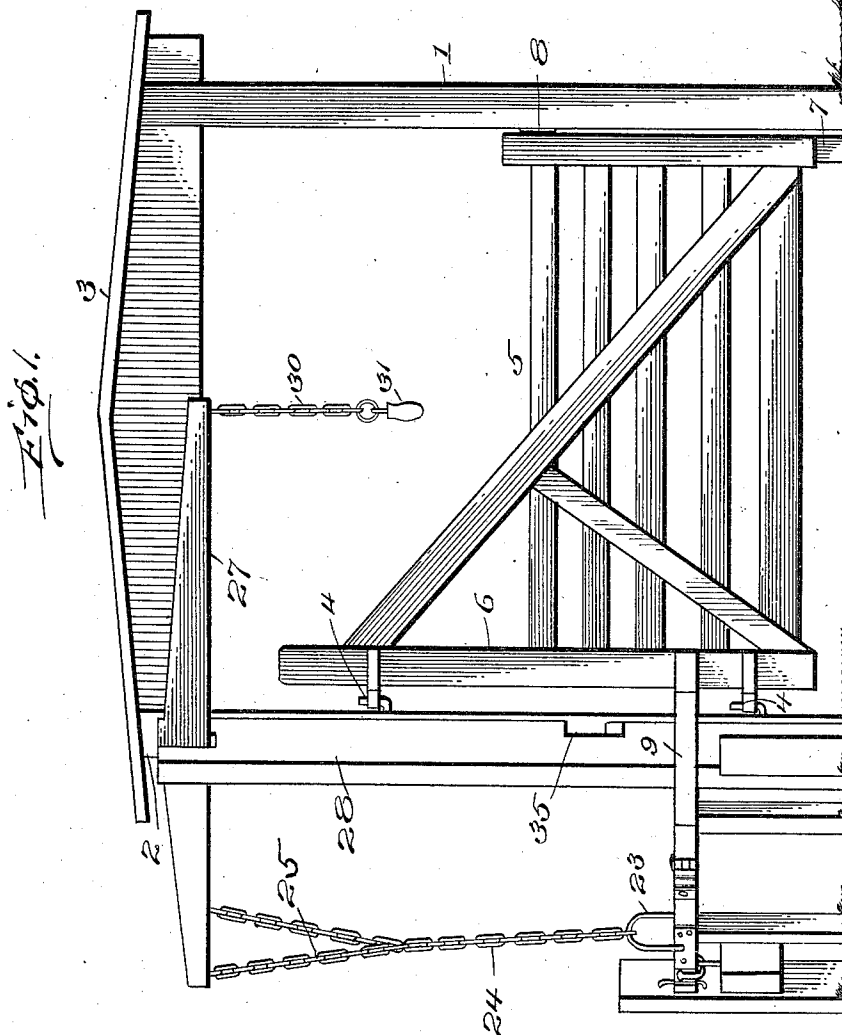


S. WILSON.
GATE OPERATING MECHANISM.
APPLICATION FILED JUNE 15, 1910.

1,011,300.

Patented Dec. 12, 1911.

3 SHEETS-SHEET 1.



Witnesses
M. Fowler Jr.
G. M. Copeland

Inventor
Simeon Wilson

By *[Signature]*

Attorney

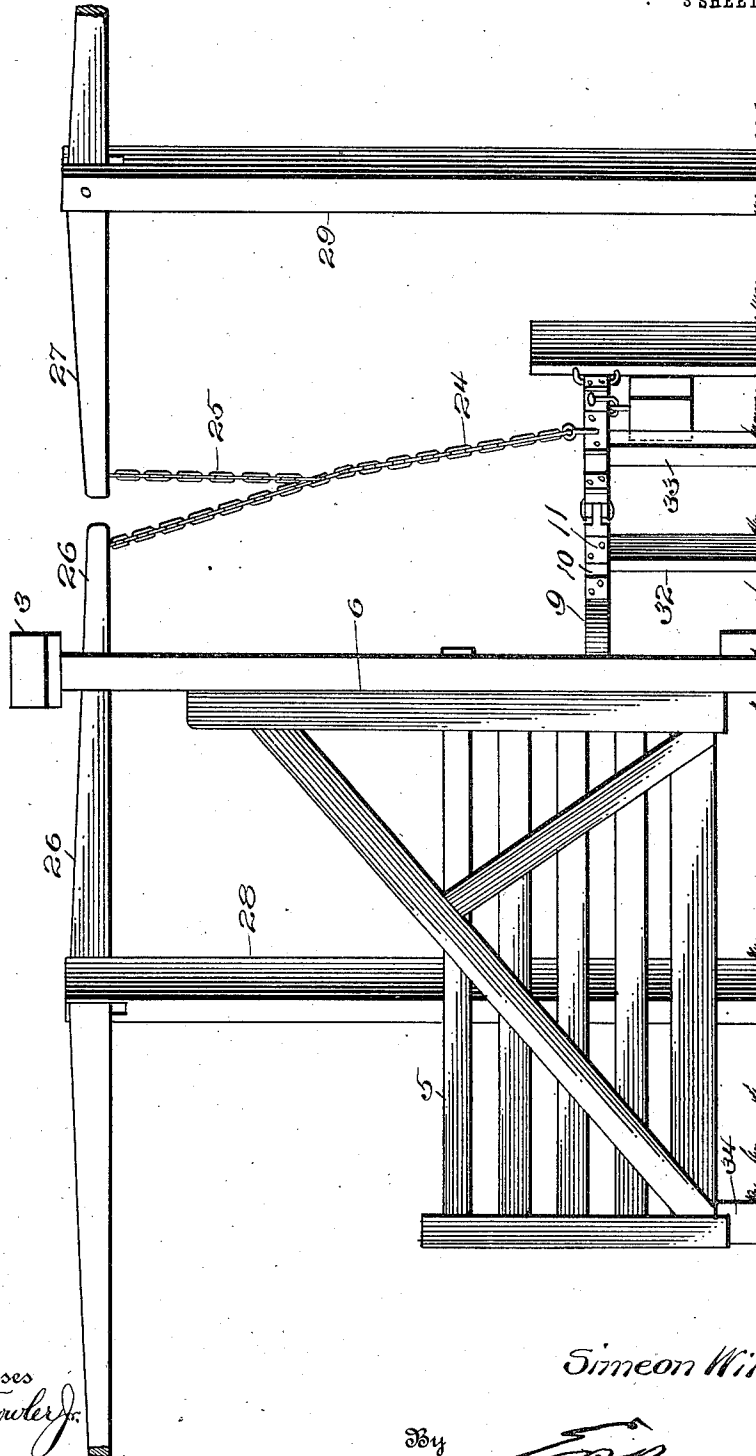
S. WILSON.
GATE OPERATING MECHANISM.
APPLICATION FILED JUNE 15, 1910.

1,011,300.

Patented Dec. 12, 1911.

3 SHEETS—SHEET 2.

Fig. 2.



Inventor

Simeon Wilson

By

[Signature]

Attorney

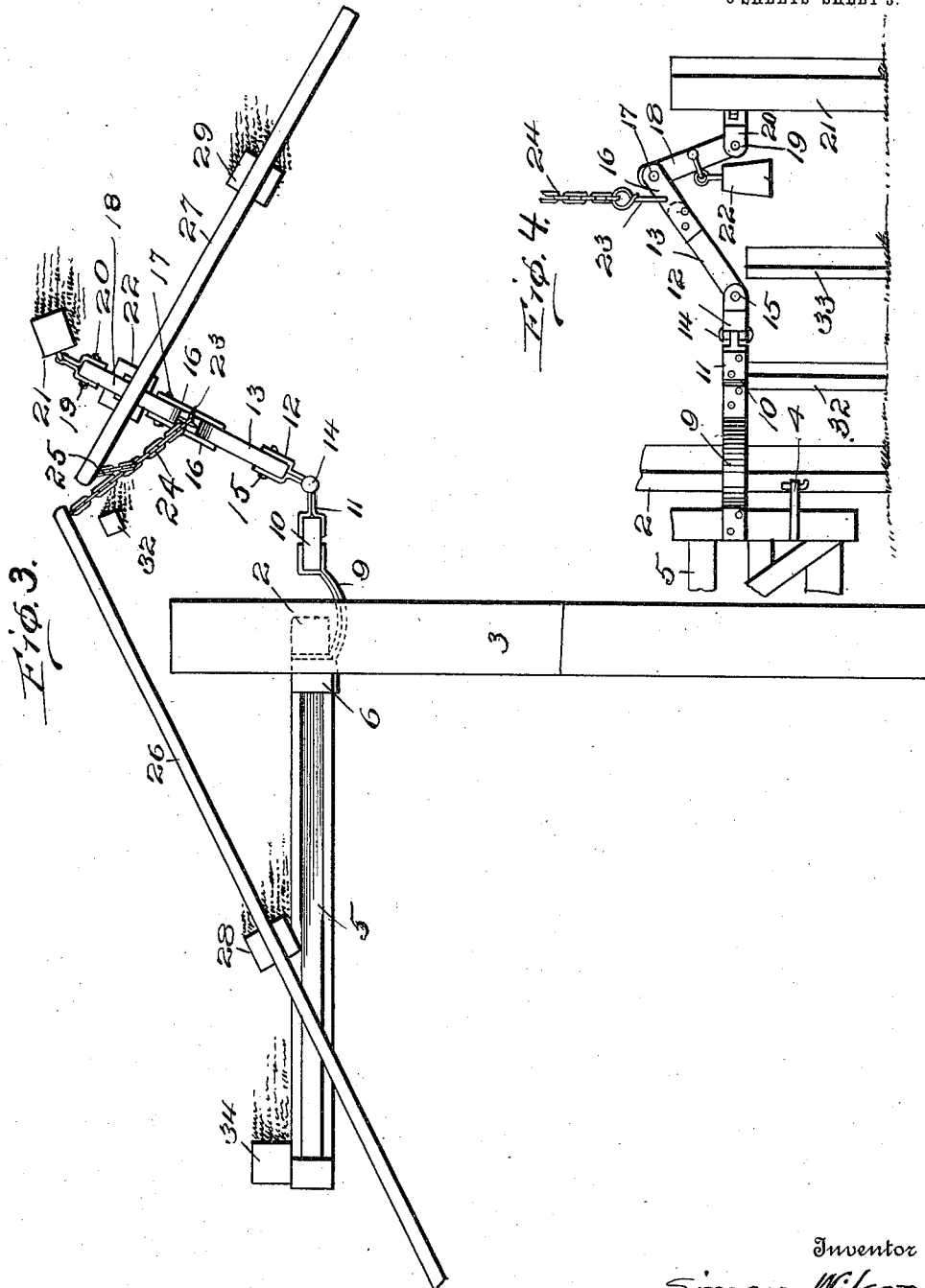
Witnesses
J. M. Fowler Jr.
J. M. Copeland

S. WILSON.
GATE OPERATING MECHANISM.
APPLICATION FILED JUNE 15, 1910.

1,011,300.

Patented Dec. 12, 1911.

3 SHEETS-SHEET 3.



Witnesses
J. M. Fowler Jr.
J. M. Copenhaver

Inventor
Simeon Wilson

By

E. R. Brumbaugh
Attorney

UNITED STATES PATENT OFFICE.

SIMEON WILSON, OF GORDON, TEXAS, ASSIGNOR OF ONE-HALF TO WILLIAM W. JOHNSON, OF GORDON, TEXAS.

GATE-OPERATING MECHANISM.

1,011,300.

Specification of Letters Patent.

Patented Dec. 12, 1911.

Application filed June 15, 1910. Serial No. 566,980.

To all whom it may concern:

Be it known that I, SIMEON WILSON, a citizen of the United States, residing at Gordon, in the county of Palo Pinto and State of Texas, have invented certain new and useful Improvements in Gate-Operating Mechanisms, of which the following is a specification.

This invention relates to farm gates, and one of the principal objects of the same is to provide reliable and efficient means for opening and closing the gate without the use of springs or other means which would be liable to get out of order and interfere with the operation of the gate.

Another object of the invention is to provide simple, reliable and efficient means assisted by gravity for opening and closing an ordinary hinged gate.

Still another object of the invention is to provide a gate operating mechanism having a counterweight for opening and closing the gate, said gate being held closed and locked by the mechanism referred to.

These and other objects may be attained by means of the construction illustrated in the accompanying drawing in which,

Figure 1 is a view in elevation of the farm gate and operating mechanism, the gate being shown closed. Fig. 2 is a view in elevation taken at right angles to Fig. 1 showing the gate opened. Fig. 3 is a plan view showing the gate opened. Fig. 4 is a detail elevation showing the manner of operating the mechanism for opening and closing the gate.

Referring to the drawing the numeral 1 designates the outer gate post and 2 is the inner or hinge post for the gate, said posts being connected by a cross bar or arch 3. The posts 1 and 2 are firmly driven into the ground and hinged to the post 2 by ordinary hinges 4 is a gate 5, said gate having preferably a vertical post or bar 6, upon which the hinges are secured. It will be understood however, that the gate and frame thereof, as well as the manner of hinging the same, may be of the usual or any suitable construction. The gate 5 is intended to swing through an arc of one-fourth of a circle and is provided with a stop 7 at one side of the post 1, said stop 7 being in the form of a stub post driven into the ground to prevent the gate from moving in one direction out of alinement with the post 1. A metal stop

8 may also be secured to the post 1 to limit the movement of the gate at the top thereof.

Firmly connected to the post or bar 6 is a curved lever 9, said lever being bent around the post 2 so as to not come in contact therewith during the operation of the gate. The lever 9 may comprise two sheet metal strips connected together and with the ends secured to the post 6, while the opposite ends are secured to a block 10, as shown more particularly in Fig. 4. A strap hinge member 11 is connected to the block 10 and a similar hinge member 12 is connected to a bar 13, said two members 11 and 12 being pivotally connected together by means of a suitable pintle 14. The bar 13 is pivoted upon a pin 15 to the member 12, said pin 15 extending at right angles to the pintle 14. Connected to the bar 13 at the outer end thereof is a pair of spaced plates 16, said plates being firmly secured to the bar 13 and pivotally connected upon a pin 17 with the lever 18, said lever being pivoted at 19 to a hinge 20 pivoted to a post 21. A counter-weight 22 is suspended from the lower side of the lever 18. Connected to the plates 16 by means of a stirrup 23 is a chain 24. Connected near the upper end of the chain 24 is a branch chain 25. At their upper ends the chains 24 and 25 are connected to the inner ends of operating levers 26 and 27, said operating levers being pivoted in the upper ends of posts 28 and 29 secured at proper distances apart upon opposite sides of the gate frame. Depending from the ends of the levers 26 and 27 are chains 30 provided with suitable handles 31 for operating the same. Supporting posts 32 and 33 are provided for sustaining the weight of the bar 13 and preventing it from moving below a horizontal position when the gate is either opened or closed. A stop post 34 for the gate when opened is provided and the post 28 is notched at 35 to receive the bars of the gate 5 when opened.

The operation of my gate may be briefly described as follows: To open the gate either one of the levers 26 or 27 may be operated by pulling downward upon the handle 31, thus raising the lever 18 and the bar 13, as shown in Fig. 5 and swinging the gate open and closed. The initial impetus given to the gate by pulling down upon the handle 31 swings the gate beyond the dead center of the toggles and hence after the handle is

released the gate is swung to either its open or closed position. When the handle 31 is released the weight 22 carries the lever 18 and the bar 13 down to a horizontal position to rest upon one or the other of the posts 32 or 33. When the gate is closed it can be operated readily by hand, owing to the fact that the leverage is indirect when operated in this way.

- 10 My gate is of simple construction, can be manufactured at low cost, is reliable in action, will not become inoperative owing to the formation of snow or ice, does not depend upon the action of springs or other uncertain and inconstant elements and can be quickly operated by a person going in either direction.

I claim:

- 20 A gate comprising a frame, a gate post, a gate hinged to the gate post, a lever secured rigidly to the gate near the lower end thereof and curved to extend partially around the gate post, a bar connected to said lever by means of a vertical pivot, a toggle lever piv-

oted to said bar by means of a horizontal pivot, said toggle lever comprising two members connected by a horizontal pivot, a rigid post, a bracket hinged to said post by a vertical pivot, said bracket being connected to the toggle lever by a horizontal pivot, a weight suspended from said toggle lever, posts at opposite sides of the gate, operating levers pivoted at the tops of said posts, a chain connected to said toggle lever, said chain having branches at its upper ends connected to said operating levers, and stop posts disposed in vertical alinement with the two positions of the toggle lever for supporting said lever and bar in a horizontal position when the gate is either opened or closed.

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

SIMEON WILSON.

Witnesses:

JNO. H. PERRY,
R. E. COLVARD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."