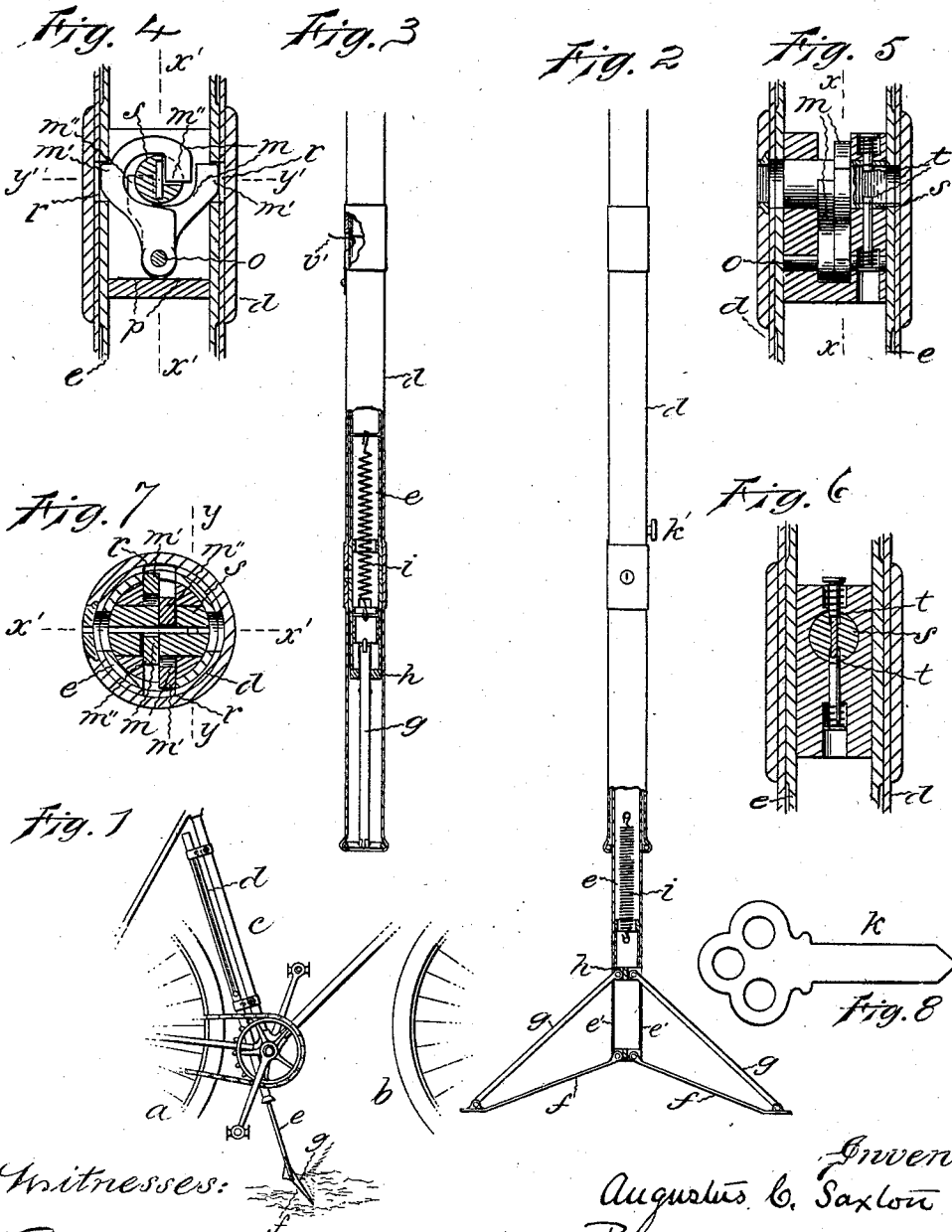


(No Model.)

A. C. SAXTON.
LOCKING BICYCLE SUPPORT.

No. 566,023.

Patented Aug. 18, 1896.



Witnesses:
Andrew Ferguson
W. Williams

Inventor:
Augustus C. Saxton
By W. E. Simonds
Atty.

UNITED STATES PATENT OFFICE.

AUGUSTUS C. SAXTON, OF BETHEL, CONNECTICUT, ASSIGNOR OF TWO-THIRDS TO GEORGE A. KINNER, OF SAME PLACE, AND WILLIAM E. TEMPLE, OF DANBURY, CONNECTICUT.

LOCKING BICYCLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 566,023, dated August 18, 1896.

Application filed December 6, 1895. Serial No. 571,264. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS C. SAXTON, a citizen of the United States of America, residing at Bethel, in the county of Fairfield and State of Connecticut, have invented a certain new and useful Improvement in Locking Bicycle-Supports, of which the following is a description, reference being had to the accompanying drawings, wherein—

Figure 1 is a side elevation view of a bicycle bearing said improvement. Fig. 2 is a detail view of the tube and adjacent parts which more immediately constitute the support with the supporting-fingers laterally extended for use. The plane of the part which is in section (the part at the bottom) is practically at right angles to the plane which includes the axis of the two bicycle-wheels. Fig. 3 is a detail view of the parts which are shown in Fig. 2 with the supporting-fingers closed or shut. The section of this view is at right angles to the section of Fig. 2. Fig. 4 is a detail view, on an enlarged scale, in central vertical section, (in the main,) of the parts of the lock. The plane of the section in this view is denoted by the dotted line xx of Fig. 5. Fig. 5 is a detail view, on an enlarged scale, in central vertical section, (in the main,) of the parts of the lock, the plane of the section being denoted by the dotted line $x'x'$ of Figs. 4 and 7. Fig. 6 is a detail view, on an enlarged scale, in central vertical section, (in the main,) of the parts of the lock, the plane of the section being denoted by the dotted line yy of Fig. 7. Fig. 7 is a detail view, on an enlarged scale, of the parts of the lock in horizontal cross-section on the plane denoted by the dotted line $y'y'$ of Fig. 4. Fig. 8 is a view of the key. The object of the improvement is the production of a device forming a part of a bicycle, which may be either made as a part of the original construction of the machine or separately and attached afterward, and the purpose of the device is to afford a support to keep the bicycle in an erect and locked position when not in use.

In the accompanying drawings the letters a b denote the ordinary bicycle-wheels, and c denotes the bicycle-frame as a whole.

The letter d denotes a tube, which is shown in Fig. 1 as clamped to a nearly-upright part of the frame; but obviously the tube and that part of the upright might be made as one and the same piece in the original construction of the machine. The tube d contains within it the sliding hollow rod e . To the lower end of this sliding rod e there are hinged two lower-extending fingers f .

The letter g denotes two upper-extending fingers, which at the outer ends are pivotally connected to the fingers f and at the inner ends are practically pivotally connected to each other through the medium of the sliding block h . This sliding block has two side ears traveling in slots or mortises e' , made through the wall of the sliding hollow rod e . In Fig. 3 the sliding block h is at the top of its play.

The letter i denotes a spring taking hold of the sliding block h and exerting a constant tendency to pull the inner connected ends of the fingers g upward, and when permitted to do this, so as to raise the block h to the top of its play, (relative to rod e), as shown in Fig. 2, the fingers f and g are extended, as shown in Figs. 1 and 2, for the purpose of supporting the entire bicycle in upright position.

In Figs. 1 and 2, when the supporting device is adjusted for holding the bicycle in upright position, the sliding hollow rod e is at the bottom of its permissible reciprocation and the ends of the extended fingers f are in contact with the ground. When the bicyclist is about to mount and use his machine, he, by means shortly to be described, pulls the sliding hollow rod e upward, bringing the arms g in contact with the lower end of the tube and folding the arms f and g together, as shown in Fig. 3, and as the rod e takes its further course upward these closed fingers are drawn upward in their closed position into the tube d . When the bicyclist would again adjust this supporting device for use, he moves the rod e downward, projecting the fingers f and g from the bottom of the tube d , when the spring i exerts its function and throws these fingers outward in their extended position, as represented in Figs. 1 and

2. The spring-catch *v'* holds the rod *e*, when desired, at the top of its reciprocating play.

The bicyclist can move the rod *e* upward and downward by taking hold of the ring on the outward end of the key *k*, which is a removable part of the lock now to be described.

The letters *m* denote the two tumblers of the lock hung on a pivot *o*, set within rod *e*, and pressed outward by springs *p*. When matters are as shown in Fig. 4, these springs press and lock the bolts *m'*, which are parts of the tumblers *m*, into the lock-sockets *r* in tube *d*. This happens when the rod *e* is down and the fingers *f* and *g* are extended, as shown in Figs. 1 and 2.

The letter *s* denotes the rotary key-shaft of the lock, which, in the main, is solid, but is mortised on the sides to permit the lugs *m''* on tumblers *m* to take the position shown in Fig. 4.

The letters *t* denote two spring-pressed dogs, which, when matters are as shown in Figs. 4 and 5, push into corresponding sockets in the key-shaft and hold it from rotation. When the key *k* is inserted, it forces these dogs outward, leaving the key-shaft free to rotate. Then, on turning the key, it strikes the lugs

m'' and moves the bolts *m'* inward, out of mesh with the lock-sockets, and putting the lock into its "unlocked" adjustment.

I claim as my improvement—

1. In combination, the bicycle-wheels *a b*, the bicycle-frame *c*, the tube *d*, the hollow and sliding rod *e*, the extensible fingers *f* hinged to said sliding rod, the extensible fingers *g* hinged together and also to said fingers *f*, and the spring *i*, all substantially as described and for the purposes set forth.

2. In combination, the bicycle-wheels *a b*, the bicycle-frame *c*, the tube *d*, the sliding rod *e*, the extensible fingers *ff gg*, the spring *i*, and the lock for locking together tube *d* and rod *e*, all substantially as described and for the purposes set forth.

3. In combination, tube *d* provided with the lock-sockets, the hollow sliding rod *e*, tumblers and tumbler parts *m m' m''*, and the rotary key-shaft *s*, all substantially as described and for the purposes set forth.

AUGUSTUS C. SAXTON.

Witnesses:

ALSON H. HOWES,
EUGENE C. DEMPSEY.