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L. AKER

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CALENDAR

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Fig. 1

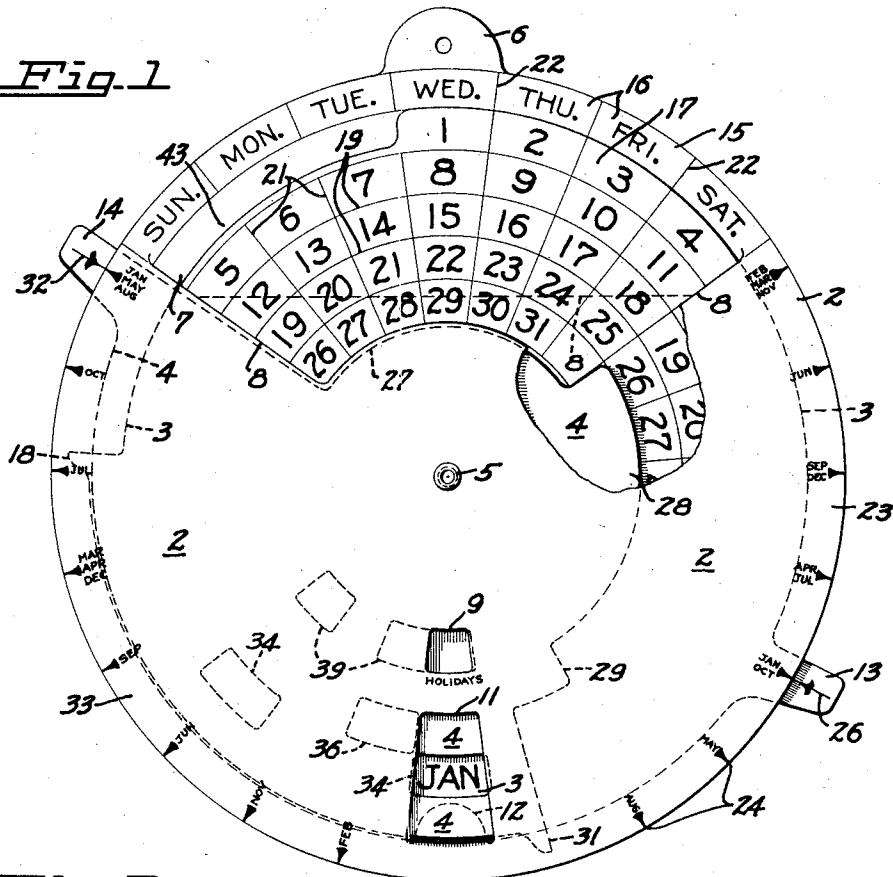


Fig. 2

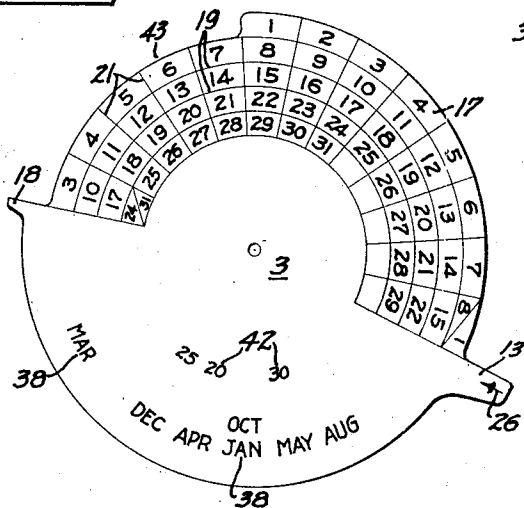
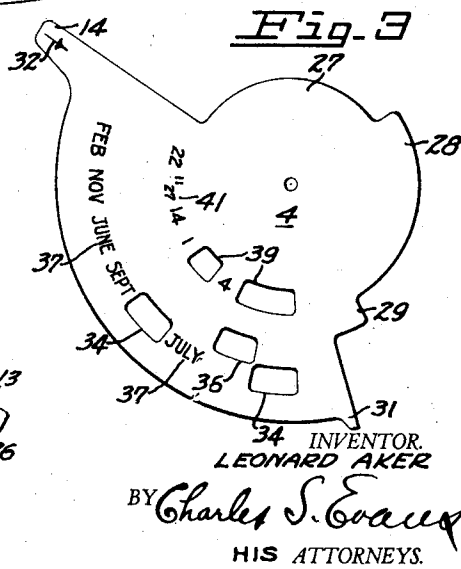


Fig. 3



INVENTOR.
LEONARD AKER
BY *Charles S. Evans*
HIS ATTORNEYS.

UNITED STATES PATENT OFFICE

LEONARD AKER, OF ATHERTON, CALIFORNIA, ASSIGNOR TO THE RECORDER PRINTING AND PUBLISHING CO., OF SAN FRANCISCO, CALIFORNIA, A CORPORATION OF CALIFORNIA

CALENDAR

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My invention relates to a calendar, and one of the objects of the invention is the provision of a calendar having parts adjustable to show each month of the year.

Another object of the invention is the provision of a calendar in which a movable date section may be calendrically aligned with the days of the week for each month of the year.

Another object of the invention is the provision, in a calendar of the character described, of means for indicating the name of the month and relevant facts, such as holidays, for each calendric alignment of dates.

The invention possesses numerous other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of my invention. It is to be understood that I do not limit myself to this disclosure of species of my invention, as I may adopt variant embodiments thereof within the scope of the claims.

Referring to the drawings:

Figure 1 is a plan view of the calendar; portions of the structure are omitted, and hidden parts are indicated in dotted lines, to show the construction.

Figure 2 is a plan view of one of the adjustable plates; and Figure 3 is a plan view of another such plate.

The chronological arrangement of dates, with respect to the days in the week, varies with the months of the year. This factor, together with the fact that the number of dates in a given month also varies, presents a problem in the design and making of calendars; and it has been the practice to overcome this difficulty by providing an individual printed sheet for each month. It is apparent that this solution to the problem in calendar design is the obvious one; but because it entails the use of considerable paper, and necessitates the printing and reprinting of many dates, this design is neither the most economical nor most effective.

Calendars have always been popular as a means for advertising, because of their universal usefulness. However, since most calendars are made in the same way, one is not more attractive or novel than another from the constructional point of view. Also, since

advertising calendars must ordinarily be given away, it is essential that they be produced at minimum cost.

The purpose of this invention is to provide a calendar which is attractive in its novel and interesting construction; which dispenses with the need of individual monthly calendar sheets; and which clearly indicates the holidays or other relevant facts in a given month.

In terms of broad inclusion, the invention comprises a plurality of relatively movable plates. One of the plates is provided with a day scale, and another has a date section adapted to register with the day scale.

The months of the year and their corresponding holidays are also arranged on the surfaces; and means is provided for effecting relative movement between the plates to indicate the month and its holidays and to calendrically align the dates with the day scale to accord with the indicated month.

In greater detail, the invention consists of a plurality of relatively movable plates of cardboard or other suitable material, comprising a preferably circular base 2, a substantially circular rotor 3, and the sector rotor 4 conveniently mounted between the base and circular rotors. The rotors are pivotally secured to the base by an apertured rivet 5, extending through the central portions. By inserting a nail or tack through the rivet aperture, and also one through an eyelet in the upwardly extending base ear 6, the whole assembly may be mounted on any convenient support.

When assembled in operative relation, the rotors 3 and 4 project through the base; and to this end, an upper sector portion or lip 7 of the circular base 2, is formed by a slit 8, extending radially from points near the periphery to a concentric arc near the center. The rotors having radii less than the base radius, project into the sector slot thus formed, and may be rotated into various positions therein, thus exposing selected sectors of the rotors.

A pair of radially aligned apertures 9 and 11, are also provided in the base. These apertures are positioned below the sector slot,

and are adapted to expose portions of the rotor lying thereunder. The bottom side of the lower aperture 11 forms a lip 12, which bears against the rear portions of the rotors, and maintains the rotors against the base, while at the same time permitting their free rotation. The outwardly extending tabs 13 and 14 are provided on the periphery of the rotors 3 and 4 respectively for rotating the rotors.

The monthly dates vary throughout the year, and means are provided whereby a single date section suffices for all the variations. The narrow peripheral sector 15, bounding the sector formed by the slit 8, is divided into seven equal parts denoted by the days of the week to form the day scale 16.

Positioned on the circular rotor 3 is a date section 17, adapted to coordinate with the day scale 16. One end of the date section is preferably bounded by the tab 13, and the other end is preferably bounded by the outwardly projecting stop 18. The stop limits the movement of the circular rotor in one direction; and the tab 13 similarly limits the movement in the other direction. Thus it is seen that the selected exposed sector of the circular rotor is always a portion of the date section.

The date section comprises a series of monthly dates, each date being positioned in a space determined by the parallel concentric arcs 19, and the radial lines 21 which at their outer ends may be registered with the spacing lines 22 of the day scale 16. There are fourteen of these radial lines, and six arcs; hence, sixty-five date spaces are provided. However, the first and last five spaces, as shown in Figure 2, are not necessary.

Beginning with the sixth space in the upper row, and proceeding clockwise, as is shown in Figure 2, the remaining spaces are numbered from "one" through "eight"; the eighth space being divided diagonally and also containing the number "one". Starting with the first space in the second row, the consecutive spaces are numbered from "three" through "fifteen". In a like manner, the third row is numbered from "ten" through "twenty-two"; and the fourth row from "seventeen" through "twenty-nine". The last or inner row, beginning with the first space, is numbered from "twenty-four" through "thirty-one"; the first space being divided diagonally and also containing the number "thirty-one".

Thus it is seen, allowing for a weekly span of seven days, that there are seven monthly combinations of dates, and by merely aligning the first date of the month with the proper day on which it falls, the remaining dates for that month will automatically calendrically align themselves in proper order. It is to be noted that the first dates in five of the months in the year fall on the same day that others do; hence the seven

monthly combinations serve for the twelve months of the year.

In order to properly set the date section for a given month, an index setting is provided. Formed on a portion of the base periphery and extending from the right edge of the sector slot to the lower portions of the base, is the month index 23, comprising the seven spaced indicia 24. Each indicia is positioned so that when the rotor tab indicator 26 registers therewith, the date section and day scale will be calendrically aligned in one of the seven respective monthly combinations.

Of course the month notation on the index will depend on the specific date combinations for that particular year. For 1930 that notation is, starting from the top and reading down on the index as shown in Figure 1: first indicia, "Feb., March and Nov."; second, "June"; third, "Sept. and Dec."; fourth, "April and July"; fifth, "Jan. and Oct."; sixth, "May"; and seventh, "Aug.". In other years of course that notation would vary to accord with the facts.

In order to block out the exposed dates which do not belong in a given month, a blocking means is provided. The sector rotor 4 has a circular central portion 27, on the periphery of which is formed the projecting arcuate portions 28 and 29. The portion 28 is shaped and proportioned to cover numerals exposed in the last row of the date section, and the portion 29, is shaped and proportioned to cover the last numeral exposed in the fourth row thereof.

The tab 14, which is positioned at one edge of the rotor sector limits the rotor movement in one direction. In this extreme position of the sector rotor, the exposed portion of the date section is unobstructed. Likewise, movement in the other direction is limited by the stop 31, projecting outward from the other edge of the sector. In this extreme position, all the dates in the last row of the date section, and the last date in the fourth row, are blocked out.

An indicator 32, on the tab 14, is arranged to register with a month index 33; which is similar to the first mentioned index 23, but positioned on the opposite front side of the base. By making the proper index setting, the blocking portions 28 and 29 will conceal the unnecessary dates. The month notation on this index will depend on the number of unnecessary dates exposed, and this in turn depends on the particular date section setting made, and the number of days in the month. This will vary with the year; and the particular notation for 1930 is, starting from the top and reading down on the index as is shown in Figure 1: first indicia, "Jan., May and Aug."; second, "Oct."; third, "July"; fourth, "Mar., April and Dec."; fifth, "Sept."; sixth, "June"; seventh, "Nov.";

eight, "Feb.". In the first setting, all the dates in the last row are covered by blocking portion 28, and the last date in the fourth row is covered with blocking portion 29; in this setting, providing the other index setting has been made, the calendar reads correctly for twenty-eight days.

Means are also provided for indicating the month for a given setting. The sector rotor 4 is provided with the plurality of apertures adapted to register with the base aperture 11. Two of these apertures 34 are similarly disposed, and the third aperture 36 is positioned above and to the side of one of these. In line with the similarly disposed apertures is part of a month scale 37, comprising spaced notations, and reading from left to right as follows: "Feb., Nov., June, Sept.", and after the first aperture, "July". This arrangement of apertures and months is shown in Figure 3.

On the circular rotor is positioned the remaining part 38 of the month scale. In line directly under the rotor apertures 34 are the spaced notations, reading from left to right as follows: "March, Dec., April, Jan., May and Aug.". "March" and "Dec." are spaced an amount equal to the notation spacing. Directly above "Jan." in this portion of the scale is "Oct.", adapted to underlie the rotor aperture 36. The arrangement of months in this portion of the month scale is shown in Figure 2.

The arrangement of these notations and the apertures is such that when the rotors 3 and 4 are set to calendrically position the dates for a given month, the corresponding month will be indicated through the base aperture 11. This arrangement of the month scale and the cooperating rotor apertures is designed for the year 1930; it being obvious that the specific arrangement will vary for another year.

In a calendar it is desirable to have other relevant facts, such as holidays, clearly indicated for a given month, and for this purpose suitable means are provided. Similarly disposed apertures 39 are provided in the sector rotor 4, for registering with the base aperture 9. In line with these apertures is a portion of a holiday scale 41, comprising spaced holiday date notations; and reading from left to right as follows: "22nd, 11th and 27th, 14th, 1st", and then "4th" between the apertures. Since "11th" and "27th" fall in the same month, they are placed in the same space. This arrangement of dates and apertures is shown in Figure 3.

On the circular rotor, in line directly under the rotor apertures 39, is positioned the remaining part 42 of the holiday scale. From left to right the date notations read: "25th, 20th and 30th"; "20th" and "30th" being spaced by one notation space. This

portion of the holiday scale is shown in Figure 2.

When a setting for a given month has been made, not only will that month be visible through the aperture 11, but also the holidays for that month will be indicated through the aperture 9. If desired, the name of the holiday may be written with the corresponding date, so that both will be visible through the aperture. For example, the arrangement of the holiday scale is that for the year 1930; it being obvious that for other years a different arrangement will obtain. The holiday dates shown are only national holidays, and it is to be noted that others may be added; in fact, any relevant matter may be indicated in this manner.

In this embodiment, rotors are used to give relative movement between the plates, but it is apparent that plates having relative movement other than that of rotation might be employed.

This calendar lends itself particularly well for advertising purposes, due to its interesting and novel construction. Advertising matter may conveniently be placed on the base surface 2, and it may also be placed on those portions of the rotor surfaces which become exposed in the various positions.

Preferably an arcuate recess 43 is provided in the first row of the date section, extending from the stop 18 to the numeral 1 in the sixth space of that row. Thus it is seen, that, as the circular rotor 3 moves clockwise, the space under the first row of the date section is exposed to display any suitable advertising matter. This matter may conveniently relate to the days of the week, since it is positioned directly under the day scale.

In a like manner, advertising matter having specific relation to the various months or holidays in the year may conveniently be placed to become visible with a particular month or holiday indication.

I claim:

1. A calendar comprising a day scale, a date section adapted for coordination with the day scale, a month scale cooperating with the day scale and date section, a pair of month indexes each bearing a fixed relation to the day scale, means for registering the date section and a portion of the month scale with one of the month indexes to calendrically align the date section and day scale, and means for registering the remaining portion of the month scale with the other month index to indicate the month as determined by the calendric relation between the date section and day scale.

2. A calendar comprising a day scale, a date section adapted for coordination with the day scale, a month scale and a holiday scale cooperating with the day scale and date section, a pair of month indexes each bearing a fixed relation to the day scale, means for

- registering the date section and a portion of the month and holiday scales with one of the month indexes to calendrically align the date section and day scale, and means for
5 registering the remaining portion of the month and holiday scales with the other month index to indicate the month and its holidays as determined by the calendric relation between the date section and day scale.
- 10 3. A calendar comprising a plurality of relatively movable cooperating plates, one of the plates having a day scale and a pair of month indexes, other plates having a date section and a month scale, and means on the
15 last mentioned plates adapted to register with the indexes for indicating any given month and for calendrically positioning the dates on the date section with respect to the day scale to accord with the indicated month.
- 20 4. A calendar comprising a fixed disk having thereon an arcuate day scale and openings therein, a second disk pivoted to the fixed disk and having a date section alignable with the day scale and visible in selected
25 sectors through one of said openings in the fixed disk and having a month scale selectively visible through another of said openings in the fixed disk, and a third disk pivoted to the other two and having portions for
30 blocking selected areas of the second disk and having a month scale selectively visible through the last named opening and disposed upon one of said blocking portions.

In testimony whereof, I have hereunto set
35 my hand.

LEONARD AKER.

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