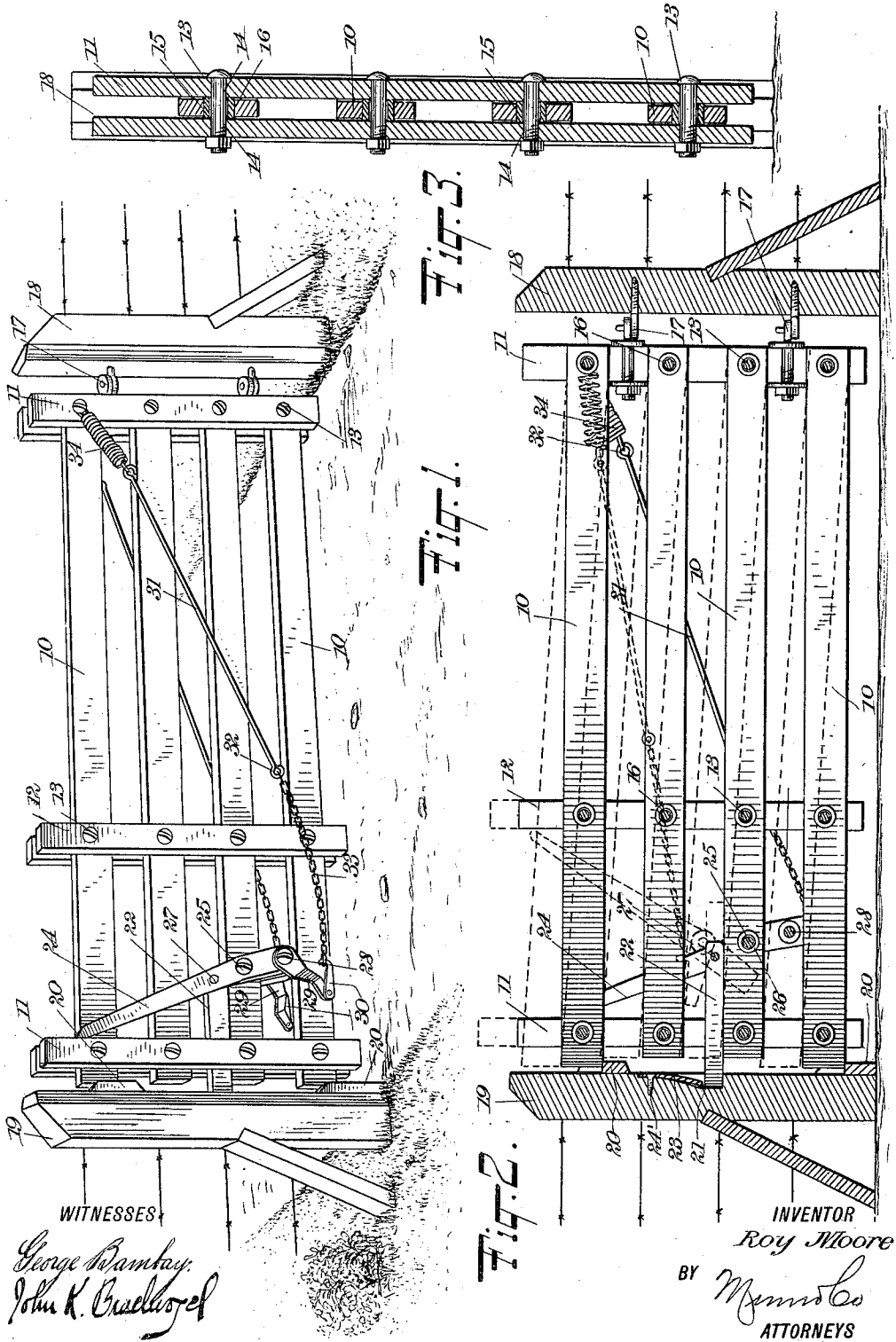


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GATE.

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WITNESSES

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GATE.

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To all whom it may concern:

Be it known that I, ROY MOORE, a citizen of the United States, and a resident of Adena, in the county of Jefferson and State of Ohio, have invented a new and Improved Gate, of which the following is a full, clear, and exact description.

This invention relates to gates for use with farm fences and for other purposes, and has reference more particularly to a gate which is mounted to swing open and shut, and is foldable, so that one end can be raised, the gate having a latch for holding it against lateral and vertical movement, means for holding the gate against lateral movement, and an operating member for simultaneously releasing the latch and rendering the last-mentioned means inoperative.

An object of the invention is to provide a simple, strong and durable gate of the class described, which will not sag, which is so constructed that when closed the weight thereof is borne by both gate posts, which requires but a simple manipulation to unlatch it, which necessitates but slight effort in opening and shutting it, and which produces no undue strain upon the posts.

A further object of the invention is to provide a gate of the folding type, which is provided with means for preventing the sagging of the gate, the means being resiliently adjustable, and which is so constructed at the joints that the parts of the gate cannot bind owing to warping or swelling.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a perspective view of an embodiment of my invention; Fig. 2 is a longitudinal section of the gate; and Fig. 3 is an enlarged transverse section of the device.

Before proceeding to a more detailed explanation of my invention, it should be clearly understood that the gate proper is mounted to swing between suitable posts or supports of any convenient type. The gate body may comprise different numbers of bars and uprights, and may be fashioned

from wood or any other suitable material adapted for the purpose. Certain of the details of construction, shown for example herewith, form no part of the invention, and can be varied in accordance with individual preference and special conditions, without deviating from the essence of the invention as defined in the appended claims.

Referring more particularly to the drawings, I have shown for example, a gate body consisting of four superposed and spaced bars 10, of suitable dimensions, joined by pairs of end uprights 11, and a pair of intermediate uprights 12. These consist of bars of suitable sizes, and are pivotally connected with the bars 10, by means of bolts 13 arranged in openings 14 of the uprights and passing through openings 15 of the bars 10. The openings 15 have located therein sleeves 16, which receive the bolts, and which exceed in length the width of the bars 10, so that the ends thereof engage the uprights. This arrangement permits the bolts to be tightened securely, without causing the uprights and bars to bind. It minimizes furthermore, the possibility of binding of the parts owing to swelling or warping of the material.

The gate body is mounted to swing, by means of hinges 17, of any desired type, upon a suitable post 18. A second post, 19, has near the upper and lower ends, socket projections 20 open at the top and the front, and constituting keepers adapted to receive the projecting extremities of the respective upper and lower bars 10, which extend beyond the extremities of the intermediate bars 10. Between the keepers 20, the post 19 has a recess 21, adapted to receive a latch 22, movably carried by the gate body, as will appear hereinafter. The upper end of the recess 21 is inclined and has positioned therein a spring strip 23, secured in place by means of a screw or in any other convenient manner, and constituting a stop to prevent the upward movement of the latch in the recess until the latch is partly withdrawn. I employ a pair of operating levers 24 pivotally mounted upon one of the lower bars 10 of the gate, near the free end of the latter, by means of a bolt 25, and a sleeve 26, similar to the sleeves 15. The latch is secured at one end between the levers, by means of a bolt or pin 27. At the lower ends, the levers have secured thereto, by means of screws

or bolts 28, offset arms 29, at the lower extremity of each of which is a pivoted hook 30. I employ tension rods 31 having at the extremities eyes 32. Each rod at one end has secured to the eye thereof a chain 33 adapted to be engaged at one of the hooks 30. Secured at the other eye of each rod is the end of a helical spring 34. The other ends of the springs 34 are secured to the gate body by means of one of the bolts 13.

When the gate is closed and latched, the projecting extremities of the upper and lower bars 10 are received in the socket keepers and held therein, so that the gate is supported not only by its hinges 17, but as well, by the gate post 19. The operating members or levers are forwardly disposed, so that the latch 22 projects into the recess 21. In these positions of the parts the tension rods and chains are slack and the springs 34 are not under tension. When it is desired to open the gate, one or the other of the levers 24 is grasped and swung rearwardly, *i. e.*, toward the gate post 18. This operation withdraws the latch from the recess and places the rods 31, the chains 33 and the springs 34 under tension. As a result, the gate, which is foldable, swings upward at its free end, as indicated in broken outline in Fig. 2, and the upper and lower bars 10 are raised clear of the keepers, so that the gate can be swung open. When the gate is shut, the operating levers are thrown forwardly to release the gate, to permit it to settle in a position so that the upper and lower bars are again received in the keepers. This also projects the latch into locking engagement with the recess. As the free end of the gate swings downward, the end of the latch will ride along the spring strip 23, and pass the end of the same into the lower portion of the recess.

It will be understood that the flexible members 33 can be engaged with the hooks 28 at different links, so that the tensions under which the springs 34 are placed when the levers are rearwardly disposed can be regulated as necessary. The arrangement of the parts is such that when the levers are rearwardly disposed against the intermediate uprights 12, as is indicated in dotted outline in Fig. 2, they will tend to remain in this position, so that the gate when swinging open or shut will not sag. When the gate is swung into its closed position it is necessary to swing the levers forward manually, to permit the gate to settle into its locked position.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent:

1. In combination, a gate mounted to swing open and shut, and foldable so that one end thereof can be raised, a latch for holding said gate against lateral and ver-

tical movement, and means for operating said latch, said means including a resilient element for holding said gate in a normal, raised position when said latch is withdrawn.

2. In combination, a gate mounted to swing open and shut, and foldable so that one end thereof can be raised, a latch for holding said gate against lateral and vertical movement, means for holding said gate against lateral movement alone, a member movably mounted upon said gate, and serving simultaneously to operate said latch and to raise or lower said gate, and a resiliently extensible, adjustable connection between said operating member and said gate.

3. In combination, a gate mounted to swing open and shut, and foldable so that one end thereof can be raised, a latch movably carried by said gate, means adapted to cooperate with said latch to hold said gate against vertical and lateral movement when said latch is projected, a keeper for holding said gate against lateral movement, an operating member controlling said latch, means whereby said operating member serves to withdraw said latch and to raise said gate to disengage the same from said keeper, and a resiliently extensible, adjustable connection between said operating member and said gate.

4. A gate mounted to swing open and shut, and foldably constructed, whereby it can be raised and lowered at one end, a keeper adapted to hold said gate closed, an operating member mounted upon said gate, and a connection between said member and the body of said gate, said connection including a spring, said operating member serving to raise and lower said gate to release it from said keeper.

5. A gate hinged to swing open and shut, and having a body consisting of pivotally connected bars and uprights, whereby said gate body is foldable and can be raised and lowered at the end remote from the hinged end, a latch movably carried by said gate, means adapted to cooperate with said latch, to hold said gate against vertical and lateral movement when said latch is projected, a fixed member adapted to receive a part of said gate body to hold said gate against lateral movement, a pivoted lever mounted upon said gate body and operatively connected with said latch, and an elongated member having a spring connection with said gate body and an adjustable connection with said lever.

6. A gate mounted to swing open and shut, means for holding said gate shut, an operating member carried by said gate and controlling said means, and a connection between said member and said gate, said connection comprising a rod, a spring secured thereto at one end, and to said gate, and a

flexible member secured to said rod at the other end thereof and adjustably connected with said operating member.

5 7. The combination with spaced posts, of a gate body mounted to swing upon one of said posts foldably, whereby said gate body can be raised and lowered at the end remote from said post upon which it is hinged, said other post having a recess, a latch movably carried by said gate body and adapted to be projected into said recess to hold said gate body against vertical and lateral movement, a spring tongue in said recess and

serving to guide said latch into said recess and to act as a stop to prevent the vertical movement of said body until said latch is withdrawn from said recess, and means for withdrawing said latch and raising said gate body. 15

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 20

ROY MOORE.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."