

C. G. McKELLAR.
 CHAIN ADJUSTMENT DEVICE FOR REAR WHEEL FITTINGS OF CYCLES.
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Patented Aug. 29, 1911.

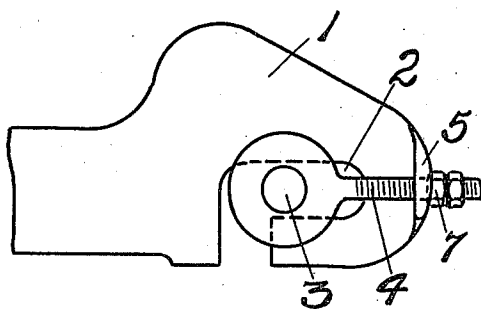


FIG. 1.



FIG. 2.

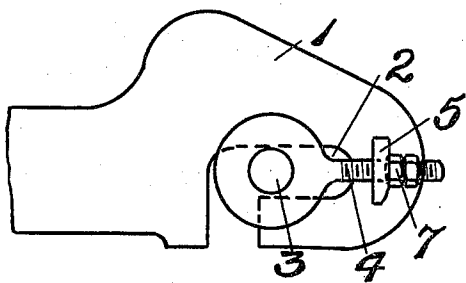


FIG. 3.



FIG. 4.

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CHAIN-ADJUSTMENT DEVICE FOR REAR-WHEEL FITTINGS OF CYCLES.

1,001,971.

Specification of Letters Patent. Patented Aug. 29, 1911.

Application filed June 3, 1911. Serial No. 631,038.

To all whom it may concern:

Be it known that I, CECIL GEORGE McKELLAR, subject of the King of Great Britain, residing at 100 Gloucester street, Christchurch, in the Province of Canterbury and Dominion of New Zealand, have invented new and useful Improvements in Chain-Adjustment Devices for Rear-Wheel Fittings of Cycles, of which the following is a specification.

This invention relates to the rear wheel fittings of cycle frames and to that type in which the extremities of the rear axle are arranged within longitudinal slots so as to permit of a certain amount of movement therein for chain adjustment purposes.

The object of the present invention is to provide a fitting of this kind with means whereby the necessary backward movement of the axle within the slots may be effected by the use of a simple eye-bolt, while the arrangement is such that the axle may be unshipped and replaced in the frame without interfering with the setting of the nuts of the eye-bolt.

With this object in view, the construction comprises briefly a suitable projection or lug arranged upon the fitting in rear of the slot and extending at right angles to the face of such fitting. The said lug is formed with a downwardly opening slot, adapted to receive the shank of the eye-bolt which is inserted through the opening and drawn upward into place, the tightening being effected by means of the nuts which are adapted to bear against the rear face of the lug.

In order that the nature of the invention and its construction may be fully understood, reference will now be made to the accompanying sheet of drawings in which.

Figure 1.— is a side elevation of a fitting showing one method of carrying out the invention, Fig. 2.— is an end elevation of the same, Fig. 3.— is a similar view of Fig. 1, illustrating an alternative therefor, and Fig. 4.— is an end elevation of the same.

1 is the fitting arranged upon the rear forks of the cycle frame and provided with the usual longitudinal slot 2 to receive the axle 3.

4 is an eye-bolt adapted to embrace the axle 3 and having its screwed shank extending rearwardly.

In order to enable the axle to be drawn back so as to tighten the chain by means of the eye-bolt, a lug 5 having a downwardly

opening slot 6 to receive the shank of the eye-bolt is arranged upon the fitting 1 in rear of the slot 2 and projecting at right angles to the face of such fitting. The lug 5 may be formed in a variety of different ways, as for instance in the form shown in Fig. 1, such lug is provided by stamping the fitting 1 with a suitable rearward extension which is then bent around at right angles as shown.

In the modification shown in Figs. 3 and 4 the lug may be either pressed integral with the fitting 1 or it may be attached thereto by any convenient method such as riveting, brazing, etc.

The operation of the device is as follows:—The shank of the eye-bolt 4 is drawn upward within the slot 6 of the lug 5 and the nuts 7 on the outer end of the eye-bolt are screwed up against the rear face of the lug 5 until the desired degree of chain tension is provided. In order to hold the nuts in place the upper portion of the slot 6 is slightly recessed or countersunk upon the rear side and the nut is formed with a coinciding projection upon its forward face. It will also be noticed that the rearward face of the lug 5 is somewhat curved toward its lower end in order to permit of the nuts sliding easily over such face when the shank is being drawn up into the slot 6. Thus it will be seen that when used in conjunction with a fitting of the type shown having a slot 2 with its entrance arranged beneath and at the forward end, the rear wheel may be unshipped by loosening the axle nuts and then pressing the shank of the eye-bolt downward to clear the slot 6 without disturbing the nuts 7.

I claim.

1. In a device of the class indicated the combination of a fitting arranged upon the back forks of a cycle frame and having a slot with its entrance at its forward end and which receives the rear axle and allows of longitudinal movement therein, an eye-bolt adapted to effect the backward movement of said axle within its slot and a lug formed integral with said fitting in rear of the slot and adapted to receive the shank of said eye-bolt and provide a surface against which to tighten the nuts, substantially as and for the purpose set forth.

2. In a device of the class indicated the combination of a fitting arranged upon the back forks of a cycle frame and having a

slot with its entrance at the forward end and which receives the rear axle and allows of longitudinal movement therein, an eye-bolt adapted to effect the backward movement of
5 said axle within its slot and a lug secured upon said fitting in rear of the slot and adapted to receive the shank of said eye-bolt and provide a surface against which to
10 tighten the nuts, substantially as and for the purpose set forth.

3. In a device of the class indicated the combination of a fitting arranged upon the back forks of a cycle frame and having a
15 slot with its entrance at the forward end and which receives the rear axle and allows of longitudinal movement therein, an eye-bolt adapted to effect the backward movement of
said axle within its slot and a lug arranged
20 upon said fitting in rear of its slot, said lug being formed with a downwardly opening slot to receive the shank of said eye-bolt, substantially as and for the purpose set forth.

4. In a device of the class indicated the combination of a fitting arranged upon the
25 back forks of a cycle frame and having a slot with its entrance at the forward end and which receives the rear axle and allows of longitudinal movement therein, an eye-
30 bolt adapted to effect the backward movement of said axle within its slot and a lug arranged upon said fitting in rear of the slot, said lug being formed with a down-
wardly opening slot to receive the shank of
35 said eye-bolt, the upper portion of said slot on the rearward side being countersunk to receive the corresponding projection on the forward side of the nut, substantially as
and for the purpose set forth.

In testimony whereof I have signed my
40 name to this specification in the presence of two subscribing witnesses.

CECIL GEORGE McKELLAR.

Witnesses:

PERCY RICHMOND CLIMIE,
CYRIL CASLYON COATES.

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