

(No Model.)

2 Sheets—Sheet 1.

H. FECHT.
WATCHMAN'S TIME RECORDER.

No. 506,988.

Patented Oct. 17, 1893.

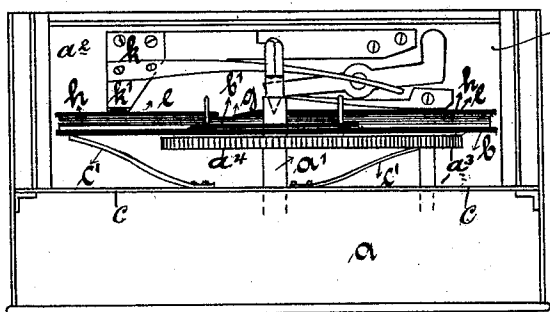


Fig. 2.

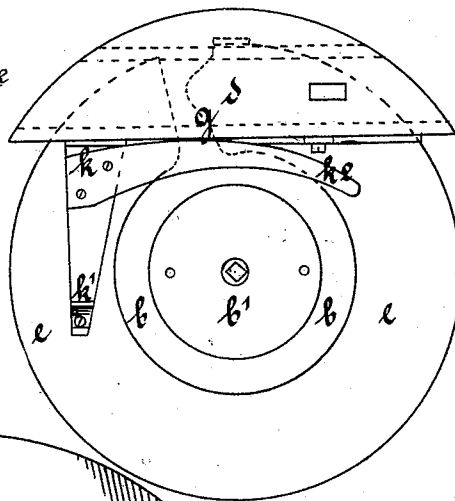


Fig. 3.

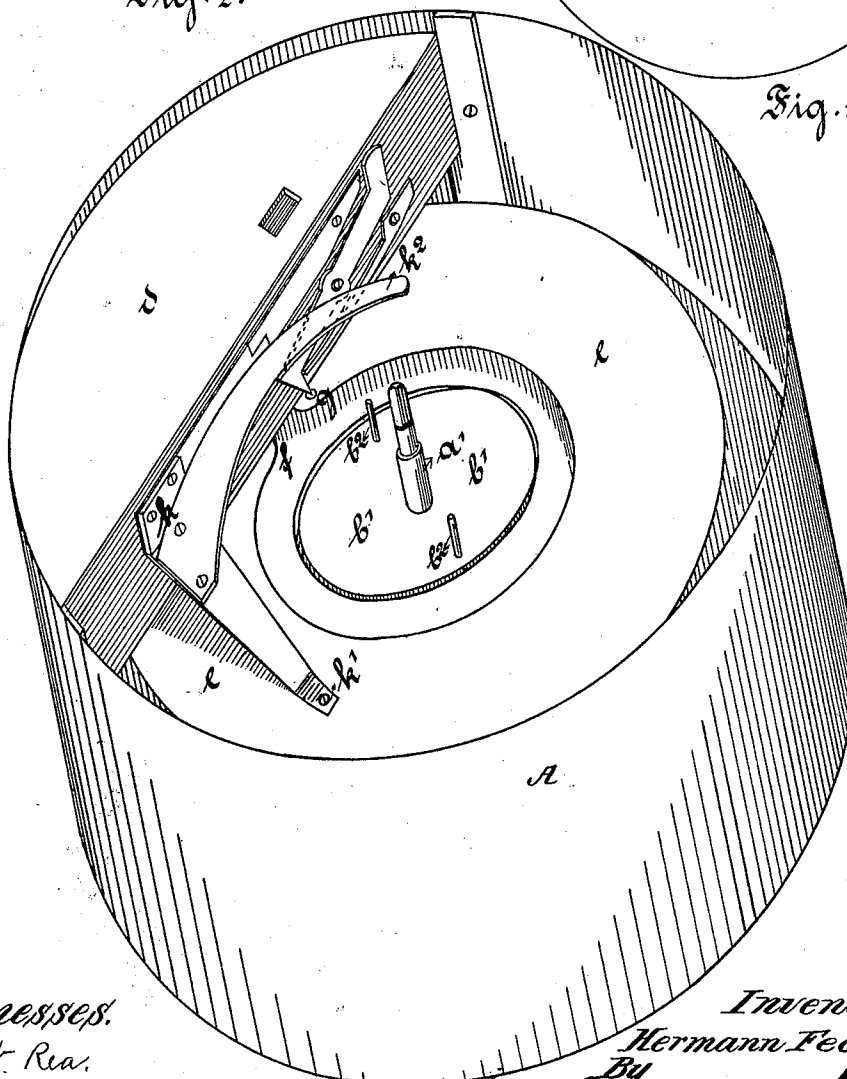


Fig. 1.

Witnesses.

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(No Model.)

2 Sheets—Sheet 2.

H. FECHT.

WATCHMAN'S TIME RECORDER.

No. 506,988.

Patented Oct. 17, 1893.

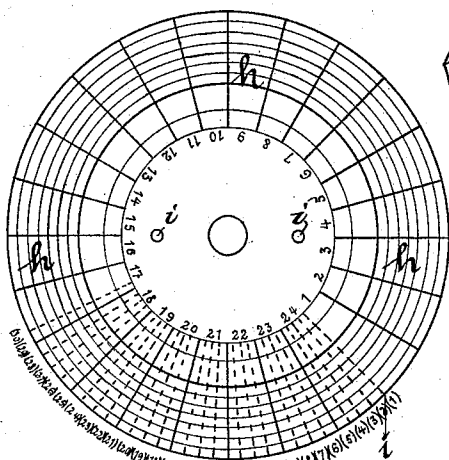


Fig. 5.

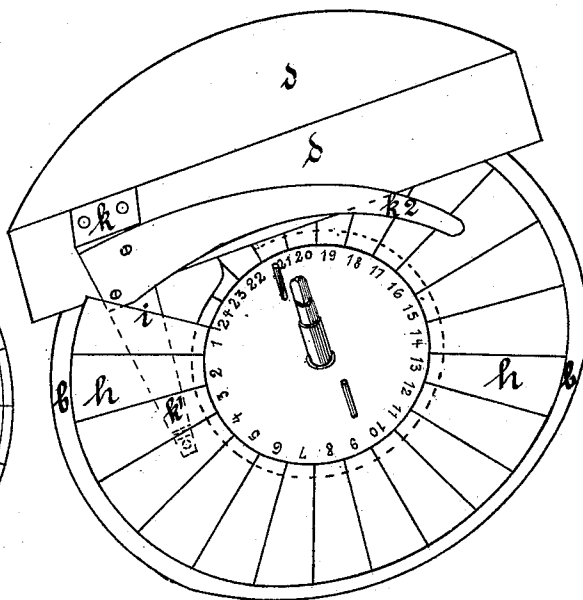


Fig. 6.

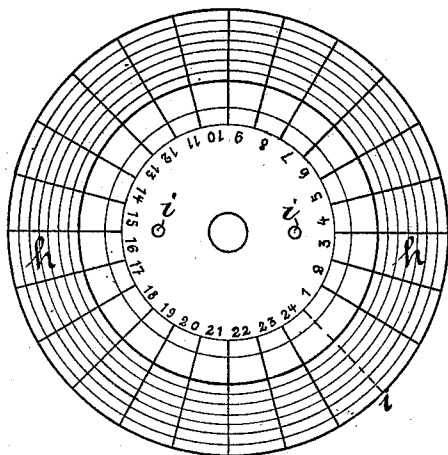


Fig. 4.

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UNITED STATES PATENT OFFICE.

HERMANN FECHT, OF TROCHTELFINGEN, ASSIGNOR TO THE WÜRTTEMBERGISCHE UHRENFABRIK SCHWENNINGEN, OF SCHWENNINGEN, GERMANY.

WATCHMAN'S TIME-RECORDER.

SPECIFICATION forming part of Letters Patent No. 506,988, dated October 17, 1893.

Application filed December 6, 1892. Serial No. 454,244. (No model.) Patented in Germany August 2, 1891, No. 63,020; in Switzerland August 3, 1891, No. 3,975, and in France October 22, 1891, No. 216,908.

To all whom it may concern:

Be it known that I, HERMANN FECHT, watchmaker, a subject of the Emperor of Germany, and a resident of Trochtelfingen, Hohenzollern, in the Empire of Germany, have invented certain new and useful Improvements in and Relating to Watchmen's Tell-tales, (for which I have obtained patents in Germany, dated August 2, 1891, No. 63,020; in Switzerland, dated August 3, 1891, No. 3,975, and in France, dated October 22, 1891, No. 216,908,) of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to that class of devices known as a "watchman's tell-tale," and has for its object to provide a device of this character, which shall be neat in appearance, simple in construction, and accurate in its operation.

Watchmen's tell-tales, heretofore in use, have met with the objection, of the necessity of removing the recording sheet each day, and replacing a new, or clean sheet. It is the purpose of my invention to overcome this difficulty, by making provision for the introduction of a great number of recording sheets at the same time, say thirty or thirty-one, for all the days of the month, and also provide means for the automatic delivery of a sheet at stated intervals, as for instance, at the end of each day, said sheet bearing the recording mark, or record.

To these ends my invention consists in the novel features of construction and combination of parts, hereinafter pointed out, and claimed.

In order to enable others skilled in the art to make, use, and construct my invention, I will proceed to describe the same in detail, reference being made to the accompanying drawings, in which—

Figure 1, is a perspective view of the device with the recording sheets removed. Fig. 2, is a central sectional view of the same. Fig. 3, is a plan view of the revolving and stationary disks. Fig. 4, is a face view of one of the recording sheets. Fig. 5, represents a month's supply of sheets ready to be placed in the device. Fig. 6, is a perspective

view showing a recording sheet partially discharged.

Referring now to the drawings, the reference letter A, designates the housing or casing of the device, which is divided, by means of a horizontal central partition *c*, into two compartments *a*, *a'*, the lower one of which contains the clock-work mechanism, (not shown,) for communicating motion to the disks and recording sheets. Upon the central partition *c*, are secured two or more springs *c'* which serve to support a revolving disk *b*, said disk receiving its motion from the clock-work mechanism through the medium of shaft *a'* and gear-wheels *a³*, *a⁴*. This disk is adapted to be removed from its place of support if desired. Immediately above the disk *b*, and at the center thereof is detachably secured in any suitable manner a smaller disk *b'* carrying the recording sheets. Extending upward from this disk *b'*, are two pins *b²*, which pins pass through perforations in the recording sheets, whereby they are held in proper position until discharged.

The recording sheets *h*, one of which is represented in Fig. 4, are each provided with twenty-four radial lines, corresponding to the twenty-four hours of the day, and each sheet has moreover two perforations *i'*, and a radial cut *i*, the purpose of which will be presently explained.

The letter *d* represents a removable casing placed in the upper compartment *a²* and which contains the mechanism for operating the punching or marking tool. To the side of this casing *d*, is attached one end of a spring arm *k'*, the opposite end of which is secured to, and carries an annular disk *e*. This spring arm is also provided with a branch arm *k* extending at a right angle therefrom, and serves as a guide in the discharge of the sheets.

The annular disk *e* has a cut or break therein which is represented by the letter *f*, and one side thereof is provided with a sharp edge *g*, the purpose of which will presently be seen.

Incidentally, I have shown attached to the side of the casing *d*, a punch, or marker, for the purpose of marking the sheets, but as this

feature forms no part of my present invention, it will not be described in detail.

The recording sheets, as before explained, are each provided with a radial cut i , and 5 perforations i' ; these cuts are varied as to their location on the sheets, in the following manner; the cut on the top sheet being placed in line with the first day of the month, as is represented by the bracketed numbers, in 10 Fig. 5. The next sheet has its cut shifted by an angle corresponding to one-quarter of an hour, or is opposite the second day of the month; the third sheet has its cut shifted in the same manner, and so on, until all the 15 sheets for the month are prepared. The perforations i' are the same in all the sheets, so that as they are placed upon the disk b' , the cuts i , will be in proper position for their accurate discharge.

20 To load or fill the device for a month, the casing d , with its annular disk being removed the sheets are placed one at a time, upon the disk b' ; the sheet having the radial cut corresponding to the last day of the month being 25 placed home first; the sheet having the cut corresponding to the next to the last day of month placed upon the previously placed sheet, and so on until all the sheets for the month are in regular order, as clearly shown 30 in Fig. 5. The disk b' being detachably connected to the disk b , may, if desired, and for greater convenience, be removed, from the device during the operation of arranging the sheets thereon, after which it can be again 35 placed in position upon the disk b , ready for use. The sheets being now properly placed upon the disk b' , the casing with its annular disk e is placed in position over the recording sheets, the springs c' , c' , in connection with 40 the spring arm k' , serving to confine the sheets between the two disks with sufficient pressure to allow of their ready and easy discharge, which takes place as follows: The shaft a' being rotated through the medium 45 of the clock work mechanism, (not shown) motion is communicated to the disk b , and thence to the disk b' , carrying the recording sheets. The sheets in so revolving at the regular clock speed, when the cut i in the top 50 one comes in contact with the sharp edge of the stationary annular disk, the said edge engages with the cut and the disk still revolving, automatically delivers the sheet, it passing over the spring arm k , and upon 55 branch arm k^2 , until it is entirely freed from between the two disks b' , and e . In the continued turning movement of the disks carrying the recording sheets, they are, one by

one delivered or discharged each day, in the same manner as the first one, until all the 60 sheets for the month have been used, when the device is again filled or loaded for the next month.

The marker or punching tool is attached to the side of the casing d , just above the sharp 65 edge g , of the annular disk e , and serves to mark the sheet as it revolves. The mode of marking the sheets is optional, and likewise the cuts in the recording sheets may be made according to other periods of time. 70

The sheets as they are discharged or delivered may be removed each day, or if so desired may be left in the instrument until the end of the month, and all be taken out together. 75

What I claim is—

1. In a watchman's tell-tale, the combination with the rotary and stationary disks, of recording sheets placed between the same 80 and carried by the rotary disk, and means whereby the recording sheets are automatically discharged from between the disks during each rotation, substantially as described.

2. In a watchman's tell-tale, the combination with the rotary disks b , b' , and stationary annular disk e , having a segment taken therefrom, one side of said annular disk being provided with a sharp edge g , of a series 85 of recording sheets placed between the rotary and stationary disks, and carried by the disk b' , each one of said sheets having a radial cut i , to engage with said sharp edge g , and automatically discharge the sheets, during each rotation of the disks, substantially 90 as described.

3. In a watchman's tell-tale, the combination of the rotary disks b , b' , stationary annular disk e , provided with a sharp edge g , a series of recording sheets h , having radial cuts i , placed between the said rotary and 95 stationary disks, and detachably mounted upon and revolving with the disk b' , springs c' , c' , bearing against the under side of disk b , and a spring arm k' , bearing upon the upper side of disk e , whereby the sheets are 100 held under sufficient pressure to admit of an accurate engagement of the cut i , with the sharp edge g , and automatically discharge a sheet from between the disks at each rotation thereof, substantially as described. 110

In witness whereof I have hereunto set my hand this 31st day of October, 1892.

HERMANN FECHT.

Witnesses:

JOHAN GEORG BART,
ANTON SCHMID.