E. MATTHEWS.

GATE OR DOOR FASTENING.

APPLICATION FILED SEPT. 4, 1914.

1,131,403.

Patented Mar. 9, 1915.

Fig. 1.

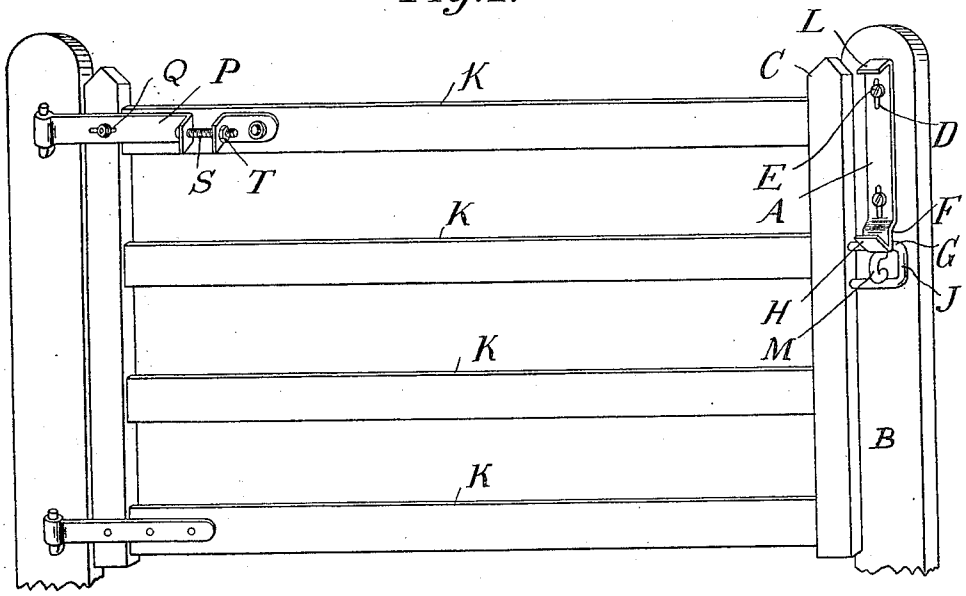


Fig. 2.

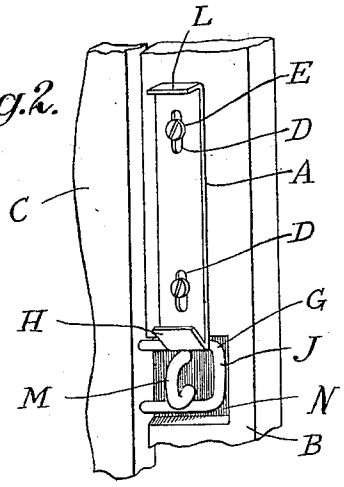
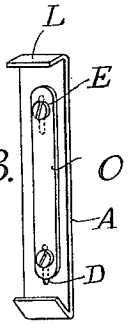


Fig. 3.



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UNITED STATES PATENT OFFICE.

EDWIN MATTHEWS, OF HEREFORD, ENGLAND.

GATE OR DOOR FASTENING.

1,131,403. Specification of Letters Patent. Patented Mar. 9, 1915.

Application filed September 4, 1914. Serial No. 860,202.

To all whom it may concern:

Be it known that I, EDWIN MATTHEWS, a subject of the King of Great Britain, and a resident of Hereford, England, (whose post-office address is Red Barn Farm, Hereford, in the county of Hereford, England,) have invented new and useful Improvements Relating to Gate or Door Fastenings, of which the following is a specification.

This invention relates to improvements in automatic catches or fastenings for swing gates whereby greater certainty of action is attained together with facility in releasing the catch, and at the same time the gate is supported at the catch end without pressure on the catch in addition to the support afforded at the other end by the hinge pin.

Referring to the accompanying drawings, Figure 1 shows a gate fitted with my improved fastening, the middle part of the gate being broken away. Fig. 2 shows a modification of the catch, and Fig. 3 a modification of the bolt-retaining device.

According to the invention a drop bolt or bar A is mounted vertically upon the face of the gate post B in such a position that the swing post C of the gate when closed lies alongside such bolt. Two or more vertical slots D are provided in the bolt A, through which the shanks of bolts or screws E with sufficiently broad heads or washers to retain the bolt are loosely passed and secured in the gate post so far as to allow free vertical play to the bolt within the limits of the slots. The lower part F of the bolt, which forms the catch is conveniently cranked or rabbeted so as to be adapted to drop in front of a securing member G projecting from the swing bar of the gate, when the latter is closed; it is also provided with an extension or nose H, the under face of which slopes upward from the rear so as to raise the bolt when struck by the said projecting member G. This member G is preferably the upper arm of a staple J which is secured to the swing post with its bow in a vertical position and arms parallel with the gate bars K. This staple is so adjusted relatively to the bolt that on the closing of the gate, its upper arm G glides under the nose H of the bolt and raises it until, by reason of the rabbet or space under the end F, the bolt drops over the arm thus securing the gate.

The upper part of the bolt is conveniently shaped so as to form a hook or handle L by means of which it can be raised so as to release the gate from the catch.

Upon the gate post a second and smaller staple M is fixed just below the bolt with its bow vertical and projecting from the post in such a way that as the gate shuts, the larger staple will pass over and inclose the smaller crosswise. This second staple, besides acting as guide to the first, will also support the gate and keep it at the proper level and moreover will afford means for securing it with a padlock if desired.

By slight modifications the bolt and smaller staple may be mounted on the swing post and the larger staple on the gate post, in which case the raising of the bolt and swinging open of the gate may be effected by a continuous movement of one hand.

As a modification of the bolt shown in Fig. 2, it may be made straight from end to end and, to provide the necessary space behind the lower end, a recess N may be cut in the gate post large enough to take the staple J to the required depth.

In place of washers under the heads of the bolts or screws E which retain the bolt in Figs. 1 and 2, a single plate O may be used as shown in Fig. 3.

In order to adjust the gate so that it may swing truly and bring the top arm of its staple over that of the gate post staple and just under the bolt nose, the gate may be made adjustable with respect to the top hinge. For this purpose, the hinge strap P is of the known kind which is provided with a longitudinal slot Q through which the bolts are passed which secure it to the gate bar. This will allow of a certain amount of longitudinal adjustment of the gate near the top hinge and a consequent raising or lowering of the part near the bolt. In order to facilitate the adjustment, the end of the strap may be turned outward at right angles and a corresponding member R fixed to the gate so as to face the first with an interval between them. This interval may then be made greater or less by known means such as a screw bolt S and nut T or by a two ended clamping screw.

I claim:

1. A gate fastening device comprising a staple adapted to be fixed to and project from the swing post, a smaller staple adapted to be fixed to and project from the gate

post so as to enter crosswise within the first mentioned staple and thereby to support the gate when closed, together with a drop-bolt mounted on the gate post adapted to be raised by and to drop over the upper arm of the first mentioned staple when the gate is closed, substantially as described.

2. A gate-fastening device comprising a staple adapted to be fixed to and project from the swing-post, a smaller staple adapted to be fixed to and project from the gate post so as to enter crosswise within the first mentioned staple and thereby to support the gate when closed, together with a drop-bolt mounted on the gate post adapted to be raised by and to drop over the upper arm of the first mentioned staple when the gate is closed, the said bolt being flat and having vertical slots whereby it may be retained in working position by means of bolts passed loosely therethrough, and having also an inclined nose adapted to engage the top arm of the swing-post staple for the purpose of raising the bolt.

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