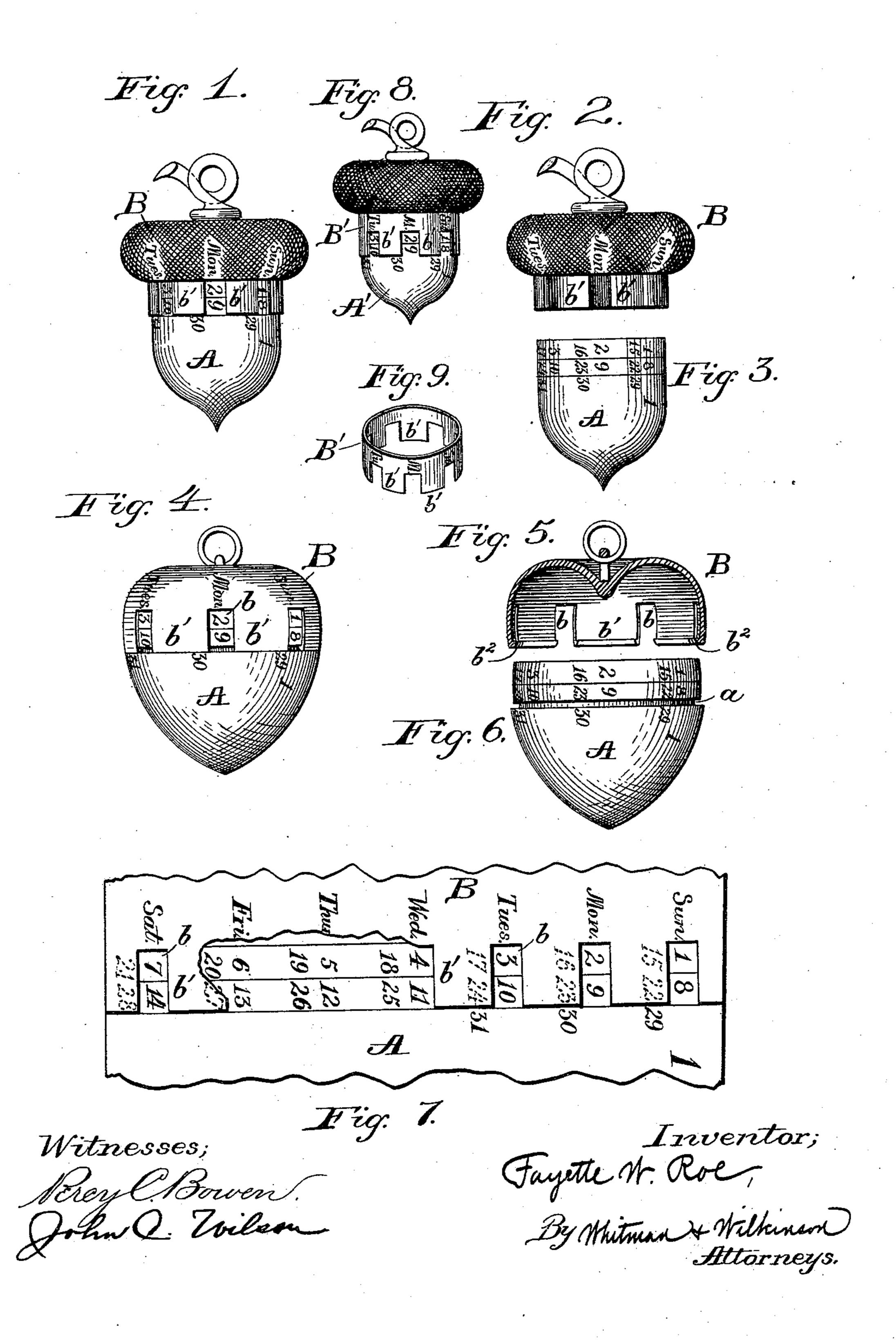
(No Model.)

F. W. ROE.

PERPETUAL CALENDAR FOR WATCH CHARMS.

No. 475,156.

Patented May 17, 1892.



## UNITED STATES PATENT OFFICE.

FAYETTE WASHINGTON ROE, OF THE UNITED STATES ARMY.

## PERPETUAL CALENDAR FOR WATCH-CHARMS.

SPECIFICATION forming part of Letters Patent No. 475,156, dated May 17, 1892.

Application filed April 4, 1892. Serial No. 427,709. (No model.)

To all whom it may concern:

Be it known that I, FAYETTE WASHINGTON ROE, lieutenant United States Army, a citizen of the United States, stationed at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Perpetual Calendars for Watch-Charms, &c.; 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.

My invention relates to perpetual calendars for use on watch-charms, the ends of pencils, and other similar articles; and it consists of certain novel features hereinafter described and claimed.

Reference is had to the accompanying drawings, wherein the same parts are indicated by the same letters.

Figure 1 represents a side elevation of a watch-charm in the form of an acorn, composed of two parts detachably or revolubly attached and adapted for use as a perpetual 25 calendar. Fig. 2 represents a side elevation of the cup or cap of the same detached, and Fig. 3 represents a side elevation of the acorn detached. Fig. 4 represents a watch-charm in the form of a heart, composed of two de-30 tachably or revolubly attached parts and adapted for use as a perpetual calendar. Fig. 5 represents a central vertical section of the cap or upper portion of the heart, and Fig. 6 represents a side elevation of the lower por-35 tion of the heart. Fig. 7 represents a diagrammatic view of the two cylindrical surfaces forming the calendar device developed or rolled out. Fig. 8 represents a side elevation of an acorn made in one piece and fitted 40 with a revoluble ring B', and Fig. 9 represents a perspective view of said revoluble ring.

On the cylindrical surface of the upper portion of the piece A of the two pieces A and B, which when together constitute the watch-45 charm, fourteen groups of figures ranging from "1" to "31" are placed. These groups of figures are arranged in two or three tiers, as the case may be, running down the elements of the cylinder, the said groups being either equidistant from each other or arranged in

pairs, as shown. In the first group the figures "1" and "8" are placed, the "1" preferably over the "S." Alongside of this group a group composed of the numbers "15," "22," and "29" is placed, then another group "2," 55 "9," &c., the only limitation upon these groups being that the primary groups "18," "29," "3 10," "4 11," "5 12," "6 13," and "7 14" be equidistant from each other, and that the secondary groups "15 22 29," "16 23 30," "17 24 60 31," "18 25," "19 26," "20 27," and "21 28" be also equidistant from each other. These figures are preferably arranged one above the other and may be included between parallel circles circumscribing the cylindrical surface 65 on which the figures are placed.

The revoluble cap B to the charm has its sides slotted in seven places b, equidistant from each other, with the days of the week indicated at the top of each slot. These slots 70 have between them seven equidistant teeth or screens b', and the function of the slots is to expose seven of the said groups of figures, either the seven primary groups or the seven secondary groups, while the function of the 75 teeth or screens is to hide the other seven groups of figures or a portion of the figures in each one of said groups. Now if at any time during the first half of any month the cap be turned so that in the slot under the sign of 85 the day of the week with which the month began the figures "1" and "8" are seen. Then the calendar will show all the days of the month from "1" to "14" in their proper order, with the appropriate week-days indicated 85 above them.

The device is set for the last half of the month by setting the group "15 22 29" under the sign of the week-day with which the month began. In this way be setting the cal- 90 endar twice every month a perpetual calendar is obtained.

The cap B may be detachably or revolubly attached in any convenient way; but the connection should be sufficiently secure to pre- 95 vent the parts from being separated or turned relative to each other by any ordinary accidental jars or strains.

In the device shown in Figs. 1, 2, and 8 the teeth b' are made to slip closely over the cy- 100

lindrical portion of the lower piece A, and the friction of the teeth on the said surface is sufficient to hold the cap firmly in place.

In the device shown in Fig. 5 an annular 5 groove a is provided to receive the spring-catches  $b^2$  on the interior of the teeth b'. In this device friction holds the cap against turning, as in that shown in Fig. 1; but the catch  $b^2$  prevents the two pieces of the charm from being torn apart.

In the device shown in Figs. 8 and 9 the acorn A' is made in one piece and a toothed ring B' is sprung on over it. This ring is adapted to revolve on the cylindrical portion of the acorn, and the calendar is set as before.

It will be obvious that without departing from the spirit of my invention the surface holding the figures may be conical or polygonal with fourteen sides and that the general contour of the watch-charm may be varied at will, provided the essential feature of my invention be maintained, which is the marking upon the surface of any regular solid two series each of seven equidistant groups of figures, as described, and arranging a movable screen which will expose one series of these groups and conceal the other series.

It will be evident that the calendar may be made hollow to form a box or case.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. A perpetual calendar formed of two parts,

the one adapted to slip over the other, the one part being marked with two series each of 35 seven equidistant groups of figures corresponding to the days of the month and the other part being provided with seven equidistant screens, with the days of the week indicated between said screens, and the said 40 screens being adapted to cover one of said series of seven groups of figures and to expose the other series of groups, as and for the purposes described.

2. In a perpetual calendar, the combination, 45 with a body having its upper portion cylindrical and the surface of said cylindrical portion marked with two series each of seven equidistant groups of figures corresponding to the days of the month, of a dentated cap 50 having seven equidistant teeth, the said cap being adapted to fit snugly over the said cylindrical portion and the said teeth being adapted to hide one of said series of seven groups of figures and to expose the other series of groups, and the said cap having the days of the week indicated thereon between the said teeth, substantially as and for the purposes described.

In testimony whereof I affix my signature in 60

presence of two witnesses.

FAYETTE WASHINGTON ROE.

Witnesses:

C. M. TRUITT,

E. J. DAVIS.