J. F. LASH.

ADJUSTING PENDULUM.

No. 251,368.

Patented Dec. 27, 1881.

Fig1

Fig2

Fig2

Fig2

Fig2

WITNESSES

Red. & Dieterich.

John Jash,

by Cashowand Con
Attorneys

United States Patent Office.

JOHN F. LASH, OF HAMILTON, ONTARIO, CANADA, ASSIGNOR TO W.
NICHOLAS MILLER.

ADJUSTING-PENDULUM.

SPECIFICATION forming part of Letters Patent No. 251,368, dated December 27, 1881.

Application filed October 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, John Fannon Lash, of Hamilton, in the Province of Ontario and Dominion of Canada, have invented certain new and useful Improvements in Clocks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a side view of a pendulum to which my invention has been applied, showing the same in position in a clock-case; and 15 Fig. 2, a perspective view, illustrating a modification of matical states.

fication of my invention.

Similar letters of reference indicate corre-

sponding parts in both figures.

This invention relates to pendulum-clocks; and it consists in certain improvements whereby the escapement may be easily and conveniently as well as accurately adjusted to beat, or restored to beat when off, as will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A represents the clock-case; B, the back of the clock; C, the escapement-wheel; D, the escapementlever; E, the verge rod or wire, and F the 30 pendulum-rod, which is suspended or adjusted in the usual manner by a flat spring at its upper end. The lower end of the pendulum-rod is provided with a triangular or other suitably-shaped loop, G, which may be formed sep-35 arately and attached to the pendulum-rod; but it may be easily and more cheaply formed by properly bending the wire of which the pendulum-rod is composed and twisting it upon itself, as shown in Fig. 1 of the drawings. 40 Upon the lower or horizontal part of the loop G is adjusted a spring-coil, H, formed with a

rod F is provided with a laterally-projecting index or finger, K, which may be attached to it separately; or it may be formed of a continuation of the pendulum-wire after the same has

hook, I, upon which the pendulum ball or

weight J is hung, as shown. The pendulum-

been twisted to form the loop G. The latter construction is preferable, being very inexpensive. Upon the inside of the clock-case is secured another index or finger, L, which is so adjusted that when the fingers K L are exactly opposite each other the escapement shall be on beat.

When from any cause—such as placing the clock or hanging it in a position not level—the escapement comes off beat, causing the clock to gain or lose, or stop entirely, it may be easily restored by simply changing the position of the ball or weight from right to left, 60 or vice versa, to the position at which the index-fingers register with each other. The escapement is then infallibly on beat, and no further adjustment is necessary.

In Fig. 2 of the drawings I have shown a 65 modified construction of my invention, in which it is applied to a duplex pendulum-rod. The main rod F is adjusted or clamped in a spring-loop, M, formed upon the lower end of the auxiliary rod N, which is also provided with an 70 index, as above described, which, in order to bring the escapement on beat, must register with an index upon the inside of the clock-case. The main pendulum-rod, which carries the ball or weight, may be adjusted in either 75 direction to its proper position in the loop M.

From the foregoing description the operation and advantages of my invention will be readily understood. It is simple, convenient, and easily operated.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination, with the pendulum F, having loop G, of the adjustable spring-coil H, 85 having hook I, carrying the ball or weight J, as described, for the purpose set forth.

2. In a clock, a pendulum formed of a single piece of wire with a loop at its lower end, and having a laterally-adjustable ballor weight, 90 substantially as set forth.

3. The combination, in a clock, of a pendulum having a laterally-adjustable weight, and provided with a laterally-extending finger or

index, and an index secured upon the inside of the clock-case, as described, for the purpose set forth.

4. In a clock, a pendulum-rod formed with an index-finger and with a loop supporting a laterally-adjustable spring-coil, having a hook for a detachable ball or weight, substantially as set forth.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in ropresence of two witnesses.

JOHN FANNON LASH.

Witnesses:

BEVERLEY HEATH,

Hamilton.

Chas. Moore, Consulate of the United States of America.