

No. 689,598.

O. V. SIGURDSSON.
TIME LAMPLIGHTER.

Patented Dec. 24, 1901.

(No Model.)

(Application filed Feb. 21, 1901.)

2 Sheets—Sheet 1.

Fig:2.

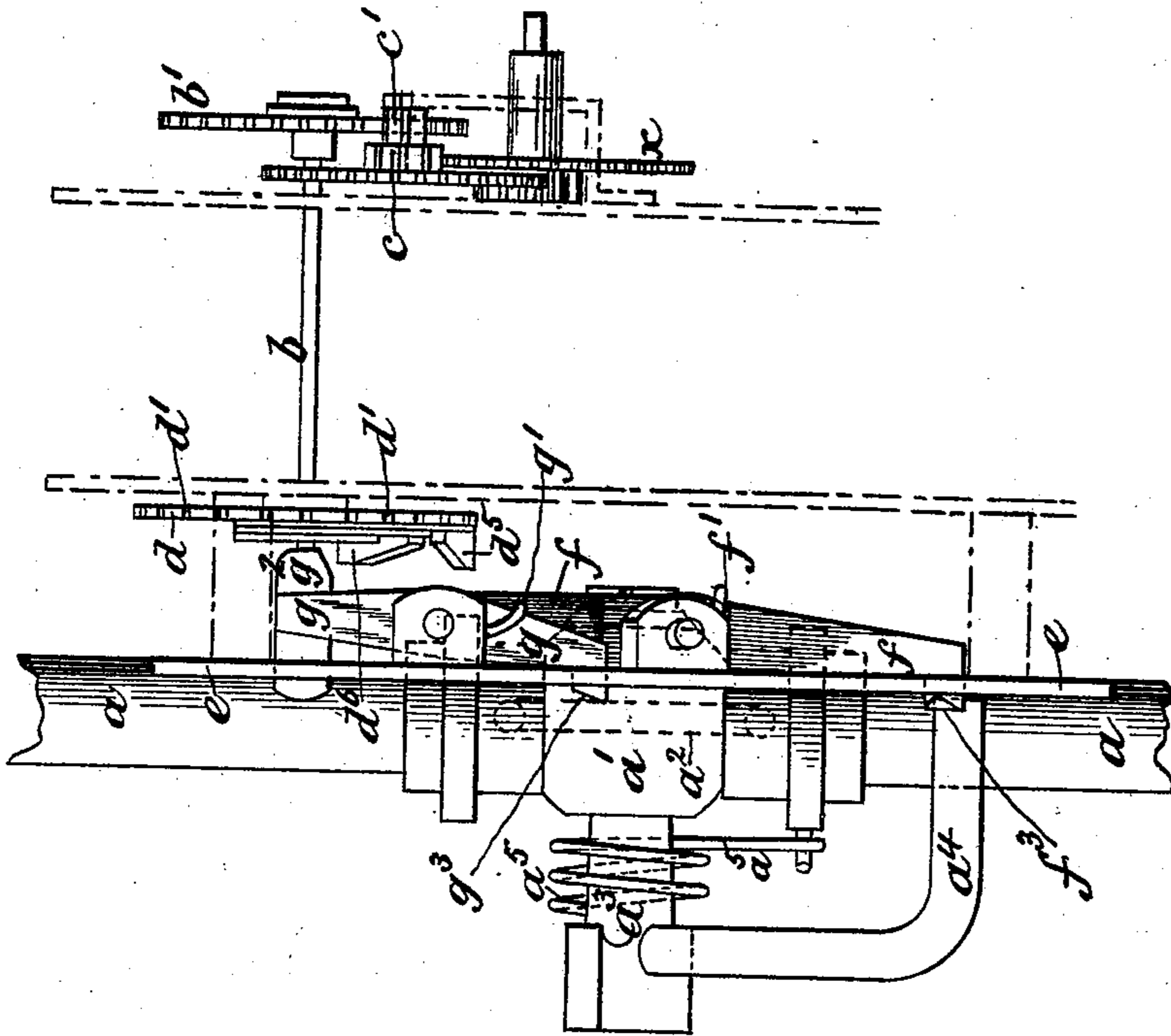
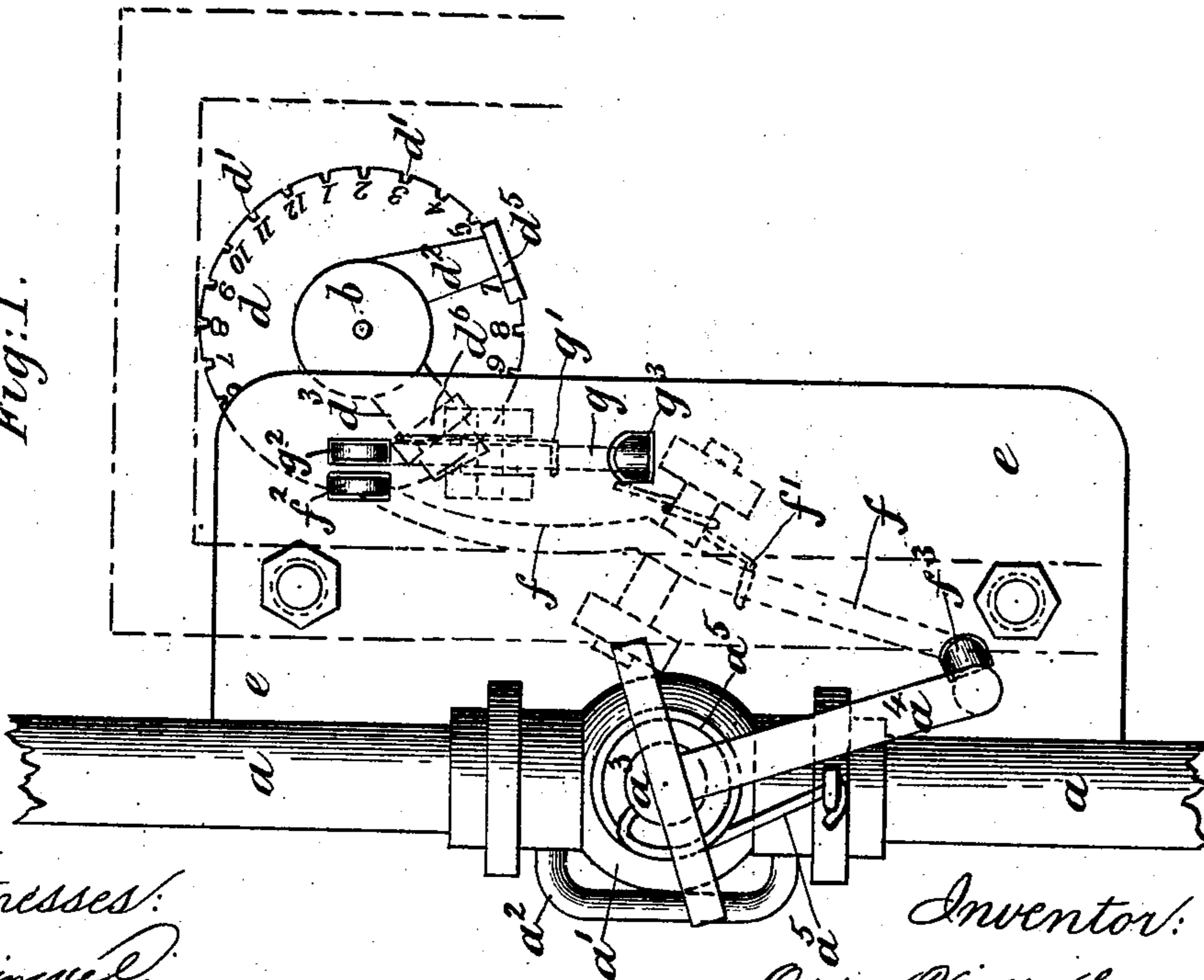


Fig:1.



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Inventor:
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by Wm. F. Tucker
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2 Sheets—Sheet 2.

Fig. 3.

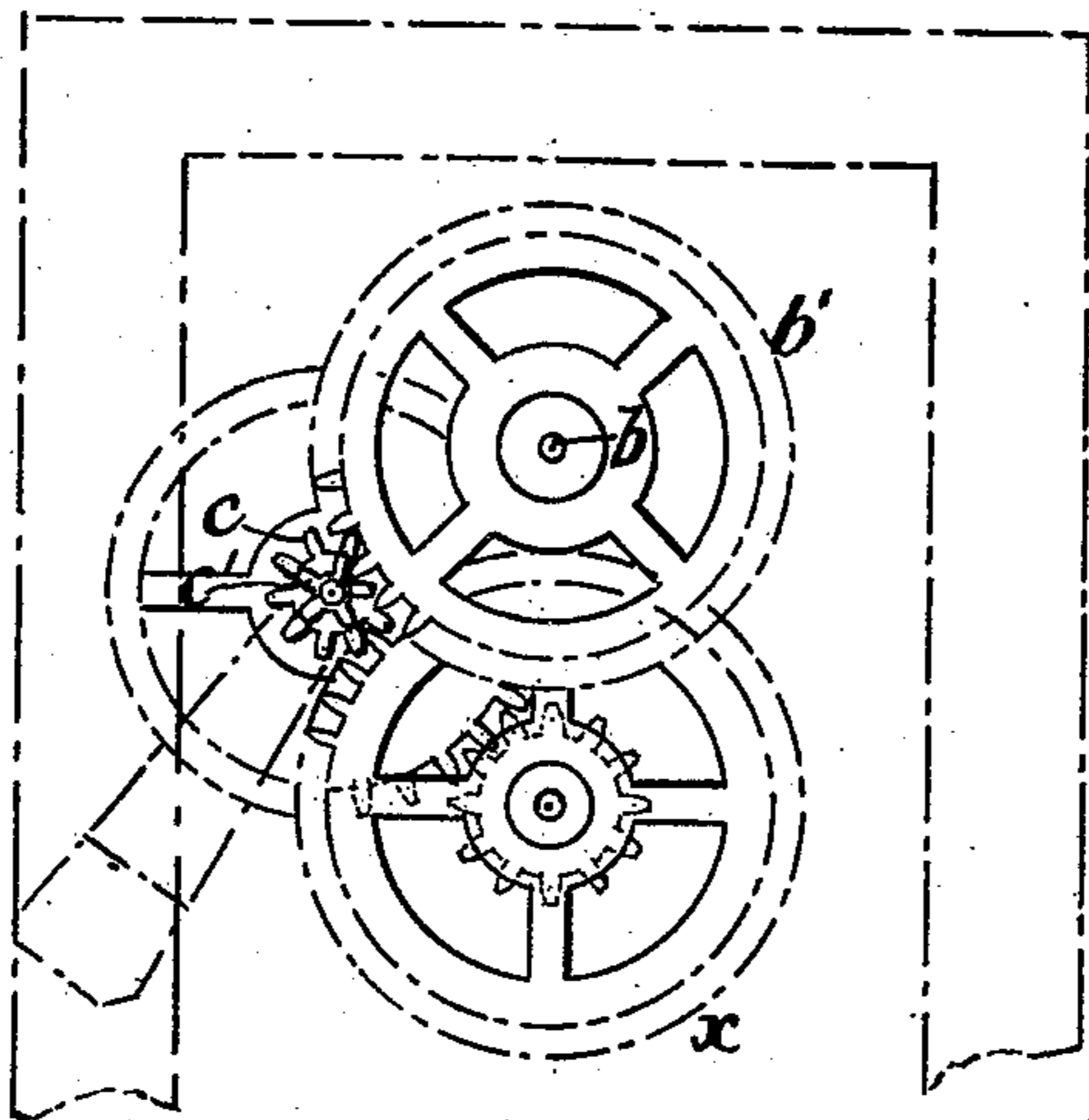


Fig. 4.

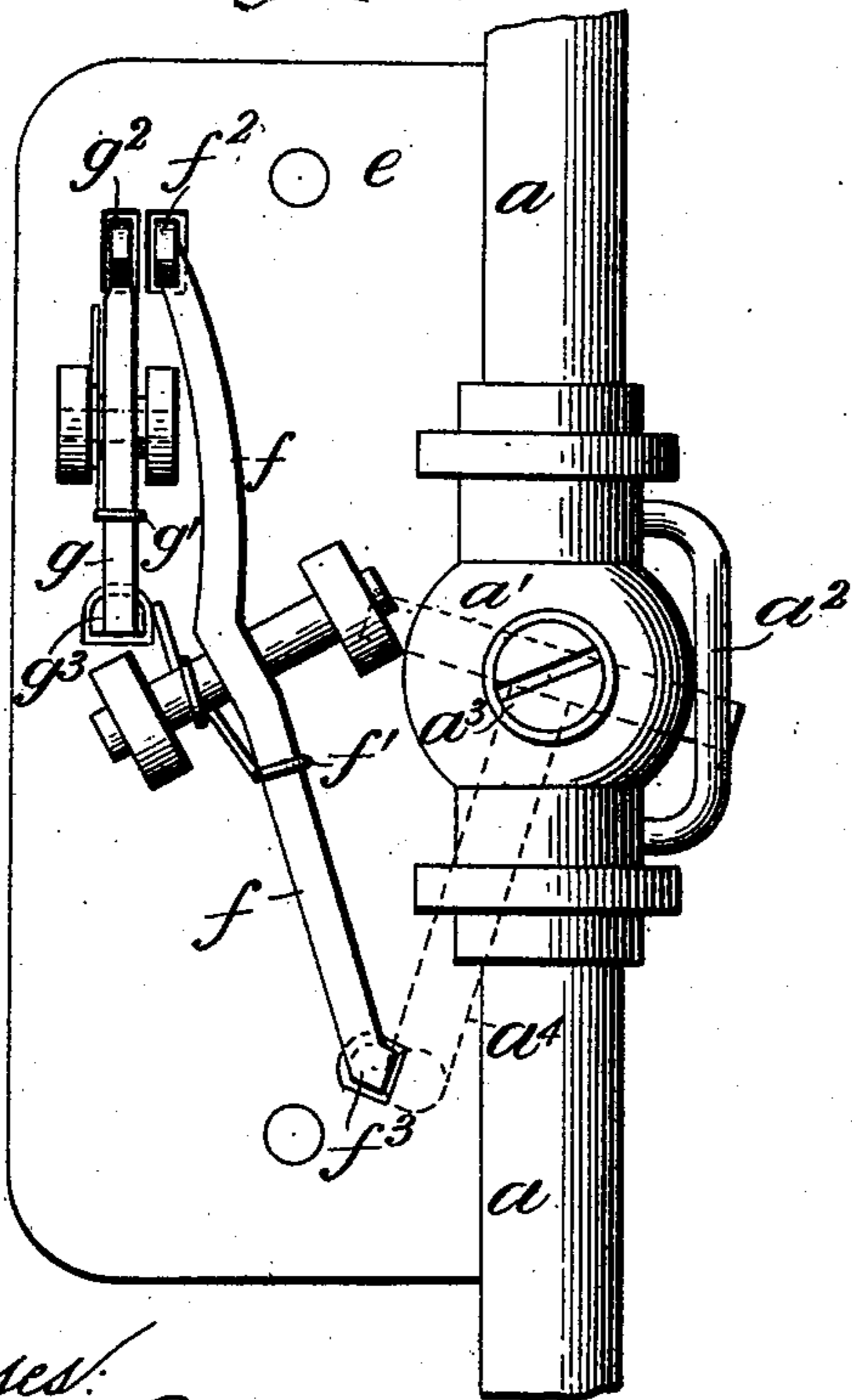
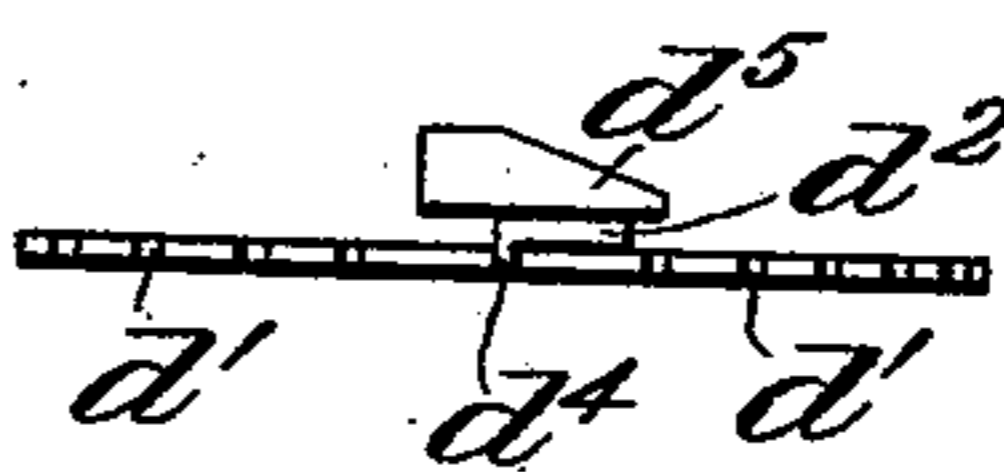


Fig. 5.



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UNITED STATES PATENT OFFICE.

ODDUR VIGFÚS SIGURDSSON, OF HAMMERSMITH, LONDON, ENGLAND.

TIME-LAMPLIGHTER.

SPECIFICATION forming part of Letters Patent No. 689,598, dated December 24, 1901.

Application filed February 21, 1901. Serial No. 48,358. (No model.)

To all whom it may concern:

Be it known that I, ODDUR VIGFÚS SIGURDSSON, a subject of the King of Denmark, residing at Hammersmith, in the county of London, England, have invented a new and useful Time Lamp Lighter and Extinguisher, of which the following is a full, clear, and exact description, and for which I have made application for patent in Great Britain, dated July 27, 1900.

The invention has for its object improved means for automatically turning gas on and off at predetermined times and at intervals of more or less than twelve hours between each action.

I will describe my invention by the aid of the accompanying drawings, in which—

Figure 1 is a back view of mechanism constructed according to my invention. Fig. 2 is a side or edge view thereof. Fig. 3 is a front view of the clockwork. Fig. 4 is a rear elevation of the mechanism shown in Fig. 1, omitting the clockwork-frame and its attached wheel; and Fig. 5 is a detail view.

In carrying my present invention into effect I employ a main gas-pipe a , which is fitted with a tap a' and is provided with a bypass, preferably consisting of a small pipe a^2 , connected to the main pipe a on each side of the tap a' , or a separate small pipe may be employed to convey gas to the pilot-flames. I also employ clockwork apparatus to retain and liberate at the required times an arm a^4 , fixed on the gas-tap plug a^3 , which latter is acted upon by a spring a^5 . I employ any ordinary clockwork, which may go either for a day or a week, the general arrangement of which being well known I have not shown in the drawings; but I modify the same in the following manner: I add to such clockwork mechanism a spindle b , having on one end a toothed wheel b' , which is driven by a pinion c' , solid with the pinion c , giving motion to the hour-wheel x , the pinion c' being of such proportion as to give to the said toothed wheel b' , and consequently to the shaft b , one complete revolution in twenty-four hours. On the other end of the spindle b I fix a numbered disk d , provided with a number of notches d' on its edge, which notches may be of such number, forty-eight, as to serve for half-hour setting, or ninety-six to serve for

quarter-hour setting. In the drawings, however, only twenty-four notches d' are shown for hour-setting. On the spindle b , close to the notched wheel d , are loosely mounted two spring-arms d^2 d^3 , each being provided with a pin or projection d^4 , (see Fig. 4,) capable of being placed in one or other of the notches d' . Each arm d^2 d^3 is respectively provided with a rise or cam d^5 d^6 for the purpose herein-after referred to.

In connection with the clockwork is a plate e , on which are mounted two detent-levers f g , acted upon by springs f' g' . The end f^2 of the lever f is in position to be acted upon by the rise or cam d^5 , and the end g^2 of the lever g is in position to be acted upon by the rise or cam d^6 , while the other or detent ends f^3 g^3 of such levers project through the plate e in position to stop the arm a^4 of the gas-tap until when the predetermined times have arrived the rises or cams d^5 d^6 cause the detent ends f^3 g^3 to descend out of the way of the gas-tap arm a^4 , and thereby allow the latter by the action of the spring a^5 to pass from one detent to another, where it will be detained until the required period has passed, when it is again liberated in the manner above described.

The arm a^4 , as shown in the drawings, is against the detent f^3 , which is the shut-off position. When liberated from such detent f^3 and allowed to pass to the detent g^3 , it is in the turned-on position, and when liberated from the detent g^3 it passes to the reverse shut-off position.

For clockwork running only for a day only two detent-levers f g and two spring-arms d^2 d^3 and cams or rises d^5 d^6 are used; but with clockwork running for a week four of each of such parts will be employed, and the spring a^5 will be long enough to cause the plug a^3 to rotate completely for each day the clock will run.

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

1. In means for automatically turning gas on and off, the combination with a gas-pipe and tap thereon, of clockwork mechanism having an additional spindle revolving once in twenty-four hours, an arm on the gas-tap plug, a spring to act on said plug, spring-pressed detent-levers the detent end of each

of which is in position to act as a stop for the gas-tap arm, a notched and numbered plate on the additional twenty-four-hour spindle, and adjustable cams or rises in connection
5 with said notched plate to act on the ends of the detent-levers opposite to the detent ends thereof, substantially as herein set forth.

2. In means for automatically turning gas on and off, the combination with a gas-pipe
10 and tap thereon, of clockwork mechanism having an additional spindle revolving once in twenty-four hours, an arm on the gas-tap plug, a spring to act on said plug, a plate fixed to the clockwork mechanism, spring-
15 pressed detent-levers mounted on axles carried by said plate and having one end of each

lever in position to act as a stop for the gas-tap arm, a notched and numbered plate on the twenty-four-hour spindle, adjustable
spring-arms in connection with said notched 20 plate, a cam or rise on each of said spring-arms to act on one end of each of said detent-levers, and a pin or projection on each of said spring-arms to pass into any selected
notch of said plate, substantially as herein 25 set forth.

In testimony whereof I affix my signature in presence of two witnesses.

O. V. SIGURDSSON.

Witnesses:

CLAUDE K. MILLS,
H. SEYMOUR-MILLS.