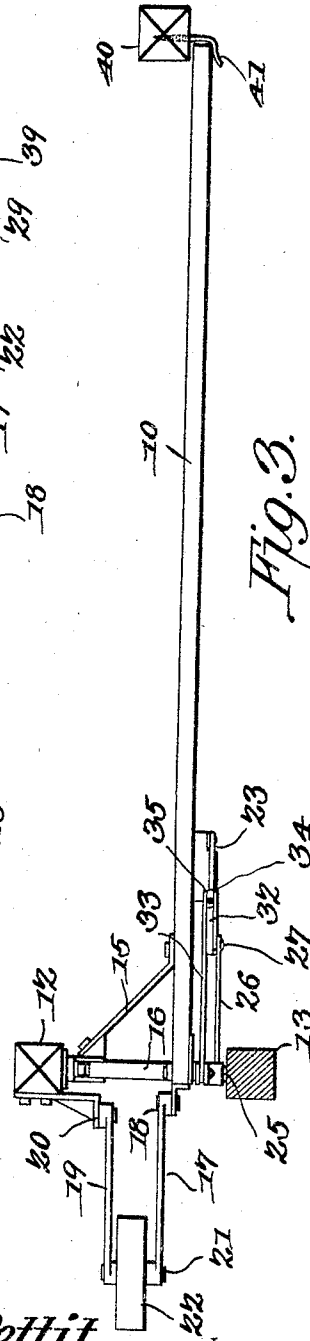
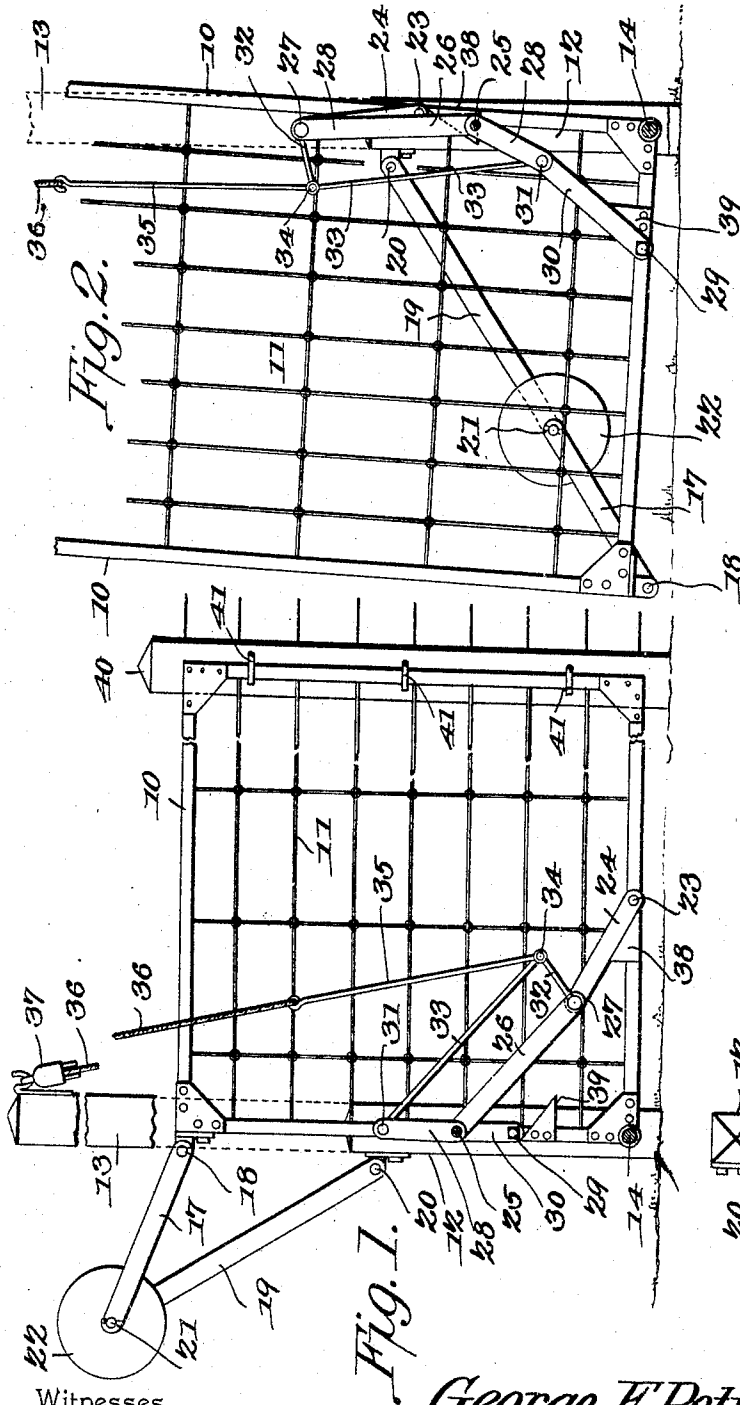


No. 794,113.

PATENTED JULY 4, 1905.

G. F. PETTIT.
TILTING GATE.

APPLICATION FILED DEC. 19, 1904.



Witnesses

E. J. Stewart
C. N. Woodward

George F. Pettit,

by

C. A. Snow & Co.,
Attorneys

Inventor,

UNITED STATES PATENT OFFICE.

GEORGE FESTUS PETTIT, OF ENID, OKLAHOMA TERRITORY.

TILTING GATE.

SPECIFICATION forming part of Letters Patent No. 794,113, dated July 4, 1905.

Application filed December 19, 1904. Serial No. 237,533.

To all whom it may concern:

Be it known that I, GEORGE FESTUS PETTIT, a citizen of the United States, residing at Enid, in the county of Garfield and Territory of Oklahoma, have invented a new and useful Tilting Gate, of which the following is a specification.

This invention relates to gates of the class mounted to tilt vertically and movable transversely of the gateway-openings, and has for its object to simplify and improve the construction and increase the efficiency of gates of this class.

With these and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of embodiment of the invention, it being understood that the invention is not necessarily limited thereto, as various changes in the shape, proportions, and general assemblage of the parts may be resorted to without departing from the principle of the invention or sacrificing any of its advantages.

In the drawings thus employed, Figure 1 is a broken side elevation of the improved gate in closed position. Fig. 2 is a similar view with the gate open, and Fig. 3 is a plan view.

The gate portion of the improved device may be of any desired structure as to material or size, but for the purpose of illustration is shown formed of a rectangular frame 10 and wire strands and stays 11 for the panels of the same.

The supports at the swinging or "tilting" end of the gate consist of two posts 12 13, between which the gate is pivoted by the lower corner upon a rod 14 and is suitably braced from lateral movement, as by straps 15 16.

A lever-arm 17 is pivoted at one end at 18 to the upper corner of the gate at the same end of the gate as the pivot-shaft 14, and a second lever-arm 19 is pivoted at 20 to the

post 12 and at the other end at 21 to the free end of the first-mentioned lever 17, and a counterweight 22 is connected to the same pivot-point which unites the outer ends of the lever-arms 17 19. The counterweight 22 will be less in weight than the gate, so that it will not automatically open the same, but will materially assist in the opening motion, and when the gate is elevated into a vertical position the counterweight, added to the weight of the gate when swung rearwardly of the post members 12 13, will effectually prevent the return of the gate until the same has been moved manually to an extent sufficient to cause the weight of the gate to overcome the resistance of the weight, when the continuation of the closing movement will be accomplished by gravity alone, the weight retarding the closing movement and preventing undue jarring or concussion.

Attached to the gate-frame at 23 is a lever-arm 24, and attached to the post 13 at 25 is a lever-arm 26, the two arms being pivotally united by their free ends at 27.

Pivotally attached to the post 13 by the same pivot 25 by which the lever-arm 26 is connected is a lever-arm 28, and pivoted to the gate-frame 10 at 29 is a lever-arm 30, the lever-arms 28 and 30 being united at their free ends by a pivot-pin 31.

Pivoted by one end to the pivot member 27 is a rod 32, and pivoted by one end to the pivot member 31 is a rod 33, the two rods being united at their other ends, as at 34, to a pull-rod 35, to the free end of which a draw-cable 36 is connected, which leads thence over a guide-pulley 37 on the post 13.

A stop 38 is disposed upon the gate-frame 10 adjacent to the pivot end 23 of the arm 24, and a similar stop 39 is connected to the gate-frame adjacent to the pivot end 29 of the arm 30, the stop 38 limiting the movement of the arms 24 26 in one direction when the gate is closed, as in Fig. 1, and the stop 39 limiting the downward movement of the arms 28 30 when the gate is open, as in Fig. 2. The stop member 38 will be so disposed relative to the arm 24 that the joint 27 will drop a short distance below a direct line between the pivot-points 23 and 25 when the gate is open,

as shown in Fig. 1, to cause the arms 24 26 to form a locking means to prevent the opening of the gate until the arms are released by drawing upon the cable 36, and the stop 5 39 is similarly disposed to cause the arms 28 30 to form a locking means to prevent the closing of the gate until the latter arms are likewise released by drawing upon the same pull-cable, as shown in Fig. 2. The draw- 10 cable will be conveyed to any required distance from the gate and supported at any desired distance from the ground convenient to the hand of the person who may desire to open the gate, so that it can be actuated from 15 an approaching vehicle in the usual manner of operating gates of this general class; but as the means for thus operating gates are so well known it is not further illustrated.

At the closing side of the gateway-opening 20 the end post of the fence, as at 40, is provided with a number of L-shaped catches 41, into which the free end of the gate will enter when closed, as shown in Figs. 1 and 3, to form 25 stops to prevent lateral movement or displacement of the gate, and the post will preferably be arranged at the side on which the greatest strains occur, so that the post will receive the brunt of the lateral pressure, and the catch members be relieved from the same. 30 The construction is simple and inexpensive and may be readily adapted to all sizes of gates by merely varying the weight of the counterweight and the length and strength of the various lever-arms.

35 Having thus described the invention, what is claimed is—

1. In a tilting gate, a supporting-post disposed at one side of the gateway-opening, a gate structure mounted to swing at one corner 40 from said post, a lever-arm pivoted at one end to another corner of said gate, a lever-arm pivoted at one end to said post and pivoted at its free end to the free end of said first-mentioned lever-arm, and a counter- 45 weight connected to the united swinging ends of said lever-arms.

2. In a tilting gate, a supporting-post disposed at one side of the gateway-opening, a gate structure mounted to swing at one corner 50 from said post, two pairs of lever-arms centrally jointed and each pair pivotally united by one end to said post with the free end of one of said pairs of lever-arms pivoted to the bottom member of said gate structure and the 55 free end of the other pair of said lever-arms pivoted to the end member of said gate structure, and means for alternately operating said pairs of lever-arms.

3. In a tilting gate, a supporting-post disposed at one side of the gateway-opening, a gate structure mounted to swing at one corner 60 from said post, two pairs of lever-arms centrally jointed and each pair pivotally united

by one end to said post with the free end of one of said pairs of lever-arms pivoted to the 65 bottom member of said gate structure and the free end of the other pair of said lever-arms pivoted to the end member of said gate structure, means for alternately operating said pairs of lever-arms, a lever-arm pivoted by one end 70 to said gate structure, a lever-arm pivoted by one end to said post and pivotally united by its free end to the free end of said last-mentioned lever-arm, and a counterweight connected to the united swinging ends of the 75 same.

4. In a tilting gate, a supporting-post disposed at one side of the gateway-opening, a gate structure mounted to swing at one corner 80 from said post, two pairs of lever-arms centrally jointed and each pair pivotally united by one end to said post with the free end of one of said pairs of lever-arms pivoted to the bottom member of said gate structure and the 85 free end of the other pair of said lever-arms pivoted to the end member of said gate structure, and means attached at the central joints of said pairs of lever-arms for alternately elevating the same.

5. In a tilting gate, a supporting-post disposed at one side of the gateway-opening, a gate structure mounted to swing at one corner 90 from said post, two pairs of lever-arms centrally jointed and each pair pivotally united at one end to said post with the free end of one of said pairs of lever-arms pivoted to the 95 bottom member of said gate structure and the free end of the other pair of said lever-arms pivoted to the end member of said gate structure, rods connected respectively at the central 100 joints of said pairs of lever-arms and pivotally united at their free ends, and a draw-cable connected to said rods at their united ends, whereby the pairs of lever-arms may be 105 alternately operated to open and close said gate.

6. In a tilting gate, a supporting-post disposed at one side of the gateway-opening, a gate structure mounted to swing at one corner 110 from said post, two pairs of lever-arms centrally jointed and each pair pivotally united at one end to said post with the free end of one of said pairs of lever-arms pivoted to the bottom member of said gate structure and the 115 free end of the other pair of said lever-arms pivoted to the end member of said gate structure, means for alternately operating said pairs of lever-arms, and stops to limit the movement of said lever-arms in one direction.

In testimony that I claim the foregoing as 120 my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE FESTUS PETTIT.

Witnesses:

M. A. BLACKBURN,
J. S. LIGHTFOOT.