

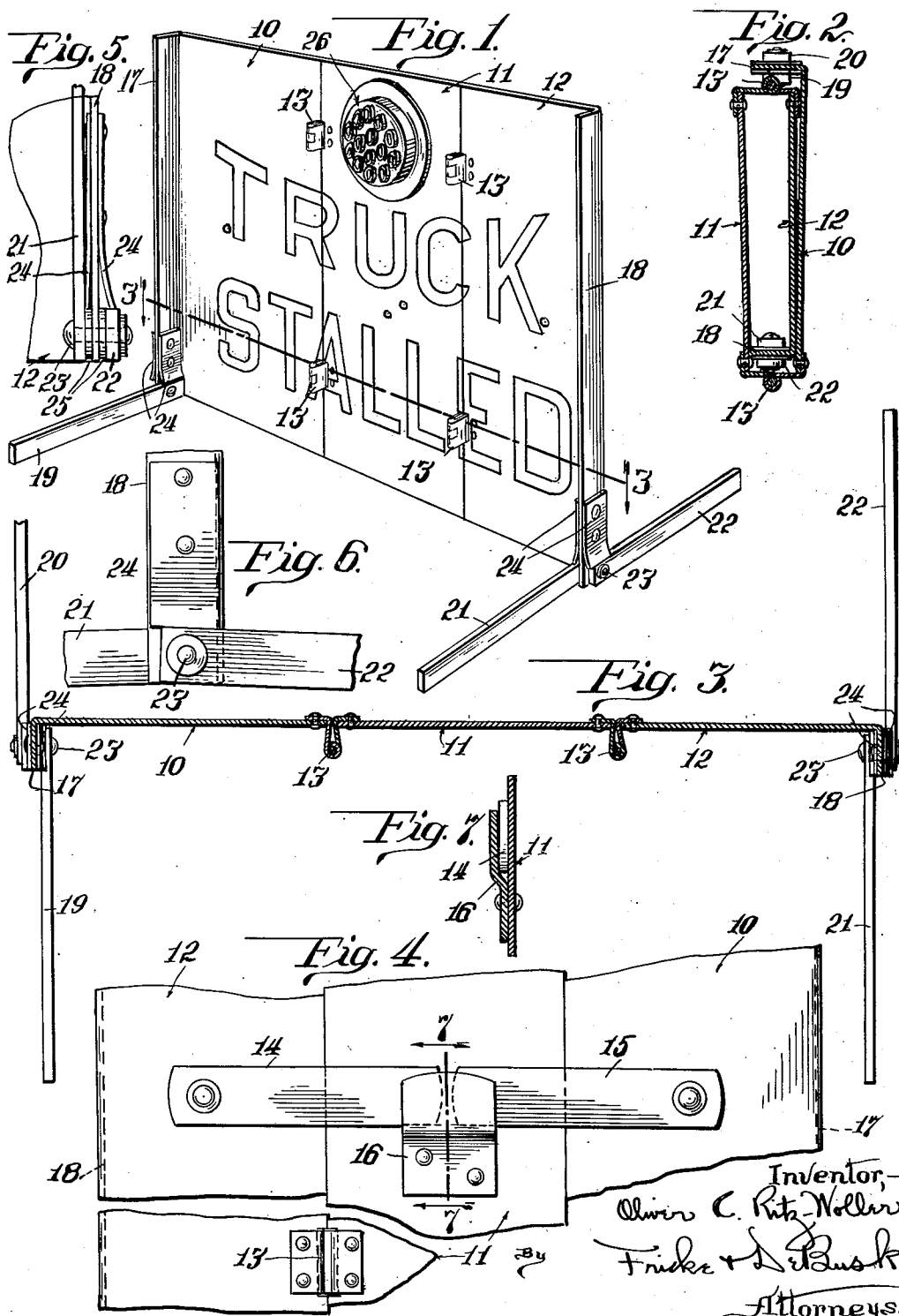
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SIGNAL DEVICE

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SIGNAL DEVICE

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My invention relates to signal devices and it has for its object the provision of a new and improved form and arrangement of parts in a device of this type whereby it is made highly effective for use as a protective marker on a highway or the like at opposite sides of an obstruction by which the way is partially or wholly blocked.

It is one of my objects to provide an improved form of signal device which shall be effective either by day or by night for giving a warning of a truck parked or broken down on a pavement. It is another object of my invention to provide an improved device of this type arranged so that it can be folded into very compact form for transportation and can then be very quickly and easily spread out into effective form so as to have a firm and stable stand on a flat pavement and so as to resist successfully any probable tendency for the device to be upset or otherwise thrown out of operative condition by the wind or other weather conditions. It is one of the objects of my invention to provide an improved device which may be easily and quickly available for use in this manner and which may be as nearly as possible completely proof against failure. It is another object of my invention to provide a device of this type which may be conspicuous by day and which by reason of a reflector mounted on its face may be illuminated brightly at night by the forwardly projected rays from the headlights of an approaching automobile.

It is another object of my invention to improve devices of this type in sundry details hereinafter pointed out. The preferred means by which I have accomplished my several objects are illustrated in the accompanying drawing and are hereinafter specifically described. That which I believe to be new and desire to cover by Letters Patent is set forth in the claims.

In the drawing,—

Fig. 1 is a perspective view of the preferred form of my improved signal device;

Fig. 2 is a vertical sectional view through the device of Fig. 1 when folded together into compact form for transportation;

Fig. 3 is a horizontal sectional view taken at line 3—3 of Fig. 1;

Fig. 4 is a fragmentary view of a portion of the rear face of my improved device;

Fig. 5 is a front face view of the lower right-hand corner of the device as shown in Fig. 1, one of the supporting arms being shown in changed position as compared with the showing of said Fig. 1;

Fig. 6 is a fragmentary view of the lower right-

hand corner of the device as seen from the right side of the device illustrated in Fig. 1; and

Fig. 7 is a vertical sectional view taken at line 7—7 of Fig. 4.

Referring now to the several figures of the drawing, in which corresponding parts are indicated by the same reference characters, 10, 11 and 12 indicate three panel sections of sheet metal connected together along their side edges by means of hinges 13, the pivot pins of which are offset forwardly, as is best shown in Fig. 3, the arrangement being such that when the two end sections 10 and 12 are folded over upon the front face of the intermediate panel section 11 the face portions of the end panels are in substantially spaced relation to the face of the intermediate panel section 11. Upon the rear face of the panel comprising said sections 10, 11, and 12, I have pivotally mounted locking arms 14 and 15 which are movable into engagement with a clip 16 carried by the intermediate section 11 so as to hold the sections releasably in face alignment with each other as is shown in Fig. 3.

As is best shown in Fig. 3, the outer edge portions of the end panels 10 and 12 are bent forwardly in the form of flanges 17 and 18 respectively which serve very substantially to strengthen and stiffen the panel as a whole. Upon the lower ends of the flanges 17 and 18, I have pivotally mounted supporting arms 19, 20, 21, and 22, two of such arms being mounted upon opposite faces of each of said flanges 17 and 18 by means of pivot pins 23 which in the arrangement shown are fastened tightly enough to hold the supporting arms by friction in any position to which they are swung with respect to the flange. For locking the supporting arms in their extended position as shown in Fig. 1, I have provided spring latch devices 24 which are adapted to be forced inwardly for allowing the arms to be folded into position along the flange and which in their normal position engage the top faces of the arms as shown in Fig. 5 for locking the arms against swinging movement. For providing the desired clearance for the arms with respect to the latch devices, I have employed washers 25 on the pivot pins 23 between the supporting arms and the flanges 17 and 18.

On the front face of the intermediate panel section 11, I have provided a reflector 26 of any approved type adapted to be illuminated by the rays from the headlights of an approaching automobile so as to indicate clearly the presence of the reflector and the signal device. The reflector 26 in the arrangement shown is centered upon

the front face of the intermediate section 11 so as not to interfere with the folding of the sections together into compact form for transportation, the reflector being enclosed within the housing provided by the sections when the sections are folded together.

When it is desired to transport the device, the supporting arms 19, 20, 21, and 22 are, of course, folded upwardly along the sides of the flanges 17 and 18 and the sections 10 and 12 are folded over upon the intermediate section 11. In this condition, as will be readily understood, two of the signal devices take up very little room in a truck, and the reflector member 26 of each of the devices is amply protected against breakage. When the signal devices are required at opposite sides of the truck so as to give a warning as to the presence of the truck, the devices can be very quickly and very easily spread out into their completely extended form as shown in Fig. 1, the parts being easily and quickly locked in such extended form as above described. With the device in position upon a pavement with the supporting arms spread as shown in Fig. 1, the device as a whole has very strong and stable support in its upright position on edge so as to hold the reflector 26 in conspicuous position. The arrangement is such that the device cannot be blown over by any ordinary wind pressure and the device is not affected in any way by rain. The nature of the device is such that it is ready at all times for instant effective use even though it has not been used or inspected for months or even years. There is nothing about the device which has any tendency to deteriorate, the device being as nearly as possible proof against failure under any probable conditions. In the preferred form of device, the words "Truck stalled" are shown on the front face of the panel so as to be more effective as a signal by day. The device is preferably painted or enameled in bright colors so as to be as conspicuous as possible.

While I prefer to employ the form of device as shown in the drawing and as above described, it is to be understood that my invention is not limited to the form shown, it being understood that changes might well be made in the form and arrangement of the parts without departing from my invention.

I claim:—

1. A highway signal device, comprising in combination a panel, two arms pivotally mounted on said panel at one of its lower corners adapted to be swung in opposite directions into the form of a supporting base resting on the highway, latch means releasably engageable with said arms for holding them in operative extended position for supporting the panel in upright position with its bottom edge on the highway and a reflector mounted on the face of the panel.

2. A highway signal device, comprising in combination a panel of sheet metal having one of its side marginal portions bent forwardly in the form of a strengthening flange, two arms pivotally mounted on the lower end portion of said flange at opposite faces of the flange and adapted to be swung in opposite directions into the form of a supporting base and adapted in such extended position to hold said panel in upright position on edge, means for maintaining the arms in operative position, and a reflector mounted on the face of the panel.

3. A highway signal device, comprising in combination a panel of sheet metal having one of its

side marginal portions bent forwardly in the form of a strengthening flange, two arms pivotally mounted on the lower end portion of said flange at opposite faces of the flange and adapted to be swung in opposite directions into the form of a supporting base, flat spring latch devices mounted on said flange above the axis on which said arms are mounted adapted by engagement with said arms in extended position to hold the arms in operative spread position and adapted to be displaced against their resiliency for permitting the arms to be swung upwardly along the flange, and a reflector mounted on the face of the panel.

4. A highway signal device, comprising in combination a plurality of panel sections of sheet material hingedly connected together along their side edges, means for holding said panel sections releasably in face alignment with each other, arms pivotally mounted on said panel sections so as to be foldable into and out of the plane of the panel adapted in their extended positions to support said panel in upright position on a pavement, means for maintaining said arms in operative position, and a reflector mounted on the face of one of said panel sections.

5. A highway signal device, comprising in combination two panel sections of sheet material, hinging means connecting the side edges of said panel sections adapted to hold the panel sections in face alignment with each other when spread out and to hold the faces of the panel sections in substantially spaced relation to each other when said sections are folded together, means for holding said panel sections releasably in their extended positions with respect to each other, arms pivotally connected with said panel sections and foldable into and out of the plane of the panel adapted when extended to support said panel in upright position on a pavement, means for maintaining said arms in operative position, and a reflector on the face of one of said panel sections in position to be enclosed between the panel sections and protected thereby when the panel sections are folded together.

6. A highway signal device, comprising in combination a plurality of panel sections of sheet material, hinges connecting adjacent side edges of said panel sections for permitting the sections to buckle backwardly with respect to each other and having their pivot pins offset forwardly in advance of the faces of the sections, said sections having their outer side edge portions bent forwardly in the form of flanges, a locking arm pivotally mounted on the back face of one of said panel sections, a clip on the back face of the adjacent panel section adapted by engagement with said locking arm to hold said sections in face alignment with each other, means adjustably mounted on said panel sections so as to be movable into and out of the plane of the panel adapted in their extended positions to support said panel in upright position on a pavement, means for maintaining said adjustably mounted means in operative position, and a reflector mounted on the front face of one of said panel sections in position to be enclosed between the panel sections when folded together.

7. A highway signal device, comprising in combination three panel sections of sheet material, hinges connecting adjacent side edges of said panel sections for permitting the sections to buckle backwardly with respect to each other and having their pivot pins offset forwardly in advance of the faces of the sections, the end sec-

tions having their outer side edge portions bent forwardly in the form of flanges, a locking arm pivotally mounted on the back face of each of said end panel sections, clip means on the back face of
5 the intermediate panel section adapted by engagement with said locking arms to hold said sections in face alignment with each other, two arms pivotally mounted on the lower end portion of each of said flanges at opposite faces of the
10 flange and adapted to be swung in opposite direc-

tions into the form of a supporting base and adapted in such extended position to hold said panel in upright position on edge, means for maintaining said last named arms in operative position, and a reflector mounted on the front
5 face of the intermediate panel section in position to be enclosed between the panel sections when folded together.

OLIVER C. RITZ-WOLLER. 10