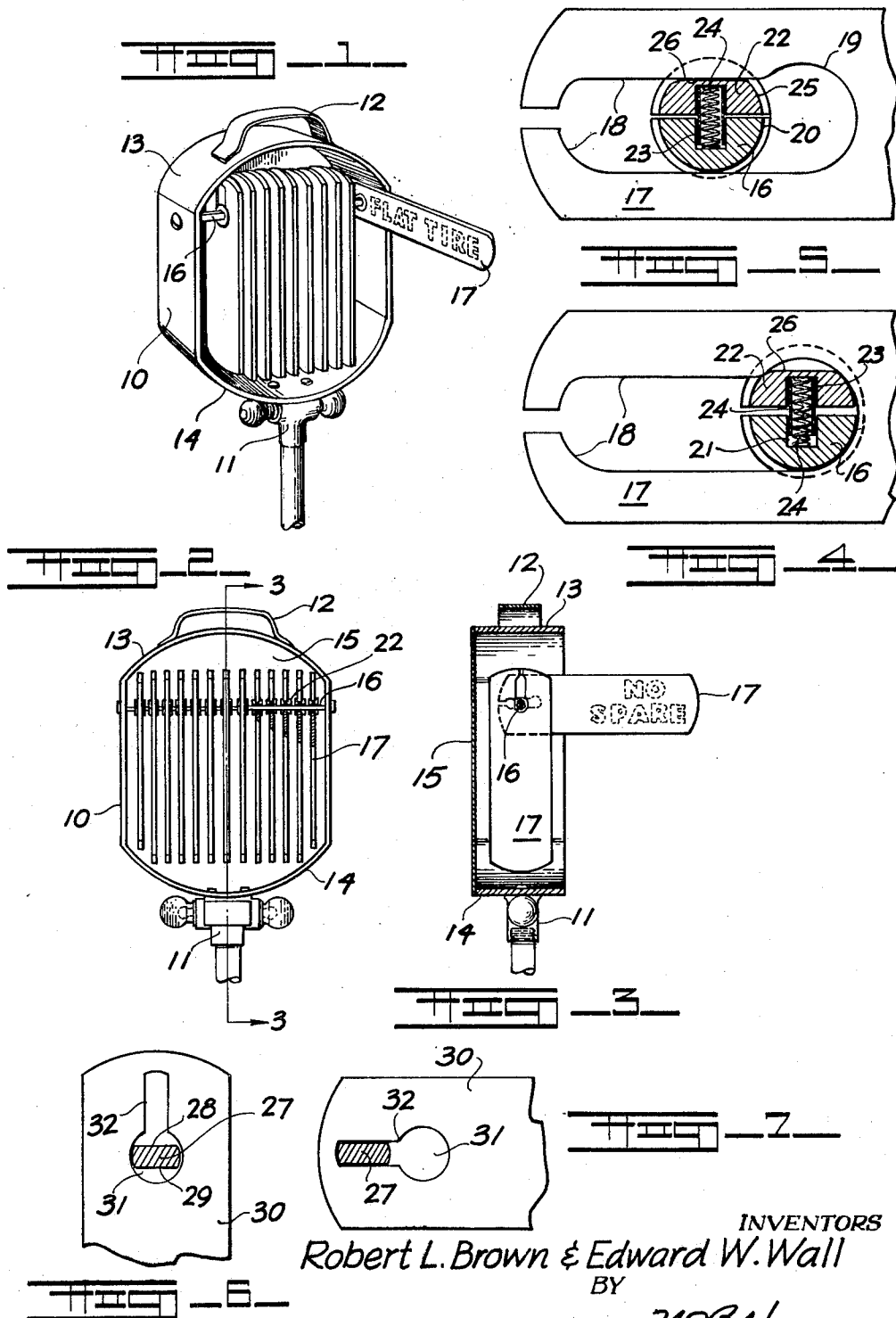


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R. L. BROWN ET AL
PORTABLE EMERGENCY SIGN

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INVENTORS
Robert L. Brown & Edward W. Wall
BY

W. B. Harpman
ATTORNEY.

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PORTABLE EMERGENCY SIGN

Robert L. Brown, 1646 Jacobs Road 44505, and Edward W. Wall, 545 Samuel Ave. 44502, both of Youngstown, Ohio

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3 Claims

ABSTRACT OF THE DISCLOSURE

A portable roadside sign incorporating a plurality of individual signs pivoted in a holder adjacent there ends and movable from a normal vertical hidden position to a horizontal extended visible position.

This invention relates to portable emergency signs such as may be carried in automotive vehicles, and used in cases of emergency to indicate the need of assistance.

The principal object of the invention is the provision of a portable emergency sign incorporating a number of indicia carrying elements which may be individually moved to an exposed visible display position and held in such position until manually altered.

A further object of the invention is the provision of a portable emergency sign which is of light weight construction and of compact size so that it may be conveniently carried in the motor vehicle, and thereby be available for use when needed.

A still further object of the invention is the provision of a portable emergency sign device incorporating a plurality of individual signs pivotally mounted in the device and arranged for movement from a hidden position in the device to an exposed visible position.

The portable emergency sign disclosed herein, is particularly adapted for use in motor vehicles by drivers who encounter trouble along the highway, such as freeways and turnpikes where there are very few service stations, and it is necessary to signal for assistance.

The present invention provides the driver with a lightweight, relatively small and compact device resembling a small traveling bag, which may be easily and conveniently carried in the trunk or storage space of the motor vehicle and removed therefrom and positioned on a collapsible stand, not illustrated, positioned beside the motor vehicle so that anyone of a number of signs in the device may be prominently displayed, indicating the particular trouble requiring assistance. For example, the signs may advise out of fuel, flat tire, sickness or other emergency warnings as will occur to those skilled in the art. The individual sign elements are so arranged that they may be individually moved from their normal, hidden nested position in the device to an extended horizontal visible position by simply moving them to such position where they will remain until manually replaced.

The invention is illustrated in the accompanying drawing, wherein:

FIGURE 1 is a perspective view of the portable emergency sign.

FIGURE 2 is a front plan view of the portable emergency sign.

FIGURE 3 is a vertical section on line 3—3 of FIGURE 2.

FIGURE 4 is an enlarged detailed plan view of a portion of one of the sign carrying elements of the device showing the same in rotating position.

FIGURE 5 is a detailed plan view of a portion of one of the sign elements of the device showing the same in sliding position.

FIGURE 6 is a detailed plan view on an enlarged scale

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showing a modification of a portion of one of the sign carrying elements in vertical position.

FIGURE 7 is a detailed plan view on an enlarged scale of one of the sign carrying elements showing the same in horizontal position.

By referring to the drawings, and FIGURES 1, 2 and 3 in particular, it will be seen that the portable emergency sign comprises a housing 10 having a mounting device 11 attached thereto on its lower side and a carrying handle 12 attached thereto on its upper side. The housing 10 is illustrated as having upper and lower oppositely disposed arcuate body sections 13 and 14 so that in appearance it resembles a small traveling case or flattened hat box. A closure, not shown, is preferably provided to close the open front as illustrated in the drawings. The back is closed by a back panel 15. A cross sectionally, half circular rod 16 extends transversely of the device and between the opposite sides of the housing 10, as best seen in FIGURE 2 of the drawings. The rod 16 is secured to the housing 10 and carries a plurality of individual sign carrying elements 17, each of which has a different indicia thereon, indicating a particular emergency such as a flat tire, no spare, out of gas, sickness etc.

By referring now to FIGURE 2 of the drawings, it will be seen that all of the sign carrying elements 17 are shown in vertical position and therefore, disposed within the area of the housing 10. In FIGURE 1 of the drawings, one of the sign carrying elements 17 has been swung out, pivoting on the rod 16 and is illustrated in horizontal sign displaying position. In FIGURE 3 of the drawings a different sign carrying element 17 is shown in horizontal position. Each of the plurality of sign carrying elements 17 comprises a rigid, elongated member having flat sides, on which the sign indicia is carried. Each of the sign carrying elements 17 has a slot 18 adjacent its uppermost, innermost end and each of the slots 18 act to pivot the sign carrying elements 17 on the cross sectionally half-circular rod 16.

The slots 18 in the sign carrying elements 17 are elongated and have enlarged, circular end sections 19. The cross sectionally half-circular rod 16 is provided with longitudinally spaced grooves 20 in the radius thereof, and openings 21 are formed in the flat surface of the cross sectionally, half-circular rod 16 adjacent each of the grooves 20, and a plurality of half-circular tensioning members 22 are located, one in each of the slots 18. These half-circular tensioning members 22 are each provided with an opening in its flat surface in which opening a tubular member 23 is positioned. Each of the tubular members 23 encloses a spring 24 and each of the tubular members 23 engages one of the openings 21 in the half-circular rod 16, so as to locate the tensioning members 22 in longitudinally spaced relation along the half-circular rod 16, and in oppositely disposed relation to the grooves 20 in the rod 16.

The tensioning members 22 each have a peripheral groove 25 in their radius, and the edges of the sign carrying elements 17 defining the slots 18 register in the grooves 20 and 25.

By referring to FIGURE 4 of the drawings, it will be seen that the sign carrying element 17 has been moved to a horizontal position, and that the enlarged circular end section 19 of the groove 18 therein, is in registry with the groove 20 in the half-circular rod 16 and the groove 25 in the tensioning member 22. It will also be seen that the spring 24 has moved the tensioning member 22 away from the half-circular rod 16 so that tension of the rod 16 and the tensioning members 22 relative to the sign carrying element 17 is relaxed, and the same may therefore, be freely rotated about the half-circular rod 16. The sign carrying elements 17 are in such position when they

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are vertically disposed as seen in FIGURES 1, 2 and 3 of the drawings, and they may obviously be easily moved to a horizontal position, due to the lessened frictional engagement occasioned by the wider separation of the tensioning member 22 and the half-circular rod 16. When the sign carrying element 17 is moved relative to the half-circular rod 16, as shown in FIGURE 5 of the drawings, the tension is increased by reason of the tensioning member 22 moving toward the half-circular rod 16, and thereby increasing the tension on the spring 24.

By referring to FIGURE 5 of the drawings, it will be seen that the uppermost surface of each of the tensioning members 22 has a flattened section 26 which directly engages the straight section of the slot 18 and thereby prevents rotation of the sign carrying elements 17 relative to the half-circular rod 16.

It will thus, be seen that a relatively simple and efficient tensioning mechanism mounts each of the sign carrying elements 17 on the half-circular rod 16 so that the sign carrying element 17 may be rotated relative to the rod 16 only when the rod 16 and the tensioning element 22 are in the enlarged circular end sections 19 of the slots 18. The sign carrying elements 17 are, thus, held firmly when in horizontal position, and are thereupon, capable of movement longitudinally thereof, until such time as the tensioning member 22 and the half-circular rod 16 are within the enlarged circular end sections 19 of the slots 18, whereupon the sign carrying element 17 may be moved in pivotal relation to the half-circular rod 16.

Modifications in the construction herein disclosed may obviously be made and in FIGURES 6 and 7 of the drawings, one such modification is illustrated. In FIGURE 6 a support rod 27 is illustrated, the support rod being of generally rectangular cross section with upper and lower flat surfaces 28 and 29 respectively. The slot in the sign carrying element 30, as seen in FIGURES 6 and 7 of the drawings, is circular at one end, as indicated by the numeral 31, and extends outwardly therefrom longitudinally of the sign carrying element 30 in a narrower configuration 32, which is only slightly wider than the narrow dimension of the support rod 27. Thus, the sign carrying element 30 of the modification may be rotated relative to the support rod 27 when the support rod 27 is in the circular section 31 of the slot and when it is aligned therewith by rotation of the sign carrying element 30, the latter may be moved so as to position the

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support rod 27 in the narrow portion 32 of the slot and thereby establish a relation of the sign carrying element 30 at the support rod 27 which prevents the sign carrying from rotating or pivoting relative thereto.

It will thus be seen that a portable emergency sign suitable for roadside use by a disabled motorist has been disclosed which incorporates novel mounting and tensioning means for a plurality of signs which may be individually moved into visible or display position, and held in such position until manually returned to their hidden position in the device. It will thus be seen that a portable emergency sign has been disclosed which meets the several objects of the invention, and having thus described our invention what we claim is:

1. A portable emergency sign comprising a housing having at least one opening therein, a cross-sectionally half circular rod positioned transversely of said housing, a plurality of slotted elongated sign carrying elements mounted on said rod in pivotal relation thereto, said slots having enlarged circular end portions, tensioning means on said rod engageable in each of said slots in said sign carrying elements whereby said sign carrying elements may be moved axially and rotatably on said tensioning means from a first position within said housing to a second extending out of said housing.

2. The portable emergency sign set forth in claim 1 and wherein said tensioning means consists of tension members and springs between said tension members and said rod.

3. The portable emergency sign set forth in claim 2 and wherein said tension members have peripheral grooves engaged in the edges of said sign elements defining said slots.

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EUGENE R. CAPOZIO, Primary Examiner

WENCESLAO J. CONTRERAS, Assistant Examiner

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