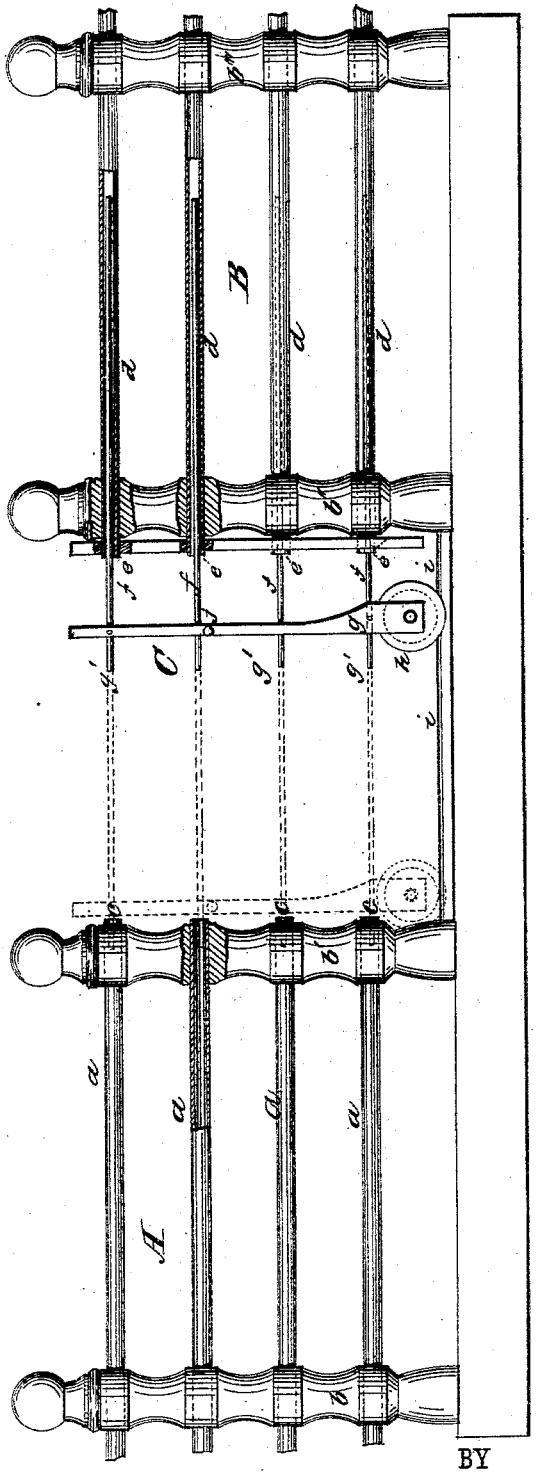
W. H. HUBBARD.

Gate.

No. 210,938. Patented Dec. 17, 1878.



WITNESSES:

F. McArdle.

C. Sedgwick

INVENTOR:

W. H. Hubbard

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM H. HUBBARD, OF RED BANK, NEW JERSEY.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **210,938**, dated December 17, 1878; application filed October 9, 1878.

To all whom it may concern:

Be it known that I, WILLIAM H. HUBBARD, of Red Bank, in the county of Monmouth and State of New Jersey, have invented a new and useful Improvement in Gates, of which the following is a specification:

The object of this invention is to furnish a neat, easily-constructed, and economical gate for farms, gardens, and other purposes; and it consists of metal or wooden bars supported at one end in a post having a friction-roller at the bottom running on a rail, and at the opposite end entered into metal or wooden tubes placed in or constituting the adjoining panel of the fence, so that when the gate is opened the rods of which it is made slide or telescope into the tubes of the adjoining panel, and when closed they are drawn out of the same.

In the accompanying drawing, forming part of this specification, a side elevation of my improved gate is shown, with two panels of fencing, and the movement and opened and closed positions of the gate indicated.

Similar letters of reference indicate corresponding parts.

Referring to the drawing, the panel adjacent to the front stile of the gate is designated by the letter A, and that in the rear by the letter B.

Panel A is composed of horizontal metal tubes *a a a a*, supported horizontally in the posts *b b'*, entered in holes therein, with the ends next to the gate projecting through, as shown at *c c c c*.

Panel B is made, in the same manner, of tubes *d d d d*, supported in posts *b'' b'''*, projecting through the gate-post, as shown at *e e e e*.

The gate is indicated by the letter C. It is composed of metal rods *f f f f*, of a diameter slightly less than the interior diameter of the tubes composing the panels, so that they will slide freely, but without perceptible looseness, back and forth therein. One end of these rods is supported in the stile *g*, the ends projecting through, as at *g'*, while the opposite ends are entered into the projecting ends *e e e e* of the tubes *d d d d*. Each rod is placed at an interval from the other corresponding to the intervals between the tubes composing the panels, so that the several tubes and rods are in the same horizontal and vertical planes.

The stile *g* at the foot is furnished with the friction-wheel *h*, pivoted therein, which bears on the rail *i*, placed on or embedded in the ground between the posts *b' b''*, with the ends thereof entered into the posts, or otherwise secured against lateral or vertical displacement.

The operation of my invention is as follows: The metal rods *f*, composing the gate, slide or telescope into the tubes *d* of the panel B when the gate is opened, and are drawn out when the gate is closed. To open the gate, the knob *j* is caught, and by means of it, or in any other suitable manner, the gate is shoved back, the rods telescoping in the tubes *d*, the friction-wheel *h* facilitating the movement of the stile on the rail *i*. To close the gate, the movement is reversed, and when the gate is approached to the post *b'* the projecting ends *g'* are entered into the protruding ends *c c*, &c., of the metal tubes *a a*, &c., in panel A, as clearly shown in the drawing. When closed it can be secured by a hook or any other suitable device.

A gate constructed in this manner is as strong as can be desired, and much more economical than any sliding gate that can be constructed. At the same time it is easily worked, never sags, and can be always maintained at the same level, as there is no weight on the supporting-post, the free end of the gate resting on the rail. This of itself is a great advantage.

No matter how wide the gateway needs to be, or how heavy the material of which it is made, by dividing the gate it can be made to work easier and be more durable than anything now in use.

While I describe metal tubes and rods as composing my gate, I do not confine myself to the use of this material, or to its application to a fence made of tubes of any kind. Wooden tubes can be used as well as metal. So, too, if it is applied to a fence in which tubes form no part, wooden or metal tubes can be placed in the panel or panels to receive the rods composing the gate.

I am aware that gates have been so made that their rails will pass between the horizontal rails of the adjacent fence-panel to guide them; but in all such gates the horizontal

bars or rails have to be made very heavy and clumsy-looking, in order that they may fit and slide snugly between the said rails; or, if they be made small enough to make a neat gate, the rails of the adjoining panel have to be placed much nearer than it is customary to place them; consequently there is a great waste of material in either case. But the greatest advantage that my gate possesses over all other sliding gates is, that it will work equally as well in damp, wet, or freezing weather as it will in dry. This is not the case with other gates of this class. In all other sliding gates the snow and rain, freezing on the bars and between the uprights, so clog them that if the gate be shut it is almost an impossibility to open it, and vice versa. I have no such trouble with my gate. There being no place where ice or snow can lodge, it works equally as well in winter as in summer.

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

1. An improved gate in which the rods of which it is composed telescope or slide into the tubes placed in or constituting the adjoining panel of the fence, substantially as and for the purpose described.

2. The gate C, composed of the horizontal rods *f* and the stile *g*, in combination with the tubes *d* of the panel B, substantially as described.

WM. HENRY HUBBARD.

Witnesses:
H. J. CHILD,
J. H. SCHANCK.