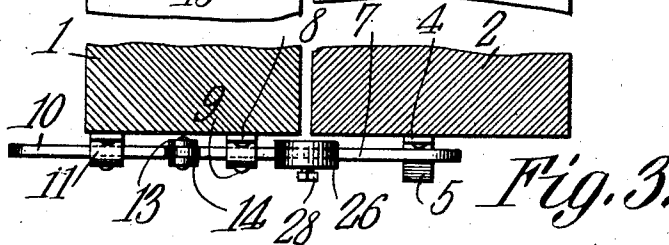
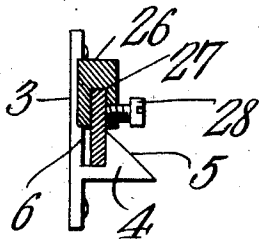
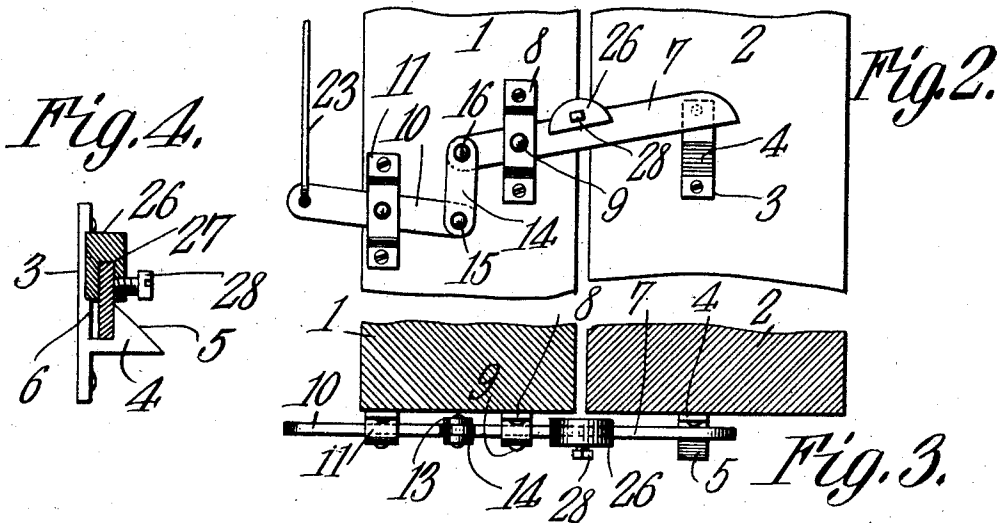
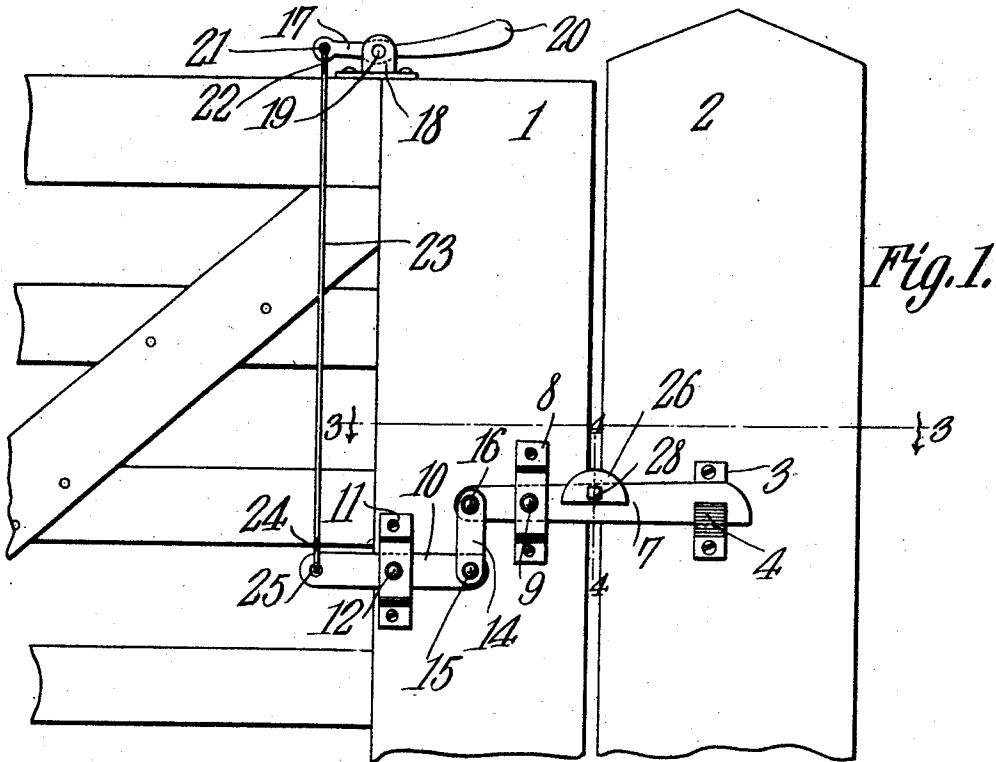


No. 866,766.

PATENTED SEPT. 24, 1907.

C. J. AUSTAD.
GATE LATCH.

APPLICATION FILED MAY 13, 1907.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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GATE-LATCH.

No. 866,766.

Specification of Letters Patent.

Patented Sept. 24, 1907.

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To all whom it may concern:

Be it known that I, CARL J. AUSTAD, a citizen of the United States, residing at Peterson, in the county of Fillmore and State of Minnesota, have invented a new and useful Gate-Latch, of which the following is a specification.

This invention relates to improvements in latches for retaining gates and similar devices in closed position, and it has for its object to provide an improved device of this character that is so simple in construction that it may be made and sold cheaply and is capable of being readily applied by unskilled persons, the device operating automatically to retain the gate or other device in the desired position, and it is capable of being readily unlocked by pressure upon a handle that is so located relatively to the gate that it may be conveniently reached and operated from either side of the gate, the device being so constructed that it avoids the use of springs or other devices that are liable to be affected by the weather.

To these and other ends, the invention comprises the various novel features of construction and combination and arrangement of parts, which will be hereinafter more fully described and pointed out particularly in the claims appended hereto.

In the accompanying drawings:—Figure 1 is an elevation of a latch constructed in accordance with the present invention, the parts being shown in locked position. Fig. 2 is a view showing the parts of the latch in unlocked position. Fig. 3 is a section on the line 3—3 of Fig. 1. Fig. 4 represents a section on the line 4—4 of Fig. 1.

Corresponding parts in the several figures are indicated throughout by similar characters of reference.

In the present embodiment of my invention, the device is employed as a gate latch, 1 designating one end of the gate and 2 the adjacent gate post, the latter being provided at one side with a suitable catch 3, which, in the present instance, is composed of an attaching plate screwed or otherwise secured to the post and having a hook 4 projecting therefrom, the forward upper surface of the hook being inclined, as at 5, to permit the latch to automatically enter the locking recess 6 thereof.

The cooperating mechanism of the latch is carried, in the present instance, by the gate, although it will be understood that, if so desired, the hook may be applied to the gate and the latch mechanism supported on the gate post or other relatively fixed support, and it comprises, in the present instance, a latch member 7 pivoted intermediately to a bracket 8 by means of a pivot 9, the bracket having its ends screwed or otherwise fastened to one side of the gate and having its intermediate portion offset laterally of its ends in

order to accommodate the latch member between it and the adjacent side of the gate. One end of the latch member projects beyond the end of the gate and is arranged to cooperate with the hook member or catch, the opposite end of the latch member being operatively connected to an actuating lever 10, the lever being pivoted at a point intermediate its length to a bracket 11 by means of a pivot 12, and the operative connection between this lever and the latch member embodies a pair of links 13 and 14 which are arranged at opposite sides of the respective parts, and are pivotally connected thereto by means of pivot pins 15 and 16.

The actuating lever is arranged at a point preferably in rear of the latch member in order that the operating handle may be spaced inwardly from the free end of the gate sufficiently to enable it to be operated conveniently, the operating handle, in the present instance, comprising a lever 17 pivoted at an intermediate point to a bearing bracket 18 arranged on the top or upper portion of the gate, a pivot pin 19 forming an axis about which the operating handle turns. One end of the lever, preferably the end near the free end of the gate, is formed into a handle portion 20, the opposite end of the lever being provided with an eye 21 with which a loop or hook 22 on an actuating rod or wire 23 operates, the lower end of the rod or wire being provided with a similar loop or hook 24 which cooperates with an eye 25 formed in the rear portion of the actuating lever.

The outer end of the latch member has a normal tendency to move downwardly under the action of a weight 26, the latter being preferably mounted to slide longitudinally on the upper edge of the latch member, the weight, in the present instance, having a groove 27 to slidably fit over the upper edge of the latch member, and a set screw 28 threaded into the side of the weight serves to retain the weight in the desired adjusted position on the latch member.

When the gate is in closed position, the parts occupy the position shown in Fig. 1, that is to say, the outer end of the latch member rests in the locking recess 6 of the catch on the gate post, the weight 26 operating to retain the latch member in locked position. When it is desirable to open the gate, the handle portion 20 is depressed by the hand, causing the actuating rod or wire to be lifted, and the latter transmitting its movement to the actuating lever, causing the latter to be rocked about its pivot into the position shown in Fig. 2, and as the right hand end of the actuating lever is depressed, the corresponding end of the latch member will be elevated by reason of the link connections between these parts, the latch member being thereby disengaged from the catch and enabling the gate to be

opened. As the gate swings to closed position, the outer end of the latch member will engage the inclined surface 5 on the catch, the latter serving as a cam to lift the latch member and enable it to drop into the locking recess of the catch under the action of the gate.

A latch constructed in accordance with the present embodiment of the invention is capable of being used generally as a fastening for holding gates, doors, and similar devices, in any given desired position, and is especially adapted for use for gates and other devices that are exposed to the weather, for the reason that the use of springs and other delicate parts that are liable to become rusted or broken is avoided, and the device is so simple in construction that it may be cheaply manufactured and it is capable of being applied by unskilled persons.

What is claimed is:—

1. In a device of the character described, the combination with a catch, of a pivoted latch member adapted to cooperate therewith, an actuating lever operatively connected to the latch, a pivoted operating handle connected to the actuating lever, and a weight adjustable longitudinally of the latch member and serving to overbalance the actuating lever and operating handle to retain the latch in cooperative relation with the catch.

2. In a device of the character described, the combination with a catch, of a pivoted latch member adapted to cooperate therewith at one end and having a link connection at its opposite end, an actuating lever mounted in pivotal relation to the latch member and having one end operatively connected to said link connection, and a

pivoted operating handle having a rod connecting it to the opposite end of the actuating lever for unlocking the latch member relatively to the catch.

3. In a device of the character described, the combination with a catch, of a latch member pivoted at a point intermediate of its ends, one end of the latch member being adapted to cooperate with the catch, an actuating lever mounted in pivotal relation to the latch member, the actuating member being mounted pivotally at a point intermediate its ends, a pair of links arranged at the opposite sides of the latch member and actuating lever and pivotally connected to the proximate ends thereof, and a device connected to the end of the actuating lever opposite to said link and serving to unlock the latch member relatively to the catch.

4. In a gate latch, the combination with a suitable catch adapted to be secured to the gate post, of a latch member pivoted intermediately to the gate and having its free end projecting beyond the gate and adapted to cooperate with said catch, an actuating lever pivoted at a point intermediate its ends, a link connection between the inner end of the latch member and the outer end of the actuating lever, an operating device pivoted on the top of the gate having a handle portion extending toward the free end of the gate and having an eye at its opposite end, and an actuating rod having one end connected to the said eye and having its opposite end connected to the end of the actuating lever opposite to the link connection.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

CARL J. AUSTAD.

Witnesses:

NELS THORND,
N. J. AMBLE.