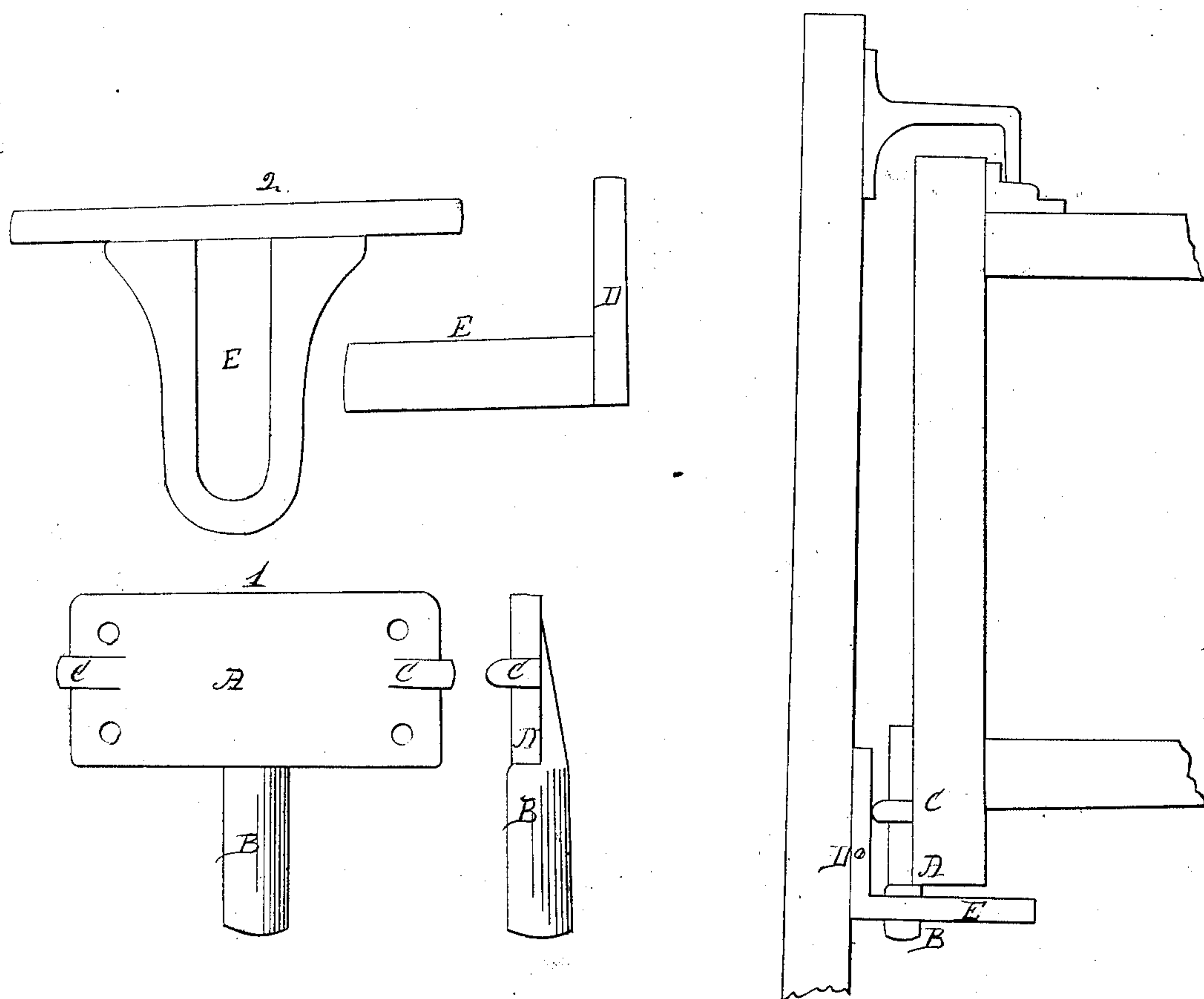


A. T. Hendrick.

Hinge.

N^o 21,496.

Patented Sep. 14, 1858.



UNITED STATES PATENT OFFICE.

A. T. HENDRICK, OF CLYDE, NEW YORK.

GATE-HINGE.

Specification of Letters Patent No. 21,496, dated September 14, 1858.

To all whom it may concern:

Be it known that I, AARON T. HENDRICK, of Clyde, in the county of Wayne and State of New York, have invented a new and useful Improvement in Gate-Hinges; 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 a part of this specification, in which—

Figure 1 is a front view of a gate with my improved hinge applied to it. Fig. 2 exhibits the hinge in detached parts.

Similar letters of reference in each of the several figures indicate corresponding parts.

My invention consists in the employment of an angle plate having an oblong slot cut vertically through its horizontal angle, in combination with a plate which has the pintle or axial pin of the hinge on its lower edge and a shifting projection on each of its side edges, all as presently described. By this simple combination, I am enabled to provide a hinge which will not cost but little, if any, more than the ordinary hook and eye hinge and yet will be capable, when used in connection with an ordinary hook and eye or other hinge, of allowing the gate to open both ways or inward and outward and will invariably cause the gate to close automatically or not allow it to remain stationary in any other but a closed condition unless held so by cord or hook.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The upper hinge may be of the ordinary hook and eye character to support the weight of the gate, the lower hinge for the purpose of description I will consider in two parts 1 and 2, as shown in the accompanying drawings. The part 1 consists of a plate A, a round pin B, projecting from the center of the lower edge of the plate downward, and equidistant from said center pin right and left upon the outer edges of the plate 1, are two projections C, C. This part of the hinge is attached to the stile of the gate. That part of the hinge No. 2, is attached to the post of the gate way and consists of a plate D, corresponding in size with its fellow, and instead of the ordinary round hole for the pin B, to turn in, is a slot E, extend-

ing at right angles with the plate 2, horizontally under the stile of the gate. This hinge, when thus constructed and properly secured to the post and gate, forms a movable center somewhat similar to that of turning ovals and the sweeping of an ellipse. The weight of the gate being borne by the top hinge where the force is downward and forward, while at the bottom hinge the force is directly opposite. As the gate opens either way, one of the projections C, rubs against the plate D, on the post moving in the direction of the slot and at right angles therewith, while the corresponding projection sweeps a portion of an ellipse at the same time the pin B, is forced forward into the slot E. When the gate is open at right angles with the fence, the force at the bottom is of course directly across the slot E. To prevent the gate resting here, various devices may be used. In the drawing accompanying this I have so adjusted the top hinge as to give the gate a slight inclination toward the opposite post when open. A spring, either at top or bottom, would also be a preventive. With the closing swing of the gate, the projection C, recedes outwardly and the pin B, returns in the slot toward the post, the force increasing in proportion as the distance increases between the slot E, and the projection C, until the opposite projection comes in contact with the plate D. In this position, and no other, will the gate rest. Each projection bearing equally against the plate D, while the center pin does not touch it. The gate would be held tolerably secure by these projections without a latch, but for perfect security the latch had better be used.

What I claim as my invention and desire to secure by Letters Patent, is—

The employment of an angle plate having an oblong slot cut vertically through its horizontal angle, in combination with a plate which has the pintle or axial pin of the hinge on its lower edge and a shifting projection on each of its side edges, substantially as and for the purposes set forth.

AARON T. HENDRICK.

Witnesses:

B. M. VAN DER VEER,
MOSES MUNN.