R. PIERCE.

GATE.

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1,250,648. Patented Dec. 18, 1917.

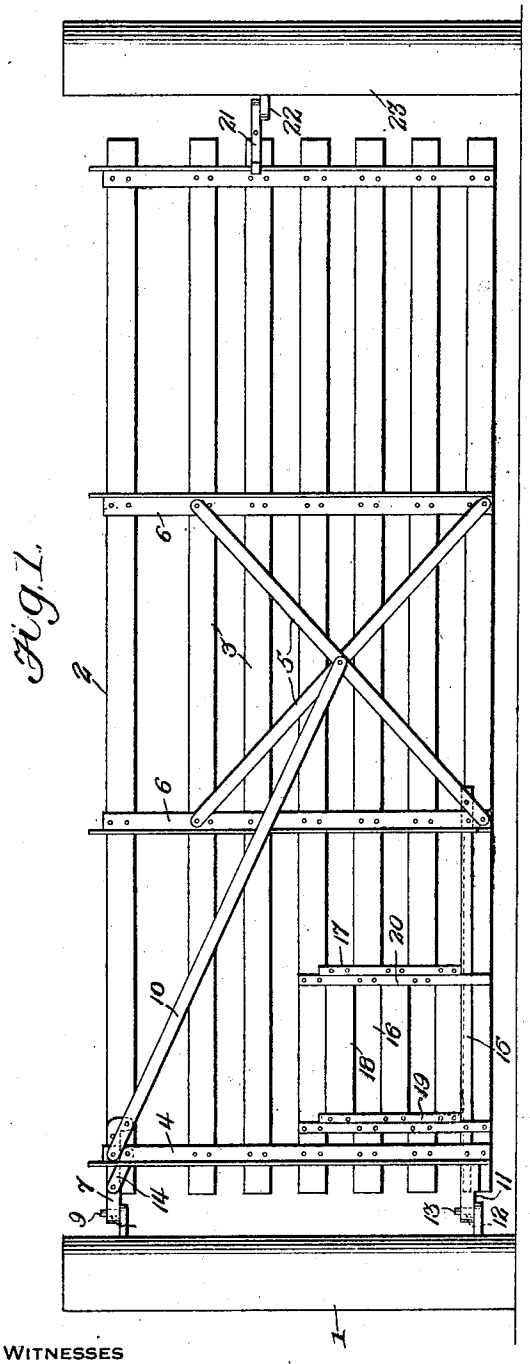


Fig. 1.

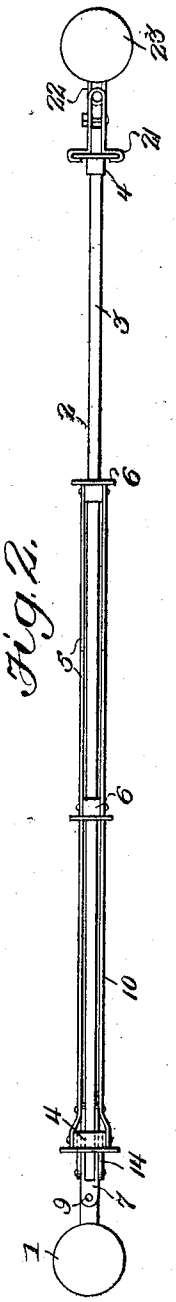


Fig. 2.

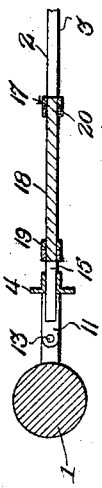


Fig. 3.

WITNESSES

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GATE.

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To all whom it may concern:

Be it known that I, ROY PIERCE, a citizen of the United States, residing at Upland, in the county of Grant and State of Indiana, have invented new and useful Improvements in Gates, of which the following is a specification.

My invention relates to gates and more particularly to gates of the horizontal swinging type.

The construction involved is such that the various horizontal rails will be held in proper position in such a manner that, although the structure is very light, there will be no tendency of the gate to sag even after long service.

A further object is to provide a gate including a plurality of wooden horizontal ends across which are disposed a number of brace members which take up the various strains to which the gate is subjected.

Another object is to provide a small gate within the main gate structure, the structure being such that the main gate structure is not weakened by the opening of the smaller gate.

With these and other objects in view which will be hereinafter fully described and particularly pointed out in the claims, the invention consists in the novel construction and arrangement of parts illustrated in the accompanying drawings, forming a part of this specification, in which:—

Figure 1 is a side elevation of a gate embodying my invention,

Fig. 2 is a top plan view of the same,

Fig. 3 is a partial horizontal sectional view of the same.

Like characters of reference indicate like parts in the various views.

In the drawings 1 designates a gate post to which a gate 2 is hinged. The gate 2 comprises a series of spaced horizontal members 3. These spaced horizontal members 3 are preferably of wood although they may be of any suitable material. A series of vertical members 4 are provided which are secured to the horizontal members at regular intervals along the length thereof. The end vertical members are disposed adjacent the ends of the horizontal members. In the preferred form of my invention I provide pairs of vertical members disposed on either side of the horizontal members.

A pair of oppositely disposed diagonal brace bars 5 are provided having their opposite ends secured to a pair of intermediate vertical members 6 of the series 4. The diagonal brace rods 5 intersect at points intermediate the ends thereof and are secured to each other at that point. A hinged member 7 is secured to one end of the upper horizontal member. Said hinged member 7 extends outwardly from said horizontal member and has a vertical hole formed therein adapted to engage a pintle 9 mounted on the gate post 1. A diagonal brace rod 10 is provided having its one end secured to the diagonal brace rods 5 at their point of intersection and has its other end secured to the end vertical member of the series, adjacent the hinged member 7. The lower horizontal member of the series 3 has a hinged member 11 secured to the end thereof, said hinged member having a vertical hole 12 formed therein in alinement with the hole 7. A pintle 13 mounted on the gate post 1 engages said hole 12. A diagonal brace 14 has its one end connected to the outer end of the hinged member 7 and its other end connected to the adjacent vertical member of the series 4. The inner end of the hinged member 7 is bifurcated and embraces the adjacent end of the upper horizontal member, the extreme ends of the arms thereof being turned downwardly and secured to the diagonal brace member 10. A reinforcing member 15 having a U-shape is provided and engages the top of the lower horizontal member, and has its outer end connected to the adjacent end of one of the diagonal brace rods 5 and has its other end connected to the hinged member 11 and the adjacent vertical member of the series 4. The various vertical members are secured to each horizontal member at each point of intersection thereof.

The two horizontal members adjacent the bottom members of the series have portions thereof cut out adjacent the hinged end of the gate, as designated at 16. The aperture so formed is adapted to be closed by a sliding gate 17. The gate 17 comprises longitudinal members 18 spaced to correspond with the openings between the adjacent horizontal members of the main gate structure, and pairs of vertical members 19 on either side of the longitudinal members. The ends of the vertical members 19 extend beyond the longitudinal members and engage the sides of the adjacent horizontal members of

the main gate structure whereby said gate 17 is adapted to slide upon the adjacent horizontal members of the main gate structure. A pair of vertical members 20 are provided and secure the ends of the horizontal members which were cut to provide the opening 16. The vertical member of the series 4 which is adjacent the free end of the gate is provided with a clamp bracket 21 which is adapted to engage a latch 22 of usual construction mounted upon a gate post 23.

By the above described construction it will be seen that a gate is provided which is very strong and light. As above stated pairs of vertical members may be provided on either side of the gate, and said pairs are formed preferably in one piece doubled over. In this form the doubled over end is placed at the top of the gate. It will be noted also that a duplicate set of diagonal braces are used in the preferred construction, each set being disposed on the opposite sides of the horizontal members. The hinge members also engage both sides of the horizontal members, each hinge having a pair of ears formed thereon for that purpose.

Having thus fully described my invention, I claim:—

1. A gate comprising a series of horizontal members, a pair of vertical members secured to said horizontal members at points intermediate the ends thereof, a pair of intersecting diagonal brace members having their ends secured to said vertical members, and a diagonal brace rod having one of its ends secured to said pairs of braces at their point of intersection and having its other end secured to the structure adjacent one of the upper corners thereof.

2. A gate comprising a series of horizontal members, of a series of vertical members secured to said horizontal members at intervals along their length, a pair of intersecting diagonal braces having their ends secured to a pair of vertical members, a diagonal brace bar having one of its ends secured to said pair of braces at their point of intersection and having its other end secured to the upper portion of one of the end vertical members, and a reinforcing member adjacent the lower horizontal member and having its one end secured to one of said diagonal braces and having its other end secured to said end vertical member at a point adjacent the lower end thereof.

3. A gate comprising a series of spaced horizontal members, a pair of spaced vertical members secured to said horizontal members, a pair of intersecting diagonal braces having their ends secured to said pair of vertical members, a vertical member secured to said horizontal members at one end thereof, a brace bar having its one end secured to said braces at their point of intersection and having its other end secured to said vertical member at a point adjacent the upper end thereof, a horizontal reinforcing member adjacent the lower horizontal member and having one end secured to one of said pair of diagonal braces and its other end secured to said vertical member, a number of said horizontal members directly above said reinforcing member having portions thereof cut out to form an aperture adjacent said vertical member, and an auxiliary sliding gate comprising longitudinal members disposed within the spaces of the horizontal members of the main gate structure, and a pair of transverse members secured on said longitudinal members of the auxiliary gate and loosely engaging the opposite sides of said horizontal members of the main gate structure.

In testimony whereof I affix my signature.

ROY PIERCE.

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