March 31, 1959 P. W. SEWELL 2,880,408

SIGNALING DEVICE

Filed Oct. 25, 1957

Fig. 1.

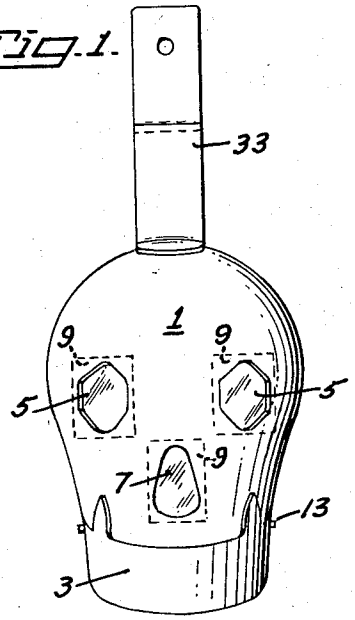


Fig. 2.

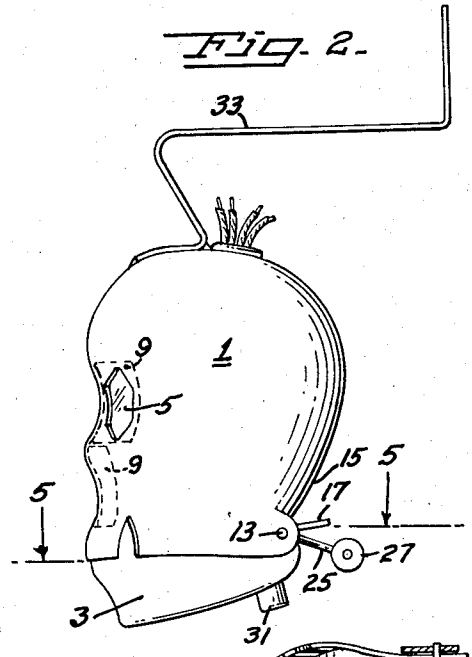


Fig. 5.

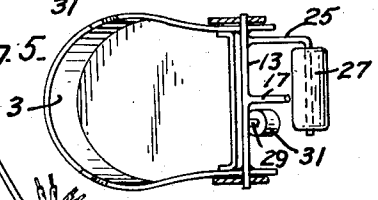
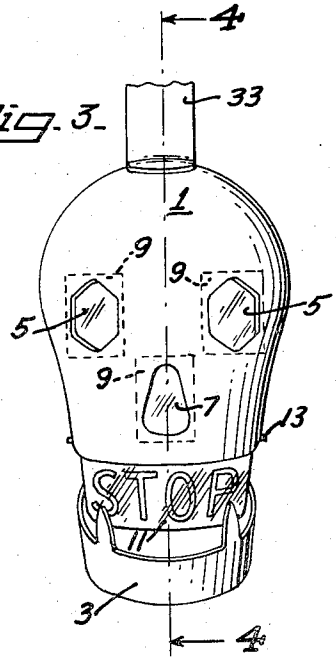


Fig. 3.



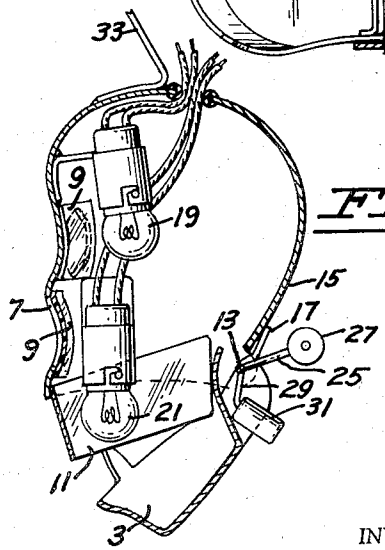


Fig. 4.

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SIGNALING DEVICE

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5 Claims. (Cl. 340—262)

This invention relates to signaling devices for automotive vehicles, and more particularly to a signaling device useful in warning a driver of a following vehicle, of a marked deceleration in the speed of the vehicle ahead.

Moving vehicles such as automobiles, trucks and the like often encounter traffic conditions in which changes in speed are very frequent. Such a condition may arise, for example, during heavy traffic periods. At such times, particularly in heavy city traffic or approaches to bridges, ferries and the like, the vehicles may be very close to each other. While motor vehicles are customarily equipped with brake-pedal responsive stop lights, such lights are conventionally positioned low on the vehicle and are otherwise relatively slow in stimulating the driver behind to an awareness of the development of a potentially dangerous situation.

Among the objects of my invention are:

(1) To provide a novel and improved signaling device of the stop light type, for vehicles;

(2) To provide a novel and improved signaling device for vehicles which is inertia controlled and responds automatically to changes in vehicle speed;

(3) To provide a novel and improved signaling device for vehicles which will psychologically stimulate a driver in the rear to quicker response to such a signal;

(4) To provide a novel and improved signalling device as set forth above, which is distinctive in character; and

(5) To provide a novel and improved signaling device as aforesaid, which is simple in construction, inexpensive to manufacture, and highly efficient in use.

Additional objects of my invention will be brought out in the following description of my invention in its preferred form, taken in conjunction with the following drawings, in which

Figure 1 is a front view in elevation of a signaling device according to my invention, the movable jaw thereof being shown in its normal, or closed, position;

Figure 2 is a side view thereof in elevation;

Figure 3 is a front view in elevation, showing the jaw in its open position;

Figure 4 is a sectional view taken in the plane 4—4 of Figure 3; and

Figure 5 is a sectional view taken in the plane 5—5 of Figure 2.

Referring more particularly to the drawing wherein the same reference numerals designate the same parts throughout, there is shown an opaque housing in the form of a human skull **1** including a hinged jaw **3**, and provided with eye holes **5** and nose opening **7**, suitably covered by translucent sheet material **9**, which may be plain or colored.

Depending from what would correspond to the upper jaw, is a translucent signal indicating band **11** which is normally concealed by the lower jaw **3** in its closed position, said lower jaw being secured fast to a hinge pin **13**. The pin **13** is rotatably carried by the skull adjacent the

base of the cranium **15**. Thus, the jaw **3** is mounted for pivotal movement between the closed and open positions, the latter position being determined by a stop pin **17** extending from the hinge in position to abut the cranium in the full open position of the jaw.

The band **11** which may be either of opaque or of translucent material such as covers the eye holes etc., and of any desired color, is preferably provided with warning indicia or markings, such as the word "Stop." Such markings may be in the form of a cut-out, stamping, printing, or the like; and if in the form of a cut-out, such markings may be covered interiorly with a translucent strip of material which contrasts in color with that of the band.

Illuminating means, preferable in the form of a light **19** supported within the cranium and a light **21** supported behind the band **11**, is provided, the light **19** being in a position to throw light through the eye holes and nose opening, while the light **21** is adapted to cast light through the band **11**, when the lower jaw is in open position.

Secured to the hinge pin **13** and extending rearwardly therefrom is a lever arm **25** which carries a counter weight **27**, sufficient to normally overbalance the jaw **3** and keeps the jaw in its closed position.

Fixed to and depending from the hinge pin **13**, is another lever arm **29**, to the end of which is fixed an inertia weight **31**.

The device is adapted for mounting by providing it with a mounting bracket **33** at the top of the cranium.

With the device mounted to face through the rear window of a car, a steady forward motion of the car will cause the lower jaw to remain closed. Any sudden deceleration of the car, caused, as by application of the brakes, will, due to the tendency of the inertia weight to continue its travel in the forward direction, cause the jaw **3** to fly open and expose the warning notice. Any fluctuations in the deceleration cycle will produce fluctuations in exposure of the warning notice.

The lights may be maintained "on" constantly, if desired, while driving, in which case the eye and nose openings will show steady illumination. In lieu of this, they might be connected in parallel through the usual brake switch of the vehicle, to go "on" and "off" with brake operation. In either event, the sudden illumination of the warning notice in an illuminated skull, and the animation produced by changes in the rate of deceleration, all cooperate in producing a startling effect on the drive to the rear.

From the foregoing description, it will be apparent that I have provided a novel and simple signaling device of the stop light type which is useful on vehicles for drawing a quick reaction from a driver to the rear.

Although I have shown and described only a single embodiment thereof, it will undoubtedly be apparent to those skilled in the art that many variations thereof are possible within the spirit of my invention. For example, a single weight supported at an angle between the two weights shown, may be used in lieu of such weights. I, therefore desire that the form of the invention depicted in the drawings shall be taken merely as illustrative and not as limiting.

I claim:

1. A signaling device comprising a hollow form simulating a human skull including eye and nose openings and a movable portion in the form of a hingedly secured lower jaw movable between a closed position and an open position, said openings being covered with translucent material, an indicator within said skull form and depending below the upper jaw, means normally urging said lower jaw toward its closed position to cover said indicator, and means responsive to a deceleration in move-

ment of said hollow skull form, for moving said lower jaw to its open position to expose said indicator.

2. A signaling device comprising a hollow form simulating a human skull including eye and nose openings and a movable portion in the form of a hingedly secured lower jaw movable between a closed position and an open position, said openings being covered with translucent material, an indicator within said skull form and depending below the upper jaw, means normally urging said lower jaw toward its closed position to cover said indicator, and inertia means responsive to a change in movement of said hollow skull form, for moving said lower jaw to its open position to expose said indicator, said inertia means including a weight depending from the hinge axis of said lower jaw and effectively connected thereto.

3. A signaling device comprising a hollow form simulating a human skull including eye and nose openings and a movable portion in the form of a hingedly secured lower jaw movable between a closed position and an open position, an indicator within said skull form and depending below the upper jaw, means normally urging said lower jaw toward its closed position to cover said indicator, and inertia means responsive to a deceleration in movement of said hollow skull form, for moving said lower jaw to its open position to expose said indicator, said inertia means including a weight depending from the hinge axis of said lower jaw and effectively connected thereto, and illumination means within said skull form for directing light through said eye and nose openings and said indicator when exposed.

4. A signaling device comprising a hollow form simulating a human skull including eye and nose openings and a movable portion in the form of a hingedly secured lower jaw movable between a closed position and an open position, said openings being covered with translucent material, an indicator within said skull form and depending below the upper jaw, means normally urging said lower jaw toward its closed position to cover said indicator, and means responsive to a deceleration in movement of said hollow skull form, for moving said lower jaw to its open position to expose said indicator.

5. A signaling device comprising a hollow form simulating a human skull including eye and nose openings and a movable portion in the form of a hingedly secured lower jaw movable between a closed position and an open position, an indicator within said skull form, means normally urging said lower jaw toward its closed position, and inertia means responsive to deceleration in movement of said hollow skull form, for moving said lower jaw to its open position to expose said indicator.

References Cited in the file of this patent

UNITED STATES PATENTS

1,356,585	Zadig	Oct. 26, 1920
2,753,830	Pillsbury	July 10, 1956

FOREIGN PATENTS

333,515	Great Britain	Feb. 25, 1930