## H. C. JACOT.

REGULATING-ATTACHMENTS TO PENDULUM-BALLS.

No. 194,915.

Patented Sept. 4, 1877.

Fig.1.

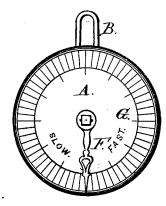
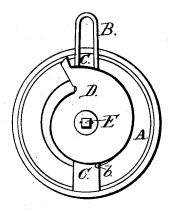


Fig. 2.

Fig. 3



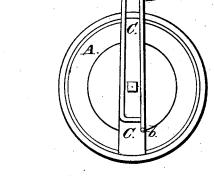
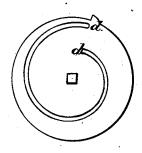


Fig.4.



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Inventor: Heury b. Jacot By Mighthers!

## UNITED STATES PATENT OFFICE.

HENRY C. JACOT, OF ST. LOUIS, MISSOURI.

## IMPROVEMENT IN REGULATING ATTACHMENTS TO PENDULUM-BALLS.

Specification forming part of Letters Patent No. 194,915, dated September 4,1877; application filed July 27, 1877.

To all whom it may concern:

Be it known that I, HENRY C. JACOT, of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Regulating Attachments to Pendulum-Balls, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings form-

ing part of this specification.

My improvement consists in forming the suspending-loop of the ball for adjustment by means of a volute cam, whose arbor carries a hand or indicating-finger, moving over a circular scale upon the face of the bob or ball. The scale is marked with the words "fast" and "slow," to indicate the way in which the hands should be turned in regulating the clock. The hand is turned by a direct appli, cation of the finger to the cam, or by a key, which may be applied at either front or back

In the drawings, Figure 1 is a face view of my improvement. Fig. 2 is a back view of the same. Fig. 3 is a back view with the cam removed to show the parts beneath. Fig. 4 shows inside view of modification of cam.

A is the weight or bob, which is suspended from the pendulum-rod by means of the wire or

other loop B.

The loop B is adjustable in the guide-groove C made diametrically in the rear part of the bob, and the loop is held in the groove by the volute cam D, whose edge has bearing upon the upper side of the out-turned toe b of the loop-wire B, and thus the position of the loop is governed by the position of the volute cam.

E is an arbor, to the inner end of which the cam is attached, and to the outer end of which the hand F is attached, which is in front of

the face of the bob.

The face G of the bob is marked with a circular scale, and has upon it the words "slow" and "fast" to indicate in which direction the

cam should be moved to cause the clock to run slower or faster.

Either or both ends of the arbor E may be made angular to receive a key by which the cam may be turned, the key of the clock being used for this purpose.

In place of the volute cam D a plate with volute groove d to receive toe b may be used.

(See Fig. 4.)

The following are the advantages of my device over the present way of regulating pendulum-bobs:

There is no projecting end of the wire-loop below the bob to become bent or broken, besides having a bad appearance.

There is no nut to become turned, whenever the bob is removed, by friction against the bench, thus rendering regulating necessary.

There is a sure guide to every one as to the direction the regulator should be turned, and the scale renders a very nice adjustment attainable by any inexpert person.

The bob of my construction forms an orna-

ment to a clock.

In moving the pendulum by hand, or in moving the clock from place to place, the nut supporting the bob of the ordinay pendulum is liable to be turned by friction against the clock-case, necessitating regulating over again. With my improvement this accident is impossible. The scale may be so divided that a certain movement of the hand of the regulator will rectify a certain loss or gain per day.

I claim as my invention—

The combination, in a pendulum-bob, of the suspending-loop B, cam D, arbor E, hand F, and face G, substantially as set forth.

HENRY C. JACOT.

Witnesses:

SAML. KNIGHT, CHAS. HALL.