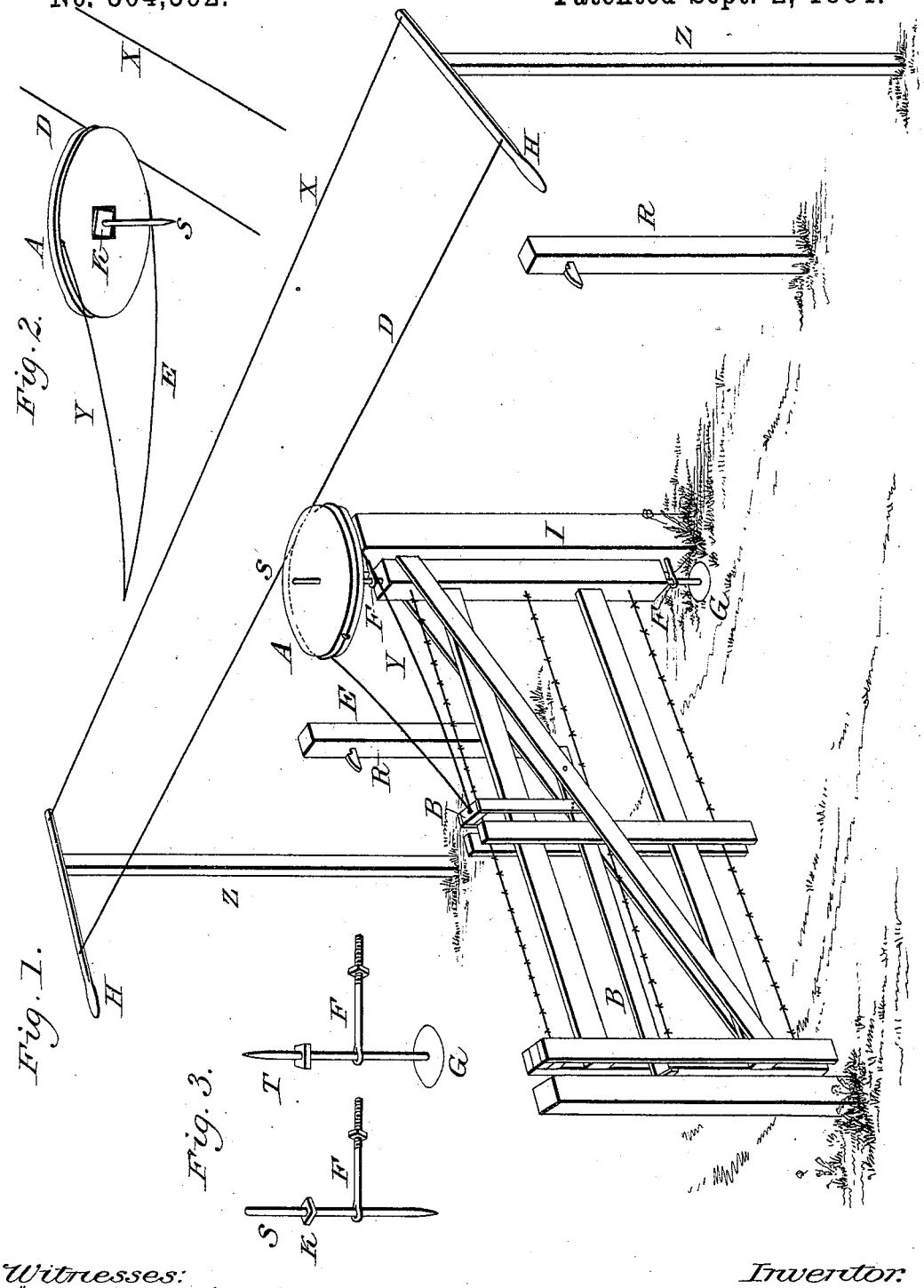
(No Model.)

R. WOLFE.

GATE.

No. 304,392. Patented Sept. 2, 1884.



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UNITED STATES PATENT OFFICE.

RICHARD WOLFE, OF KEITHSBURG, ILLINOIS.

GATE.

SPECIFICATION forming part of Letters Patent No. 304,392, dated September 2, 1884.

Application filed December 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, RICHARD WOLFE, a citizen of the United States, residing at Keithsburg, in the county of Mercer and State of Illinois, have invented a new and useful Gate, of which the following is a specification.

My invention relates to an improvement in gates; and the objects of my improvements are, first, to provide a means whereby a gate, by the use of a wheel and wire attachments operated by levers, can be unlatched, opened, closed, and relatched from a vehicle or other mode of conveyance, without getting out of or off of same; second, to provide a combination of two hinges and a plate resting on the ground, so as to remove the weight of the gate from the hinges, and to reduce the friction of the hinges in operating the gate. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view of the entire gate. Fig. 2 is a view of the wheel and a portion of the wire attachments used in operating the gate; also of the wires attached to the wheel and latch used in operating the latch. Fig. 3 is a view of the hinges and ground-plate.

Similar letters refer to similar parts throughout the several views.

The gate is constructed of wood or iron, substantially as shown in Fig. 1, and is hung by the hinges F F to the post I, and the gudgeon of the lower hinge F rests upon the ground-plate G, and permits the gate to be swung open in either direction.

The wheel A is attached to the gate by an extension of the gudgeon of the upper hinge F, which passes through the center of the wheel A. The wheel A is supported on the gudgeon S by the square block K, substantially as shown in Fig. 2. In the under side of the wheel A is a square mortise, which receives the block K. Said mortise is enough larger than the block K to allow a slight motion in the wheel A independent of the gate. The wires E Y are attached to the wheel A, and connected with the latch B, substantially as shown in Fig. 1.

The hinges F F are made of iron. The upper hinge F consists of an iron bolt, which passes through the post I and is secured by a nut at the rear. The end of said bolt nearest the gate terminates in an eye, through which passes the gudgeon S, said gudgeon being securely fastened in an upright of the gate, as shown in Fig. 1. The lower hinge F consists of an iron bolt, which passes through the post I and is secured by a nut at the rear. The end of said bolt nearest the gate terminates in an eye, through which passes the gudgeon T, said gudgeon being securely fastened in an upright of the gate, as shown in Fig. 1.

The ground-plate G is made of iron, and rests upon the ground independent of the post I. The ground-plate presents a smooth flat surface and receives the gudgeon T, thereby supporting the weight of the gate independent of the hinges F F or the post I. The gudgeon T rests upon the ground-plate G, forming a pivot on which the gate swings, thereby reducing the amount of friction upon the hinges F F.

The wires D X connect the levers H H. The wire D passes completely around the wheel A, and is securely fastened to said wheel by a staple at a point opposite to where the wire D crosses in leaving the wheel A. The purpose of the wire X is to give tension to the wire D. The levers H H are attached to the posts Z Z by pins which pass through the levers H H into the posts Z Z.

The gate is operated by pulling on either of the levers H H. When either of these levers are thus operated upon, the uncoiling of the wire D, which passes around the wheel A, causes a slight rotary motion independent of the motion of the gate, which tightens either of wires E or Y, as the case may be, raising the latch B. Then the mortise in the wheel A catches the block K and swings the gate open in a direction opposite to that of the side operated upon, and latches the gate against the post R. Passing through the opening, the operator is enabled to close the gate by operating the opposite lever, which draws the wire D, causing a slight rotary motion of the wheel A independent of the gate, which tightens either of the wires E Y, as the case may be, raising the latch B and freeing the gate from either of the posts R, as the case may be, then the mortise in the under side of the wheel A catches the block K and swings the gate shut and latches the same.

I am aware that prior to my invention

hinge-gates have been made. I therefore do not claim the invention of the gate; but

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

The combination, with a hinge-post of a gate, of the pintles attached to the rear upright thereof, the angular block rigidly secured to one of the pintles, the wheel provided with an angular mortise slightly larger than said block, means for connecting said wheel with the latch, and means for operating the wheel, substantially as set forth.

RICHARD WOLFE.

Witnesses:
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