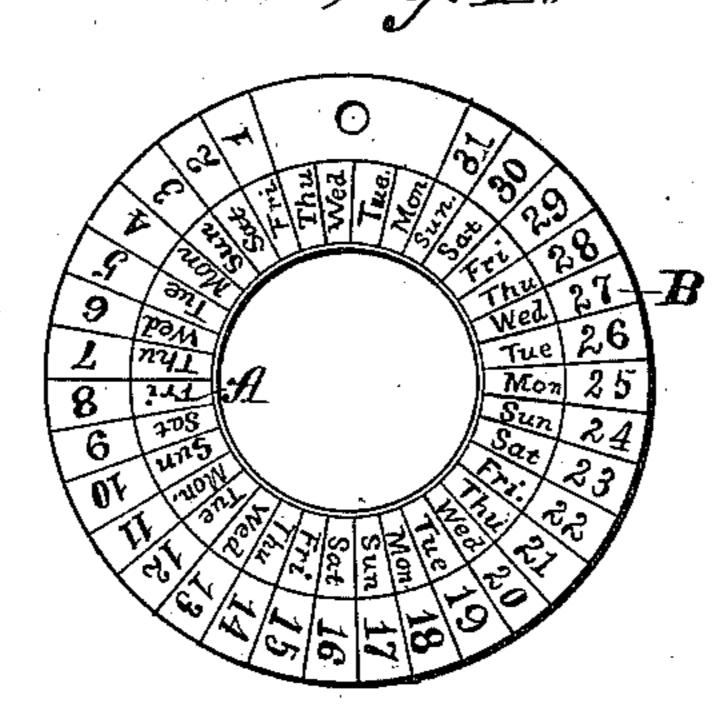
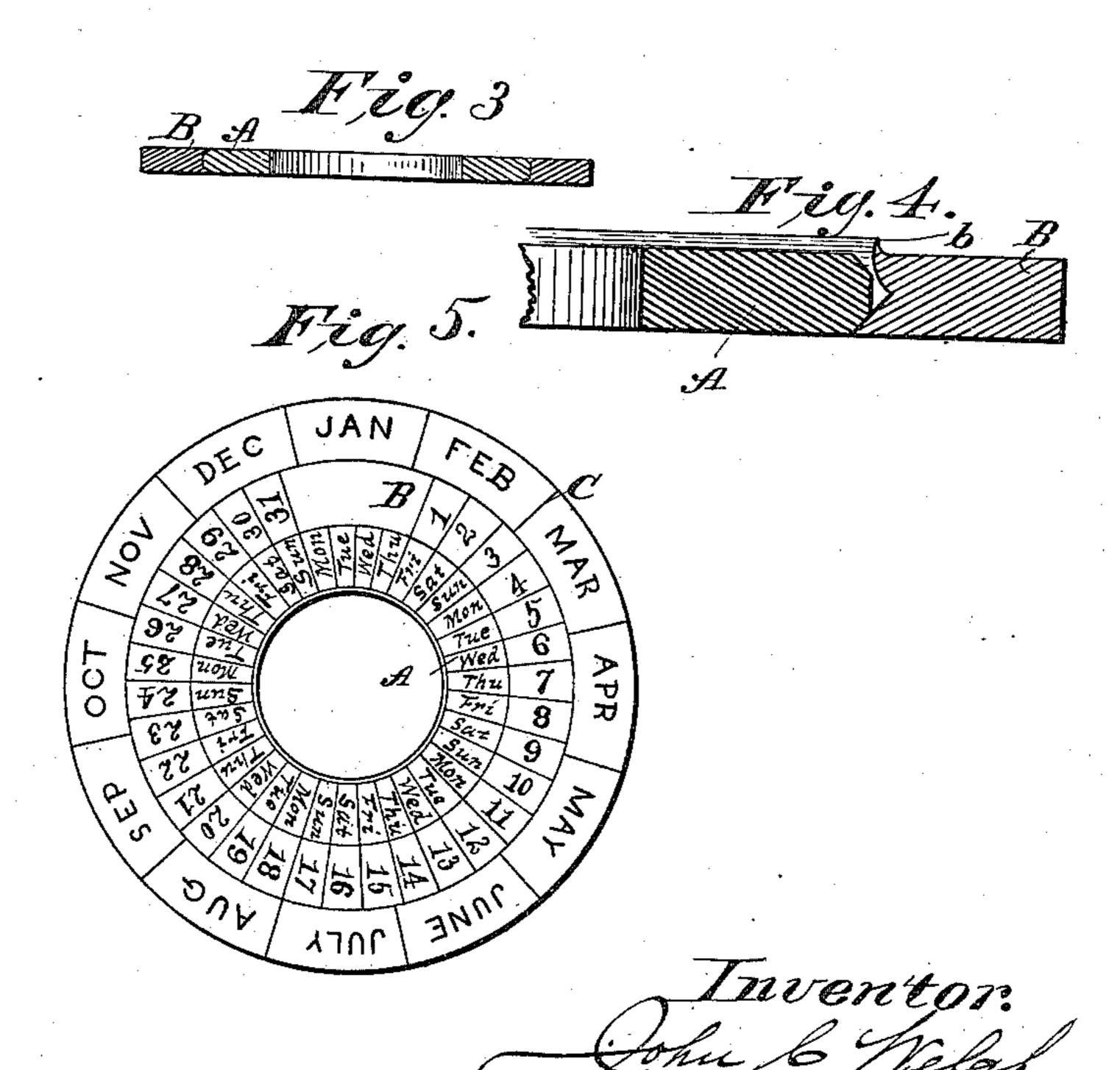
J. C. WELCH.

PERPETUAL CHRONOLOGICAL CALENDAR.

No. 309,271.

Patented Dec. 16, 1884.





Witnesses: Walker Willamay

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

United States Patent Office.

JOHN C. WELCH, OF NEW YORK, N. Y.

PERPETUAL CHRONOLOGICAL CALENDAR.

SPECIFICATION forming part of Letters Patent No. 309,271, dated December 16, 1884.

Application filed April 12, 1884. (No model.)

To all whom it may concern:

Be it known that I, John C. Welch, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Perpetual Chronological Calendars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention consists of a perpetual reversible chronological calendar composed of concentric rings which are adapted to be rotated on one another, and are provided with like divisions of time on both sides, the divisions on one side being arranged reversely to the divisions on the other side, so that the calendar may be set from either side, and will give the same reading on both sides.

In order that my invention may be clearly understood, I have illustrated in the annexed drawings and will proceed to describe a practical form thereof.

Figure 1 illustrates one side of a calendar composed of two concentric rings. Fig. 2 illustrates the reverse side thereof. Fig. 3 is a cross-section of the same. Fig. 4 illustrates the manner of fitting the rings together.

The same letters of reference indicate iden-

tical parts in all the figures. Each face of the inner ring, A, is divided by thirty-five radial lines into thirty-five equal spaces, where the days of five weeks are 35 marked in regular order. Thirty-one equalspaces, where the days of the month are marked, are formed on each face of the outer ring, B, by thirty two radial lines adapted to register with thirty-two of the lines on the 40 faces of the inner ring, so that there is one wide blank space, equal to four spaces on the inner ring, on each face of the outer ring besides the thirty-one marked spaces. On one, side of this calendar the numerals and days 45 run from left to right, and on the other side from right to left, and the days are so arranged b

on the opposite sides that corresponding days will always register with the marked spaces on the respective sides of ring B. It will be readily observed that this calendar may be 50 both set and read correctly from either side.

When the rings are to be held together frictionally, to prevent them from turning on one another except when duly manipulated, they may be formed and fitted to one another as 55 shown in Fig. 4, and then the fin b swaged down.

The rings may be mounted on one another, and held from turning in ways and by means different from what I have shown and de-60 scribed. Any skillful mechanic can readily select other proper means for the purpose.

Fig. 5 illustrates a calendar provided, in addition to the rings A and B, with a ring, C, each face of which is divided by twelve radial 65 lines into twelve equal spaces, where the twelve months of the year are marked in regular order, running from right to left on one side, and from left to right on the other side. To set this ring C, it is turned until the current 7c month is brought opposite to the blank space on ring B.

This calendar may be manufactured in the form of a watch-charm or as a pocket-piece. It may also be constructed in the form of a 75 stand or paper-weight for use on a desk. It may be ornamented to any desired degree.

I claim as my invention—
The perpetual reversible chronological calendar described, composed of rotatable con-80 centric rings, which have both force expected.

endar described, composed of rotatable con- 80 centric rings which have both faces exposed, are fitted frictionally within one another, and are provided with like divisions of time on both sides, the divisions on one side being arranged reversely to the divisions on the other 85 side, all substantially as before set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN C. WELCH.

Witnesses:

E. T. WALKER, W. M. HANNAY.