

No. 889,393.

PATENTED JUNE 2, 1908.

A. A. NEWMAN.
MARKING DEVICE FOR WATCHMEN'S CLOCKS.
APPLICATION FILED DEC. 4, 1906.

Fig. 1.

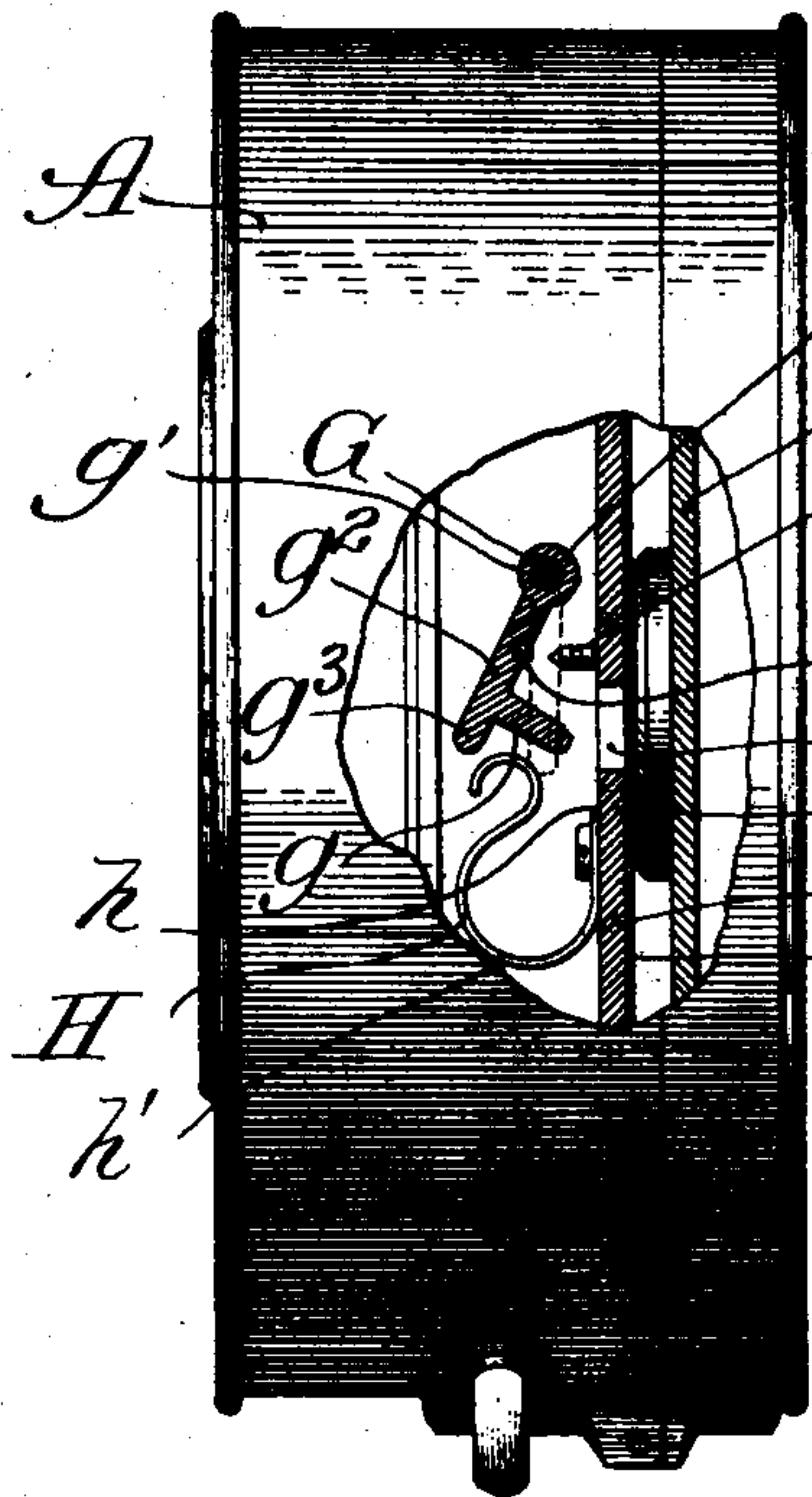


Fig. 2.

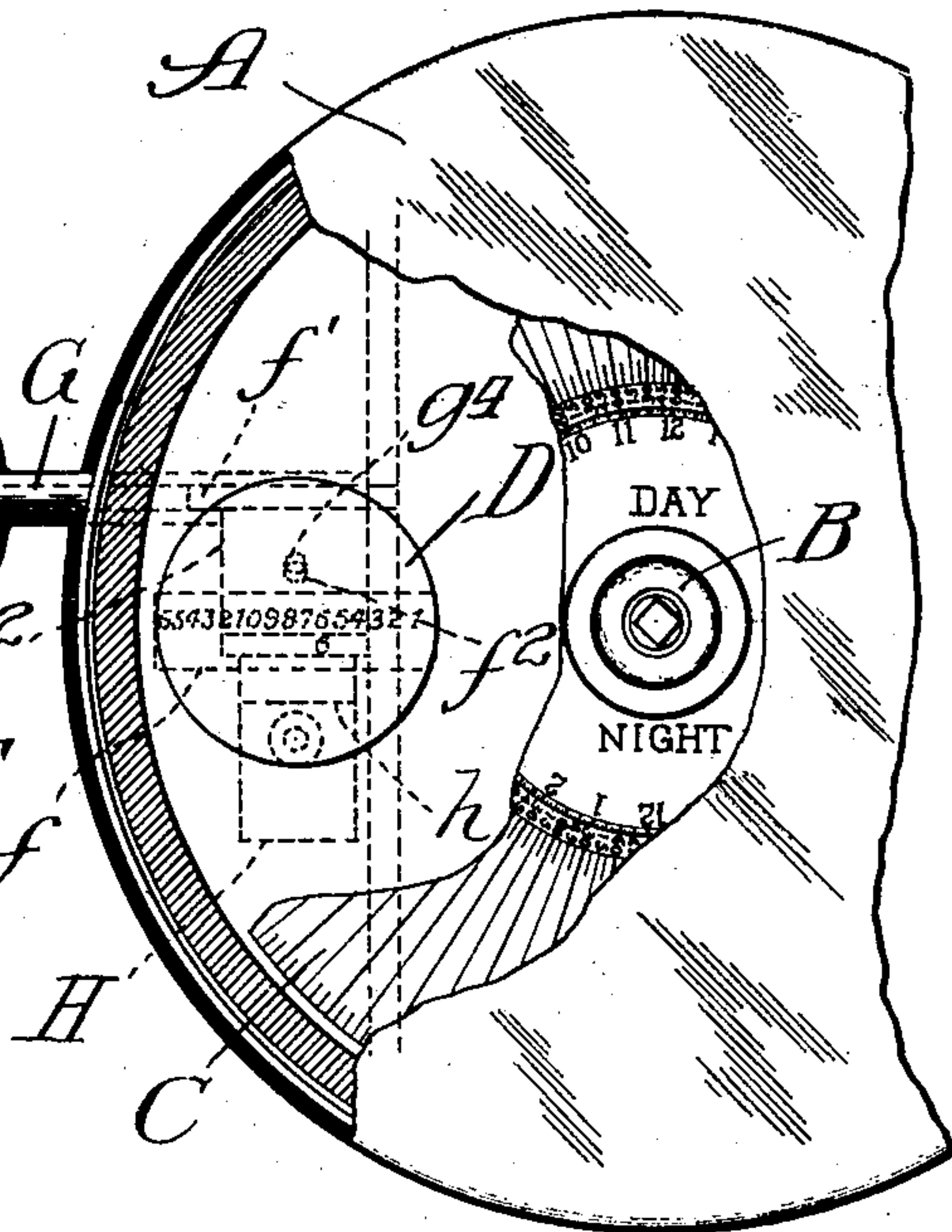
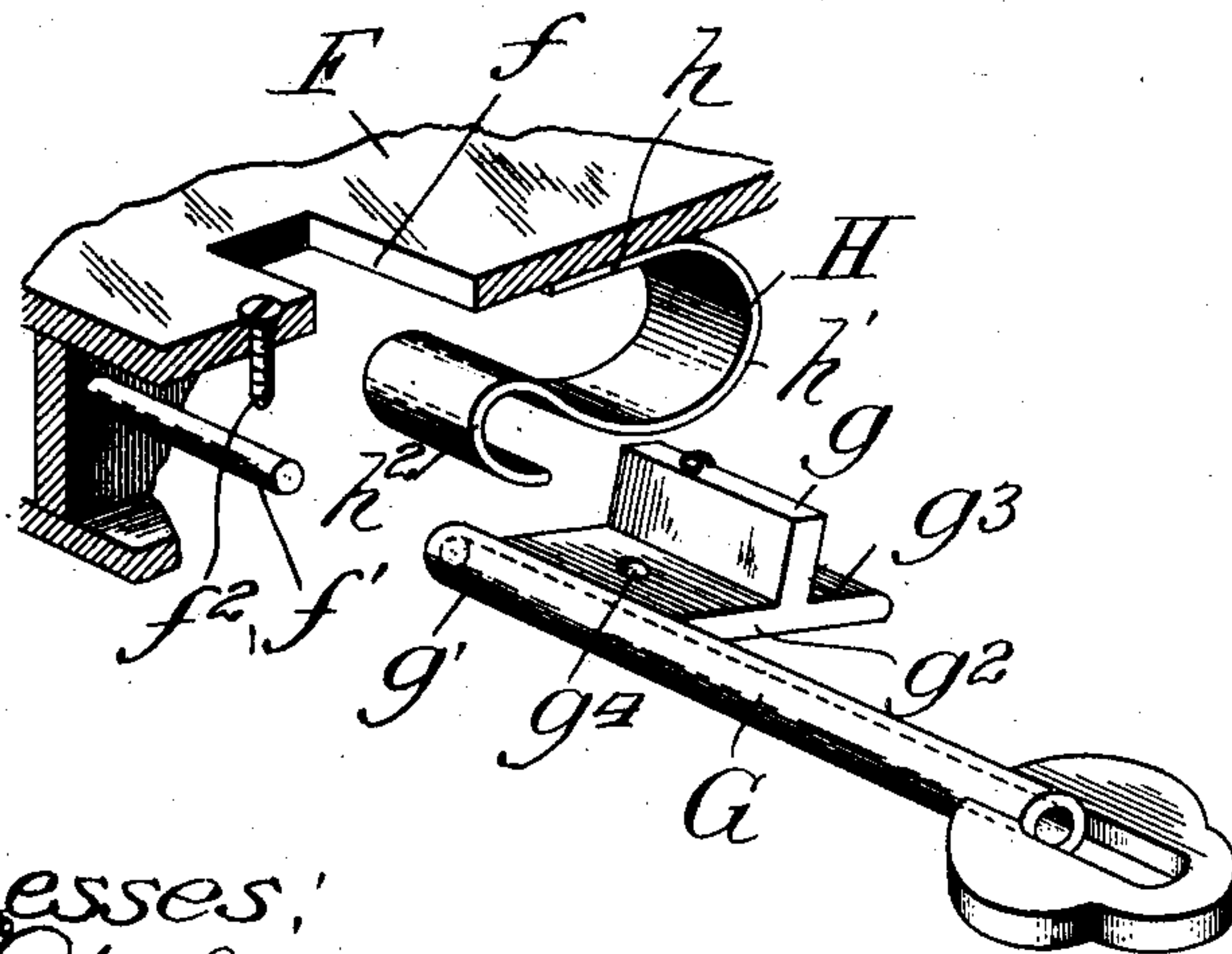


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

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MARKING DEVICE FOR WATCHMEN'S CLOCKS.

No. 889,393.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed December 4, 1906. Serial No. 346,274.

To all whom it may concern:

Be it known that I, ABRAHAM A. NEWMAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Marking Devices for Watchmen's Clocks, of which the following is a specification.

My invention relates to improvements in marking device for watchman's clock, and is fully described and explained in this specification and shown in the accompanying drawings, in which

Figure 1 is a side elevation of a watchman's clock embodying my improved device, the casing of the clock being broken away to show my device; Fig. 2 is a top plan of the clock, the casing being broken away to show the interior of the structure; and Fig. 3 is a perspective view showing certain portions of my device in detail.

Referring to the drawings, A, is a suitable case which contains a clock-movement of any ordinary form, which clock-movement drives a dial-carrying spindle, B. Inasmuch as the clock-movement can be of any well-known form and as such movements are used in all watchmen's clocks, I have not shown the same in the accompanying drawings, it having no relation to my invention except so far as it constitutes one of the portions of an operative watchman's clock. The spindle, B, carries a dial, C, (Fig. 1) above which is mounted a matrix, D, having engraved upon it in reverse type a series of characters here shown as a series of numerals, said matrix forming one portion of the registering device. This matrix can be supported in any suitable way within the case, A, it being common practice to mount it on the lower side of a crescent-shaped supporting member, E, sufficient space being left between the matrix and a plate, F, to permit the ready insertion of the paper-dial, C. The plate, F, is provided behind the series of numerals in the matrix with a slot, f , through which slot the bit, g , of a key, G, can pass. This key, G, comprises a tubular shank, g^1 , a flat web, g^2 , projecting therefrom, and the bit, g , which projects from this web between its ends, as illustrated, leaving a projecting lip or flange, g^3 , as illustrated.

H, indicates a click-spring formed of flat spring metal, one end of which, h , is secured to the lower surface of the plate, F. This spring is carried from its point of attachment

to the plate in a large curve, h^1 , first downward, and then upward, the free end of the click-spring being bent into a small reverse curve, h^2 , the extreme upper end of the reverse curve lying in such a position that when the shank of the key is passed over a pin, f^1 , adapted to receive it, the lip or flange, g^3 , which extends beyond the bit of the key will engage with it as the key is rotated. The plate, F, carries a backwardly projecting pin, f^2 , adapted to enter a depression, g^4 , in the flat web, g^2 , of the key.

It will be understood that the clock herein shown is of the type carried about from place to place by the watchman, the keys being stationarily secured in place at the various stations which he visits and each key having upon its bit the character adapted to engage or register with one of the engraved characters on the matrix to produce an embossed character on the paper dial. As the watchman reaches each station he takes the key and passes it through a suitable opening in the side of the case, the shank of the key passing up over the pin, f^1 , and being thereby guided to proper position. When the key is pushed home it can be turned by the watchman and when turned the projecting flange, g^3 , of the key engages the click-spring, thus arresting its movement so that when the key finally passes the spring a sufficient degree of force is exerted upon it to insure the production of a clear impression on the paper dial. The pin, f^2 , operates to prevent interchanging the keys of one clock with the keys of another, for in practice the pins are placed in varying positions on the various clocks and corresponding depressions are drilled in the webs of the key.

My improved device is particularly advantageous owing to its simplicity and cheapness of construction, and on account of the further fact that means are provided for preventing the keys from being interchanged from clock to clock.

I realize that considerable variation is possible in the details of this construction without departing from the spirit of my invention; therefore I do not intend to limit myself to the specific form herein shown and described.

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

1. The combination with a matrix, of a key-guide opposed to the matrix, a key

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adapted to engage the key-guide and having a character adapted to cooperate with the matrix, a spring opposite the key-guide, said spring being bent into a substantially S-shaped form, one end of which is suitably supported, the opposite end being adapted to engage a portion of said key.

2. The combination with a matrix, a plate opposite the matrix having a perforation through which a key can operate, a key-guide beneath the plate and adapted to receive a key having a character to engage the matrix, a spring beneath the plate and having one end secured thereto, said spring being led first away from the key-guide in a

curve, thence toward the key-guide, and thence away from the key-guide, the portion of said spring adjacent to said key-guide being adapted to engage a portion of said key.

3. The combination with a matrix and a plate beneath the same, of a projecting pin on the plate adapted to prevent the engagement of any key with the matrix unless such key is provided with a suitable opening for the entrance of said pin.

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Witnesses:

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