A. V. ROWE.

GATE.

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1,224,325. Patented May 1, 1917.

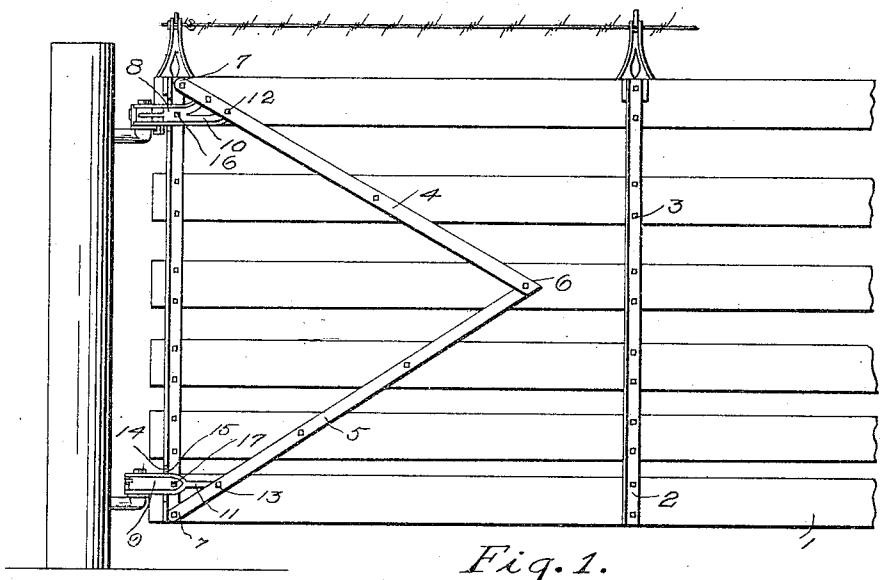


Fig. 1.

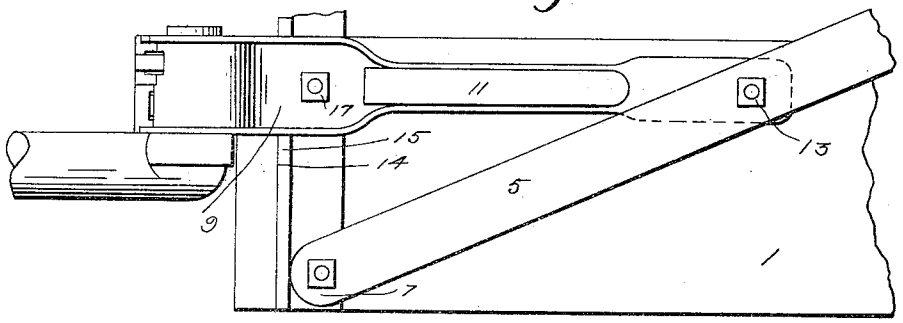


Fig. 2.

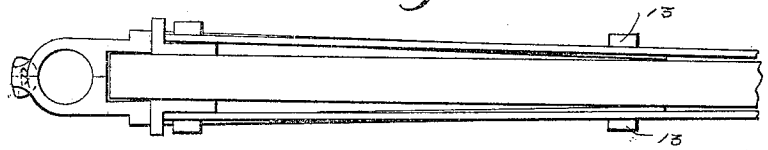


Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

ALVIN V. ROWE, OF GALESBURG, ILLINOIS.

GATE.

1,224,325. Specification of Letters Patent. Patented May 1, 1917.

Application filed August 15, 1912. Serial No. 715,292.

To all whom it may concern:

Be it known that I, ALVIN V. ROWE, citizen of the United States, residing at Galesburg, in the county of Knox and State of Illinois, have invented certain new and useful Improvements in Gates, of which the following is a specification.

This invention has reference to improvements in gates and particularly to the swinging type of gate.

One of the objects of this invention is the provision of a bracing means for a gate which is simple and efficient, giving the gate rigidity and preventing the same from sagging at the hinge.

My invention has further reference to the improvement in various details of structure, arrangement and design of a gate, having particular reference to that type of gate which may be termed non-sagging.

To the accomplishment of the foregoing and such other objects as may hereinafter appear my invention consists in the construction, combination and arrangement of parts hereinafter described and then sought to be defined in the appended claims, reference being had to the accompanying drawings forming a part hereof and which show, merely for the purpose of illustrative disclosure, one embodiment of my invention, it being understood however that various changes may be made in practice within the scope of the appended claims without digressing from my inventive idea which is defined herein.

In the drawings;

Figure 1 shows a gate provided with my improved brace and hinge member, the upper and lower hinge being of different design, and the gate being provided with my improved barbed wire attachment.

Fig. 2 is a side elevation of a portion of my gate showing the lower hinge shown in Fig. 1.

Fig. 3 is a top plan view of the structure shown in Fig. 2.

In gates of this general character it has been found advisable to provide bracing or truss members so as to prevent all sagging of the gate. To this end I have provided in this invention a double truss which is connected to the upper and lower hinges of the gate and also to the upper and lower end portions of the angle iron cross-piece. This double truss thereby forms an additional truss at the upper and lower portions of the hinge end of the gate. This forms two triangular braces or trusses at these portions, materially aiding in forming a rigid gate structure and preventing all sagging away from the hinges.

Referring now to the drawings, the numeral 1 designates the longitudinal members or slats being spaced apart and secured in proper relative position by the cross-pieces 2, which as shown preferably take the form of angle irons. These angle iron cross-pieces are arranged in pairs on opposite sides of the boards and are connected by means of bolts 3.

The primary truss member is formed by the end cross-piece 2 and the diagonally disposed brace members 4 and 5 which are arranged in duplicate on opposite sides of the gate and secured together, constituting what might be called a double truss. These members are connected together in the center of the middle pair as at 6, this having the advantage of making the gate self squaring, that is in assembling, permitting the members to be placed in proper position without the necessity of squaring them up. As shown these brace members 4 and 5 are attached to the extremital portions of the end cross-piece 2, as at 7. The hinge members for the top and bottom of the gate, indicated generally as 8 and 9, are provided with the extensions 10 and 11, to which the braces 4 and 5 are connected, as at 12 and 13. The end cross-piece 2 has the upwardly extending flange of the angle iron cut away as at 14 to provide the recesses 15 in which the hinge members 8 and 9 are seated, the latter being secured to said end cross-piece 2 by means of the bolts 16 and 17. Attention is here called to the fact that I provide a major triangular brace for the hinge end of the gate which includes the cross or transverse angle iron pieces 2 and the brace members 4 and 5, and, in addition, I provide the minor triangular braces or trusses, which include the extremital portions of the brace members 4 and 5 and end cross-pieces 2 and also the extensions 10 and 11 of the hinge members 8 and 9. This provides the gate with additional bracing means in the place where it is necessary, giving it additional rigidity, and preventing all possibility of sagging.

What I claim is:—

1. In combination with a gate including longitudinal members and cross pieces or members connecting said longitudinal mem-

bers in spaced relation, an end cross piece or member formed of angle iron and having its outstanding flange cut away to provide recesses, hinge members secured to said longitudinal members and to said end cross piece and resting in said recesses.

2. In combination in a gate including longitudinal members and cross pieces or members, one of said cross pieces or members being adjacent the hinge end of the gate, a brace or truss for said gate including diagonally extending members secured together to one of said longitudinal members and having their ends secured to the end portions of said cross piece or member, hinge members for said gate having portions extending under and secured to said diagonal brace or truss members, said hinge members also being secured over said end cross piece or member, whereby a major triangular truss is formed and also a plurality of minor triangular trusses.

3. In combination in a gate including longitudinal members and cross pieces or members, one of said cross pieces or members being of angle iron and located adjacent the hinge end of the gate, and having its outstanding flange cut out to provide recesses with abrupt shoulders, a brace or truss for said gate including diagonally extending members secured together to one of said longitudinal members and having their ends secured to the flat side of the end portions of said angle iron cross piece or member, separate hinge members for said gate having portions extending under and secured to said diagonal brace or truss members, said hinge members also being secured over said end cross piece or member and passing through said recesses, whereby a major triangular truss is formed and also a plurality of minor triangular trusses.

4. A gate including in combination, longitudinal members in spaced relation, cross pieces or members extending transversely to said longitudinal members and one being positioned at the hinge end of the gate, brace members secured to the ends of said end cross piece or member and extending diagonally to an intermediate longitudinal member, being secured together, hinge members having extensions secured to said end cross piece or member and also secured to said diagonal brace members, whereby minor triangular trusses are formed within the angles of the major triangular truss formed by said diagonal brace members and said end cross piece or member, said hinge extensions being positioned on top of said cross piece or member and extending under said diagonal brace members.

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

ALVIN V. ROWE.

Witnesses:
C. A. GUSTAFSON,
P. F. BRUEME.

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