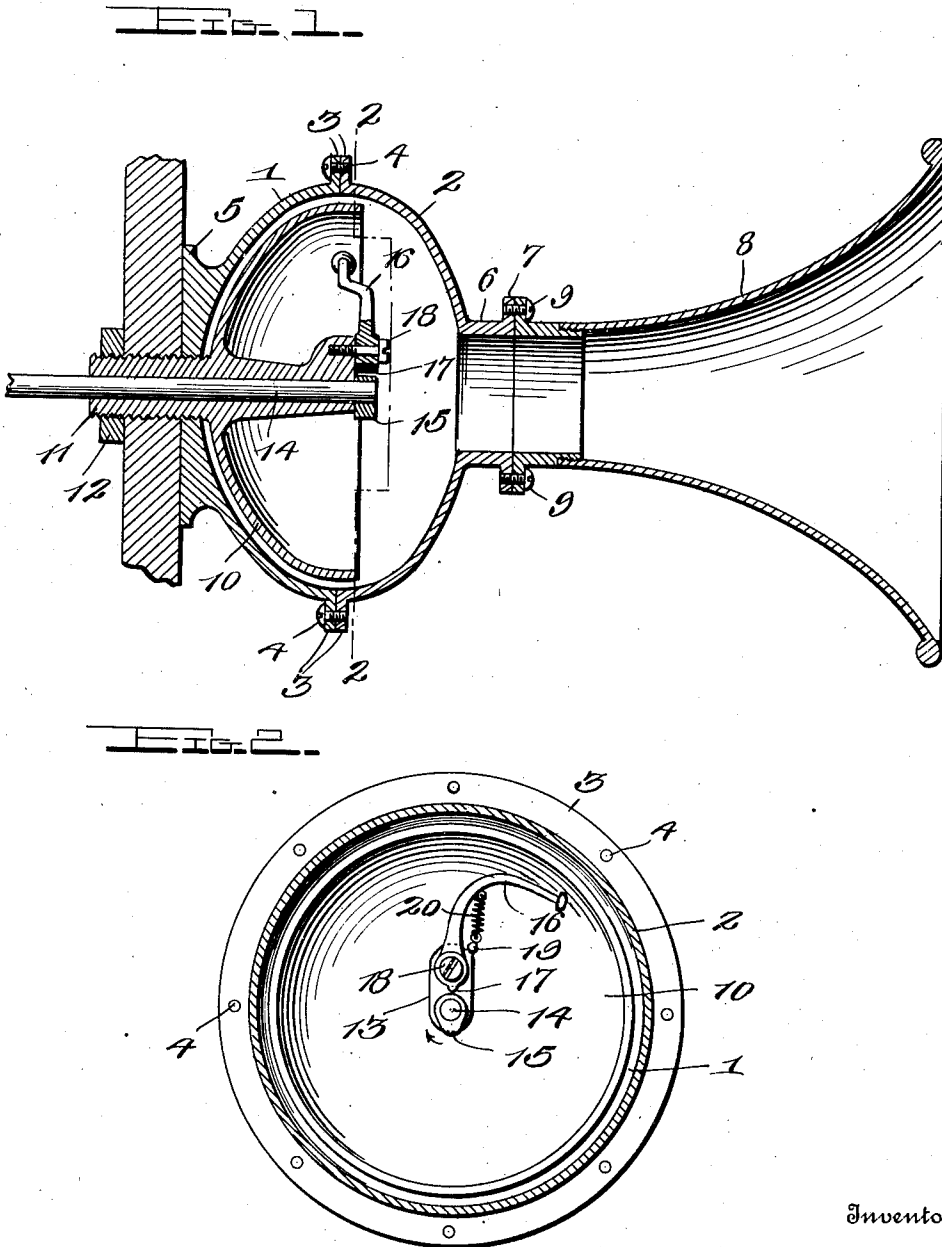


L. A. MARCOTTE.
 AUTOMOBILE HORN.
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1,063,561.

Patented June 3, 1913.



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LOUIS A. MARCOTTE, OF BEVERLY COVE, MASSACHUSETTS.

AUTOMOBILE-HORN.

1,063,561.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LOUIS A. MARCOTTE, a citizen of the United States, residing at Beverly Cove, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Automobile-Horns, of which the following is a specification, reference being had to the accompanying drawings.

15 This invention relates to alarms and more particularly to horns designed for use primarily in connection with automobiles.

The principal object of the invention, is the provision of an alarm comprising a bell casing having arranged therein a cam-operated bell and a horn connected to the bell casing, whereby the ringing of the bell may be radiated to the atmosphere.

20 A further object of the invention is the provision of a bell horn of the above stated character which can be operated by any suitable means, such as a flexible shaft adapted to be driven through the medium of the engine fly-wheel by the operation of a controlling pedal when the device is arranged upon an automobile.

25 With these and other objects in view as will appear as the description proceeds, the invention comprises the various novel features of construction, combination and arrangement of parts as will be more fully described hereinafter and set forth in particularity in the appended claims.

30 Referring to the drawings, Figure 1 is a vertical longitudinal sectional view through my improved bell horn; and Fig. 2 is a transverse sectional view taken on the line 2-2, Fig. 1, looking in the direction of the arrow.

Similar characters of reference are used to denote like parts throughout the accompanying drawings and the annexed specification.

45 Referring more particularly to the drawings, my improved bell horn is shown to consist of a bell casing which consists of semi-elliptical sections 1 and 2 respectively, each of said sections being provided with outwardly projecting circumferential flanges 3 that are provided with a plurality of threaded openings through which fastening screws 4 are adapted to be passed to secure said sections together. The rear section 1 is provided with a base plate 5, whereby the bell casing may be securely fastened to a

suitable support. The section 2 is provided centrally thereof with a forwardly projecting tubular sleeve 6 which has its forward end provided with a circumferential flange 7 against which is adapted to be clamped a similar flange formed upon the rear end of a suitably constructed horn 8. These flanges 7 of the sleeve 6 and the horn 8 are provided with a plurality of threaded openings through which are passed screws 9, whereby the horn may be securely attached to the tubular extension 6 of the bell casing. By this construction, it will be apparent that direct communication is established between the interior of the casing and the atmosphere through the medium of the horn.

Disposed within the bell casing and in spaced relation to the section 1 thereof is arranged a bell 10 which is provided with a rearwardly projecting threaded stud 11 that is threadably connected to the base plate 5. By this construction, it will be manifest that the space between the casing 1 and the bell may be varied at will, so that different variations of tone may be had from the bell by the adjusting of the latter relatively to the section 1 of the bell casing. If desirable, a locking nut 12 may be threadably connected to the end of the stud 11 so as to hold and retain the bell in its desired adjusted position. As shown, the bell is provided centrally with a forwardly projecting bearing 13 which is provided with a longitudinal opening for the reception of a revoluble cam shaft 14, the latter being provided on its forward end adjacent the end of the bearing with a suitably formed cam 15. This shaft 14 extends entirely through the bell and through the support to which the device is attached and is designed to be driven through any suitable means, such as a flexible shaft geared to the fly-wheel of an engine when the device is used upon an automobile. The bell clapper or striker arm 16 has one of its ends pivotally mounted upon the forward end of the bearing 13 and is provided with a cam 17 with which is adapted to cooperate the cam 15 upon the revoluble shaft 14. The striker arm, as shown, is pivotally connected to the bearing 13 through the medium of a screw 18, whereby the arm may be readily detached when found desirable. The bearing 13 is provided with a stop lug 19 disposed upon one side of the clapper arm and is adapted to limit the inward swinging movement of the clapper in

order to maintain the cam end thereof in operative relation with the cam of the revoluble shaft when the bell is inoperative. A retractor spring 20 is connected to the stop lug 19 and to the striker arm 16 and normally serves to hold and retain the striker arm in its initial position or a position to be operated by the cam shaft 14.

In the operation of the device, the shaft 14 is revolved in the direction indicated by the arrow in Fig. 2 so that the cam 15 carried thereby will engage the cam 17 carried by the striker arm and force the cam laterally, thus rocking the striker arm upon its pivot and swinging the bell end thereof outwardly into engagement with the outer circumferential edge of the bell 10. The clapper is successively returned to its initial position immediately after each striking of the bell.

From the foregoing description taken in connection with the accompanying drawings, the advantages of construction and the method of operation will be readily apparent to those skilled in the art to which the invention relates and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device is merely illustrative and that such changes may be made, when desired, as are within the scope of the appended claims.

Having thus described this invention, what I claim is:—

1. An alarm comprising a casing embodying sections detachably connected together, the rear section of said casing being formed with a base plate having a threaded opening therein, a bell arranged within said casing having an integral rearwardly projecting threaded stud adapted for engagement with the threaded opening in the rear section of said casing, whereby the casing may be secured to a suitable support, said threaded stud being adapted to hold the bell in adjustable spaced relation with the casing, said bell being also provided with an integral bearing projecting forwardly from the central portion thereof, a striker arm pivotally mounted on said bearing, means connected to said bearing for actuating said striker arm, and means for establishing communication

between the interior of the bell casing and the atmosphere.

2. An alarm comprising a casing embodying sections detachably connected together, the rear section of said casing being formed with a base plate having a threaded opening therein, a bell arranged within said casing, having a rearwardly projecting threaded stud adapted for engagement with the threaded opening, said threaded stud being adapted to hold the bell in adjustable spaced relation with said casing, said bell being also provided with a centrally arranged forwardly projecting bearing, a striker arm pivotally mounted on said bearing a revoluble shaft mounted in said bearing and extending through said stud, means formed on the forward end of said shaft and adapted to operate said striker arm when said shaft is rotated, and means for establishing communication between the interior of the bell and the atmosphere.

3. An alarm comprising a casing embodying sections detachably connected together, the rear section of said casing being formed with a base plate having a threaded opening therein, a bell arranged within said casing having a rearwardly projecting threaded stud adapted for engagement with the threaded opening in the rear section of said casing whereby said casing may be secured to a suitable support, said threaded stud being adapted to hold the bell in adjustable spaced relation with said casing, said bell being also provided with a forwardly projecting bearing from the central portion thereof, a striker arm pivotally mounted on said bearing and provided with a cam on one end thereof, a revoluble shaft disposed in said bearing and extending through the casing, a cam formed on the forward end of said shaft and adapted to engage with the cam on the striker arm, when said shaft is rotated, and means for establishing communication between the interior of the bell casing and the atmosphere.

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

LOUIS A. MARCOTTE.

Witnesses:

CHARLES F. LEE.
HARRIE L. OBER.