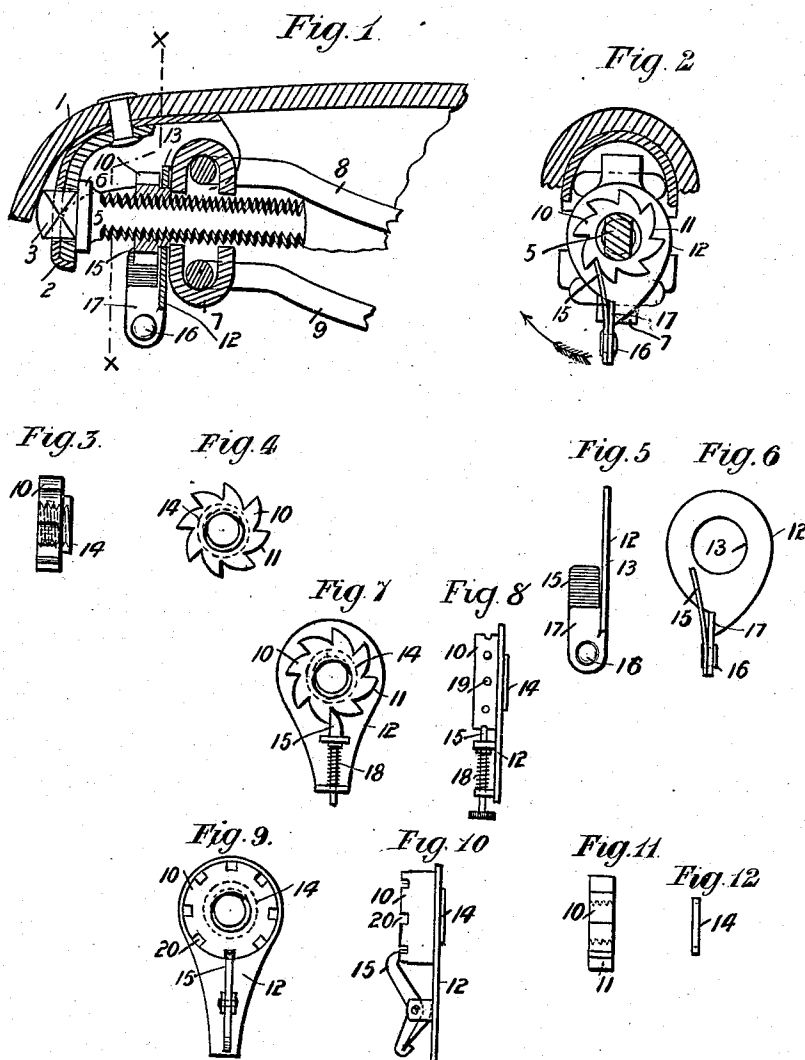


942,363.

T. BETTNEY.
CYCLE SADDLE.
APPLICATION FILED MAR. 13, 1909.

Patented Dec. 7, 1909.



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THOMAS BETTNEY, OF BIRMINGHAM, ENGLAND.

CYCLE-SADDLE.

942,363.

Specification of Letters Patent.

Patented Dec. 7, 1909.

Application filed March 13, 1909. Serial No. 483,255.

To all whom it may concern:

Be it known that I, THOMAS BETTNEY, a subject of His Majesty the King of Great Britain and Ireland, and resident of 14 Albert road, Handsworth, Birmingham, England, commercial traveler, have invented new and useful Improvements in Cycle-Saddles, of which the following is a specification.

This invention has reference to saddles for bicycles and other cycles and consists of improved means for tensioning or tightening the leather top part of the saddle between the tensioning pin at one end of the saddle spring or frame and the cantle or back plate at the other end without it being necessary to use a spanner.

According to this invention the tension nut of the saddle is constructed like a ratchet wheel or its equivalent arranged to be worked by a lever which is combined with the said nut and is mounted to turn around the tension pin as a center this lever having attached to it a pawl or its equivalent to engage with the ratchet wheel to turn the same to tension up the saddle, means being provided for preventing the lever from being bound between the nut and the tension plate of the saddle frame. Thus in order to turn the nut to tighten up the tension screw it is only necessary to rock the lever to and fro, as when moved in one direction the pawl or the like engages with the ratchet nut and turns the same and then the lever can be moved in the opposite direction for the pawl or the like to engage with another part of the nut ready for another forward movement.

My invention is illustrated by the accompanying drawings on which—

Figure 1 is a sectional side elevation of the fore part of a cycle saddle with the tension nut on the tension screw constructed and arranged with its operating lever in accordance with this invention; Fig. 2 is a cross sectional elevation taken on line X X of Fig. 1; Fig. 3 is a side elevation and Fig. 4 is a front elevation of the ratchet nut detached; Fig. 5 shows in side elevation and Fig. 6 in front elevation the lever of the nut separately therefrom; Fig. 7 is a front elevation of the ratchet nut and lever with a modified form of ratchet; Fig. 8 is a side elevation of the nut and lever illustrating a further modification; Fig. 9 is a front elevation; Fig. 10 is a side elevation of a fur-

ther modification of my invention; Fig. 11 is a side elevation of a modified form of the ratchet wheel like nut and Fig. 12 is a side elevation of the boss part of the same separately.

1 is the front part of the leather seat of a cycle saddle; 2 is the usual metal nose which is riveted to the underside of the said leather front part and is made with a square hole 3 for the corresponding shaped head 4 of the tension pin 5 to engage with, the said pin having a collar 6 which fits against the face of the nose piece 2; 7 is the tension plate which is connected to the springs 8, 9 of the saddle underframe. All these parts are of the usual construction and form no part of my invention.

10 is the tension screw nut which I make like a ratchet wheel and which is tapped internally to fit on the tension screw 5 and has ratchet teeth 11 around its periphery, 12 is the lever for turning the nut 10 and this lever 12 is made with an eye at 13 of the proper size to fit and turn freely on a boss 14 which is formed on that face of the nut 10 which is next to the tension plate 7. The depth of this boss 14 is somewhat greater than the thickness of the lever 12 so that the latter will not be bound between the face of the nut 10 and the face of the tension plate 7.

15 is the ratchet which can conveniently be made as in Figs. 2, 5 and 6 as a spring tongue riveted at 16 to the front projecting part 17 of the lever.

When the lever is turned through a small angle in the direction indicated by the arrow in Fig. 2 the ratchet wheel like nut 10 will be turned on the tension screw 5 so as to tighten up the leather top part 1 of the saddle and when the lever is turned in the opposite direction the ratchet 15 will ride over the ratchet teeth 11 of the wheel like nut and engage with another tooth ready for the next forward movement of the lever 12.

It will be evident that the nut 10 and the ratchet or its equivalent which is carried by the lever 12 can be constructed in various ways without departing from the nature of my invention. For instance as shown by Fig. 7 the pawl or ratchet 15 may be mounted on the lever 12 so as to slide along the same and be pressed inwardly by the coiled spring 18 which is carried on the shank of the pawl. Or as shown in Fig. 8 the wheel like nut 10 may have a series of holes 19

made in its periphery for the spring pawl or ratchet 15 to engage in; or as shown in Figs. 9 and 10 these holes may take the form of notches 20 formed in the face of the wheel like nut 10 for the ratchet or pawl or lever 15 to engage in.

If desired, instead of the tension nut 10 having the boss 14 formed on one face of it for the lever 12 to turn on, said boss 14 may, as shown in Figs. 11 and 12 be made as a separate washer somewhat thicker than the lever 12 and of the proper diameter for the lever 12 to turn on.

What I claim as my invention and desire to secure by Letters Patent is:—

1. In a cycle saddle the combination with the leather top tensioning screw of a nut mounted thereon and made like a ratchet wheel and a lever carried by said screw and furnished with a pawl and adapted to engage with and turn the nut to tighten up the

said leather top part, substantially as set forth.

2. In a cycle saddle, the combination with a leather top tensioning screw and tension plate, of a nut mounted on said screw and made like a ratchet wheel, a washer situated between the saddle tension plate and said nut, and a lever having a pawl and mounted to revolve on said washer and being adapted to engage with and turn the nut to tighten up the leather top part, said washer being slightly thicker than the lever so as to enable the latter to turn freely.

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

THOMAS BETTNEY.

Witnesses:

CHARLES BOSWORTH KETLEY,
THOMAS JOHN ROWE.