

(No Model.)

C. M. HAMILTON.

COMBINED PERPETUAL CALENDAR AND TIME CARD.

No. 446,916.

Patented Feb. 24, 1891.

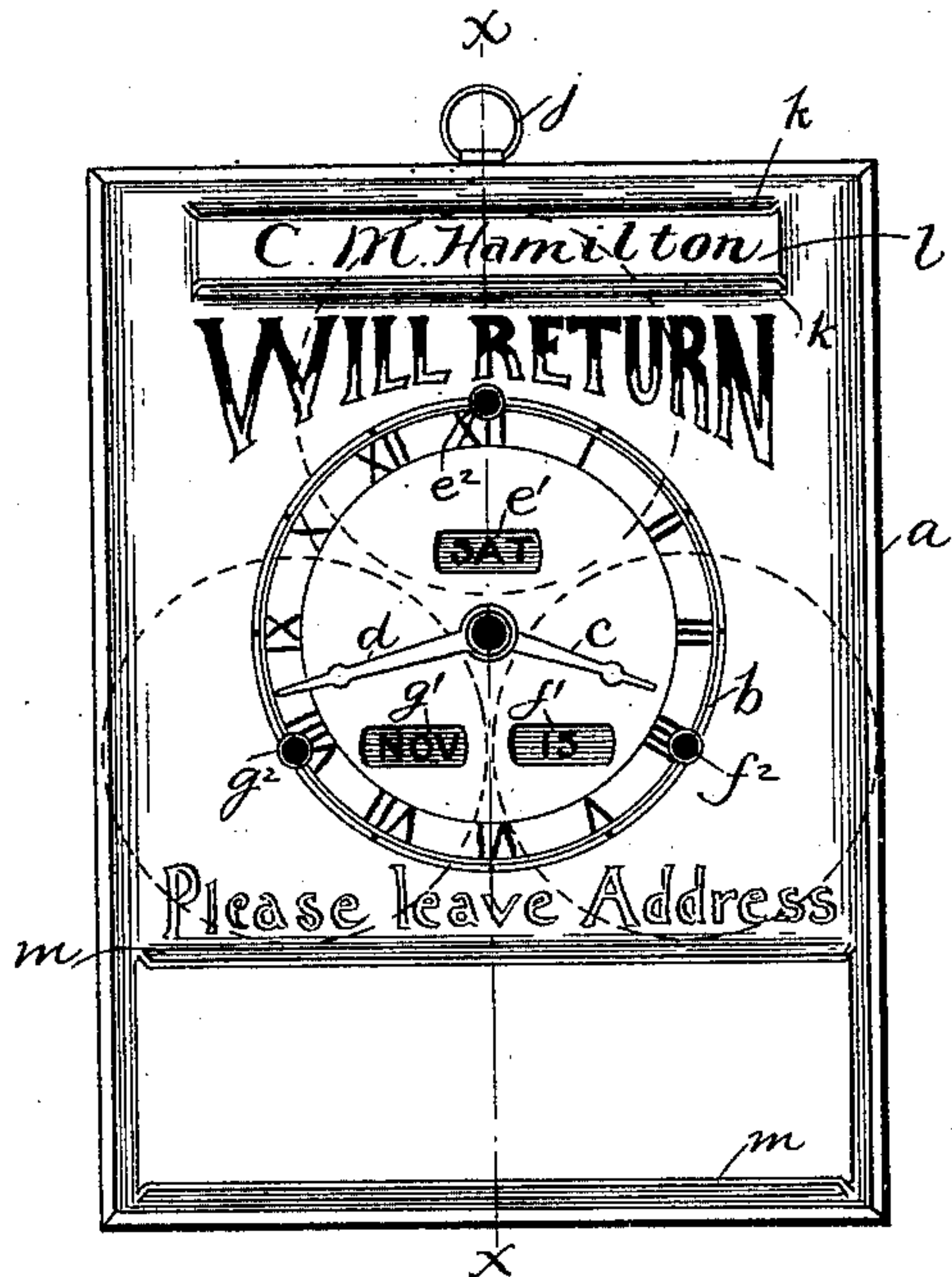


FIG. 1.

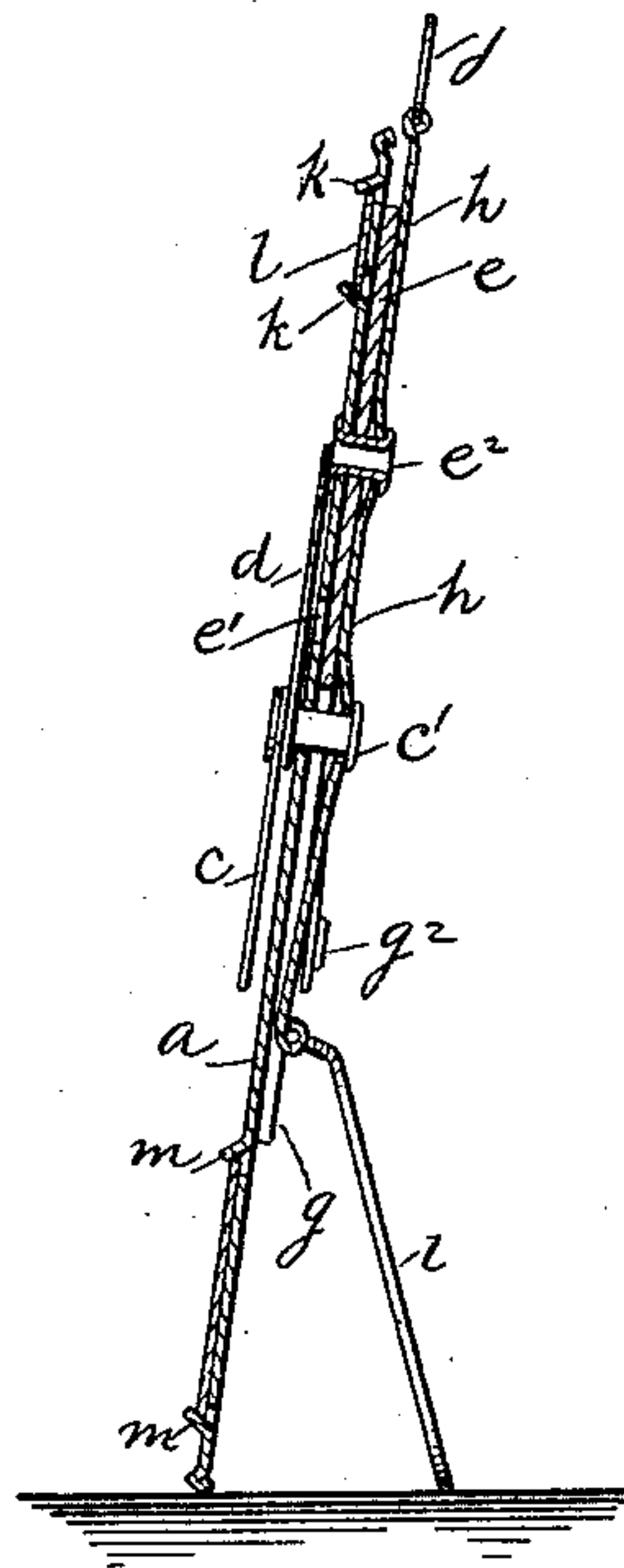


FIG. 2.

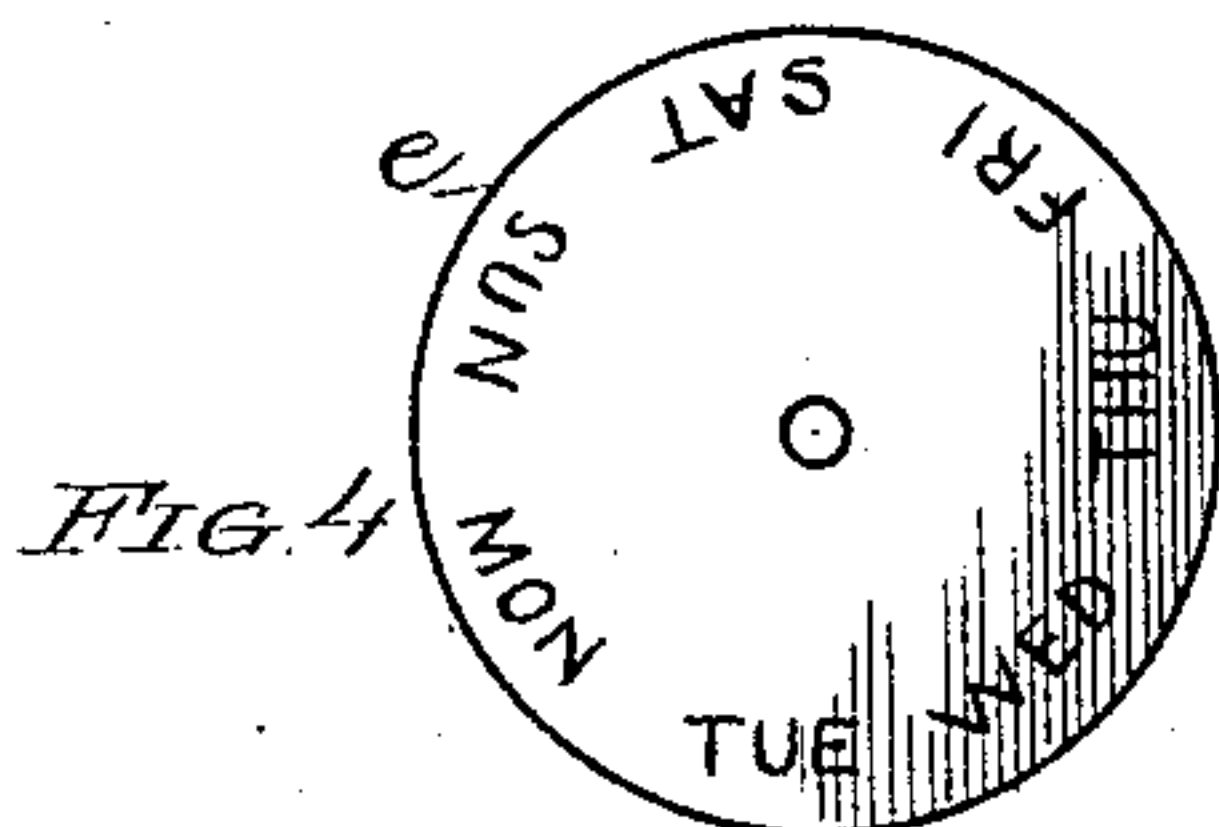


FIG. 4.

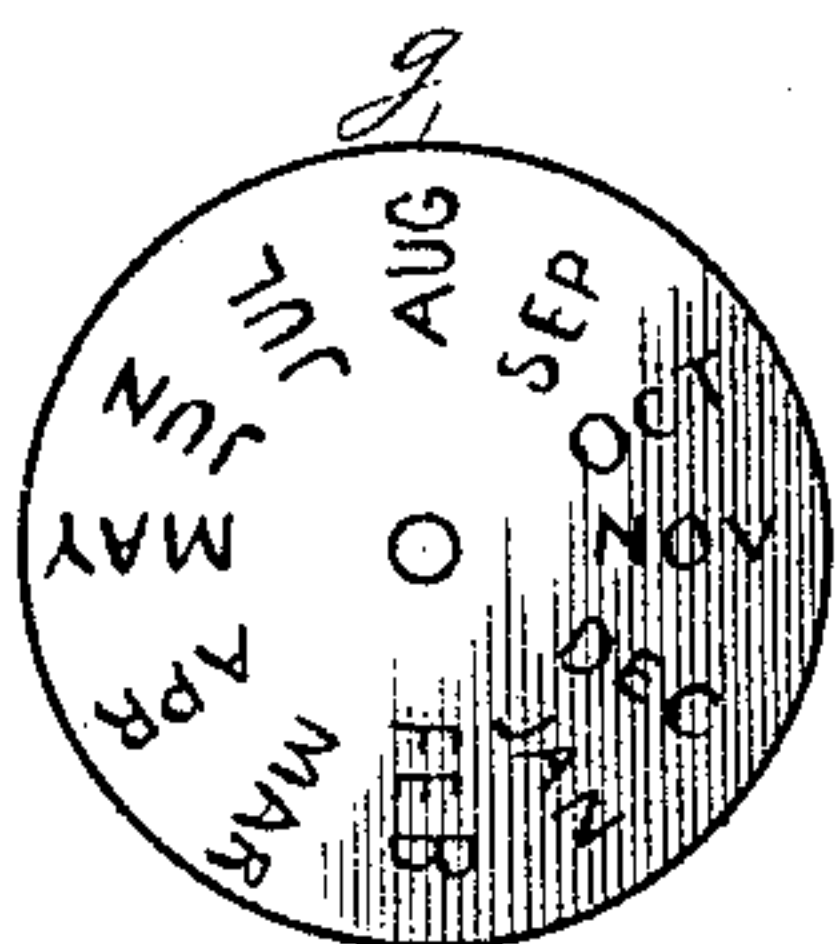


FIG. 5.

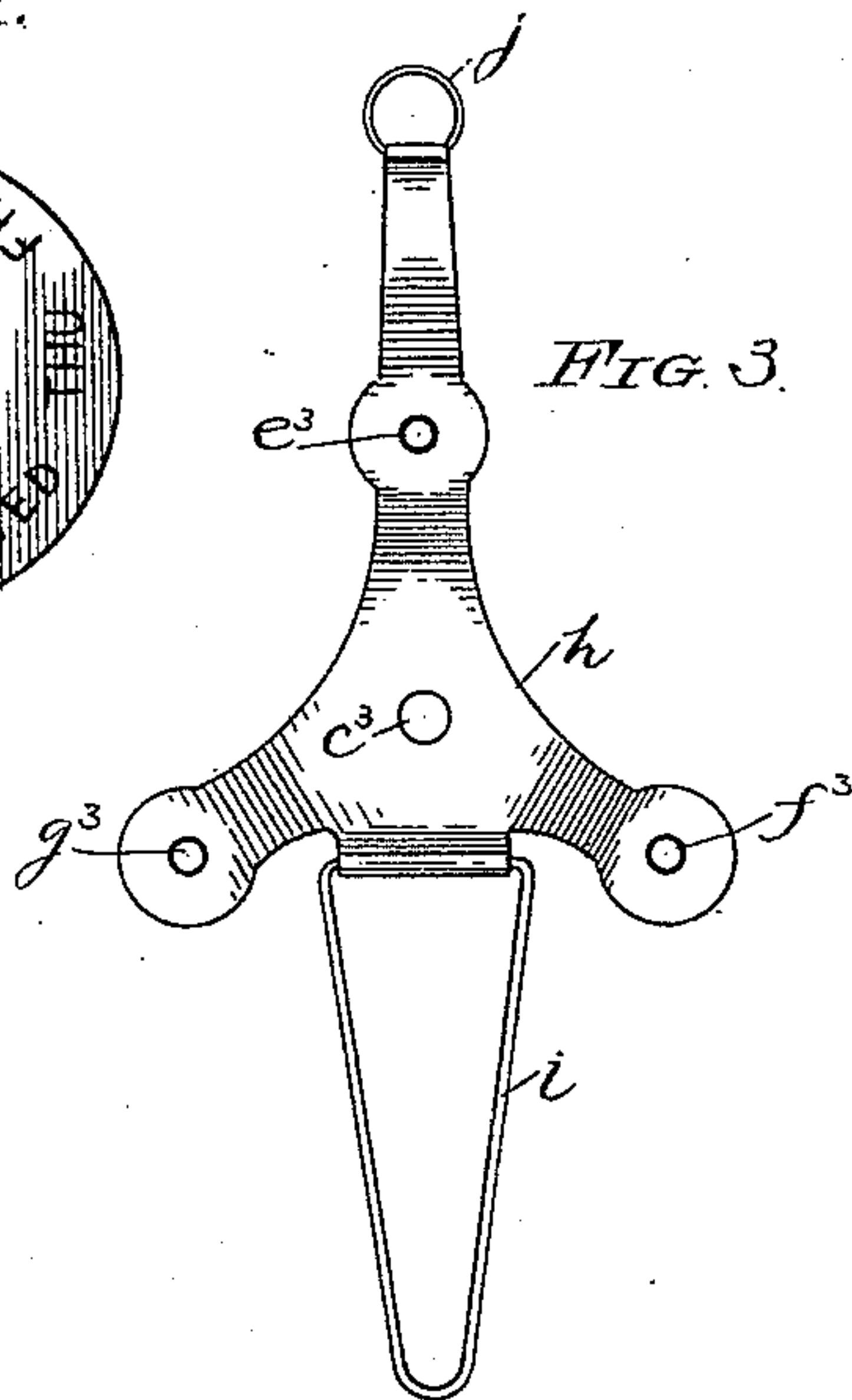


FIG. 3.

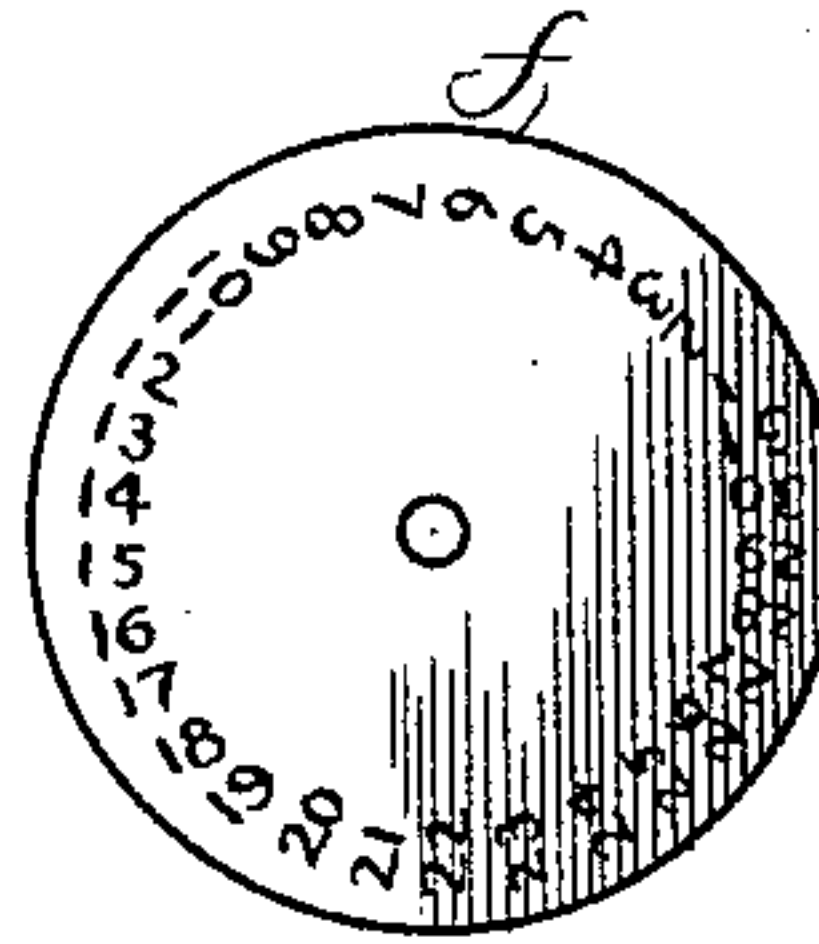


FIG. 6.

Witnesses:  
J. Halpenny.  
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Inventor:  
Cassius M. Hamilton,  
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his Atty.



# UNITED STATES PATENT OFFICE.

CASSIUS M. HAMILTON, OF CHICAGO, ILLINOIS.

## COMBINED PERPETUAL CALENDAR AND TIME-CARD.

SPECIFICATION forming part of Letters Patent No. 446,916, dated February 24, 1891.

Application filed December 8, 1890. Serial No. 373,966. (No model.)

*To all whom it may concern:*

Be it known that I, CASSIUS M. HAMILTON, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Combined Perpetual Calendar and Time-Card, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a face view of my improved calendar. Fig. 2 is a vertical sectional view thereof, taken upon the line  $x x$ , Fig. 1. Fig. 3 is a face view in detail of the spring for maintaining the disks and movable hands under tension, and Figs. 4, 5, and 6 are face views of the respective disks.

Like letters of reference in the different figures indicate like parts.

The object of my invention is to so construct a combined perpetual calendar and time-card that the name of the day of the week, the month, and the number of the day of the month, hour, and minute may be indicated upon a common dial in such manner that each of the parts may be actuated by the user independently of its fellow, while at the same time said parts may be maintained in any desired position by means of frictional tension.

To these ends my invention consists in the combination of elements hereinafter more particularly described and claimed.

Referring to the drawings,  $a$  represents a flat plate or sheet, preferably of metal, upon which is embossed, painted, or otherwise represented an ordinary clock-dial  $b$ , at the center of which are pivotally mounted the usual hour and minute hands  $c d$ . Upon the back of the plate  $a$  and at points equally distant from the center of the clock-dial is loosely pivoted a series of disks  $e, f$ , and  $g$ , upon the first of which is shown the names of the days of the week, in the manner indicated in Fig. 4, and upon the disks  $f$  and  $g$ , respectively, the numbers of the days of the month and the names of the months arranged radially, as shown. Within the plate  $a$  is formed a series of slots  $e' f' g'$ , through which the names and numbers upon the disks  $e f g$  are exposed,

as shown in Fig. 1. The disks and hands  $c d$  are attached to the plate  $a$  by means of eyelets  $c' e' f' g'$ , which are compressed in the usual way by means of a suitable die, so as to clasp the plate  $a$  and the parts to be attached thereto.

As it is important that the hands and disks should be normally held in given positions without danger of being displaced by the movement of the plate  $a$ , I have provided means for holding them each under frictional tension. A spring  $h$ , having perforations  $c^3 e^3 f^3 g^3$ , adapted to register with the perforations in the plate  $a$ , in which the hands  $c d$  and disks  $e f g$  are pivoted, respectively, is secured behind the disks mentioned by means of the eyelets  $c' e' f' g'$ , as clearly shown in Fig. 2. The spring  $h$  is bent or dished, as shown, so that the parts in contact with the eyelets stand out, thereby serving, when combined with the card, to draw upon the eyelets and at the same time to press in an opposite direction against the respective disks, which serves to hold them, as well as the hands  $c d$ , in place by means of a frictional tension. The friction, however, should not be so great as to prevent the disks and hands from being readily moved to any desired position by the user.

To the bottom of the spring  $h$  is secured a bent wire  $i$ , intended to serve in the usual manner as a brace to support the plate in a standing position, as shown in Fig. 2, while a ring  $j$ , attached to the upper end of the spring, serves as a means of suspension.

Flanges  $k$  at the top of the plate enable a card  $l$  to be inserted bearing the name of the user, while like flanges  $m$  at the bottom enable a card or paper block to be secured to the plate for memoranda.

I am aware that it is not new to employ rotary disks in connection with a clock-dial and means for actuating the disks; nor is it new to place a rotary dial behind a card having perforations through which the figures or characters upon the disks may be shown; but in neither of these devices is there employed means for retaining the disks and clock-hands in given normal positions and at the same time enabling them to be actuated in—

dependently of each other. The advantage of this feature is too apparent to require further mention.

Having thus described my invention, I  
5 claim—

1. The combination, with a card or metal sheet having perforations therein to show calendar names and numbers, of a series of rotary disks bearing said calendar names and  
10 numbers secured to the back of said card, and a spring in operative proximity to said disks for placing the same under frictional tension, substantially as shown and described.

2. The combination, with a card or metal  
15 sheet having perforations therein through which to display calendar names and numbers, of a clock-dial, clock-hands pivoted thereon, a series of rotary disks bearing said calendar names and numbers pivotally se-  
20 cured to the back of said card, and a spring-

plate in operative connection with the pivotal points of bearing of said hands and disks, respectively, said plate being dished, as shown, whereby its compression in securing it in po-  
25 sition tends to produce a frictional tension of said springs and hands, respectively, substantially as shown and described.

3. The combination, with the plate *a*, hav-  
ing perforations *e' f' g'* therein, of the clock-  
dial *b*, clock-hands, rotary disks *e f g*, and  
30 the spring *h*, substantially as shown and de-  
scribed.

In testimony whereof I have signed this specification, in the presence of two subscrib-  
ing witnesses, this 26th day of November, 35  
1890.

CASSIUS M. HAMILTON.

Witnesses:

D. H. FLETCHER,  
J. B. HALPENNY.