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PATENTED DEC. 31, 1907.

V. C. DE YBARRONDO.  
ELECTRICAL IGNITING DEVICE FOR GAS STOVES.  
APPLICATION FILED MAY 20, 1907.

Fig. 1.

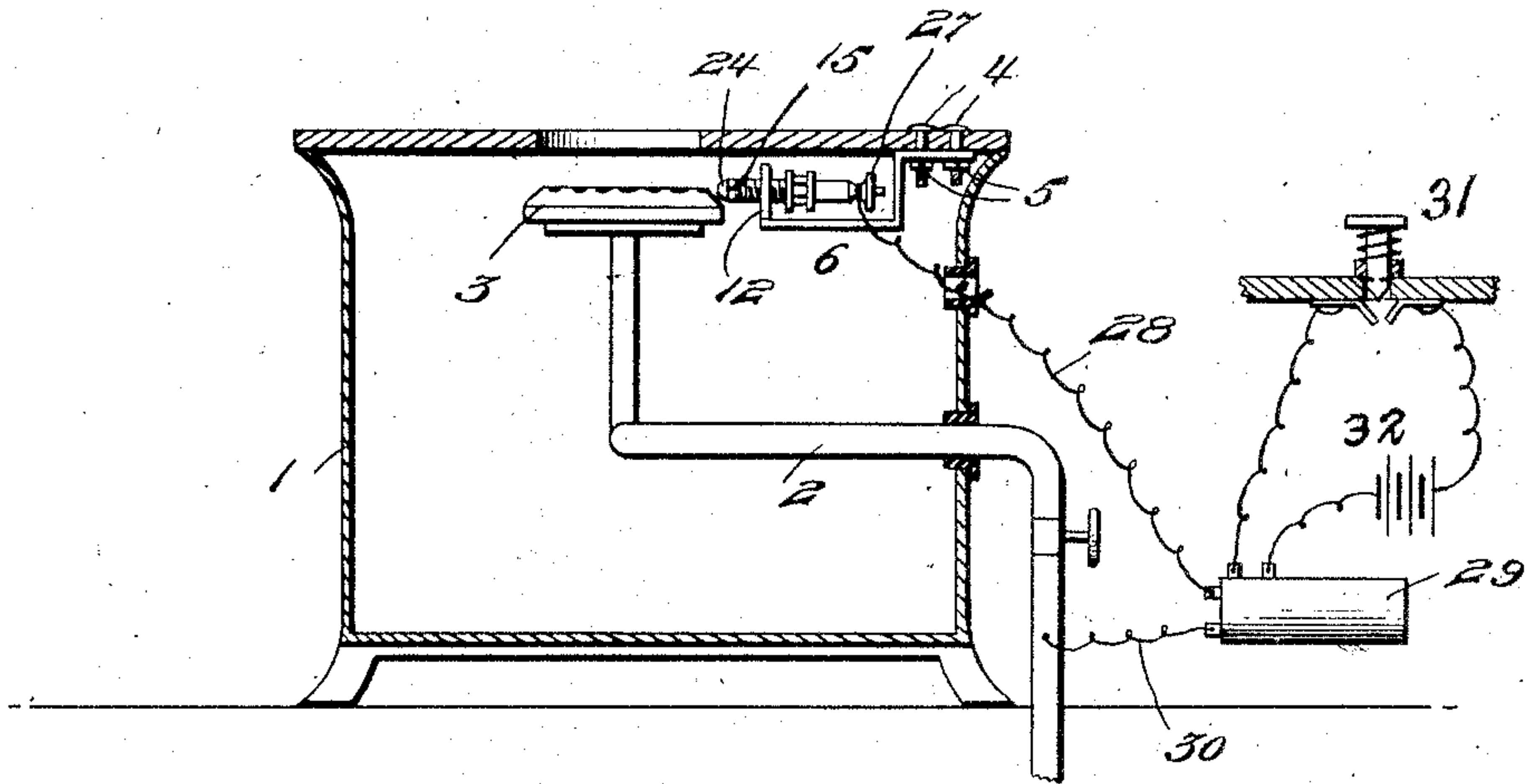


Fig. 2.

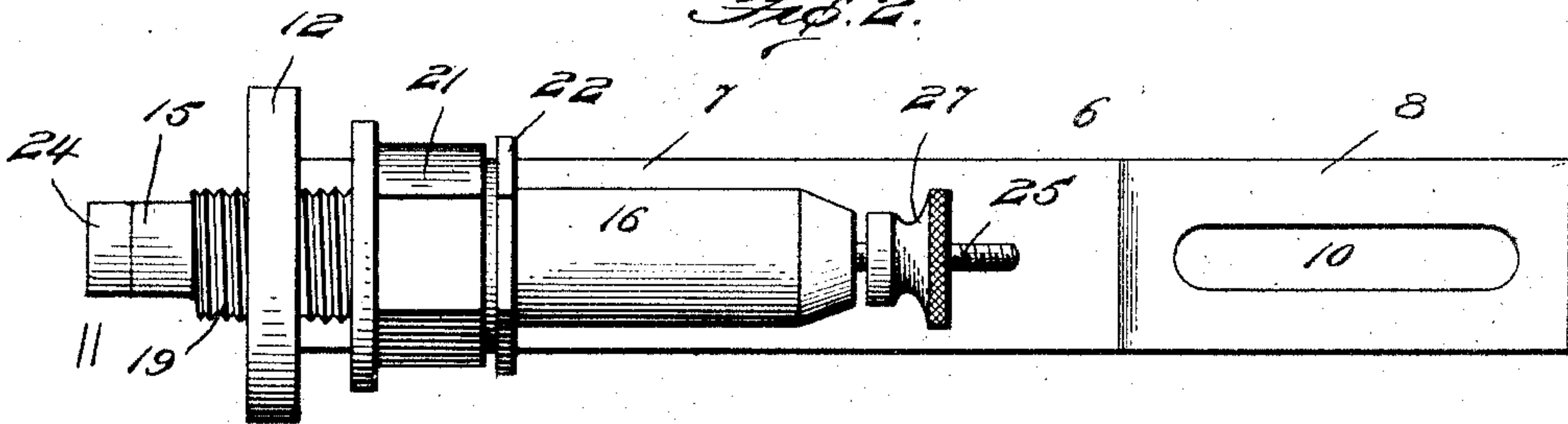


Fig. 3.

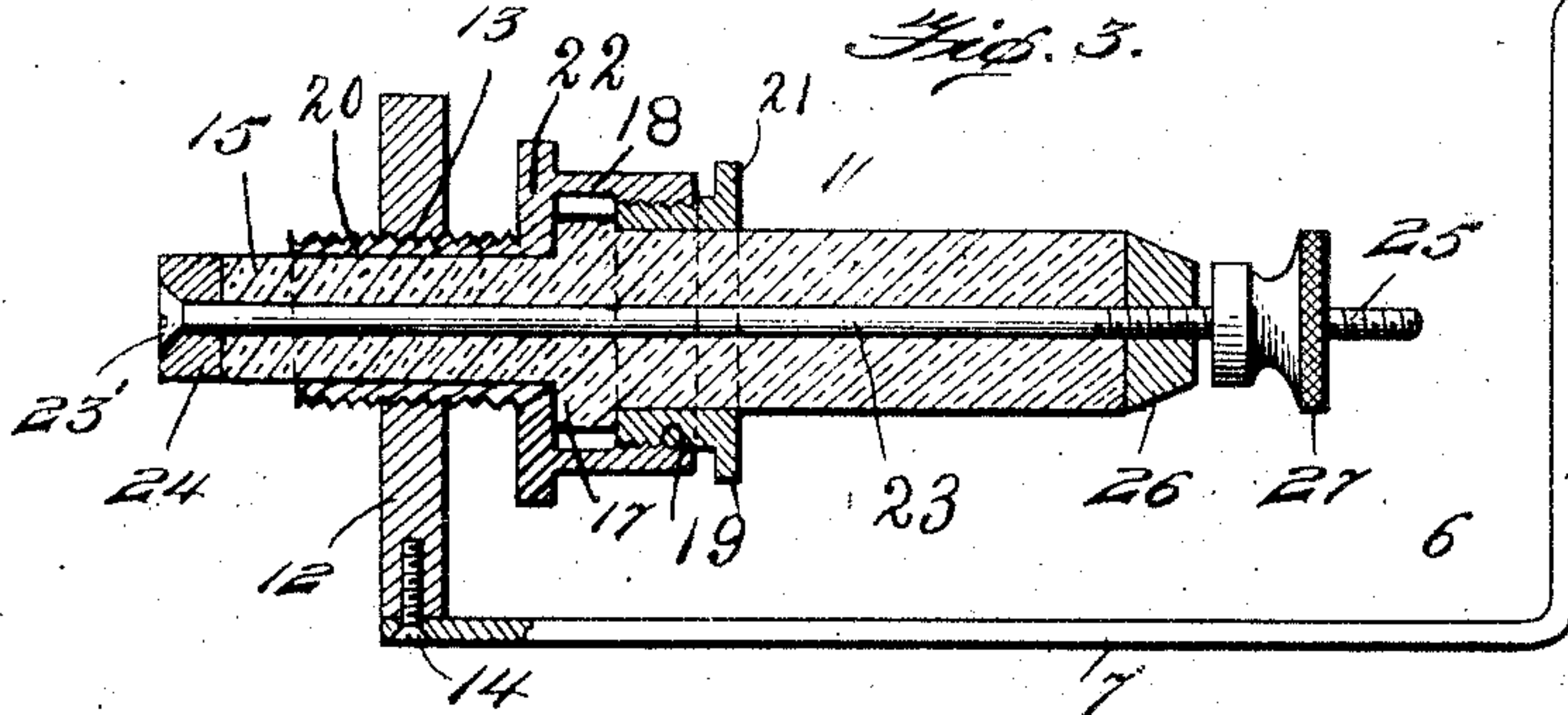
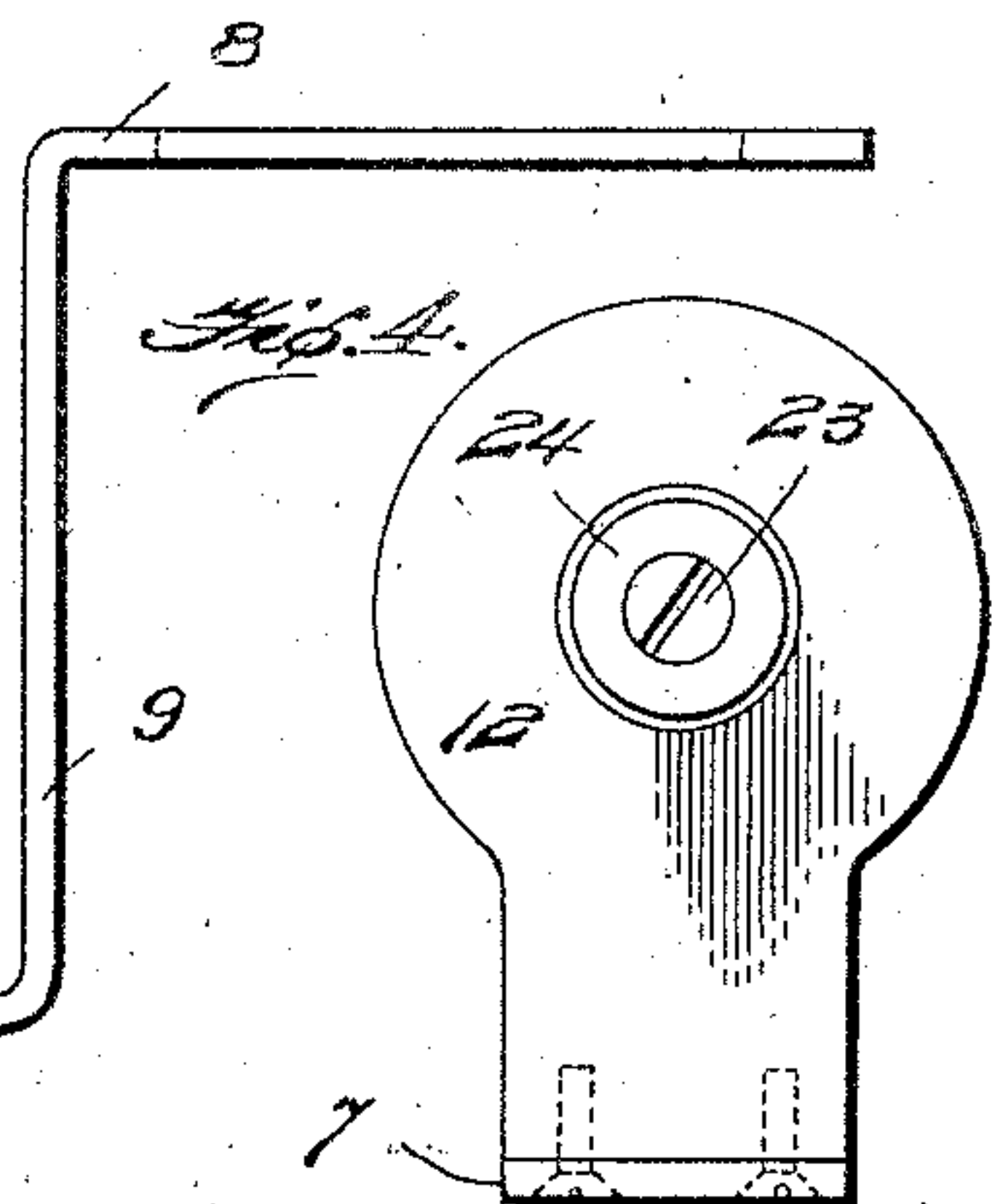


Fig. 4.



Witnesses,

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his Atty.



# UNITED STATES PATENT OFFICE.

VINCENT C. DE YBARRONDO, OF LOS ANGELES, CALIFORNIA.

## ELECTRICAL IGNITING DEVICE FOR GAS-STOVES.

No. 875,035.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed May 20, 1907. Serial No. 374,791.

*To all whom it may concern:*

Be it known that I, VINCENT C. DE YBARRONDO, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Electrical Igniting Devices for Gas-Stoves, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to an improvement in electrical igniting devices for gas stoves, and has for its object the provision of means for facilitating the igniting of gas escaping from a burner, or like device.

Another object of the invention is the improvement of the construction of an igniting device, which comprises a minimum number of parts and which is comparatively simple and cheap to manufacture.

With these and other objects in view, the invention consists of certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings: Figure 1 is a view in side elevation of a device constructed in accordance with the present invention, showing the same in application. Fig. 2 is a top plan view of the supporting-bracket and the spark plug. Fig. 3 is a view in side elevation of the supporting-bracket, partly shown in section, and a longitudinal sectional view of the spark plug. Fig. 4 is an end view of the spark plug.

Referring to the drawings by numerals, 1 designates a gas stove, constituting a support, carrying the valved gas pipe 2, upon the upper end of which is, preferably, secured the burner 3. Preferably positioned within stove 1 and secured thereto by suitable means, as for instance, bolts 4 and nuts 5, is an adjustable supporting-bracket 6. The bracket 6 comprising primary and auxiliary horizontal supporting portions 7 and 8, respectively. These portions 7 and 8 are integrally connected by, preferably, a vertical portion 9. The auxiliary, horizontal portion 8 is provided with an elongated aperture 10, and by reason of this apertured structure, the bracket may be adjusted upon the support or stove 1, so as to place the spark plug 11 contiguous to the burner 3.

The spark plug 11 is carried by a removable vertical standard 12. This standard 12 is provided with a screw-threaded aper-

ture 13, and is removably secured to the primary, horizontal portion 7 of bracket 6, preferably, by screws 14. By reason of the removable structure of standard 12, different size spark plugs may be employed, as it will only be necessary to attach to the primary, horizontal supporting-portion 7, a standard 12 having an aperture of suitable size to accommodate the particular spark plug.

The spark-plug 11 comprises a substantially cylindrical member 15 formed of insulating material. Hereinafter, I will designate the member 15 as an "insulating member". The insulating member 15 is provided near its center with, preferably, an annular shoulder 17. A female member 18 is internally screw-threaded, at 19, and is provided with a tubular portion 20, which is screw-threaded upon its outer face. The screw-threaded portion 20 is threaded into aperture 13 of the standard 12. A male member 21 is threaded into female member 18, and the shoulder 22 of member 18 bears against one side of the shoulder 17 and the inner end of male member 20 bears against the opposite side of said shoulder. By threading male member 21 into female member 18, the insulating member 15 will be securely fastened upon the standard 12. A screw 23 extends through the insulating member 15, and said screw 23 is provided with a head 23', which head 23' engages a metallic disk 24. The opposite end of the screw is threaded, at 25, and secured upon said end 25, against the insulating member 15, is a disk 26. Adjustably mounted upon said end 25 is also a thumb-nut 27, between which nut 27 and disk 26, wire 28 is secured to the spark plug. The opposite end of the wire 28 is connected to one of the terminals of the vibrating spark-coil 29, and by means of wire 30, the spark-coil is also connected to pipe or tube 2. A suitable circuit-closure or switch 31 is electrically connected to a battery 32, or any other source of electrical energy, and the spark-plug 29, whereby, when the circuit is closed at the switch or circuit-closure 31, a spark will jump from the spark-plug to the burner 3, thereby igniting escaping gas. It is to be noted that the outer end of the spark-plug constitutes an electrode, while the burner constitutes another electrode. The pipe 2 and the wire 28 are suitably insulated from the stove.

I have found, from practical experience,



that, when the circuit is closed, through the medium of the switch or circuit-closure 31, and the gas is turned on, said gas will be instantaneously ignited. It will be noted that, by the adjustable structure of the fastening means and the standard, the spark-plug can be positioned so as to accommodate any size burner, whereby the positive operation of the device is assured.

10 What I claim is:

1. In a device of the character described, the combination with a gas stove provided with a burner, of a bracket positioned within and depending from a portion of said gas stove, a standard secured to said bracket, a spark-plug provided with an insulating portion, engaging said standard, said spark-plug provided with an outer, metallic end positioned contiguous to said burner, and means for supplying a current of electricity to the metallic end of said spark-plug and to said burner.

2. In a device of the character described, the combination with a support, a burner carried by said support, of a bracket provided with a pair of horizontal portions, one of said horizontal portions secured to said support, a spark-plug, means supporting said spark-plug upon the other horizontal portion of said bracket, and means for supplying an electric current to said spark-plug and burner.

3. In an electrical igniting device, the combination with a support provided with a burner, of a bracket attached near one end to said support and having its opposite end spaced from said support, a removable standard carried by said last-mentioned end, a spark plug supported entirely upon said standard and positioned contiguous to said burner, and means for supplying a current of

electricity to said spark-plug and to said burner.

4. In an electrical igniting device, the combination with a gas stove provided with a burner, of a spark-plug positioned within said stove and contiguous to said burner, means for adjustably securing said spark-plug to said stove, and means for supplying an electric current to said spark-plug and burner.

5. In a device of the character described, the combination with a support, a burner carried by said support, of a standard positioned contiguous to said burner, means supporting said standard upon said support, a member threaded into said standard, an insulating member provided with a shoulder, extending through said first-mentioned member, means for holding said shoulder of said insulating member against said first-mentioned member, and means carried by and adapted to conduct an electric current through said insulating member.

6. A device of the character described, comprising a standard, a female member threaded into said standard, an insulating member extending through said female member, a male member positioned upon and threaded into said female member and engaging a portion of said insulating member for securing the same upon said female member, and a metallic member provided with wire attaching means, extending through said insulating member.

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

VINCENT C. DE YBARRONDO.

Witnesses:

F. R. GRIFFITH,  
WM. P. FERRIS.