(No Model.)

H. A. CAIN.

WATCH HOLDER FOR BICYCLES.

No. 465,159. Patented Dec. 15, 1891.

FIG. 1.

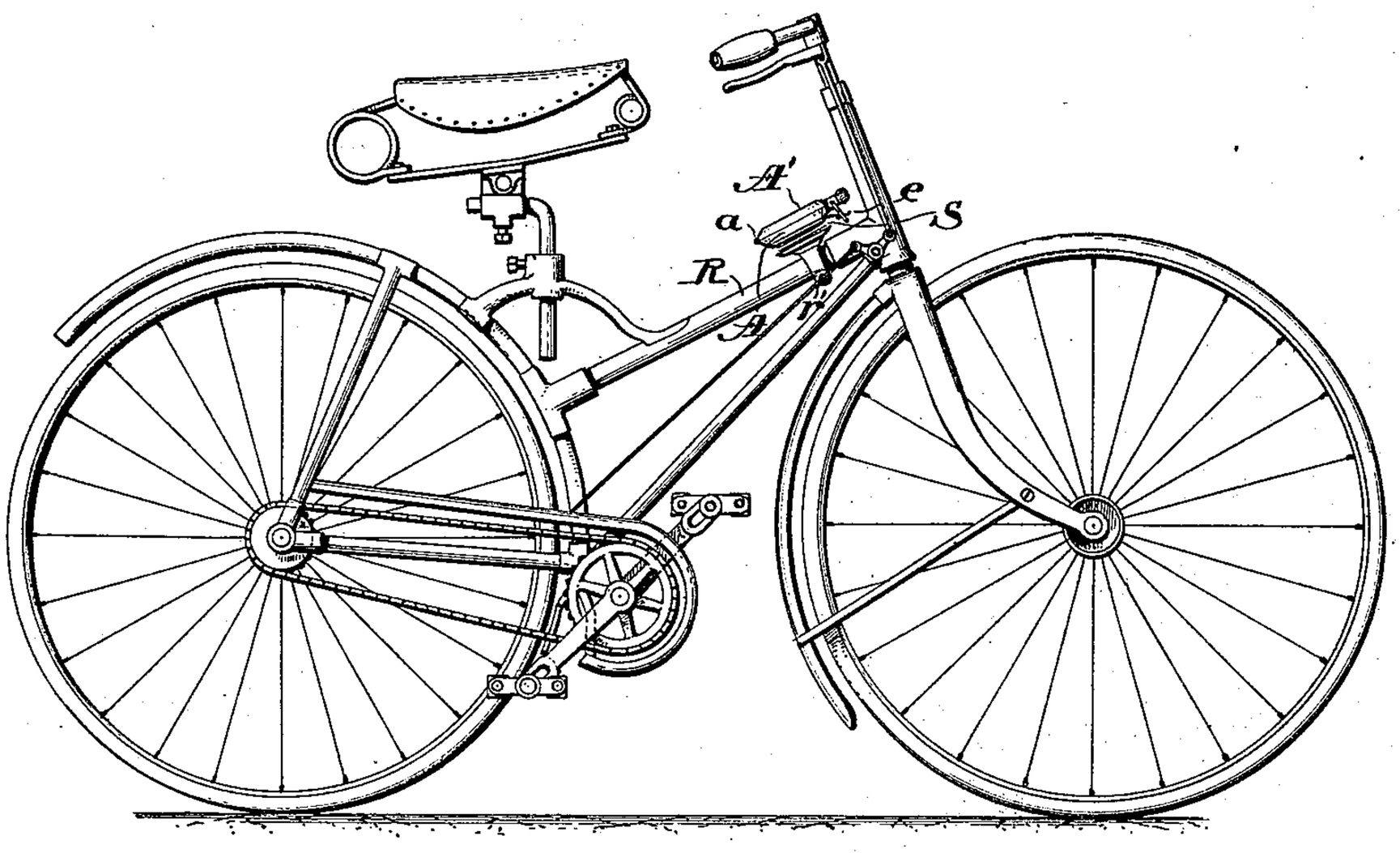


FIG. 2.

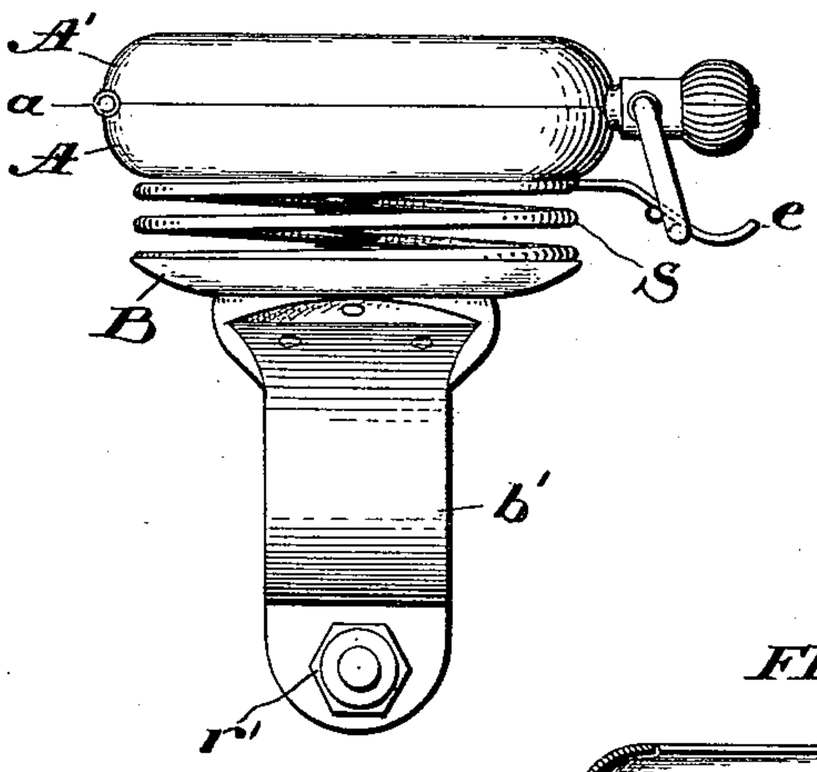


FIG. 3.

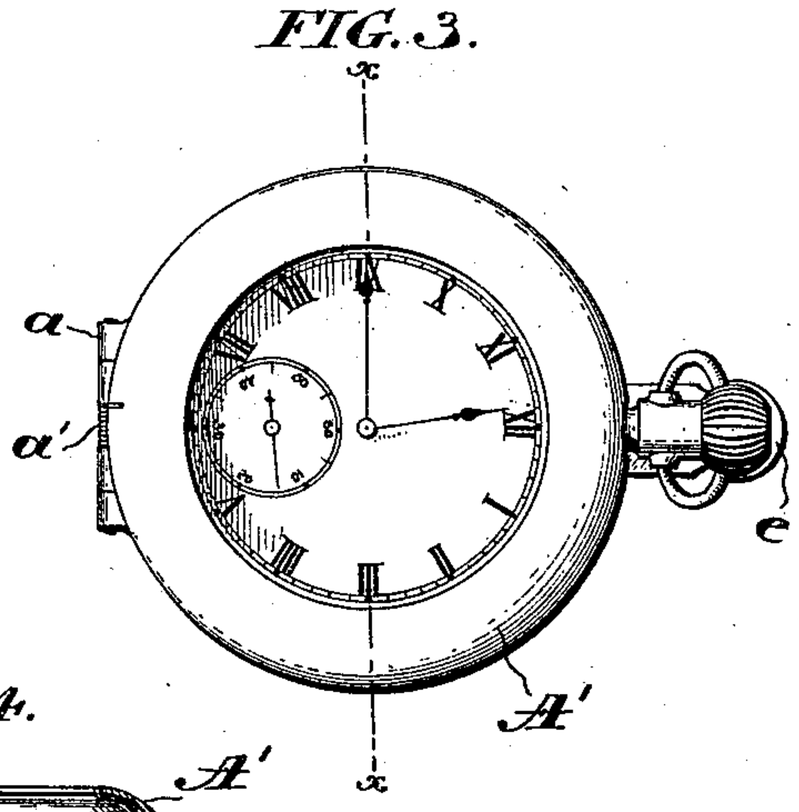
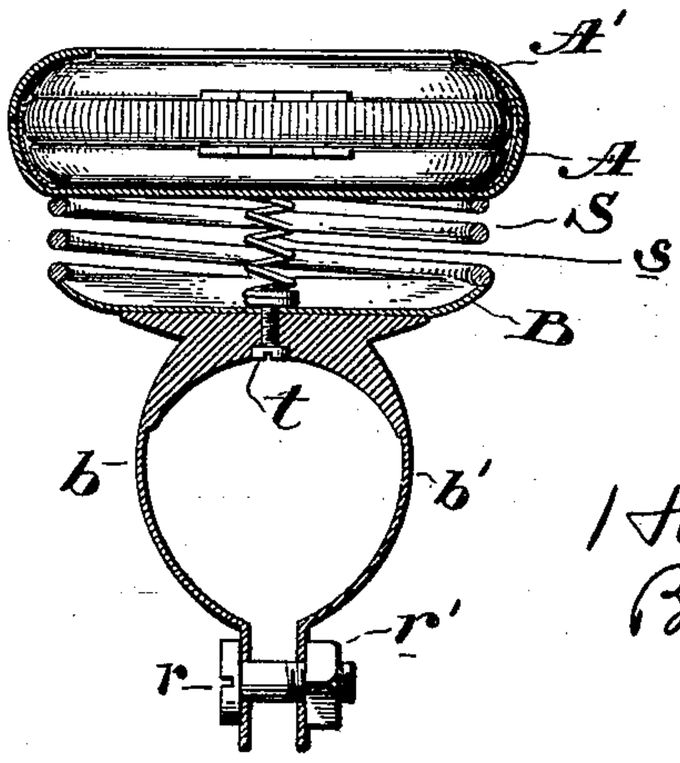


FIG. 4.



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UNITED STATES PATENT OFFICE.

HARRY A. CAIN, OF PHILADELPHIA, PENNSYLVANIA.

WATCH-HOLDER FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 465,159, dated December 15, 1891.

Application filed March 12, 1891. Serial No. 384,840. (No model.)

To all whom it may concern:

Be it known that I, HARRY A. CAIN, of the city of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Watch-Holders for Bicycles; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification.

My invention has relation to devices for securing watches or time-pieces to bicycles and other vehicles; and it consists in the device hereinafter particularly described.

The object of my invention is to provide a neat, compact, and secure holder for securing watches or other time-pieces, which, while holding the time-piece securely in position, will also be of such a construction as will reduce on the watch or time-piece the jar and jolt occasioned by the machine in traveling.

In the accompanying drawings similar letters of reference refer to similar parts throughout.

Figure 1 is a side elevation of a bicycle having my improved holder secured in position thereto. Fig. 2 is a side view of my improved holder containing a watch detached from the machine. Fig. 3 is a plan view of the face of the device with a watch contained therein. Fig. 4 is a sectional view of the device on the line *x x* of Fig. 3.

A represents the case of the holder, provided with a top or lid A′.

B is a cup or base-plate, to which is provided the downwardly-projecting securing-arms *b b′*, adapted to clasp and clamp upon a desirable portion of the frame of the bicycle, such as the rib R, with a screw-bolt *r*, which passes through the lower ends of the arms, provided with a nut *r′*, turning thereon to bind the arms upon the rib. Upon the plate B and intermediate of the bottom of the case A is mounted a short spiral spring S, the diameter of the spring being preferably of about the same diameter as the plate B, the respective ends of which spring are secured firmly to the plate B and underneath the case A, respectively.

In order to regulate the tension of the spiral spring S and to prevent too great vibratory motion being occasioned to the case A, counteracting small spiral spring *s* of an opposite tension is centrally provided within the spiral spring S, the ends of which are secured to the bottom of the case A and to the plate B, respectively, preferably adjustably secured at one end, as by a regulating-screw *t*. The tension of the spring *s* thus may be lessened or increased and the effect of the jar and jolt of the machine on the case A regulated. In the construction I preferably employ spiral springs, as stated, though other springs may be used for producing the desired result.

The lid A′ of the case A is hinged to the case A, as at *a*, and preferably provided with a small spring *a′*, secured to the case and the lid, for holding the lid A′ normally closed.

In the construction shown in the drawings I have described a holder for watches and have provided on the bottom of the case A an outwardly and downwardly projecting spring-tongue *e*, over which the ring of the watch, after having been placed within the case, may pass, and the tension of the tongue *e* holds the same down and the watch firmly in position.

In Fig. 1 I have shown my improved holder secured to the rib R of the bicycle at the extreme front. This is a most convenient position for viewing the time-piece, and is also a preferable position, tending toward the greatest security of the holder and time-piece against accident, as it is here best protected by the lines of the handles and other parts of the machine from contact with objects in the event of the machine falling. Though this is a preferable position, the holder may be adjusted to any other desirable part of the machine.

The case may be of any desired shape, the lid A′ and watch-movement may be secured in any desirable manner, and the holder may be provided with any known device for clamping the same to the machine, though the constructions shown are preferable constructions.

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

1. In a watch-movement holder, a case for containing the movement, a securing device for securing the holder to a bicycle, an intervening spring mounted on the securing device and attached to the holder, a second spring se-

cured to the case, and securing device at its respective ends having a tension opposite to that of the tension of the large spring, substantially as described.

2. In a watch-holder for bicycles, a case for containing the movement, a lower securing device for securing the movement to the bicycle, spring S, secured to the securing device and to the holder-case, and a centrally-located spring *s*, acting in an opposite direction, secured to the said securing device, substantially as described.

3. In a watch-holder for bicycles, a case for containing the movement, a lower securing device for securing the movement to the bicycle, spring S, secured to the securing device and to the holder-case, and a centrally-located small spiral spring *s*, acting in an opposite direction, secured adjustably to the said securing device.

4. In a holder, a case A, having a lid A′, a base-plate B, spiral spring S, located intermediate between said case A, a plate B, smaller spiral spring *s*, centrally located within said spring S, secured to said case and said plate, as described, and securing-arms *b b′*, provided on said plate B, with means for clamping the same to the bicycle, substantially as described.

5. In a holder, a case A, having a lid A′ and spring-tongue *e*, spring S, small spring *s*, said spring secured to said case A and to a plate B between the same, adjusting-screw *t*, arms *b b′*, bolt *r*, and nut *r′*, substantially as described.

In witness whereof I have hereunto set my hand this 10th day of March, A. D. 1891.

HARRY A. CAIN.

Witnesses:
J. BAYARD HENRY,
HORACE PETTIT.