

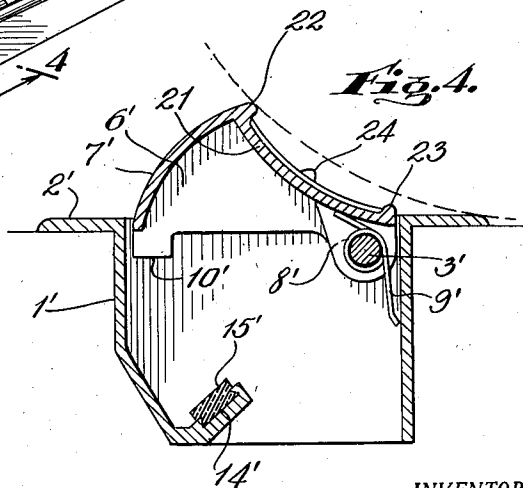
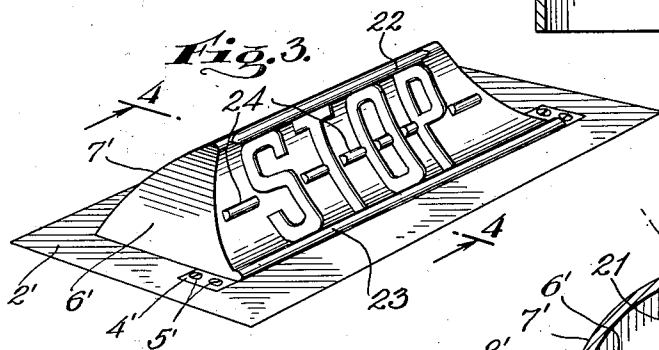
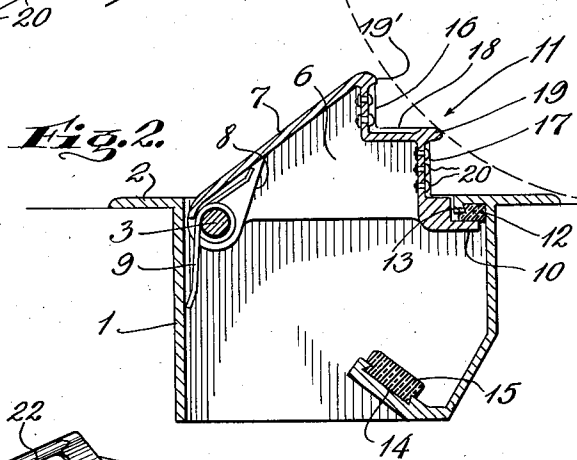
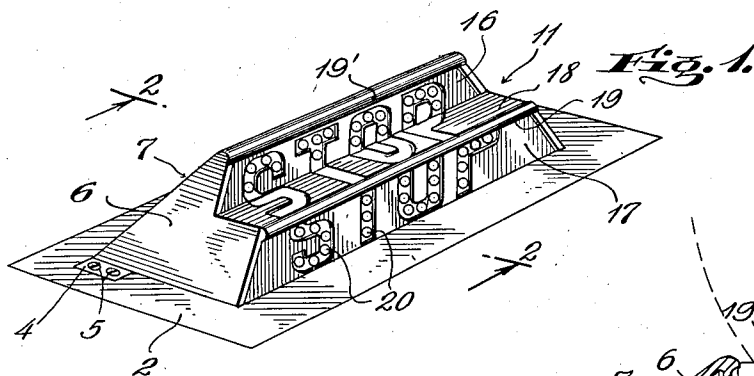
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DEPRESSIBLE TRAFFIC SIGNAL

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DEPRESSIBLE TRAFFIC SIGNAL

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This invention relates to traffic signals, and particularly to the type of signals mountable in streets or highways and having a visible indicia bearing element projecting above the surface of the street or highway and depressible by vehicle wheels.

In general structure the signal illustrated and described hereinafter resembles and embodies features of the signal shown and described in the copending application of Roberts Tatlock, Serial No. 437,215.

The principal novel features of the present invention reside in the construction of the depressible signal element in such manner as to protect the indicia bearing face and indicia from damage, wear, and dirt from the treads of vehicle wheels which encounter and pass over the element, so that the indicia will remain clearly visible for a great length of time.

All of the objects and advantages of the invention will become apparent, and will be pointed out during the course of the following detailed description of the accompanying drawing, wherein are shown preferred embodiments of the invention, and in which

Fig. 1 is a perspective view of one form of traffic signal shown mounted in a street;

Fig. 2 is a transverse vertical sectional view through the signal of Fig. 1;

Fig. 3 is a view similar to Fig. 1, showing another form of signal embodying features of the invention; and

Fig. 4 is a transverse vertical sectional view through the signal of Fig. 3.

Referring to the drawing, the two forms of the invention are shown in connection with a base and other parts disclosed in the said Tatlock application, including a rectangular tubular housing 1, to be placed in a pit provided in a highway or street, and having a flange 2 at its top to rest on or substantially flush with the surface of the street or highway. A hinge rod or pintle 3 is journaled in the ends of the base below the opening in the top of the base along one of the walls. Plates 4 are secured to the base by removable screws 5 over the ends of the pintle to maintain it in place.

As previously stated, the present invention relates to the signal elements which are hingedly supported on the pintles 3, and in Figs. 1 and 2, the signal element is shown as having inclined side walls 6 and an inclined rear wall 7. At the lower end of the wall 7 and adjacent the ends of side walls 6 the signal element is provided with depending ears 8 which are journaled on the pintle

3, thus providing the hinged or a pivotal connection between the base and signal element. A coil spring 9 encircles pintle 3 between ears 8, with one of its ends bearing against the inner surface of wall 7, and its other end bearing against one of the walls of housing 1, so that the spring normally urges and holds the signal up or in the position of Figs. 1 and 2, which is determined or established by engagement of the offset corners 10, of the front wall 11 of the signal, hereinafter described in detail, with cushioning blocks 12 mounted at the front corners of the housing 1. Projecting rabbeted sections 12 on the side walls of the housing form in conjunction with the front wall of the housing pockets for the cushioning blocks. It may also be desirable to provide a cushion for contact by the signal when it is depressed into the housing, and to this end I may provide on the front wall of the housing a channel 14 to hold a cushion block 15 at the proper distance below the street for contact by the lower edge of the front wall 11 of the signal element when it is depressed.

The front wall 11 is of stepped formation including upright or vertical panels 16 and 17, connected by a horizontal panel 18, the forward edge of which projects beyond the top of the panel 17 to provide a rib or abutment 19, for contact by the treads of the wheels passing over the signal. There is also a projection 19' at the top of panel 16 for contact by the treads of wheels subsequent to contact with projection or rib 19, as presently explained in detail.

The embodiment of the invention shown in Figs. 1 and 2 is especially, though not exclusively, adapted to reflecting or illuminated signals in which the indicia is clearly visible night and day. The panels each have portions of letters S—T—O—P, which are painted in a bright color so that they may be seen in daylight, and prisms 20 are mounted at spaced intervals in the lettering so that they will reflect the light from an approaching vehicle's headlight, whereby the word Stop will appear before the driver in illuminated form at night. The vertical panels 16 and 17 or stepped wall 11, appears to the approaching driver as a continuous surface, but where large or prominent letters are desired, if the front or indicia bearing wall of the signal was in the form of a straight surface the elevation would be too great to obtain proper or complete deflection or depression of the signal into the housing. Furthermore, if the front wall with prisms therein is inclined, the angle of inclination will prevent direct reflection of rays of light from approaching vehicles.

With the signal constructed and mounted as shown in Figs. 1 and 2, a vehicle wheel tread engaging it from any direction will depress it and pass over it without shock, due to the inclined side and rear walls and stepped front wall. The tread of a wheel approaching the front wall will first engage projection 19 and partly depress the signal and then engage projection 19' further depressing the signal and eventually completely depressing the signal and passing thereover with the indicia and prisms within the housing and never contacted by the tread. Attention is called to the fact that the pintle 3 is located at the end of the rear wall, so that the front or indicia bearing wall is always pushed down in the housing and the tread runs over the rear wall in passing over the signal. It will thus be seen that the indicia is protected not only by the projections above referred to for engagement by the tread, but also by the manner in which the signal element is arranged and secured to the housing.

Figs. 3 and 4 illustrate another embodiment of the invention and the numerals 1', 2', 3', 4', 5', 6', 7', 8', 9', 10', 12', 13', 14', 15' designate the same parts as the corresponding unprimed numerals in Figs. 1 and 2. It will be noted, however, that the pintle 3' is located at the lower end of the front or indicia bearing wall of the signal element, which is provided with the ears 8' to pivotally connect the signal element to the housing or base, hence when the signal element is depressed the wheel tread will pass over the indicia. To protect the indicia from wear and dirt which the wheel treads would otherwise impart to it, I provide at the top of the front wall 21 a projection or rib 22, similar to 19 of Figs. 1 and 2, for contact by the treads of wheels or tires. I also preferably form the face or wall 22 curved in an arc smaller than the arc on the surface of wheel or tire treads, so that the surface of the tire or wheel tread will not contact the surface of wall 21. I also preferably provide a projecting rib 23 along the bottom of wall 21, and an interrupted rib 24 intermediate ribs 22 and 23 between and at the ends of the lettering. As in the case of the letters of Figs. 1 and 2, the letters S—T—O—P of Figs. 3 and 4 are painted a bright color and preferably indented in the wall 21.

When an approaching wheel arrives at the signal from the front, the tread will strike the projection 21 and depress the signal, and as the wheel passes over the depressed signal the tread will be supported on the projections and will not contact the indicia.

What is claimed is:

1. In a traffic signal including a base to be mounted in a street or highway, a signal element pivotally connected to said base, and a spring to hold said element above the surface of the street and permitting depression of said element when contacted by the treads of vehicle wheels, said signal element having a stepped front wall bearing indicia to confront approaching vehicles, and the top edges of the stepped portions constituting abutments for contact by the treads of wheels and presenting a bar to contact between the treads and the indicia, and a rear wall over which the wheels run when the signal is depressed.

2. A depressible traffic signal comprising a base to be mounted in a street or highway, a signal element pivotally secured to the base, a spring normally holding the element above the surface of the street, said signal element having an inclined rear wall and a stepped front wall, the latter bearing indicia confronting approaching vehicles, the pivotal connection being so arranged and located that when the stepped wall is engaged by the treads of wheels said stepped wall and indicia thereon will be depressed into the base and said inclined wall will be positioned across the top of the base and will support the wheels passing over the signal.

3. In a depressible traffic signal including a base, a signal element having a wall of stepped formation with panels bearing indicia, light reflecting prisms in said indicia, means pivotally connecting said element to said base, a spring holding said element and stepped wall above said base with said prisms at a light reflecting angle relative to the headlights of an approaching vehicle and the line of vision of the driver, and a rear wall over which the wheels run when the signal is depressed.

4. A depressible traffic signal comprising a base mountable in a street, a signal element pivotally connected to the base and depressible therein, said signal element having a wall of stepped formation providing panels and at least one ledge intermediate the panels, the forward edge of said ledge projecting beyond the indicia for contact by the tread of an approaching vehicle wheel and to bar contact between said tread and indicia, the pivotal connection being so arranged and located that when the stepped wall is engaged by the treads of wheels said stepped wall and indicia thereon will be depressed into the base and said inclined wall will be positioned across the top of the base and will support the wheels passing over the signal.

5. A depressible traffic signal including a base, a signal element pivotally connected to the base, and a spring to hold said element above said base, said element having a concave wall confronting approaching vehicles and said wall bearing indicia, projections on said wall extending beyond the indicia for contact by the treads of vehicle wheels passing over the signal element, and the arc of said wall being smaller than the arc of the treads of usual vehicle wheel tires whereby said tread will be held by said projections from contact with said indicia.

6. A depressible traffic signal including a base to be mounted in a street or highway, a signal element pivotally supported by the base, and a spring to hold said element above the surface of the street, said element having indicia on one face and said face being formed to prevent contact between the tread of a tire passing over the element and the indicia, an inclined wall on the element opposite said face, and a projection extending from the top of said wall outwardly beyond said face and indicia and located for contact by the tread of the tires of approaching vehicle wheel to further protect the indicia from being contacted by said tread.

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