

No. 639,137.

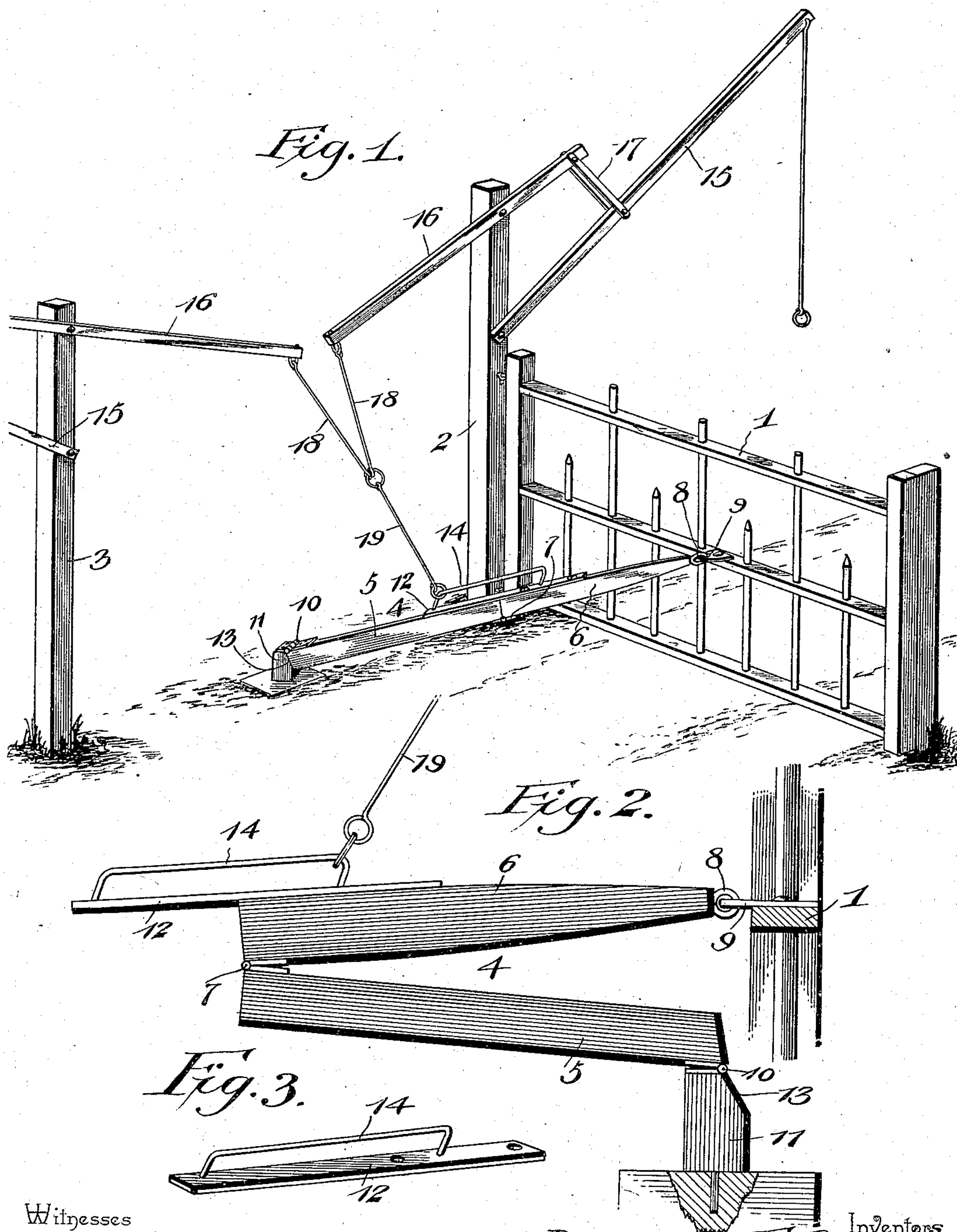
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GATE.

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(No Model.)



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UNITED STATES PATENT OFFICE.

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GATE.

SPECIFICATION forming part of Letters Patent No. 639,137, dated December 12, 1899.

Application filed September 13, 1899. Serial No. 730,340. (No model.)

To all whom it may concern:

Be it known that we, BENJAMIN E. BERGEN and BENJAMIN F. GILL, citizens of the United States, residing at Cropper, in the county of Shelby and State of Kentucky, have invented a new and useful Attachment for Operating Drive-Gates, of which the following is a specification.

This invention relates to swinging gates of that class embodying a system of levers whereby the gate may be opened and closed from either side without dismounting from horse-back or from a vehicle.

The object of the present invention is to provide a new and novel construction and arrangement of the bar affording an operative connection between the levers and the gate.

Further objects and advantages of the improvements will be hereinafter more fully described, shown in the drawings, and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a gate in closed position with our invention applied thereto. Fig. 2 is a vertical transverse sectional view of the gate when open, showing the position of the operating-bar. Fig. 3 is a detail perspective view of the plate.

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

Referring to the accompanying drawings, 1 designates a gate of any preferred construction hinged upon a gate-post 2. Another post 3 is provided a suitable distance from the gate-post, and the operating-levers are mounted upon these posts.

The connection between the levers and the gate consists of the two-part bar 4, composed of two parts 5 and 6, of about equal length. These parts or sections are hinged together by means of any suitable hinge 7, located on the underneath face of the parts, so as to allow the abutting ends to rise upward when opening the gate. The front end of the section 6 is provided with a hook 8, which is adapted to engage a suitable eye 9, provided at about the center of the gate. By this means of connection with the gate the end of the bar is capable of movement in any direction. The rear end of part 5 is connected by

a hinge 10 to a block 11. The upper front face of the block is beveled, as at 13, and the rear end of part 5 is also beveled, as shown, to fit squarely against the beveled face of the block. This block is mounted to turn in a horizontal plane upon a pivot, so as to accommodate itself to the movement of the bar 4. A plate 12 is secured to the upper face of section 6 and overlaps the joint between the two sections, but has no connection with the part 5. An inverted substantially U-shaped guide 14 is provided upon the plate 12, extending longitudinally thereof and spanning the joint between the parts.

The system of levers for operating the gate comprises long levers 15, pivoted at their inner ends to the posts 2 and 3, respectively, and extending at opposite sides of the gate, so as to be in reach from a vehicle or on horse-back. Other shorter levers 16 are pivoted intermediate their ends directly above the pivots of the long levers, with their longer arms extending toward each other. Links 17 connect the short ends of the levers 16 to the levers 15, so that the pairs of levers work together, except that the long ends of the levers 16 work more quickly than the levers 15, on account of the relative disposition thereof. Depending from the free inner ends of the levers 16 are links 18, which connect with a single link 19, and this latter link engages the guide 14 and is capable of sliding thereon.

The operation of the device is as follows: The gate being in closed position, as shown in Fig. 1, the outer end of either of the levers 15 is given a quick movement downward, which causes the free ends of levers 16 to move quickly upward and raise the plate 12 by means of the guide and the connecting-links. This movement causes the joint between the parts 5 and 6 to break in an upward direction and draw the gate open. The impetus given by the quick movement of the levers throws the gate entirely open, which folds the sections 5 and 6 back upon one another, and thereby holds the gate against being accidentally shut.

It will be noted that the link 18 normally remains at the inner extremity of the guide, which affords a long leverage for raising the

part 6 and breaking the joint between the parts, and the plate further aids in locking the joint.

By reason of the block 11 turning upon a pivot it assumes a position, when the gate is shut, with its beveled face directly in line with the bar 4, which, together with the flat abutting ends of the sections 5 and 6, effectually locks the gate against being opened by stock.

The arrangement of the long hand-lever 15 and its operating connection with the bar 4 will impart a quick jerking movement to said bar and throw it past its dead-center and over to its folded position, as shown in Fig. 2. A slow continuous movement of the bar 4 would not throw it past its dead-center and accordingly the herein-described arrangement of operating-levers has been devised.

Changes in the form, proportion, and minor details may be made without departing from the spirit and scope or sacrificing any of the advantages of the invention, and therefore we do not wish to be understood as limiting ourselves to the precise construction and arrangement as herein described.

Having thus described the invention, what we claim is—

1. The combination with a hinged gate, of a two-part bar having a hinge-joint at the adjacent ends of said parts, and also connected to the gate, a pivoted support for the opposite end of the bar, a guide carried by one of

the parts and overlapping the joint therebetween, and operating means connected to the guide and slidable thereon, substantially as shown and described.

2. The combination with a hinged gate, of a two-part bar having a hinged joint at its meeting ends and connected to the gate at one end, a pivoted support connected to the other end of the bar, a plate connected to one of the parts and overlapping the joint between the parts, a guide provided upon the plate and spanning the joint, and operating means connected with the guide for operating the gate, substantially as shown and described.

3. The combination with a hinged gate, of a two-part bar having a hinge-joint at the adjacent end of the parts, and also connected to the gate, a pivoted support for the opposite end of the bar, an inverted substantially U-shaped guide carried by one part of the bar and overlapping the joint between the two parts thereof, and operating means connected to the guide and slidable thereon, substantially as shown and described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

BENJAMIN E. BERGEN.
BENJAMIN F. GILL.

Witnesses:

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