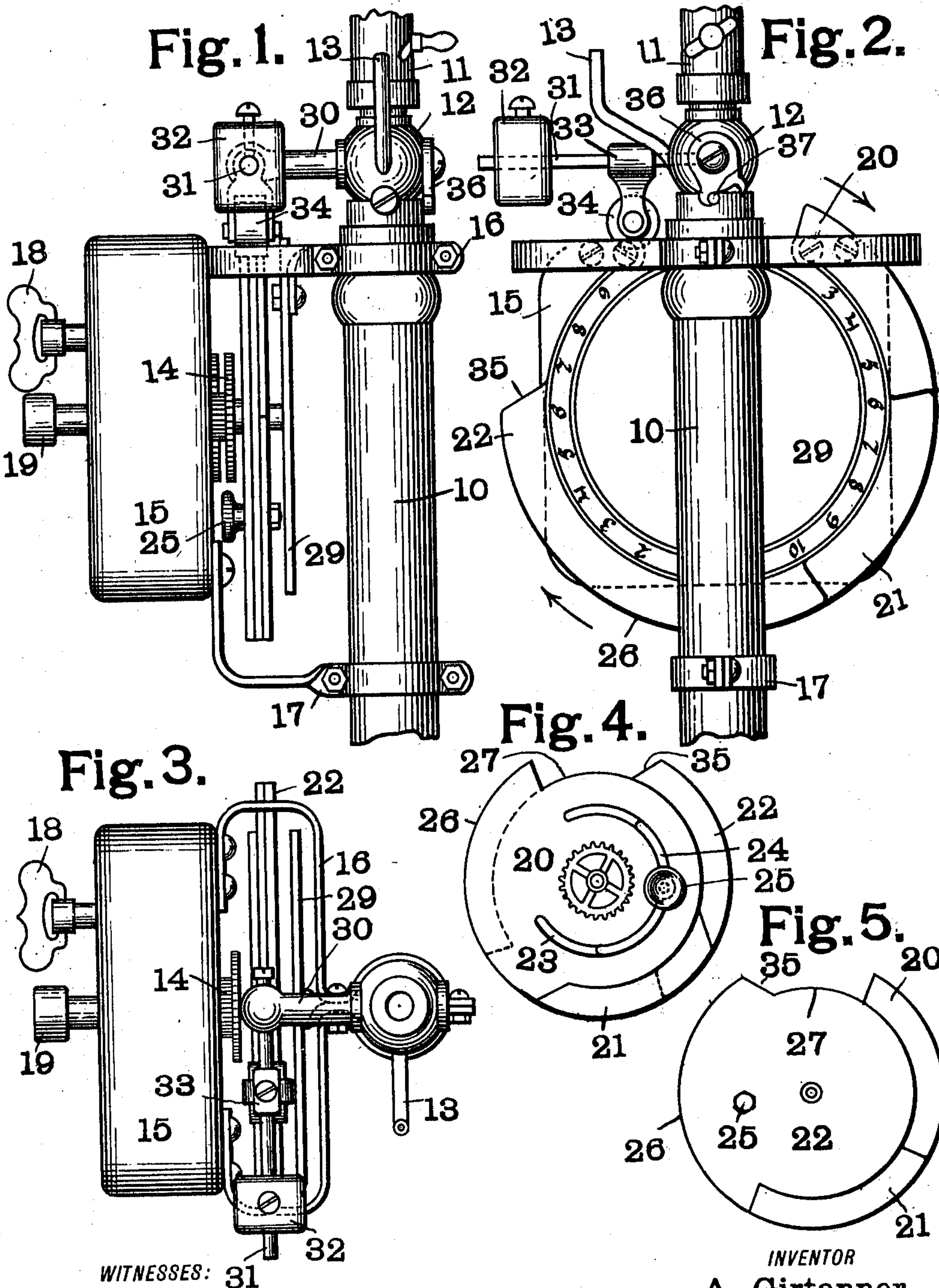


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 CONTROLLER FOR GAS BURNERS.  
 APPLICATION FILED JULY 7, 1910.

982,808.

Patented Jan. 31, 1911.



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# UNITED STATES PATENT OFFICE.

ALEXANDER GIRTANNER, OF ST. LOUIS, MISSOURI.

CONTROLLER FOR GAS-BURNERS.

982,808.

Specification of Letters Patent.

Patented Jan. 31, 1911.

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*To all whom it may concern:*

Be it known that I, ALEXANDER GIRTANNER, a citizen of the United States, residing at the city of St. Louis, Missouri, have invented a certain new and useful Controller for Gas-Burners, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a controller for gas burners and is particularly adapted for use in connection with gas street lamps.

The object of my invention is to provide a device of the class above referred to which will be simple in construction and reliable in operation and which may be readily attached to the ordinary form of gas burner without any substantial change in the burner itself.

In the accompanying drawings which illustrate a controlling device made in accordance with my invention, together with a portion of a gas burner to which the same is attached, Figure 1 is a side elevation; Fig. 2 is a front elevation; Fig. 3 is a top plan view and Figs. 4 and 5 are rear and front views respectively of the controlling disk.

Like marks of reference refer to similar parts in the several views in the drawings.

10 represents the standard of the gas burner. This standard 10 carries the burner 11, the flow of gas to which is controlled by means of the valve 12.

13 is the pilot light which is kept continually burning and lights the gas in the main burner 11. In order to control the valve 12 I provide clockwork 14 which is inclosed in a suitable casing 15. This casing is secured to the standard 10 by means of upper and lower clamps 16 and 17 respectively. The upper clamp 16 is loop-shaped as is best shown in Fig. 3 so as to allow of the passage of the connections between the valve and controlling device as will be hereinafter more fully described. The clock-work 14 is provided with the usual winding key 18 and setting key 19. Carried on the stem of the setting key 19 is the controlling disk which consists of a main part 20 and two auxiliary parts 21 and 22 respectively. The main part 20 of the controlling disk is rigidly attached to the stem of the setting key 19 while the parts 21 and 22 are loosely mounted thereon so as

to be movable relatively to the part 20. The part 20 is provided with a long slot 23 and the part 21 with a shorter slot 24, through which slots pass a clamping screw 25 so as to secure the two parts rigidly together. The main part 20 is provided with an outer periphery 26 and an inner periphery 27 each of which is concentric with the axis of the disk. The peripheries of the parts 21 and 22 form a continuation of the periphery 26 of the main part so that the effective length of both the inner and outer peripheries is varied by the relative adjustment of the parts. Adjacent to the controlling disk is a disk 29 carried from the upper clamp 16. This disk 29 is provided with figures to enable the operator to set the controlling disk so that the device will turn the gas off and on at the proper hours. It will be understood that the gearing of the clock mechanism is so proportioned that the controlling disk will rotate once in every twenty-four hours. Secured in the stem 30 of the valve 12 is an arm 31 carrying an adjustable weight 32. This arm also carries a block 33 in which is mounted a roller 34 adapted to run either on the outer periphery 26 or the inner periphery 27 of the controlling disk. In order to guide the roller 34 from the inner to the outer part of the periphery of the controlling disk I provide the part 22 with an inclined face 35. The opposite end of the valve stem 30 is provided with a yoke 36 engaging with a pin 37 to limit the movement of the valve.

The operation of my apparatus is as follows: The time for turning the gas on or off is regulated by turning the setting key 19 and loosening the binding screw 25 so that the relative length of the two controlling surfaces of the disk may be properly regulated as well as the position of the disk relative to the setting disk 29. The roller 34 when riding on the inner part 27 of the periphery of the controlling disk will hold the valve stem 30 in position to cut off the gas from the main burner 11 only that in the pilot light 13 being now used. As soon, however, as the roller 34 comes in contact with the inclined face 35 it will be lifted on to the periphery 26 so that the gas will be turned on the main burner.

My device is very simple in construction and can be applied to any ordinary gas burner with very slight changes, it being only necessary to substitute the arm 31 for the



ordinary controlling key. At the same time the range adjustment of the device is very great.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. The combination with a gas burner, of clock-work, an upper and a lower clamp carried by said clock-work and adapted to engage with the standard of the burner, a controlling device situated between the burner standard and the clock-work and actuated by the latter, and connections between said actuating device and the valve of the burner to operate the latter, the upper of said clamps being loop-shaped to allow the passage of said connections.

2. The combination with a gas burner, of

clock-work, an upper and a lower clamp carried by said clock-work and adapted to engage with the standard of the burner, the upper of said clamp disks being loop-shaped, an adjustable controlling disk carried by said clock-work and extending through said loop-shaped support, a weight arm directly carried by the valve stem of the burner, and a roller carried on said arm and engaging with the periphery of said controlling disk.

In testimony whereof, I have hereunto set my hand and affixed my seal in the presence of the two subscribing witnesses.

ALEX. GIRTANNER. [L. S.]

Witnesses:

W. A. ALEXANDER,  
ELIZABETH BAILEY.