

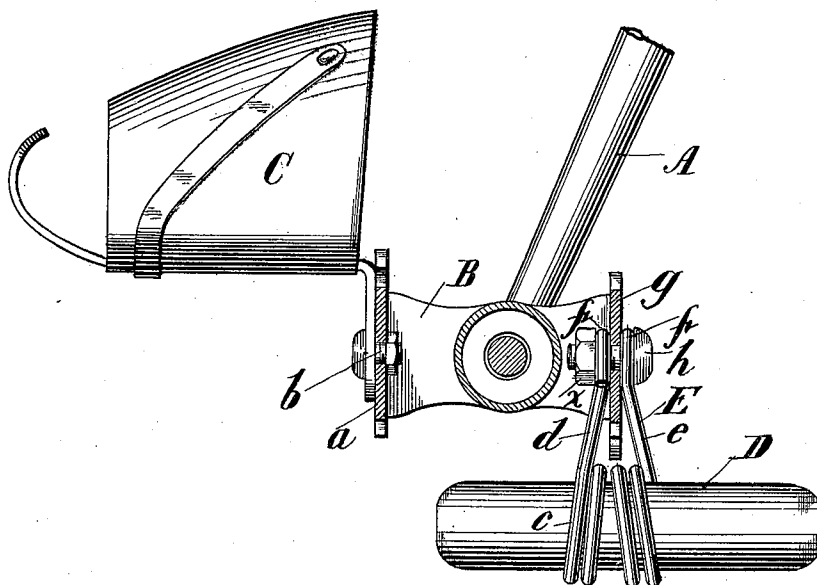
No. 651,084.

J. H. OPPENHEIM, JR.
TOE CLIP BALANCE.

(Application filed Sept. 28, 1898.)

Patented June 5, 1900.

(No Model.)



WITNESSES:

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TOE-CLIP BALANCE.

SPECIFICATION forming part of Letters Patent No. 651,084, dated June 5, 1900.

Application filed September 28, 1898. Serial No. 692,148. (No model.)

To all whom it may concern:

Be it known that I, JULIUS H. OPPENHEIM, Jr., a citizen of the United States, residing in the city of New York, borough of Manhattan, county and State of New York, have invented certain new and useful Improvements in Toe-Clip Balances, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part hereof, and wherein the figure shown is a side view of a toe-clip balance embodying my invention, together with a sufficient number of parts of a cycle to illustrate the application of my improved balance.

The invention relates to toe-clip balances; and the object of said invention is to provide a simple, cheap, and efficient balance which is adapted to be readily attached to cycle-pedals of any ordinary construction now in use and which is capable of being adjusted in order that it may be used to properly balance any of the numerous styles of toe-clips now in common use and maintain the pedals in such position that the toe-clips will be properly presented at all times for the insertion of the rider's toes in place therein.

To these ends my invention consists in the novel construction and arrangement of parts to be hereinafter described and claimed.

In the drawing, A indicates a pedal-crank of a cycle, to which is pivoted in the usual manner a pedal B of any suitable construction. To the forward plate *a* of the pedal is shown secured a toe-clip C, which, as is well understood, is removable from the pedal by a connection such, for instance, as that indicated at *b*. A great variety of toe-clips are now in common use; but no matter what be the construction of the toe-clip employed the weight of it is such that it will normally hang down below the pedal in such a position that access thereto cannot be had until the pedal is turned to substantially the position represented in the drawings. In order that the pedal may be normally maintained in this position, so that the toe-clips are always accessible to the rider, I provide a toe-clip balance which comprises a suitable elongated weight D, that is encircled or otherwise held in place by a clamp E, which in the present instance consists of a wire coil *c*, that terminates in

arms *d e*, each provided with an eye or loop *f*. These arms *d e* may be secured to the rear plate *g* of the pedal by passing a headed bolt *h* through the eyes *f* in the arms and through any of the apertures present in the plate *g* of all rat-trap pedals, when the parts may be secured together by a nut *x*. It will thus be seen that the elongated weight D extends longitudinally at right angles to the axis of the pedal and that as said weight is adjusted longitudinally in one direction or the other the weight will be brought nearer to or conveyed farther away from the axis of rotation of the pedal, and in this way a suitable counterbalance may be provided for any of the various weights or styles of toe-clips that may be employed. The coil *c* has a considerable binding force upon the weight D when the balance is connected to the pedal and maintains the weight against longitudinal movement in the coil. When the weight is to be adjusted, it is merely necessary to disconnect the arms *d e* from the pedal and separate the arms slightly in a direction contrary to that in which the coil is wound, whereupon the pressure exerted upon the weight will be relieved and the weight may be moved through the coil to the desired point. The arms *d e* are again secured to the pedal in the manner hereinbefore described, which will result in the clamp or coil *c* binding upon the weight and preventing longitudinal movement thereof in the coil.

It will be observed that by my invention I am enabled to make a toe-clip balance with an adjustable weight at little expense, the entire structure consisting of two pieces. One of these pieces is the clamp, which is made of a single piece of wire, and the other the elongated weight which coöperates therewith.

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

1. In a toe-clip balance, the combination of a weight and a clamp for said weight, said clamp comprising a wire coil within which the weight is adapted to be adjusted and which coil terminates in arms provided with means for securing them to the pedal, whereby when said clamp is secured in place upon the pedal the arms will be prevented from separating,

thus preventing the coil from releasing its pressure upon the weight.

2. In a toe-clip balance, the combination of a spring-pressed clamp made of a single
5 piece of wire and having means by which it may be secured to a pedal, and an elongated weight held in place frictionally by said clamp

and adapted to be adjusted therein at right angles to the axis of rotation of the pedal.

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Witnesses:

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