

C. E. A. SCHNAKE.  
WINDING INDICATOR FOR TIMEPIECES.

(Application filed Jan. 2, 1901.)

(No Model.)

Fig: 1.

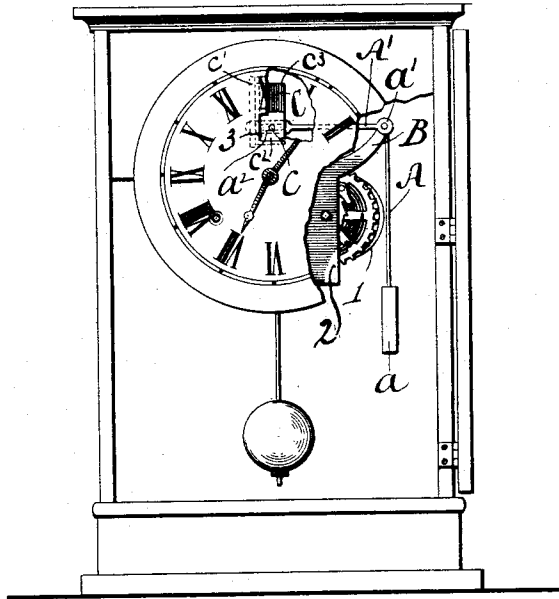
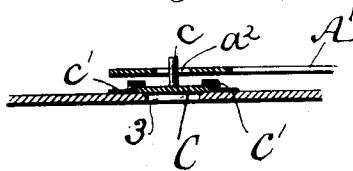


Fig: 2.



Witnesses:  
 Belle Paterson,  
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# UNITED STATES PATENT OFFICE.

CARL ERNEST AUGUST SCHNAKE, OF OKAWVILLE, ILLINOIS.

## WINDING-INDICATOR FOR TIMEPIECES.

SPECIFICATION forming part of Letters Patent No. 683,074, dated September 24, 1901.

Application filed January 2, 1901. Serial No. 41,783. (No model.)

*To all whom it may concern:*

Be it known that I, CARL ERNEST AUGUST SCHNAKE, a citizen of the United States, and a resident of Okawville, county of Washington, and State of Illinois, have invented certain new and useful Improvements in Winding-Indicators, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar characters of reference indicate corresponding parts.

This invention relates to improvements in indicators adapted to be attached to and automatically operated by a clockwork mechanism, the object of the invention being to supply an inexpensive and operative device of this character which will automatically indicate an unwound condition of the mainspring thereof, whereby the clockwork can not run down without the device giving external notice thereof.

The invention will be hereinafter fully described, and specifically set forth in the annexed claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a front elevation of a clock having my improved device attached thereto and having having its face partly broken away, and Fig. 2 is a detail sectional plan view taken on a line  $ax$  of Fig. 1.

In the practice of my invention I place adjacent to the mainspring, as 1, a depending rod A, which has a weighted lower end  $a$  to keep it in a normally vertical position. This rod swings from and is loosely pivoted to a hanger B, which is extended from the clock-frame 2.

Extended horizontally from the hub  $a'$  of the rod A is an arm  $A'$ , which is provided at its free end with a slot  $a^2$ , which engages a pin  $c$  of a vertically-slidable plate C, whereby swinging motion of the arm  $A'$  will move the plate C vertically. The plate C acts as an indicator, and it is visible through the opening 3 in the face of the clock-dial. The plate C moves within guides  $c'$  on the back of the clock-dial. The lower part  $c^2$  of the said plate C is painted white or the same color as the clock-dial face, and the upper part  $c^3$ , which is normally obscured, is painted a contrasting color, preferably red.

In the operation and use of the invention when the spring 1 is tightly wound around its post 4 the depending rod A does not contact therewith, and the white surface of the lower part of the plate C is in view through the opening 3 of the clock-dial; but when the mainspring unwinds and expands its outer coil will contact with the rod A and swing the same in the direction of the arrow 5, whereby the plate C will be carried in a downward direction until its red-colored portion is visible through the opening 3, thus indicating that the clockwork is in condition ready for winding. When the mainspring is again wound up, the device will automatically assume its normal position, with the white portion of the plate C in view.

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

1. In a winding-indicator, the combination with the face of a clock, having an opening therein, substantially as described; and guides upon the back of said face; of a two-colored plate, adapted to move in said guides, across said opening; a pin on said plate; and a slotted arm engaging said pin, and adapted and arranged to move said plate in said guides, across said opening; all substantially as and for the purpose set forth.

2. In a winding-indicator, the combination with the face of a clock, formed with an opening substantially as described; guides on the back surface of said face; a plate adapted to move in said guides; and a pin on said plate, of an arm pivotally attached by one end to a hanger, formed with a slot at its free end, to engage said pin, and by its motion to slide said plate in said guides, across said opening; and means as specified for supporting said hanger, and for actuating said arm, all substantially as and for the purpose set forth.

3. In a winding-indicator, the combination with the face of a clock, formed with an opening substantially as described; guides on the back surface of said face; a plate adapted to move in said guides; across said opening and a pin on said plate; of a hanger supported by the casing of said clock; a rod depending from, and pivotally attached to said hanger; a weight on the lower end of said rod, and said rod arranged and adapted to be moved

by the spring of said clock, when nearly run  
down; an arm attached at one end to the  
pivot on which the said rod turns, moving  
with the said rod, formed with a slot at its  
5 free end, which engages said pin, and affords  
facility for moving said plate in said guides,  
across said opening; all substantially as and  
for the purpose set forth.

In testimony that I claim the foregoing as  
my invention I have signed my name, in pres- 10  
ence of two witnesses, this 20th day of No-  
vember, 1900.

CARL ERNEST AUGUST SCHNAKE.

Witnesses:

G. M. MCNEELY,  
E. M. HOYER.