H. L. GULLINE.

CALENDAR.

APPLICATION FILED AUG. 19, 1918.

1,378,857. Patented May 24, 1921.

Fig. 1.

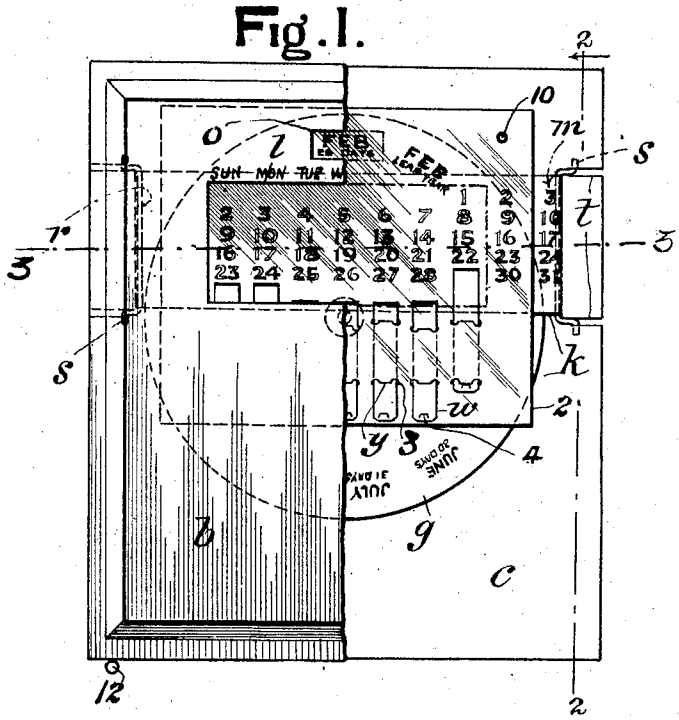


Fig. 2.

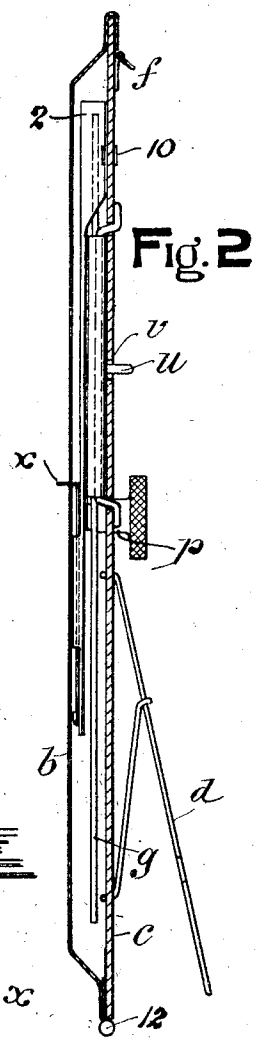


Fig. 3.

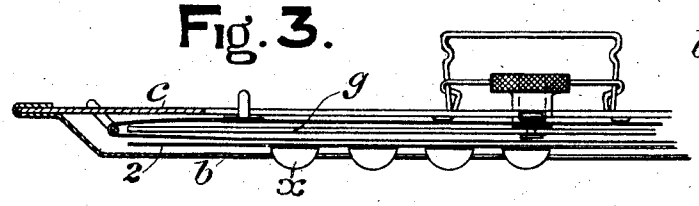


Fig. 4.

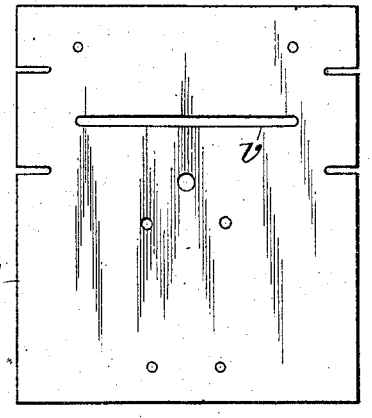
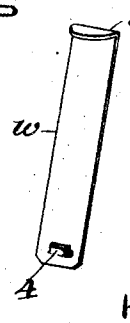


Fig. 5.



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CALENDAR.

1,378,857. Specification of Letters Patent. Patented May 24, 1921.

Application filed August 19, 1918. Serial No. 250,624.

To all whom it may concern:

Be it known that I, HENRY LAWRENCE GULLINE, of the town of Bordeaux, in the Province of Quebec, Dominion of Canada, have invented certain new and useful Improvements in Calendars; and I hereby declare that the following is a full, clear, and exact description thereof.

My invention relates particularly to perpetual calendars, and has for its object to provide a calendar of the type adapted to expose the actual number of days in any month; another object being to simplify and reduce the thickness of these calendars.

To this end the invention may be said to consist of a perpetual calendar comprising a rotary disk for the names of the months and an endless flexible loop for the ordinal numbers in columnar arrangement and including sufficient columns with relative ordinal numbers to present a complete month in any seven contiguous columns. This loop is caused to move slidably across the disk and the disk is adapted to be rotated, while a transparent face-plate covers the disk and loop and a slidable series of screens are adapted to conceal the surplus ordinals when the month is less than thirty-one days. This mechanism is contained within a substantially flat case the front of which has openings to expose the monthly ordinals and the names of the month, the back of the case carrying all the mechanism.

The invention also consists of the construction, specific combination and particular arrangement of parts hereinafter described with reference to the drawings and pointed out in the claims.

For full comprehension, however, of my invention reference must be made to the accompanying drawings in which—

Figure 1 is a front elevation of my improved calendar;

Fig. 2 is a vertical sectional view taken on line 2—2 Fig. 1;

Fig. 3 is a horizontal section taken on line 3—3 Fig. 1, and

Figs. 4 and 5 are detail views of the back and one of the slidable screens respectively.

With reference to these drawings the case of my calendar consists of a front *b* and back *c*, the front being preferably of thin sheet steel and the back of cardboard or other flexible or resilient material and the back carries means for standing it on a desk or other surface, such as the feet *d* for instance, or an eye *f* by which it may be hung on the wall. Within the case, according to my invention and on the back *c*, is mounted a rotary disk *g* bearing the names of the months including two Februarys one having the number "28" and word "days" beneath it and the other the words "leap year;" while the other months of the year have their number of days indicated beneath their names. An endless flexible loop *k*, preferably of textile ribbon, incloses the disk, and is divided transversely into thirteen spaces *m* each containing a series of ordinal numbers arranged to expose, through an opening *l* in the front of the case, a full monthly calendar, with the ribbon in any position to which it may be adjusted. The front of the case has the names of the days of the week marked on it along one edge of the opening exposing the monthly calendar and registering with the spaces of the ribbon. The front also has a small opening *o* close to the opening just mentioned, through which the names and associated inscription of the number of the days of the month, are exposed. The back *c* of the case carries the disk pivotally, the pivot *p* projecting through the back and being provided with a thumb hold to facilitate its operation manually. The ribbon loop is slidably supported by a pair of guiding carriers *r* consisting of wires bent to wide U-form with their ends *s* turned out and set in notches *t* in the opposite edges of the back, this ribbon being operated by a stud *u* carried thereby and projecting through a slot *v* in the back.

In order to conceal the surplus ordinals to confine the dates to the actual number of days of the month exposed, a series of slidable screens *w* with their top ends bent outward to afford finger holds *x*, are carried in slots *y* in a transparent face-plate 2 the slots being cut with enlarged ends 3 to present shoulders *z* acting as stops for limiting the movement. The lower shoulder in each slot being engaged by tits 4 pressed out of the screens near their lower ends and a sufficient distance above the ends to prevent the displacement of such ends from the slots when the screen is raised to the limit of its vertical movement. The finger holds are adapted to rest on the lower edge of the opening *l* in the front when the screens are lowered. This transparent face-plate is fastened to the back by eyelets 10 and it is of sufficient size to extend completely across those portions

of the disk and ribbon exposed to dust or dampness through the openings *l* and *o* its function being to also prevent interference of the edges of the ribbon and the disk with the edges of the openings; the uppermost of the slots *y* being preferably located in close proximity to the bottom edge of the opening *l*.

In order to cause the calendar to stand evenly a pair of feet 12 are provided at its bottom corners by pins having spherical heads, these pins being stuck into the lower edge of the back at these bottom corners, the spherical heads serving as feet.

When the disk has been rotated to an angular position exposing the name of the month through the opening *o* and the ribbon shifted to bring the first day of the month in juxtaposition with the particular day of the week upon which the month starts (indicated at the top of the opening *l*) the ordinal numbers of a complete month of thirty-one days are exposed, which is obtained by the particular arrangement of ordinal numbers and spaces illustrated. In the event of the month having less than thirty-one days the screen or screens necessary to conceal the surplus ordinals are adjusted for the purpose.

To meet the requirement of leap year the disk is as before mentioned provided with two Februarys one of which has the words "leap year" associated with it and the angular position of the disk is changed to expose this "leap year" February. In this case the ordinal number 29 will not be screened.

With the construction and particular arrangement of parts above described a case of minimum thickness may be contained, while the fact that operating parts are carried by the back simplifies the assembling of the calendar which is further simplified by the flexibility or resiliency of the back with its slotted side edges in which the ends *s* of the ribbon carriers *r* are set. To equip the back with a slidable ribbon it is curved to bring the edges closer together the carriers with the ribbon looped about them may then be readily set in the notches *t* and when the back is released and springs to its flat position the carriers are drawn inwardly to their seats and the ribbon stretched taut, the stud engaging in and projecting through the slot *v* in the back.

What I claim is as follows:—

1. In a perpetual calendar, a movable member bearing ordinal numbers divided in series, any contiguous seven of which series include thirty-one days, a front for concealing a portion of said movable member and having an opening for exposing such contiguous series, of means for concealing one or more of the ordinal numbers finishing the month, said means consisting of a series of individually adjustable screens supported in position to be adjusted over the said ordinal numbers finishing the month, for the purpose set forth.

2. In a perpetual calendar, a movable member bearing ordinal numbers divided in series any contiguous seven of which series include thirty-one days, a front for concealing a portion of said movable member and having an opening for exposing such contiguous series, of means for concealing one or more of the ordinal numbers finishing the month, said means consisting of a series of individually adjustable vertical screens independently supported in position to be adjusted over the said ordinal numbers finishing the month the screens consisting of strips of metal each having one end bent to serve as a finger hold, for the purpose set forth.

3. In a perpetual calendar the combination with a front member having an opening therein for exposing to view the days of the month, and a back member each vertical side edge of which is provided with a pair of notches; of a flexible endless loop bearing ordinal numbers divided in vertical series, any contiguous seven of which include thirty-one days; and means for carrying said loop, said means consisting of a pair of guiding carriers of substantially wide U-form located at opposite sides of said opening and each having its free ends projecting through said notches and offset to prevent displacement therefrom.

4. In a perpetual calendar a rotary disk bearing the names of the months of the year; a movable endless loop bearing a plurality of related series of ordinal numbers any seven of which series present the ordinal numbers of a complete month of thirty-one days; a front concealing portions of the loop and disk and having openings exposing some of the ordinal-number series and one of the month-names; a transparent protective celluloid face-plate located between the front, on one hand, and the loop and disk on the other hand and having a series of pairs of parallel slots *y* with enlarged ends; and a series of metal screens carried slidably in the pairs of parallel slots and each having its upper end bent outwardly to afford a finger hold and slidable in a direction at substantially right angles to the direction of travel of the ribbon.

In testimony whereof I have signed my name to this specification in the presence of two witnesses.

HENRY LAWRENCE GULLINE.

Witnesses:
L. C. WINTER,
G. TURGEOW.