

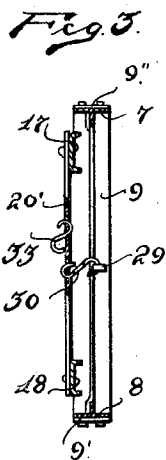
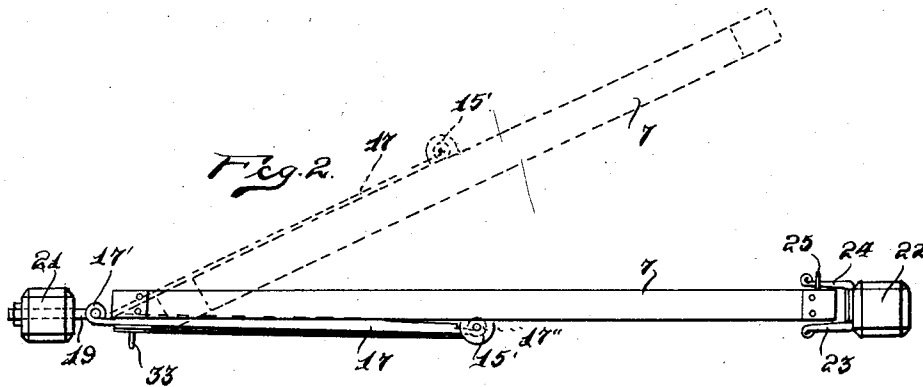
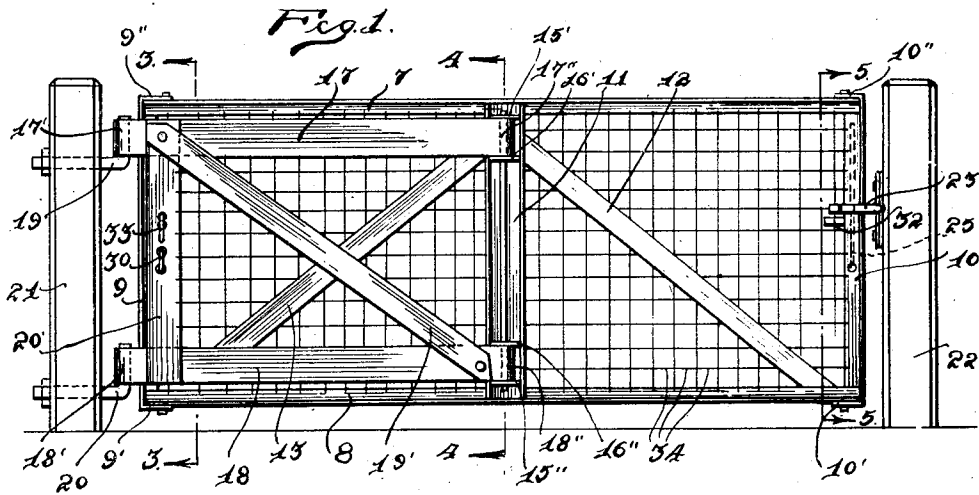
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F. GWISDALLA

GATE

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UNITED STATES PATENT OFFICE.

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GATE.

Application filed July 31, 1926. Serial No. 126,163.

My invention relates to a new and useful improvement in a gate, and has for its object the provision of a gate so constructed and mounted as to prevent sagging of the gate at its free end.

Another object of the invention is the provision of a gate so constructed and mounted as to be balanced on its mountings and swingable to open and closed position from one end.

Another object of the invention is the provision of a gate which will be simple in structure, economical of manufacture and highly efficient in use.

Another object of the invention is the provision of a gate hung at its middle and adapted to have either end swung around to the pivotal end of opening so that any sagging at the free end of the gate may be corrected by reversing the end which hangs free.

Another object of the invention is the provision of a supporting frame engaging the gate at its medial vertical line and provided with fastening means for meeting the adjacent end of the gate and retaining it against swinging on its medial vertical line.

Other objects will appear hereinafter.

The invention consists in the combination and arrangement of parts hereinafter described and claimed.

The invention will be best understood by a reference to the accompanying drawings which form a part of this specification and in which,

Fig. 1 is a side elevational view of the invention.

Fig. 2 is a top plan view of the invention.

Fig. 3 is a sectional view taken on substantially line 3—3 of Fig. 1.

Fig. 4 is a sectional view taken on substantially line 4—4 of Fig. 1.

Fig. 5 is a sectional view taken on substantially line 5—5 of Fig. 1.

The gate comprises, as shown in the drawings, a frame having an upper rail 7, made from T-iron and a lower rail 8, also made from iron. A side rail 9, constructed from T-iron, has its arms at its ends angularly turned and engaging the ends of the lower and upper rails as at 9' and 9'' respectively. These portions 9' and 9'' may be riveted, welded or otherwise suitably secured, to the upper and lower rails. The end rail 10 is also constructed from T-iron and has its arms at its ends angularly turned as at 10'

and 10'', these angularly turned portions being riveted, welded or otherwise suitably secured to the upper and lower rails 7 and 8. Extending vertically to the rails 7 and 8 and serving to join these rails is a central supporting rib 11 which is formed preferably from channel iron. Connected to the upper end of the rib 11 and extending to one end of the lower rail 8 is a brace 12 made from scrap iron, or other suitable material, a similar bracing 13 being secured to the lower rail 8 at the opposite end to the rib 12. Positioned within the angle iron 11 and secured thereto is a metal strap 15, having its ends angularly turned as at 15' and 15''. Secured to the outer surface of the strap 15 is a shorter strap 16, having its ends angularly turned as at 16' and 16'', these angularly turned portions 15' and 16' serving as supporting members and co-operating with each other, as do likewise the angularly turned portions 15'' and 16''. A supporting frame for the gate is provided which comprises a horizontally extended channel iron 17, having one end curled to form a knuckle 17' and its opposite end curled to form a knuckle 17'', which is adapted to engage between the angularly turned portions 15' and 16'. A low rail of the supporting frame comprises the horizontally disposed channel iron 18, having one end curled to form the knuckle 18' and the other end curled to form the knuckle 18'', this knuckle 18'' engaging between the angularly turned portions 15'' and 16''. The knuckle 17' is adapted for the reception of the vertically turned portion of the supporting bolt 19 which is projected through the post 21, and the knuckle 18' serves to receive the vertically extending end portion of the bolt 20, which is also projected through the post 21. A brace 19' serves to connect the lower end of the rib 11 to the end of the upper rail 7. Attached to the post 21 is one end of the fence, the other end of the fence being attached to the post 22 in the usual manner. Swingably mounted on the post 22 is a U-shaped clip, the legs 23 and 24 of which are adapted to embrace the end rail of the gate to retain it in position. Attached at one end to the end rail 10 is a wire latching member 25 which is offset to provide the engaging nose 26, the member 25 below the engaging member being bellied outwardly as at 28 and provided with a horizontally extending angu-

larly turned gripping portion 27 which is free and by which the nose 26 may be sprung inwardly so as to disengage the leg 24. When the gate is swung into the position shown in Fig. 1 or Fig. 2 the latching member may be swung on its pivot into embracing relation as shown in the drawings, the leg 24 riding over the nose 26 and the bellied outward portion 28 serving to resist the movement of the leg 23, so that the latch member is held in operative position. A similar latch member 33 is mounted on the end rail 9. In order to release this latch member from this position the member may be sprung inwardly so as to disengage the nose from the arm 24 either by pushing or by pulling on the horizontally extending portion 27. Secured to the end rail 9 is an eyelet 29 in which engages the curved end of the hook 30, this hook being mounted on the upright 20' which connects the rails 17 and 18, and it will be noted that the hook 30 is not mounted on a horizontal alignment with the eyelet 29, so that a tendency to separate the supporting frame from the end of the gate tends to draw the hook 30 further into the eyelet 29. When the gate is swung to the position shown in full lines in Fig. 2 and as shown in Fig. 1, the eyelet 29 is engaged by the hook 30, the gate being positioned on one side of the supporting frame. If desired the gate may be swung around as shown in dotted lines in Fig. 2 so that it is positioned on the opposite side of the supporting frame, in which case the eyelet 32 would be engaged by the hook 33, this eyelet 32 being mounted upon the end rail 10.

By mounting this gate in this manner it will be noted that the support of the gate proper is at the medial vertical line of the gate so that sagging of the gate at either end is reduced to a minimum. Should the free end of the gate have a tendency to sag this sagging may be overcome by swinging the gate to the opposite side of the supporting frame, thus making the opposite end of the gate the free end.

The structure shown is one which lends to economy in manufacture and affords a gate which is durable in use and believed to be most adapted for the specific structure of gate shown, the wire 34 may be secured to the trunk of the T-iron which forms the upper and lower rails 7 and 8 and the end rails 9 and 10.

While I have illustrated and described the

preferred form of structure, I do not wish to limit myself to the precise form of structure shown, but desire to avail myself of such variations and modifications as may come within the scope of the appended claims.

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

1. A gate of the class described comprising a frame; a rib extending transversely thereof at its medial line; a plate mounted on one face of said rib and having its ends angularly turned and projecting outwardly therefrom; an auxiliary plate shorter than said first mentioned plate mounted thereon and having its ends angularly turned and projecting outwardly therefrom, the angularly turned ends of said plates comprising a pair of sets of spaced outwardly projecting supporting lugs; a supporting frame swingably mounted and having a pair of horizontally extending members, the free ends of which are provided each with a knuckle, each for engaging between one of said pairs of lugs; and means projected through said lugs and said knuckles for swingably mounting said first mentioned frame on said members.

2. A gate of the class described comprising a frame; a rib extending transversely thereof at its medial line; a plate mounted on one face of said rib and having its ends angularly turned and projecting outwardly therefrom; an auxiliary plate shorter than said first mentioned plate and mounted thereon, and having its ends angularly turned and projecting outwardly therefrom, the angularly turned ends of said plates comprising a pair of sets of spaced outwardly projecting supporting lugs; a supporting frame swingably mounted and having a pair of horizontally extending members, the free ends of which are provided each with a knuckle, each for engaging between one of said pairs of lugs; and means projected through said lugs and said knuckles for swingably mounting said first mentioned frame on said first mentioned members, said frame being swingably mounted on said knuckles for bringing either end into overlapped relation with said members and means for locking either end of said frame in said overlapped relation.

In testimony whereof I have signed the foregoing.

FRANK GWISDALLA.