

(Model.)

2 Sheets—Sheet 1.

G. W. SHIRK.
CALENDAR.

No. 542,538.

Patented July 9, 1895.

Fig. 2.



Fig. 1.

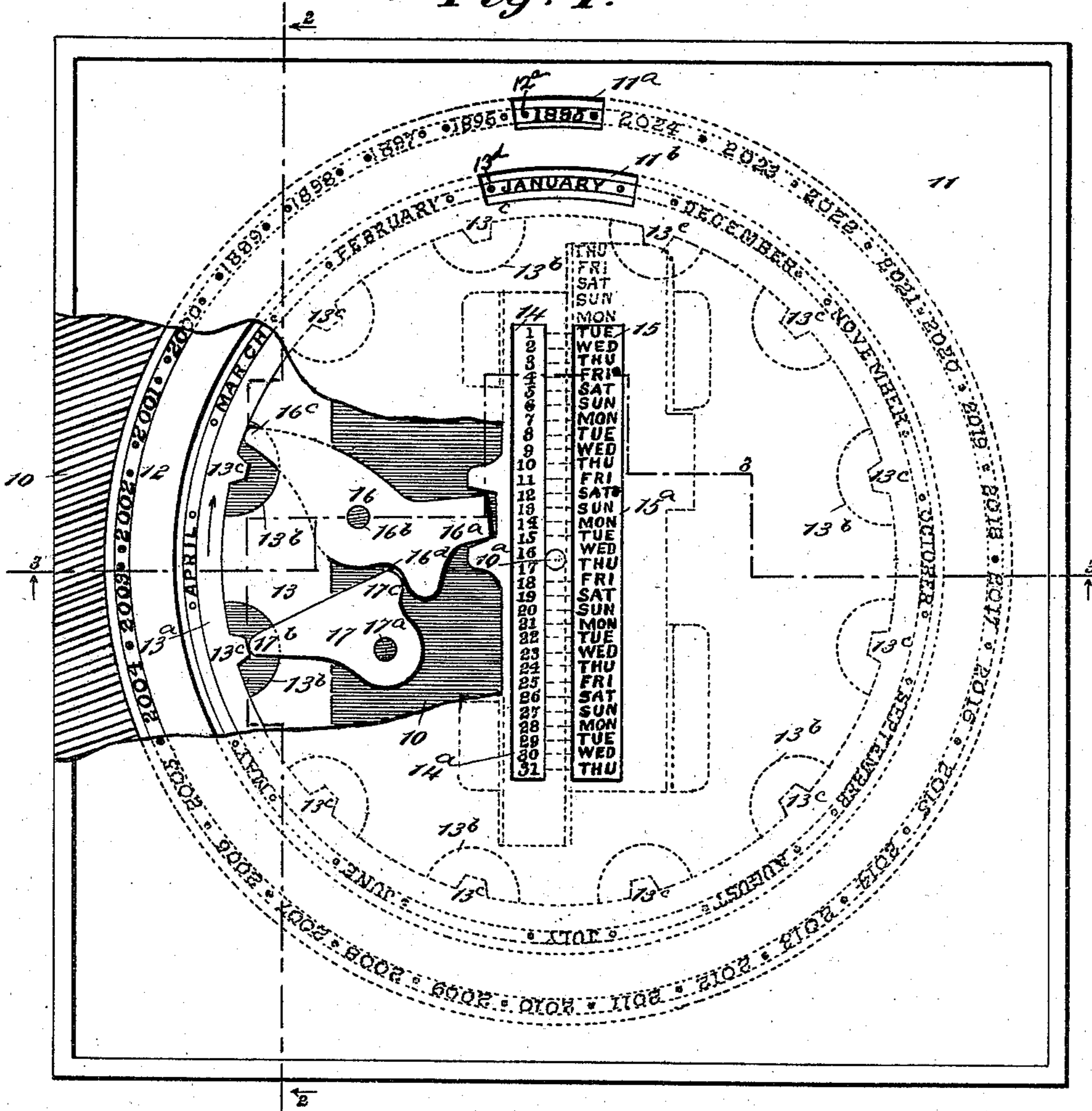
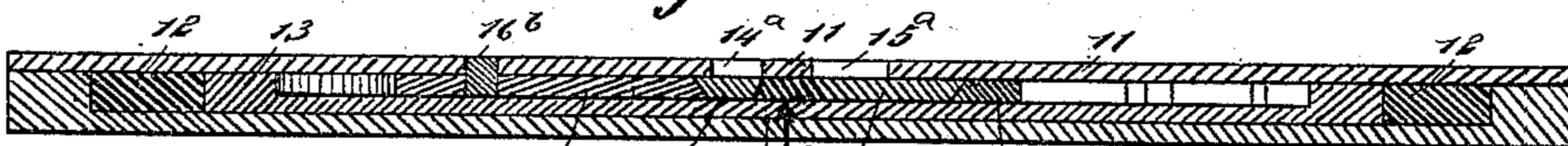


Fig. 3.



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(Model.)

2 Sheets—Sheet 2.

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Fig. 4.

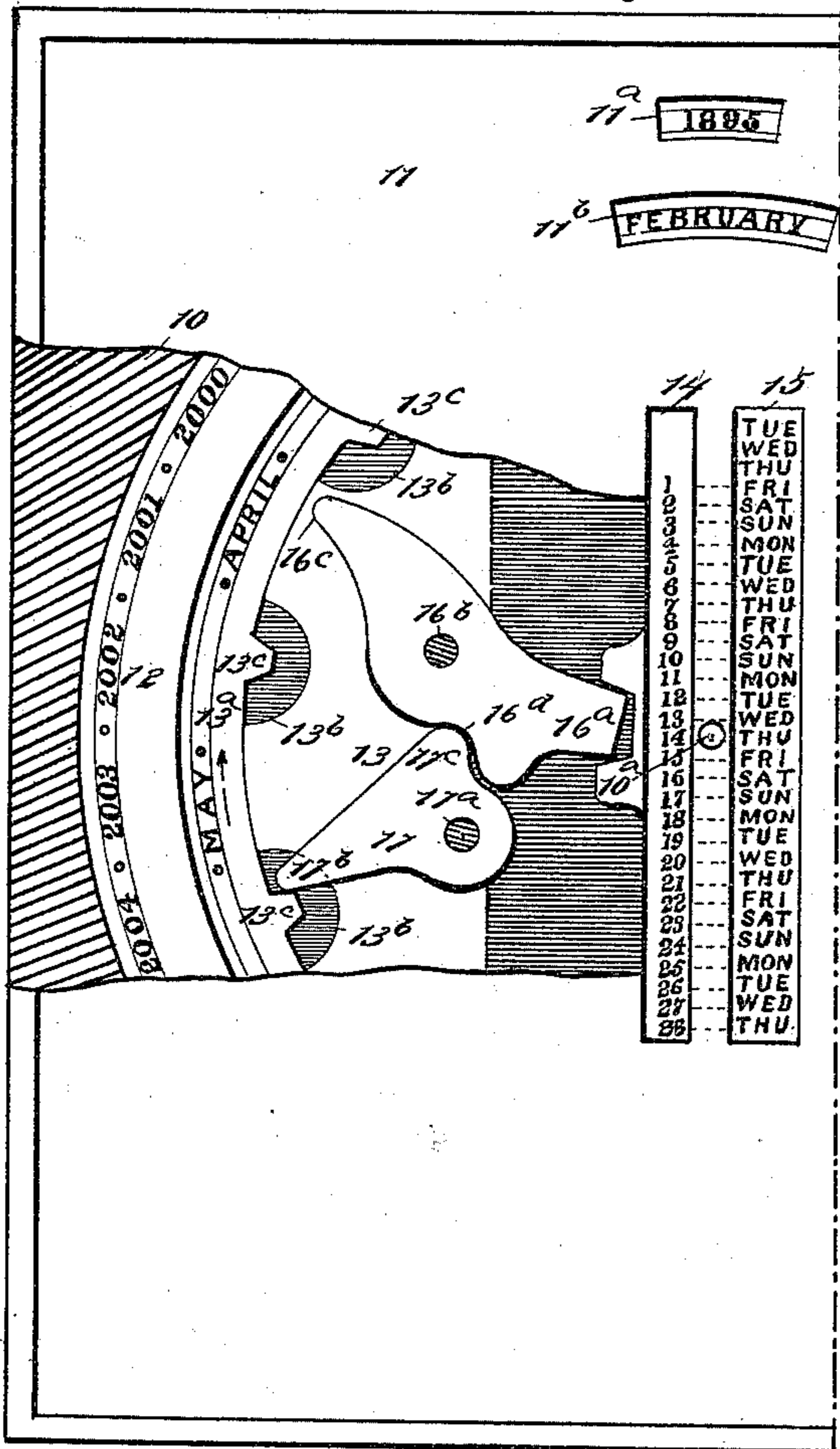


Fig. 5.

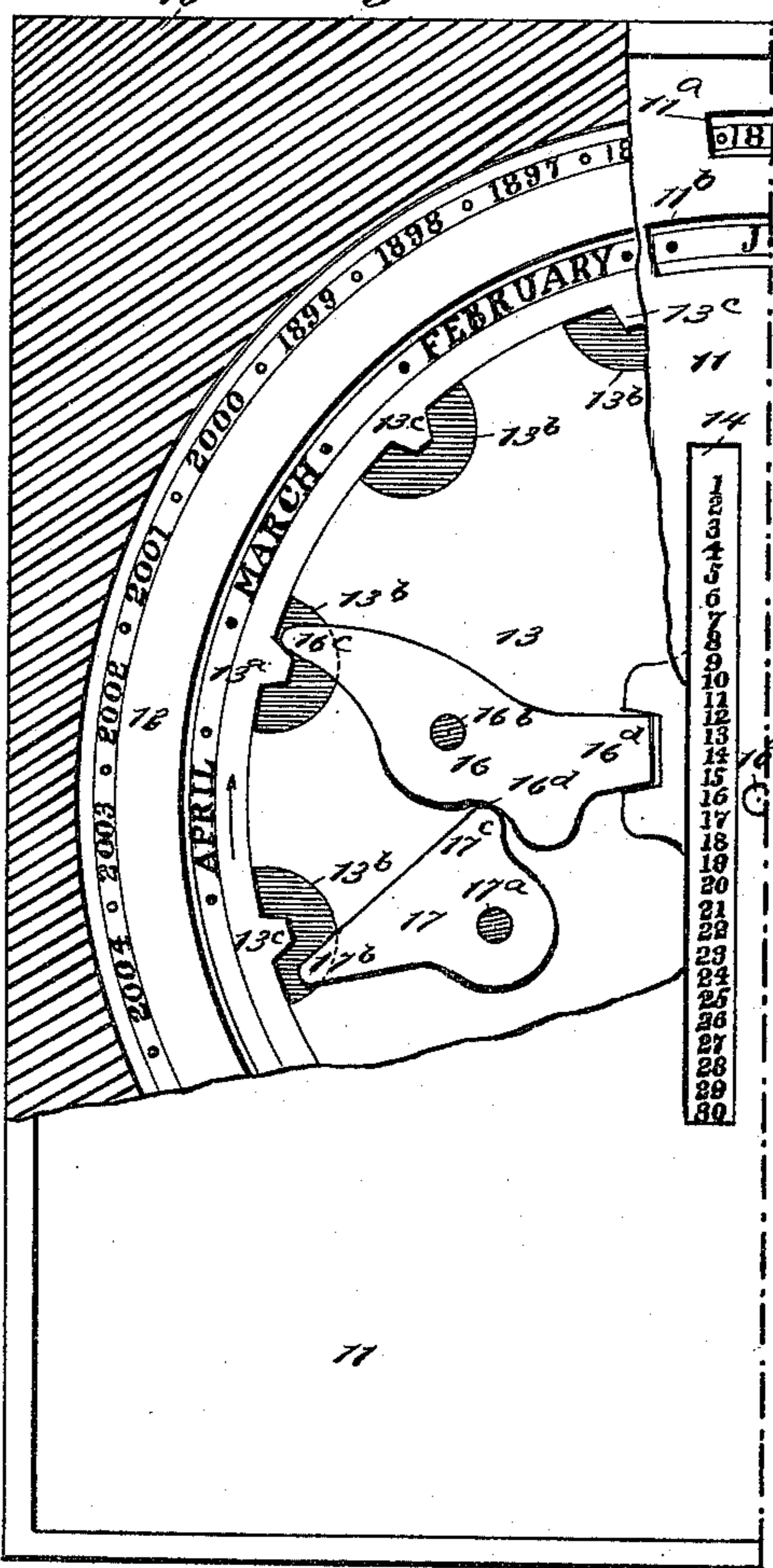


Fig. 6.

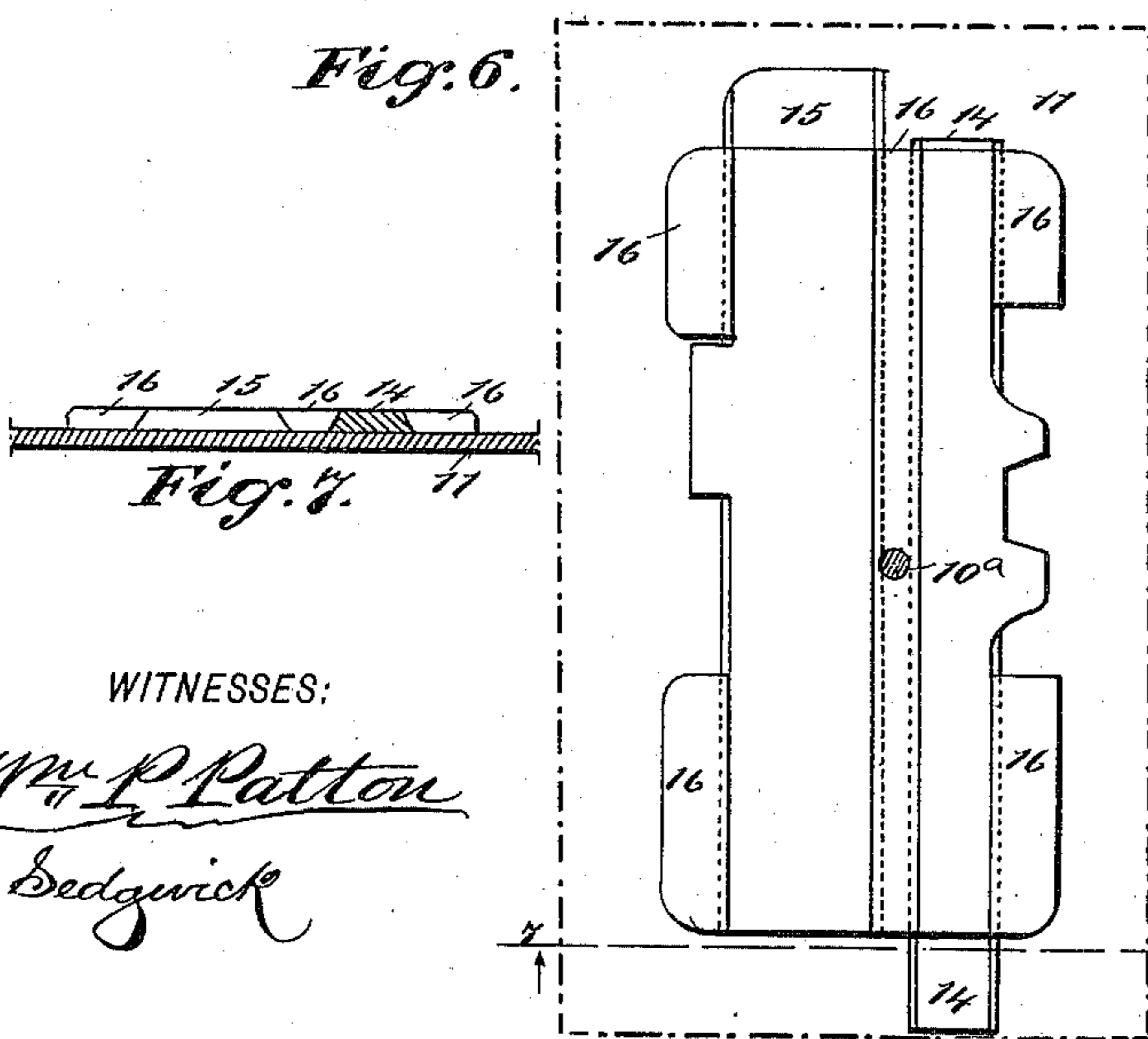
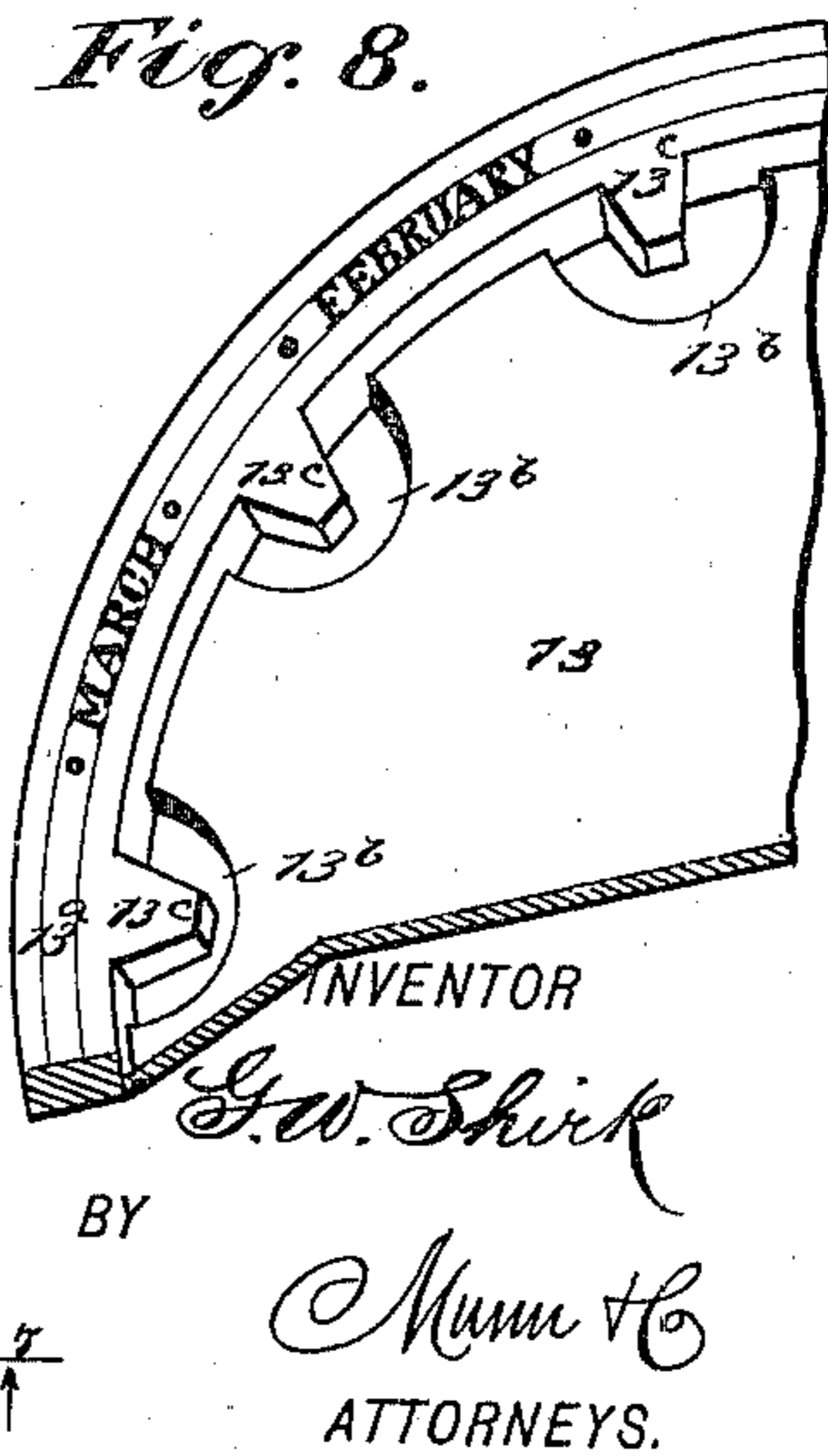


Fig. 8.



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GEORGE W. SHIRK, OF VAN ORIN, ILLINOIS.

CALENDAR.

SPECIFICATION forming part of Letters Patent No. 542,538, dated July 9, 1895.

Application filed March 21, 1895. Serial No. 542,663. (Model.)

To all whom it may concern:

Be it known that I, GEORGE W. SHIRK, of Van Orin, in the county of Bureau and State of Illinois, have invented a new and Improved Calendar, of which the following is a full, clear, and exact description.

This invention relates to calendars of a type that are denominated "perpetual" or which are adapted to indicate the year, month, and day of the month for a great many years.

The object of my invention is to provide a very simple device of the character indicated, which will possess novel features of construction that adapt it to automatically adjust the day-indicator when the month-indicating dial is moved, so as to exhibit the correct number of days for the month that is displayed on the calendar.

A further object is to provide a calendar that may be produced at a low cost, which will be reliable in operation and be adapted for changing to expose the correct year, month, day-name, and also the date-numeral of the month, and, furthermore, that will be of such a convenient shape and dimensions as will permit the face of the calendar to be utilized for containing business-cards or other advertisements and prominently display them.

The invention consists in the construction and combination of parts, as is hereinafter described, and indicated in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a front view of the calendar with the face-plate broken away to show working parts of the device, other details being represented by dotted lines. Fig. 2 is a transverse sectional view on the line 2 2 in Fig. 1. Fig. 3 is a transverse sectional view on the line 3 3 in Fig. 1. Fig. 4 is a front view, in part, of the calendar with the face-plate broken away to expose normally-concealed parts which have received adjustment to effect the display of numerals to indicate twenty-eight consecutive days for the month of February. Fig. 5 is a front view of the device in part with a portion of the face-plate removed, showing the relative position of working parts that have been changed in position from that represented in Figs. 1 and 4.

Fig. 6 is a rear view of the week-day name and date slides that are located within the casing of the calendar in position indicated by arrow 6 in Fig. 3. Fig. 7 is a transverse partly sectional view of the details shown in Fig. 6 on the line 7 7 in said figure; and Fig. 8 is a perspective view of part of the month-indicating dial, which constitutes part of the invention.

The casing that is provided to hold in proper position the several working parts of the improved calendar is preferably given a rectangular form, having a suitable thickness to enable the disposition of said parts within it.

Any available material may be employed from which to produce the casing, that comprises a back piece 10 and a face-plate 11, the back piece being recessed a proper depth and rendered level on the bottom surface to afford a receptacle for other details, and it may here be mentioned that the two parts of the casing may be secured together by any preferred means after the interior parts have been properly placed in position within the back piece.

The upright wall of the recess in the back piece 10 may be given a circular form to adapt it to laterally support the ring-like piece 12, that has a loose engagement therewith, or any other means may be employed to prevent lateral displacement of the annular part 12, which, when in place, is seated on the bottom of the recess in the back piece 10.

The ring 12 is of sufficient width to permit imprinting or otherwise forming the series of spaced year indications on its front face, these extending in a circle around said ring, as indicated in Fig. 1, and, as represented in Figs. 1 and 4, an aperture 11^a is cut in the face-plate 11 at a correct point to permit the exposure of one year-indication at a time when the ring 12 is adjusted to effect such a display of a year symbol.

A dial-plate 13 is furnished, which has a circular periphery and such a diameter as will adapt the said plate to loosely fit within the ring 12. The dial-plate 13 is centrally perforated and engages a pivot 10^a, which may extend through the back piece 10 and face-plate 11, or project from either within the recess of the back piece 10. The main portion of the dial-plate 13 is of equal thickness; but a

thicker portion or rim 13^a is formed around the periphery and is flush with the top and bottom surfaces of the ring 12. The rim 13^a is substantially annular.

5 The names of the twelve months of the year are produced in regular order on the top surface of the rim 13^a and read to the left from January, as is represented by full and dotted lines in Fig. 1, portions of the ring 12 and rim
10 13^a, with the spaced year and month designations shown thereon, also appearing in Figs. 4 and 5.

At a suitable point, preferably near the aperture 11^a, a larger aperture 11^b is formed in
15 the face-plate 11, as clearly shown in Figs. 1 and 4, this aperture being designed to expose to view the names of the months consecutively as the dial-plate 13 is rotated, and this movement is always toward the right of the
20 casing, as indicated by the curved arrows in Figs. 1, 4, and 5.

A series of small perforations 12^a and 13^a are produced at proper intervals both in the ring 12 and rim of the dial 13, these perforations being of service to permit the appli-
25 cation of any pointed implement to the ring and dial for their rotation, the said perforations being exposed for the introduction of a pin or other pointed device at the apertures
30 11^a 11^b, as shown in Fig. 1.

Between adjacent names of the months and close to the inner edge of the rim 13^a a number of recesses 13^b are formed in the thinner portion of the dial-plate 13, the said recesses
35 being designed to facilitate the formation of twelve ears 13^c that project from the inner edge of the rim 13^a into the recesses.

Near the transverse center of the face-plate 11 two parallel slots 14^a 15^a are produced, (see
40 Figs. 1 and 3,) and are located one at each side of the pivot 10^a, and beneath said slots slide-plates 14 and 15 are respectively located, the latter being maintained in place free to receive longitudinal adjustment by the guide-
45 strips 16, that are fastened on the rear face of the plate 11, the meeting edges of the slide-plates and guide-strips being beveled, so as to mate and afford a loose connection between the said parts, as clearly shown in Figs. 6 and 7.

50 On the surface of the slide-plate 14, which is exposed through the slot 14^a, a series of thirty-one integers are produced in correct numerical order, beginning with "1" at the end of the slide-plate, which may be regarded as
55 uppermost in service, providing the casing is erected or hung in an upright position for the convenient reading of its indications.

On the face of the slide-plate 15, which appears through the aperture 15^a, a succession
60 of groups of day-names are formed, these groups each representing the days of the weeks of a month in regular order, and are intended to be arranged so as to appear successively opposite a proper integer that designates the month-date of the day-name with
65 which it is in alignment, as clearly represented in Figs. 1 and 4.

A notch is formed on or in the edge of the slide-plate 14 that is farthest from the pivot 10^a, either by the formation of spaced bars
70 thereon as shown, or by cutting away material, as may be preferred, the said notch being provided for the reception of the limb 16^a of the rocking dog 16, loosely engaged intermediate its ends by the pintle 16^b projecting from the
75 inner surface of the face-plate 11, the dog having a toe 16^c that projects closely to the inner edge of the dial-plate rim 13^a. Below the dog 16 another dog 17 is in a like manner pivoted on a pintle 17^a on the inner face of the plate
80 11, and the dogs 16 and 17 are of such a relative thickness that they will lie in the space afforded by the elevation of the rim 13^a above the general surface of the dial-plate 13 and have their faces, that are flush with the rim,
85 in loose contact with the inner face of the plate 11, so that the dogs will be free to receive movement on their pivots. The dog 17 has a toe 17^b projected toward the rim of the dial-plate 13, and, as will be seen in Fig. 1,
90 when it is rocked to locate the toe thereon substantially in the same horizontal plane with the pivot 17^a the toe will have clearance from an adjacent ear of the rim 13^a.

A knuckle protuberance 17^c is formed on
95 the dog 17 at a point nearly opposite the toe 17^b, the knuckle being loosely entered in a scallop 16^d that is produced in the edge of the dog 16 below its pivot, the knuckle and scalloped edge having a loose-jointed engagement, so that the rocking movement of the
100 dog 16, by contact of its toe with an upwardly-moved ear of the rim 13^a, will transmit motion to the dog 17 and rocks its toe in a downward direction or oppositely from the trend
105 of the toe 16^c, and it will be evident that should the toe 17^b receive an upward movement from an ear on the dial-plate 13 the toe 16^c will be depressed a certain degree.

Assuming that the parts of the calendar are
110 assembled and relatively adjusted, as shown in Fig. 1, which will expose the present-year indication "1895" at 11^a and "January" at the aperture 11^b, then the slide-plate 14 will be so held by the limb of the dog 16 that the full
115 thirty-one date-numerals will be displayed through the slot 14^a. It will be observed that when the dogs 16 17 are adjusted, as represented in Fig. 1, there will be one of the ears 13^c located below and near to the toe 16^c, and
120 that the toe of the dog 17 has a position near to but not in the path of the ear 13^c next below the toe 17^b.

When the month of January is current, the week-day name-slide 15 should be longitudi-
125 nally adjusted, by insertion of a pin or other pointed instrument in a small perforation in this slide-plate, so as to locate the proper day-name or its abbreviation in the same plane with the figure "1" on the slide-plate 14, de-
130 noting the first day of the month of January, which, in the year 1895, is Tuesday, and as the names of succeeding days are arranged in their regular order it will be evident that the

proper name for each successive day of the month will appear opposite the numeral denoting the date of said day, as clearly shown in Fig. 1.

5 After the month of January has passed, the calendar may be adjusted to indicate the day, numbers, and names of the days in February by first moving the dial-plate 13 toward the right. This rotatable movement of said plate
10 will cause the adjacent ear 13^c to have contact with the toe 16^c on the dog 16 and rock said dog, causing its limb 16^a to press the slide-plate 14 downward.

The progressive movement of the dial-plate
15 13 will remove the month-name "January" from the aperture 11^b, and locate the month-name "February" opposite said aperture when the dial-plate has been sufficiently moved.

20 As represented in Fig. 5 of the drawings, the traverse of the month-name "February," by moving dial 13 toward the aperture 11^b, effects the simultaneous downward-sliding movement of the slide-plate 14, and the relative proportion of parts is such that when the
25 name "February" is displayed, as indicated in Fig. 4, then the movement of the dog 16 has so depressed the slide-plate 14 that but twenty-eight numerical indications will be
30 exposed through the slot 14^a of the face-plate 11. A slightly further movement of the dial 13 will expose twenty-nine day-date numerals in the slot 14^a. The downward-rocking movement of the toe 17^b, effected when the dial-
35 plate 13 is moved to expose the name "February," projects said toe in the path of an approaching ear 13^c, and causes said ear to nearly touch the toe, as shown in Fig. 4, and for the correct operation of the calendar the
40 month-names on the dial-plate are so spaced apart that when successive months are to be indicated throughout the year either the dog 16 or 17 will be adapted to change the adjustment of the slide-plate 14 for a proper ex-
45 posure of the correct number of day-numerals on it through the slot 14^a. As, for instance, the movement of the dial-plate 13 toward the aperture 11^b, so as to bring the month-name "March" in the said aperture, will cause the
50 adjacent ear 13^b to press the toe 17^b upwardly, and this will so move the dog 16 as to elevate the slide-plate 14 and expose thirty-one day-date numerals in the slot 14^a.

The dog 16 always throws the slide-plate 14
55 down to the same starting-point. The names of the months are so spaced that when the name of any desired month is at the center of the space 11^b the dog 17, and consequently the slide-plate 14, will be carried up to a position corresponding to the number of days of
60 that month. If there be less than thirty-one days in the month, the dogs 17 and 16 and plate 14 will be moved still further after the name of the month has passed the center of the space 11^b. Thus the plate 14 always
65 travels the same distance up and down for each month; but in the case of a short month

the limit of the downward movement has not been reached when the name of the month is at the center of the space 11^b.

70 It is to be understood that the numerical year indications on the ring 12 are to be changed in position so as to successively expose the current-year symbol, and that the slide-plate 15 is to be moved so as to locate
75 the proper name-abbreviation in line with the first-day numeral of each succeeding month, so that the calendar can be conveniently and quickly set to indicate the year, month, and day indications as time passes, and the cal-
80 endar will last for a long term of years.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An adjustable calendar having a day
85 date slide, automatically adjustable when the month name indication is exposed, so as to display the correct number of date integers for the current month, substantially as described.

90 2. A calendar, comprising a recessed casing, apertured and slotted in its front, a rotatable plate ring having numerical year indications thereon, a movable dial plate having month name symbols produced thereon in regular
95 order, a longitudinally-movable slide plate bearing day names, and a longitudinally-adjustable day date slide plate operated simultaneously with the dial plate, substantially as described.

100 3. In a calendar, the combination with a recessed casing, having its face plate apertured in its front for the exposure of year symbols and month names in sequence, and also provided with two parallel slots, of a ro-
105 tatable plate ring having numerical year indications thereon, adapted to be successively exposed at one aperture of the face plate, a movable dial plate having month name symbols produced thereon, adapted to success-
110 ively appear at the other aperture of the face plate when the dial is moved, a longitudinally-movable slide plate bearing day names, a longitudinally-adjustable slide plate bearing day
115 dates, the said slide plates being located opposite the slots of the face plate, and devices for simultaneously and correspondingly moving the day date slide plate when the dial plate is partly rotated, substantially as de-
120 scribed.

125 4. In a calendar, the combination with a recessed casing having two apertures and two parallel slots in its face plate, of a rotatable plate ring having numerical spaced year in-
130 dications thereon, adapted to successively appear opposite one of the apertures in the face plate, a rotatably movable dial plate having spaced month name symbols thereon, adapted to successively appear at the other aperture in the face plate when the dial is moved, a
day name slide plate longitudinally adjustable behind one of the slots in the face plate, a day date slide plate longitudinally movable at the rear of the other slot in the face plate,

and pivoted dogs adapted to receive motion from the dial plate and longitudinally move the day date slide plate, substantially as described.

- 5 5. In a calendar, the combination with a casing, having parallel slots in its face plate, and a rotary year date plate in the casing, a dial plate having a raised rim and a series of ears on the inner edge of said rim, of a slid-
10 able day date plate in the casing opposite one

of the slots in said casing, and pivoted dogs engaging each other, one of the dogs engaging a notch in the slidable plate, both dogs being adapted to receive the impinge of the ears of the dial plate for the slidable movement of the day date plate, substantially as described. 15

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Witnesses:

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