 when the gate is thrown violently against the latch to spring, as indicated by the dotted line in Fig. 7, thus relieving the jar, lessening the liability of breakage, and assisting in causing the latch-hook to fly up.

Figs. 5 and 6 show an upper and a lower latch connected by rods 12, secured to corresponding lugs 13 on the upper and lower latch-hooks. By lifting one of the latches, top or bottom, the connecting-rod causes the corresponding latch to rise simultaneously. This arrangement of my latch is used on high gates where it is necessary to fasten both top and bottom.

As will be seen from Figs. 3 and 4, my latch may be clamped or otherwise secured upon one of the meeting bars of a double gate or it may be similarly attached to a wood or iron post. Again, one of the latches may be dispensed with or formed rigid with the plate, so that the gate may be opened only in one direction.

Modifications of my latch other than those shown here will suggest themselves to those skilled in the art, and I do not, therefore, limit my device to the exact details here shown and described.

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

1. In a gate-fastening device, a finger curved laterally at its outer end to form a hook and having its outer under side transversely inclined, and means for pivotally supporting the finger in an upwardly-inclined position, the arrangement being such that the finger swings vertically upon its pivot.

2. In a gate-fastening device, a plate adapted for engagement with its support, transversely-bored horizontally-arranged lugs on the plate, a pintle supported in the bore of the lugs, a latch pivotally mounted upon the pintle, said latch being horizontally curved on one side, as a hook, and stops which limit the movement of the latch upon its pivot.

3. In a gate-fastening device, a plate, a pair of latches pivotally connected side by side at their inner ends to the plate, the outer ends of the latches being curved toward each other and stops which limit the swing of the latches upon their pivots.

4. In a gate-fastening device, a plate adapted for engagement with its support, horizontally-projecting lugs on the plate, said lugs having transverse bores arranged in alinement with each other, a pintle in said bores, a pair of latches pivoted side by side upon the pintle and being curved toward each other at their outer ends, and means for limiting the swing of the latches upon their pivots.

5. In a gate-fastening device, a plate, three lugs on the plate having transverse bores arranged in alinement with each other, the bore of the middle lug being laterally elongated, a pintle in said bores, a latch pivoted upon said pintle at one side of the middle lug, a latch pivoted upon said pintle at the opposite side of said lug, said two latches being curved toward each other at their free ends, and means for limiting the swing of the latches upon their pivots.

6. In a gate-fastening device, a pair of fingers curved laterally at their outer ends to form hooks, the outer under sides of the hooks being transversely inclined, means for pivotally supporting said fingers, one above the other, in an upwardly-inclined position, said fingers being arranged to swing vertically upon their pivots, and connections between the upper and lower fingers which cause them to swing in harmony upon their pivots combined with a stop which limits the swing of a gate beyond its closed position.

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

ELWOOD O. BAYLOR.

Witnesses:
JOSEPH P. LIBS,
C. D. HARDY.