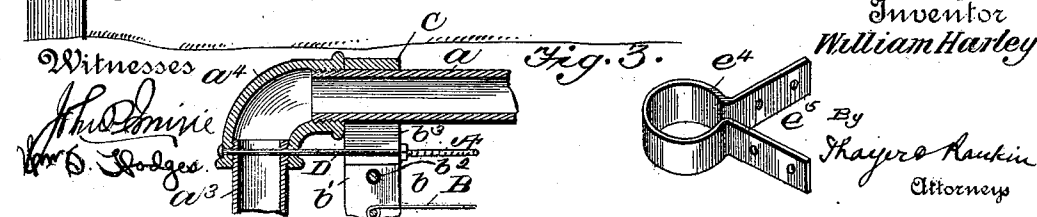
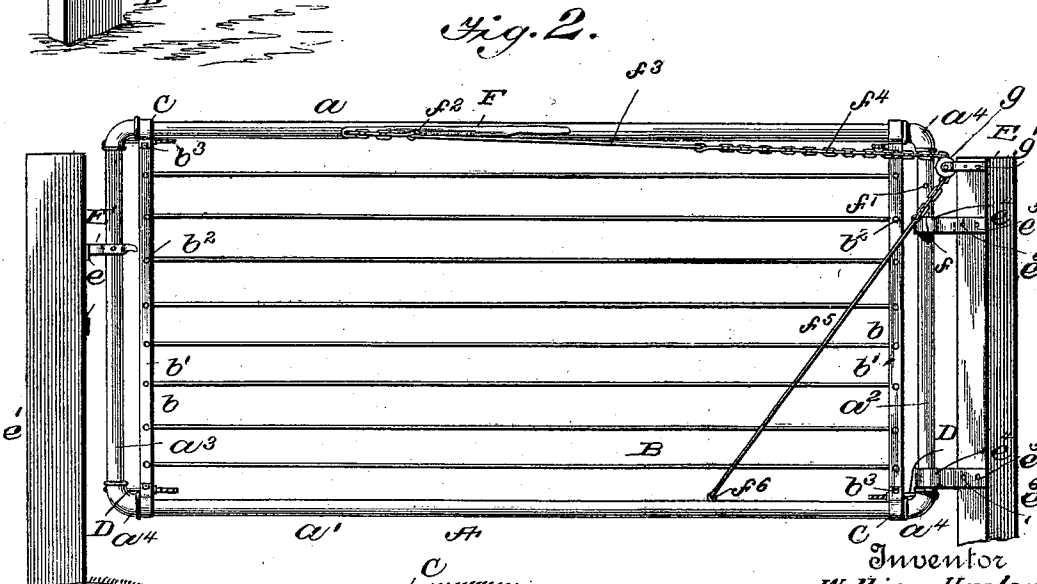
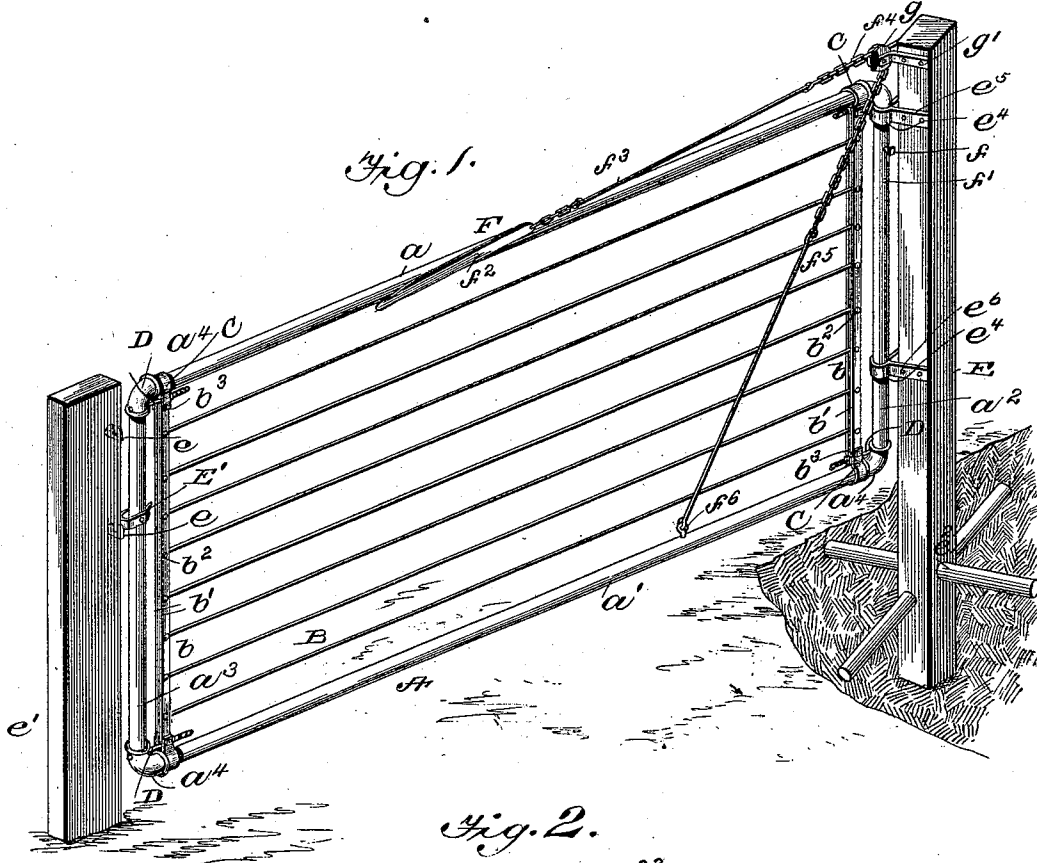


(No Model.)

W. HARLEY.
GATE.

No. 555,003.

Patented Feb. 18, 1896.



Witnesses
Wm. D. Dodge
Wm. D. Dodge

Inventor
William Harley
By
Haynes & Raskin
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM HARLEY, OF SCOTTVILLE, MICHIGAN.

GATE.

SPECIFICATION forming part of Letters Patent No. 555,003, dated February 18, 1896.

Application filed June 12, 1895. Serial No. 552,584. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HARLEY, of Scottville, in the county of Mason and State of Michigan, have invented certain new and useful Improvements in Gates; and I do hereby 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.

This invention contemplates certain new and useful improvements in gates, and it has for its object the production of a simple and inexpensive gate in which the parts will be firmly united and prevented from spreading or sagging, and which is capable of being readily and easily raised and lowered and held at any desired point. This I accomplish by providing a gate in which the filling-in wires are connected at their ends to vertical members which are adjustably united to the end portions of the gate. A lever fulcrumed on the top of the gate has a rod-and-chain connection with the lower portion of said gate, said chain being passed over a wheel or pulley mounted on the hinging post of the gate.

The invention comprises the novel features of construction and also the combination and arrangement of parts, substantially as hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation. Fig. 2 is a similar view showing the gate raised. Fig. 3 represents details.

Referring to the drawings, A designates the gate-frame of approximately rectangular form. It is composed of upper and lower horizontal pipes a a' , connected at their threaded ends to vertical pipes a^2 a^3 by means of threaded elbows a^4 .

B designates a series of horizontal wires arranged parallel within and longitudinally of the frame A. At their ends these wires are connected to adjustable clamping-bars b , each of which consists of two corresponding parallel plates b' united together by nutted bolts b^2 , around which latter the ends of the wires are coiled. At their ends these clamping-bars are held between the flanged ends b^3 of clips C, which encircle the upper and lower portions of the frame adjacent to the elbows.

D designates a series of nutted rods or bolts,

which are inserted through coincident holes in each elbow and end pipe and between the flanged ends b^3 of the clips, the nuts on said bolts bearing against the latter. By means of these nutted bolts the clamping-bars are rendered adjustable, and hence the series of wires B can be constantly held taut.

E is the hinging-post and e' the latch-post, which is provided with two or more notched plates e , with which a spring-catch E' carried by the gate-frame is designed to engage. The hinging-post E is preferably square or diamond shape in horizontal cross-section and is set relatively to the gate with one of its edges adjacent to the end of the latter. Through two transverse holes in this post, at right angles to each other, at points beneath the earth-surface, are passed rods e^2 , the projecting portions of which serve as anchors and maintain the post in an upright position.

The gate-frame is pivotally connected to the post E by two hinge-rings e^4 , each of which is made from a single metallic plate having divergent ends e^5 , which conform to two of the sides of the post, to which they are secured by means of screws e^6 or the like. In this way a firm hinge connection is formed and the gate-frame is free to turn in said rings.

The gate can be elevated and held by means of a short rod or bolt f , designed to be inserted through either one of two holes f' in end portions a^2 , said rod or bolt resting on the upper hinge-ring.

To enable the gate to be easily raised I provide a lever F, which is fulcrumed at f^2 on the top portion, a , and to it is connected a rod f^3 , which latter is united by a chain f^4 to a second rod f^5 , the free end of which is connected by a hook f^6 to the lower portion, a' , of the gate. The chain f^4 engages a wheel g pivotally supported by a bracket g' attached to the top of post E. The lever F in its normal position rests along the side of the top portion of the gate with its handle end toward the latching-post. By reversing the position of this lever the gate will be raised, the end post a^2 sliding upwardly through the hinge-rings.

The advantages of my invention are apparent. It will be specially observed that in a gate constructed as herein described the filling-in wires can be constantly held taut and that

the clamping-bars are simple and the ends of the wires are attached to the bolts uniting the members of said clamping-bars. It will also be seen that the hinging-post is firmly anchored and that a simple and highly efficient form of hinge is provided, as well as simple means for raising and holding the gate elevated.

I claim as my invention—

1. The combination with the hinging-post, of the gate pivotally connected thereto and capable of being raised and lowered, the wheel mounted on the upper end of said post, the lever fulcrumed on the upper portion of said gate at or near the center thereof, and the chain connection between said lever and the lower portion of said gate near the hinge end of the latter, substantially as set forth.

2. The combination with the hinging-post having hinge-rings and a wheel on its upper end, and the latch-post having upper and lower engaging plates, of the gate having at one end portion a latch to engage said plates, and at its other end portion engaging said hinge-rings, said latter portion having holes therein, a rod or bolt designed to be inserted in said holes, a lever fulcrumed on the upper portion of said gate, and a chain connection between said lever and the lower portion of

said gate, the same being passed over said wheel, as set forth.

3. The herein-described improved gate, consisting of a rectangular frame, a pair of clamping-bars, each formed of two corresponding parts or members, united by bolts, clips movable upon the horizontal members of the gate-frame, to which clips the clamping-bars are connected at their upper and lower ends, a series of horizontal wires attached to the bolts between the members of said clamping-bars, nutted straining-bolts holding the clamping-bars to the uprights of the frame, a hinging-post supporting a wheel upon which post the gate is capable of being raised and lowered, a latch-post having upper and lower engaging plates, a lever fulcrumed on the upper horizontal member of the gate-frame, and a chain passing over the wheel on the hinging-post, and connecting said lever with the bottom of the gate, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM HARLEY.

Witnesses:

W. C. MARTIN,

E. F. LE GENDRE.