

No. 696,256.

Patented Mar. 25, 1902.

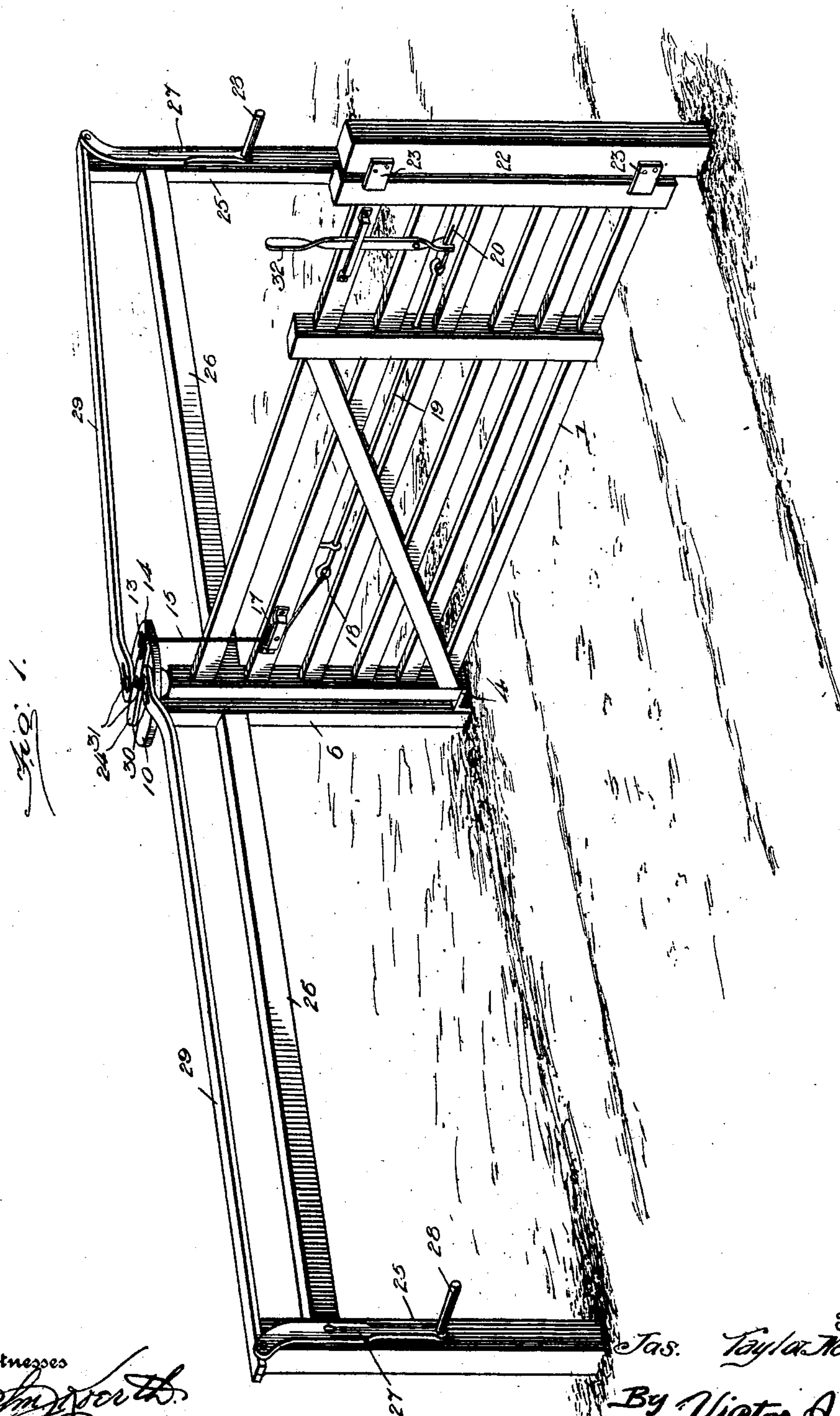
J. T. NEWDIGATE.

GATE.

(Application filed July 30, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses
James H. Smith
Arthur Macdonald

Inventor
Jas. Taylor Newdigate,
By *Victor J. Evans,*
Attorney.

No. 696,256.

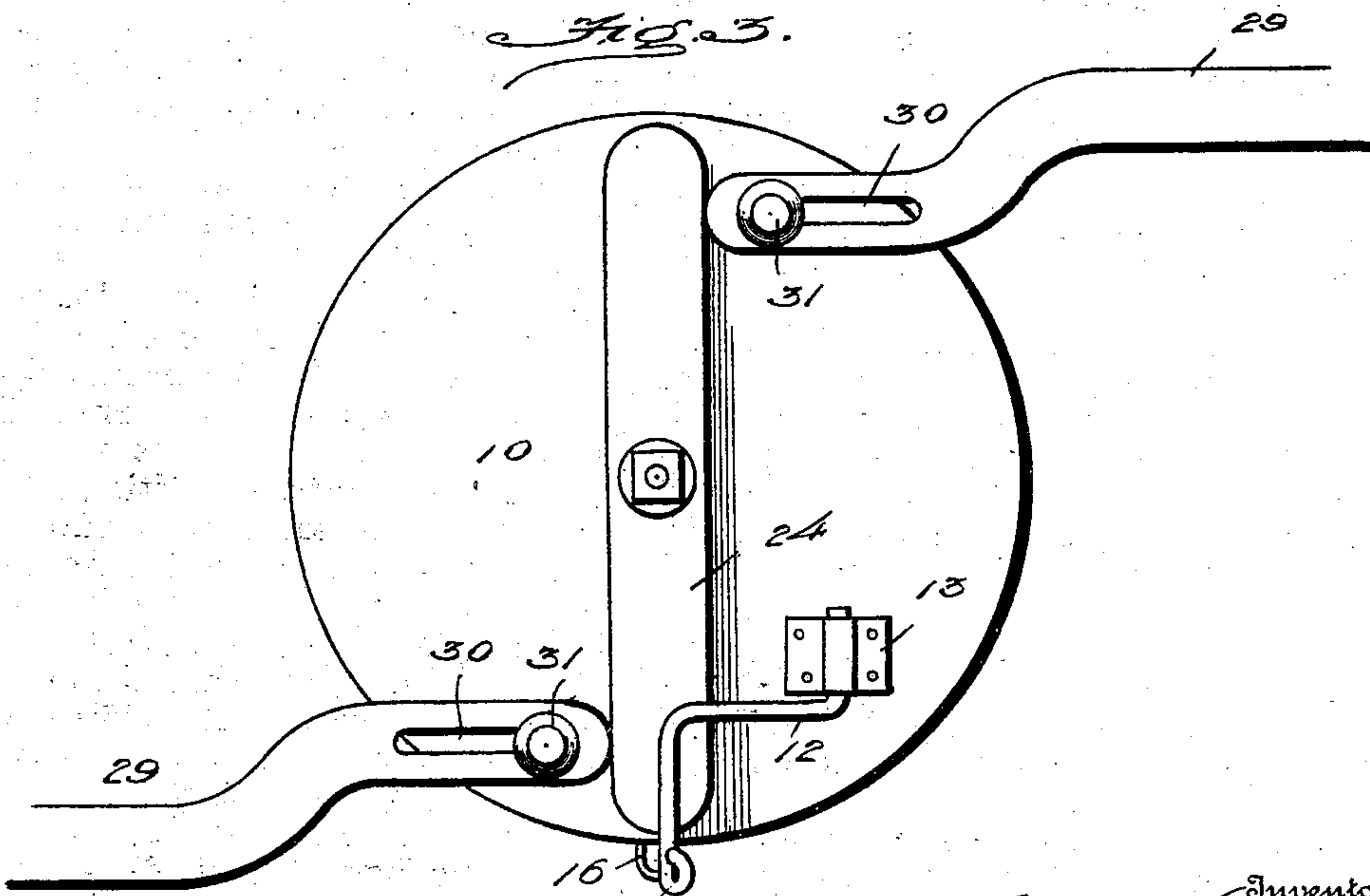
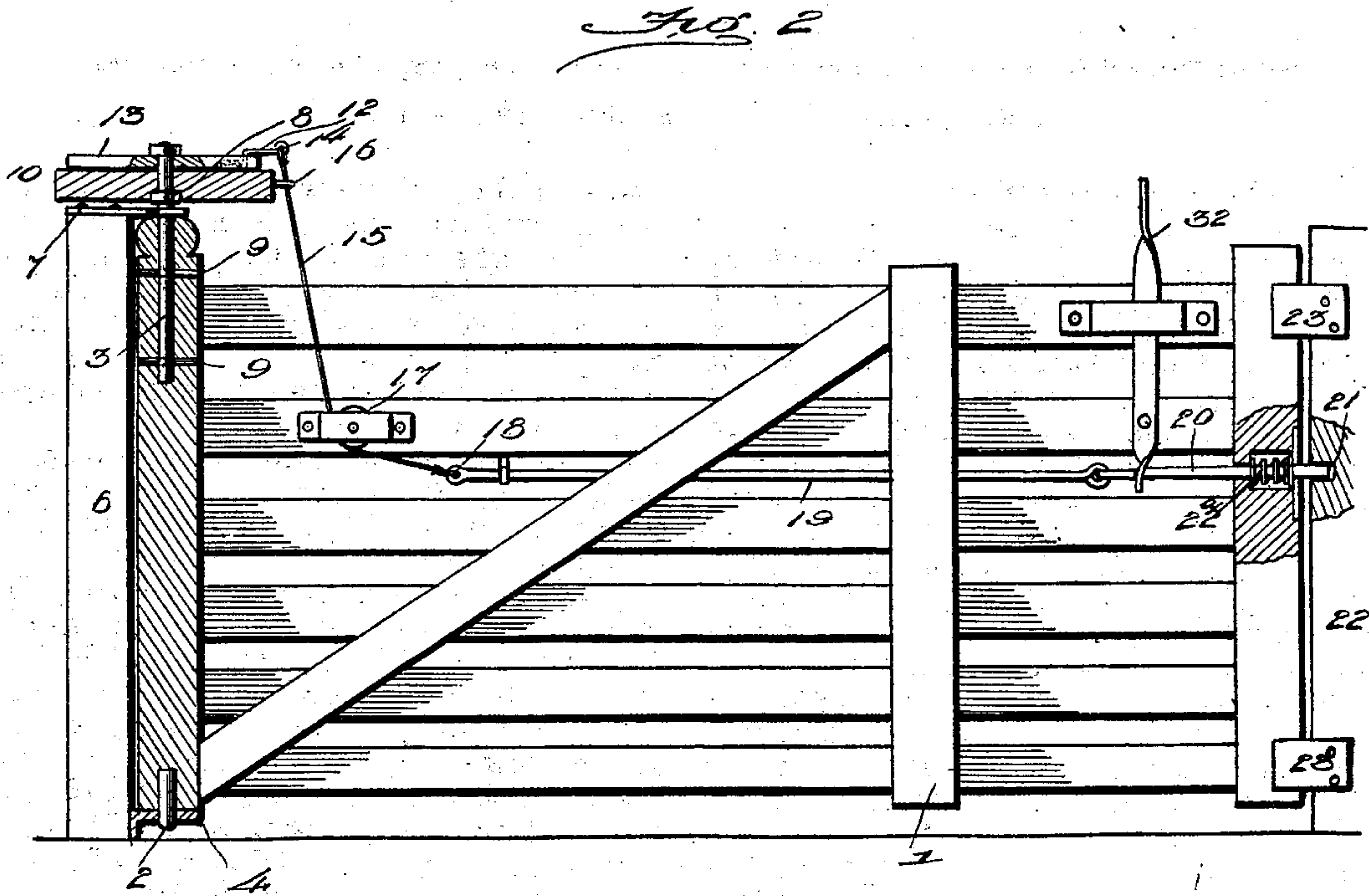
Patented Mar. 25, 1902.

J. T. NEWDIGATE.
GATE.

(Application filed July 30, 1901.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses
John North
Walter Maddox

Inventor
Jas. Taylor Newdigate
By *Victor J. Evans*
Attorney.

UNITED STATES PATENT OFFICE.

JAMES TAYLOR NEWDIGATE, OF FLEMINGSBURG, KENTUCKY.

GATE.

SPECIFICATION forming part of Letters Patent No. 696,256, dated March 25, 1902.

Application filed July 30, 1901. Serial No. 70,283. (No model.)

To all whom it may concern:

Be it known that I, JAMES TAYLOR NEWDIGATE, a citizen of the United States, residing at Flemingsburg, in the county of Fleming and State of Kentucky, have invented new and useful Improvements in Gates, of which the following is a specification.

This invention relates to gates, more particularly to that class known as "hand-openers," where the gate may be opened or closed by a person on a horse or in a vehicle without his dismounting or leaving the vehicle; and the object of my invention is to improve and simplify the mechanism to withdraw the latch and to open and close the gate.

The invention consists in the novel construction, combination, and arrangement of parts, which will be fully described hereinafter, illustrated in the accompanying drawings, and claimed.

In the drawings, Figure 1 is a perspective view of a gate constructed in accordance with this invention. Fig. 2 is a side elevation of the gate, parts appearing in section and the gate being shown closed. Fig. 3 is a top plan view of the operating-disk.

Referring now more particularly to the drawings, the numeral 1 designates a swinging gate of any well-known style, the rear stile of which is provided at its upper and lower ends with pintles 2 and 3. The pintle 2 is arranged in an eye or opening of a bracket 4, secured to the lower end of a post or standard 6, and the pintle 3 in an eye or opening of an arm 7, secured upon the top of said post. The pintle 3 extends above the arm 7 and has a shoulder or offset 8, and the said pintle is secured against axial movement by pins 9, passing through the stile and pintle. A disk 10 is mounted upon the pintle 3 and has a recess adapted to engage the shoulder or offset 8 and is thereby rigidly secured to the pintle.

13 designates a bracket-bearing secured to the upper side of the disk 10 to receive one end of an angle-arm 12, the opposite end of said arm being provided with an eye 14 for the attachment of a flexible connection 15. The said flexible connection is then passed through an eye 16, secured to the disk 10, and

under a pulley 17, mounted on the gate, where it is secured in an eye 18 in one end of a link 19. The other end of said link is secured to a latch 20, which when the gate is closed is normally held in the recess 21 of the front gate-post 22 by means of a spring 22^a. The said post has secured thereto upper and lower stop-plates 23.

Journaled upon the extended portion of the pintle 8 and above the disk 10 is an oscillatory operating-bar 24, one end of which lies under the lever 12.

In alinement with and at a suitable distance from the rear gate-post 6 are uprights 25, connected with the said post 6 by horizontal rails 26. Fulcrumed upon the inner side of said uprights 25 are levers 27, provided at their lower ends with handles 28 and connected at their upper ends to the outer ends of operating-arms 29, the inner ends of said arms 29 being provided with elongated slots 30. The operating-arms 29 are slidably and pivotally connected to the disk 10 through the medium of their elongated slots 30 and bolts 31, projecting through said slots. The said inner ends of the arms 29 also bear upon opposite sides of the operating-bar 24 on opposite sides of the pintle 3 and are adapted to oscillate said bar to operate the angle-arm 12.

The operation of the invention is as follows: By pulling one of the levers 27 by means of the handle 28 one of the operating-arms 29 is pushed forward, thereby turning the operating-lever 24 upon its pivot and forcing the same farther under and lifting the angle-arm 12, causing the same to withdraw the latch through the medium of the flexible connection 15 and link 19. It will thus be seen that at this point the gate is free to be turned upon its hinges and that the operating-arm 29 is at the limit of its sliding movement, hence that upon a further movement being imparted to the arm 29 the outer end wall of the slot 30, which abuts against the bolt 31, will as the disk 10 is rigidly secured to the rear hinging-stile of the gate force the gate open. The person passing through the gateway may then by operating the lever 27 upon the opposite side of the gateway move the co-operating arm 29 to swing the gate closed.

To enable the latch-bolt 19^a to be retracted by a person in close proximity to the free end of the gate, a lever 32 is provided, which is pivoted to the gate and suitably connected to the bolt.

From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation, and advantages of the invention will be readily understood without a further extended description. Changes in the form, proportion, and minor details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

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

1. In a gate-opener, the combination with a swinging gate, a latch-post and a sliding latch to engage said post, of operating-levers arranged upon opposite sides of the gate, a disk fixed to the hinging-stile of the gate, operating-rods connected at their ends to the levers and at their inner ends to the disk and adapted to have a limited independent movement without actuating the disk, and means operated by said arms upon their initial independent movement to retract the latch, where- by the movement of either arm first retracts

or releases the latch and then swings the gate open or closed, substantially as described.

2. In a gate-opener, the combination with a latch-post, of a swinging gate provided with a sliding latch to engage said post, operating-levers upon opposite sides of the gate, operating-arms pivoted to the levers, a disk fixed to the gate and having a slot-and-pin connection with each arm, such slot-and-pin connections being upon opposite sides of the center of the disk, an oscillatory operating-bar operated by the arms, an angle-arm operated by said bar, and a connection between said angle-arm and the sliding latch, substantially as described.

3. In a gate-opener, a latch-post, a swinging gate, a latch carried by the gate to engage the post, a crank-disk rigidly connected with the gate, an angle-arm connected with the latch, an oscillatory bar upon the disk, and operating members having a slot-and-pin connection with the disk for turning the same to operate said angle-arm, substantially as described.

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

JAMES TAYLOR NEWDIGATE.

Witnesses:

E. H. KENNER,
JNO. K. LYONS.