

No. 620,700.

Patented Mar. 7, 1899.

M. F. CUNNINGHAM.
BICYCLE LOCK.

(Application filed Nov. 8, 1898.)

(No Model.)

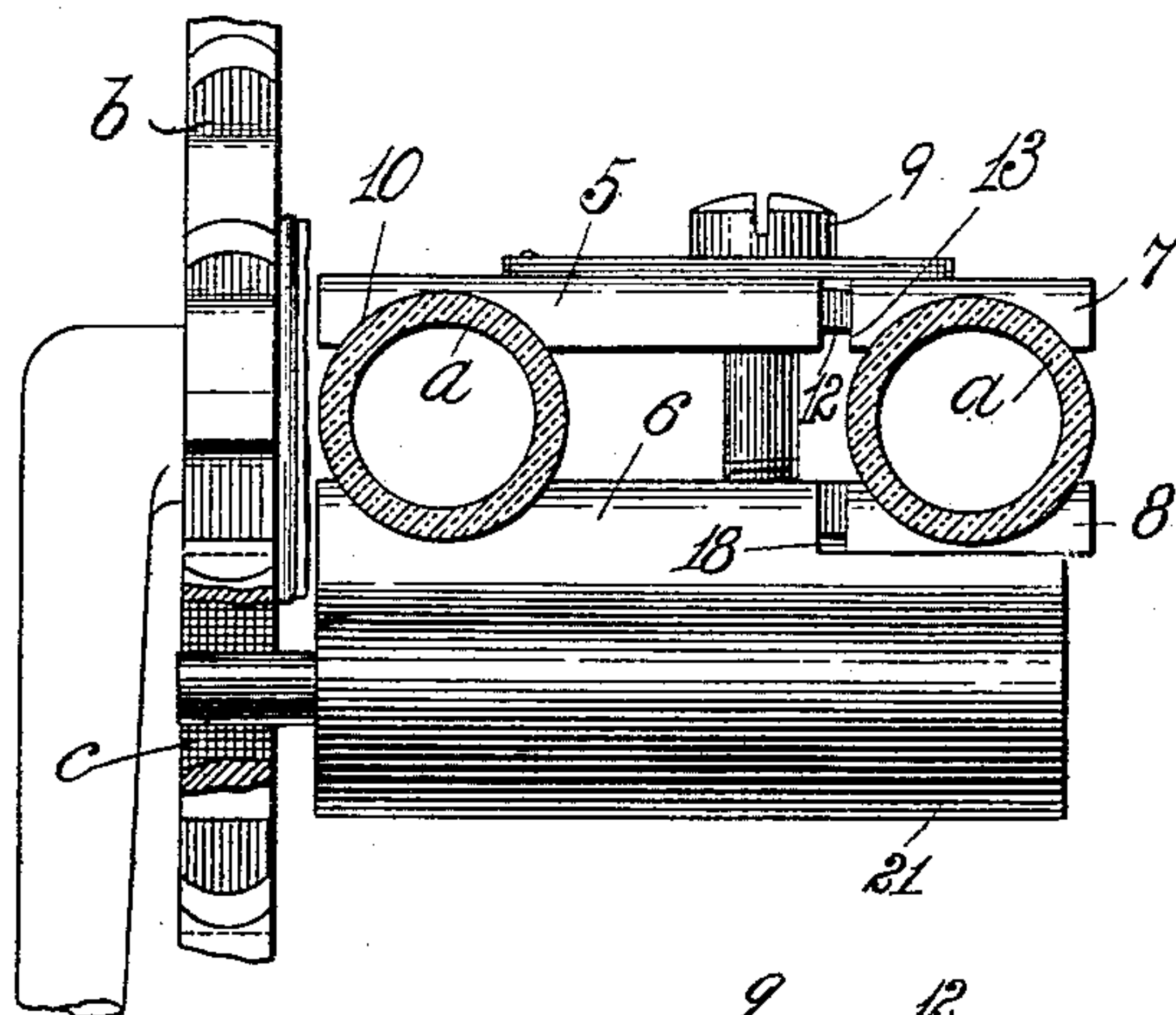


Fig. 1.

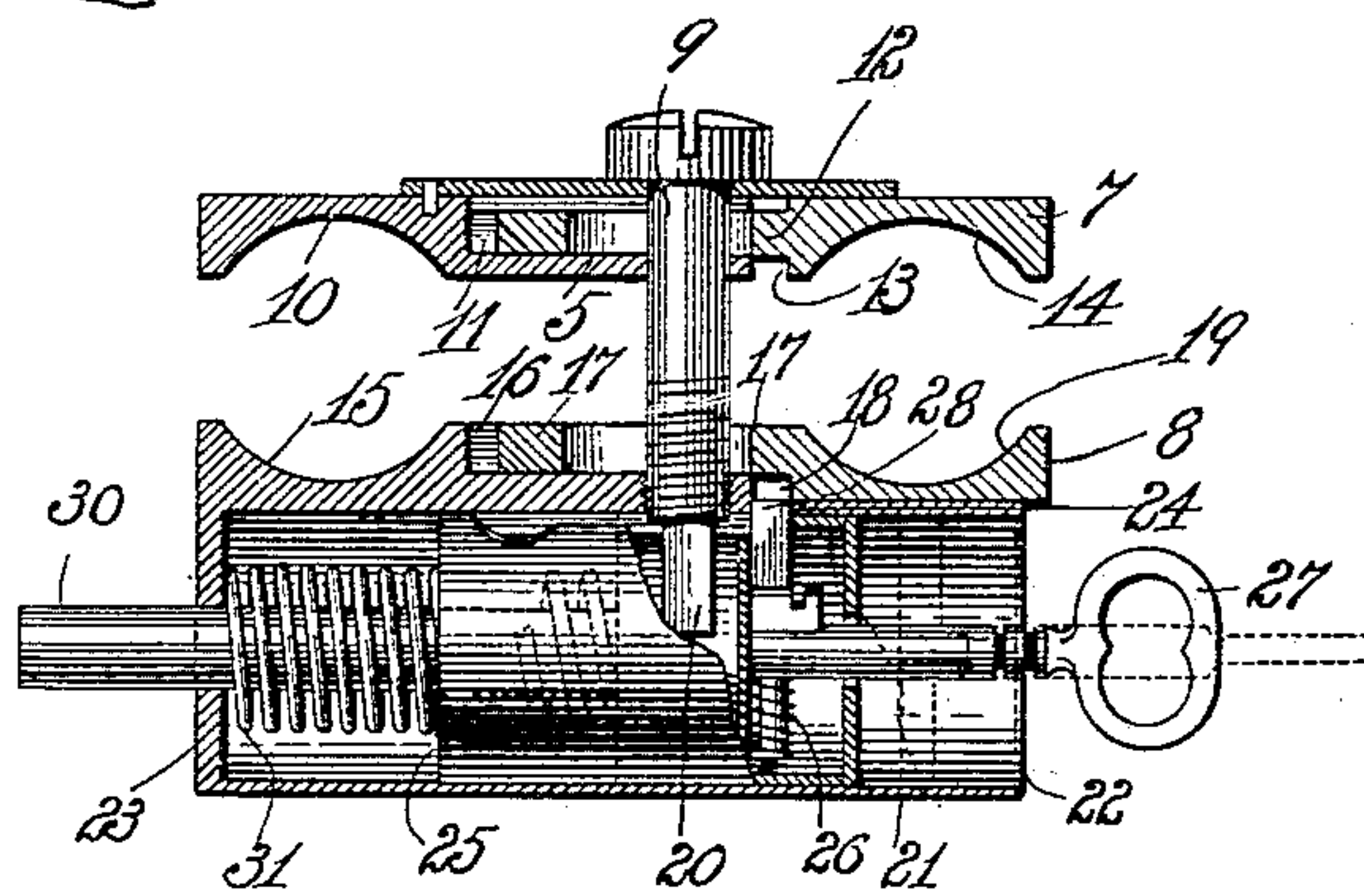


Fig. 2.

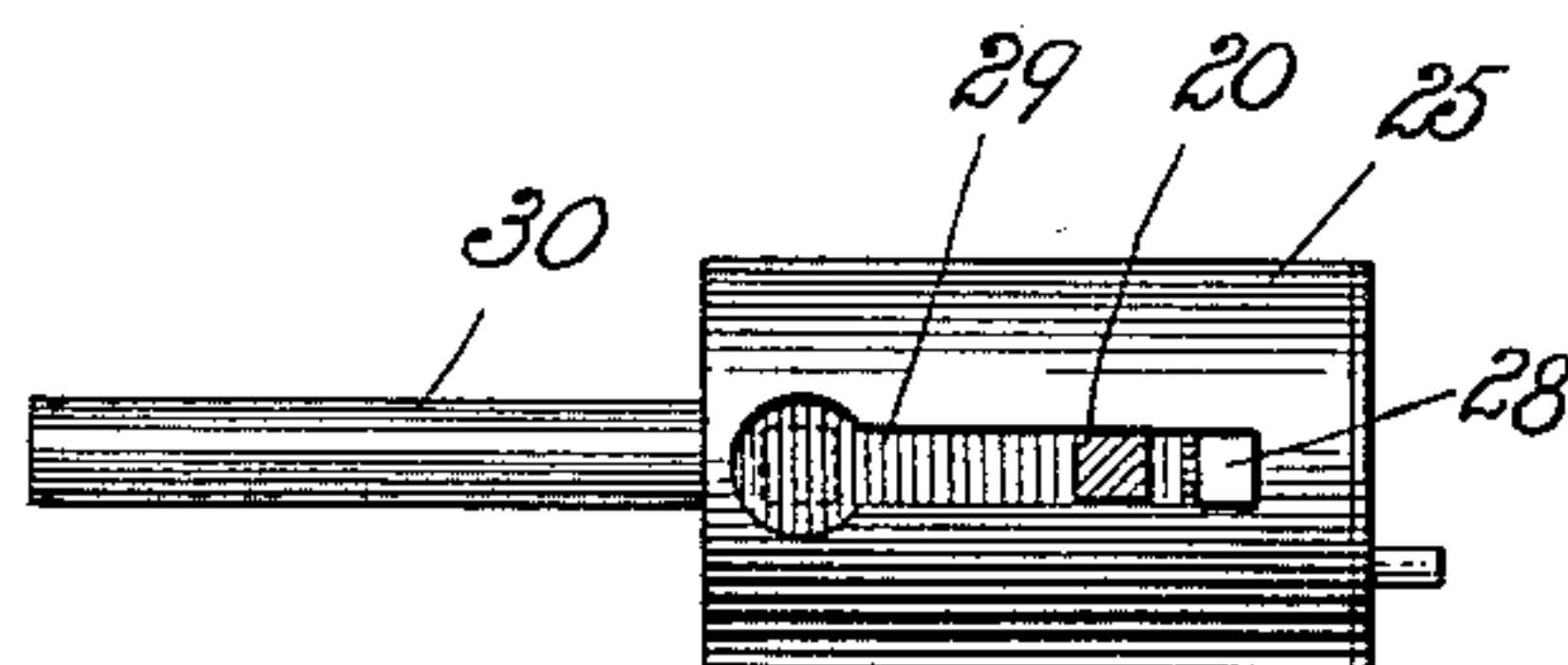


Fig. 3.

WITNESSES.

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BICYCLE-LOCK.

SPECIFICATION forming part of Letters Patent No. 620,700, dated March 7, 1899.

Application filed November 8, 1898. Serial No. 695,887. (No model.)

To all whom it may concern:

Be it known that I, MATTHIAS F. CUNNINGHAM, of Waltham, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Bicycle-Locks; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

The invention has reference to improvements in devices by means of which a movable part of a bicycle can be locked.

The object of the invention is to improve the construction of the lock with reference to the engagement of the clamping-bolt by the locking mechanism.

The invention consists in certain features of construction and combination of parts whereby the object of the invention is carried into effect, as shall hereinafter be more fully described, and pointed out in the claims.

In the drawings, Figure 1 represents a side elevation of the improved lock secured to a bicycle-frame in position to be engaged with the sprocket-wheel, parts of the frame and the sprocket-wheel being shown in section. Fig. 2 represents a vertical sectional view of the improved lock. Fig. 3 represents a plan view of the lock-bolt and member or hollow barrel to more clearly show the means for engaging the clamp-securing device.

Similar numbers of reference designate corresponding parts throughout.

In the drawings, A A represent the two lower braces of a bicycle-frame, which extend rearwardly from the crank-hanger, as is usual in bicycles of well-known construction, and B represents the sprocket-wheel or other rotatable part, usually mounted on the crank-shaft. This sprocket-wheel is generally furnished with openings, as C, which vary in size or shape in the different makes of bicycles.

The lock-clamp comprises the upper member 5 and the lower member 6, with the adjustable portions 7 and 8 and the securing device or screw 9. The upper member 5 is transversely concaved at 10 in its lower surface and in its upper surface has the longitudinal cavity 11 to receive the slotted slide 12 of the portion 7, the inward movement of

this portion being limited by the shoulder 13, while the lower surface of this portion 7 is transversely concaved, as at 14. The lower member 6 is transversely concaved at 15 and has the cavity 16, in which the slotted slide 17 of the portion 8 may move. This portion 8 has the shoulder 18 and the concavity 19.

The clamp-securing device or screw 9 works through a screw-threaded perforation in the members 5 and 6 as well as through the slotted slides 12 and 17. At its upper end this securing device has a head shaped to be engaged by a suitable tool, while its lower end has flat sides, as 20.

The lock-case 21 is formed in part with the lower member 6 and has the open end 22 and the closed end 23, which latter is perforated to allow for the passage of the lock-bolt. In the upper portion of the case is the socket 24 to receive the latch of the locking mechanism. Within the case 21 is reciprocal the barrel member 25, provided with a locking device 26 of any well-known construction, in this instance operated by the key 27 and having the latch 28. This barrel member has the keyhole-slot 29, the circular portion of which is located in the unlocked position to receive the end 20 of the securing device, the elongated portion of this slot 29 being proportioned to engage the flat sides 20 of the screw 9 when the barrel member 21 is pushed inward to prevent the turning of the screw to release the clamping members. From the barrel 25 extends the bolt 30, which passes through the perforation in the case end 23 and may be engaged in the opening C of the sprocket-wheel. Between the case end 23 and the end of the barrel 25 is the coiled spring 31, which exerts an outward pressure on the barrel.

When in place, as shown in the drawings, the barrel 25 can be pushed inward until the latch 28 engages with its socket and the bolt 30 is entered through the opening C in the sprocket, thus locking the sprocket against rotation. The screw 9 now having its end 20 in the narrow portion of the slot 29 cannot be turned to separate the clamping members, and the only means of releasing the same is by the use of a key to disengage the latch 28 from its socket.

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

1. The combination with the casing 21 and
5 a clamping device provided with a screw having a lower square end which extends into said casing, of the barrel 25 having the slot 29 in which the end of the screw is engaged, the bolt 30 secured to said barrel, and a lock-
10 ing mechanism for securing the barrel against reciprocation.

2. The combination with the member 5 having the cavity 11, and the portion 7 having the slotted slide 12 working in said cavity, and
15 the shoulder 13, the member 6 having the cav-

ity 16, the portion 8 having the slotted slide 17 working in said cavity, a lock-casing formed in part with the member 6, and a screw working through perforations in said members, and through the slotted slides 12 and 17 and
20 having an engageable end extending within the casing, of a locking mechanism reciprocally mounted in the casing and adapted to engage the end of the screw when in the locked position.

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Witnesses:

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