F. B. CLAPCOTT.

GATE FASTENING.

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1,136,102.

Patented Apr. 20, 1915.

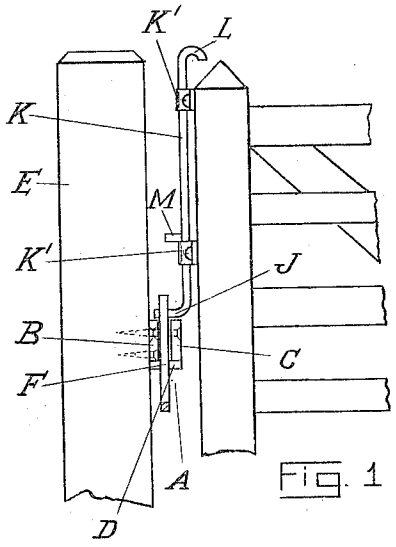


Fig. 1

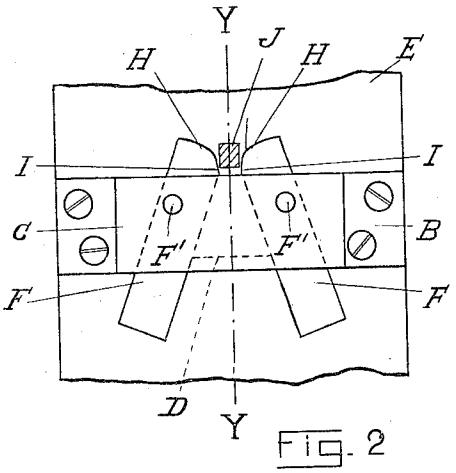


Fig. 2

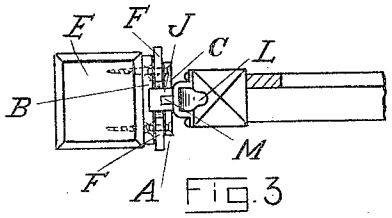


Fig. 3

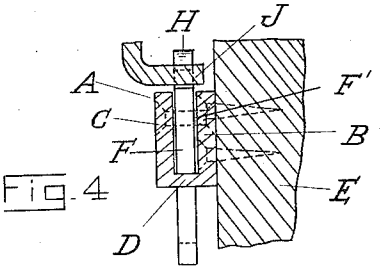


Fig. 4

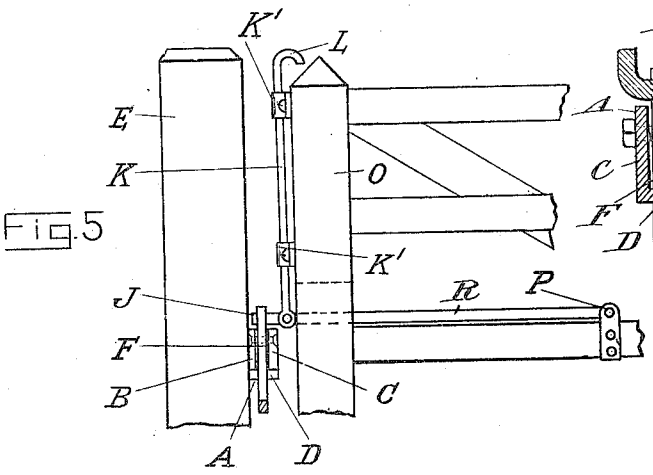


Fig. 5

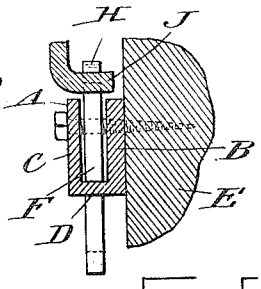


Fig. 6.

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FREDERICK BUNTER CLAPCOTT, OF MOUNT EDEN, NEAR AUCKLAND, NEW ZEALAND.

GATE-FASTENING.

1,136,102. Specification of Letters Patent. Patented Apr. 20, 1915.

Application filed March 20, 1913. Serial No. 755,724.

To all whom it may concern:

Be it known that I, FREDERICK BUNTER CLAPCOTT, a subject of His Majesty the King of the United Kingdom of Great Britain and Ireland, resident of Stokes Road, Mount Eden, near the city of Auckland, in the Provincial District of Auckland and Dominion of New Zealand, gentleman, have invented an Improved Gate-Fastening, of which the following is a specification.

The object of this invention is to produce a gate fastening especially adapted for use on railway and farm gates, although it can also be used on other gates if desired. The fastening so produced, is such that stock cannot operate it and open the gate, it also locks automatically from whichever way the gate is swung, and can quite easily be operated by a person on horseback, from either side. The portion secured to the gate side of the gate post, consists of a bracket formed of two plates connected together at their lower edges. Between the plates are two droppers, so pivoted that their upper ends will swing inward and downward, but not outward. The tongue or latch which is secured and works on the gate, is adapted to be caught between the upper ends of the droppers and holds the gate stationary until raised vertically so as to clear the droppers, when the gate can be swung either way.

Referring to the drawings accompanying this specification, Figure 1 shows in elevation, part of a gate and gate post, with the improved fastening fitted thereon, Fig. 2 is an enlarged elevation of the bracket with the droppers pivoted therein, and as secured to the gate side of the post, Fig. 3 is a plan view of the parts illustrated in Fig. 1, Fig. 4 is a sectional view of the bracket taken through Y—Y in Fig. 2, Fig. 5 is a similar view to Fig. 1, but showing a different way of securing the latch on the gate. Fig. 6 is a view illustrating a coach screw connection which serves as a pivot for the latch.

The bracket A consists of two parallel plates B, C connected together contrally at their lower edges by the portion D, and secured to the gate side of the gate post E, through the plate B. Mounted between the plates B and C are the droppers F, pivoted so that they have a longer radius below the pivots F′ than above them (Fig. 2). The upper ends H of the droppers F are curved as shown, and have flat portions I formed on the inner sides thereof, between which the latch or tongue J is held, as hereinafter described. The portion D of the bracket A is formed large enough to keep the lower ends of the droppers F apart sufficiently, so as to leave the required space for the latch J between the flat portions I, with the result that the droppers F are normally inclined toward each other as shown. This flat portion D prevents any outward movement of the upper curved ends H of the droppers F, and the latch J can therefore only be got from between the flat portions I by lifting it directly upward, and until this is done the gate remains fastened or locked.

The latch J is formed on the lower end of a rod K working vertically in guides K′ on the gate, and terminating in a handle L, which may be crook shaped or otherwise. To open the gate, the handle L is gripped, and the latch J lifted vertically from between, and so as to clear the upper curved ends H of the droppers F. The gate is then free, and may be swung in either direction, and the latch J dropped again by releasing the handle L, a stop M on the rod K permitting it to drop only the required distance.

The locking or fastening of the gate, is performed automatically, by swinging the gate from either side, the latch J striking against the back or flat side of one of the upper curved ends H of the droppers F, which end being free to swing inward and downward, allows the latch J to push it down, until it has passed over and cleared it. The swing of the gate is then arrested by the latch J striking the flat portion I on the other dropper, which has no outward movement, being locked against same by its lower end abutting against the portion D. As soon as the latch J has passed over or cleared the first dropper, the latter will immediately fall back to its normal position, owing to the unequal pivoting, and thus again lock or fasten the gate from swinging either way. The flat portions I on the droppers F are provided for the purpose of preventing the latch J from riding up over the curved ends H, either when the gate is shut by pushing or jerking, or, when the gate is being shut.

To insure the latch J being rigid, it may be formed separate from the rod K and projected through the front rail O of the gate, (Fig. 5), and pivoted at P, to one end of the bars R, the rod K being secured

thereto as shown. Also, instead of using permanent pivots F′, coachscrews may be used for the same purpose, they being inserted through the plates and droppers, and serving to fasten the brackets A to the post E as well.

From the foregoing, it will be seen that once the latch J is in place between the flat portions I, the gate cannot be opened until the latch J is lifted high enough to clear the upper curved ends H, and that the gate can be shut from either side without any fear of the latch J over-shooting the catch, as it can only pass over or push down while it passes over one dropper, the other dropper preventing further movement of the gate, any rebound being checked by the first mentioned dropper, which, immediately the latch J is clear, assumes its original position.

By making the handle L short, or close to the gate, stock are prevented from operating the latch and opening the gate, while at the same time, a person on horse-back is enabled to open the gate with ease. Also by using the two droppers as shown, the gate can be swung in either direction, although it will be obvious that one dropper only can be used if desired.

The complete fastener is simple, effective, with no parts to get out of order, can be produced cheaply, and be applied to existing gates.

Having now fully described my invention, what I desire to claim and secure by Letters Patent is:—

1. In a gate fastening, a plurality of droppers; and a bracket adapted for attachment to the gate side of a gate post and constituted by two parallel plates and a central connecting portion located at their lower edges and normally serving to separate said droppers, said plates having sufficient space between them to allow said droppers to swing freely in such space until their movement is checked by said central connecting portion in combination with a latch adapted for attachment to a gate to ride over and oscillate said droppers and to locate itself in position between said droppers.

2. In a gate fastening, a bracket constituted by two plates and a portion centrally connecting said plates at their lower edges; and a plurality of droppers unequally pivoted between said two plates and having their upper ends curved inward and formed with flat portions on the inner sides thereof, the lower ends of said droppers being kept farther apart than the upper ends by contacting with said central connecting portion.

3. In a gate fastening of the kind described, a pair of connected parallel plates adapted for attachment to a gate post; a plurality of droppers disposed between said plates and formed with flat surfaces at their upper ends; and a latch adapted for attachment to a gate and to ride over the droppers without vertical movement and then to engage between the flat surfaces of the upper ends of said droppers, said latch being adapted to be raised vertically from above in order to clear the droppers when opening the gate.

4. A gate fastening comprising in combination a bracket adapted for attachment to a gate post and formed by two parallel plates and a centrally disposed portion connecting the lower edges thereof; a pair of pivoted droppers arranged between said plates and limited in their movement in one direction by said central connecting portion so as normally to hang substantially vertically; a latch adapted for attachment to a gate so as without vertical movement to ride over the upper edges and engage between the upper ends of said droppers when the gate is closed; and means attached to said latch to raise same vertically to open the gate.

FREDERICK BUNTER CLAPCOTT.

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