

No. 822,746.

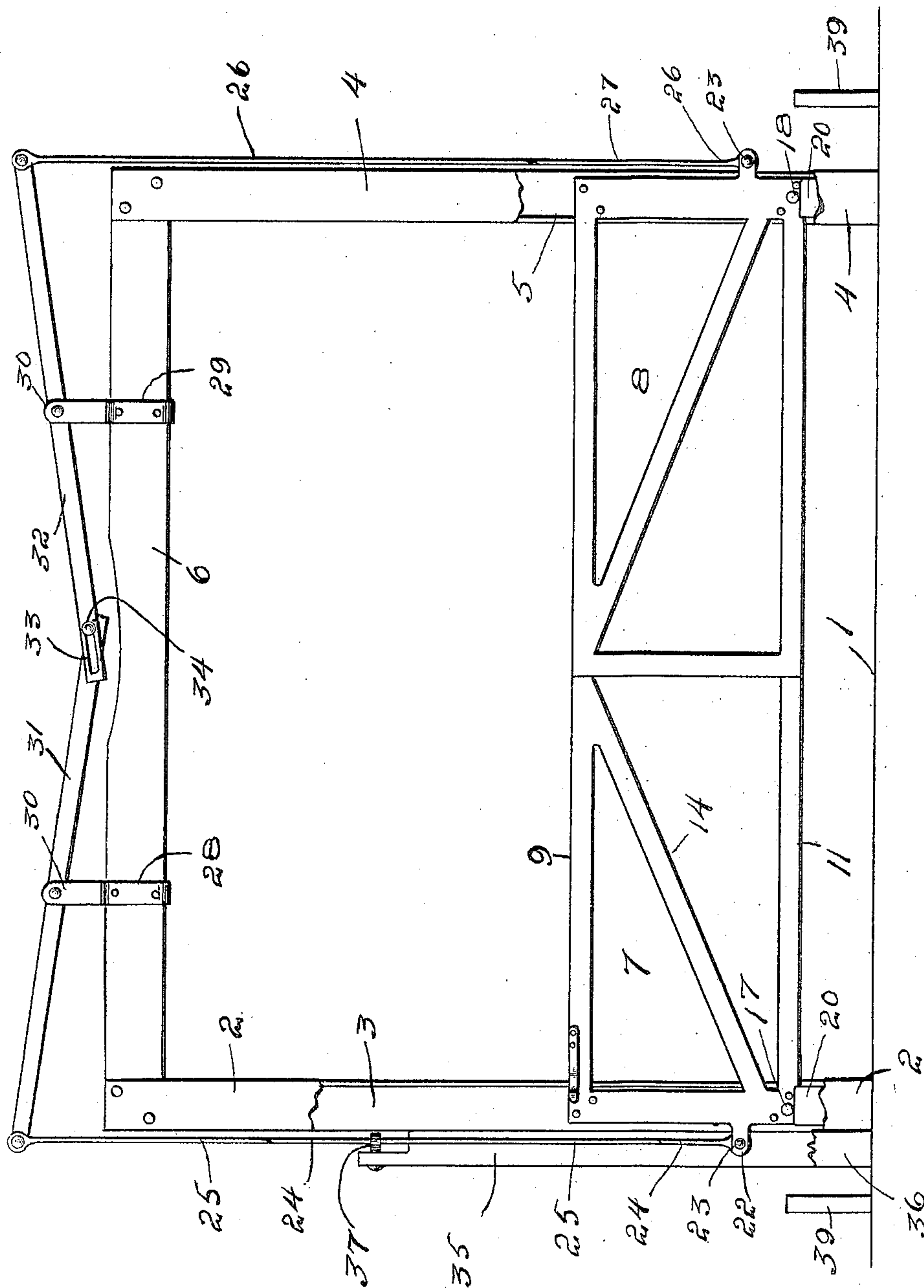
PATENTED JUNE 5, 1906.

C. H. LOVERING.

TILTING GATE.

APPLICATION FILED JUNE 16, 1905.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 2

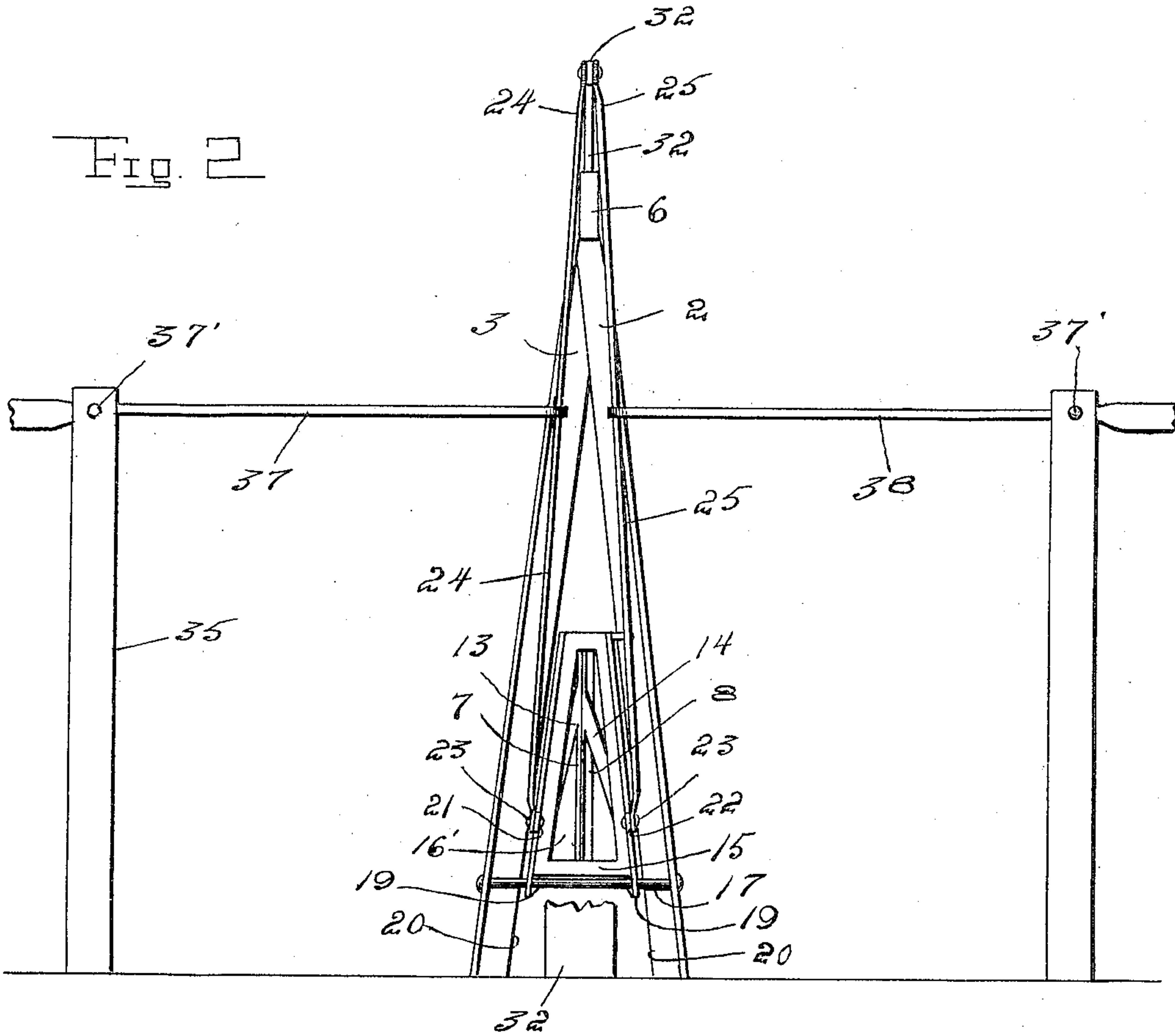
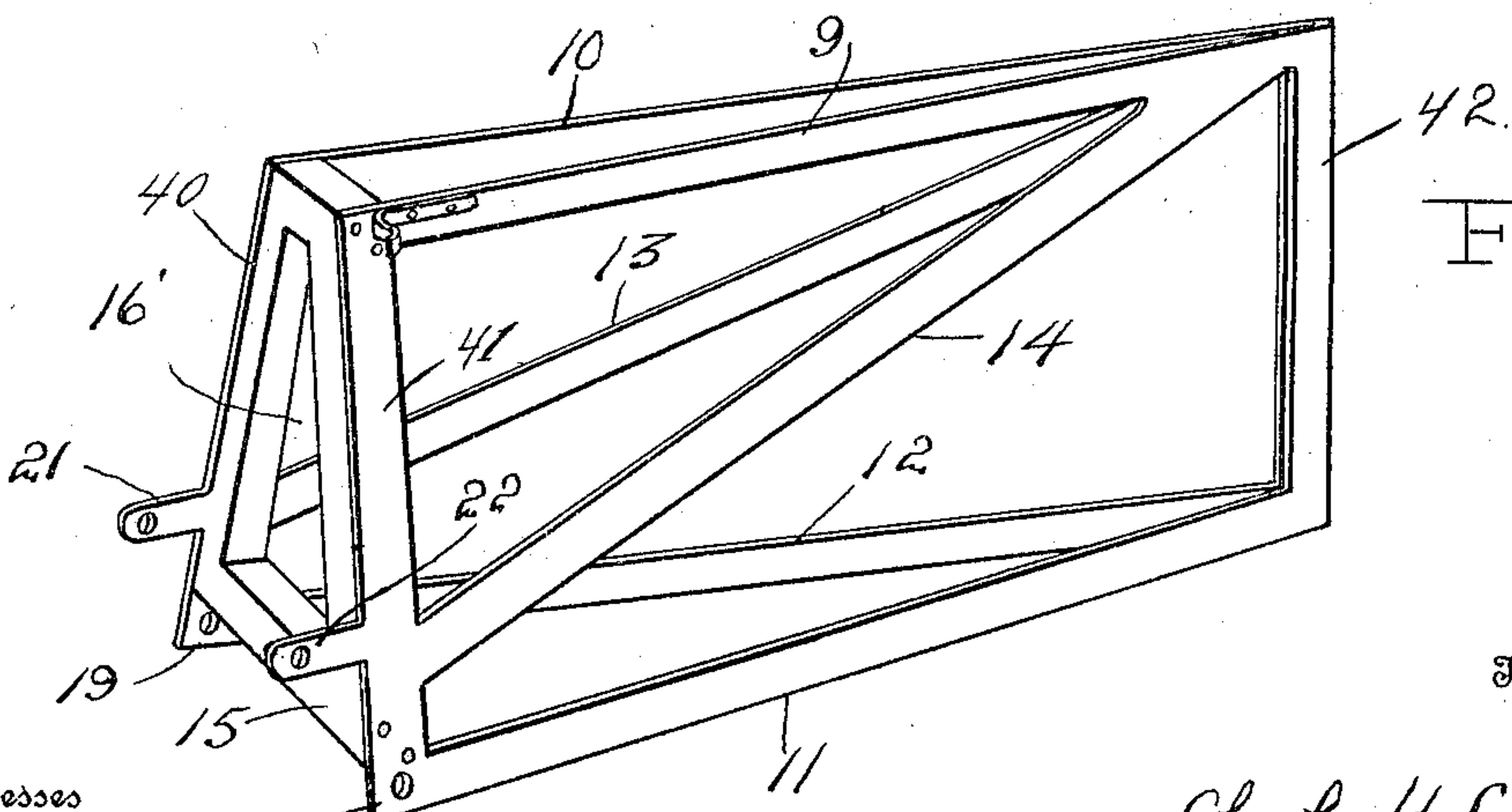


Fig. 3



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UNITED STATES PATENT OFFICE.

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TILTING GATE.

No. 822,746.

Specification of Letters Patent.

Patented June 5, 1906.

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To all whom it may concern:

Be it known that I, CHARLES H. LOVERING, a citizen of the United States, residing at Sidney, in the county of Dawson, State of Montana, have invented certain new and useful Improvements in Tilting 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.

This invention relates to gates.

One object of the invention is to provide a simple, inexpensive, durable, and efficient gate of the double or single variety and means whereby the single or double gates may be tilted in their opening and closing operation.

Another object of the invention resides in the provisions of a farm or other gate of the double or single variety with means whereby they may be opened or closed by persons in vehicles without dismounting or leaving the vehicles.

With these and other objects in view the present invention consists in the combination and arrangement of parts that will be hereinafter more fully described, and shown in the accompanying drawings, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is an elevation of a gate embodying the present invention. Fig. 2 is an end view of the gate. Fig. 3 is a detail perspective view of one of the gate members.

Referring now more particularly to the accompanying drawings, the reference character 1 designates the roadway, upon opposite sides of which are the side hinge-posts of the gates. The post at the left-hand side of the roadway consists of two upright members 2 and 3, and the post at the right-hand side of the roadway consists of two upright posts 4 and 5, the uprights of the respective posts converging upwardly and receiving at their upper ends the cross-piece 6, the connections between the members of the posts and the cross-piece being made in any suitable manner. As shown, each upright of each post is of angular formation; but it is to be understood that these uprights need not necessa-

rily be of angular formation, but they may be formed otherwise of metal or any other suitable material.

The gates are designated by the reference characters 7 and 8, and the gates illustrated in Fig. 1 of the accompanying drawings are the same in formation, and each consists of diverging upper and lower elements 9, 10, 11, and 12, together with the diagonal cross-braces 13 and 14, the inner and outer ends 40, 41, and 42 of each gate being formed integrally with the upper and lower intermediate and end elements and connected at their inner ends by means of a block of wood or any other suitable material 15, each of said blocks being provided with an opening 16, the connection between the gates proper and the said blocks being made in any suitable manner.

While a peculiar form of gate-body is illustrated in the drawings and described above, I wish it understood that I do not intend to limit myself to the forming of the gate-body out of a single piece of material or arranging the elements in the manner described—that is to say, I consider myself entitled to employ gate-bodies of various forms, and my invention resides particularly in the connection at the inner ends of the gates and the means for opening and closing the same.

Journaled through the uprights 2 and 3 is a pintle 17, and through the uprights 4 and 5 is journaled a second pintle 18. These pintles are disposed at the lower end of the respective uprights of each post, and in the particular construction of gate shown in the drawings it will be observed that the inner end pieces 19 of each gate extend beneath the blocks 15 and are provided with perforations therebeneath, whereby the gates at their lower inner ends may be journaled upon the aforesaid pintles. However, it is obvious that, if desired, the said pintles may be passed directly through the lower ends of the respective blocks 15. It is thought entirely unnecessary to illustrate this last modification. It will be observed that the blocks 15 are broader at their lower ends than at their tops, or that, in other words, the sides of the said block converge upwardly in accordance with the convergency of the uprights of each post. While not altogether necessary, I sometimes associate with each upright of each post a short post 20, upon the upper

ends of which rest the aforesaid pintles 17 and 18. It may be found desirable to employ these short posts 20 to prevent bending of the said pintles under the weight of the inner ends of the respective gates in their operation. It will be observed, too, in view of the upward convergency of the aforesaid blocks 15 the bottom elements 11 and 12 of each gate are farther separated at their inner ends than the inner ends of the upper elements 9 and 10 of each gate.

Formed integrally with the inner ends 40 41 of each gate are ears 21 and 22, each being provided with a perforation for the reception of a suitable bolt 23, through the instrumentality of which are connected to the ears upwardly-directed rods 24 and 25, 26 and 27, the rods 24 and 25 converging upwardly above the cross-piece 6 in accordance with the convergency of the upright members 2 and 3 of the corresponding post, the rods 26 and 27 being arranged in the same manner as regards their disposition and association with the respective members of the other post. Brackets 28 and 29 are disposed near each end of the cross-piece 6 and secured to the latter in any suitable manner. Each of these brackets has the fingers 30, between which are secured, respectively, the levers 31 and 32, the lever 32 being provided with a slot 33 for engagement therein of the projection 34 at the corresponding end of the lever 31, whereby a slide play may be permitted between the inner ends of said levers. It will now be understood that these levers are permitted to rock upon their pivotal connections 34 in the ears or fingers 30, and reference to the drawings will disclose that the outer end of each lever 31 and 32 is pivotally connected to the convergent meeting upper ends of the corresponding rods 24 and 25 and 26 and 27.

Arranged in alinement with the uprights 2 and 3, forming one of the posts, and upon opposite sides thereof, are additional posts 35 and 36, to the upper ends of which are pivotally secured operating-arms 37 and 38, the said arms extending beyond the respective posts and being pivoted thereto by means of a suitable pivot-pin 37. The inner ends of the operating-arms 37 and 38 are fixedly secured in any suitable manner to the rods 24 and 25 and near the upper ends thereof.

It will be observed that when the gates are in their lowered position the inner ends thereof overlap each other, and now in order that the opening of the gates may be fully understood I will state that in the event a person in a vehicle desires to pass through the gate without dismounting from the vehicle it is only necessary for the person to push upwardly upon the outer end of either operating-arm 37 and 38, when the rods 24 and 25 will be thrown downwardly by reason of the

connection between the operating-arms and the said rods, causing the gates to be swung upon the pintles 17 and 18 with the rear faces of the blocks 15 of each gate resting upon the supports 39. It is obvious that when either operating-arm 37 and 38 is moved, as stated, together with the arms 24 and 25, the pivotal connection between the levers 31 and 32 will result in both gates 7 and 8 being tilted in opposite directions away from each other. Of course, if desired, operating-arms 37 and 38 may be arranged upon each side of the roadway; but it is thought that this is entirely unnecessary.

It is to be understood that while a double gate has been referred to above a single gate may be operated in the same manner as is the double gate. Of course in the event of using a single gate it would be entirely unnecessary to have two sets of arms connecting the gate and the upper levers 31 and 32, one lever being sufficient.

What is claimed is—

1. A gate comprising a pair of converging upper elements, a pair of lower converging elements, a pair of converging braces, an outer end connecting the braces and the upper and lower elements, rear ends formed integral with the upper lower intermediate bracing and end elements, ears formed integral with the rear ends of the said gate, and a block disposed between the said rear ends of the gate and made to converge upwardly.

2. The combination with oppositely-disposed posts having a cross-piece connecting their upper ends, of a gate hinged to the lower rear end of each post, levers pivotally mounted upon the said cross-piece and having their inner ends pivoted together, rods connecting the outer end of each lever and the rear of the gate, and other means connected with one pair of said rods, whereby they may be moved vertically.

3. The combination with two posts, each consisting of upwardly-convergent members, of a cross-piece connecting the upper ends of the posts, a gate pivoted at its rear ends between the converging members of each post at the lower ends of said members, a support arranged adjacent to each post, pivotally-connected levers mounted upon said cross-piece, rearwardly-extending spaced projections carried by each gate, rods connected with the projections and converging upwardly for pivotal connection with the outer ends of the levers thereabove, and means for operating said levers.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES H. LOVERING.

Witnesses:

JOEL E. CUSHING,
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