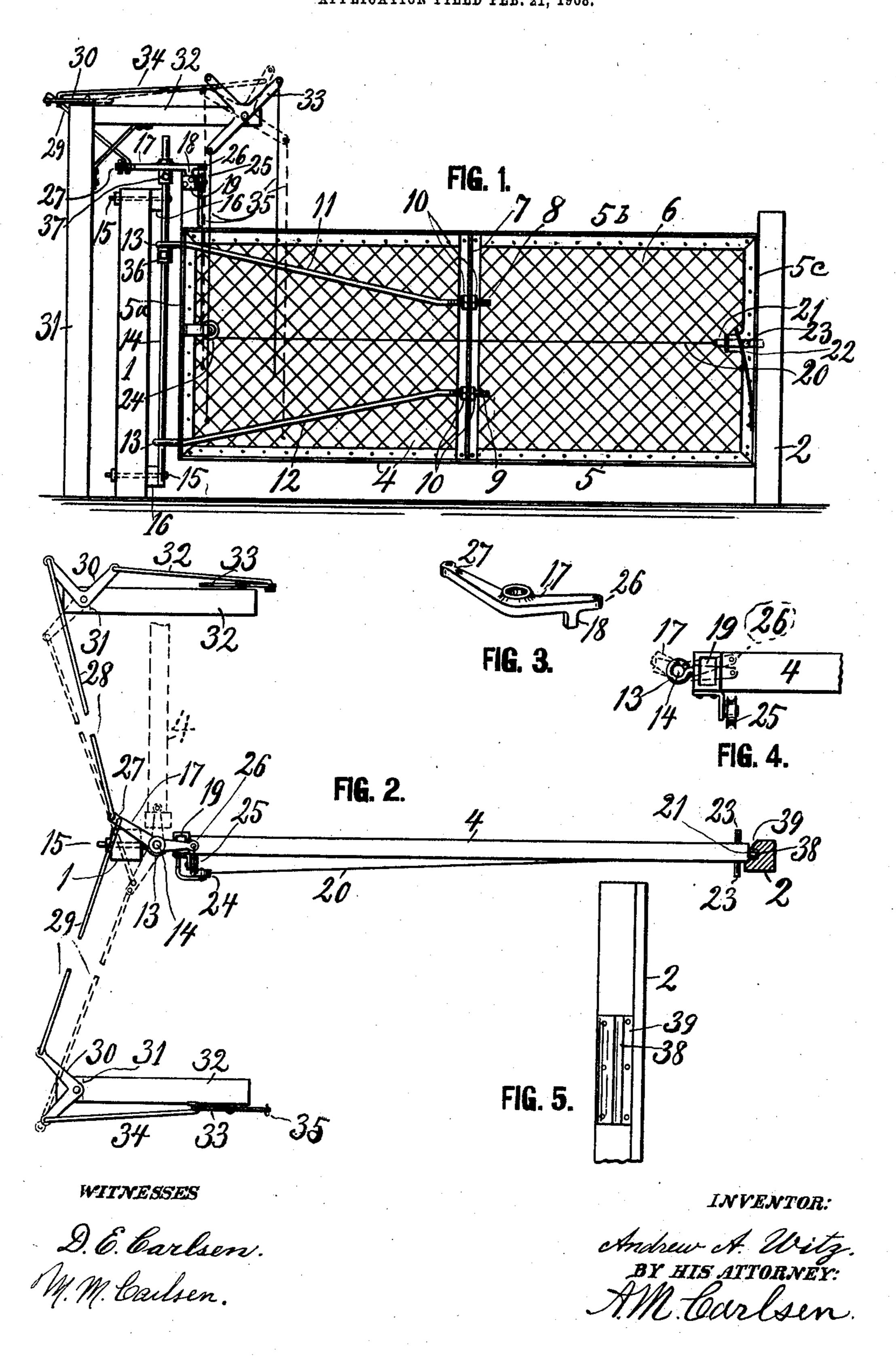
A. A. WITZ.

GATE.

APPLICATION FILED FEB. 21, 1908.



## UNITED STATES PATENT OFFICE.

ANDREW A. WITZ, OF GARRISON, NORTH DAKOTA.

## GATE.

No. 897,949.

Specification of Letters Patent.

Patented Sept. 8, 1908.

Application filed February 21, 1908. Serial No. 417,005.

To all whom it may concern:

Be it known that I, Andrew A. Witz, a citizen of the United States, residing at Garrison, in the county of McLean and State of 5 North Dakota, have invented a new and useful Gate, of which the following is a specification.

My invention relates to gates, especially of the kind used on farms or other places where 10 it is desirable that the driver should be able to open and close the gate without stepping down from the wagon or buggy.

The object of the invention is to improve such a gate in various respects as hereinafter 15 fully set forth and pointed out in the claims.

In the accompanying drawing Figure 1 is a side elevation of the improved gate in closed position. Fig. 2 is a top view of Fig. 1. Fig. 3 is a perspective detail view of the 20 lever that directly engages the gate to close and open it. Fig. 4 is a top view of the upper corner of the gate near the hinged end of which the gate is latched when closed, look-25 ing at it from the gate opening.

Referring to the drawings by reference numerals, 1 designates the fence post to which the gate is hinged and 2 is the fence post to which the opposite end of the gate is latched.

30 when closed.

3 is the gate proper and is in the present instance shown as being built of angle irons 5, 5a, 5b, 5c, wire netting 6 and a vertical central bar 7 in the middle of the frame 35 work. The latter bar is made of T-iron and is provided in its central flange with two holes in which are inserted and provided with nuts 10 the screw-threaded ends 8 and 9 of two bars 11 and 12, the other ends of 40 which are spread apart, passed through holes in the angle bar 5<sup>a</sup> and formed with eyes 13, embracing loosely a wrought iron pipe 14 secured by bolts 15 to the post 1, with interposed blocks 16, whereby the pipe 45 is made to serve as pintle in the eyes as the hinges of the gate. On said tube, pintle or staff is fulcrumed a lever 17 having one arm provided with a downwardly projecting finger 18 (see also Figs. 3 and 4) engaging in a 50 pocket 19 near the hinged end of the gate, so that the latter may be swung open and closed by the lever. The finger 18 is so much smaller than the pocket that the lever swings some before the gate moves; this 55 preliminary movement of the lever is used to unlock the gate by a cord or wire cable 20 l

fixed to the rear end of the latching bolt 21, which is normally thrown forward by a spring 22 engaging one of the handles 23, by which the latch may also be operated by 60 hand. The other end of the cable is passed over a guiding sheave 24 on the gate and 25 on the pocket, and near the latter secured to the arm 26 of the actuating lever 17, so that the latch is retracted before the gate starts 65 to open. The other and longer arm, 27, of the actuating lever is operated alternately by either one of two rods 28, 29, pivotally secured each with one end to said lever arm and the other end to one arm of a bell-crank 70 lever 30, mounted on a post 31 fixed in the ground near one side of the road. Said post has a horizontal arm 32, on which is pivoted to swing in vertical plane a T-shaped or three-armed lever 33, whose middle arm is 75 pivotally connected to the nearest arm of the bell-crank lever by a rod 34. From each of the other two arms of the T-lever is susit. Fig. 5 is a side view of the fence post to | pended a piece of cord or similar means 35 for the driver to take hold of while sitting on 80 the vehicle, and by pulling downward on the rope he finds in the highest position he will either open or close the gate, as may be required. This arrangement of operating cords, levers, posts and rods being the same 85 at both sides of the gate the description just given will answer for both sides of the gate.

It will be understood that when the operating lever 33 at one side of the gate is operated by its rope to open the gate the operat-90 ing lever at the other side of the gate is automatically operated by the rod and lever mechanism described, so as to occupy a position from which it will close the gate when its highest hanging rope is pulled down, and 95 each of the two operating levers also presents the proper position for opening the gate if the driver who closed the gate desires to open it from the side he closed it.

On the staff 14 are two set-screwed collars 100 36, 37, of which collar 36 serves to support the gate, at various heights as may be required by ice, snow or animals desiring to either pass under or jump over the gate, and collar 37 supports the actuating lever slightly 105 above the pocket 19 of the gate. In harmony with such vertical adjustment of the gate the groove 38 in the striking plate 39 on the post 2 is long enough vertically to receive the end of the latch with the gate raised, and 110 lowered to its limit.

The nuts 10 serve to adjust the gate in

case the post to which it is hingedshould settle to a slightly leaning position, or the gate itself should sag down at its swinging end as is often the case with gates from gen-5' eral wear and tear. It will also be observed that the gate is by said nuts and the Tshaped bar 7 and hinge rods 11 practically supported midway between its ends, whereby the tendency to sag down at the free end is 10 greatly diminished.

Having thus described my invention, what I claim is:—

In a gate, the combination with the gate proper of a vertical frame bar secured at the 15 middle of the gate, two rods having threaded

ends inserted horizontally through the bar near the middle thereof and provided with nuts at both sides of the bar, the outer ends of said rods being spread apart, passed through the frame bar forming the hinged 20 end of the gate and being beyond the end of the gate formed with eyes to serve as hinges for the gate.

In testimony whereof I affix my signature,

in presence of two witnesses.

Witnesses:

A. M. CARLSEN, D. E. CARLSEN.