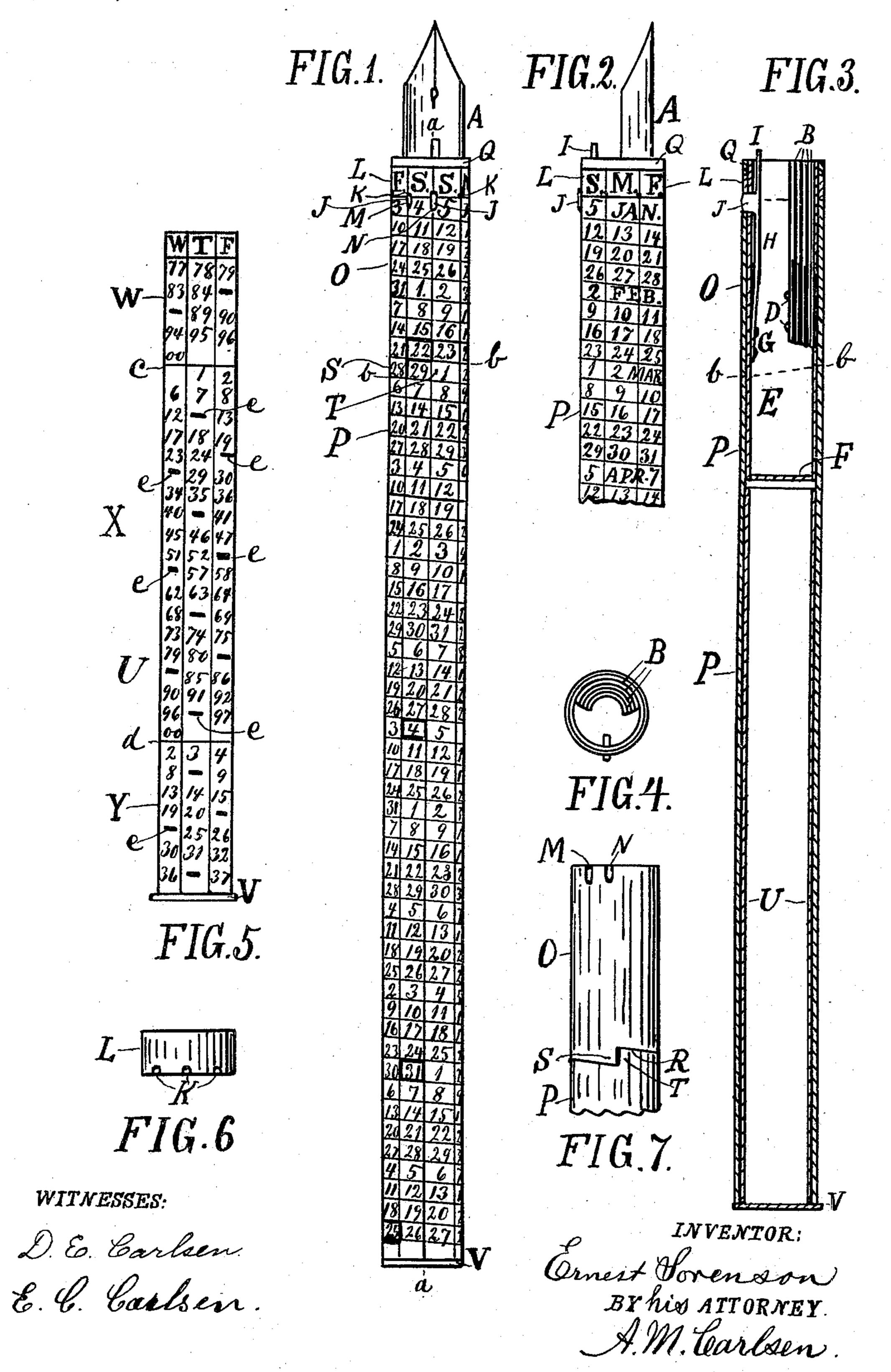
E. SORENSON.

PERPETUAL CALENDAR.

(Application filed June 6, 1898.)

(No Model.)



United States Patent Office.

ERNEST SORENSON, OF CAMDEN PLACE, MINNESOTA.

PERPETUAL CALENDAR.

SPECIFICATION forming part of Letters Patent No. 627,212, dated June 20, 1899.

Application filed June 6, 1898. Serial No. 682,667. (No model.)

To all whom it may concern:

Be it known that I, ERNEST SORENSON, a subject of the King of Sweden and Norway, residing at Camden Place, in the county of Hen-5 nepin and State of Minnesota, have invented certain new and useful Improvements in Perpetual Calendars; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable oth-10 ers skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in perpetual calendars; and the object of my invention is to provide a perpetual calendar adapted to be combined with a penholder or any other cylindrical or nearly cylindrical

20 body.

With this and other objects in view my invention consists of the novel construction and arrangement of parts illustrated in the accompanying drawings, in which my calendar is 25 shown as applied to a certain class of pen-

holders.

In said drawings, Figure 1 is a front side view of pen and penholder with my perpetual calendar applied to it. Fig. 2 is a right-hand 30 side view of the upper portion of Fig. 1. Fig. 3 is a central sectional view, as on the line a a in Fig. 1, with the pen removed from the holder. Fig. 4 is a front end view of the penholder. Fig. 5 is a side view of the index-35 tube contained within the calendar-tube proper. Figs. 6 and 7 are detail views.

Referring to the various parts in the drawings by letters of reference, A designates the pen proper. This may, according to its size, 40 be inserted and firmly held by either one of the several slits B between the grooved spring-arms C, which are secured at D in the front end of the tube E, which extends from the front end of the penholder to its 45 bottom F. Opposite the spring-arms C is secured at G the spring-latch H, of which the free end I projects forward slightly beyond the penholder. This latch H is provided with a side tooth or catch J, which projects through 50 an aperture in the tube E and engages with its upper edge either of the notches K in the

lower edge of a revoluble ring L, on which the days of the week are indicated, and with its lower edge it engages either of the two notches M N in the upper end of the oscillating tube 55 O, which extends from the said ring L down to the line b b, where it meets the front end of the larger outer tube P, which is rigidly secured upon the rear end of the tube E, while the sleeve O and ring L (best shown in the 60 detail views, Figs. 7 and 6, respectively,) are loosely fitted and retained on the tube E between the fixed ring Q and the front end of the large tube. In Fig. 7, where the numerals are omitted on the tubes, it will be best 65 seen that the abutting ends R of the sleeve O and the tube P are spiral-shaped, so that they form overlapping corners S and T, on which the 28th day of February is printed upon the former and the 1st day of March 70 upon the latter, and the 29th of February is marked upon the tube E, so that it becomes visible when the tube O is turned with its corner S slightly away from the corner T, and when turned back into its normal position its 75 corner S covers the number "29" and it remains in this position for three years, and only every fourth or leap year is turned so as to expose the number "29." The sleeve O is held in either of said positions by the latch- 80 tooth J, as already described.

The days in January and the regular twenty-eight days in February are marked spirally in circular succession about the tube O, beginning near the week-ring L and ter- 85 minating at the corners S T, where the days of all the other months of the year commence, and are likewise arranged along the large tube P. The names of the months are printed in abbreviated form upon the tubes near the 90 beginning of each month, preferably dispensing with one or two of the first numerals to make room for the initials of the month, as shown in Fig. 2, where "Feb." fills the spaces "3" and "4" ought to occupy; but these 95 numbers are dispensed with and are only to be read by knowing that they ought to be there according to the preceding number.

Notable dates, like February 22, July 4, December 25, &c., are indicated by heavy lines 100 around them, which serve as memoranda or reminders of their approach.

U is the index-tube, adapted to be inserted, as in Figs. 1 and 3, into the large tube P until its open end about meets the bottom F of the tube E, while its closed end remains 5 slightly protruding out of the tube P and is provided with the circular rim V as a fingerhold for extracting it from the tube P. This index-tube has at its front end the initials of the days of the week circularly inscribed ro upon it and its surface laid out by the two transverse lines c and d into three divisions W, X, and Y, of which the first division contains circularly-arranged numerals representing the tens and units of the numbers of the 15 years in the last part of the eighteenth century, while the division X shows like parts of the numbers of each year in the nineteenth century, and the division Y represents in like manner the first forty years of the twentieth 20 century.

The dashes e indicate each one that the num-

ber preceding it is a leap-year.

In operation the index-tube is pulled out, as in Fig. 5, and, supposing one was to regu-25 late the calendar for the year 1896, he would then look for "96" in the nineteenth century, and, finding that after "96" appears a dash, he will know that it is a leap-year, and he therefore presses on the latch I, turns the 30 tube or sleeve O so that the number "29" in February becomes visible, and then lets the latch lock the sleeve. He further finds on the index that directly over "96" in the nineteenth century stands at the end of the tube 35 the letter "W," which indicates "Wednesday" as the first day in that year, and he therefore turns the ring L so that "W" comes directly above the first day of January on the sleeve already set. That is all, and the cal-40 endar is regulated for that year. The next year, 1897, he skips over the dash e to "97," and, this not being a leap-year, he turns the sleeve O back so as to cover "29," (and it will so remain for three years,) then sets the ring 45 L so that "F," (or "Friday,") as indicated above "97" on the index, comes over the first

of one day, as in the other years.

It is obvious that this calendar may be adapted for pencil-boxes, pill-boxes, matchboxes, and numerous other cylindrical or oval objects and that when applied to a larger article than a penholder the ring L may con-

of January on the sleeve. This will move

the date ahead two days in the week instead

the circles of dates around the box, and the circles need not necessarily run spirally; also, that instead of the dashes e any other suitable mark may be used, so that I do not suitable to confine myself to such immaterial

60 wish to confine myself to such immaterial points.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

1: A perpetual calendar comprising a main 65 tube with a smaller tube secured in and extending beyond one end of it, a sleeve loosely mounted upon said extension and a loose ring placed still farther out on the extension, and means for retaining the ring and sleeve 70 in their respective places, and a spring-latch secured to the small tube and engaging notches in the ring and the sleeve to lock them at any desired point of rotation, said revoluble ring having the days of the week 75 upon it and the sleeve having all the days of January and of February in a regular year marked upon it and the main tube having all the dates of the last ten months in the year marked in circles upon it, and the small 80 tube or extension on which the sleeve turns having the numeral "29," marked upon it near by and preceding the first day of March on the main tube, so that by turning the sleeve "29" will be covered by the part of 85 the sleeve on which the 28th of February is marked, substantially as and for the purpose set forth.

2. A perpetual calendar comprising a main tube with a smaller tube secured in and ex- 90 tending beyond one end of it, a sleeve loosely mounted upon said extension and a loose ring placed still farther out on the extension, and means for retaining the ring and sleeve in their respective places, and a spring-95 latch secured to the small tube and engaging notches in the ring and the sleeve to lock them at any desired point of rotation, said revoluble ring having the days of the week upon it and the sleeve having all the days of 10 January and of February in a regular year marked spirally upon it and the main tube having all the dates of the last ten months in the year marked spirally upon it, and the small tube or extension on which the sleeve 10 turns having the numeral "29," marked upon it near by and preceding the first day of March on the main tube, so that by turning the sleeve "29" will be covered by the part of the sleeve on which the 28th of February 11 is marked; and the index-tube U, adapted to be housed in the main tube and having the days of the week marked around one end and numbers of the years and marks for leapyears arranged upon it in the order shown, 11 substantially as and for the purpose set forth.

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

ERNEST SORENSON.

Witnesses:
HAROLD HARRIS,
A. M. CARLSEN.