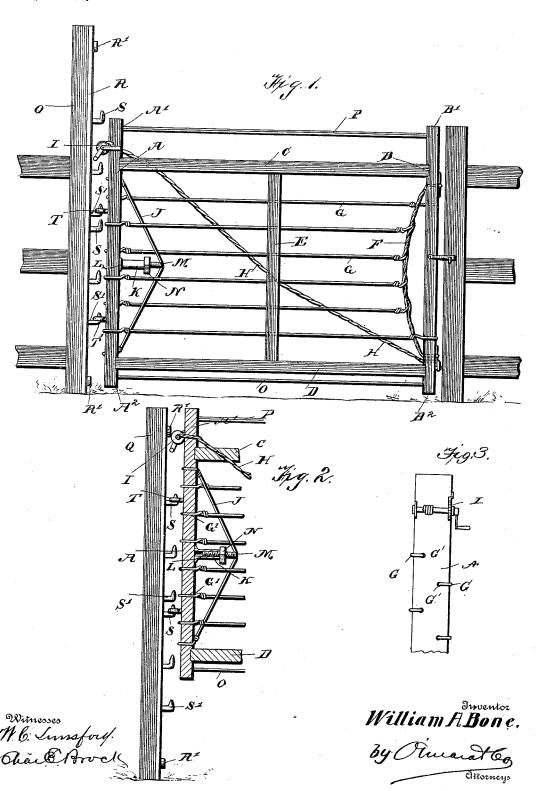
W. A. BONE.

GATE.

(Application filed June 15, 1899.)

(No Model.)



UNITED STATES PATENT OFFICE.

WILLIAM A. BONE, OF WILSON, INDIANA.

GATE.

SPECIFICATION forming part of Letters Patent No. 649,532, dated May 15, 1900.

Application filed June 15, 1899. Serial No. 720,701. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. BONE, a citizen of the United States, residing at Wilson, in the county of Shelby and State of In-5 diana, have invented a new and useful Gate, of which the following is a specification.

My invention relates to gates generally, and particularly to gates with wooden frames and wires stretched therein, adapted for farm and 16 general use, the object of the invention being to provide an improved gate of this class in which the frame is thoroughly braced, the ends stiffened and strengthened, and the strain of the wires removed from the ends.

With this object in view my invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described and afterward specifically pointed out in the appended claims.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, reference being had to the accompanying draw-25 ings, forming part hereof, in which-

Figure 1 is a view in front elevation of a gate constructed in accordance with my invention hung to a post in its lowermost adjustment. Fig. 2 is a view in section of the 30 part of the hinge end of the gate hung to the post in its highest adjustment. Fig. 3 is a

face view of the hinged end.
Like letters of reference mark the same parts in all of the figures of the drawings.

Referring to the drawings by letters, A is the hinge end, B the latch end, C the top rail, D the bottom rail, and E the center upright, of the frame of the gate, these parts being of wood properly secured together, the ends A 40 and B extending above and below the rails C and D, as at A' B' A" B".

F indicates a double steel wire secured to the latch end B near its top and bottom and curved inward. Wires G are secured to the 45 curved wire F, pass through holes in center upright E, and are secured in holes G', arranged in a zigzag line in hinge end A, such arrangement of the holes preventing the splitting of A, to which it would be liable if the 50 holes were in a straight line.

secured in end B near its lower end, passing through upright E a little below its center, through top rail C near end A, and through end A near its upper end, the upper end pass- 55 ing through end A and being provided with a ratchet device I to stretch it.

J indicates a truss-wire secured to end A near its upper and lower ends and provided with stretching means consisting of a pipe K, 60 mounted on a base L, secured to the inner side of end A at about its center, a screw M, slidably placed in said pipe, and a nut N, threaded on screw M to cause it to engage the center

of truss-wire J and stretch and tighten it.

The lower ends A" and B" of the end uprights are connected by a wire O and their upper ends A' B' by an ornamental wire P.

Q indicates the main gate-post, and R a bar secured to its inner face by large screws R'. 70 Two series of hooks S and S' project inward from the gate-post Q, and two eyebolts T and T' are secured in end A to engage on any pair of hooks S S', the eyebolts being the same distance apart as the two upper, two 75 middle, or two lower hooks of the two series. By means of this arrangement of hooks and eyebolts the gate may be swung at three different heights, and the number of hooks in each series may be increased, if desired, to 80 give greater range of adjustment, the object being to swing the gate close to the ground or at a suitable distance above it to clear snow-drifts or permit small stock to pass un-

By securing one end of the wires G to the double curved wire F and the other end to the hinged end A of the gate all strain of the wires comes on the end B at about its junction with the top and bottom rails and is go borne by said rails, the central portion of the end B being entirely relieved of such strain.

The brace H stiffens the whole frame and prevents the latch end from sagging, and the truss J stiffens and strengthens the end A.

While I have illustrated and described what I consider to be the best means now known to me for carrying out my invention, I do not wish to be understood as restricting myself to the exact forms and constructions 100 shown, as slight changes therein or variations H indicates a diagonal double-wire brace | therefrom might suggest themselves to the

ordinary mechanic, all of which would be clearly included within the limit and scope of my invention.

Having thus fully described my invention, 5 what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination in a gate, having a frame comprising end uprights and top and bottom rails, of an inwardly-curved wire secured to one end upright near its top and bottom and horizontal wires connected to the curved wire at one end and the other gate upright at the other, substantially as described.

2. The combination in a gate, provided with a frame having end uprights and top and bot-

tom rails, of a vertically-curved wire connected to one of the end uprights near its end, horizontal wires connecting the other end upright and curved wire, a truss-rod secured on the inside of one of the end up- 20 rights near its top and bottom, a pipe secured to the upright at about the middle of the truss-wire, a screw slidably mounted in the pipe and engaging the truss-wire, and a nut on the screw beyond the pipe, substantially 25 as described.

WILLIAM A. BONE

Witnesses:
WM. R. WOLF,
JOSEPH CHEZ.