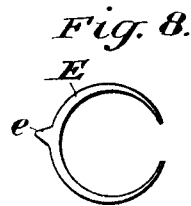
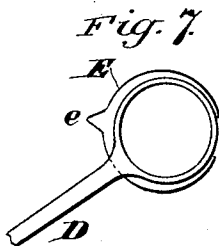
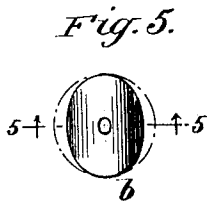
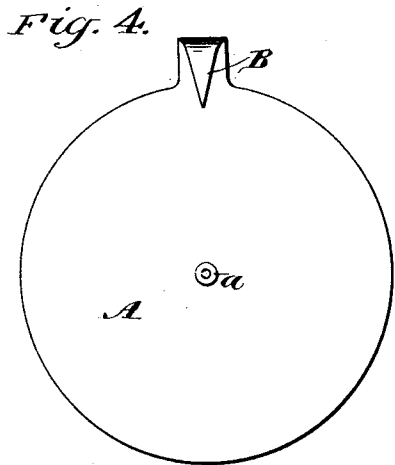
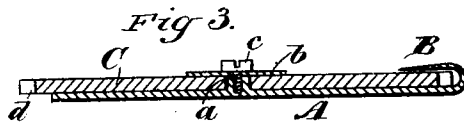
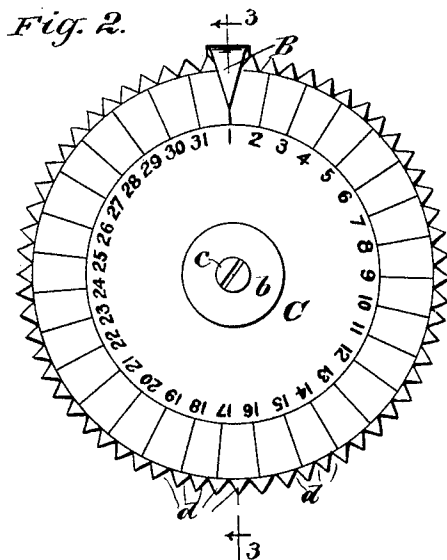
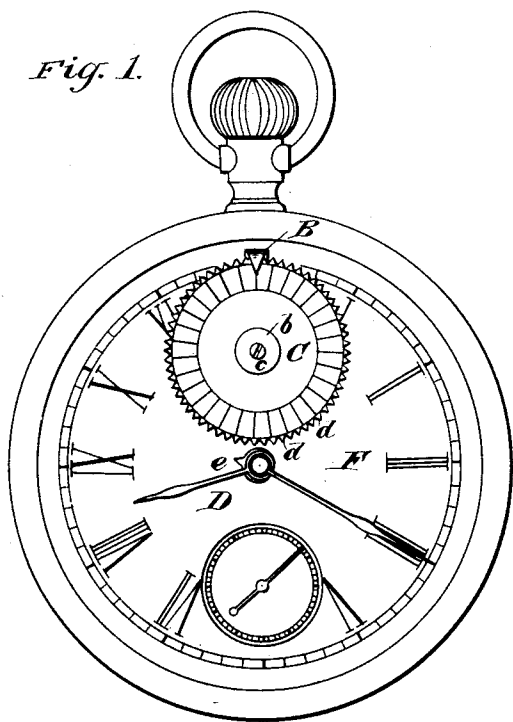


(No Model.)

P. J. JOHNSON & J. H. HAMILL.
CALENDAR ATTACHMENT FOR TIMEPIECES.

No. 481,793.

Patented Aug. 30, 1892.



WITNESSES:

J. H. Criswell
C. Sedgewick

INVENTORS.

P. J. Johnson
BY *J. H. Hamill*
Munn & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

PAUL J. JOHNSON AND JOSEPH H. HAMILL, OF GLOBE, ARIZONA TERRITORY.

CALENDAR ATTACHMENT FOR TIMEPIECES.

SPECIFICATION forming part of Letters Patent No. 481,793, dated August 30, 1892.

Application filed November 16, 1891. Serial No. 412,101. (No model.)

To all whom it may concern:

Be it known that we, PAUL J. JOHNSON and JOSEPH H. HAMILL, of Globe, in the county of Gila and Territory of Arizona, have invented a new and Improved Calendar Attachment for Watches and Clocks, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

10 Figure 1 is a front elevation of a watch to which our improvement has been applied. Fig. 2 is an enlarged detail view of the calendar attachment. Fig. 3 is a diametrical section taken on line 3 3 in Fig. 2. Fig. 4 is an
15 enlarged detail view of the plate which supports the calendar disk. Fig. 5 is a front elevation of the spring-washer. Fig. 6 is a transverse section taken on line 5 5 in Fig. 5. Fig. 7 is an enlarged front elevation of the
20 hour-hand, showing the operation of the calendar-operating finger; and Fig. 8 is a detail view of the calendar-operating finger.

Similar letters of reference indicate corresponding parts in all the views.

25 The object of our invention is to construct a simple and efficient calendar attachment for watches and clocks which may be readily applied to timepieces already in use.

Our invention consists in a metallic disk
30 furnished with a pointer extending from the edge thereof and provided with a central boss, a graduated disk mounted on the boss and furnished with divisions corresponding with the days of the month and having a notched
35 periphery, and a finger provided with curved spring-arms mounted on the boss of the hour-hand and adapted to engage the notched periphery of the disk, all as will be hereinafter more fully described.

40 The disk A, forming the fixed portion of our attachment, is made of metal or other suitable material, with a pointed arm B extending from the edge thereof and bent over or returned parallel with itself, with the point of the arm extending within the periphery of
45 the disk. The center of the disk is furnished with a boss *a* for receiving the disk C, which is held in place on the boss by a spring-washer *b*, secured to the boss by the screw *c*, passing through the washer and entering the
50 center of the boss.

The disk C is made of material such as will harmonize with the watch or clock dial—such, for example, as enameled metal, ivory,
55 or celluloid.

The disk C is provided on its face near its periphery with thirty-one equidistant radial lines, which are numbered from "1" to "31," representing the days of the month, and the periphery of the disk is provided with sixty-two
60 notches *d*.

On the boss of the hour-hand D is placed a curved spring E, provided with a finger *e*.

The disk A is secured to the dial F of the timepiece by means of any suitable cement in
65 such a position relative to the hour-hand boss as to enable the finger *e*, carried by the hour-hand, to enter the notches of the disk C and carry it forward one notch for each revolution, so that when the hour-hand moves the
70 calendar-disk C two notches it carries the disk forward a distance representing one day and brings a new figure opposite the pointed end of the arm B. The disk C can be set at
75 any time when the finger *e* is not in engagement with its notched periphery. If the timepiece runs regularly, the said disk requires setting only once a month.

Having thus described our invention, we claim as new and desire to secure by Letters
80 Patent—

1. A calendar attachment for watches and clocks, consisting of a base-plate provided with a pointer and adapted to be secured to a dial, a notched and graduated disk mounted
85 to turn on the base-plate, and a spring adapted to be secured to the boss of the hour-hand and provided with a finger to engage the notched disk, substantially as described.

2. In a calendar attachment for watches and
90 clocks, the combination, with a base-plate adapted to be secured to a dial and provided with a central boss and an inwardly-projecting finger, of a graduated disk having a central aperture to receive the said boss and a
95 notched periphery, a screw and washer for holding the graduated disk on the boss of the base-plate, and a curved spring adapted to be secured to the boss of the hour-hand and provided with a finger to engage the notches
100 of the graduated disk, substantially as herein shown and described.

PAUL J. JOHNSON.
JOSEPH H. HAMILL.

Witnesses:

AL. SIEBER,
CHAS. T. MARTIN.