L. SWANK & J. E. VAN DEVENTER.

GATE.

APPLICATION FILED FEB. 15, 1915.

1,171,903. Patented Feb. 15, 1916.

Fig. 1.

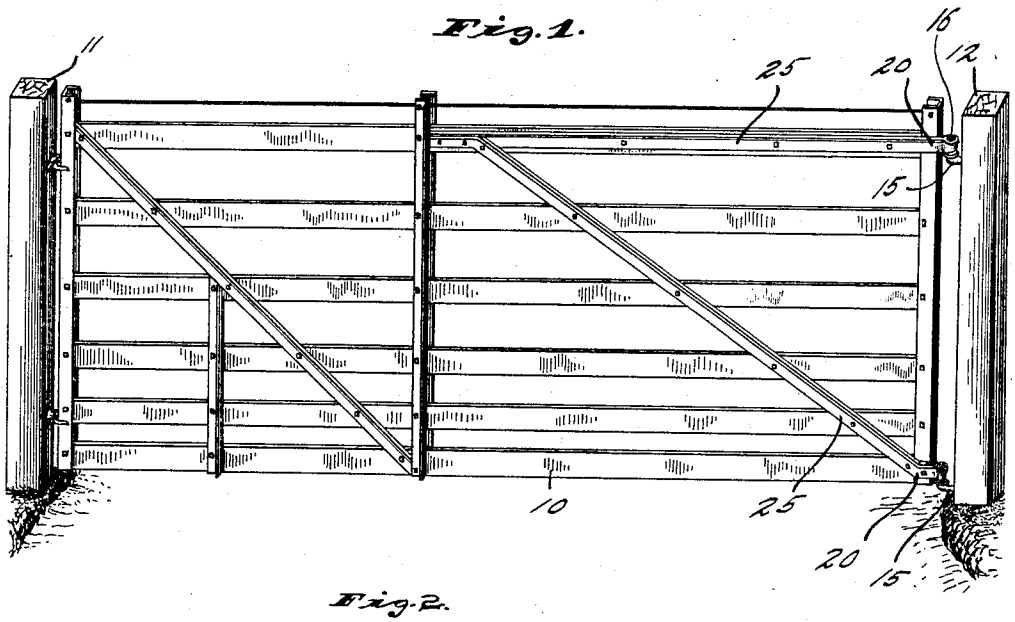


Fig. 2.

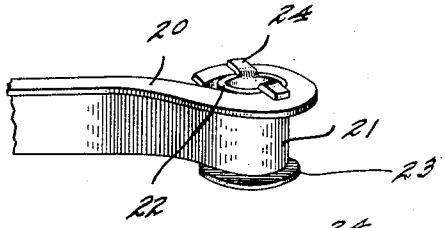


Fig. 3.

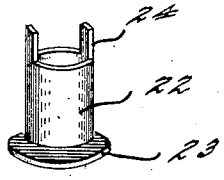
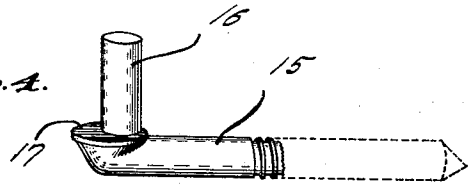


Fig. 4.



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LAFE SWANK AND JAMES E. VAN DEVENTER, OF ANDERSON, INDIANA, ASSIGNORS TO DWIGGINS WIRE FENCE COMPANY, OF ANDERSON, INDIANA, A CORPORATION OF INDIANA.

GATE.

1,171,903. Specification of Letters Patent. Patented Feb. 15, 1916.

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To all whom it may concern:

Be it known that we, LAFE SWANK and JAMES E. VAN DEVENTER, citizens of the United States, residing at Anderson, in the county of Madison and State of Indiana, have invented a new and useful Gate, of which the following is a specification.

Our invention relates to brace hinges, particularly for gates. Its object is to provide a hinge construction which will make the hinged structure, such as the gate, more firm and rigid, and which will permit of the ready replacement of any worn part without necessitating the replacement of the whole hinge.

The accompanying drawing illustrates our invention.

Figure 1 is a perspective view of a gate equipped with our improved hinge; Fig. 2 is a perspective view of the hinge end of the female member of the hinge; Fig. 3 is a perspective view of the bushing used in such female member; and Fig. 4 is a perspective view of the male member of the hinge.

The gate 10 is shown as being located between two fence posts 11 and 12, being mounted on the fence post 12 by our improved hinges. Into the fence post 12 are screwed the male members 15 of two or more of these hinges, each of these members having a screw shank with an upturned pivot pin 16 at the lower end of which is a shoulder 17. Coöperating with these male members 15 are the female members 20 of such hinges, each of which is made of angle iron which at the hinge end is bent to form a socket 21, which encircles the coöperating pin 16, but leaves sufficient space within it and around such pin to receive a bushing 22, which at one end has a flange 23 for bearing against one end of the socket and at the other end is provided with a pair of fingers 24 which can be hammered over, as shown in Fig. 2, to hold the bushing 22 in place in the socket 21. The female members 20 not only comprise the sockets 21, but also comprise portions 25 which extend a considerable distance along the gate 10 and are fastened thereto at a number of points. The part 25 of the lower hinge is bent upward at an angle, as is clear from Fig. 1, so that it also serves as a brace for preventing sagging of the gate.

All the wear of the hinge takes place between the pin 16 and the bushing 22. When this bushing is worn out another can be substituted for it without requiring that an entire new hinge member be substituted. Similarly when the pin 16 is worn out a new male member 15 may be screwed into the post 12 to take its place.

We claim as our invention:

1. As an article of manufacture, a gate, comprising a plurality of vertically-spaced, substantially horizontal wooden bars, a metal member having an angular cross section and arranged transversely of said wooden bars at one end thereof and attached thereto, a metal hinge-bar attached to one of said horizontal wooden bars and extending a considerable portion of the length thereof, said hinge-bar having a portion substantially parallel to the plane of said wooden bar and another portion at a material angle to said wooden bar, the said hinge-bar being projected at one end beyond the vertical metal member and having an integral portion for the reception of a supporting hinge member, a second hinge-bar arranged in an inclined position relative to the first hinge-bar and the horizontal wooden bars, said second hinge-bar being attached at its upper outer end to the first hinge-bar and attached at the crossing points to the horizontal wooden bars, and at its lower end extended beyond the vertical metal member and provided with an integral portion for the reception of a supporting hinge member, said second hinge-bar having a portion parallel with the plane of the wooden bars and another portion at a material angle to said plane, a vertical metal member having an angular cross section arranged transversely of the wooden bars beyond the outer ends of the hinge-bars and attached to the wooden bars, a third metal member having an angular cross section arranged transversely of the wooden bars at their outer ends and attached thereto, and an inclined metal member having an angular cross section extending diagonally between the second and third vertical members and attached to the wooden bars at the crossing points.

2. As an article of manufacture, a gate, comprising a plurality of vertically-spaced, substantially horizontal wooden bars, a metal member having an angular cross section and arranged transversely of said wooden bars at one end thereof and attached

thereto, a metal hinge-bar attached to one of said horizontal wooden bars and extending a considerable portion of the length thereof, said hinge-bar having a portion substantially parallel to the plane of said wooden bar and another portion at a material angle to said wooden bar, the said hinge-bar being projected at one end beyond the vertical metal member and having an integral portion for the reception of a supporting hinge member, a second hinge-bar arranged in an inclined position relative to the first hinge-bar and the horizontal wooden bars, said second-hinge-bar being attached at its upper outer end to the first hinge-bar and attached at the crossing points to the horizontal wooden bars, and at its lower end extended beyond the vertical metal member and provided with an integral portion for the reception of a supporting hinge member, said second hinge bar having a portion parallel with the plane of the wooden bars and another portion at a material angle to said plane.

In witness whereof, we have hereunto set our hands at Anderson, Indiana, this 12th day of February, A. D. one thousand nine hundred and fifteen.

LAFE SWANK.
JAMES E. VAN DEVENTER.

Witnesses:
M. M. MORRISON,
J. E. DAVIS.

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