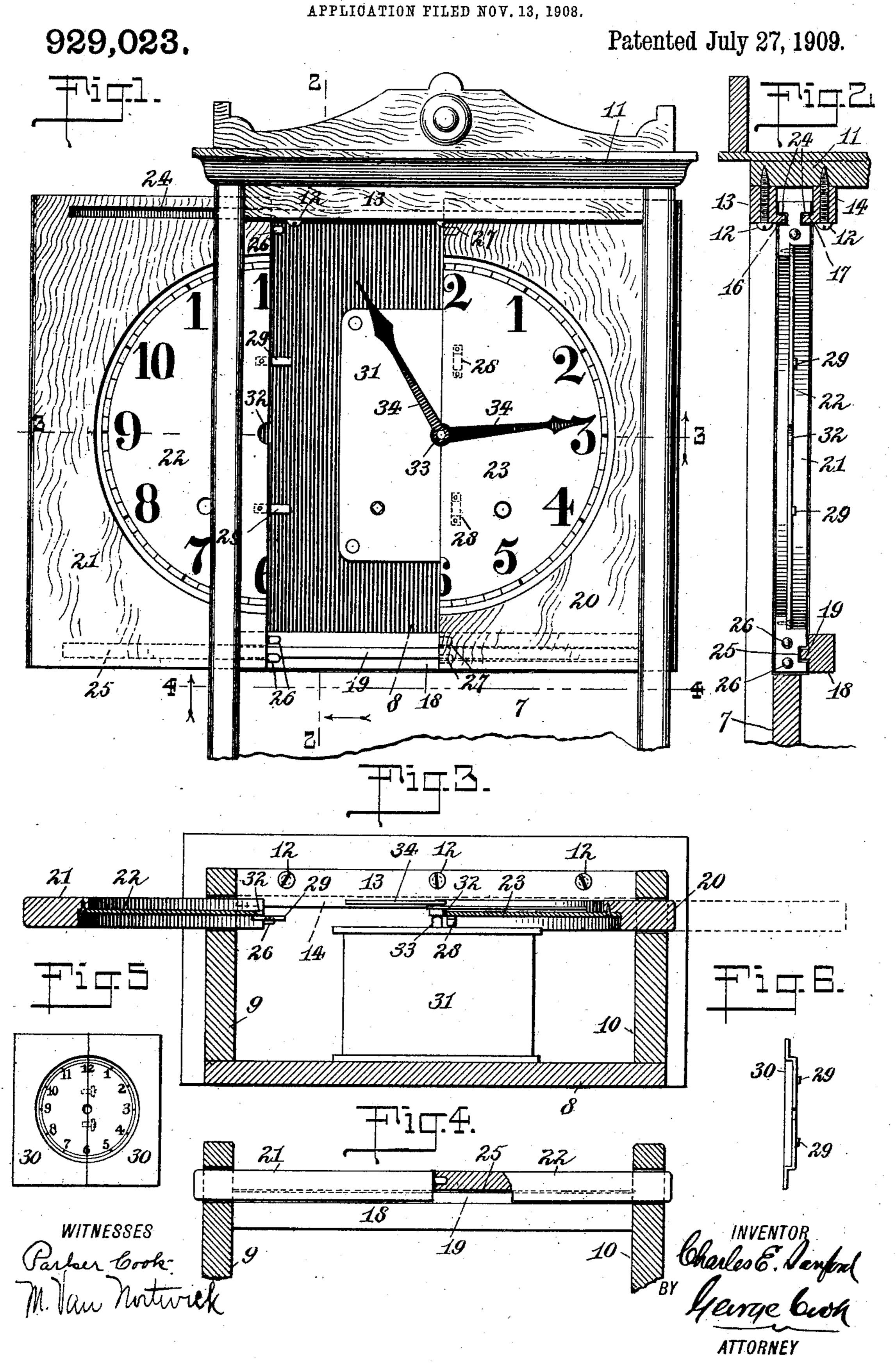
C. E. SANFORD.
CLOCK CASE.



UNITED STATES PATENT OFFICE.

CHARLES E. SANFORD, OF NEW YORK, N. Y.

CLOCK-CASE.

No. 929,023.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed November 13, 1908. Serial No. 462,373.

To all whom it may concern:

Be it known that I, Charles E. Sanford, a citizen of the United States, and a resident of New York, borough of Manhattan, in the county of New York and State of New York, have made and invented certain new and useful Improvements in Clock-Cases, of which the following is a specification.

My invention relates to an improvement in clocks or clock cases, comprising in part a sectional dial, whereby ready and convenient access may be had to the movement or works without the necessity of removing the latter from the case.

As is well known, in order to have access to the movement, for the purpose of repairing the same, it is necessary with clock cases as now ordinarily constructed, to remove the works from the case, and in many instances, to first remove the hands from the arbors and then the dial, in order to get at the dial side of the movement.

The object of my invention is to overcome the above difficulties, and particularly to improve and enlarge upon the construction shown and described in Letters Patent granted to me on the 20th day of August, 1907, No. 863,382.

With these and other ends in view, the invention consists in certain novel features of construction and combinations of parts, as will be hereinafter fully described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in elevation of a part of a clock case constructed in accordance with my invention. Fig. 2 is a vertical sectional view taken on the line 2—2 of Fig. 1. Fig. 3 is a horizontal sectional view taken on the line 4—3 of Fig. 1. Fig. 4 is a similar view taken on the line 4—4 of Fig. 1. Figs. 5 and 6 are views of a modified form of the dial.

I have illustrated in the drawings the upper part or portion of a clock case comprising a front side 7, rear side 8, the two sides 9, 10, and a top 11, these parts being constructed and assembled in the usual manner. Between the sides 9 and 10, and to the top 11, is secured by means of the screws 12, or otherwise, the cross piece 13, and back of it, the cross piece 14 made of wood or metal as desired, and flanged inwardly at the lower edges as illustrated at 16, 17, (Fig. 2). Below these strips and about opposite the lower edge of the dial, is secured the cross strip 18,

provided on its face with the rib 19. Between the upper cross strips 13, 14, and the lower cross strip 18, is fitted the sectional dial comprising the sliding carriers 20—21, the inner or adjacent edges of which are provided with semi-circular openings in which the sections 22, 23 of the dial are securely fitted, the sliding carriers and sectional dial being made of wood, metal or other desired material.

In the sides 9—10 of the clock case, are formed elongated openings in which slide the carriers 20, 21, the latter near their upper edges, being provided with grooves or recesses 24, in which fit the flanges 16—17 70 formed on the cross strips 13, 14, as clearly illustrated in Figs. 1 and 2 of the drawings. On the rear sides of the carriers 20, 21, and near their lower edges, are formed the grooves or recesses 25, in which is fitted the 75 rib 79 formed on the cross bar 18, these means guiding the carriers in their inward and outward movements when inserting or withdrawing the sectional dial.

In order to assist in holding the carriers in 80 proper closed adjustment, pins or pegs 26 are formed on or secured to one edge of one of said sliding carriers to fit in the corresponding recesses 27 formed in the adjacent edge of the other carrier. In order also to 85 strengthen and stiffen the central portion of the dial, I form on or secure to the rear face of one section, the loops or pockets 28 to receive pins or lugs 29 formed on or secured to the rear side and near the adjacent edge of the 90 other section of the dial.

Instead of forming the sliding sectional dial as above described, that is, of a sliding sectional carrier having secured thereto the sectional dial, I may construct the sectional 95 dial integral with the sectional carrier, as illustrated in Figs. 5 and 6 of the drawing. In this event, each section 30 will be made in one piece, preferably of metal, the dial being painted, stamped, stenciled or enameled 100 thereon.

From the foregoing it will be seen that I have materially improved upon the construction shown and described in the Letters Patent supra, in that instead of constructing the clock case of hinged sections to be swung as under, I leave the case intact, and so form and assemble the several parts that by sliding outwardly the carriers with the dial secured thereto or formed thereon, access may 110

be conveniently had to the movement 31 inclosed within the case, the invention thus being made applicable to nearly, if not quite all of the different forms of clock faces, and at a much lower cost than in the case of my former invention.

To gain access to the clock movement 31, it is simply necessary to separate or pull outwardly through the slots or openings in the sides 9 and 10, the carriers 20, 21, one of these carriers with its attached section of dial, being shown in this adjustment in Fig. 1, the flanges 16 and 17 on the cross pieces 13, 14, and the rib 19 formed on the cross piece 18, assisting in guiding the carriers in their movements and preventing any binding thereof.

When desired to close the case, the carriers with their attached sections of dial are pushed inwardly until the edges of the carriers and dial sections meet, recesses 32 being formed in the edges of the dial sections to permit of the same nicely fitting around the shaft 33 on which are secured the hands 34, the several parts when in their closed positions, having all the appearances of the usual clock face.

Having fully described my invention, what I claim as new and desire to secure by Let-30 ters Patent, is:—

1. A clock case comprising in part a dial formed in two independent and separable sections, each of said sections being constructed and arranged to slide in and out of said case

and independently of the other, substantially 35 as described.

2. A clock case, the vertical sides of which are provided with openings, a sectional carrier, the sections of which are each provided with a section of the dial, and each adapted 40 to be independently withdrawn through said openings, substantially as described.

3. The combination with a clock case provided with openings in the sides thereof, of a sectional carrier slidably mounted in said 45 openings and provided with a sectional dial, and means for guiding the sections of said carrier when moved toward or away from each other, substantially as described.

4. The combination with a clock case, provided with openings in the side thereof, of a sectional carrier slidably mounted in said openings, a sectional dial, one section of which is secured to one section of the carrier and the other section of the dial secured to the other section of the carrier, and means, a part of which are provided on said case and a part on said carriers, whereby to guide said carrier sections when moved toward or away from each other, substantially as described.

Signed at New York, borough of Manhattan, in the county of New York, and State of New York, this 12th day of November, A. D. 1908.

CHARLES E. SANFORD.

Witnesses:

M. Van Nortwick, Parker Cook.