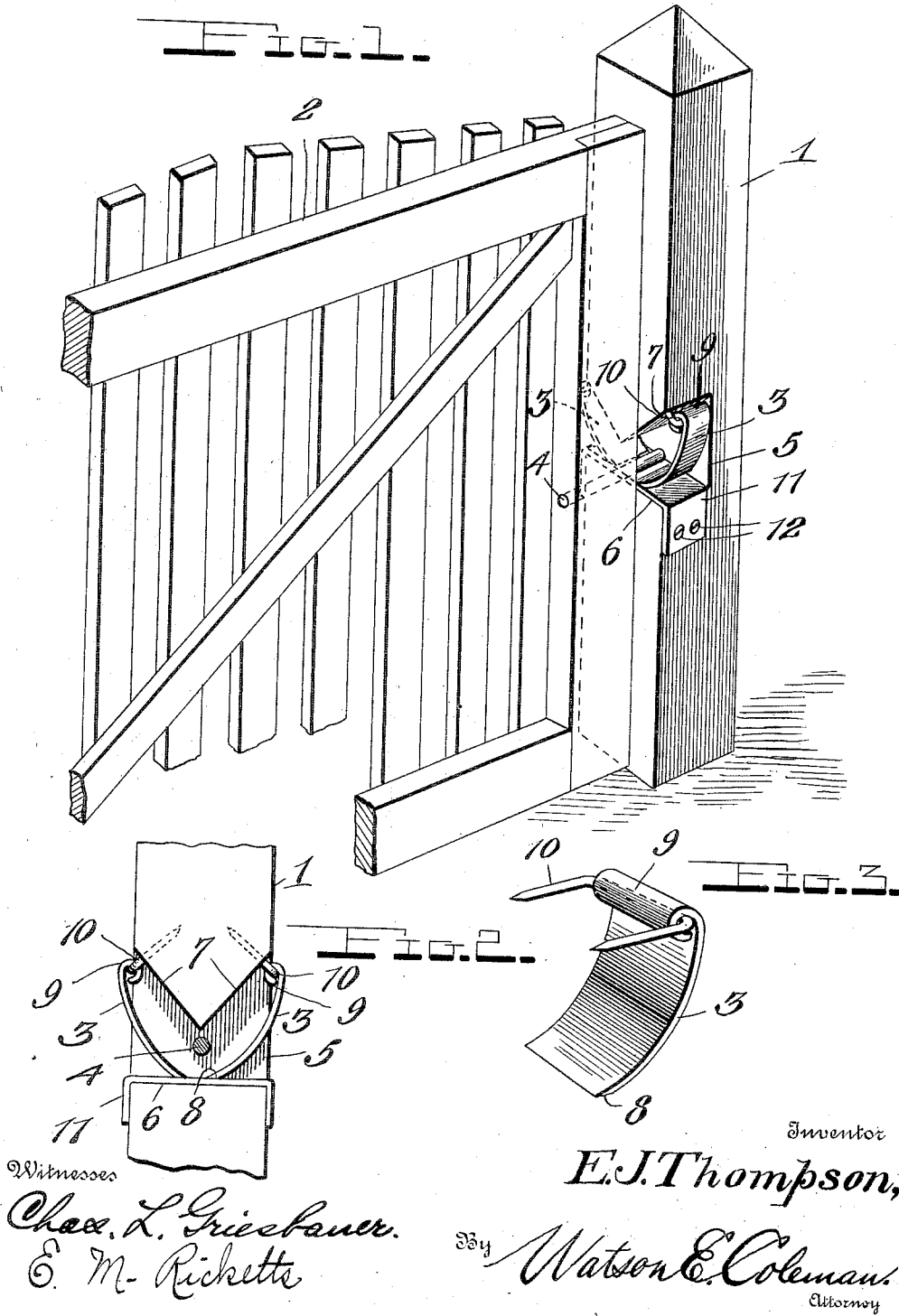


E. J. THOMPSON.
GATE LATCH.

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UNITED STATES PATENT OFFICE.

ELIHU J. THOMPSON, OF PLAINFIELD, GEORGIA.

GATE-LATCH.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ELIHU J. THOMPSON, a citizen of the United States, residing at Plainfield, in the county of Dodge and State of Georgia, have invented certain new and useful Improvements in Gate-Latches, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in gate latches and its object is to provide one which may be produced at a very small cost and easily applied to any wooden gate post, and which will be automatic in operation and hold the gate when it is swung to its closed position from either side of the gateway.

With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of a horizontally swinging gate and its post showing my improved latch applied thereto; Fig. 2 is a view of a portion of the inner side of the post showing the latch; and Fig. 3 is a perspective view of one of the resilient latch dogs and its pivoting and attaching staple.

Referring more particularly to the drawings 1 denotes a rectangular wooden gate post and 2 denotes a horizontally swinging gate which may be of any form and construction and mounted in any manner so that it can swing on either side of the gate or latch post 1.

My improved latch consists of two oppositely arranged resilient latch dogs 3 disposed in a recess in the inner side of the post 1 and adapted to co-act with a latch arm 4 which is carried by the gate and in the form of a pin passed horizontally through the upright end bar of the body of the gate and having its extremity projecting for engagement with the latch dogs 3.

In applying my latch to the post 1 a transverse recess 5 is formed in its inner face and is of such shape that its bottom wall 6 is horizontally disposed and its upper wall consists of two downwardly and inwardly converging inclined faces 7, which latter serve as stops to limit the inward or upward swinging movement of the dogs 3, their downward and outward swinging

movement being limited by the bottom 6 of the transverse recess 5, as will be readily understood on reference to Fig. 2. The latch dogs 3 are similar and each is formed from a piece of sheet steel or other resilient metal which is curved longitudinally and has a beveled lower end 8 and an upper end bent upon itself to provide a hinge eye 9 for the reception of the cross portion of a staple 10 which latter serves as a pivot and an attaching means for the latch dog. The staple 10 is driven into the upper portion of one of the inclined upper or side faces 7 of the recess in the gate post, as clearly shown in Figs. 1 and 2, and it supports the dog so that its beveled end 8 rests upon the bottom 6 of the recess 5 or upon a metal wear plate 11 formed from a strip of sheet metal bent into U-shape and having its central portion arranged on the bottom 6 of said recess and its depending end portions secured by nails, screws, or similar fastenings 12 to the outer side faces of the post 1. By mounting the dogs in this manner it will be seen that when the gate 2 is swung to its closed position from either side of the gate, the latch arm or pin 4 will engage the curved outer face of one of the latch dogs 3, elevate the latter and swing under it and against the opposing latch dog, which latter will serve as an elastic stop to prevent the gate from swinging open on the other side of the gate post and to cushion the closing movement of the gate, as will be readily understood. As soon as the latch arm 4 passes under the latch dog that it elevates, said dog drops by gravity so that when the latch arm 4 rebounds after its contact with the opposite dog, it will strike against the inner face of the dog which it had elevated, and be thereby held within the recess 5 to maintain the gate in closed position.

From the foregoing it will be seen that the peculiar construction of the device enables it to be produced at an exceedingly small cost and applied by any one to ordinary wooden gate posts. The peculiar shape, construction and mounting of the latch dogs 3 not only renders the device exceedingly inexpensive but also causes the gate to be cushioned in its closing movement to relieve the hinge and body of the gate from shocks and jars.

Having thus described the invention what is claimed is:

1. The combination of a gate post formed

on its inner side with a transverse recess having at its top downwardly and inwardly converging surfaces, a pair of latch dogs constructed of metal and having longitudinally 5 curved body portions bent upon themselves at their upper ends to provide hinge eyes and adapted to have their lower ends rest upon the bottom of the recess in said post, and staples having their cross portions arranged within said hinge eyes of the dogs 10 and their pointed ends driven into the inclined faces of the recess in said post, whereby said dogs are mounted for inward and upward swinging movement.

15 2. The combination with a wooden gate mounted for horizontal swinging movement and a latch pin passed through the outer end upright of the gate and having a horizontally disposed outer extremity, of a wooden 20 post formed in its inner face with a transverse recess having a horizontal bottom wall and downwardly and inwardly inclined surfaces at its top, a U-shaped metallic wear

plate extending across the bottom of said recess in the post and having its depending 25 ends secured to the outer side faces of the post, a pair of oppositely disposed latch dogs constructed of pieces of resilient metal curved longitudinally and having beveled 30 lower ends resting upon said wear plate, the upper end of said latch dogs being bent upon themselves to provide hinge eyes, and staples having their cross portions arranged in said hinge eyes and their pointed ends driven 35 into said inclined surfaces at the top of the recess in the post, whereby the dogs will be mounted for inward and upward swinging movement and in the path of the latch pin on the gate.

In testimony whereof I hereunto affix my 40 signature in the presence of two witnesses.

ELIHU J. THOMPSON.

Witnesses:

J. A. GRIESBAUER, Jr.,
A. F. GARVEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."