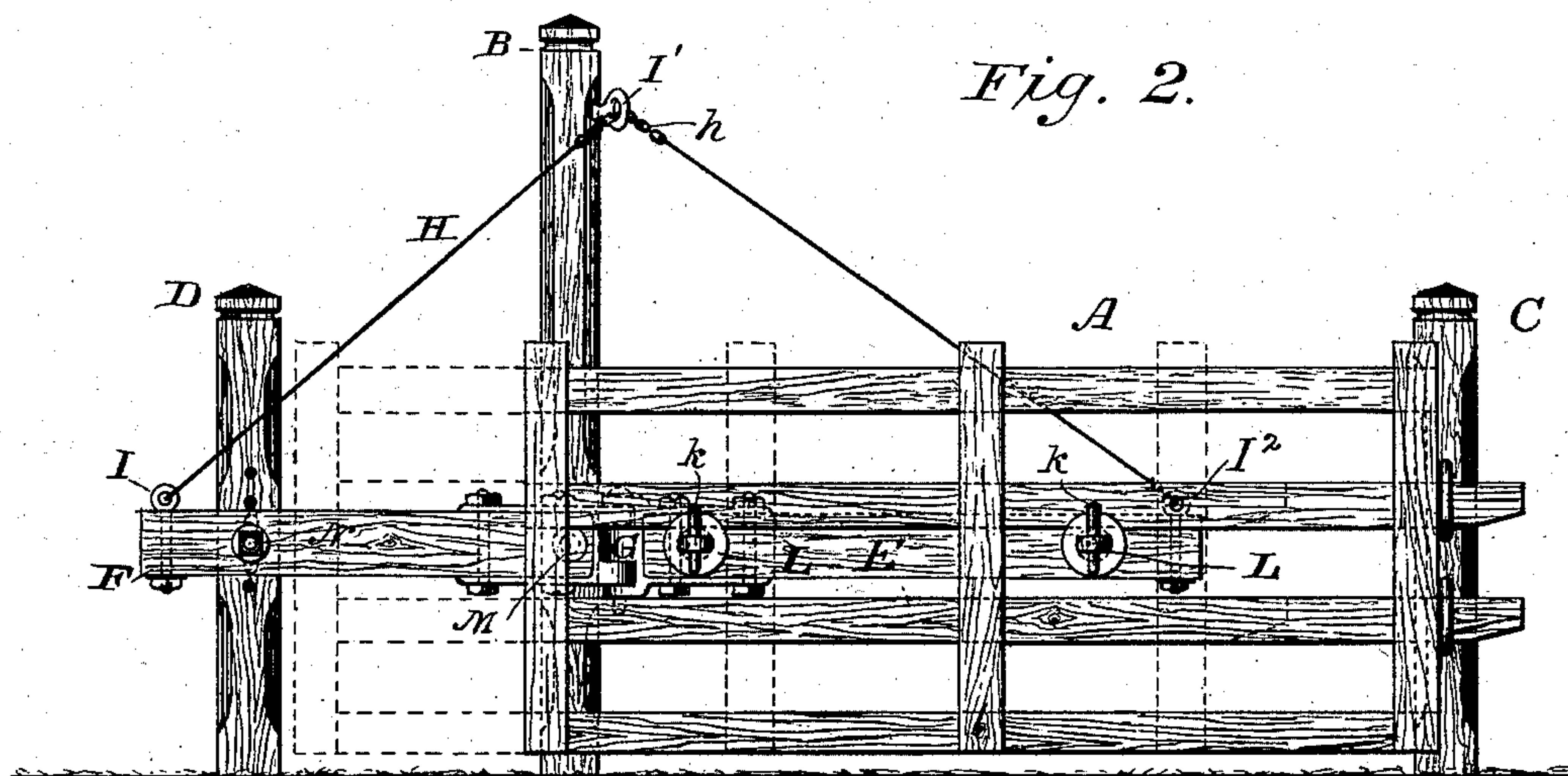
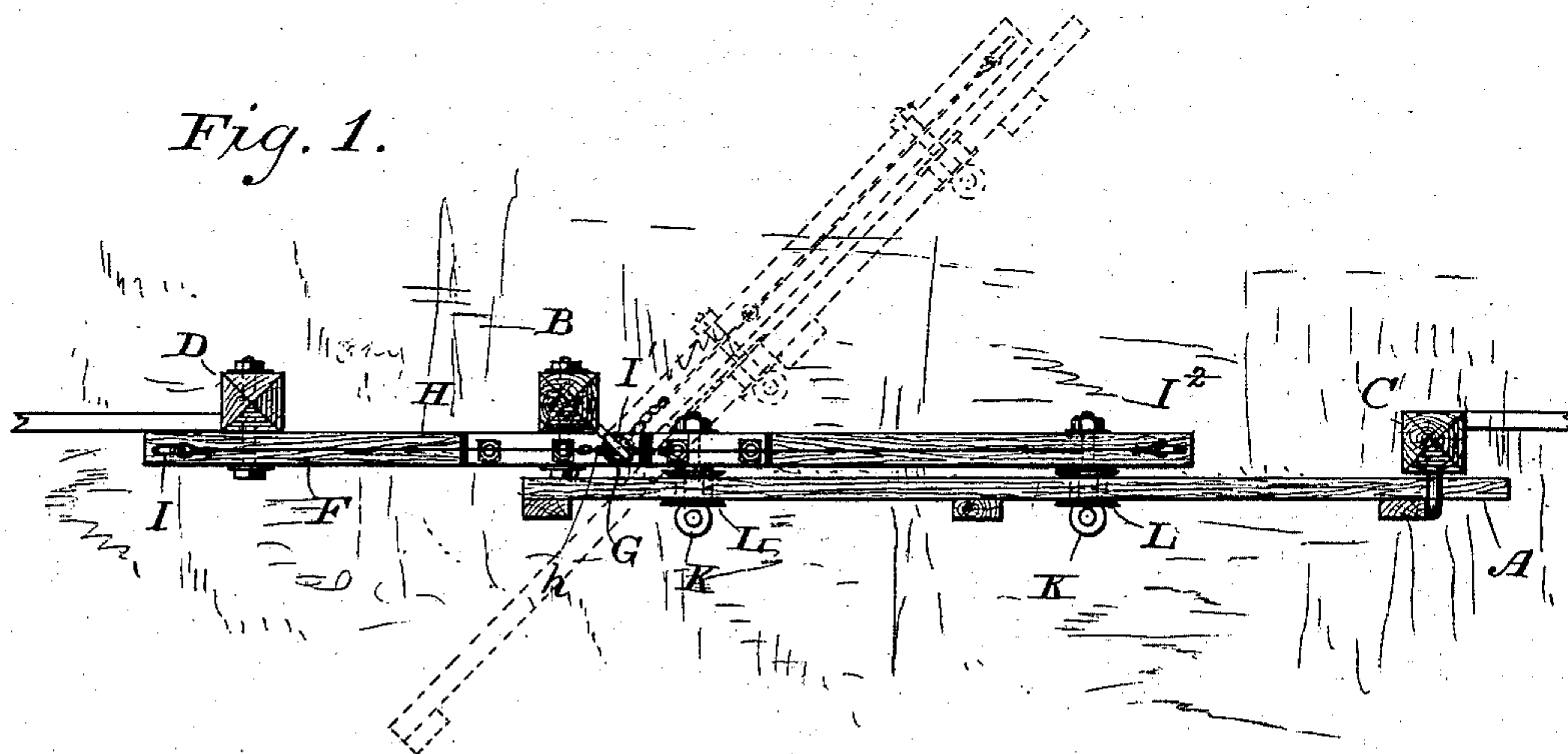


(No Model.)

F. HOPKINS.
GATE.

No. 407,662.

Patented July 23, 1889.



Witnesses

Wm. A. Skinkb.
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Inventor

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UNITED STATES PATENT OFFICE.

FLOYD HOPKINS, OF BELVIDERE, ILLINOIS.

GATE.

SPECIFICATION forming part of Letters Patent No. 407,662, dated July 23, 1889.

Application filed September 24, 1888. Serial No. 286,220. (No model.)

To all whom it may concern:

Be it known that I, FLOYD HOPKINS, a citizen of the United States, residing at Belvidere, in the county of Boone and State of Illinois, have invented a new and useful Improvement in Gates, of which the following is a specification.

My invention relates to improvements in gates in which provision is made for adjusting the hanging-bar, as occasion may require, to obviate or to remedy the gate's sagging.

The objects of my invention are to provide a gate-hanging bar composed of two parts hinged together with means for holding it in position, so that one part will answer to sustain a gate and allow it to be swung thereon; second, to provide so that said hinged hanging-bar will be supported and will allow the gate both to slide and be swung on one part thereof, and, third, to provide efficient and inexpensive means for supporting and adjusting said hanging-bar. I attain these objects by the mechanism hereinafter described, and illustrated in the drawings.

Figure 1 is a top or plan view of the gate, that part of the illustration presented in solid lines showing the gate in its closed position supported upon posts, and the representation in dotted lines showing the gate partly swung open. Fig. 2 is a side elevation of the gate supported in its closed position upon posts, the dotted lines indicating the position the gate will occupy when slid back on its bearings ready for being swung open.

Similar letters of reference refer to like parts throughout.

The gate A is of the ordinary pattern of sliding gates that are supported upon hangers attached to hanging-posts, and so constructed as to be partly opened by sliding the gates back toward the hanging-posts, and then swinging them around, borne on the hinged hangers, until fully opened.

B is the hanging-post.

C is the latch or lock post.

D is a rear or anchor post.

E F are the two parts of a hanging-bar.

G is the hinge-connection between the front part E and the rear part F of the hanging-bar.

H is a suspender, consisting of a wire rope,

or chain, or of portions of each, and serving to uphold or assist in upholding the front end of front part E of the hanging-bar.

I I' I² are eyebolts, that are of special relation to the suspender H, the one I', fastened into the hanging-post B at or near its top, serving by means of its eye to allow said suspender to pass loosely therethrough, but be held taut and fixedly therein ordinarily against endwise movement for supporting the same at that point against the downward pull of the hanger induced by the weight of the gate carried thereon. The other two eyebolts I I² serve to attach the ends of the suspending-wire H to the rear end of the rear part F and to the forward end of the front part E of the hanger, said eyebolts being fastened into said ends and the ends of the suspending-wire being tied into the eyes, as shown. It is preferred to make this suspender of wire or of solid metal, excepting a section formed of links *h* at that portion passing through the eye of the eyebolt I', to better insure its flexibility at that point. A wire-rope section might take the place of said chain, or some other flexible equivalent might be substituted for said section. In fact, the entire part H may be made of links, and thus consist merely of a chain; but that is not essential, as a few links or other short flexible section in the part passing through the upper eyebolt I' would answer every purpose—that is, it would serve to act as a variable hinge-connection between the parts thereby joined together, and admit of the ready adjustment longitudinally of the suspender H in the eye of the bolt in the hanging-post.

Eyebolts K project horizontally from the part E of the hanger, bearing on their shanks the wheels L, on which rests the lower edge of one of the longitudinal planks comprising the gate, preferably the second one from its top, as shown. Pins *k* are placed in or driven into the eyes of said bolts to afford additional security against the accidental displacement of the gate from its position on the hanger.

The hanging-bar or hanger E F is secured to the hanging-post B by means of a bolt M, the said bolt serving as a pivot upon which

said hanger may be rocked or turned when adjusting the front end of the hanger, as may be desired. This makes a very secure fastening for the hanger and saves applying any leaf-hinge or pintle-hinge to the hanging-post, and is the only hinge-connection between the hanger and the post, excepting that in the suspender H at or near the eyebolt I' in the upper part of said post.

The hinge-connection G between the two parts E F of the hanger-bar has leaves extending along on the top and bottom edges of said parts and securely bolted thereto, as shown in Fig. 2. This hinge-connection between the two parts E F of the hanger may have one or more of its parts extended as a leaf plate or plates alongside of the hanger each side of the joint, and have a hole or holes provided therein for the bolt M to pass through to afford greater strength to its bearing in said hanger.

In the rear end of the rear part F of the hanger is a bolt or pin N, that passes there-through and into any one of a series of holes placed at different heights in the anchor-post D. By placing this bolt or pin in a lower hole than the one it is represented as occupying in the anchor-post the rear end of the hanger will be held at a lower point and its front end at a higher point, thus raising the said front portion of the hanger and its bearings or wheels, and thereby elevating the front end of the gate.

In some cases the anchor or anchor-post itself might be raised and lowered to make the aforesaid adjustment of the gate without changing the said bolt or pin in its relation to either the hanger or the anchor or anchor-post.

The anchor may be of a variety of forms, and may be sufficiently heavy to serve by its weight alone to counterbalance the gate.

It is generally preferred to use an anchor-post set into the earth in the same manner as the regular hanging-posts and the latch-posts are ordinarily set.

The wheels used for the gate to rest upon may be of any of the usual kinds, or other suitable anti-friction bearings may be provided for supporting the gate upon the hang-

ing-bar. It is, moreover, to be understood that the hanging-post and the anchor-post may be connected to each other by boards or wires, thereby enabling the stability of the one to contribute to that of the other. It is obvious, moreover, that in such case the more firmly the anchor-post is secured in the earth, as by being sunk therein to considerable depth or by being heavily weighted in any suitable manner, the more firmly will the hanger-post be sustained in position against swaying or leaning because of the strain of the weight of the gate.

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

1. The combination of a gate, a hanging-post, and an anchor-post, with a jointed hanging-bar provided with a pivotal fastening securing it to the hanging-post, and having means of adjustment with the anchor or anchor-post, substantially as and for the purpose hereinbefore set forth.

2. The combination of a hanging-post, a jointed hanging-bar pivoted to the hanging-post and provided with wheels or bearings, a gate, a supporting wire, rod, or chain, and an anchor or anchor-post, substantially as and for the purpose hereinbefore set forth.

3. A gate supported on a jointed bar, extending horizontally, and pivoted at one side of the joint by a bolt to a hanging-post, and provided with means of adjustment, and having bearings whereon the gate may have end-wise movement, substantially as and for the purpose described.

4. A hanging-post, an anchor or anchor-post, and a jointed hanger or bar pivoted to the hanging-post, in combination with a gate and a suspender supported at one point by the hanging-post and connected with the front part of the hanger, substantially as and for the purpose hereinbefore described.

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

FLOYD HOPKINS.

Witnesses:

W. SPENCER JEWELL,
FRANK O'NEIL.