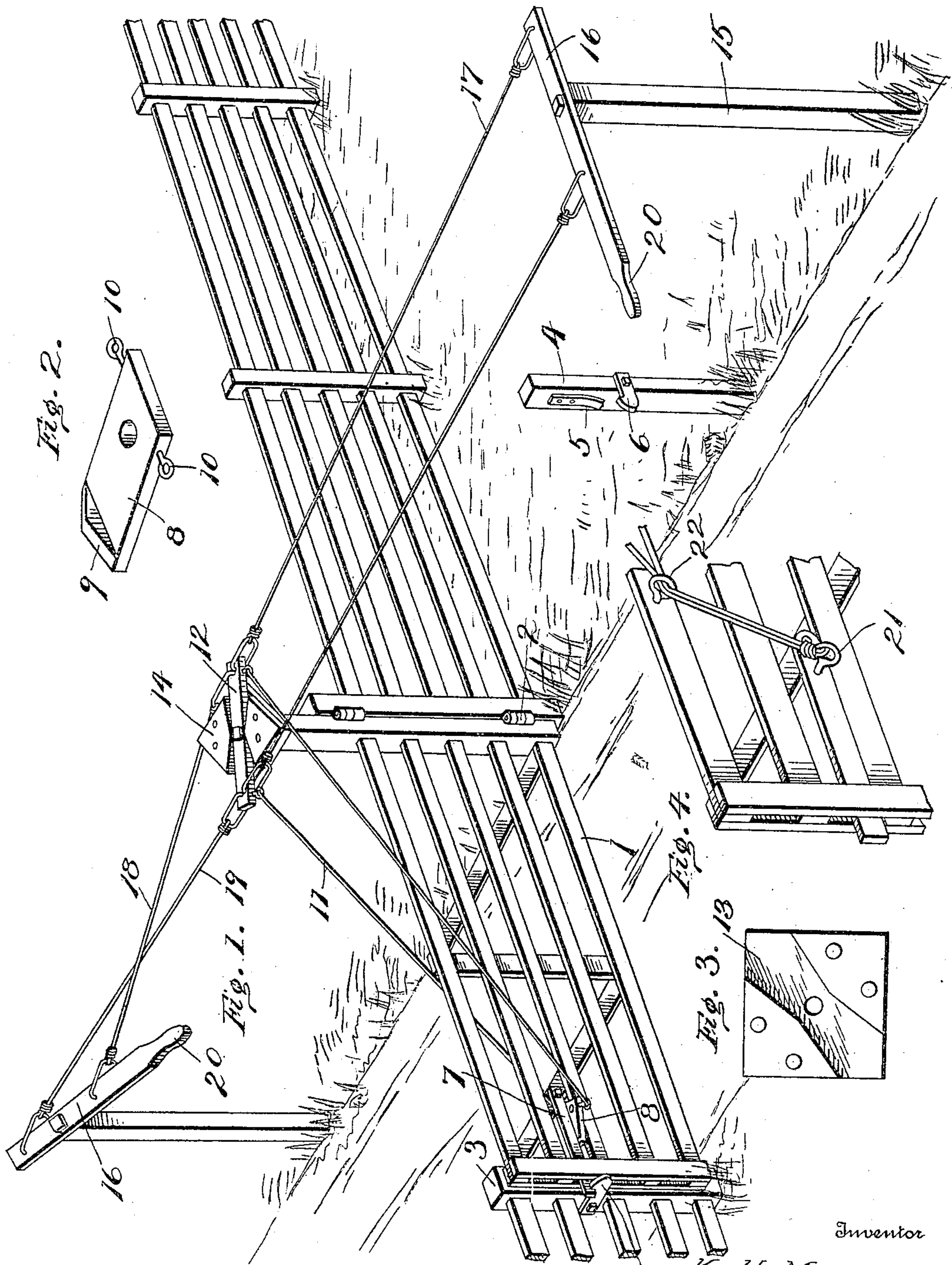


No. 795,446.

PATENTED JULY 25, 1905.

K. H. MEANOR.
GATE CONSTRUCTION.
APPLICATION FILED FEB. 28, 1905.



Witnesses
W. R. Taylor.
Herbert Dawson

Inventor
K. H. Meanor.
By *W. J. F. Farnell*
Attorneys

UNITED STATES PATENT OFFICE.

KARL H. MEANOR, OF IMPERIAL, PENNSYLVANIA.

GATE CONSTRUCTION.

No. 795,446.

Specification of Letters Patent.

Patented July 25, 1905.

Application filed February 28, 1905. Serial No. 247,741.

To all whom it may concern:

Be it known that I, KARL H. MEANOR, a citizen of the United States, residing at Imperial, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Gate Constructions; 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 gates, and more particularly to means for unlocking and opening or closing the gate.

The object of the invention is to provide operating mechanism of simple and inexpensive construction which may be readily applied to gates of ordinary form and which is provided with means whereby said mechanism can be actuated at points distant from the gate.

Another object is to provide a latch-lifting device of peculiar construction which is so connected to the gate-opening mechanism as to be operated immediately prior to the movement of the gate.

With the above and other objects in view the invention consists of a gate having a lever fulcrumed thereon at a point above the gate-hinges, and this lever is connected to means arranged adjacent the latch of the gate, whereby when the lever is swung in either direction said latch will be raised out of engagement with a gate-retaining means. Stop devices are connected to the gate at opposite sides of the lever and are so disposed in relation thereto as to permit the lever to swing a predetermined distance before coming into contact therewith, this swinging motion being sufficient to operate the latch. Subsequent to said operation the lever will come in contact with the stops and cause the gate to swing upon its hinges. Suitable operating means, such as levers, are located at desired distances from the gate.

The invention also consists in further novel construction and combination of parts hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings I have shown the preferred forms of my invention.

In said drawings, Figure 1 is a perspective view of a gate having my improved mechanism connected thereto. Fig. 2 is a detail view of the latch-lifter. Fig. 3 is a plan view of the stops and their connecting-plate; and Fig. 4 is a perspective view of a portion of a gate,

showing a different means for connecting the latch with the operating mechanism.

Referring to the figures by numerals, 1 is a gate of any preferred construction, which is hinged as at 2 and is adapted when closed to bear against a post 3. Another post 4 is so located as to be contacted by the gate when the same is opened, and both of these posts are provided with the spring-strips 5, adapted to be compressed when the gate contacts therewith. Each post also has a catch 6 projecting therefrom and adapted to be engaged by a latch 7, pivoted to the gate. This latch is preferably in the form of a strip of metal and is fulcrumed at one end.

In the form of my invention shown in Fig. 1 the latch is raised by means of a lifter, which consists of a base 8, having an angular extension 9 at one end which contacts with the lower edge of the latch and is adapted when swung thereunder to lift the latch. Plate 8 is pivotally mounted upon the gate and is adapted to move in a horizontal plane. Ears 10 extend from opposite sides of the plate and are connected by wires or cords 11 with opposite ends of a lever 12. This lever is centrally fulcrumed upon the head 13, which is secured upon the gate at a point above the hinges 2 thereof, and arranged at diametrically opposite corners of the head are stops 14, the adjoining edges of which converge toward the centers thereof to produce a groove or channel therebetween which is of varying width. The fulcrum of the lever 12 is located within the narrowest portion of this channel, and it will therefore be seen that said lever is permitted to have a slight movement in either direction before coming into contact with the stops.

Arranged at opposite sides of the gate and at any desired distance therefrom are posts 15, on each of which is fulcrumed an operating-lever 16. A wire or cord 17 connects one end of the lever 12 with one end of one of the operating-levers 16, and said end of lever 12 is also connected by a cord or wire 18 with the other operating-lever 16. The opposite end of lever 12 is connected by wires or cords 19 with the levers 16 at points adjacent their other ends. It will be noticed that each of these levers is provided with a handle 20, whereby the same can be readily manipulated.

When a person is approaching the gate and desires to open the same, it is merely necessary to grasp the nearest lever 16 and swing it upon

its fulcrum. This will cause lever 12 to pull upon the base 8 of the latch-lifter and swing it upon its fulcrum, thereby moving the angular extension 9 under the latch and causing it to swing upward out of engagement with the catch 6. As soon as the latch is released from the catch the spring 5, which is interposed between the gate and post 3, will throw the gate partly open, so as to prevent the latch from again falling into engagement with its catch. As soon as the lever 12 is swung a sufficient distance to raise the latch it contacts with one of the stops 14, and further movement of said lever will result in the swinging of the head 13 and its stops, and therefore the gate 1 will be also caused to swing therewith. When the gate reaches the limit of its movement, it will contact with the post 4 and compress spring 5, and the latch 7 will then drop automatically into engagement with the catch on said post 4. When it is desired to close the gate, the operation above described is repeated by swinging the other lever 16, and the gate will then be caused to return to its original or closed position.

While I have shown and described a lifter adapted to raise the latch, I do not wish to restrict myself to the employment of a device of this character, for, if desired, the cords or wires 11 may be connected directly to an ear 21, extending from the latch, as shown in Fig. 4. Where this construction is employed, it is of course necessary to extend the cords or wires through an eye 22, arranged upon the gate, so as to obtain the necessary upward pull in order to actuate the latch.

By providing the novel arrangement of stops 14 on the head 13 the lever 12 is contacted simultaneously by both of them during the operation of opening the gate, and therefore the pivot-pin of the lever is relieved of all strain, thereby rendering the apparatus very durable.

As hereinbefore stated, the mechanism constituting my improvements is very simple and inexpensive in construction and can be readily

applied to any form of gate. By using this mechanism the gate can be opened by a person approaching it in a vehicle and without the necessity of said person leaving the vehicle.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a gate having a latch pivoted thereto and a laterally-movable lifter fulcrumed below and supporting and adapted to operate the latch; of a lever fulcrumed upon the gate and connected at opposite ends to the lifter, stops secured to the gate and in the path of the lever and at opposite sides of its fulcrum, said stops adapted to simultaneously contact with and receive motion from the lever subsequent to the actuation of the latch and means for operating the lever.

2. The combination with a gate having a latch pivoted thereto, of a laterally-movable plate pivoted upon the gate below the latch, an angular extension upon the plate for supporting the latch, a lever fulcrumed upon the gate, stops upon the gate at opposite sides of the fulcrum of the lever and adapted to be simultaneously contacted and operated by said lever, and means for actuating the lever and connections between the lever and plate for swinging the plate to raise the latch.

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

KARL H. MEANOR.

Witnesses:

J. B. CROOKS,
L. E. McNALL.