D. C. DILLABOUGH.

GATE LATCH.

APPLICATION FILED AUG. 26, 1913.

1,126,728. Patented Feb. 2, 1915.

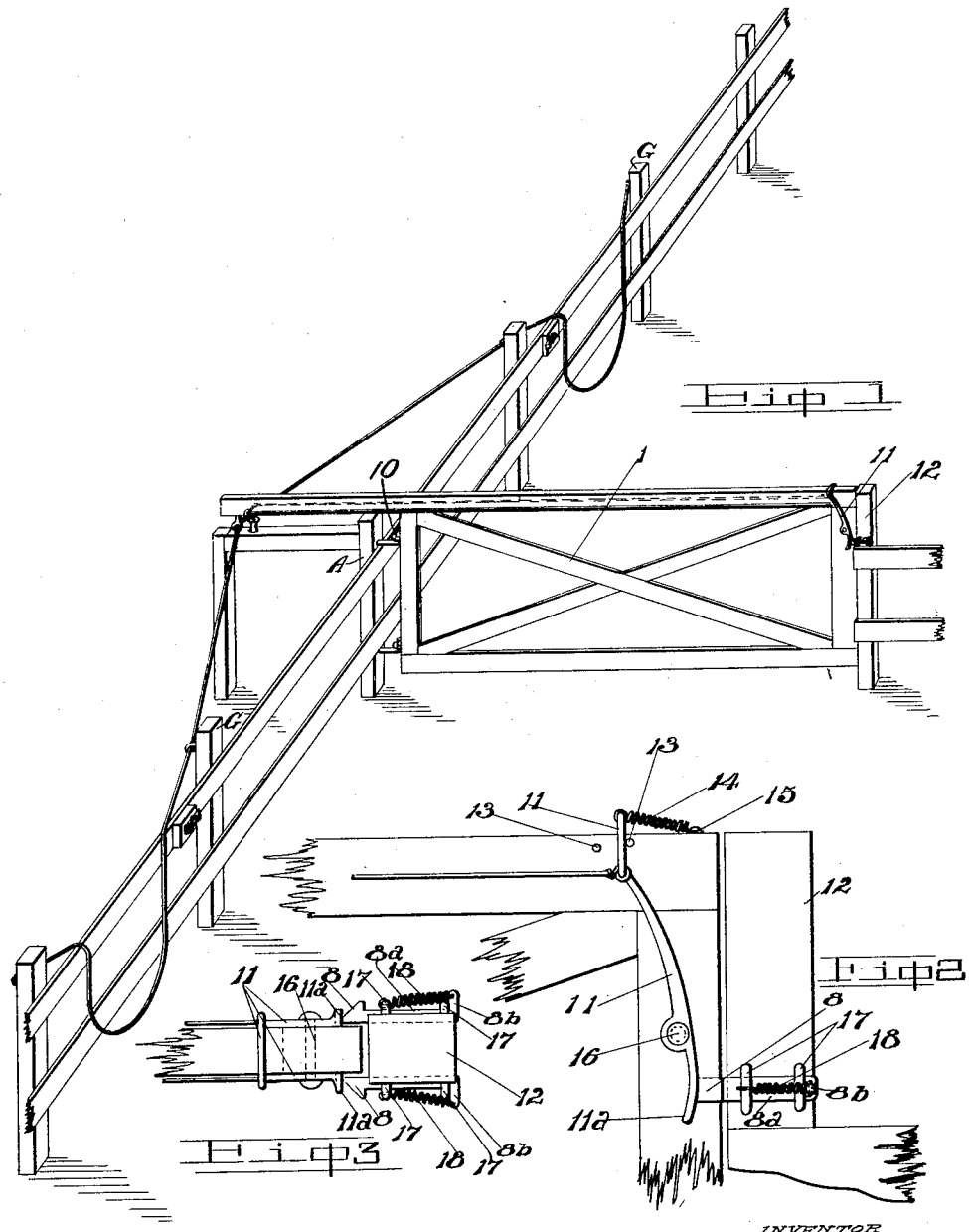


Fig 1

Fig 2

Fig 3

WITNESSES:

A. J. Mather

E. Earl Dike

BY

INVENTOR

Dexter C. Dillabough.

J. H. Moore

ATTORNEY

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

DEXTER C. DILLABOUGH, OF LYLE, WASHINGTON.

GATE-LATCH.

1,126,728. Specification of Letters Patent. Patented Feb. 2, 1915.

Application filed August 26, 1913. Serial No. 786,704.

To all whom it may concern:

Be it known that I, DEXTER C. DILLABOUGH, a citizen of the United States, residing at Lyle, in the county of Klickitat and State of Washington, have invented certain new and useful Improvements in Gate-Latches, of which the following is a specification.

My invention relates to gate latches for use in connection with farm gates or the like whereby an effective barrier may be interposed or swung aside at will through convenient manipulation of mechanism designed for the purpose.

It is the object of my invention to produce a simple and efficient gate fastener susceptible of convenient manipulation in operation which may be produced, set up, and, in case of need, repaired at a minimum expense.

What constitutes my invention will be hereinafter specified in detail and distinctly set forth in the appended claims.

In the accompanying drawing which constitutes a part of this specification and to which reference is hereby made, Figure 1 is a perspective view of two cross lines of fences, showing my latch attached to a gate in the closed position set in one of said lines of fence. Fig. 2 is an enlarged view in elevation of a portion of the free end of the gate and its post to illustrate details of my latch and latch operating mechanism. Fig. 3 is a top plan view of the subject matter of Fig. 2.

Referring to the numerals on the drawing, 1 indicates a gate hung, in service, as upon vertically alined hinges 10 from a supporting post A upon which it is adapted to swing with a horizontal movement to both sides of the post A between it and the post 12, to and against a cross fence G.

Near the free end of the gate 1, I provide a latch operating lever 11 which is preferably bifurcated and, straddling the top of the gate as will clearly appear from comparison of Figs. 1, 2 and 3, is carried upon coaxially disposed pivotal supports 16 upon opposite sides of the gate, said supports being preferably the opposite projecting ends of a single bolt or rivet as shown in dotted lines in Fig. 3 by way of example.

The free ends 11^a of the lever 11 project preferably downwardly and are fashioned to constitute broad push members upon opposite sides of the gate 1 as shown in Figs. 2 and 3, the lever 11 being of sufficient extent above its supports 16 to admit of the operative oscillation upon said supports to adapt it to the performance of its function. Said function is to actuate latch bolts 8^a that are operatively mounted in respect to the gate upon opposite sides of the post 12, to release the gate preparatory to its being opened. To hold the lever 11 in a normal position ready for the performance of said function, I prefer to employ a contractile spring 14 secured at one end to the lever and at the other to the gate 1 as indicated at 15, Fig. 2. Limits of movement to said lever may be imposed as by pins 13 set upon opposite sides of it in the gate and projecting therefrom across its range of oscillation, as is shown in Fig. 2.

The respective push members 11^a impinges each against one of two latch bolts 8^a provided upon opposite sides of the post 12. Each latch bolt may consist of a horizontal bar working through keepers or staples 17 set in the post 12 and projected normally as by a spring 18 across the face of said post toward the front edge of the gate-frame wherewith it normally engages. Compare Figs. 2 and 3. Each spring 18 is preferably secured to its forward staple 17 and to a pin 8^b projecting from the rear end of the latch. Said pin serves also for a stop pin limiting the forward movement of the latch whose head 8, by impingement against the forward staple 17, limits the rearward movement of the latch.

By the action of the respective springs 18 each latch-bolt head 8 is projected across the edge of the vertical frame-piece of the gate 1, thereby confining the gate 1 to the post 12 until it is released as by the operation of the lever 11, and thereupon it, the gate 1, may be swung freely in either of two directions upon its hinges 10.

It is indicated that the head 8 of each of the latch bolts is beveled as clearly shown in Fig. 3 so that the bolts may severally retreat before impact of the gate, and thus become automatic spring catches, and that in the manner already specified either one of the latch bolts may be retracted by a pull upon the lever 11.

It is obvious that when the gate is closed from either direction, the nearest latch bolt will be forced to recede until the gate has passed into locking position and may be opened only after actuating the lever 11,

whereupon it may be moved in either direction.

I claim:

1. The combination of a gate mounted to swing between gate posts, with a latch mechanism comprising a pivot pin mounted near the free end in said gate, a V-shaped lever fixed, one member upon each end of said pin, and each terminating in a push element, a latch mounted upon each side of the free post each yieldingly held into the path of said gate opposite one of the push elements of said lever to normally coöperate therewith, and a spring for holding the lever normally in retracted position.

2. A gate latch comprising a releasing lever adapted to be pivotally mounted on the side of the free end of a gate and having a depending push member, in combination with a latch bar having a bent-over end, slidably mounted under retaining staples attached to a post adjacent the free end of the gate in locking position and a spring attached to said bent-over end and to one of the staples so as to hold the locking end of the latch bar in the path of the gate for the purpose of engaging the side of the gate adjacent to the push member of the releasing lever which is adapted to be so actuated as to push the latch bar out of locking position.

3. A gate latch comprising a V-shaped, releasing lever adapted to be pivotally mounted on the side of the free end of a gate and having depending push members, in combination with latch bars having bent-over ends, slidably mounted under retaining staples attached to a post adjacent the free end of the gate in locking position, and a spring attached to said bent-over end and to one of the staples so as to hold the locking end of the latch bar in the path of the gate for the purpose of engaging the side of the gate adjacent to the push member of the releasing lever, which is adapted to be so actuated as to push the latch bars out of locking position.

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

DEXTER C. DILLABOUGH.

Witnesses:

L. H. LAWSON,

J. E. FARR.

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