(No Model.)

No. 332,265.

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R. W. LUCIUS. CLOCK FRAME. Patented Dec. 15, 1885.

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Fig.7.

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H







Fig.5.

Attest; Edmand Stur

F J A

Inventar;

Gersthelock

Rudolph W. Lucius Bythightbro.

N. PETERS, Photo-Lithographer, Washington, D. C.

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UNITED STATES PATENT OFFICE.

RUDOLPH W. LUCIUS, OF MASCOUTAH, ILLINOIS.

CLOCK-FRAME.

SPECIFICATION forming part of Letters Patent No. 332,265, dated December 15, 1885.

Application filed November 26, 1883. Serial No. 112,830. (No model.)

To all whom it may concern: Be it known that I, RUDOLPH W. LUCIUS, of Mascoutah, St. Clair county, State of Illinois, have invented a certain new and useful 5 Improvement in Clocks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification. My improvement consists in making reto movable parts of the frame, in which one end of the key-shafts have journal-bearing, so as to allow the removal of either or both of these

shafts, thereby enabling the putting in of a new spring without disturbance of other parts 15 of the works.

Figure 1 is a front view of a clock-movement with my improvement applied thereto, one of the removable parts being shown detached from the front plate to show the lugs 20 to which the part is attached when in position. Fig. 2 is a side view of one of the joints, the parts being detached; and Fig. 3 is a similar view, except that the parts are connected. Fig. 4 is a front view of the joint 25 attached. Fig. 5 is a front view of the joint, showing a modification.

tional security against any shake or movement of the joint the end of the part F fits against the shoulders a^2 of the part A. G are turning buttons, whose edges overlap 50 the ends of the plate F when in the position shown in Figs. 3 and 4 and at the upper joint at the left hand in Fig. 1. When the button is in the position shown in Fig. 2 and at the right hand in Fig 1, the joint 55 may be detached. In addition to these joints, the parts F are attached to a corner-post, H, of the clock-frame by the usual means. In this case a nut, I, is shown, which screws upon the end of the post down upon the frame- 60 section F. Another means of securing the joint is shown in Fig. 5. In this a screw, J, passes through the end of plate F and screws into the lug a.

I wish it to be understood that I do not 65 confine myself to any particular means of connecting the plates F to the plate A, as the connection may be varied without departing from the principle of the invention. The connection HI may also be changed without affecting 70 the principle of the invention. The invention is of course equally applicable to clocks that do not strike, or those having only one spring. I claim as my invention— 75 1. In a clock-movement, a main plate having lugs a, leaving shoulders a^2 , a detachable portion, F, surrounding a spring-shaft and fitting against the shoulders, and a stud and button by which the detachable portion is se- 85. cured to the main plate, as set forth. 2. In a clock-movement, the combination of a main plate having lugs a, leaving shoulders a^2 , and studs a' on said lugs, detachable portion F, having eyes a^3 to receive the stude, 85 and fitting against the shoulders, and a turnbutton, G, on the main plate, to lock the de-RUDOLPH W. LUCIUS.

The improvement is shown applied to the front plate.

A is the front plate of a clock-movement, 30 and B is the back plate of the same. The whole improvement is in one of these plates, preferably the front plate, as shown.

C C are the key-shafts, carrying, respectively, the running-spring D and the striking-35 spring E. The parts F of the front plate, in which the outer ends of the shafts C have bearing, are connected to the rest of the front plate, A, by any suitable joints that admit of detachment. I have shown a lug, a, upon 40 each bar of the frame, to which connection is made, the lugs being sunk below the surface of the plate \dot{A} the depth of the thickness of | tachable portion to the main plate, as set forth. plates F, so that the fronts of these plates are flush with that of plate A. Each $\log a$ 45 has a steady-pin, a', that fits in a pin-hole, a^3 , in the detachable plate F, and as an addi-

Witnesses:

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SAML. KNIGHT, GEO. H. KNIGHT.