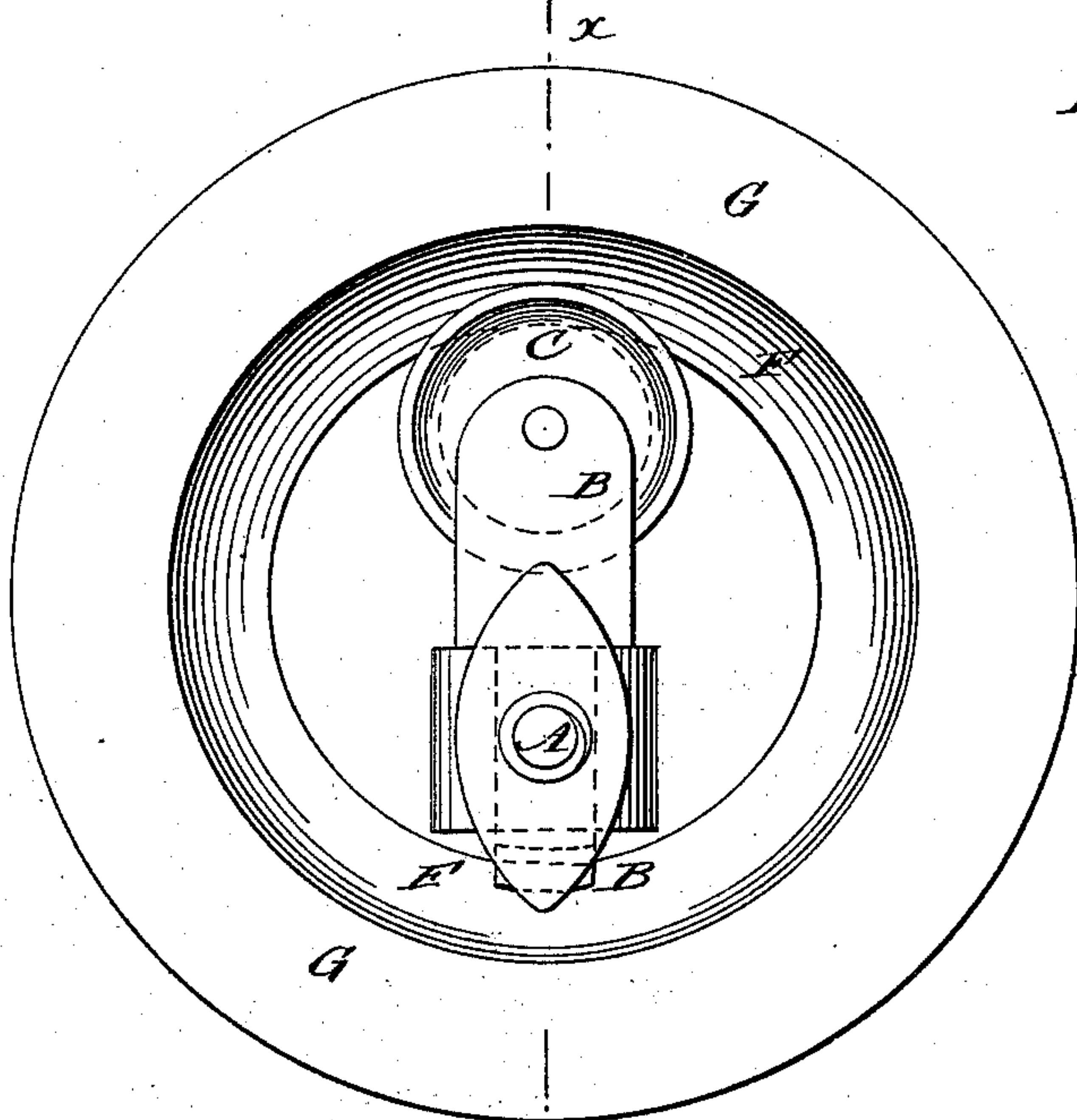


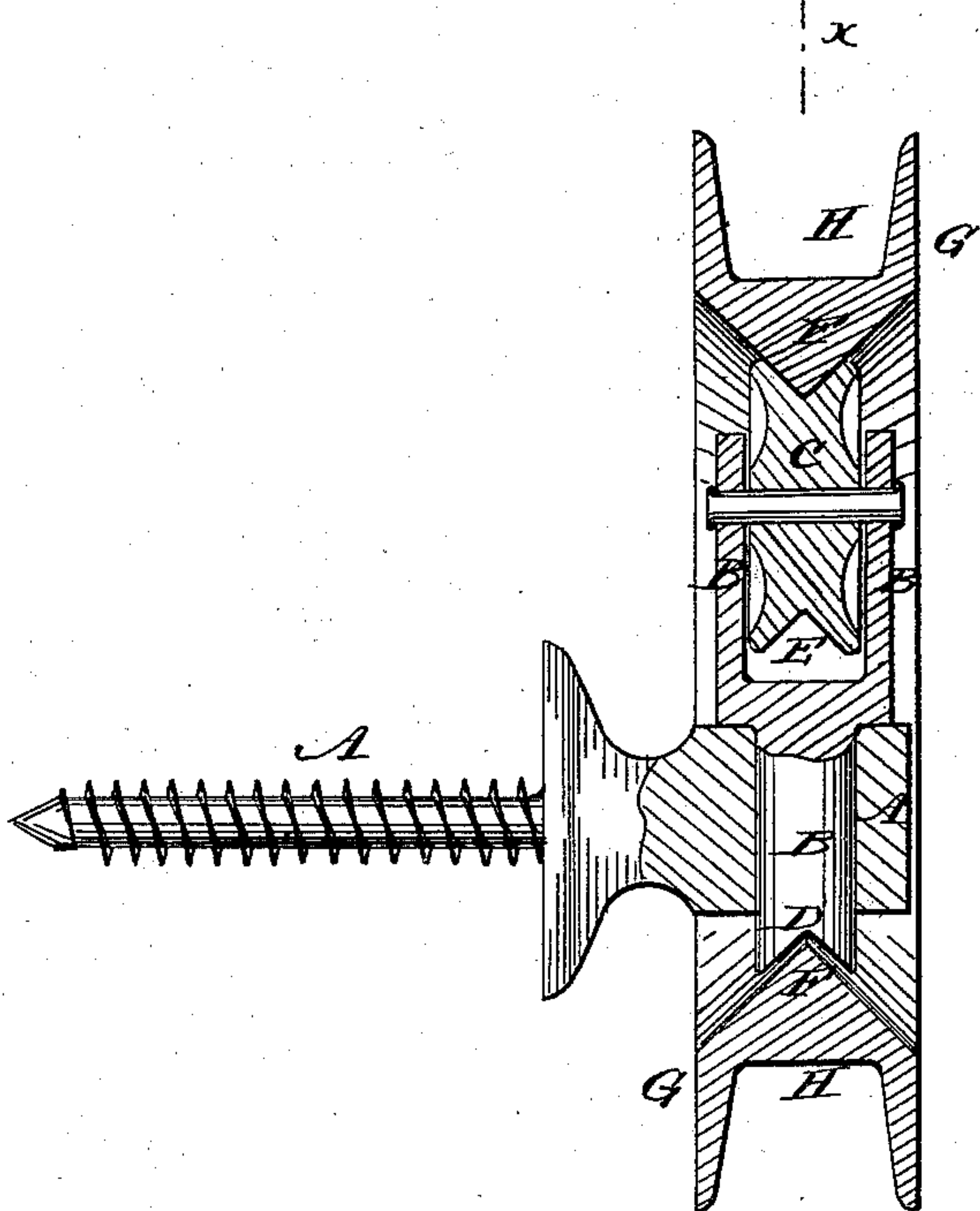
J. E. DAVIS.  
Gate-Hinge.

No. 223,890.

Patented Jan. 27, 1880.



*Fig. 1*



*Fig. 2*

WITNESSES:

*E. Novaux*  
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# UNITED STATES PATENT OFFICE.

JAMES E. DAVIS, OF PALMYRA, OHIO.

## GATE-HINGE.

SPECIFICATION forming part of Letters Patent No. 223,890, dated January 27, 1880.

Application filed November 7, 1879.

*To all whom it may concern :*

Be it known that I, JAMES E. DAVIS, of Palmyra, in the county of Portage and State of Ohio, have invented a new and Improved Gate-Hinge, of which the following is a specification.

Figure 1 is a side elevation of my improvement. Fig. 2 is a sectional elevation taken through the line *x x*, Fig. 1.

This invention relates to the class of gates that are opened by running them back and then swinging them around; and it has for its object to furnish a hinge so constructed that the gate may be very easily operated.

The invention consists in a gate-hinge formed of a screw hinged to a pintle provided with a small pulley and placed within a large ring-pulley, as will be hereinafter fully described, so that the said parts may move freely upon each other and allow the gate to be easily opened and closed, however heavy it may be.

Similar letters of reference indicate corresponding parts.

A represents a screw, through the extended head of which is formed a hole to receive the pintle B. The upper end of the pintle B is enlarged, and is slotted to receive the small pulley C, which pulley is pivoted to the said slotted end of the pintle B. The lower end of the pintle B has a V-shaped notch, D, formed in it, and the pulley C has a V-shaped groove, E, formed in it. The notch D and the groove E

receive the V-shaped inner side, F, of the ring-pulley G, which pulley has a square groove, H, formed in its outer side to receive the bars between which it is designed to roll.

In using the hinge the screw A is screwed into the gate and the ring-pulley G is inserted between two stationary bars; or the screw A is screwed into a post or other support and the ring-pulley G is inserted between two bars of the gate. In either case the gate is opened by running it back for a part of its length and then swinging it around.

With these hinges heavy gates can be easily and quickly opened and closed.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. As an improved article of manufacture, a gate-hinge made as herein shown and described, and formed of the screw A, the pintle B, the small pulley C, and the ring-pulley G, constructed and operating in connection with each other, as set forth.

2. In a gate-hinge, the ring-pulley G, formed with an angular inner side, F, to engage with the pintle B and pulley C, substantially as herein shown and described, to keep it in place upon the pintle B and pulley C, as set forth.

JAMES E. DAVIS.

Witnesses:

JOHN A. HIMES,  
THOS. HIMES.