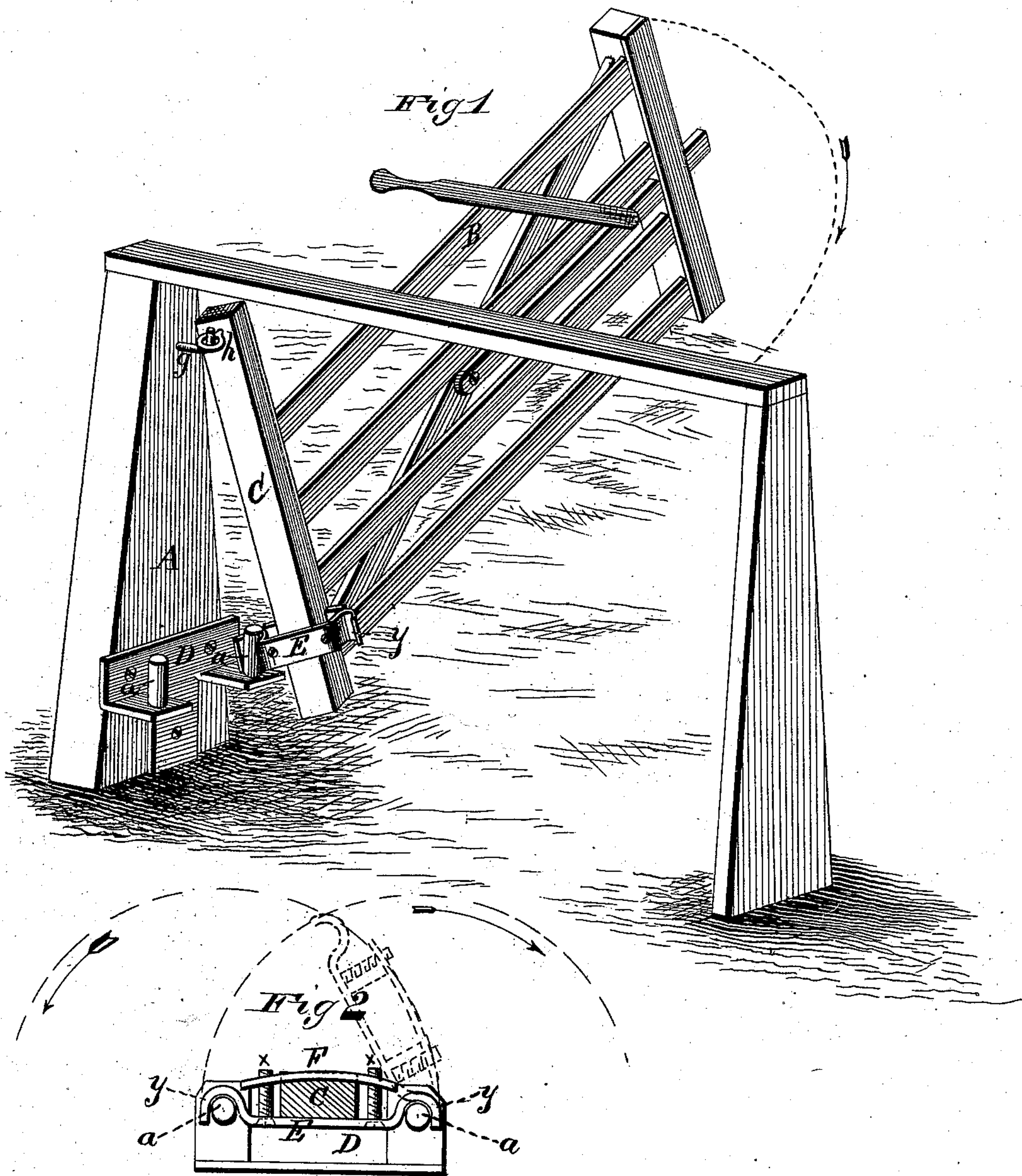


W. W. HINMAN.

HINGE.

No. 173,631.

Patented Feb. 15. 1876.



WITNESSES
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UNITED STATES PATENT OFFICE.

WILLIAM W. HINMAN, OF ELKHART, ILLINOIS.

IMPROVEMENT IN HINGES.

Specification forming part of Letters Patent No. **173,631**, dated February 15, 1876; application filed August 14, 1875.

To all whom it may concern:

Be it known that I, WILLIAM W. HINMAN, of Elkhart, in the county of Logan and State of Illinois, have invented certain new and useful Improvements in Hinges; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to that class of hinges in which an angular plate, having two upward-projecting pins or studs, is used in combination with a plate having recesses for engaging with the pins.

My invention is mainly designed for use upon gates; and it consists in the employment of a plate, which is bent to form two hooks, which are thrown back from the body of the plate, in combination with an angular plate having two upward-projecting studs, all as more fully hereinafter set forth.

In the accompanying drawings, making a part of this specification, Figure 1 represents a perspective view of a gate-frame and gate with my hinge applied. Fig. 2 represents a view of the top edge of the hinge as applied to the gate.

A represents a gate-post, and B, an ordinary farm-gate, having an upright, C, to which one section of my hinge is attached.

The top of the upright C of the gate is hinged to the top part of the post A by an ordinary hook and staple, *g h*.

Near the bottom of the post A is an angular metallic plate, D, upon the horizontal angle of which are two upward-projecting pins or studs, *a a*, which form one section of the hinge.

The other section of the hinge is attached to the upright C, and consists of a metallic plate, E, with a hook, *g*, formed at each end, which hook is thrown back from the body of the plate so that when the plate is applied to the upright the hooks *y y* will be in front and rear, respectively, of said upright; or, in other words, the ends of the hooks will be on a line with the front surface of the plate itself.

The plate is bolted or screwed direct to the front of the upright by passing bolts *x x* through the plate on each side of the same, and securing the bolt ends to a plate, F, on the back of the upright, as seen in Fig. 2. This mode of connecting with plate avoids screwing into the wood of the upright, and effectually clamps plate E thereto.

It will be seen and understood that this form of hinge allows the gate or door to open either way, inasmuch as the hinge-sections are disconnected, and either hook can encircle either pin.

I am aware that hinges composed of one section having upright pins, and the other section formed on the arc of a circle, with the ends of the latter provided with notches or recesses for engaging with the pins, are not new.

With my form of the plate E, the hinge is a self-lock whether the gate is opened or closed, and the post is let into the space between the hooks, so that the gate and post can fit close to one another.

The part of the hinge on the gate being constructed as described, will not be liable to catch and drag off hay or fodder when loaded upon a sled.

When the gate is closed, there is but a small space left, so that hogs cannot pass through, nor can they raise the gate off its hinges by rooting under the latter.

What I claim is—

The plate E, with the hooks *y y* formed on its ends and thrown back from the body of the plate, so that the ends of the hooks will be on a line with the front of the plate, and screwed to the upright by the back plate F and bolts *x x*, in combination with the angular plate D, having upward-projecting pins *a a*, all substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of July, 1875.

WILLIAM W. HINMAN.

Witnesses:

ALEX. M. DYE,
JOHN GIBBS.