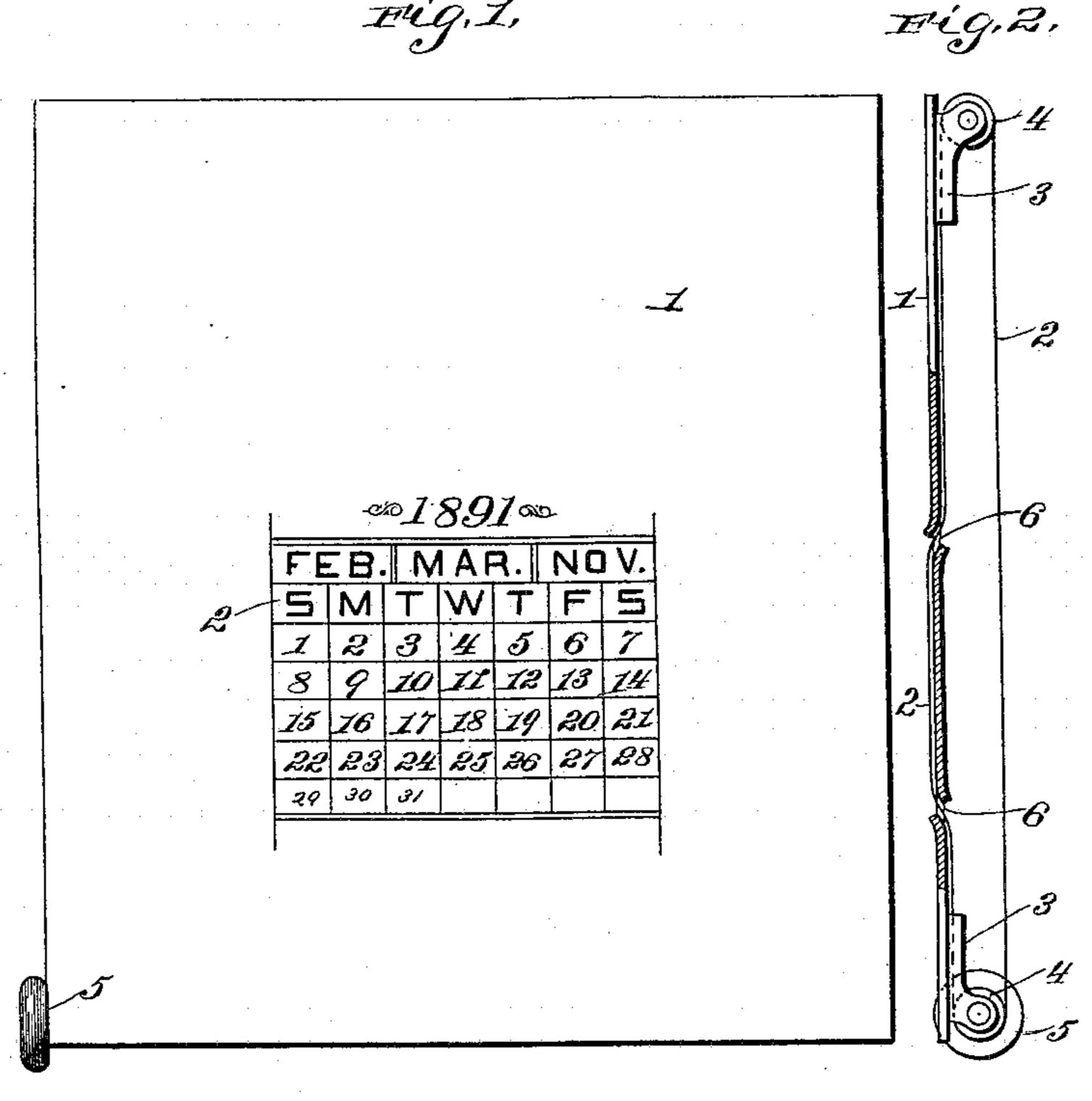
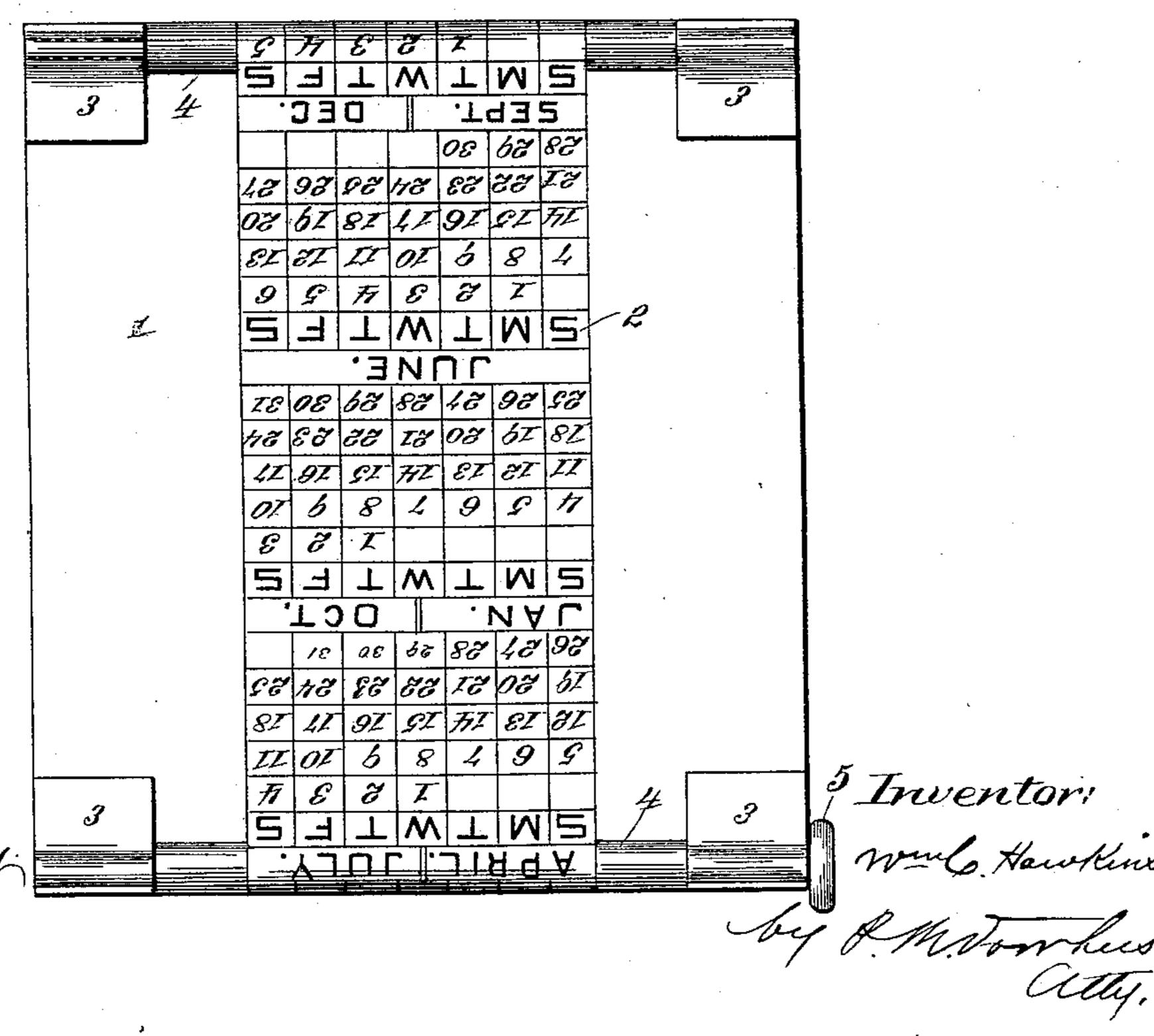
(No Model.) W. C. HAWKINS. CALENDAR.

No. 475,502. Patented May 24, 1892.





Witnesses!

United States Patent Office.

WILLIAM C. HAWKINS, OF TAUNTON, MASSACHUSETTS.

CALENDAR.

SPECIFICATION forming part of Letters Patent No. 475,502, dated May 24, 1892.

Application filed April 4, 1891. Serial No. 387,712. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. HAWKINS, of Taunton, in the county of Bristol and State of Massachusetts, have invented a new 5 and useful Calendar, which invention is fully set forth and illustrated in the following specification and accompanying drawings.

The object of this invention is to provide a calendar in which a minimum number of 10 date-tables are required for a year and in which reference to past or coming months may be readily made, the whole being pre-

servable for that purpose.

The invention consists in providing a se-15 ries of seven different calendar date-tables in the form of a continuous strip in separate leaves or in any suitable form, each datetable having displayed therewith as a heading, in conjunction with the names, initials, 20 or abbreviations of names of the days of the week in the usual order, the names or abbreviations of names of every month of the year whose corresponding dates fall upon the same day of the week, thereby reducing the 25 number of such tables required for a year from the usual twelve to seven.

In the accompanying drawings the seven date-tables are printed upon a strip, which is joined at the ends into an endless web, this 30 web being mounted upon a card in such a way as to expose to view at the front but one table with its heading at a time, concealing all the others, the web being mounted to run over rollers journaled upon the back of the 35 card.

In the drawings, Figure 1 is a face view; Fig. 2, a side view, partly in section, through the center of Fig. 1; and Fig. 3, a back view

of a calendar made according to my inven-

40 tion.

In the figures the several parts are respectively indicated by reference-numbers, as follows: A web 2 passes through slits 6, cut in 45 suitable bearings 3, secured to the back of said card. A button 5 is attached to one of the rollers 4, by means of which said rollers may be rotated, and thus the endless web 2 be changed in position at pleasure. The 50 slits 6 in the card 1 are, as shown, placed at the proper distance apart to expose to view l

but one date-table with its accompanying headings. As there are twelve calendar months and but seven days of the week, it is obvious that some two or more months must 55 have corresponding dates falling upon the

same day of the week.

In the drawings the groups of month-headings are arranged as for the year 1891, in which year there occurs one group of three months, 60 consisting of February, March, and November; three groups of two months, consisting of September and December, April and July, and January and October, and three single months, June, May, and August, having each 65 no other month whose corresponding dates fall upon the same day of the week. The grouping of the month-headings into seven groups, above explained, holds good for all years not leap-years. In leap-years there are 70 also one group of three months, three groups of two months, and three single months, the grouping being different, however, from nonleap-years, but always the same for any leapyear. The relative positions, however, of the 75 month-groups and the days of the week change in either leap-years or non-leap-years for every year. For 1892 or any leap-year the grouping becomes January, April, and July, September and December, March and November, 80 February and August, May, June, October. From the above description it is obvious that a calendar such as herein provided may be made to serve for any non-leap-year by providing for changing only from year to year 85 the relative positions of the month-groups and the days of the week and that by providing also for a change in the grouping of the months or by printing on each exhibition-face containing a calendar-table a plurality of month- 92 group series with the numbers of the years to which they belong the calendar may be made to serve for any desired period.

In the drawings the calendar is set to show the card 1, and over rollers 4, journaled in | the three-month group for the year 1891, as 95 illustrated in Fig. 1, and as set serves for either of the months February, March, and November, the tables for May and August being out of view in both Figs. 1 and 3, as they are obscured by the card 1. The three two- 100 month groups--April, July, January, October, and a part of September and December, as

well as the single-month table for June—are seen in the back view, Fig. 3. As in this case a given date-table must contain as many date-numbers as are required for the month named in the heading which has the greatest number of days, all the date-numbers of any table beyond those required for the shortest month in the group are made in smaller figures or are distinguished from the rest in form, color, or otherwise, as fully described in my application filed herewith, Serial No. 387,710.

It is obvious that in place of the slits in the card 1, through which the web 2 passes, as shown in Fig. 1, a rectangular opening may be cut in the card of proper dimensions to exhibit to view a single table with its heading. The calendar is preferably made as shown, however, the ends of the slits serving as guides for the web 2. With this arrangement of card and web any table may be readily moved into view, while all but two of the other tables and a part of a third may be consulted by reference to the back of the calendar

endar. It is obvious that the series of seven datetables may be used without either the weekday or month exponents being printed or displayed directly thereon, but with either or both of these displayed upon the card or 30 mount, and thus remain stationary, while the date-tables alone are moved. For example, the names, initials, or abbreviations of names of the days of the week may be printed or displayed upon the card 1 at the top or bot-35 tom of the area exhibiting the date-table instead of on the date-table itself as a part of the heading, while the month-groups may be displayed upon the date-tables alone as a heading, or said month-groups may also be 40 printed or displayed upon the card 1 in seven spaces corresponding in position with the week-day exponents, as shown and described in my application filed herewith, bearing the Serial No. 387,711, and a suitable pointer or 45 index displayed on each table, designating the position of the month-group which is to be used. In the arrangement last described a plurality of slips containing month-groups for several years may be used, making the cal-50 endar serve for as many years as there are provided slips containing said month-groups, as described in my last-mentioned applica-

It is also obvious that the seven date-tables,
with their month-group headings, may be
placed or displayed upon separate leaves,
cards, or pages, or displayed upon webs used
without rollers or upon slides similar in operation to those shown and described in my
last-mentioned application. I do not confine
myself, therefore, to the arrangement of endless web mounted on rollers, as shown; but,

Having thus fully described my said invention, I claim—

1. In a calendar, a series of seven date-ta- 65 bles with the dates thereon arranged in seven different orders, each of said tables having displayed thereon or conjoined therewith, in addition to the names, initials, or abbreviations of names of the days of the week, the 70 names or abbreviations of names of the month or months whose corresponding dates fall upon the same day of the week, said names or abbreviations of names of the week-days being always displayed in their natural order 75 from the first week-day, preferably Sunday, placed in line with the left-hand column of dates, whereby seven of said date-tables will suffice for a calendar for one year, substantially as set forth.

2. In a calendar, a series of seven date-tables with the dates thereon arranged in seven different orders, each of said tables having displayed thereon or conjoined therewith, in addition to the names, initials, or abbrevia-85 tions of names of the days of the week, the names or abbreviations of names of the month or groups of months whose corresponding dates fall upon the same day of the week, said names or abbreviations of names of the week-days 90 being always displayed in their natural order from the first week-day, preferably Sunday, placed in line with the left-hand column of dates, in combination with means, substantially as shown and described, for bringing 95 into view, one at a time, said tables with their accompanying month-group headings, as desired, substantially as set forth.

3. In a calendar, the combination of an endless web of paper or other suitable material, 100 as 2, having displayed thereon seven calendar date-tables arranged in seven different orders, each of said tables having also displayed thereon or conjoined therewith, in addition to the names, initials, or abbreviations 105 of names of the days of the week, the names or abbreviations of names of the month or months whose corresponding dates fall upon the same days of the week, a perforated card or mount, as 1, and rollers, as 4, journaled on 110 the back of said card or mount, said names or abbreviations of names of the week-days being always displayed in their natural order from the first week-day, preferably Sunday, placed in line with the left-hand column of 115 dates, and said web being mounted to run upon said rollers and exhibit, one at a time, said tables with their accompanying monthgroup headings at the front of said card, substantially as set forth. WM. C. HAWKINS.

Witnesses:
Theo. H. Friend,
P. R. Voorhees.