

Lamp Lighter and Alarm.

Patented Aug. 24, 1869.

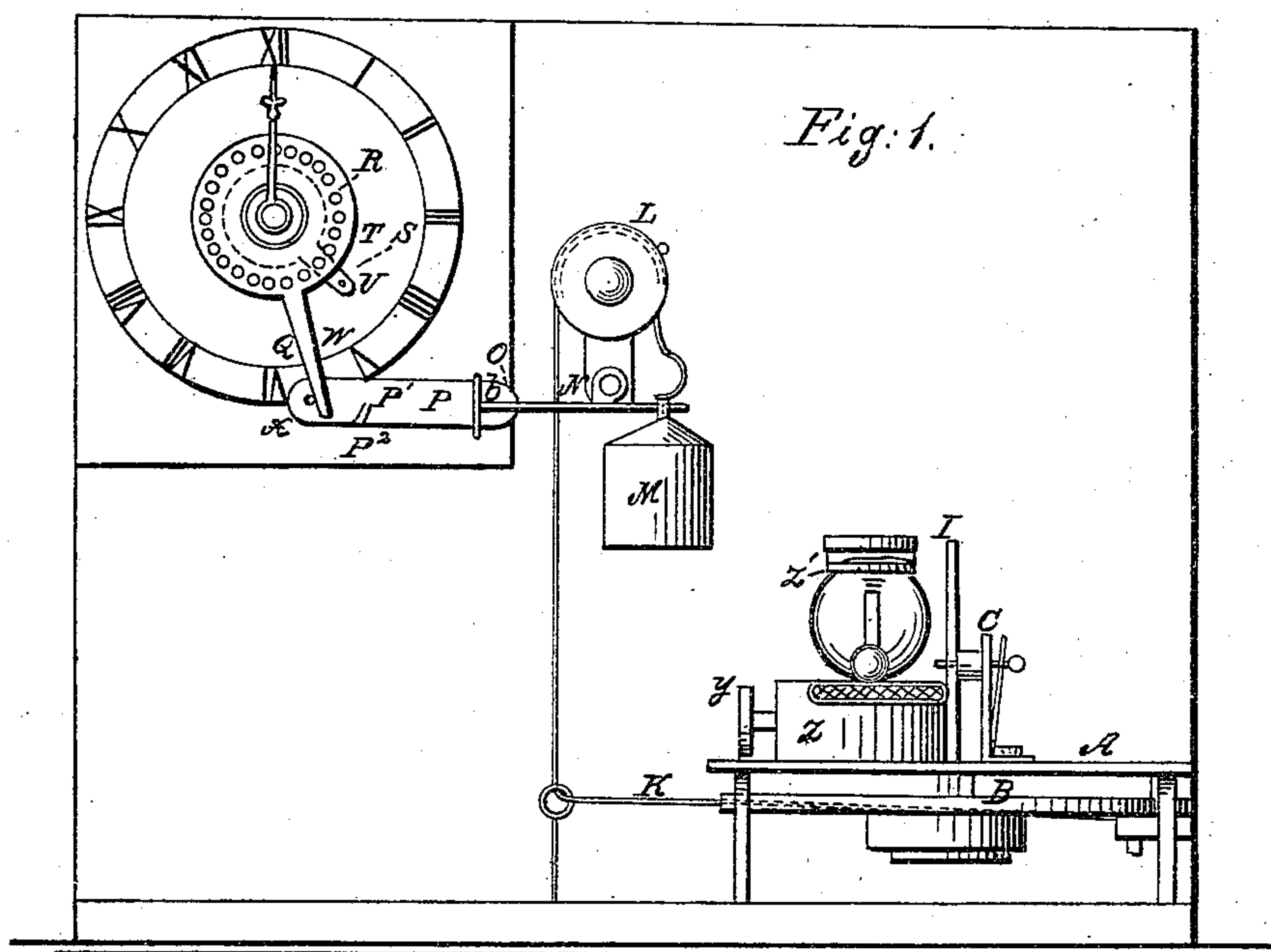
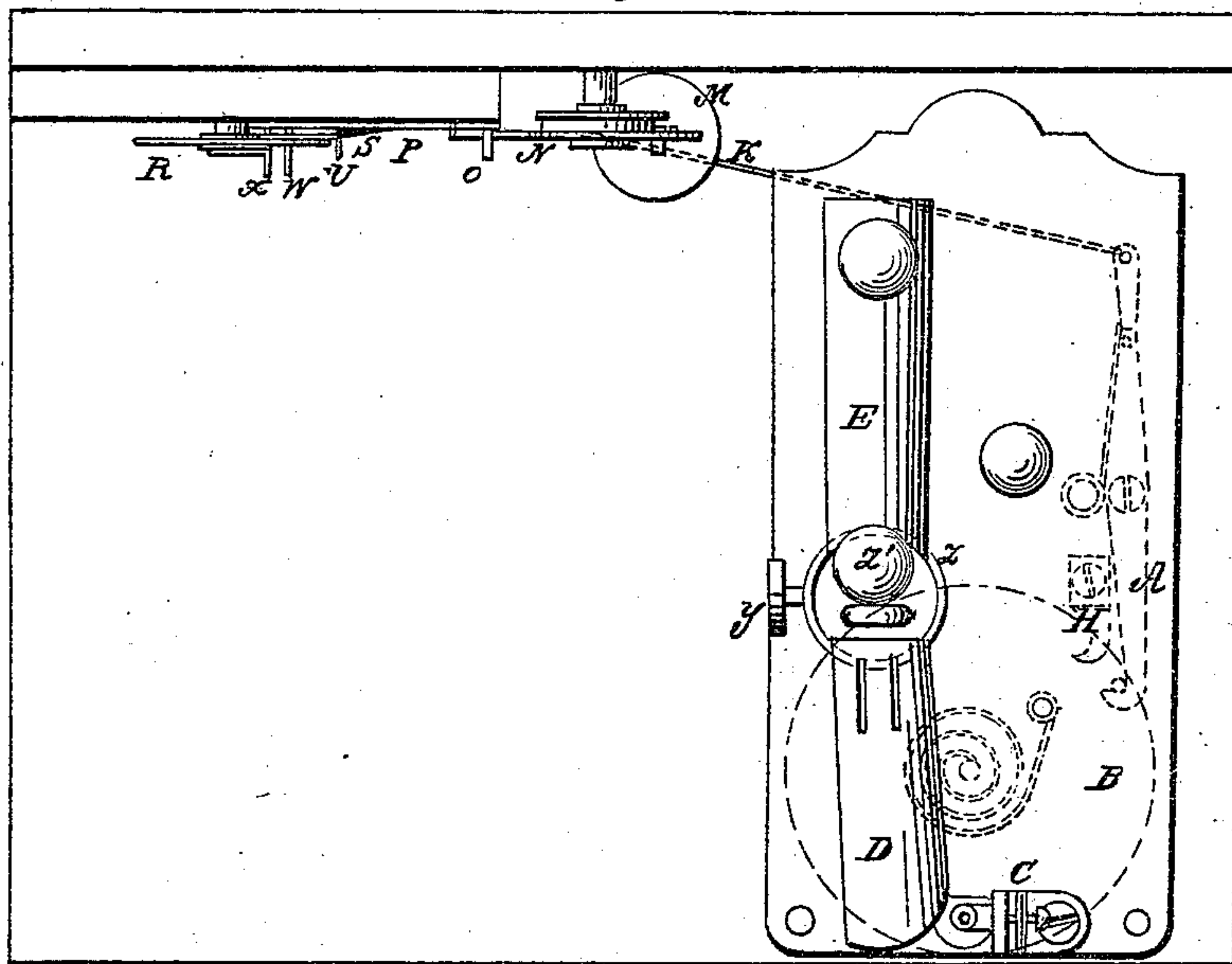


Fig: 2.



Witnesses:

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JOHN RIGBY, OF FORT HOWARD, WISCONSIN.

Letters Patent No. 94,031, dated August 24, 1869.

IMPROVEMENT IN LAMP-LIGHTERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN RIGBY, of Fort Howard, in the county of Brown, and State of Wisconsin, have invented a new and improved Automatic Fire-Lighter and Alarm; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The invention relates to improvements in apparatus to be connected to a clock, to be set into motion thereby, for lighting a lamp or giving an alarm, by making a noise at any required time.

The invention consists in an arrangement of a rotary disk, to be operated by a spring, and held in check by a catch, to be disconnected by a weight, let fall by the action of the hour-hand of the clock, for allowing the spring to operate the disk when required, which rotary disk carries a piece of sand-paper, to scrape a match, the end of which is held against the scraper.

The said match is so arranged as to light a wick saturated with oil, and arranged to give a sufficient flame, and to burn long enough to awaken persons sleeping in the room, or to set a fire in a stove.

The same apparatus is also capable of adaptation for striking a bell for giving an alarm.

Figure 1 represents a front elevation of my improved apparatus.

Figure 2 represents a plan view of the same.

Similar letters of reference indicate corresponding parts.

A represents a stand, which may be of any suitable form, for supporting a rotary disk, B, match-holder, C, wick-tube, D, and oil-reservoir, E.

The disk is preferably placed under the table A, on a pivot, F, and it is provided with a coiled spring, G, for revolving it, also with one or more catches, H, for holding it against the action of the spring.

The upper face of the said disk is provided with sand-paper, or other substance of a similar nature, for scratching a match, I, to be held in the spring holder C, with the end having the igniting-matter upon the said scratching-substance.

The end of the wick-tube D is so placed that the wick therein will be ignited by the burning match.

E represents an oil-reservoir, for supplying the wick. It may be of any preferred form or arrangement.

The long catch H is pressed by a spring, so as to engage a pin on the disk, and hold the latter from revolving, until required.

For disconnecting the said catch, its end opposite

the disk is connected by a cord, K, passing over a pulley, L, to a weight, M.

This weight M is set on a pivoted trip-lever, N, the long arm of which is held, for supporting the weight, by a pin, O, of a sliding-bar, P, arranged to be moved at the proper time, for tripping the weight, by a radial arm, Q, of a perforated disk, R, arranged loosely on the stud of a clock, to which the hands are connected.

S represents a spring-arm, also arranged loosely on the said stud, and provided with a short pin, T, for taking into any of the holes of the plate R, also with another pin, U, projecting outward from the end.

When the pin T is engaged with any of the holes in the plate, the pin U will project sufficiently to be caught by the hour-hand of the clock, but when the pin T is sprung out of the holes, and presses against the rear face of the disk, the pin U will not engage with the hour-hand, but will allow the latter to pass over it.

For tripping the weight M, the arm Q is turned back against the pin W, projecting from the dial, and the sliding bar is adjusted, with its pin X, in advance of the said arm.

The spring-arm S is then turned to that part of the dial at which the hour-hand will be when it is desired that the light shall be struck, and the pin T engaged with one of the holes of the disk R, so that when the hour-hand arrives at the place it will strike the pin U, and turn the arm Q, to move the slide P, for tripping the rod N, to discharge the weight.

This will disengage the catch H, and allow the disk B to be revolved by its springs, and ignite the match, by which the wick will be lighted and the sleepers awakened, or, instead of lighting a match, the disk may be caused to work hammers for striking a bell; but I prefer the arrangement for making a light, by which a fire may be kindled also.

When the slide P has moved, the slot P¹ permits it to drop on the pin P², so that the end of the arm Q will escape the pin X, so as not to stop the clock.

Y represents a winding-roller, placed in a receiver, Z, for winding the wick upon, and for giving it out from time to time, as required.

Z represents a cock, to stop the flow of oil, when not required for use.

Any number of cords connected with similar match-scraping devices, located in different rooms, may be employed.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a clock-dial and hour-hand, of the spring-arm S, perforated disk R, arm

Q, slide P, when all arranged substantially as specified.

2. The combination of lever-slide P, having trigger-catch O upon one end, with the rod N, weight M, flexible connection K, lever A, and retainer H, all together constituting the device for holding and releasing the spring-disk B, as described.

3. The combination of the two devices mentioned

in above clauses of claim, with the spring-disk B, match-holder C, and wick-holder D, all connected and operating together as and for the purpose specified.

JOHN RIGBY:

Witnesses:

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