G. Taylor,

Automatic Gate,

No. 15,213. Patented June 24, 1856.

Fig 1.

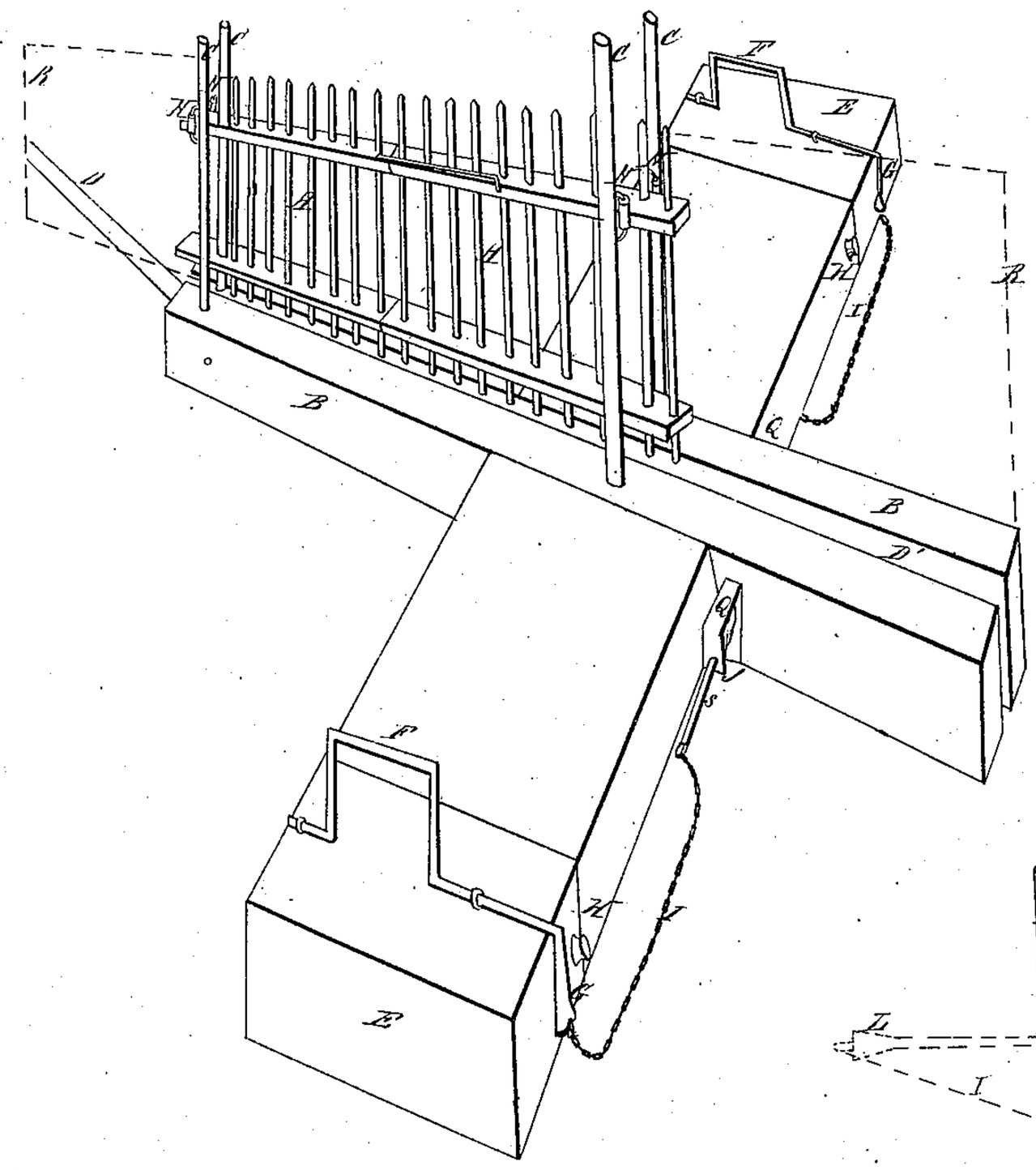

Fig 3.

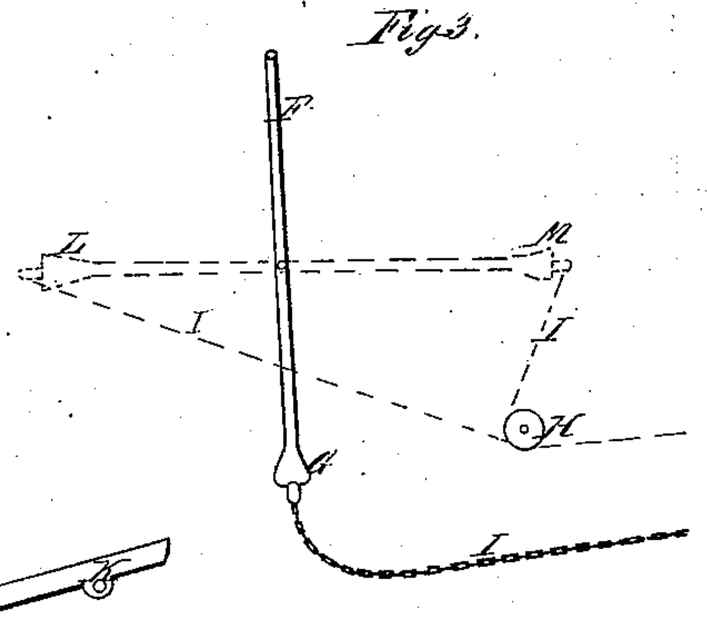

Fig 2.

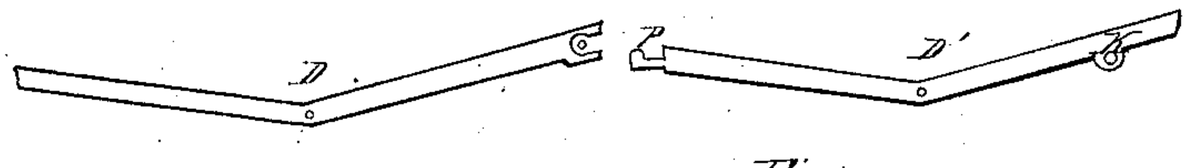

Fig 4.

UNITED STATES PATENT OFFICE.

GEORGE TAYLOR, OF RICHMOND, INDIANA, ASSIGNOR TO H. OGBORN AND GEO. W. STIGLEMAN.

FARM-GATE.

Specification of Letters Patent No. 15,213, dated June 24, 1856.

To all whom it may concern:

Be it known that I, GEORGE TAYLOR, of Richmond, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Self-Acting Gates; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of my improved gate. Fig. 2 is a front view of the levers D, D′. Fig. 3 is an end view of the levers F, G, showing their relation to the pulley H. Fig. 4, shows the shape of the cam I.

Similar letters of reference indicate corresponding parts in the several figures.

To enable others skilled in the arts to make and use my invention; I will proceed to describe its construction and operation.

A, A, is an ordinary gate formed in any proper manner, divided in the center, or in other words two short gates sufficient to close the space ordinarly occupied by a single gate. These gates are borne upon flanged friction pulleys (not shown in the figure) and are so constructed as to move laterally upon the levers D, D′, between the posts C, C, C, C, and are retained in a perpendicular position by the friction rollers N, N, N, N.

B, B, are two pieces of timber extending across the roadway with their upper surfaces on a plane with the surface of the road. These timbers B, B, are placed at proper distances apart to admit of the free vibration of the levers D, D′, between them.

D, D′, are two angular or V-shaped levers, vibrating vertically between the timbers B, B, upon axles passing through their centers. These levers receive a vertical motion by the sliding of the cam J, through the hole K, in lever D′. The levers D, D′, are connected thus. The lever D′, has a tongue P, narrower than the mortise O, in lever D, so as to allow lever D′ to move first to unlatch the gates. As the levers ascend they separate, bringing the enlargement of the tongue P into the narrow portion of the mortise O; causing the lever D, to gain upon its fellow what it lost at the commencement of the ascent.

E, E, are platforms or frames for the reception of the levers F, F, and G, G.

F, F, are stirrup levers, formed by properly bending a bar of round iron, as shown in the figure. They are placed with the centers of their stirrups immediately over the wheel rut; and are held in an upright position by weights upon levers G, G.

G, is simply another bend of the bar composing the lever F, in an opposite direction.

H, is a gain pulley to enable the lever G, to close the gate (Fig. 3,) when said lever G, is moved from the perpendicular to the position M, by a vehicle passing from the gate.

I, is a chain connecting the lever G, with the cam. The cam J, is a bar of round iron bent as in Fig. 4, the ends flattened and drilled to receive the chains, I, I. It has also the parts *r*, *s*, *s*.

K, is a hole in an enlarged portion of lever D′, for the passage of the cam J.

N, N, N, N, are friction pulleys or rollers that keep the gates off from the posts, C, C, C, C.

Q, Q, are guides for the cam J.

The dotted lines R, R, show the position of the gates when open.

My invention is operated thus: As a vehicle approaches the gate, one of its wheels comes in contact with a lever F, depressing it toward the gate, thereby bringing the lever G, to the position indicated by the dotted lines, L (Fig. 3). This motion of lever, G, tightens the chain I and slides the cam J, so as to bring one of the parts *s*, into the hole, K, thus depressing the outer ends of the levers D, D′, and causing the gates to run out and assume the position indicated by the dotted lines R, R. As the vehicle passes beyond the gate the wheel comes in contact with the other lever F, depressing it from the gate and tightening up the chain I, around the gain pulley H, sliding the cam back to its original position, thereby elevating the outer ends of levers, D, D′, and closing the gates.

It may be remarked that these gates are opened by processes exactly similar from which ever way approached, but with this distinction, that the lever F, which opens them for a vehicle going in one direction, closes them for one going the opposite way.

I am aware that self acting gates differ-

ently constructed but operated by the wheel of the carriage coming in contact with road levers F, F, have before been employed. Such parts therefore merely of themselves I do not claim. But

I do claim as new and useful and desire to secure by Letters Patent:

1. The combination of a gate A, with the angular lever D, or D′, in such a manner and so related to each other that the gate shall stand upon a level both when open or closed. The above or their equivalents substantially as set forth.

2. And I further claim the combination of the cam J, with the lever D′, or its equivalent for the purpose of vibrating the levers, D, D′, thereby opening and closing the gate substantially as delineated.

GEORGE TAYLOR

Signed in presence of—

JOHN FINLEY,

HARRISON OGBORN.