

F. J. POINAN.
 SIGNALING DEVICE.
 APPLICATION FILED MAR. 6, 1909.

990,771.

Patented Apr. 25, 1911

Fig. 1

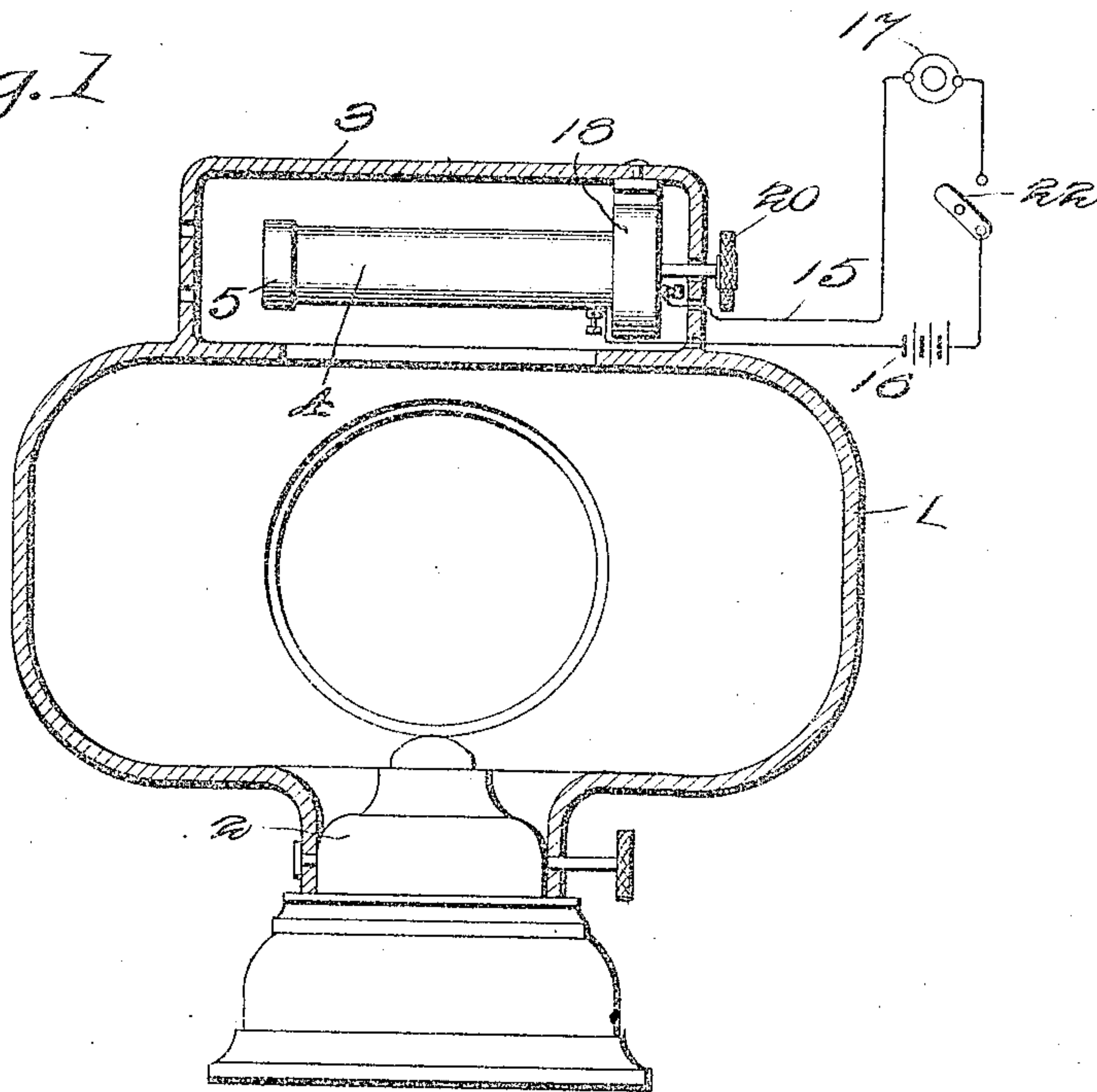


Fig. 2.

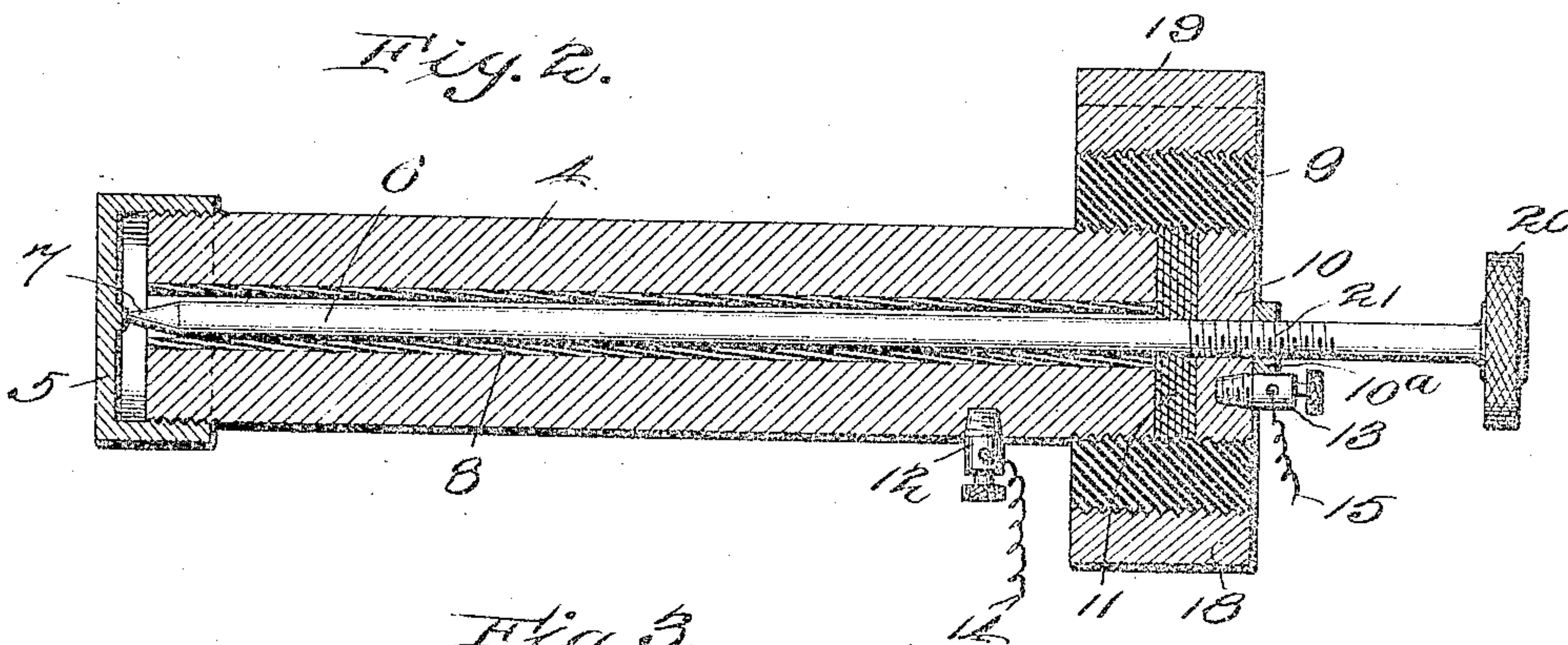
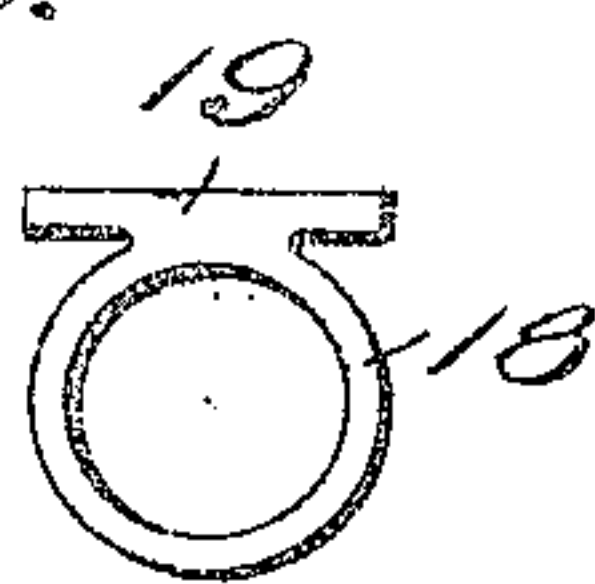


Fig. 3.



Witnesses
 W. Map. Durrall.
 A. W. Neale, Jr.

Inventor
 F. J. Poinan.
 By Wilkinson, Fisher & Wetherston
 Attorneys.

UNITED STATES PATENT OFFICE.

FRANCIS J. POINAN, OF ROCHESTER, NEW YORK, ASSIGNOR OF ONE-HALF TO FRANKLIN DECKER AND ONE-FOURTH TO JOSIAH B. BREWER, BOTH OF ROCHESTER, NEW YORK.

SIGNALING DEVICE.

990,771.

Specification of Letters Patent.

Patented Apr. 25, 1911.

Application filed March 6, 1909. Serial No. 481,773.

To all whom it may concern:

Be it known that I, FRANCIS J. POINAN, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Signaling Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in signaling devices and is primarily intended to be applied to automobiles, or other vehicles, to indicate to the chauffeur or driver that one of the lamps has been extinguished.

The object of my invention is to produce a simple and inexpensive device which may be applied to a vehicle lamp and which will give a visible or audible indication to the driver or chauffeur when the lamp goes out or becomes very low.

With this object in view, my invention consists in the construction and combinations of parts as hereinafter described and claimed.

In the accompanying drawing—Figure 1 is a view showing a vehicle lamp with my invention applied thereto. Fig. 2 is a cross section of the device for giving the signal, and Fig. 3 is an end view of the supporting clamp.

1 represents a lamp casing in which is secured an oil lamp 2, although obviously any preferred form of lamp could be used. The upper part of the casing is provided with an extension 3 in which is a device operated by the heat of the lamp for giving a signal in case the lamp should become extinguished or the light thereof become very low. This device consists of a cylinder 4, of zinc or other metal, a brass cap 5 adapted to be screwed on one end thereof, an iron rod 6 provided with a platinum point 7 and covered by an asbestos sheathing 8, located inside the hollow zinc cylinder 4. The cylinder 4 and cap 5 may, however, be made in one piece of any desired kind of metal.

9 represents a hard rubber nut screw-threaded on the inside and outside and secured at one end to the zinc cylinder 4 and having at the other end a brass nut 10, through which the rod 6 passes.

11 represents mica washers separating the

brass nut 10 from the end of the zinc cylinder 4.

12 is a binding post in the zinc cylinder 4, and 13 is a similar binding post in the brass nut 10, to which posts are connected wires 14 and 15, connected to a battery 16 and in the same circuit as a signal 17, which may be either an electric lamp or a bell or any form of indicator.

18 represents a clamp having a flat top 19 screwed or riveted to the under part of the top of the casing 3. The rod 6 is provided with a hand wheel 20 and a screw-threaded portion 21, which works in a screw-threaded portion of the brass nut 10.

10^a represents a lock nut to prevent the parts from becoming loosened by jarring.

The operation is as follows: The hand wheel 20 is so adjusted as to bring the platinum point 7 in contact with the head 5 when the cylinder 4 is not heated. This is done before the lamp is lighted and the device gives either an audible or a visible signal. When the lamp 2 is lighted, it heats the zinc cylinder, causing it to expand faster than the iron rod 6 does, the latter being contained within the asbestos tube 6. This breaks the connection between the platinum point 7 and the brass head 5, so that the circuit connected to the battery 16, and in which circuit the signaling device 17 is located, is broken, whereupon the signal ceases to give an indication, and this condition continues as long as the lamp is burning brightly. Should the lamp 2 go out or become very low, the zinc cylinder 4 will contract and close the contact between the head 5 and the platinum point 7, thereby closing the circuit above referred to, whereupon the device 17 gives a signal, either audibly or visibly. If the device 17 is a lamp, it is of course placed where the driver or chauffeur will readily perceive it, the circuit wires being led from the lamp to a point within the carriage. If the device 17 is a bell, it may be placed either outside or inside the carriage.

In case the vehicle is not in use, the hand wheel 20 is turned so as to disengage the platinum point from the head 5, or, if desired, the circuit from the battery to the signaling device may have an ordinary switch, such as 22, whereby the circuit may be broken at any time. The latter method is

preferably used, to avoid the necessity of readjustment.

The signal lamp 17 is shown in Fig. 1 as located outside of the main lamp casing 1, but obviously it could be located, if desired, inside of said casing, and there is an advantage in locating it within said casing, because when so located it can be not only used to give a signal to the chauffeur but also serve as a signal light for the automobile.

I claim:—

1. In a device of the character described, the combination of thermostatic means, including a hollow zinc cylinder, an asbestos tube therein, a metallic head closing one end of said cylinder and engaging therewith, a metallic head for the other end of said cylinder but insulated therefrom, an iron rod adjustably secured in said second named head and passing through said asbestos tube, and an electric circuit, the terminals of which engage said cylinder and said sec-

ond named head, respectively, substantially as described.

2. In a device of the character described, the combination of a hollow zinc cylinder, an asbestos tube therein, a brass head closing one end of said cylinder and connected therewith, a metallic head for the other end of said cylinder, insulating packing between said insulated head and said cylinder, means for securing said insulated head and said cylinder together, an iron rod provided with a platinum point adjustably secured in said second named head and passing through said asbestos tube, and an electric circuit, the terminals of which are connected to said cylinder and said second named head, respectively, substantially as described.

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

FRANCIS J. POINAN.

Witnesses:

GEORGE F. SLOCUM,
CHAS. F. MIELKE.