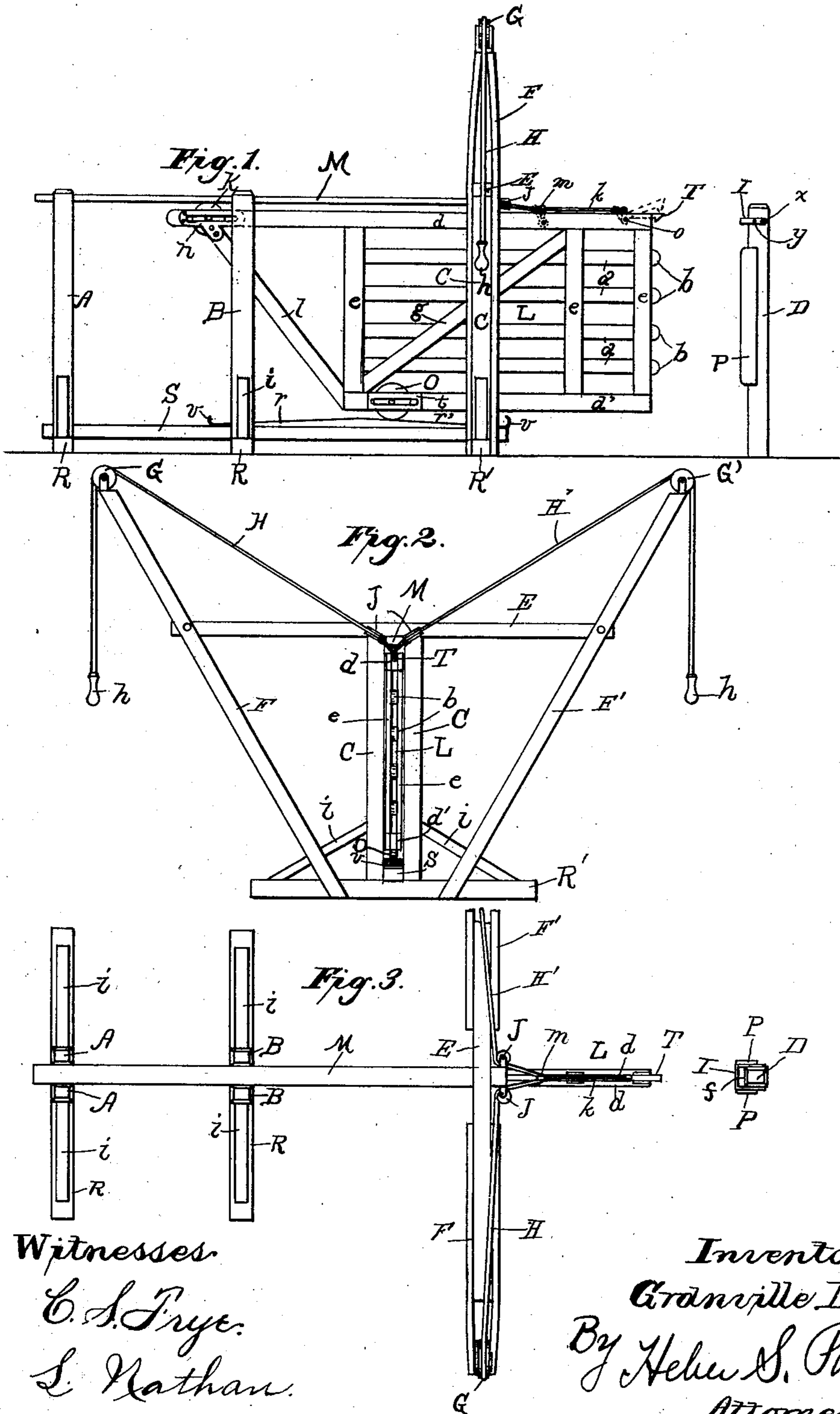


(No Model.)

G. DAVIS.
GATE.

No. 605,860.

Patented June 21, 1898.



Witnesses.

C. S. Frye.

S. Nathan.

Inventor.

Granville Davis

By Helen S. Paramore,
Attorney.

UNITED STATES PATENT OFFICE.

GRANVILLE DAVIS, OF NORTH SALEM, INDIANA, ASSIGNOR OF ONE-HALF
TO DAVID D. THOMSON, OF SAME PLACE.

GATE.

SPECIFICATION forming part of Letters Patent No. 605,860, dated June 21, 1898.

Application filed August 30, 1897. Serial No. 649,961. (No model.)

To all whom it may concern:

Be it known that I, GRANVILLE DAVIS, a citizen of the United States, residing at North Salem, in the county of Hendricks and State of Indiana, have invented certain new and useful Improvements in Gates; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in "gates," and of that class of gates usually made in large sizes for the passage of vehicles; and it consists of a gate and support easily portable embodying a certain combination and arrangement of elements whereby the gate may be easily operated and retained either in a closed or opened position and whereby the gate may be positively and conveniently manipulated from either side—that is, opened from one side and closed from the other or opened or closed from either side.

The object of my invention is to prevent the sagging of the gate and to provide a means whereby the gate may be opened or closed partially by gravity without much exertion on the part of the operator.

A further object of my invention is to construct a gate which may be readily moved from place to place and effectually to prevent animals from opening it.

Another object of my invention is to construct a gate capable of the functions above described in a simple and economic manner.

My invention consists in the novel construction and combination of the several parts, as will be hereinafter more fully set forth and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents a side elevation of the gate partially opened. Fig. 2 is an end elevation from the front; and Fig. 3, a plan view of the same, a portion of one of the arms being broken away.

The gate L may be made in any approved manner. Usually it is formed from a series of slats *a*, longitudinally located and connected by a suitable brace *g* and by the up-

rights *e*. The top slats *d* extend rearwardly a suitable distance and are provided with a pulley K, mounted upon the slotted bracket *n*, the said extending slats being connected to the main frame of the gate by means of the diagonal brace *l*.

I mount at a suitable distance upon the sills R and R' the upright posts A, B, and C on each side of the gate. The lower ends of these posts are suitably secured to the sills R and braced by the braces *i*, and the tops of the same are connected by means of the track-rail M. Upon a stringer S, between the posts A, B, and C at the bottom, is the track, having the inclines *r* and *r'* in opposite directions with the upturned ends *v*. The apex of the inclines is at or about the center between the posts B and C. On the lower horizontal slats *d'* of the gate, near its rear end, is mounted the pulley O in a suitable bracket *t*. This pulley travels over said inclines. It is to be understood that the top rail M is interposed between said upright posts and secured thereto, this forming a passage-way or guide for said gate. Upon the posts C and at right angles to the gate L is secured the horizontal bar E. Diagonal arms F and F' are secured to the sill R' and to the ends of the horizontal bar E and are provided with suitable pulleys G and G', over which the ropes H and H' are carried. Said ropes H and H' extend downward through the stationary swivel-pulleys J, secured to the end of the track-rail M, and are secured in an eye in the pivotally-mounted lever *m* between the top slats *d*. A latch T is located between the top slats *d* and is pivoted at *o*. Said latch T and lever *m* are connected by means of a wire *k*.

The horizontal slats *e* have their outer ends *b* extending slightly beyond the gate-frame and are designed to enter the recess *f* between the guide-blocks P of the locking-post D to assist in making the gate more rigid when in a closed position. The post D is provided with a loop I, pivotally secured by a bolt *x* and adapted to be secured in any desired position by a set-screw *y*. The rollers K and O are mounted upon rolling-bearings in the brackets *n* and *t*, which serve to reduce the friction.

In operation, to open the gate the operator

grips the handle *h* and pulls the same downward and outward, which releases the latch *T* from the loop *I* and causes the gate to travel up the incline *r'* until it reaches the apex of the incline, and the gate travels the balance of the way by gravity. In closing the gate the same operation is repeated from the opposite side, and when the latch engages the loop the hook thereon will hold the gate secure until the latch is again raised. The upturned ends *r* of the track *r r'* serve as stops for the wheel *O* and prevent a sudden jar against the post *D*, and likewise stop its backward movement.

It will be seen that my improved gate can be readily moved from place to place by reason of its being mounted upon the sills *R* and *R'*. The posts *A*, *B*, and *C* could be set in the ground in the usual manner without interfering with the operation of the gate; but this would destroy its portability. The diagonal arms *F* and *F'* are preferably in two pieces on either side of the sill *R'* and the bar *E*, with their upper ends, to which the pulleys *G* and *G'* are attached, drawn together, as seen in Fig. 1. This construction serves more thoroughly to brace the framework.

It is obvious to a skilled mechanic that a gate constructed as shown and described is simple in construction and effective in use.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a portable farm-gate of the class described, having a double inclined single track with upturned ends, and suitable braced supporting-posts mounted on sills, the combination of the gate *L*, consisting of the slats *a*, the diagonal brace *g*, the uprights *e*, the rearwardly-projecting top slats *d*, supported by

the diagonal brace *l*, and the bottom slats *d'*, with the slotted brackets *n* and *l*, in which are mounted the rollers *K* and *O*; the track-rail *M*, secured between the tops of the posts *A*, *B*, and *C*, to engage the roller *K*; the stringer *S*, secured upon the sills *R* and *R'*, between the posts *A*, *B*, and *C*, to support the track *r r'*; the horizontal bar *E*, secured at its center to the tops of the posts *C*, the double, diagonal arms *F* and *F'*, secured to the sill *R'*, and to the horizontal bar *E*, the pulleys *G* and *G'*, upon the upper ends of the arms *F* and *F'*, the swivel-pulleys *J*, secured to the inner end of the track-rail *M*, the ropes *II* and *II'*, passing over the pulleys *G*, *G'*, and *J*, and secured to the pivotal lever *m*; the lever *m*, pivotally mounted between the top slats *d*; the pivotally-mounted latch *T*, connected with the lever *m*, by the wire *k*, and the locking-post *D*, having an adjustable loop *I* secured by a bolt *x*, and adjusted by the set-screw *y*, and having guide-blocks *P*, to receive the projecting ends *b* of the slats *a*, as set forth.

2. The combination of a portable farm-gate, having a rearward triangular extension, provided at its outer extremity with a bracket *n* carrying a loose roller *K*, and a bracket *l* secured upon the lower rail at its rear end, carrying a loose roller *O*, with the straight upper track *M*, and the double inclined lower track *r*, against which bear said rollers *K* and *O*, substantially as set forth.

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

GRANVILLE DAVIS.

Witnesses:

CAREY S. FRYE,
LUCY NATHAN.