

No. 690,043.

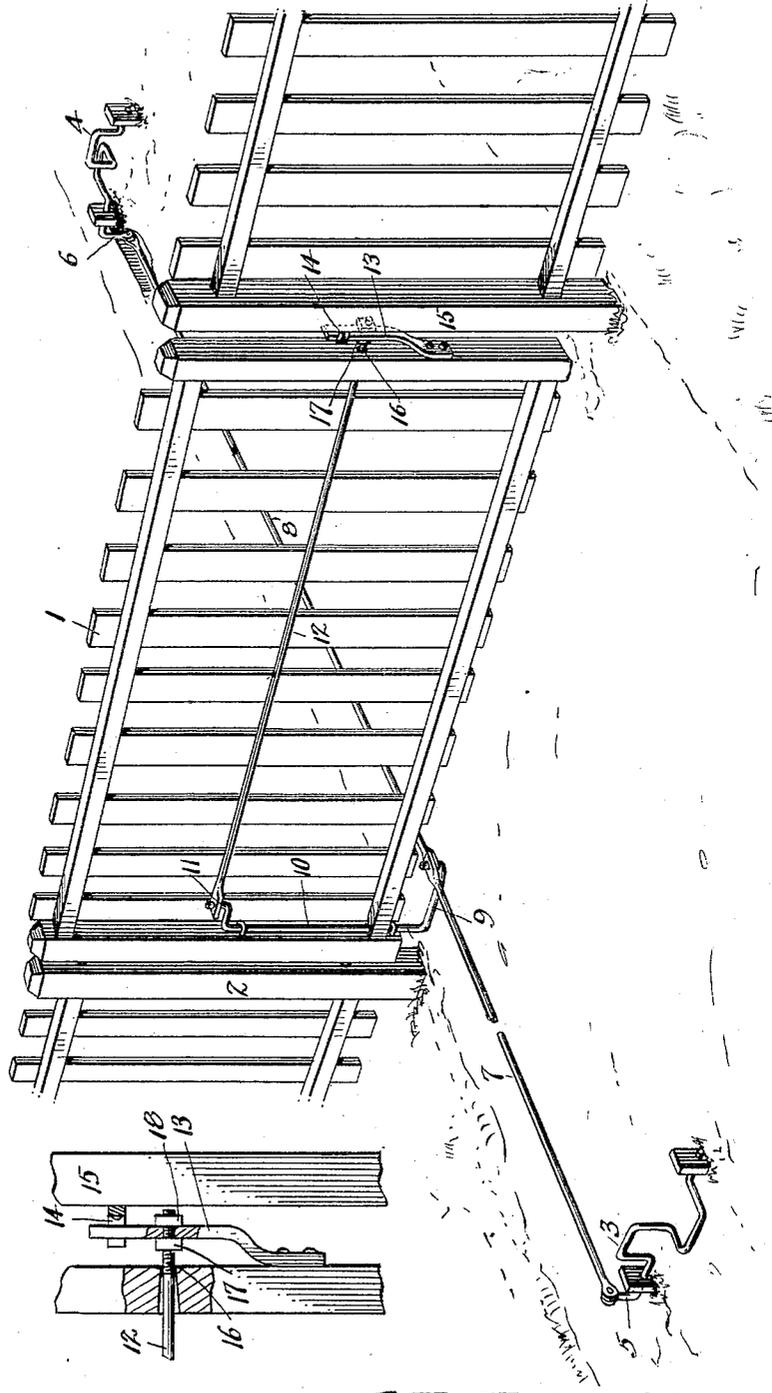
Patented Dec. 31, 1901.

D. N. ALLGIER.

GATE.

(Application filed Apr. 8, 1901.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

DAVID N. ALLGIER, OF MENNO, PENNSYLVANIA.

GATE.

SPECIFICATION forming part of Letters Patent No. 690,043, dated December 31, 1901.

Application filed April 8, 1901. Serial No. 54,875. (No model.)

To all whom it may concern:

Be it known that I, DAVID N. ALLGIER, a citizen of the United States, residing at Menno, in the county of Mifflin and State of Pennsylvania, have invented a new and useful Gate, of which the following is a specification.

The invention relates to improvements in gates.

The object of the present invention is to improve the construction of swinging gates, more especially the means for opening and closing the same, and to provide a simple, inexpensive, and efficient construction adapted to enable a gate to be opened by a vehicle approaching it from either direction and capable of enabling the gate to be closed after the vehicle has passed through it.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a gate provided with operating mechanism constructed in accordance with this invention. Fig. 2 is an enlarged sectional view illustrating the construction of the resilient latch.

Like numerals of reference designate corresponding parts in both figures of the drawings.

1 designates a gate designed to be of any desired construction and hinged at one end to a post 2 and adapted to be opened by a vehicle approaching it from either direction. Located at opposite sides of the gate are rock-shafts 3 and 4, having crank-bends arranged at right angles to each other and adapted to be engaged by the wheels of a vehicle. The rock-shafts are journaled in suitable bearings and are provided at their ends with oppositely-disposed arms 5 and 6, connected by rods 7 and 8 with a lower horizontal arm 9 of a vertical shaft 10. The arms 5 and 6, which are located at the inner ends of the rock-shafts, extend upward and downward from the same, and the rods 7 and 8 may be constructed of separate sections, or one continuous rod may be employed. One of the crank-bends of the rock-shafts or operating devices is always in a vertical position to enable it to be engaged and swung downward by the

wheels of a vehicle, and when one crank-bend is swung downward the other is brought to a vertical position.

The vertical rock-shaft 10 is journaled in suitable bearings at the inner or rear end of the gate, and it is provided at its upper end with a short arm 11, which is connected by a rod 12 with a resilient latch 13, consisting of a stout spring secured at its lower end to the gate and angularly bent above such point of attachment to offset its upper portion from the gate. The offset or upper portion of the latch is adapted to engage a suitable keeper 14 of a latch-post 15, and it will automatically spring into engagement with the same when the gate closes. The horizontal rod 12 is guided on the gate, and its front end 16 is threaded for the reception of nuts 17 and 18, located at the inner and outer faces of the latch, as clearly shown in Fig. 2 of the accompanying drawings. The nuts are capable of adjustment longitudinally of the rod to take up any lost motion or wear of the parts, so that the operating devices will properly actuate the gate. The terminals of the upper and lower arms of the vertical shaft are bent at right angles to form pivots for connecting the shaft to the rods.

In approaching the gate from the left-hand side the vertical crank-bend of the left-hand operating device is swung inward toward the gate and the first portion of its movement withdraws the latch from engagement with the keeper and the rest of the movement opens the gate. This movement of the left-hand rock-shaft swings inward the vertical loop of the right-hand rock-shaft and raises the horizontal loop or bend thereof to a vertical position, and when the vehicle passes through the gateway it engages this vertical loop or bend of the right-hand operating device and returns the rock-shafts to their former positions and closes the gate. The arm 6 of the right-hand operating device extends downward from the rock-shaft, while the arm 5 of the other operating device extends upward. When the gate is closed, each of the rock-shafts or operating devices has one of its loops arranged vertically and the other loop extending outward.

The gate which is adapted to be readily operated by a vehicle approaching it from

either direction is capable of opening against the wind. The latch holds the rock-shafts in proper position and it enables the parts to be readily adjusted to take up any wear or
5 lost motion. It will also be apparent that the operating mechanism obviates the necessity of employing springs or yielding connections and that the only spring in the gate is the resilient latch.

10 What I claim is—

The combination of a swinging gate, a vertical shaft arranged at the back of the gate and provided with upper and lower arms, the horizontal rod 12 extending from the upper
15 arm of the vertical shaft to the front of the gate and provided at its front or outer end with a threaded portion, the operating devices located at opposite sides of the gate and consisting of rock-shafts, rods extending from
20 the lower arm of the vertical shaft to the

rock-shaft, the inner and outer nuts located beyond the gate and arranged on the threaded portion of the rod 12, and the resilient latch secured at one end to the gate and having its other end free and provided with a perfora- 25 tion receiving the rod 12, said latch being arranged between the nuts and being adapted to engage a keeper and forming the sole means for holding the operating devices under the desired tension, the nuts being capable of
30 adjustment to vary the tension of the spring, substantially as and for the purpose described.

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

DAVID N. ALLGIER.

Witnesses:

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