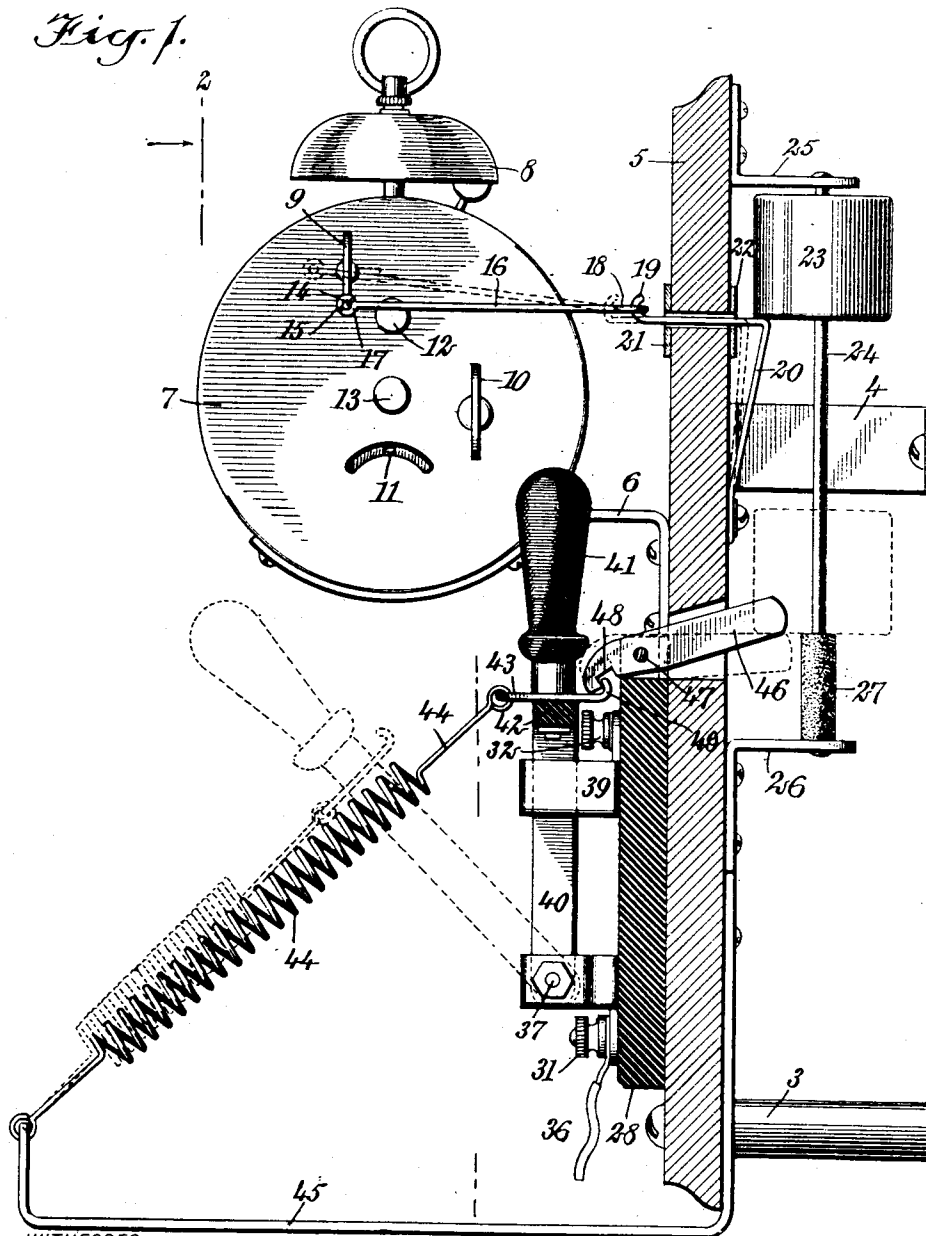


2 SHEETS—SHEET 1.

Fig. 1.



WITNESSES

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Walton Harrison

INVENTOR

John W. Wood
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NO. 870,404.

PATENTED NOV. 5, 1907.

J. W. WOOD.
TIME CONTROLLED ELECTRIC SWITCH.
APPLICATION FILED JULY 3, 1907.

2 SHEETS—SHEET 2.

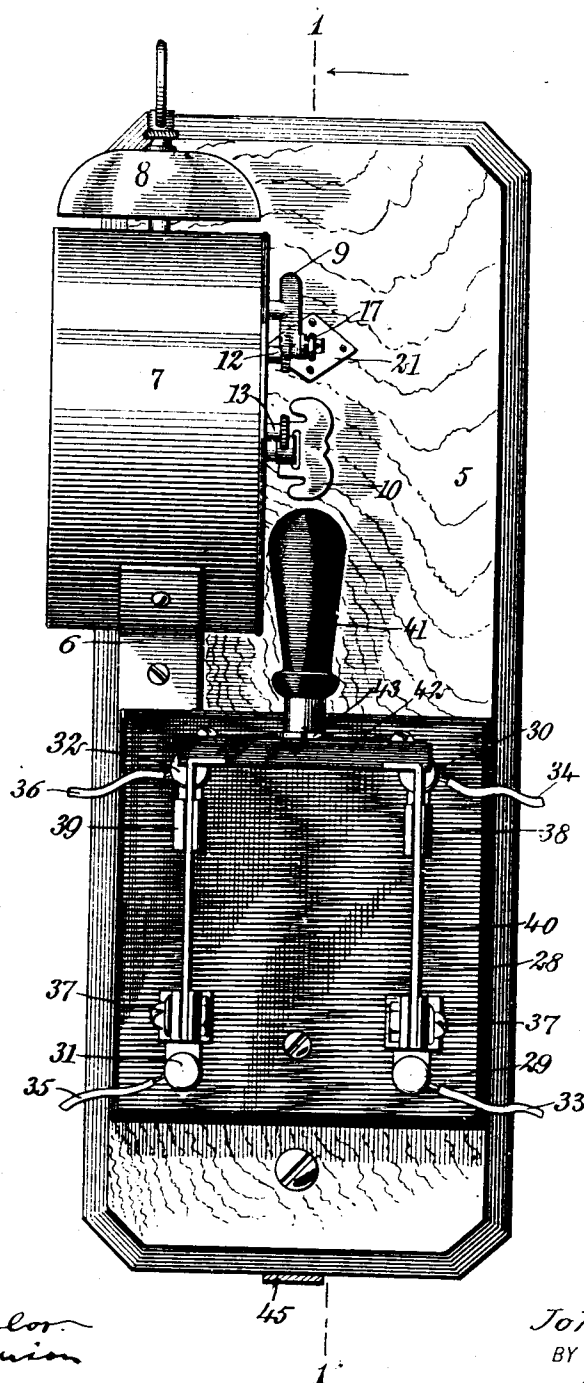


Fig. 2.

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UNITED STATES PATENT OFFICE.

JOHN WOODSON WOOD, OF MOBILE, ALABAMA, ASSIGNOR OF TWO-THIRDS TO CHARLES W. STANTON AND JAMES H. ZELNICKER, BOTH OF MOBILE, ALABAMA.

TIME-CONTROLLED ELECTRIC SWITCH.

No. 870,404.

Specification of Letters Patent.

Patented Nov. 5, 1907.

Application filed July 3, 1907. Serial No. 382,053.

To all whom it may concern:

Be it known that I, JOHN WOODSON WOOD, a citizen of the United States, and a resident of Mobile, in the county of Mobile and State of Alabama, have invented
5 a new and Improved Time-Controlled Electric Switch, of which the following is a full, clear, and exact description.

My invention relates to electric switches, my more particular object being to provide such switches with
10 means whereby a timepiece may control the movements of the switch.

My invention further relates to the provision of connections from the timepiece to the switch, for the purpose of enabling the timepiece to be set so as to cause
15 the movement of the switch to take place at any desired moment.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in
20 all the figures.

Figure 1 is a substantially central vertical section through the device, taken upon the line 1—1 of Fig. 2 and showing in full lines the appearance of the electric switch and other parts when the switch is closed, also
25 showing in dotted lines the appearance of the movable parts immediately after the switch is released by action of the timepiece; and Fig. 2 is a front elevation showing the same mechanism as seen from the left of Fig. 1, a part being in section on the line 2—2 of said figure.

Mounted upon metallic supports 3, 4, is a board 5, and secured upon this board is a bracket 6 of metal, this bracket supporting a clock 7 provided with an alarm 8 of usual construction. This alarm has a winding stem 9, and at 10 is another winding stem used for winding
35 the timepiece independently of the alarm 8. A regulator is shown at 11, at 12 the stem used in setting the alarm, and at 13 the stem used for setting the time-hands.

A pin 14 is mounted upon the winding stem 9 and describes the arc of a circle whenever the winding stem 9 is turned by hand in one direction or is turned backward during the time while the alarm is in action and running down. A stay pin 15 pierces the pin 14. A link 16 is provided with an eye 17, the latter being
45 fitted upon the pin 14 and retained in position thereupon by aid of the stay pin 15. This link 16 is provided with an eye 18 which loosely engages a hook 19, integral with a spring latch 20 secured at its lower end upon the board 5.

Mounted upon opposite sides of this board are annular disks 21, 22 through which the hook 19 passes loosely; these disks are merely to protect the hook 19 from accidental injury. A weight 23 slides vertically upon a guide rod 24, the latter being secured rigidly in

position by brackets 25, 26. A cushion, 27 of rubber or
55 other resilient material, serves as a buffer for stopping the downward movement of the weight 23. Secured rigidly upon the board 5 is a switch base 28 provided with binding posts 29, 30, 31, 32. Engaging these binding posts are wires 33, 34, 35, 36. Pivots are shown at
60 37 and bifurcated contact members at 38, 39. The switch knives are shown at 40 and are mounted upon the pivots 37.

A switch handle is shown at 41, being supported directly upon a cross bar 42 connecting the switch knives
65 40 together. Adjacent to the handle 41 is an eye 43. A tensile spring 44 is connected with this eye and is also connected with a bracket 45. This spring is sufficiently strong to open the electric circuit whenever the latter is released as hereinafter described. A lever 46
70 is mounted upon a pivot 47 at the upper end of the base 28 and is provided with a notch 48. The latter is engaged by a hook 49 which is integral with the eye 43, which is mounted upon the cross bar 42.

My invention is used as follows: The operator grasps
75 the switch handle 41 and bringing it into the general vertical position indicated in Fig. 1, closes the switch. He next adjusts the lever 46 so that the hook 49 engages the notch 48. The spring 44, by virtue of its tension, is now pulling upon the eye 43, and consequently the
80 switch tends to open, being restrained therefrom only by the action of the lever 46. The weight 23 having been previously raised, the clock having been wound, and the winding stem 9 of the alarm having been turned to any desired extent commensurate with the duration
85 of the alarm required, the apparatus is now ready for use. It will be understood that in setting the alarm, the stem 12 is turned in the usual manner, and that the winding stem 9 is left in the position indicated by full lines in Fig. 1.

The clock 7 now runs until the alarm "goes off". The inclining of the stem 9 causes the link 16 to assume the position indicated by dotted lines in Fig. 1; or in other words, to play upon the hook 19. This causes the spring latch 20 to release the weight 23. The latter
95 drops and moves the lever 46, the rapid descent of the weight being checked by the buffer 27. The lever 46 being turned, the electric switch is released and is, of course, opened by the spring 44.

I do not limit myself to any particular type of time-
100 piece, nor to the exact arrangement shown for the other parts.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. The combination of a clock provided with an alarm
105 having a movable member, a link connected with said movable member, a spring latch connected with said link and adapted to be moved thereby, a weight engaging said spring latch and supported temporarily thereupon, a buffer

for said weight, a lever disposed partially within the path of said weight, and an electric switch connected temporarily with said lever and adapted to be released by movement of the same.

- 5 2. The combination of a clock provided with an alarm having a movable member, a link connected with said movable member, a spring latch connected with said link and adapted to be moved thereby, a weight engaging said spring latch and supported temporarily thereupon, an electric switch, and releasing mechanism connected with said
- 10

electric switch and provided with a portion extending into the path of said weight, to be actuated by the fall of said weight.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 15

JOHN WOODSON WOOD.

Witnesses:

M. J. GOODBRAD,

KATHERINE E. KING.