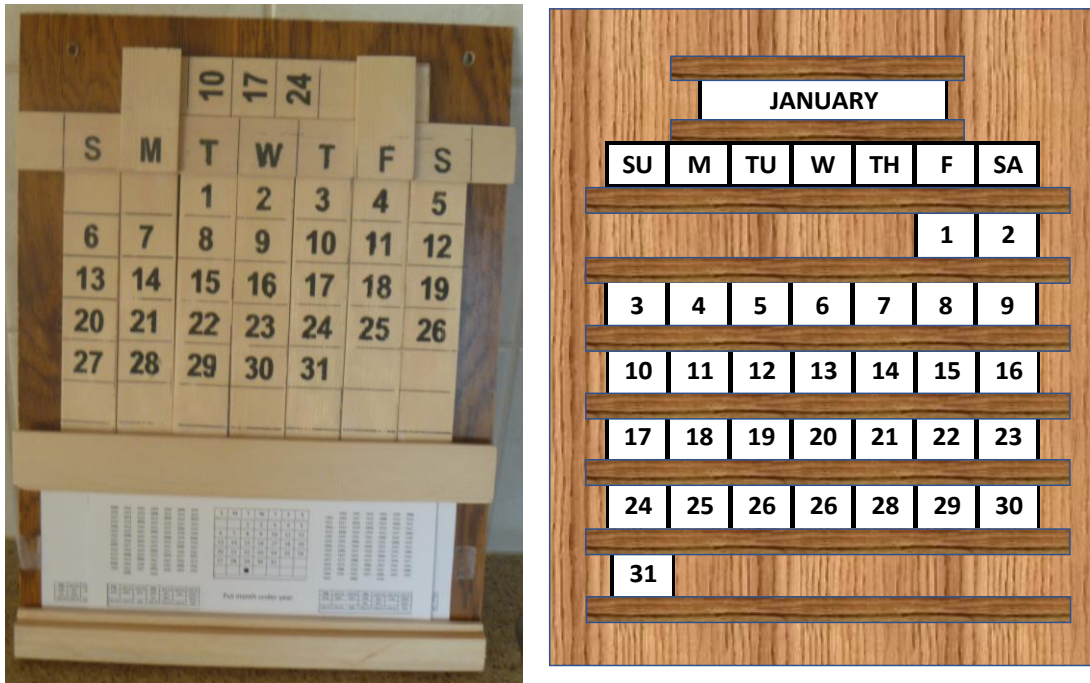


Nine Stick Perpetual Calendar Description



The above illustration shows the nine-stick perpetual calendar that I built beside a tile-type perpetual calendar. In the tile-type calendar, 31 numbered tiles are re-arranged every month to make a display similar to the month sheet on a conventional calendar. The tiles for numbers 29, 30 and 31 are turned to show a blank when these numbers are not to be displayed.

A stick-type calendar is similar to the tile-type. Instead of having tiles numbered 1 to 31 for each day of the month, there are sticks for each column. This calendar concept is not widely used, but it has the advantages over the tile calendar in that there are fewer pieces and it is easier to set. To be similar to the tile calendar, I used flat sticks which can have numbers on two sides. Some stick calendars use square sticks which can have writing on four sides. (See <https://acraftedpassion.com/perpetual-desk-calendar/> and <https://more-trees-design-en.stores.jp/items/576d02919821ccd46d000be5>) Both the nine-stick and the tile-type perpetual calendars require reference to a conventional calendar or a standalone perpetual calendar to set. The nine-stick perpetual calendar that I built has a standalone perpetual calendar at the bottom for convenience. This calendar is similar to the one described in my previous Instructable, “Tile Perpetual Calendar Improvements”. (See <https://www.instructables.com/Tile-Perpetual-Calendar-Improvements/> .)

The stick type calendar is more complicated than the tile type and this can be illustrated by considering the stick that has the numbers 3, 10, 17, 24 and 31. When the first of the month is on Sunday to Thursday, the “3” is in the top row, but when the first of the month is on Friday or Saturday the “3” is in the second row. When there are fewer than 31 days in the month, the number “31” should not be shown. The description below shows how the nine-stick calendar addresses these complications.

The nine-stick hybrid perpetual calendar has nine doubled sided sticks to display the days of the month. Seven sticks are chosen depending on the number of days in the month. Table 1 shows the front side of each of the sticks and Table 2 shows the back side of each stick.

Table 1: Front Side of Each Stick

1	2	2	3	3	4	5	6	7
8	9	9	10	10	11	12	13	14
15	16	16	17	17	18	19	20	21
22	23	23	24	24	25	26	27	28
29	30		31					

Table 2: Back Side of Each Stick

1								
8	2	2	3	3	4	5	6	7
15	9	9	10	10	11	12	13	14
22	16	16	17	17	18	19	20	21
	23	23	24	24	25	26	27	28
	30		31					

For the first seven days of the month, the number “1” is always in the top row. Therefore, the number “29” can be eliminated from the display by having 1, 8, 15, 22 and 29 on the front side of the stick and 1, 8, 15 and 22 on the back side. The top number on the sticks for the other days of the month can be either in the top row or the second row depending on the day of the week that the first of the month falls on. The front sides of these sticks are used when the top number on the stick is in the top row and the back sides of these sticks are used when the top number on the stick is in the second row. To eliminate the number “30” from the display, two sticks are required with one having “30” on both sides and the other not. Similarly for eliminating the number “31”. Tables 1 and 2 show half height rows at the top and bottom of each stick. These rows are for strips that go over the sticks at the top and bottom to prevent them from falling over. The half row at the bottom can be eliminated if the sticks sit on a ledge instead of going into a slot.

A disadvantage of the nine-stick hybrid calendar is that the two sticks not in use have to be stored somewhere. In the calendar that I built for this Instructable, I put them above the SMTWTFS row. This is a simple method and only requires two additional pieces to hold the sticks not in use. When square sticks are used, only seven are required as the sticks with “2” and “3” in the top row can have numbers on all four sides.