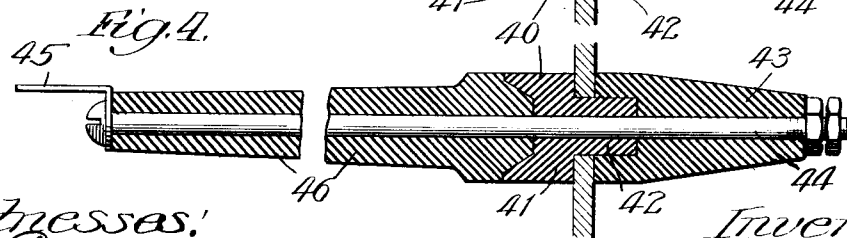
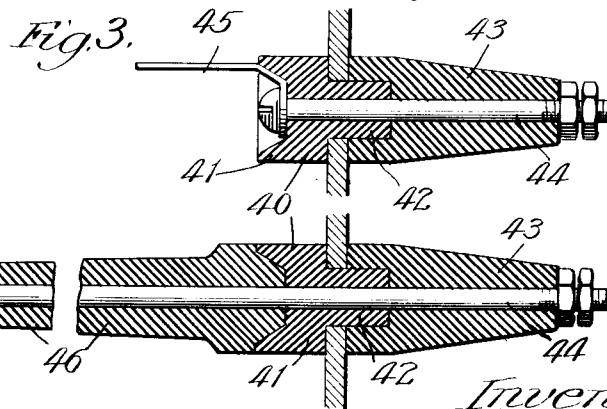
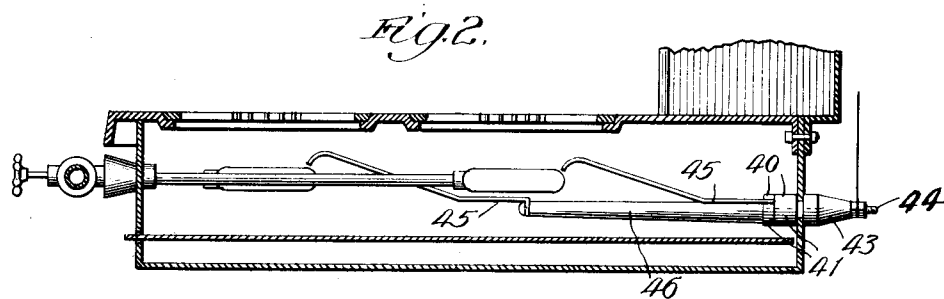
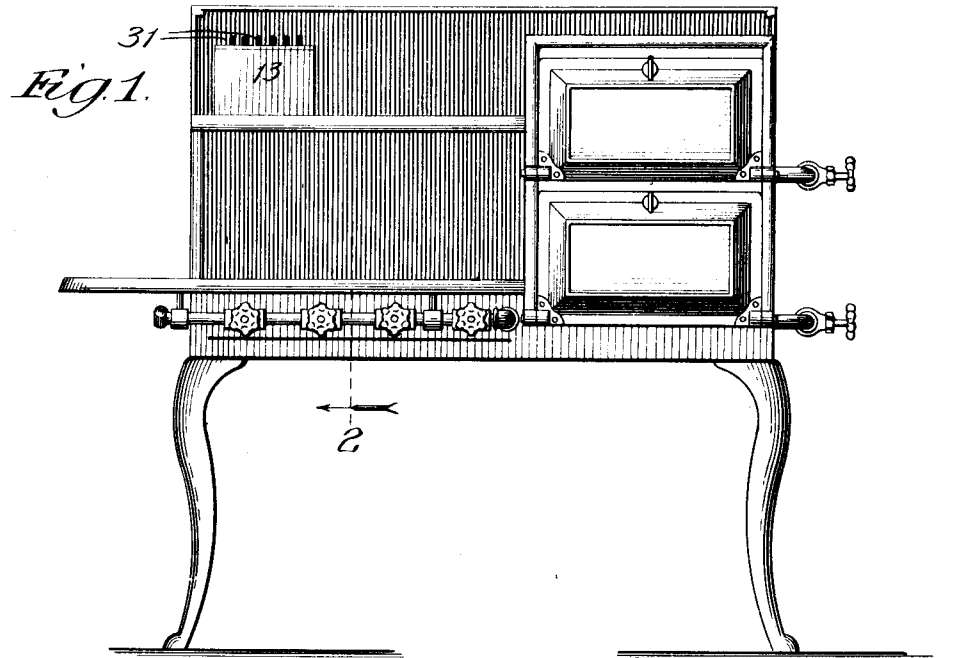


B. D. STEVENSON.
IGNITING DEVICE FOR GAS STOVES.
APPLICATION FILED MAY 22, 1911.

1,059,086.

Patented Apr. 15, 1913.

3 SHEETS—SHEET 1.



Witnesses:
E. D. Chyford.
Chas. H. Bull.

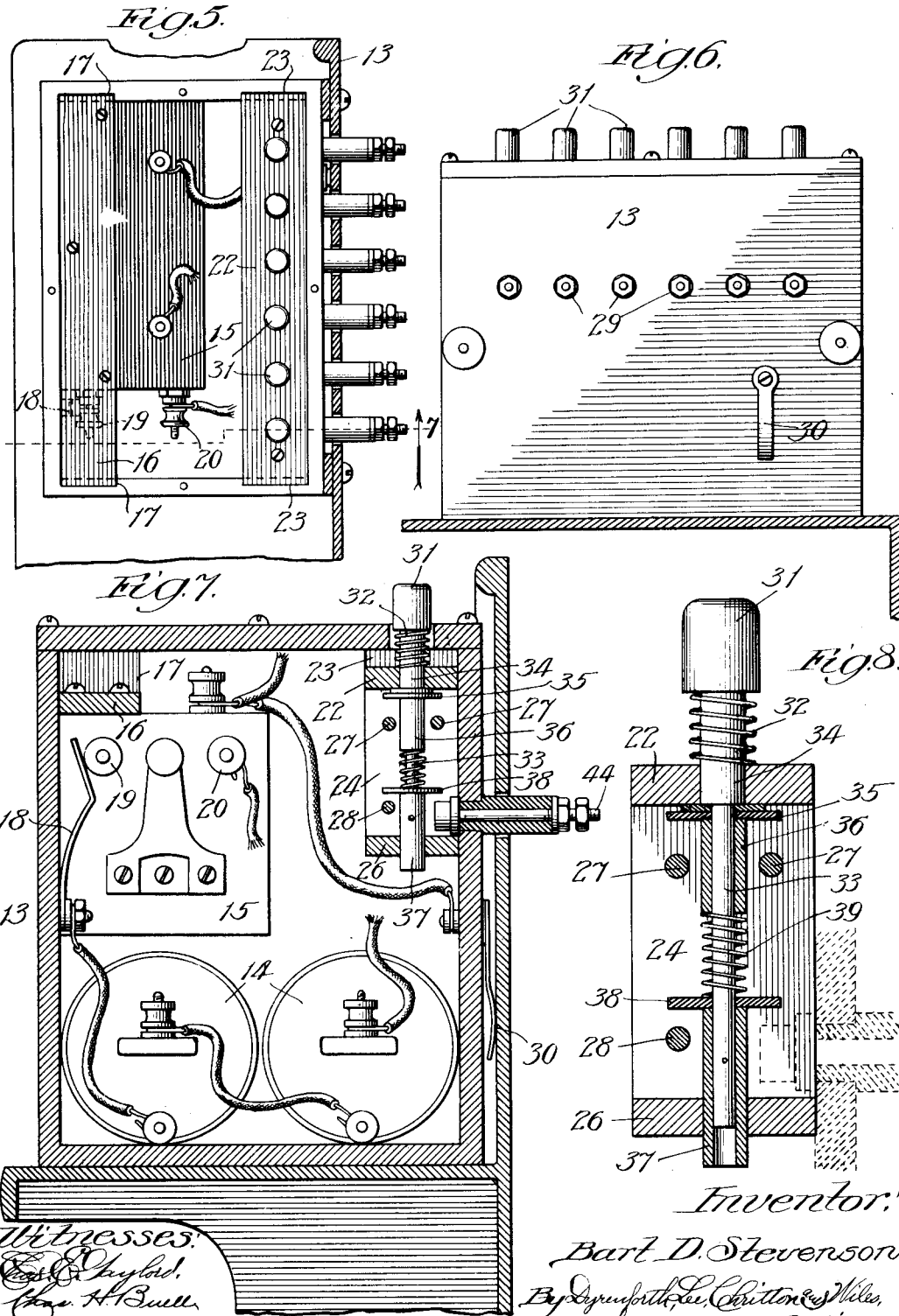
Inventor:
Bart D. Stevenson.
By *James H. Sullivan*, Attorney.

B. D. STEVENSON.
IGNITING DEVICE FOR GAS STOVES.
APPLICATION FILED MAY 22, 1911.

1,059,086.

Patented Apr. 15, 1913.

3 SHEETS-SHEET 2.



Witnesses:
E. J. Hughes,
Chas. H. Bull.

Inventor:
Bart D. Stevenson.
By Dymally, Lee, Christen & Miles,
Attys.

B. D. STEVENSON.
IGNITING DEVICE FOR GAS STOVES.
APPLICATION FILED MAY 22, 1911.

1,059,086.

Patented Apr. 15, 1913.

3 SHEETS—SHEET 3.

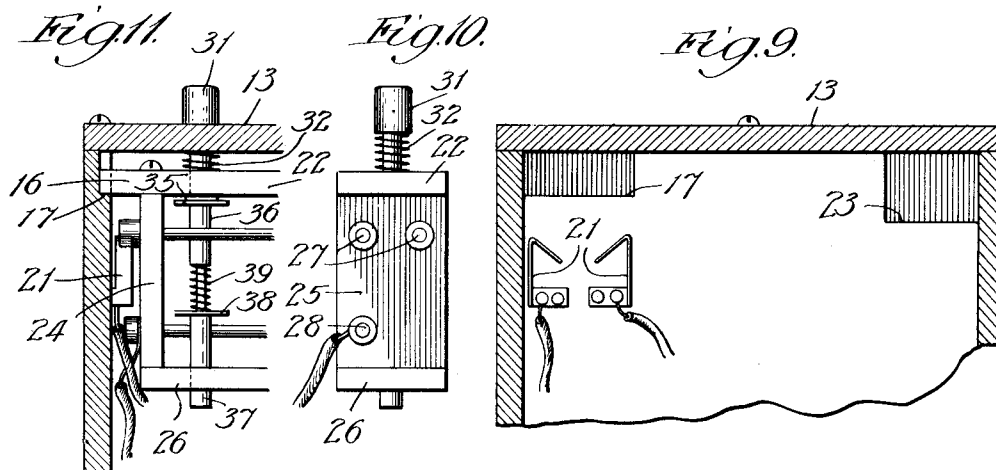
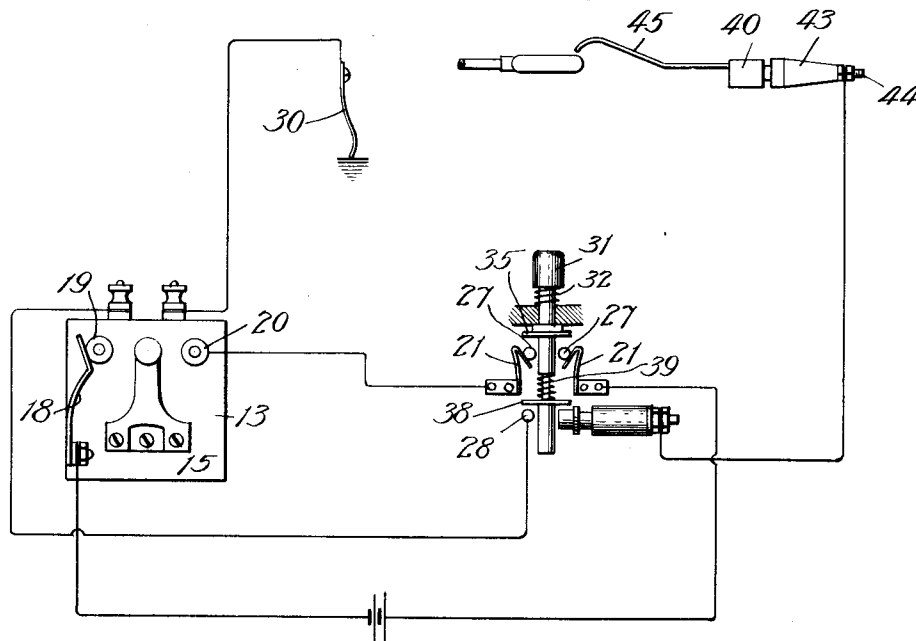


Fig. 12.



Witnesses:
Edw. C. Gaylord.
Chas. H. Bull.

Inventor:
Bart D. Stevenson.
By Dyrenforth, Lee, Christman & Mills,
Attys.

UNITED STATES PATENT OFFICE.

BARTON D. STEVENSON, OF HARVARD, ILLINOIS.

IGNITING DEVICE FOR GAS-STOVES.

1,059,086.

Specification of Letters Patent.

Patented Apr. 15, 1913.

Application filed May 22 1911. Serial No. 628,690.

To all whom it may concern:

Be it known that I, BARTON D. STEVENSON, a citizen of the United States, residing at Harvard, in the county of McHenry and State of Illinois, have invented a new and useful Improvement in Igniting Devices for Gas-Stoves, of which the following is a specification.

My invention relates to certain new and useful improvements in an igniting device for a gas-stove, and is fully described and explained in the specification and shown in the accompanying drawings, in which:

Figure 1 is an elevation of a gas-stove with my device in place thereon; Fig. 2 is a section on the line 2 of Fig. 1; Figs. 3 and 4 are horizontal sections showing the manner in which the high-tension terminals are led through the back of the stove to the burners; Fig. 5 is a top plan of the igniting mechanism proper with the cover removed; Fig. 6 is a rear elevation of the same; Fig. 7 is a vertical section on the line 7 of Fig. 5; Fig. 8 is a detailed section on a larger scale through the contact devices; Fig. 9 is an elevation of the primary contact to be engaged by the switch-mechanism; Fig. 10 is an end view of the switch-mechanism removed from place; Fig. 11 is an elevation showing the parts illustrated in Figs. 9 and 10 in their assembled relations, and Fig. 12 is a diagrammatic view illustrating the circuits.

Referring to the drawings, 13 is a case having in its lower portion two batteries 14 and above these batteries an induction coil 15 to the top of which is secured a longitudinally-extending bar 16 the ends of which rest in notches 17 in the sides of the case, so as to hold the induction-coil removably in place. One terminal of the batteries 14 is led to a contact spring 18 which, when the induction-coil is in position, engages one of the primary binding posts thereof. The other primary binding post 20 and the remaining terminal of the battery are connected to two primary contacts 21 of spring-metal on the inside wall of the case at one end and at the rear, that is, opposite the induction-coil, these two contacts being fully illustrated in Fig. 9. This construction is manifestly such that by closing the connection between these two contacts 21 in any way, the primary circuit through the induction-coil will be closed.

At the rear of the case and at the top is a switch or push-button mechanism, mounted

in a frame, having a top plate 22 projecting at its ends and resting in notches 23 in the top of the case, two end plates 24 and 25 and a bottom plate 26. Between the end plates are two primary bus-bars 27, the ends of which are arranged to contact with primary contacts 21 so that by short-circuiting the primary bus-bars, the primary circuit will be closed. Beneath the primary bus-bars and at the front of the frame is a secondary bus-bar 28 connected to one of the secondary terminals of the induction-coil. To the rear of this bus-bar, when the switch or push-button mechanism is in position, are located a series of binding posts 29, the inner ends of which are provided with metallic terminals extending inside the case and lying in the same plane with the secondary bus-bar 28. The remaining secondary terminal of the induction-coil is attached to a ground spring 30.

From the foregoing description it will be evident that if the primary bus-bars are short-circuited and at the same time the secondary bus-bar be connected by any suitable mechanism with any one of the binding posts 29, a high-tension circuit can be taken out from the ground plate 30 and the binding posts 29 with which the secondary bus-bar happen to be connected. For the purpose of making these necessary connections, a series of push-buttons 31 are provided, each being held up by a spring 32 and bearing against the top plate of the switch-mechanism frame. Each push-button has a long downwardly extending stem 33 terminating at its upper end in a shoulder 34 against which is held a metallic plate 35 by means of a sleeve 36. A second sleeve 37 on the lower end of the pin 33 affords a shoulder against which a movable metallic plate 38 is held by means of a spring 39. This construction is such that as any given push-button is pressed the plate 38 will first contact with the secondary bus-bar and the secondary binding post 29 corresponding to the push-button actuated. Further movement of the push-button will compress the spring 39, the lost motion thus afforded between the plate 38 and the remainder of the push-button permitting the push-button to move down until the primary bus-bars are struck by the upper plate 35 at which time the circuit will be closed through the primary-coil and the secondary current will be available for lighting purposes.

It will be seen that this ignition mechanism is simple, very compact, very easy to assemble, and of an inexpensive type. The induction-coil and switch-mechanism are loosely mounted in the case so that they can readily be removed and furthermore it is arranged so that it can be readily installed in position with the simplest and most efficient connection and when so installed there is little or no danger of shock.

The method of installation will now be set forth.

The device is shown as applied to a gas stove of the common type provided with a shelf above the burners. Holes are drilled in the back-plate of the stove to receive the secondary binding posts 29, which are passed through these holes, the ground-plate 30 contacting with the metal back of the stove so as to form an efficient ground. This places the metallic ends of the secondary binding posts well behind the stove where there is little or no danger of their being accidentally struck and where they will be entirely out of the way and practically invisible. The secondary wires are attached to these binding posts and led down behind the back of the stove in any desired manner. At the level of the burners and beneath the gratings usually occurring above the plane of the burners, other holes are drilled in the back-plate through which extend hollow porcelain plugs 40 having collars 41 on their front ends and reduced rear ends 42. Porcelain nipples 43 countersunk to receive the rear ends 42 of the plugs 40 fit over the said rear ends, bolts 44 holding the two porcelain parts together and furnishing the means at the rear for the attachment of the wires from the secondary binding posts 29 and at the front means for carrying spark-wires 45, the ends of which are placed in close proximity to the burners. In case this spark is to be led to a forward burner, the construction is identical except that a longer bolt is used and an elongated porcelain tip 46 fitted to the collar 41 of the part 40 is used in the manner illustrated. Thus the secondary wire is completely insulated and very substantially supported until in close proximity to the burner. This is by far the simplest and most convenient method of supporting the secondary terminals of a gas-lighting device of the character in question of which I have any knowledge, for the reason that it can be readily applied to any stove now in common use, no special brackets or fittings are required for different types of stoves, the

insulation is as perfect as can reasonably be hoped for and the terminal is substantially supported without material danger of injury or destruction.

The foregoing construction has been described in detail as the preferred form of my construction, but it is manifest that this preferred form can be modified to a considerable extent without departing from the principle of my invention, and therefore, by said accurate and detailed description, I do not intend to limit myself thereto, except as pointed out in the following claims in which it is my intention to claim all the novelty which is inherent in this construction over the prior art.

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

1. In a device of the class described, batteries and an induction-coil, a pair of primary bus-bars connected with the primary-coil of the induction-coil of the battery, a secondary bus-bar connected to one end of the secondary-coil, a ground-plate connected to the other end of the secondary-coil, a series of secondary-binding posts having conducting terminals in the plane of the secondary bus-bar, and a series of push-buttons carrying each two plates, one in position to short-circuit the primary bus-bars and the other in position to connect the secondary bus-bar to the corresponding secondary binding posts.

2. In a device of the class described, batteries and an induction-coil, a pair of primary bus-bars connected with the primary-coil of the induction-coil of the battery, a secondary bus-bar connected to one end of the secondary coil, a series of secondary-binding posts having connecting terminals in the plane of the secondary bus-bar, and a series of push-buttons carrying each two plates, one in position to short-circuit the primary bus-bars and the other in position to connect the secondary bus-bar to the corresponding secondary binding posts, said second plate having a lost-motion connection with the push-button and being arranged to engage the parts it strikes before the first-mentioned plate.

In testimony whereof I have hereunto set my hand this 15th day of May, 1911.

BART. D. STEVENSON.

In the presence of two subscribing witnesses:

R. A. JACOBS,
R. A. HEMENWAY.