J. L. PALOUS.

ELECTRIC SIGNALING DEVICE FOR MOTOR CARS.

APPLICATION FILED APR. 13, 1908.

**955,192.** **Patented Apr. 19, 1910.**

*Fig. 1*

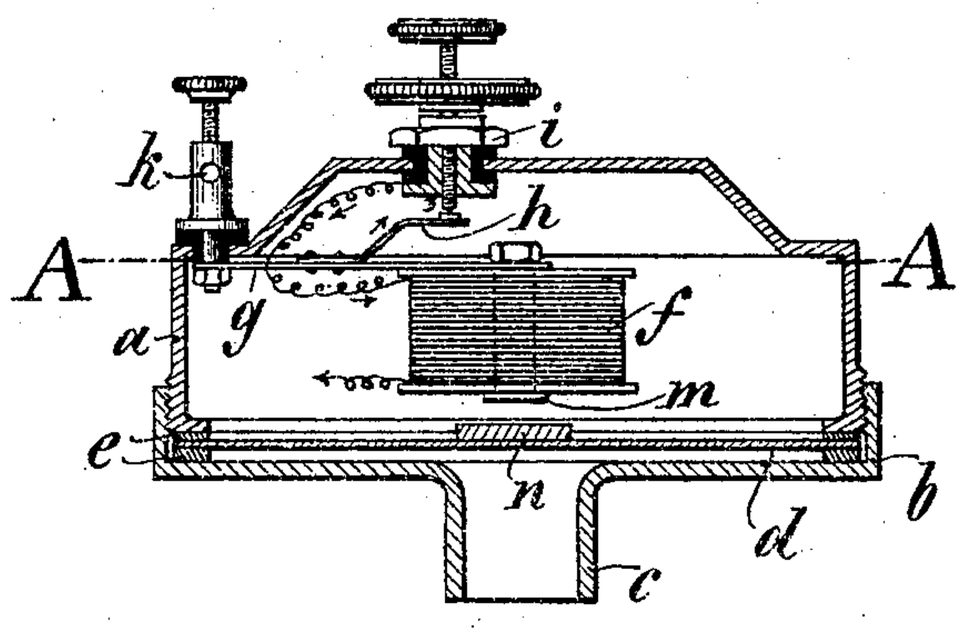
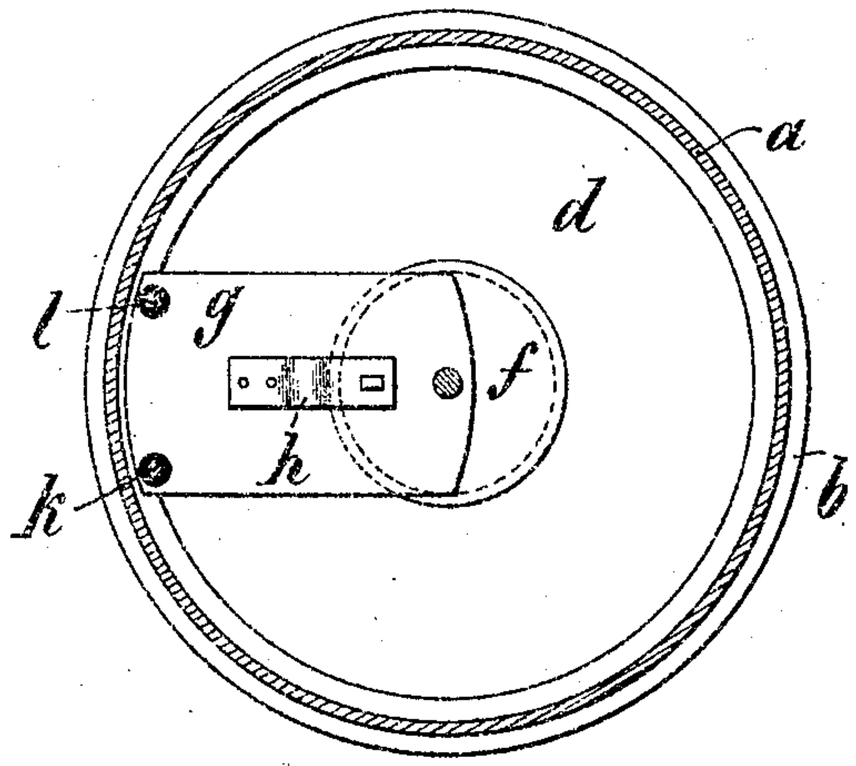



*Fig. 2*

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# UNITED STATES PATENT OFFICE.

JOSEPH LÉON PALOUS, OF BERLIN, GERMANY.

## ELECTRIC SIGNALING DEVICE FOR MOTOR-CARS.

955,192. Specification of Letters Patent. Patented Apr. 19, 1910.

Application filed April 13, 1908. Serial No. 426,850.

*To all whom it may concern:*

Be it known that I, JOSEPH LÉON PALOUS, a citizen of the German Empire, and resident of Berlin, German Empire, have invented a new and useful Improved Signaling Device for Motor-Cars, of which the following is a full, clear, and exact description.

The present invention relates to electric signaling devices or horns for motor cars and the object of the same is to simplify the device as far as possible and to reduce the number of necessary parts.

Essentially the present invention consists of a sounding plate fixed in a suitable housing and a spring-mounted electric coil adapted to vibrate against the said sounding plate when current is passed through the said coil.

In order to render the present specification easily intelligible reference is had to the accompanying drawing in which similar letters of reference denote similar parts throughout the several views.

Figure 1 illustrates a vertical central section through one form of embodying the invention and Fig. 2 is a sectional plan taken along the line A—A of Fig. 1.

To an advantageously cylindrical housing *a* is screw threaded the cap *b* having the cylindrical extension *c* to which a horn may be attached. Between the cap *b* and the bottom of the housing *a* the sounding plate *d* is supported advantageously between two rings or washers *e e* of leather or the like. At about the center a piece of soft iron *n* is attached to the sounding plate. Above the latter a coil *f* having the core *m* is mounted on a spring *g*, which may advantageously be attached to the housing *a* by means of the terminal screws *k l* or in any other suitable manner. To the top of the spring *g* is attached a lighter small spring *h* adapted normally to contact with a contact screw or pin *i* insulated from the housing *a*. The terminal screws are insulated from the housing *a*, *k* indicating the current feed terminal and *l* the return conductor. The current fed through *k* passes through the springs *g* and *h* over the contact screw *i* into the coil *f* and through this to the terminal *l*. The current magnetizes the core *m* inducing magnetic force in the iron piece *n* which causes the coil to strike the membrane or sounding plate. This however, breaks the contact between the spring *h* and the screw *i* and the coil swings back under the influence of the spring *g*, whereupon the whole operation is repeated.

I claim as my invention:—

1. An electric signal comprising a support, a flat spring secured thereto, an electromagnet secured by one core end to said spring, a stationary sounding body adjacent the free core end of said electromagnet acting as its armature, a circuit interrupter comprising a contact point coacting with said spring and an electric circuit connected with said magnet and interrupter.

2. An electric signal comprising a support, an electromagnet vibratingly secured by one core end to the support, a stationary sounding body adjacent the free core end of the electromagnet acting as its armature, a circuit interrupter coacting with the electromagnet, and an electric circuit connected with said magnet and interrupter.

3. An electric signal comprising a housing, an electromagnet vibratingly secured by one core end within the housing, a stationary sounding body adjacent the free core end of the electromagnet acting as its armature, a circuit interrupter comprising a spring plate vibrated by the electromagnet, and a contact point coacting with said plate, and an electric circuit connected with said magnet and interrupter.

4. An electric signal comprising a housing, a flat spring plate supported therein, an electromagnet secured by one core end to the spring plate, a stationary sounding plate adjacent the free core end of the electromagnet acting as its armature, a circuit interrupter comprising a contact spring connected to the spring plate, and a contact point coacting with the contact spring and an electric circuit connected with said magnet and contact point.

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

JOSEPH LÉON PALOUS.

Witnesses:

HENRY HASPER,

WOLDEMAR HAUPT.