

June 19, 1923.

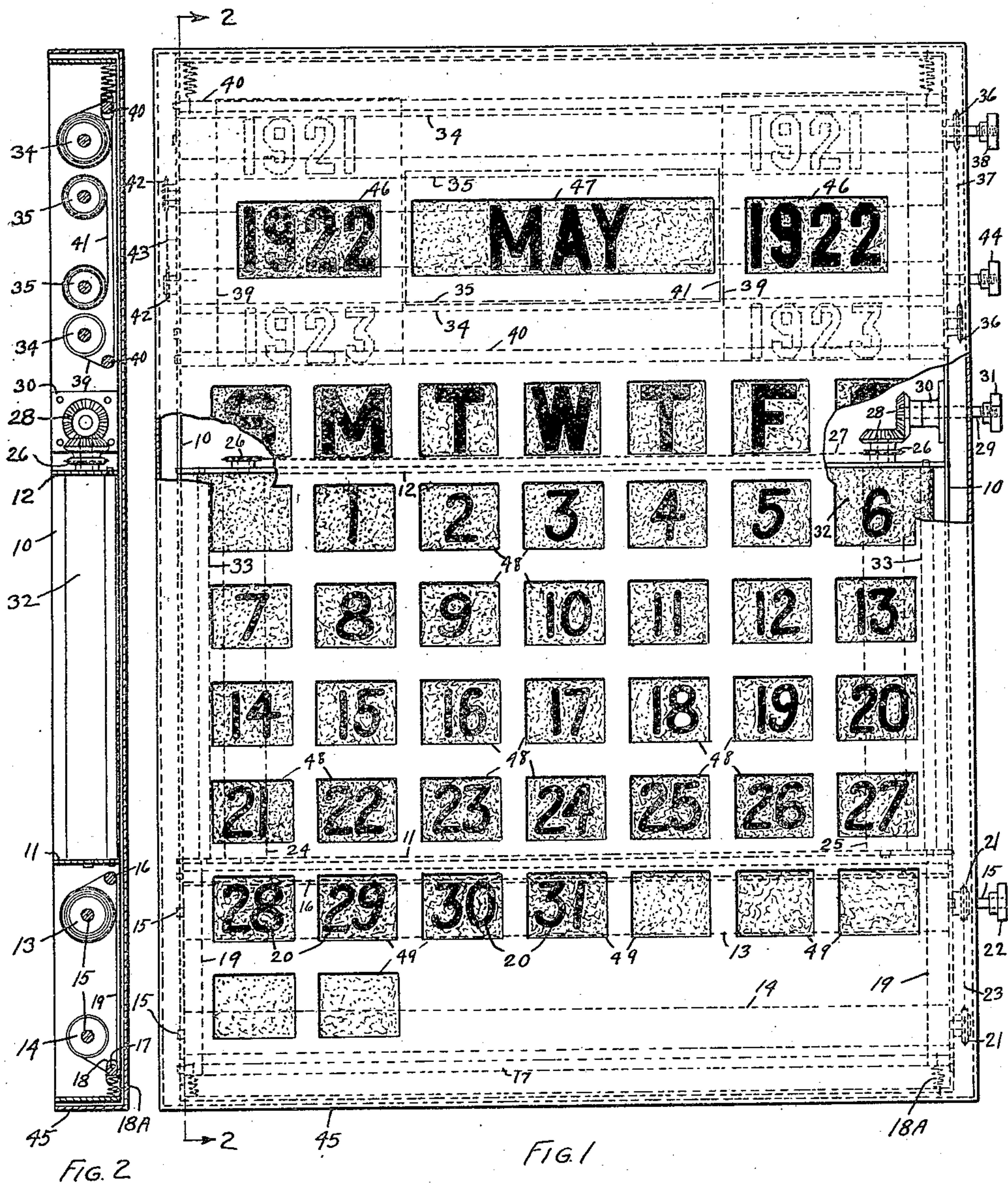
1,459,236

F. W. ORTH

PERPETUAL CALENDAR

Filed Aug. 17, 1922

2 Sheets-Sheet 1



INVENTOR
F. W. ORTH
By E. B. Burkhead
His ATTORNEY

June 19, 1923.

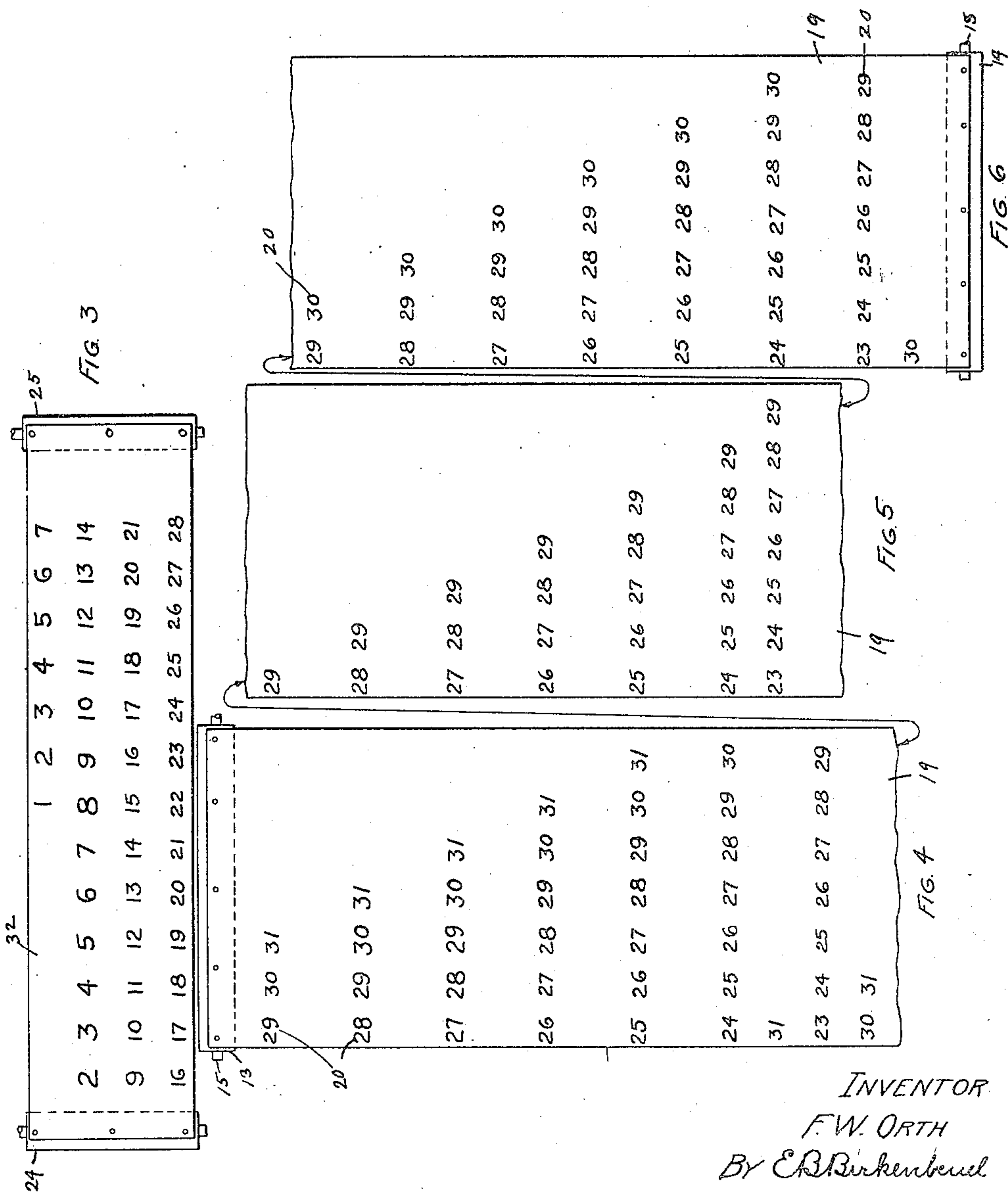
1,459,236

F. W. ORTH

PERPETUAL CALENDAR

Filed Aug. 17, 1922

2 Sheets-Sheet 2



INVENTOR
F. W. ORTH
BY *E. R. Birkenbeul*
HIS ATTORNEY

UNITED STATES PATENT OFFICE.

FRED W. ORTH, OF OCEAN PARK, WASHINGTON.

PERPETUAL CALENDAR.

Application filed August 17, 1922. Serial No. 582,507.

To all whom it may concern:

Be it hereby known that I, FRED W. ORTH, a citizen of the United States, and a resident of Ocean Park, in the county of Pacific and State of Washington, have invented a new and useful Perpetual Calendar, of which the following is a specification.

This invention relates more particularly to calendars for displaying the day of the month, month and year for any number of years within the range of the device.

The object of my invention is to provide an exceedingly simple and efficient calendar which will indicate the correct day, date, month and year for succeeding years including leap years.

I accomplish these results in the manner set forth in the following specification and illustrated in the accompanying drawings, in which:

Figure 1 is a front elevation of the device with portions cut away for clearness. Figure 2 is a section along the line 2—2 in Figure 1. Figure 3 is a plan of the web which bears the upper four tiers of dates. Figures 4, 5 and 6 are separated sections of the web which bears the lower two tiers of dates.

Similar numbers of reference refer to the same or similar parts throughout the several views.

Referring in detail to the drawing, I have constructed my device upon a rectangular frame 10 having horizontal dividing partitions 11 and 12. Below the partition 11 and journaling in the sides of the frame 10 I have mounted the rollers 13 and 14 which turn on the shafts 15. Small idler rollers 16 and 17 are also mounted below the partition 11 and near the front of the frame 10. The roller 17 journals in the slotted bearings 18 and is held away from the roller 16 by the springs 18 which are attached to the frame 10. A web 19 of suitable material and having the dates 20 printed thereon is attached to the rollers 13 and 14 and passes around the rollers 16 and 17. The shafts 15 are provided with the sprockets 21. One shaft 15 extends beyond its sprocket and is provided with a setting knob 22. A chain 23 passes over the sprockets 21 and rotates the rolls 13 and 14 in the same direction.

Between the members 11 and 12 and journaling in same, I have placed the two vertical rollers 24 and 25 which carry the

sprockets 26 around which passes the chain 27. The bevel gears 28 are attached to a sprocket 26 and to the shaft 29 which journals in the bearing 30. A knob 31 is used to rotate the rollers 24 and 25. To these rollers is attached the web 32 which carries the upper four tiers of dates. Idler rollers 33 are also provided to hold the web 32 close to the front of the frame 10.

Above the member 12 and journaling in the sides of the frame 10, are the rollers 34 and 35. The rollers 34 are connected by the sprockets 36 and the chains 37 and are driven by means of the knob 38. Two webs 39 are attached to the rollers 34 and pass around the idler rollers 40 and have printed on same a succession of years. Between the webs 39 and secured to the rolls 35 I have placed the web 41 which bears the months of the year. Sprockets 42 and chains 43 connect the rolls 35 and motion is supplied to them by the knob 44.

A case 45, large enough to receive the frame 10 is provided and the knobs 31, 38 and 44 project through its side. Openings 46 reveal the year, while openings 47 show the months. Openings 48 show the upper four rows of dates and 49 the lower two rows of dates. The letters show the days of the week and are fixed and may be on the front of the case or may be in the form of transparencies as is the case with the other characters in case the device is to be illuminated from behind.

The operation of my device is as follows: Turn knob 38 until the correct year appears in the window 46. Then turn the knob 44 to display the proper month in the window 47. Then turn knob 31 until the first date is under the correct day of the week. Then turn knob 22 until the dates in the windows 49 correspond with those above.

It will be seen that by this arrangement of parts I have produced a calendar whose range is only limited by the number of years which are listed on the web 39. By the arrangement of webbing above described it is possible to properly position the first day of any month under its proper day of the week with the minimum amount of webbing owing to the great reduction in the number of combinations required.

I am aware that many forms of calendars have been constructed in the past, and there-

fore intend to cover only those forms and modifications that fall fairly within the appended claims.

What I claim as new is:

5 1. A calendar having in combination a moveable web bearing year dates, a second moveable web bearing month names, a third web adapted to be moved horizontally and bearing the four upper tiers of dates in ex-
10 tended lines, a fourth web vertically moveable and of uniform width bearing the dates which would fall in the lower two tiers of dates in all of the possible combinations, a stationary row of characters representing the
15 days of the week above said date webs, means for adjusting the upper four tiers of dates to the days of the week, and means for adjusting the two lowermost tiers of dates to the four uppermost tiers in a manner that
20 the dates given on the upper four and the lower two tiers shall unite to form a complete month.

2. In a calendar, the combination of a

frame having openings in its front with a moveable web carrying on its face a succe- 25
sion of year numbers arranged to be visible separately through one of said windows, a moveable web bearing the names of the months of the year arranged to be visible separately through one of said windows, a 30
third web moveably mounted behind said windows bearing the upper four tiers of dates, the first row beginning with 1 at the middle and running to seven on the right, the second row runs from 2 on the left to 14 35
on the right, the third row runs from 9 on the left to 21 on the right, the fourth runs from 16 on the left to 28 on the right, and a vertically moveable web below said third web bearing in vertical column those com- 40
binations of dates which may occupy the fifth and sixth lines of the calendar and means for adjusting the relation of said moveable webs.

FRED W. ORTH.