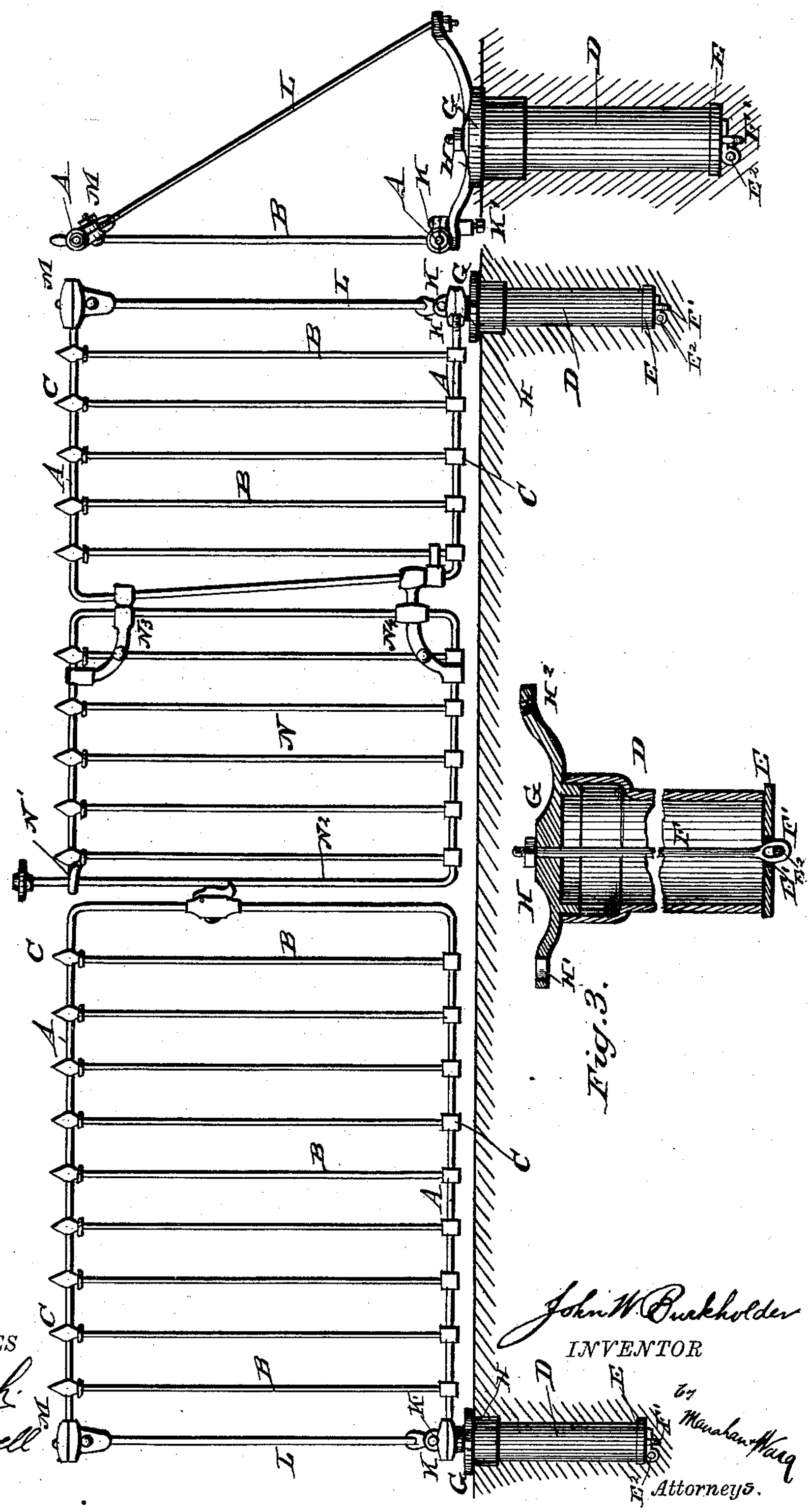
(No Model.)

J. W. BURKHOLDER.

IRON FENCE.

No. 302,234. Patented July 22, 1884.



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JOHN W. BURKHOLDER, OF MOLINE, ILLINOIS.

IRON FENCE.

SPECIFICATION forming part of Letters Patent No. 302,234, dated July 22, 1884.

Application filed September 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. BURKHOLDER, a citizen of the United States, residing at Moline, in the county of Rock Island and State of Illinois, have invented certain new and useful Improvements in Iron Fences; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention belongs to the class of iron fences, and pertains more especially to improvements in the mode of constructing such fence and setting it in the ground, the object being twofold: first, to render, as much as possible, the superstructure integral; and, second, to give such fence an attachment to the earth which shall be imperishable.

In the drawings, Figure 1 is a front elevation of a section of my fence. Fig. 2 is a cross-elevation. Fig. 3 is a side elevation, in cross-section, of that portion which extends into the ground.

A A are parallel horizontal rails placed at any altitude, and at such distance apart as may be desired.

B B are vertical rods fitted to extend across the interval between the rails A and abut against contiguous sides of such rails, respectively.

C is a metallic clasp, of any desired form or size, molded upon the ends of the rods B, and around the rails A at the points of junction of such rods and rails, and shrunk upon such parts, so as to become practically integral with the same.

In the manufacture of my fence I place the rails A and rods B, sufficient for one panel, (say sixteen feet,) in their relative position, and with their points of contact in a series of molds, having their interior conformed to produce the clasp C. The molten material, which afterward constitutes the clasp C, is then poured into such molds and allowed to cool. The natural shrinkage of the clasp C in cooling produces a very rigid connection of the parts A and B, filling all interstices, leaving no place for the accumulation of moisture, and practically rendering the parts integral with each other.

D is a hollow earthen cylinder, about four inches in diameter, but can be made of any desired size.

E is a washer placed over the lower end of the cylinder D, having a central slot, E′, for the insertion of the vertical rod F, which passes longitudinally through the center of the cylinder or base D, and projects through the cap-plate G on top of the base D. An eye or hook is formed in the lower end of the rod F, and the eye F′ is projected below the washer E, and a cross-pin, E^2, is passed through such eye below the washer E, so as to prevent the rod F from drawing upward.

Transversely to the cap G, and integral therewith, is formed a cross-brace, H, having in its outer end a vertical slot, H′, and in its inner end a vertical threaded hole, H^2. The plate G is held firmly upon the top of the base D by a flange on its lower surface, which fits into the top of such base, and by the vertical rod F, which at the upper surface of the cap G is provided with a thread and nut, by means of which the cap G is clamped down tightly upon the base D. The ends of the lower rails, A, are threaded, and the clamp K, formed in two halves, fitted and threaded within to conform to the ends of the rails A, holds the ends of the rails together and the rails rigidly in place by means of the nutted bolt K′, which passes vertically through both parts of such clamp, and through the slot H′ in the cross-brace H. By moving the bolt K′ either way in the slot H′ the bottom of the fence may be moved in or out to keep the same in line.

L is a diagonal brace, threaded at both ends, and screwed at its lower end into the threaded hole H^2 of the cross-brace H, and having its upper end inclosed, in common with the adjacent ends of the upper rails, A, between the two halves of the T-shaped clamp M, the internal and impacting surface of which is also threaded to more firmly engage and retain the ends of the rails A and brace L. A nutted bolt passes through both halves of the clamp M, and by releasing this bolt the rod L may be partially withdrawn from or inserted farther into the clamp M, in order to adjust the top of the fence to the perpendicular and in line.

The gate N has its entire boundary formed of one rod, the loop N′ in the front end of the upper horizontal forming a rest and way for the vertical end rod, N^2, which latter in itself possesses sufficient spring to perform the functions of a latch. The gate N is attached to the fence by means of hinges N^3 and N^4, the latter of which has a longer arm, and when the gate is thrown out of line of the fence, either in or out, the hinge N^4 carries the lower corner of the gate beyond the perpendicular, which causes the gate, when released, to swing automatically into line with the fence and latch itself.

The advantages of my invention are that each panel is substantially one piece, with no risk of wearing at points of contact, or of the parts becoming detached; that the joints are filled up, so as to exclude moisture and prevent rust, and contiguous parts rendered integral with each other; that the portion of the fence which extends into the ground is cheap, solid, and imperishable, and that by the use of the rod F, washer E, and brace G, the use of earthen material for posts is rendered feasible, because the diagonal strain is taken exclusively by the rod F, and the latter can be made of any desired strength. By the use of the slotted brace H and clamps K and M a very convenient and efficient means is afforded of changing the position or restoring the line of the fence.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. The combination of the cylinder D, washer E, vertical rod F, cap-plate G, provided with the cross-brace H, rails A and B, brace L, and clamps K and M, substantially as shown, and for the purpose described.

2. The combination of the rails A A, cross-brace H, clamps K and M, and brace L, substantially as shown, whereby the top and bottom of the fence may be moved laterally, as desired, for the purpose mentioned.

3. The gate N, the frame of which is formed of a single rod, bent as described, the outer end of its top rail being provided with the integral loop N′, and the upper end of its outer side or rod, N^2, projected upwardly through such loop, whereby said rod N^2 serves as a vertical latch, substantially as shown.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. BURKHOLDER.

Witnesses:

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