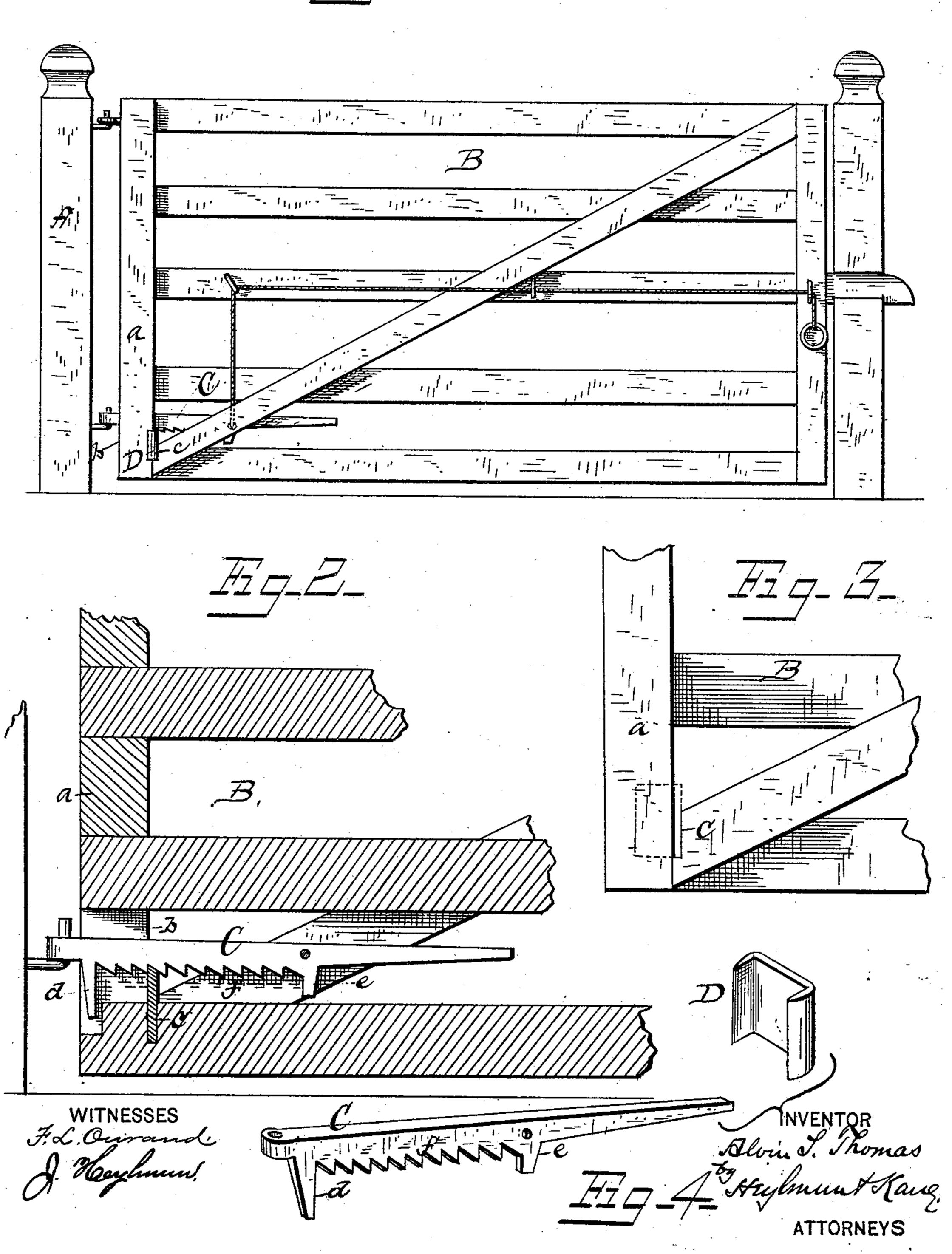
(No Model.)

A. S. THOMAS. HINGE FOR GATES.

No. 289,870.

Patented Dec. 11, 1883.

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United States Patent Office.

ALVIN S. THOMAS, OF FINDLAY, OHIO.

HINGE FOR GATES.

SPECIFICATION forming part of Letters Patent No. 289,870, dated December 11, 1883.

Application filed March 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, Alvin S. Thomas, a citizen of the United States of America, residing at Findlay, in the county of Hancock and 5 State of Ohio, have invented certain new and useful Improvements in Gates; and I do hereby 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.

This invention has relation to improvements in farm-gates of that class sustained at the lower hinge-bearings by a ratchet-bar and its adjuncts, and adjusted by means thereof, and is especially designed to provide a swinging gate with adjustable lifting means, whereby the forward end of the gate may be raised to any desirable height and maintained in position, and by which means the gate may be lowered to its normal position or stayed at any

intermediate point, as desired.

My invention therefore consists in a horizontal ratchet-bar hinged to the lower gate hook or hinge, and extending under one of the horizontal bars of the gate, in combination

with a plate fixed to the upright of the gate.

My invention further consists in the combination and arrangement of parts, as will be hereinafter more fully set forth and specifically claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side view of my improvement attached to a gate. Fig. 2 is an enlarged detail view of the horizontal ratchet-bar and metallic stay-plate, and Fig. 3 shows the method of securing the metallic stay-plate. Fig. 4 shows the ratchet-bar and stay-plate in detail.

The letter A represents the hinge-post, which 40 may be provided with hinge-hooks of ordinary kind; or the upper may be of the usual kind, and the lower one be bent over after the attachment of the gate is effected, forming an eye, so that the ratchet-bar shall be secured 45 therein against displacement in lifting and lowering the gate; and this latter construction is preferable, since it admits of the gate being lifted without straining the post or support.

The letter B represents the gate, which, except in the special features hereinafter stated, may be of any of the well-known construc-

tions. The upright a of the gate is provided or formed with a mortise, b, which receives the horizontal ratchet - bar, hereinafter de- 55 scribed, and the lower rail of the gate is shouldered at the part which is inclosed in the upright, substantially as shown, and also has the vertical slot c cut parallel with the inner face of the upright to receive the stay-plate. 60

The letter C represents the horizontal ratchet-bar, formed with hinge-eye to fit the lower hook or ring of the post, and also formed with top surface plain, and the under parts with the downward-projecting studs d and e and e and e intermediate ratchet-bar, f.

The letter D represents the vertical stayplate, which serves as a catch or lock to engage with the ratchet-bar and hold the gate in any position desired. This plate is preferably let 70 into the lower rail of the gate, and is struck at right angles to hug the side of the upright, in order to prevent lateral displacement. About midway of the length of the ratchet-bar a perforation is made, into which is secured a cord or 75 wire, which extends from thence through guiding-rings or staples to the latch of the gate, substantially as shown, by which means the party at the latch can adjust the front end of the gate to any desired height. The horizontal 80 ratchet-bar is extended beyond the ratchetsection, in order to effect a longer purchase in lifting the ratchet from engagement when raising or lowering the gate. Any latch may be used to secure the gate to the latch-post. In 85 the instance shown in the drawings the rail is extended and fits in a latch-mortise in the post. In adjusting the gate the person lifts the latch end, which causes the ratchet-bar to slip over the plate against the upright and fall by gravity 90 into engagement therewith as soon as the desired elevation is reached.

To lower the gate the cord is pulled, reaching from the ratchet-bar, until the bar is lifted from engagement with the stay-plate, and 95 the gate then falls by gravity.

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

1. In combination with a hinge-post and gate, the horizontal ratchet-bar, formed with 100 an eye to engage the hinge-hook of the post, and depending lugs, and with an intermediate ratchet-section on the under side thereof, substantially as described.

2. The ratchet-bar, formed with an eye to engage the hinge-hook of a gate, and depending lugs with intermediate ratchet-section, in combination with a vertical stay-plate secured against the inner face of the upright of the gate, substantially as described.

3. The ratchet-bar, constructed substantially as described, in combination with a vertical stay-plate secured against the inner face to of the upright of the gate, and suitable lift-

ing means whereby the ratchet-bar is disengaged from connection with the stay-plate, substantially as described.

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

ALVIN S. THOMAS.

Witnesses:
JNO. C. MARTIN,
O. A. BALLARD.