Town Gale. Patented Jun. 1, 1869. N°90,839. WITNESSES: Elleugen Kuppert INVENTOR:

## Anited States Patent Office.

## THOMAS F. HALL, OF CIRCLEVILLE, OHIO.

Letters Patent No. 90,839, dated June 1, 1869.

## IMPROVEMENT IN FARM-GATES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS F. HALL, of Circleville, in the county of Pickaway, and State of Ohio, have invented new and useful Improvements in Farm-Gates; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which-

Figure 1 is a front elevation; Figure 2 is a top view; and

Figure 3 is a section on line x x of fig. 2, showing how the gate is held suspended by the springs H H.

Like letters refer to like parts.

My invention relates to that class of farm-gates that will rise and fall vertically between two posts, and while up for the passage of vehicles, is partially sustained by weights.

In the drawing—

A represents the posts, and

B, the braces.

The posts may be set in the ground in the usual

manner, or framed into a sill.

The tops of the posts are connected by a double arch-way, C C, having sufficient space between them, as shown in fig. 2, to allow the thickness of the gate to pass between them.

At the centre of this arch the pulleys D D are mounted, as shown, and for purposes hereinafter de-

scribed.

There are also two other pulleys, E E, located, respectively, near the top and in the vertical centre of

each post.

The gate is shown at F, and may be made of horizontal bars and vertical slats, or in any other convenient style. The ends are fitted to run in grooves, or guide-ways upon the inner surface of each post.

A catch, G, of any convenient form, is placed upon the top of the gate, and secured near the middle; and this catch, when the gate is raised, as hereinafter described, engages between two springs, H H, which are situated between the pulleys at the top of the arch.

H'H'are springs, which are secured to arched pieces

C C, and so arranged as to bear upon the springs H H, near the points where they grasp the clutch G, so they may insure the holding of the gate in its position by the springs H H until it is released by pulling the cord L.

The weights that partially balance the gate are shown at II. From each of these a cord passes over the pulley E, and is attached to the lower corner of the gate,

respectively, as shown. The pulleys D D carry each a cord, K, one end being attached to the middle of the gate, and the other end to a post convenient to the approach of the

gate from each direction.

By pulling upon either of these ropes, the gate will be raised, as shown at F', in fig. 1, and carried up until the catch G engages with the springs HH, where it is held until released. This is accomplished by means of ropes, or cords, L L, one end of which is attached to the springs H H, and the other to a post convenient to the place of exit. By pulling upon either of these ropes, the catch G is released from the springs H H, and the gate descends by its own gravity, which should be a little greater than that of the weights, thereby giving it an easy and regular movement.

What I claim as my invention and improvement, and

desire to secure by Letters Patent, is-

1. The posts A, in combination with the arch C and pulleys D and E, as specified.

2. The combination of the gate F with the posts A, arch C, and pulleys D E, as specified.

3. The combination of the catch G, gate F, and springs H, as set forth. 4. In combination with the elements of these pre-

ceding clauses, the ropes K and L, and weight I, as specified.

5. The arrangement of the springs H H, for the

purpose specified. In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses. THOMAS F. HALL.

Witnesses:

JEREMIAH HALL, GEO. W. YOUNG.