

F. W. HILL.
IGNITER FOR GAS LAMPS.
APPLICATION FILED MAR. 16, 1910.

1,009,969.

Patented Nov. 28, 1911.

2 SHEETS-SHEET 1.

FIG. 1.

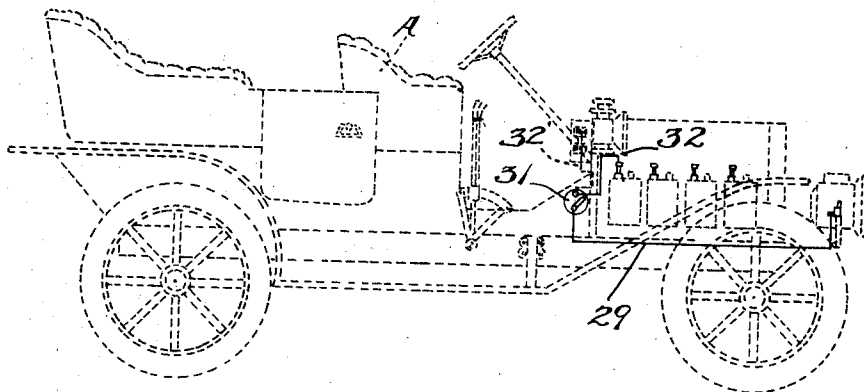
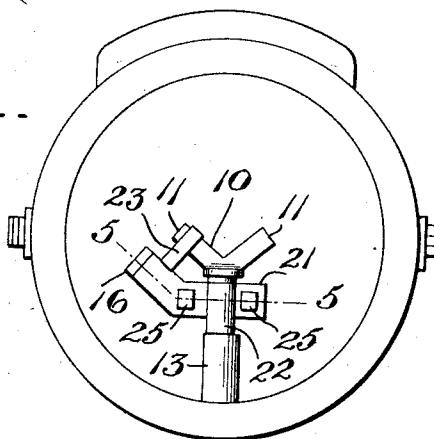


FIG. 2.



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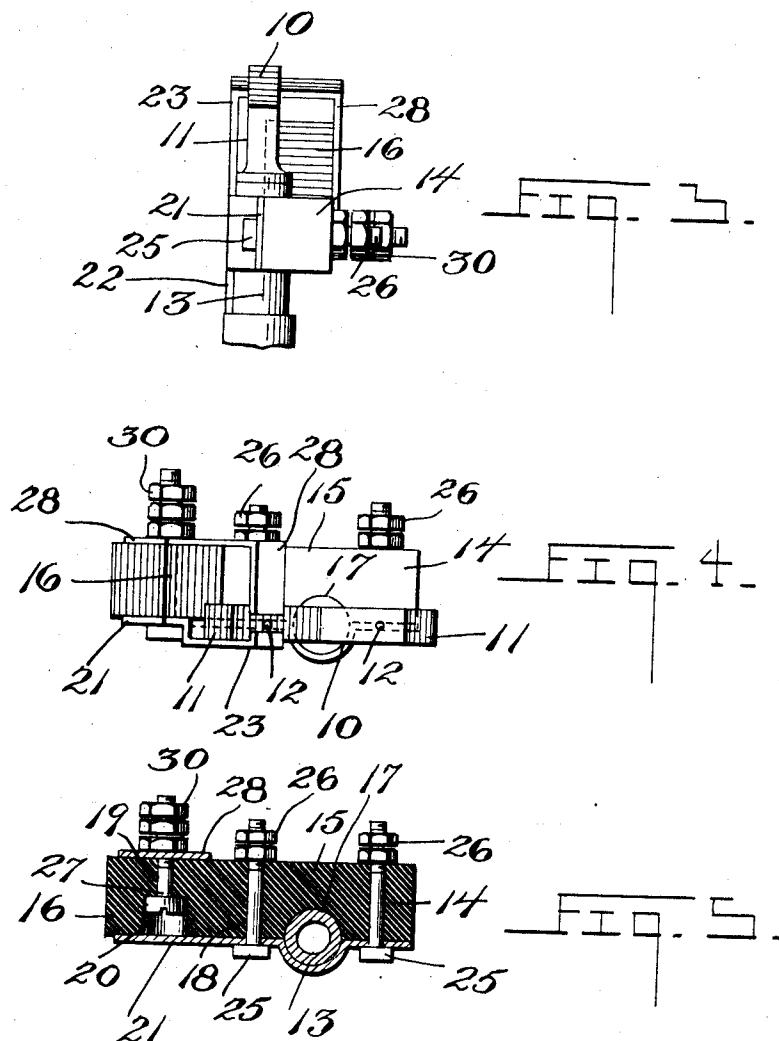
Attorneys

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UNITED STATES PATENT OFFICE.

FRED W. HILL, OF CHATHAM, PENNSYLVANIA.

IGNITER FOR GAS-LAMPS.

1,009,969.

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To all whom it may concern:

Be it known that I, FRED W. HILL, a citizen of the United States, residing at Chatham, in the county of Chester and State of Pennsylvania, have invented certain new and useful Improvements in Igniters for Gas-Lamps, of which the following is a specification.

This invention relates to lighting devices for acetylene lamps on automobiles, and has for its object to provide such a device which may be attached to any of the usual types of lamps already in use, without requiring changes in the construction thereof.

An important object is to provide such a device which will positively ignite gases passing through the tip of such lamps if of proper character for burning.

It frequently happens that, when using acetylene lamps at night upon an automobile when driving over rough country roads, or in gusty winds, the lights will be jarred or blown out, involving considerable difficulty in relighting the same, because of the necessity for stopping the machine and the difficulty of lighting the lamps with the annoying draft caused by the movement of air currents, which tend to blow out a match.

It is therefore the object of the present invention to provide a device adapted to be operated from the dashboard by means of which acetylene or other gas lamps may be relighted.

Other objects and advantages will be apparent from the following description, and it will be understood that changes in the specific structure shown and described may be made within the scope of the claim without departing from the spirit of the invention.

In the drawings: Figure 1 is a side view of an automobile equipped with my device, showing diagrammatically the wiring for the same, an alternative wiring system being shown in dotted lines, Fig. 2 is a detail front view of a burner having my device attached thereto, Fig. 3 is a side view of a burner so equipped, Fig. 4 is a top view of the burner, Fig. 5 is a section on the line 5—5 of Fig. 2.

Referring to the drawings, there is shown a motor vehicle A equipped with lamps of any suitable character, provided with the usual Y tips 10 having the oppositely extended upwardly inclined arms 11 through the adjacent inner faces of which open the orifices 12, through which gas is adapted to

pass from the usual interior passage for ignition.

My igniter is attached to the stem 13 of the burner, and comprises the large base block 14 of suitable insulating material, such as fiber or porcelain, and is in the form of a rectangular body portion 15, from one end of which extends diagonally the terminal carrying arm. In one side of the body portion there is formed an approximately semicircular notch 17, on opposite sides of which there are passages 18 extending entirely through the block in its major plane, and in the diagonal extension 16 there is a similar passage 19 having an enlargement 20 on the same side of the block with the notch 17.

The block 14 is disposed against the stem of the burner with the notch 17 partly encircling the stem adjacent the bases of the arms 11, and engaged against the opposite side of the stem, there is a terminal member 21 comprising a strip of sheet metal similar in longitudinal contour to the block 14, and having spaced perforations in its longer portion registering with the passage 18 through the block, and receiving there-through headed bolts 25 which are projected through the block and receive thereover nuts 26 by which the block and terminal member 21 are securely clamped upon the stem of the burner. The terminal member 21 may be provided with a suitable downwardly extending tongue 22, adapted to contact with the metal base of the burner, whereby the terminal is properly grounded. The terminal member 21 is provided with a sparking arm 23, projecting upward to one side of one of the arms 11, and having its extremity turned inwardly and disposed closely adjacent the edge of the orifice 12. A headed bolt 27 is projected through the passage 19 with the head disposed in the recess 20, and has engaged over its opposite end portion the sparking tip 28, similar to the arm 23, and having an enlarged base centrally perforated for engagement over the bolt 27. A suitable terminal connection is made with the tip 28 and a wire 29 by means of suitable nuts 30 engaged over the outer portion of the bolt 27, the wire being extended to a suitable switch 31 disposed upon the dashboard. From the switch 31 suitable connections are made with the spark plug of the motor, by means of the wire 32, as illustrated.

An alternative system of wiring is illustrated in dotted lines in Fig. 1, which consists in extending the wire 32' to the secondary terminal of the spark coil or other
5 source of high potential current instead of to the spark plug, the connections with the switch and burner being the same.

It will be seen from the foregoing that an extremely novel and simple igniter for
10 motor vehicle gas lamps is provided, the number of parts required being reduced to a minimum partly through the coöperation of the terminal member 21 with the block 14 for holding the device upon the burner,
15 forming the ground, and providing a spark terminal.

What is claimed is:

An igniting device for acetylene gas
20 burners, comprising a block of insulation having a semi-circular groove formed in one face for the reception of the stem of the burner, a metal plate secured to said block having a semi-circular body portion fitting around said burner stem to hold said block

thereto, bolts passing through said metal 25 plate and said insulated block, said bolts forming binding posts for electrical connections, said plate having a vertical portion, the upwardly free end of which is bent inwardly over the burner tip, a second metal 30 plate secured on the opposite side of said insulated block, the upper free end of which is bent inwardly over the burner tip to a point adjacent the first mentioned extension, a bolt having its head countersunk in one 35 face of the insulated block and securing said second named plate to said block, one end of said bolt providing a binding screw for the other terminal for electrical connections, said inwardly turned portions of the plates 40 providing a spark gap for igniting the burner.

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

FRED W. HILL.

Witnesses:

C. W. WHERRY,
W. B. RODGERS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."