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E. P. MALONE.

GATE.

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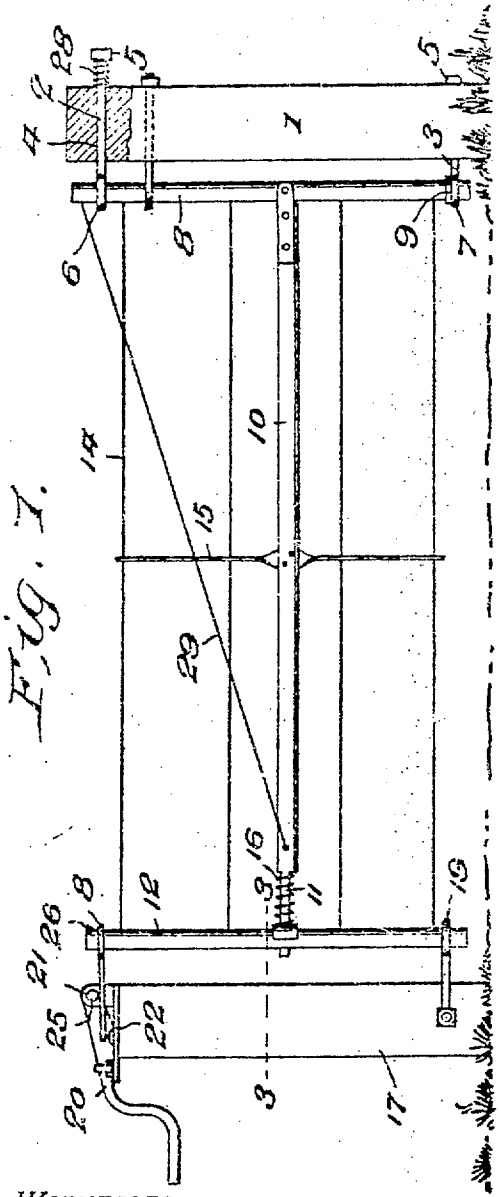


Fig. 1.

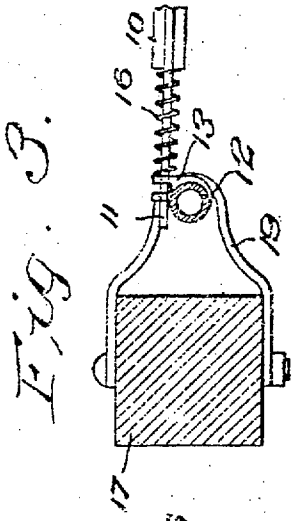


Fig. 3.

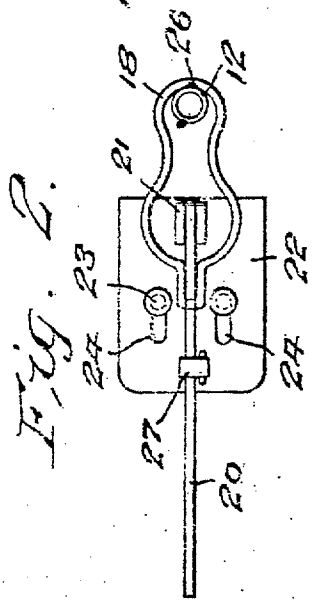


Fig. 2.

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GATE.

No. 887,676. Specification of Letters Patent. Patented May 12, 1908.

Application filed August 24, 1907. Serial No. 389,956.

To all whom it may concern:

Be it known that I, EDWARD P. MALONE, a citizen of the United States, residing at Manchester, in the county of Delaware and State of Iowa, have invented certain 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.

My invention relates to new and useful improvements in gates, and my object is to provide means for readily securing the gate in its closed position.

A further object is to provide means for drawing the strands forming the gate, taut, when the gate is closed, and a still further object is to provide means pivotally mounting the gate to an anchor post.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the claims.

In the accompanying drawings which are made a part of this application, Figure 1 is a side elevation of my improved form of gate, showing the same in its closed position. Fig. 2 is a top plan view of one end of the gate, showing the means for securing the gate in its closed position, and, Fig. 3 is a sectional view, as seen on line 3—3, Fig. 1.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates an anchor post, which may be of the usual, or any preferred form, said post carrying eye bolts 2 and 3, adjacent the upper and lower ends thereof, respectively, said bolts extending through bores 4 in the post and secured therein by means of nuts 5.

Rotatably mounted in the eye portions 6 and 7 of the bolts 2 and 3, is an upright 8, which is preferably constructed of a section of tubular pipe and, in order to prevent the upright from descending longitudinally in the eyes, a collar 9 is secured to the upright 8, adjacent its lower end, which is adapted to rest on the upper edge of the eye 7.

Secured to the central portion of the upright 8, and extending at right angles thereto, is a bar 10, said bar being preferably constructed from T iron and having its forward end reduced to form a finger 11.

An auxiliary upright 12 is slidably mounted upon the finger 11, by securing a bifurcated arm 13, to the central portion of the auxiliary upright and extending the same laterally therefrom, said arm being provided with openings, through which the finger 11 extends.

Extending from the upright 8 to the auxiliary upright 12, are a plurality of strands 14, which are preferably of wire and form the body of the gate, said strands being spaced apart at their central portion by means of a spreader 15, which is fixed at its central portion to the longitudinal center of the bar 10 and extends above and below said bar, the strands being secured to said spreader in any preferred manner.

The object in slidably mounting the auxiliary upright 12 on the finger 11, is to decrease the tension on the strands 4, when the gate is in an open position, and in order to hold said strands under a slight tension, a spring 16 is introduced on the finger 11, between the arm 13 and the end of the bar 10, the tension of the spring being sufficient to normally hold the strands from sagging.

The gate, when in its closed position, is adapted to coöperate with a latch post 17 and in order to secure the gate to the latch post and draw the strands 14 taut, I provide a pair of clevises 18 and 19, respectively, for the upper and lower ends of the auxiliary upright, the clevis 19, being secured to the latch post 17, while the clevis 18 is carried by a lever 20, said lever being pivotally secured between ears 21 on an adjusting plate 22, said plate being secured to the top of the post 17, by passing bolts 23 through slots 24 and into the post 17.

The lever 20 is so constructed, that when the gate is secured in its closed position, the clevis 18 will be in a plane below the pivot point 25, so that the tension exerted on said lever by the gate will give a downward pull to the free end of the lever and, thereby, hold the lever in its locked position.

In operation, when it is desired to secure the gate in its closed position, the lower end of the auxiliary upright 12 is engaged with the clevis 19, when, by swinging the lever 20 to the right or to the opposite position from that shown in Fig. 1, the clevis 18 will be moved until the same may be engaged with the upper end of the auxiliary upright 12, and in order to prevent the clevis 18 from casually slipping from the upper edge of the upright 12, a lip 26 is provided on the inner, upper edge of the auxiliary upright. After the clevis 18 has been placed in engagement with the upper end of the auxiliary upright

12, the lever 20 is again swung to its closed position, as shown in Figs. 1 and 2, thereby moving the clevis 18 below the pivot point 25 and locking the gate in its closed position, at the same time moving the upright outwardly on the finger 11 and drawing the strands 14 taut and, to prevent the accidental releasing of the lever 20, a retaining device 27 is pivotally secured to the plate 22 and in juxtaposition to the path of the lever 20, so that by engaging said retaining device with the lever, upward movement will be prevented until such time as the retaining device is released.

In order to cause the gate to readily swing open, after the same has been released from the clevises 18 and 19, the eye bolt 2 is provided with a spring 28, which surrounds the extended end of the bolt 2, between the post 1 and the nut 5, so that as soon as the gate is released from said clevises, the spring 28 will cause the bolt 2 to move longitudinally through the post and, thereby, elevate the outer end of the gate, so that said gate will readily swing open, by gravity.

The bar 10 is reinforced and held at right angles to the upright 8, by providing a stay rod 29, one end of which is fixed to the upper end of the upright 8, while the opposite end thereof is secured to the bar 10, at a point adjacent the finger 11, said stay rod serving to hold the parts in a horizontal position and at right angles to the upright 8.

It will thus be seen that I have provided a very cheap and economical form of gate and one that can be readily secured in its closed position. It will further be seen that I have provided means for releasing the tension of the strands forming the gate when the gate is open and additional means for drawing the strands taut when the gate is closed, and it will further be seen that by providing means for moving the anchoring upright out of a vertical position, the gate will swing open by gravity.

What I claim is:

1. In a gate of the class described, the combination with an anchoring post, and a latch post; of a pair of eye bolts extending through said anchoring post, an upright pivotally mounted in said eye bolts, a bar fixed to said upright and extending at right angles therefrom, a finger at the free end of said bar, an auxiliary upright, a bifurcated arm extending laterally from said upright, having openings in its extended end to receive said finger, a spring surrounding said finger between the arm and end of the bar, a plurality of strands carried by said uprights a plate on the upper end of the latch post having elongated slots, bolts extending through said slots and into the post, a lever pivotally mounted on said plate and a clevis carried by said lever adapted to engage the auxiliary upright and direct tension on said strands, and, at the same time, lock the gate in its closed position.

2. In a gate of the class described, the combination with an anchoring post and a latch post; of eye bolts extending through bores in said anchoring post, nuts adapted to secure said eye bolts to the post, a spring surrounding one end of the upper eye bolt and between the nut and post, an upright pivotally mounted in said eye bolts, a collar adapted to support the upright, a bar secured to said upright and extending at right angles thereto, an auxiliary upright, means to movably secure said auxiliary upright to the bar, a pair of clevises, adapted to engage said auxiliary upright and hold the gate in its closed position, a lever pivotally mounted on the upper end of the latch post and adapted to engage the upper clevis and secure or release the gate, as the lever is moved to the left or right.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD P. MALONE.

Witnesses:
H. O. Dolly,
C. H. Davis.