

(No Model.)

A. R. GRIMES.
GATE LATCH.

No. 477,654.

Patented June 28, 1892.

Fig. 1

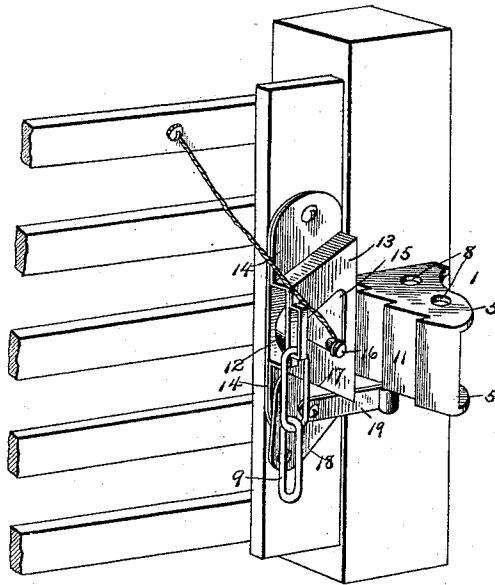


Fig. 2.

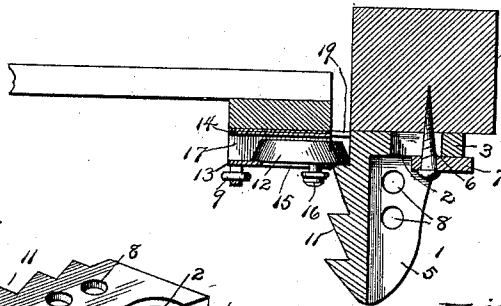


Fig. 3.

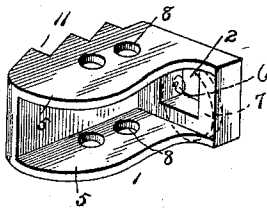
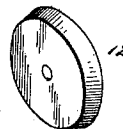


Fig. 4.



Witnesses

E. S. Ober
A. J. Riley

Inventor

Allen R. Grimes.

By *his* Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

ALLEN ROVERO GRIMES, OF PORT ROYAL, KENTUCKY.

GATE-LATCH.

SPECIFICATION forming part of Letters Patent No. 477,654, dated June 28, 1892.

Application filed April 22, 1892. Serial No. 430,236. (No model.)

To all whom it may concern:

Be it known that I, ALLEN ROVERO GRIMES, a citizen of the United States, residing at Port Royal, in the county of Henry and State of Kentucky, have invented a new and useful Gate and Door Latch, of which the following is a specification.

The invention relates to improvements in gate and door latches.

10 The object of the present invention is to provide a simple and efficient latch for gates and doors capable of being readily adjusted to suit the gate or door and which will securely fasten such gate or door irrespective of any 15 sagging, and which, should a gate or door be closed suddenly and rebound, securely hold it against such rebound.

The invention consists in the construction and novel combination and arrangement of 20 parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a portion of a gate provided with a 25 latch constructed in accordance with this invention. Fig. 2 is a horizontal sectional view. Fig. 3 is a detail perspective view of the keeper. Fig. 4 is a similar view of the latch-wheel.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a keeper, consisting of a securing-plate 3, which is provided with a rectangular opening 2, a ratchet-plate 4, and top 35 and bottom flanges 5, which connect the said plates 3 and 4. The keeper is constructed of suitable metal and is secured to a post or door-frame by means of a screw 6, which is arranged in a rectangular opening 2, and an eccentrically-arranged disk 7, which is disposed 40 between the flanges 5 and against the inner face of the ratchet-plate, whereby the keeper may be adjusted upward, downward, backward, and forward, and still be securely held 45 in place. The flanges 5 are provided with perforations 8, which register, and which enable the gate to be locked by passing a shackle of a padlock through the perforations and through a link of a chain 9, which may be arranged above or below the keeper. The ratchet-plate is provided on its outer engaging-face 50 with series of vertical teeth 11, which are

engaged by a wheel or disk 12, arranged in a casing 13. The latch-casing 13 is provided with securing-flanges 14 and has a triangular 55 opening 15, in which is arranged a centrally-projecting lug 16 of the disk 12, and a chain or cord is attached to the lug to enable the disk to be readily withdrawn from engagement with the keeper. The disk slides freely 60 in the casing, which is provided with an inclined bottom 17, and it is circumferentially beveled to facilitate engagement with the keeper. The number of teeth of the keeper enables the latter to be engaged by the wheel 65 or disk should the gate be closed suddenly and rebound. The latch is prevented being disengaged by an animal attempting to raise the gate by a plate 18, which extends beneath the keeper and which has its arm 19 bent at 70 its outer end into a cylinder or head to increase the bearing-surface. It will be seen that any amount of sagging, swelling, or the like of the gate will not effect the operation of the latch, and should any obstruction be 75 interposed between the gate and the latch-post and prevent the former fully closing, the gate may even then be securely fastened.

I desire it to be understood that I do not limit myself to the precise details of construction herein shown and described, as I may, 80 without departing from the spirit of the invention, make minor changes therein.

What I claim is—

1. A latch comprising a keeper provided 85 with a vertically-disposed tooth, a casing, and a disk loosely mounted in the casing and capable of extension and retraction and adapted to engage the tooth, substantially as described.

2. A latch comprising a keeper provided 90 with a series of vertically-disposed teeth or shoulders, a casing having an opening, and a disk loosely mounted in the casing and provided with a stud arranged in the opening, substantially as described. 95

3. A latch comprising a keeper provided with a vertical tooth or shoulder, a casing, a disk loosely mounted in the casing and adapted to engage the tooth or shoulder, and a stop-plate having an arm arranged to engage the 100 bottom of the keeper to prevent the disk being lifted out of engagement with the same, substantially as described.

4. A latch comprising a keeper provided

with a vertical tooth or shoulder and having flanges provided with registering perforations, a casing, a disk loosely mounted in the casing and adapted to engage the tooth or shoulder, 5 and a chain attached to the casing and adapted to be secured to the keeper by having the shackle of a lock passed through one of its links and the perforations of the flanges, substantially as described.

10 5. A latch having a keeper provided with a securing-plate having an opening in it, an eccentrically-arranged disk, and a screw passing through the disk at an eccentric point and through the opening of the keeper, substan- 15 tially as described.

6. A latch comprising a keeper composed of

a securing-plate having an opening, a ratchet-plate having teeth or shoulders and flanges connecting the plates, a casing provided with an opening, a disk loosely mounted in the 20 casing and provided with a stud arranged in said opening, an eccentrically-arranged disk mounted on the keeper, and a screw passing through the disk and the opening of the keeper, substantially as described. 25

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

ALLEN ROVERO GRIMES.

Witnesses:

P. J. HONAKER,

W. C. PERRY.