SAMarrach's Implinates. Patented Oct. 3, 1871.

Fig. 1. No. 119,509.

Witnesses.

E. Belhubu. 6. J. Hastenhuben Fig.3.

Samuel a. Sarrach Van Saxtword & Hauf Utter

## United States Patent Office.

SAMUEL A. DARRACH, OF NEWBURG, NEW YORK.

## IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. 119,509, dated October 3, 1871; antedated September 16, 1871.

To all whom it may concern:

Be it known that I, Samuel A. Darrach, of Newburg, in the county of Orange and State of New York, have invented a new and useful Improvement in Gates; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a sectional front view of this invention. Fig. 2 is a horizontal section of the same taken in the plane indicated by the line x x, Fig. 1. Fig. 3 is a similar section of the same, the line y y, Fig. 1, indicating the plane of section and looking up in the direction of the

arrow opposite to that line.

Similar letters indicate corresponding parts.

This invention relates to a gate constructed of cast-iron stiles and wooden rails and pickets. The stiles are provided with flanges, which project from both sides and hug the edges of the rails, so that when the rails are fastened to the stiles the gate is rendered firm and the crossbraces can be dispensed with. The bottom ends of the stiles are provided with grooves to receive the base-board. In the upper part of the front stile is cast a slot to receive the latch. From the upper part of the rear stile extends a projection provided with a cavity to receive the pin, on which the gate swings, said projection being closed at the top. From the bottom part of said rear stile extends a projection with two cavities to catch over two pins secured in the gate-post, so as to render the gate self-closing. This projection is also closed at the top so as to render it firm and strong, and its cavities are provided with hook-shaped extensions, which catch behind the pins and prevent the gate from being thrown out of its hinges by cattle or other animals. The gate-posts are made of cast-iron, and they are provided each with three legs, resting upon sills which are let down into the ground, so as to give a firm hold to the posts.

In the drawing, A designates a gate, which is constructed of cast-iron stiles B B', rails C, and pickets D. The stiles B B' are provided on each side with flanges a, capable of hugging closely

the edges of the rails C, so that when said rails are secured in position by bolts or nails b and the gate is hung on its hinges said flanges will prevent the front or outer end of the gate from sagging down and the use of a cross-brace can be dispensed with. The pickets D are inserted between the rails, as shown in Fig. 2, and fastened to them by bolts or nails, leaving a free circulation of air through between said rails so as to prevent decay. The bottom ends of the stiles are provided with grooves and mortises c(see Figs. 1 and 3) to receive the base-board E, which rests loosely in said mortises, being held in place by bolts or rivets. In the upper end of the front stile B is a recess, d, to receive the shank of the latch F, the head of which extends through a mortise, e, in the front of the stile. The latch engages with a double-inclined nose, g, which is cast with or otherwise firmly attached to the gate-post G. From the upper part of the rear stile B' extends a projection, h, which is provided with a socket to receive the pin i, which is fast in the gate-post G', said projection being closed at the top. From the bottom part of the stile B' extends another projection, j, which is provided with two cavities (see Fig. 3) to catch over two pins, k, which are secured in the gate-post G', so as to render the gate self-closing. Said projection j is also closed on top, so that it obtains the necessary strength and durability, and that the pins k are protected against rain, snow, or ice. The cavities in said projection are provided with hook-shaped extensions l, (see Fig. 3,) which catch behind the pins k when the gate is closed, so that said gate cannot be thrown out of its hinges by a force tending to raise the same up, and that cattle or other animals are not able to throw the gate down by raising it. The gate-posts G G' are made of cast-iron, and they are provided each with two legs, m, spreading in a direction transversely to the line of the fence, and with a brace-leg, n, extending in the direction of the fence, as seen in Figs. 1 and 2. The legs m are bolted down to a transverse sill, o, and the brace-leg n to a longitudinal sill, p, which sills are let down into the ground so as to give a firm hold to the posts. The fence-posts are also

secured in the same manner to transverse sills, but they have no brace-legs.

What I claim as new, and desire to secure by

Letters Patent, is—

In a gate, the arrangement of the metal stiles B B' having the flanges a c to receive the wooden rails C and base-board E, the projections h j,

and the extensions l on the stile B', in conjunction with the cast-metal posts G G' m n i k k, as herein set forth and shown.

S. A. DARRACH.

Witnesses:

W. HAUFF, CHAS. WAHLERS.