

No. 861,831.

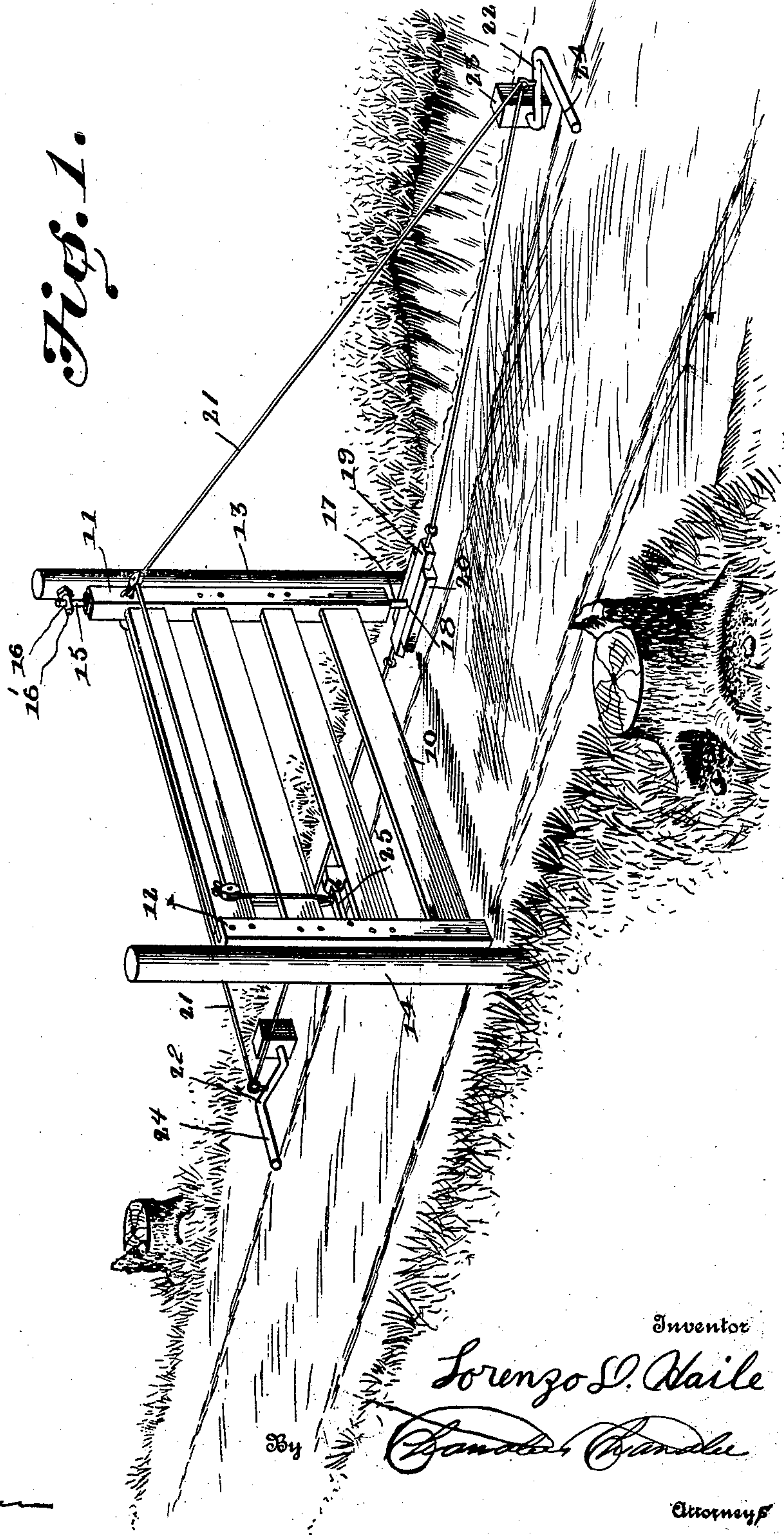
PATENTED JULY 30, 1907.

L. D. HAILE.  
GATE.

APPLICATION FILED NOV. 20, 1906.

2 SHEETS—SHEET 1.

*Fig. 1.*



Witnesses

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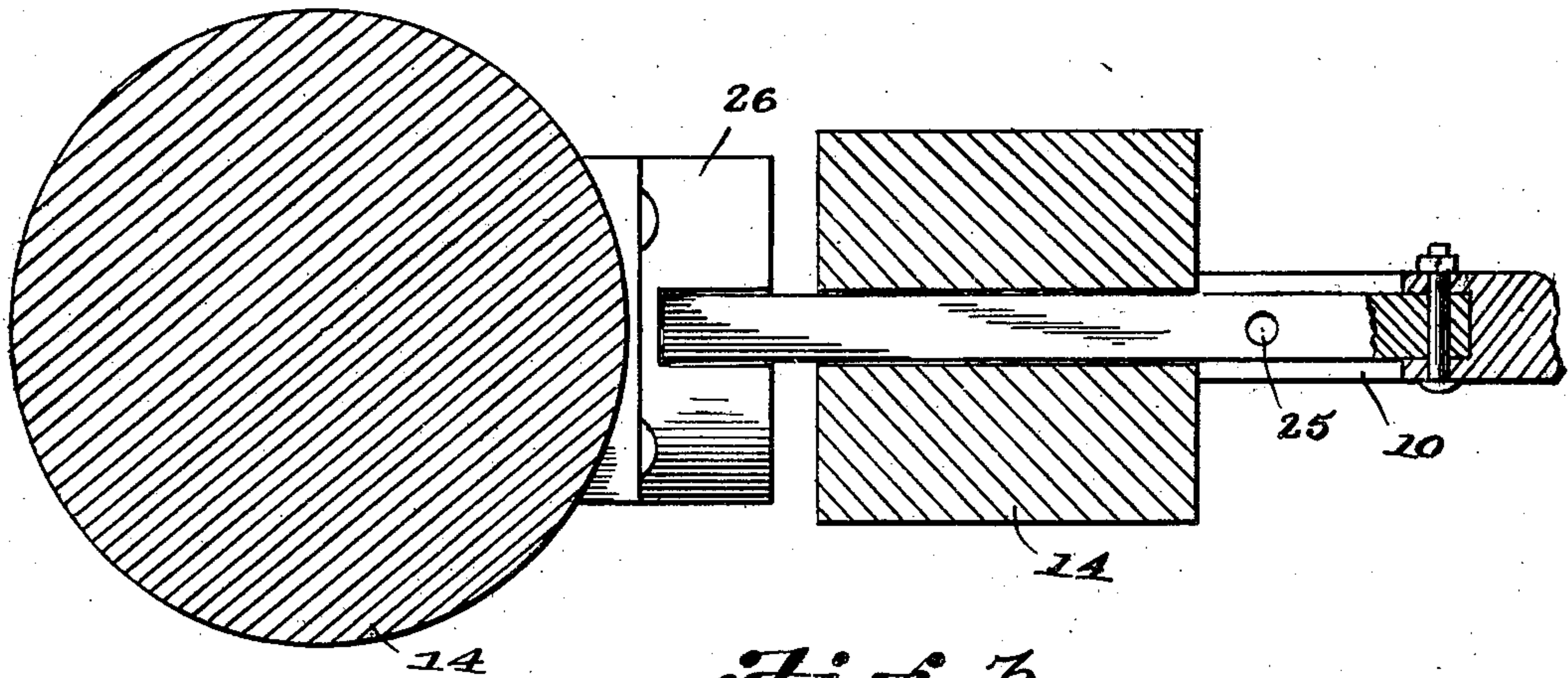
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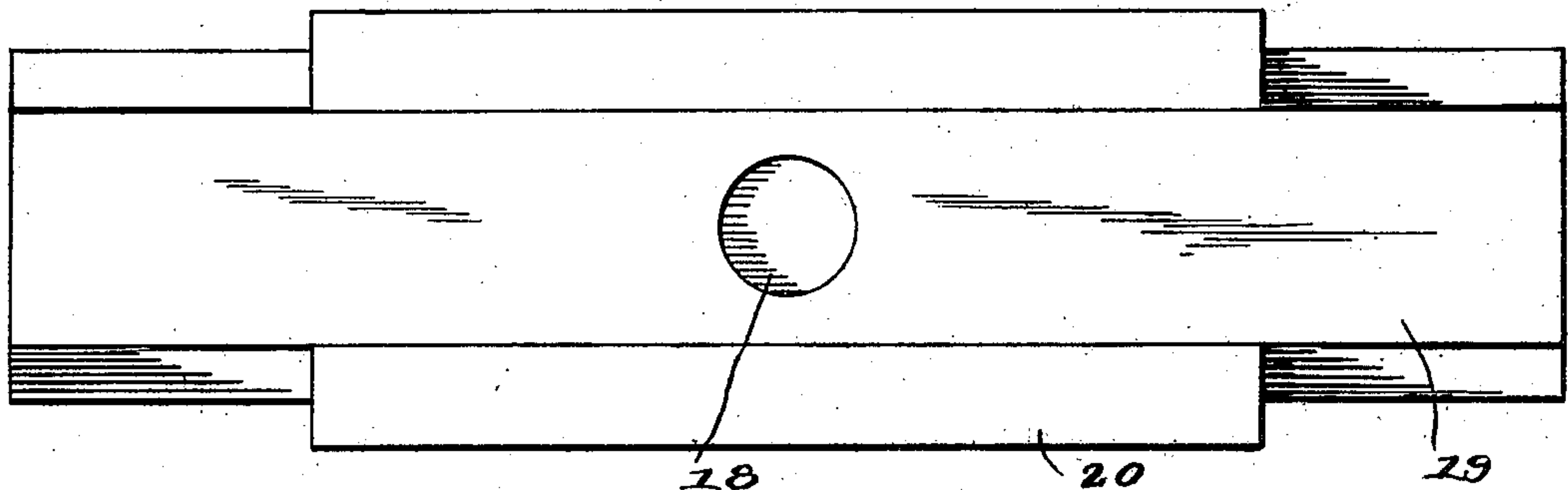
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2 SHEETS—SHEET 2.

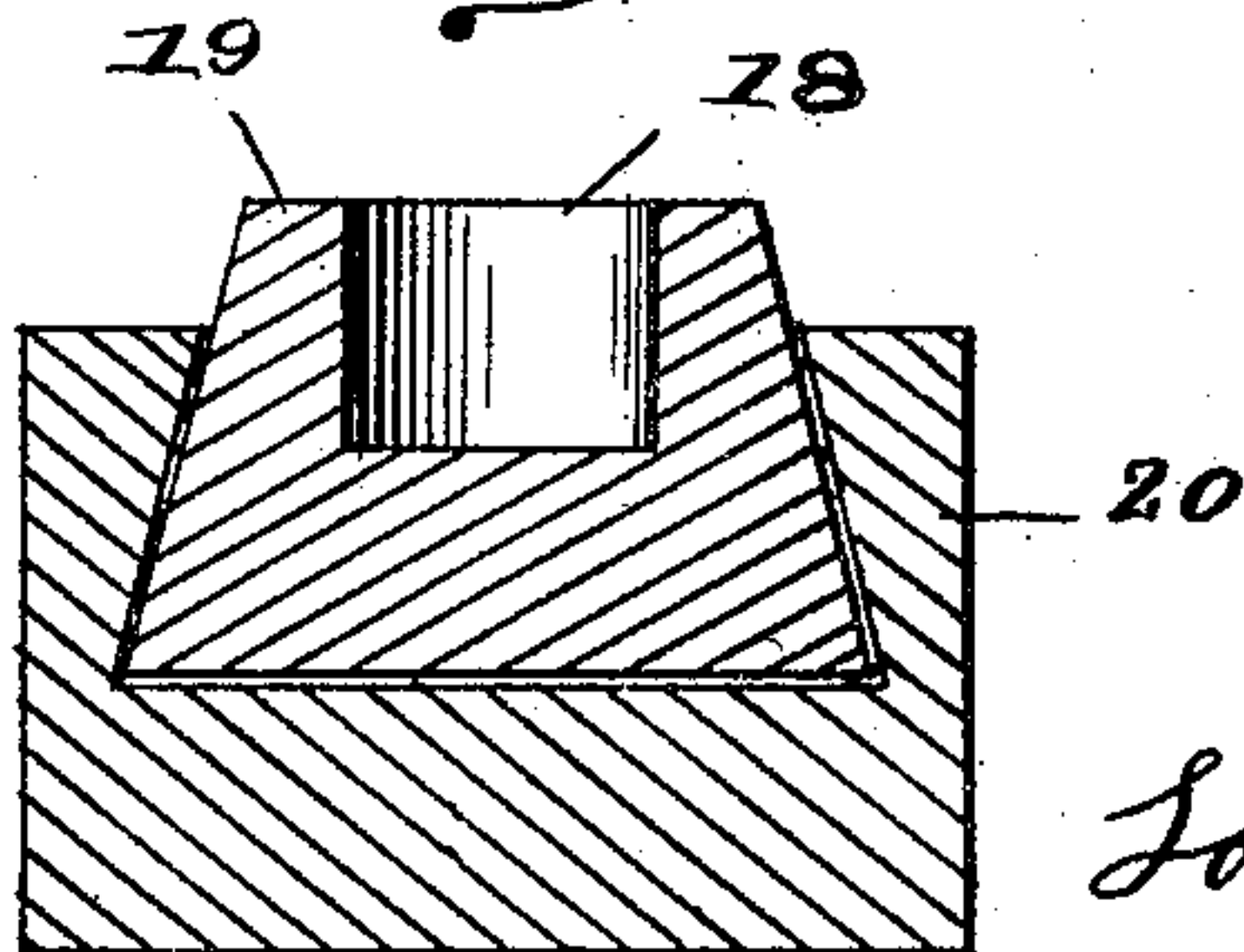
*Fig. 2.*



*Fig. 3.*



*Fig. 4*



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# UNITED STATES PATENT OFFICE.

LORENZO D. HAILE, OF KINGSLAND, TEXAS.

## GATE.

No. 861,831.

Specification of Letters Patent.

Patented July 30, 1907.

Application filed November 20, 1906. Serial No. 344,276.

*To all whom it may concern:*

Be it known that I, LORENZO D. HAILE, a citizen of the United States, residing at Kingsland, in the county of Llano, State of Texas, have invented certain  
5 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.

10 This invention is in line with that kind of gates that are provided with an upper and lower hinge, the latter being in the form of a pivot stepped in a laterally shiftable bar to render the gate self-opening.

15 The nature of my invention consists of improvements that simplify and cheapen the cost of construction and render the shifting of the step entirely certain; and the invention further consists in improved means for unlatching the gate automatically.

20 The improvements embodied in the device are portrayed in the annexed drawings, forming a part of this specification, in view of which they will first be described in detail and then be pointed out in the subjoined claims.

25 Of the said drawings:—Figure 1 is a perspective view of my invention. Fig. 2 is a detail sectional view through the latch post. Fig. 3 is a plan of the laterally shiftable pivot slide. Fig. 4 is a transverse section of the same.

30 Similar numerals of reference designate similar parts or features, as the case may be, wherever they occur.

In the drawings, 10 designates the gate composed of the upright bar 11 at the hinging end and a substantially similar bar 12, at the latching end, the two upright bars being connected by lateral bars.

35 13 designates the hinging post and 14 the latching post. The gate is hinged to the post 13 by means of a pintle 15 extending vertically from the top of the bar 11 through the eye 16 of a bolt 16' extending through the post 13 and having nuts on both sides of the post  
40 to adjust it and the gate 10 with respect to the post. At the bottom of the bar 11 there extends vertically therefrom a foot-pintle 17 that is stepped in a slight recess 18 formed centrally in the upper face of the bar 19 supported in an under-cut groove formed in a transversely arranged base-piece 20. The step-bar 19 is  
45 arranged to be moved longitudinally in its groove support in both directions, throwing the gate "out of plumb" and so causing it to swing open by gravity in a well-known way.

50 As a means for moving the step-bar, I connect one end of a cord 21 to one end of the step-bar 19, passing said cord back through an eye on one arm 22 of a crank-rod pivoted at its inner distance upon a post 23 set in the ground at a suitable end from the gate. The cord

21 after engaging the said crank-lever is passed around 55 a pulley on the hinge-stile and thence over another pulley on the gate to the gate-latch 25. The rod 22 extends in line with the roadway that passes the gate and has a right angular extension 24 extending transversely across the track of the roadway. These means 60 and their specific arrangement are established on both sides of the gate. The tension on the cord 21 is such as to keep the bar or rod 22 and its angular part 24 normally raised so that when the wheels of a vehicle are driven over the angular extension 24, they depress the 65 free end of the rod 22, draw on the cord 21 and pull the slide 19 longitudinally toward the vehicle, move the "hanging" of the gate out of plumb and impart a tendency to the latter to swing open by gravity in a direction away from the approaching vehicle. The 70 gate-post 14 is provided with a catch 26 with which the pivoted latch 25 on the gate is adapted to engage.

When the wheel of a vehicle passes over either angular extension 24 it depresses the rod 22 with the effect of drawing on the cord 27 and raising the latch from its 75 engagement with its catch and allowing the gate to swing open.

The position of the pintles 15 and 17 in direct line with the vertical bar 11 renders the movement of the step slide 19 easy and certain; and this is an important 80 feature of the improvement.

Of course, the gate may have a different form from that shown and other parts may be changed or varied in form and arrangement without departing from the 85 general nature or spirit of the invention.

What is claimed is:—

1. A self-opening gate having its vertical hinging bar provided with pintles extending in line with the bar, the upper pintle having a suitable hinge connection, a longitudinally movable step-bar provided with a socket in 90 which the lower pintle is stepped, rods extending from the ends of the said step-bar and movable means extended across the track of the drive-way with which the other ends of the rods are connected.

2. The combination with the vertical hinge-bar of a 95 gate having a pintle extending from its lower end in line with the bar, a base provided with a groove having undercut sides, a step-bar constructed to slide in said groove into which bar the said pintle is stepped and means connected with the ends of the step-bar to slide the same 100 longitudinally by the engagement of the wheel of a vehicle therewith.

3. The combination with the vertical hinge-bar of a gate having its lower hinge-pintle in line with the bar, of the sliding step-bar on which the pintle rests, and a base- 105 bar for supporting the step-bar.

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

LORENZO D. HAILE.

Witnesses:

B. J. LANBY,  
E. J. DOE.