

No. 637,267.

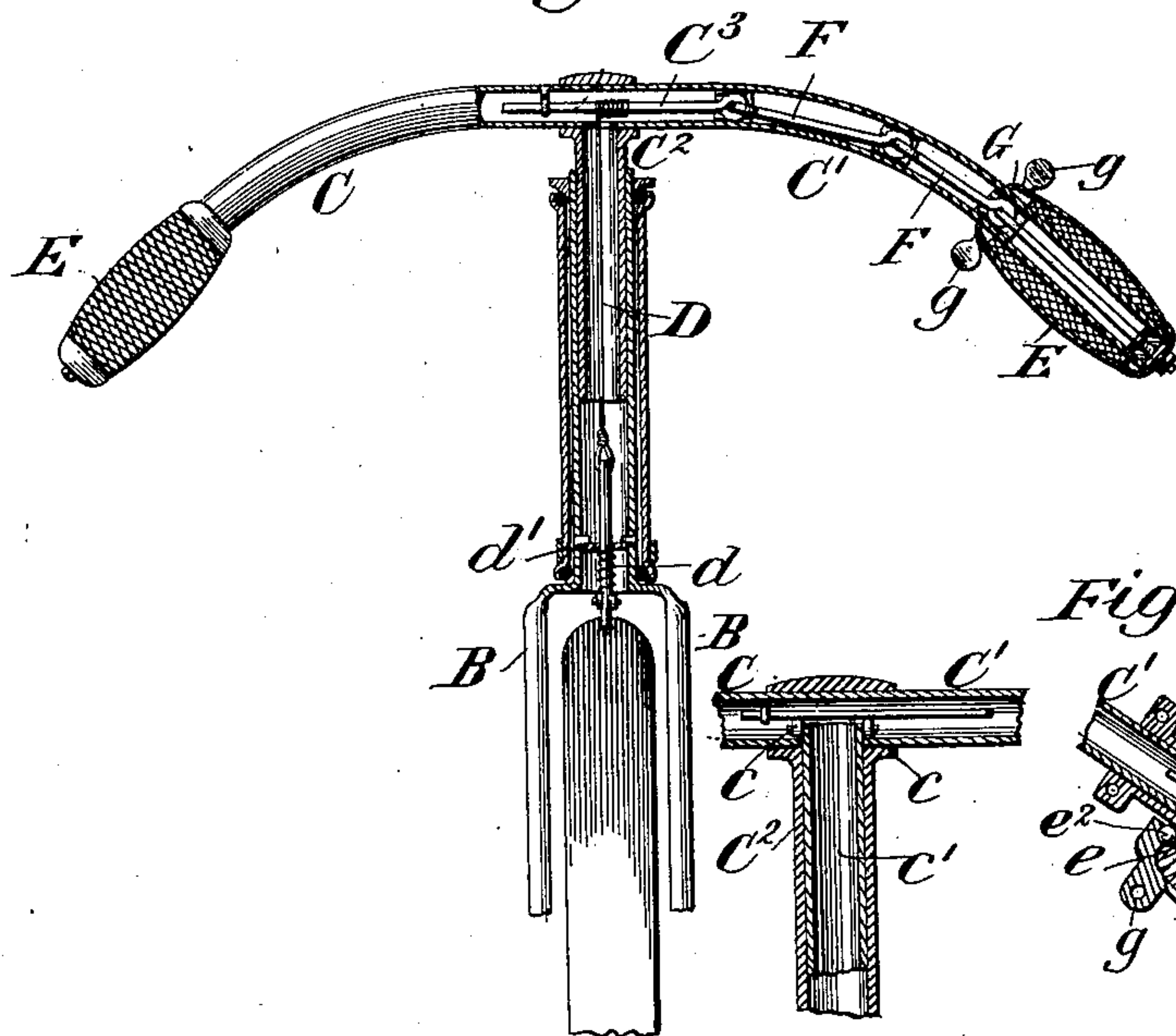
Patented Nov. 21, 1899.

**E. S. LEAYCRAFT.**  
**BICYCLE BRAKE.**

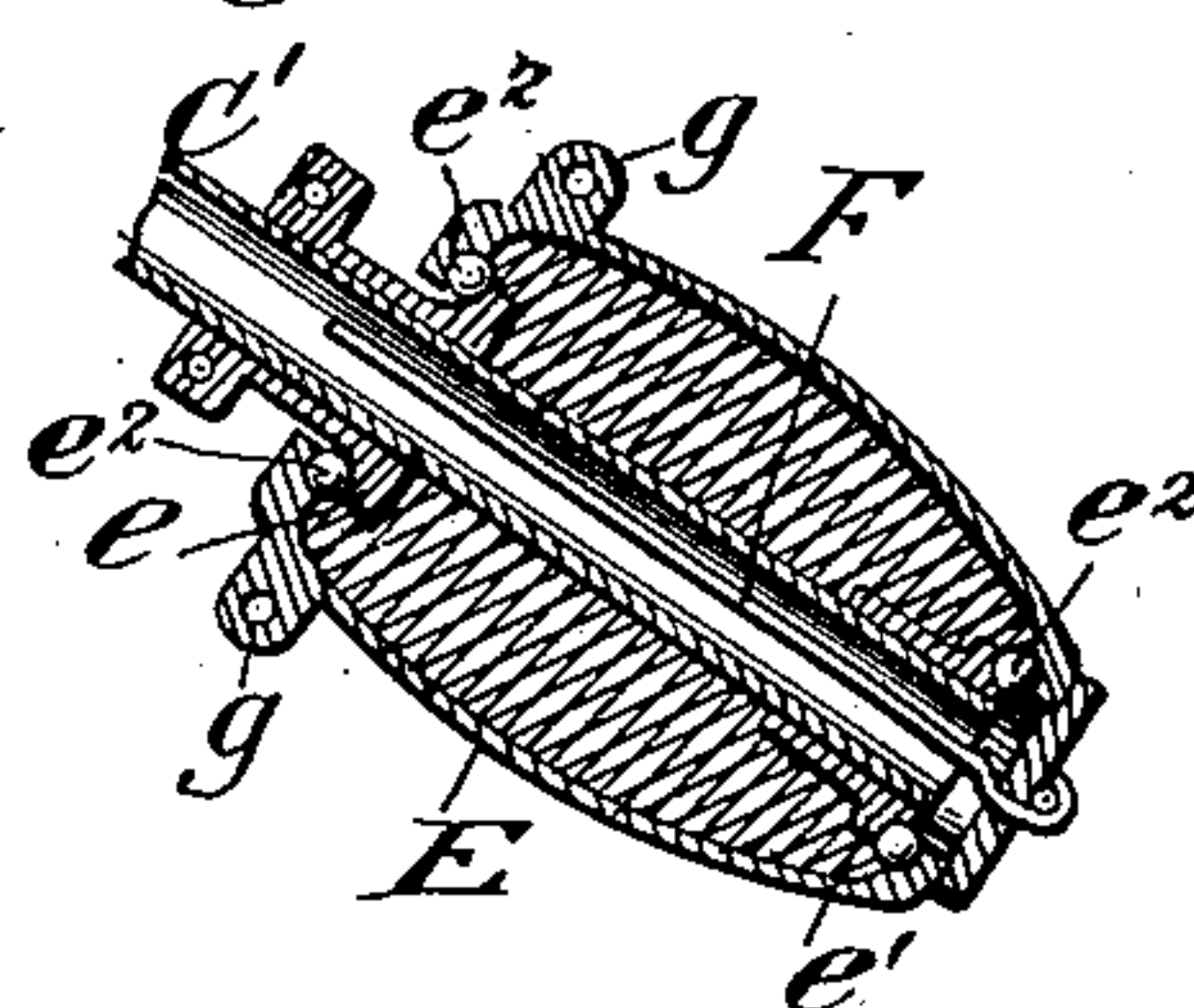
(Application filed July 15, 1895.)

(No Model.)

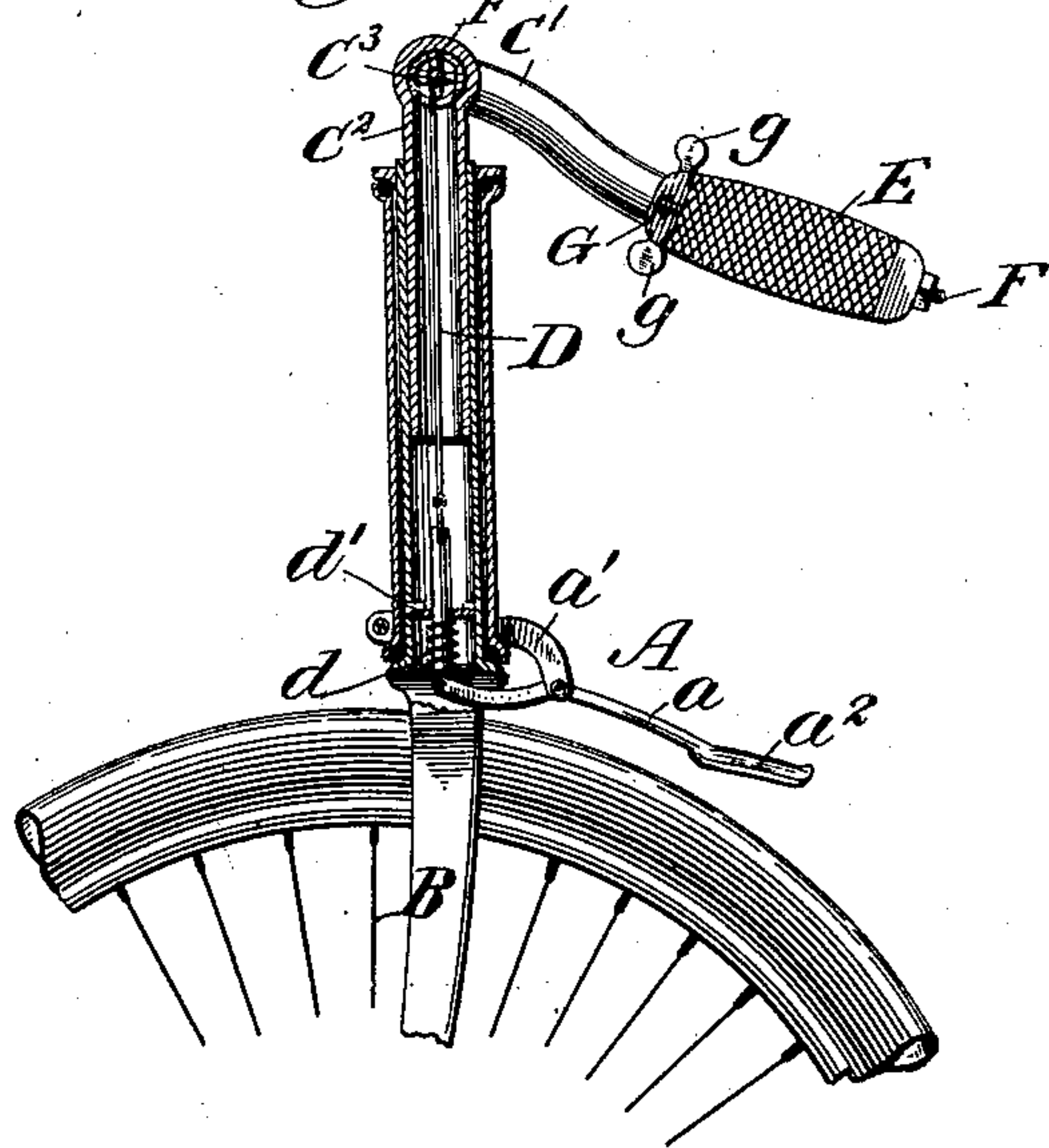
*Fig. 1.*



*Fig. 3.*



*Fig. 2.*



*Witnesses:-*

*O. H. Hayward*  
*Wm. A. Pollock*

*Inventor:*

*Edwin S. Leaycraft,*  
*by his attorney*  
*Edwin H. Brown*



# UNITED STATES PATENT OFFICE.

EDWIN S. LEAYCRAFT, OF JERSEY CITY, NEW JERSEY.

## BICYCLE-BRAKE.

SPECIFICATION forming part of Letters Patent No. 637,267, dated November 21, 1899.

Application filed July 15, 1895. Serial No. 556,014. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN S. LEAYCRAFT, of Jersey City, in the county of Hudson and State of New Jersey, have invented a certain  
5 new and useful Improvement in Brake Mechanism for Bicycles, of which the following is a specification.

I will describe a brake mechanism for bicycles in which are embodied the features of  
15 my improvement and then point out its novelty in a claim.

In the accompanying drawings, Figure 1 is a front elevation, partially in section, of a brake mechanism embodying my improvement applied to a bicycle, the plane of the  
20 section being that of the center line of the handle-bar of the bicycle. Fig. 2 is a side elevation of the same, partially in section, the plane of the section being substantially at right angles to the plane of the section represented by Fig. 1, certain portions in both  
25 figures unessential to my improvement being omitted. Fig. 3 is an enlarged sectional view of the end and middle portions of the bicycle handle-bar.

Corresponding letters represent corresponding parts in all the figures.

A is the brake proper. It is shown in the present instance to consist of a lever *a*, pivoted intermediate of its ends to a bracket *a'*,  
30 secured to the upper shank of the front fork B of the bicycle. The outer end *a*<sup>2</sup> of the lever is spoon-shaped or curved to conform to the periphery of the wheel.

35 C C' are the handle-bars of the bicycle, consisting, as usual, of a tube or tubes. Within the handle-bars, above the central opening through the handle-bar stem C<sup>2</sup> extending therefrom, there is rotatively mounted a rod or  
40 drum C<sup>3</sup>. It may be mounted upon rollers *c*, supported at the upper extremity of a tube *c'*.

D is a connection extending between and attached to the lever *a* and the drum C<sup>3</sup>. This connection will comprise a flexible portion adjacent the drum C<sup>3</sup>, whereby the connection may be wound upon the drum and the brake applied to the wheel. A spring *d*  
45 is shown interposed between the lever *a* and a fixed shoulder or plate *d'* to normally depress the inner end of the lever and disengage the brake.

50 E is a movable part fitted to the brake-handle,

that it may be moved relatively thereto by a properly-applied force. In the present instance this movable part E consists of the  
55 handle rotatively mounted upon its handle-bar. I contemplate supporting this handle upon ball-bearings upon the handle-bar, grooved collars *e e'* being secured to the latter. The grooves in the collars are provided  
60 with balls *e*<sup>2</sup>, against which the handle at opposite ends impinges. A series of links is designated by the letter F, extending from the handle to the drum C<sup>3</sup>, for transferring a movement of the former to the latter. The  
65 connections between the several links may consist simply of eyes formed upon the extremities of the link, adjacent eyes embracing each other. Preferably cloth or other  
70 flexible material will be wound about the articulations of the links to prevent an excess of undesirable lateral movement.

A clamp G, having diametrically opposite ears or thumb-pieces *g g*, may be provided upon the handle to assist in its rotation.  
75 Preferably I will form the handle of metal or other rigid material and provide the same with openings or apertures *g'*. I may so dispose these openings and their form that the handle shall present a reticulated appearance. This construction of a bicycle-handle  
80 is especially desirable, since it offers a certainty of grip not offered by a smooth handle and is yet free from liability to become clogged or defaced by dirt.

85 Having described my invention, what I consider as new, and desire to secure by Letters Patent, is—

A bicycle-brake, comprising a braking plate or piece, a carrying-rod therefor extending up  
90 through the head-piece and into the handle-bar thereof, a grip movable on the handle-bar, a shaft seated within the handle-bar adapted to be rotated by the movement of the grip, and connections between said shaft and  
95 the brake-rod whereby the latter is reciprocated by the rotation of the shaft.

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

EDWIN S. LEAYCRAFT.

Witnesses:

JOHN B. BOYD,  
D. D. CAWLEY.