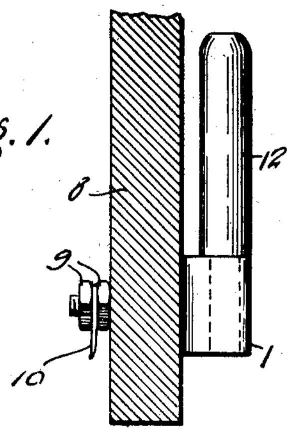
M. GARL.
ELECTRIC IGNITER FOR CIGARS.
APPLICATION FILED NOV. 16, 1920.

1,410,176. **Patented Mar. 21, 1922.**

2 SHEETS—SHEET 1.

Fig. 1.



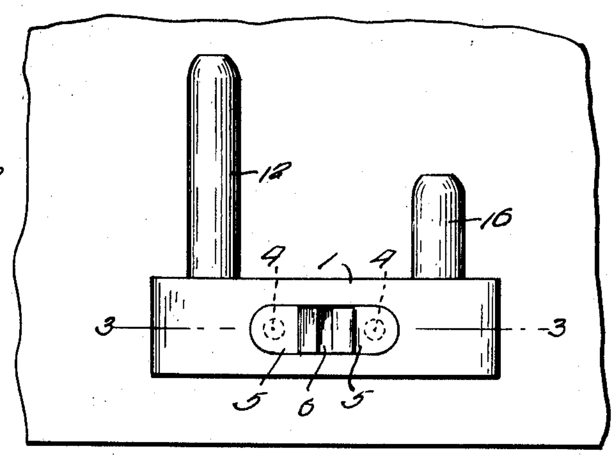


Fig. 2.

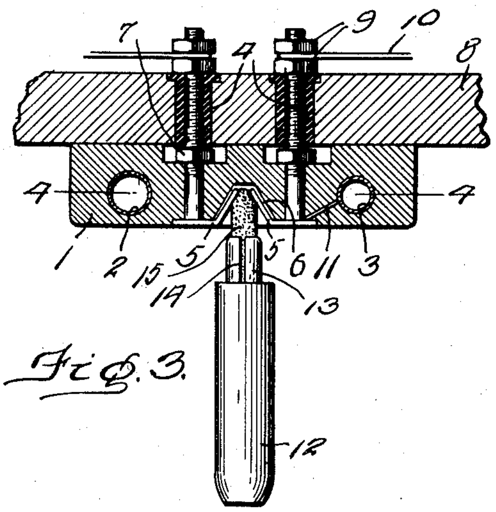


Fig. 3.

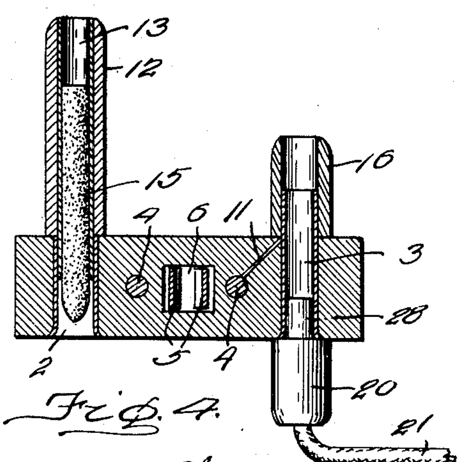


Fig. 4.

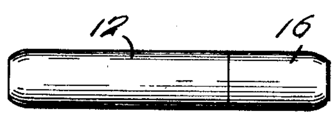


Fig. 5.

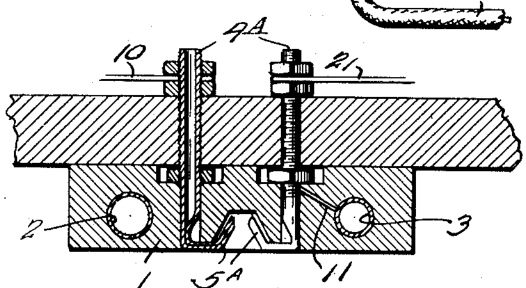


Fig. 6.

Manious Garl
INVENTOR.

Witness
[illegible signature]

BY
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2 SHEETS—SHEET 2.

Fig. 7.

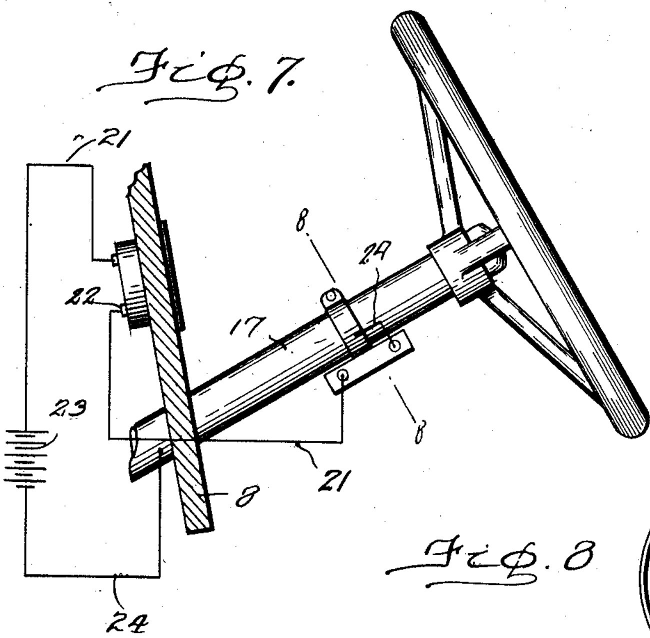
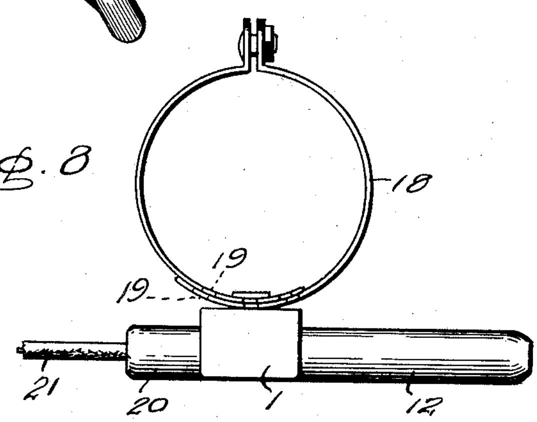


Fig. 8



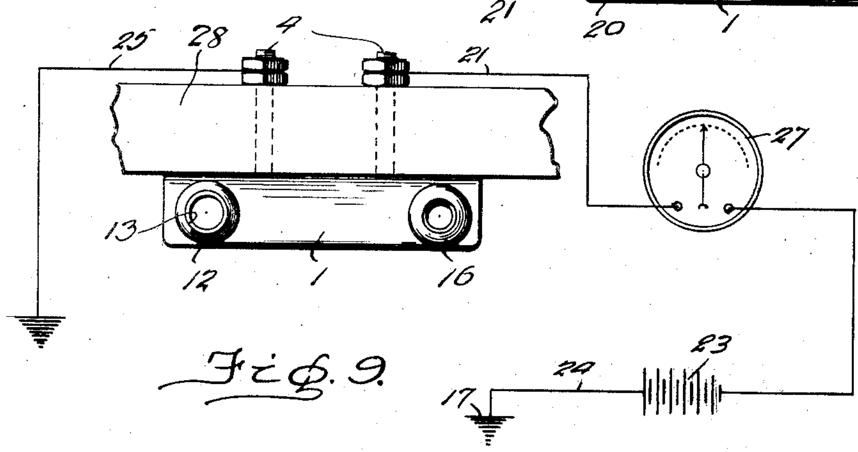


Fig. 9.

Manious Garl INVENTOR.

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UNITED STATES PATENT OFFICE.

MANIOUS GARL, OF AKRON, OHIO.

ELECTRIC IGNITER FOR CIGARS.

1,410,176. Specification of Letters Patent. Patented Mar. 21, 1922.

Application filed November 16, 1920. Serial No. 424,405.

To all whom it may concern:

Be it known that I, MANIOUS GARL, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented a new and useful Electric Igniter for Cigars, of which the following is a specification.

The object of my invention is to provide a novel electrical device for igniting cigars, which may be applied to the dashboard or the steering post of an automobile and used successfully, regardless of the speed at which the vehicle is travelling. It is an especial object of my invention to provide a device of this nature which can be manufactured at small expense and sold at a relatively low price; and to provide the simple combination and arrangement of parts described and shown in the accompanying drawings, in which—

Figure 1 is a side elevation of the invention;

Fig. 2 is a front elevation;

Fig. 3 is a section on line 3—3 of Fig. 2;

Fig. 4 is a section on line 4—4 of Fig. 3;

Fig. 5 is a detail elevation of the carbon holder and cap applied thereto;

Fig. 6 is a longitudinal section similar to Fig. 3, but of an improved form of the device;

Fig. 7 is a diagrammatic view, partly in elevation, of the device applied to the steering post;

Fig. 8 is a transverse section on the line 8—8 of Fig. 7; and

Fig. 9 is a diagrammatic view, partly in elevation, of the entire device.

Like numerals designate like parts in each of the several views.

Referring to the accompanying drawings, I provide a suitable non-conducting block 1 of porcelain, fiber, or other suitable material, having spaced metal tubes 2 and 3, of some good conducting material, such as brass or copper. I provide also spaced screw-threaded conductors 4, securing the preferably inwardly turned angular contact members 5 in place, said members being of any suitable shape, form and size, but preferably projecting into the cut-out portion 6 of block 1, as shown in Fig. 3. I provide suitable nuts 7 to secure conductors 4 and members 5 snugly on the porcelain block 1. On the outer ends of conductors 4, or on the other side of dishboard 8, I provide suitable lock nuts 9 for attaching the electric wires 10 thereto. As shown in Figs. 3, 4 and 6, I provide a conductor 11 embedded in the porcelain block 1 and forming an electrical connection between the head of the tubular member 3 and one of the inturned contact heads 5.

The igniting element or lighter consists of a carbon stick 15, preferably but not necessarily tapered at the end and slidably mounted in but frictionally held by a metal tube 13, preferably having a suitable split portion 14 to give it a degree of resiliency, the metal tube 13 in turn preferably being covered by a nonconducting cover in the form of a fiber or other similar tube 12. This construction permits of sliding the carbon stick 15 outward as it is gradually used up. I provide a suitable nonconducting cap 16 of fiber or the like, which may be applied to the projecting end of metal tube 13 so that the lighter may be carried in the pocket conveniently without danger or breaking the carbon point.

Referring to Fig. 6, the screw-threaded conductors 4^A have their inturned contact heads 5^A integral with members 4^A, thus simplifying the manufacture of the device, and minimizing its expense. This is the preferred form of my device.

Referring to Fig. 7 which shows the device applied to a steering post 17, I provide semi-cylindrical metal adjustable clamping plates 18, having a plurality of spaced openings 19 at their ends, for fastening about the steering post and securing the porcelain (or fiber) block 1 in place at a convenient position to be reached by a person driving, preferably as illustrated in the accompanying drawings. I provide a plug 15, as shown in Fig. 4 of conducting material, covered by fiber tubing 20, said plug being in electrical connection with the wire 21, which is suitably attached to the dashboard 8, as by insulated lock nuts 22, and the wire 21 thence extends to the battery 23, which is grounded on the steering post by means of a suitable conductor 24.

Referring to Fig. 9, which diagrammatically represents the device, one of the screw-threaded conductors 4 is connected by wire 25 with the frame of the car or ground 28; while the other conductor 4 is connected by wire 21, through ammeter 27, to battery 23, and thence by wire 24 with the ground 17.

The ammeter 27 is optional, and may be omitted.

The operation of the device is as follows: The lighter 12 is withdrawn from tubing 2 and its pointed end of carbon stick 15 is inserted between the inturned metal contact heads 5, thereby completing an electric circuit. The resistance of the carbon 15 heats that element to a degree which permits of its use for igniting cigars, cigarettes or pipes. As the carbon stick 15 is used up it may be slid along in the resilient metal holder 13, so that it will last a long time.

With a 6-volt battery a carbon stick 15 of less resistance is used, while with a 12-volt battery a carbon stick 15 that has a higher resistance and which therefore does not heat so quickly is employed (or the same result may be obtained by using the same grade of carbon but of larger diameter).

When the lighter is not in use it may either be left inserted in the tubing 2, or it may be withdrawn and the cap 16 applied to the projecting end of metal tube 13, thus forming a device, as shown in Fig. 5, which may be conveniently carried in the pocket, with the carbon protected from breaking.

The term "carbon" and "carbon stick" for the purposes of this specification shall be construed as applying to any substantially equivalent high resistance element, should any other suitable and equivalent element be found. I may also employ any equivalent non-conducting materials in lieu of those particular pointed out.

An important advantage attained by my invention in practical use on automobiles is that the igniter element, when heated may be handed from one person to another in the automobile where the device is installed at any distance from the point where it is heated in the gap in the circuit; and a further advantage of the invention is that if the igniter element when hot is dropped on a rug or carpet in the automobile it will not set same afire.

What I claim is:

1. In an electric cigar igniter, the combination of a block of non-conducting material, metal conductors extending through said block, angularly inturned metal contact members with which the conductors contact, an electric circuit in communication with the respective conductors, and a carbon igniting element adapted to close said circuit by its insertion between the inturned contact members, to thereby cause the barbon to heat, due to its resistance, a metal tubular holder for the carbon, and a non-conducting covering for said metal holder, substantially as set forth.

2. In an electric cigar igniter, the combination of a block of non-conducting material, metal conductors extending through said block in spaced relation, each of said conductors having inturned slightly spaced heads, an electric circuit in electrical connection with the aforesaid conductors, a carbon stick having a tapered end adapted to be inserted between the spaced heads of the aforesaid conductors to complete the circuit and heat the carbon stick, a non-conducting covering for the carbon stick, and a cap element of similar material removably engaging over the projecting end of the carbon stick, whereby the cap may be applied and the igniter element conveniently carried in the pocket when not in use.

3. As a new article of manufacture for a device of the class described, a cigar igniting element adapted to be heated by the closing of an electric circuit on its insertion in a gap therein, consisting of a carbon stick, a split metal tube in which the carbon stick is adjustably mounted, and a covering element of non-conducting material in which the major portion of the metal tube is contained.

4. In an electric cigar igniter, the combination of a block of non-conducting material, metal conductors extending through said block, metal contact members with which the conductors contact, an electric circuit in communication with the respective conductors, and a carbon igniting element adapted to close said circuit by its insertion between the aforesaid contact members, thereby causing the carbon to heat, and a suitable holder for said carbon.

5. In an electric cigar igniter, the combination of a block of non-conducting material, metal conductors extending through said block in spaced relation, spaced contact members connected to said conductors, an electric circuit in electrical connection with the conductors, a carbon stick of suitable size for insertion between the contact members to close the circuit and thus heat the carbon stick, and suitable protective covering and holding means for the carbon stick, substantially as disclosed.

6. As a new article of manufacture for a device of the class described, a cigar igniting element adapted to be heated by the closing of an electric circuit on its insertion in a gap therein, said element consisting of a carbon stick, and a suitable holder for said carbon stick, substantially as described.

MANIOUS GARL.