May 29, 1928. 1,671,574

B. V. EVANS ET AL

CHANGEABLE SIGN FOR VEHICLES

Filed May 6, 1925 2 Sheets-Sheet 1

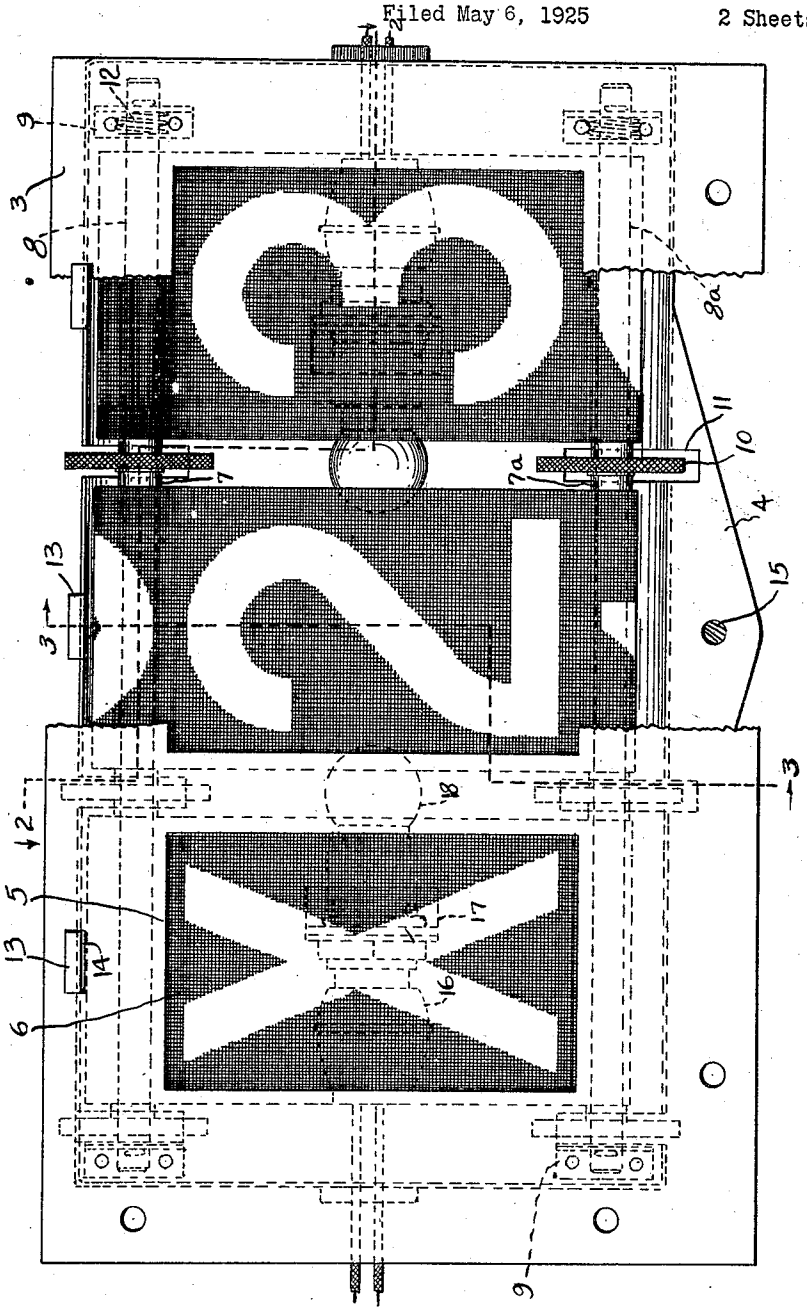


Fig. 1.

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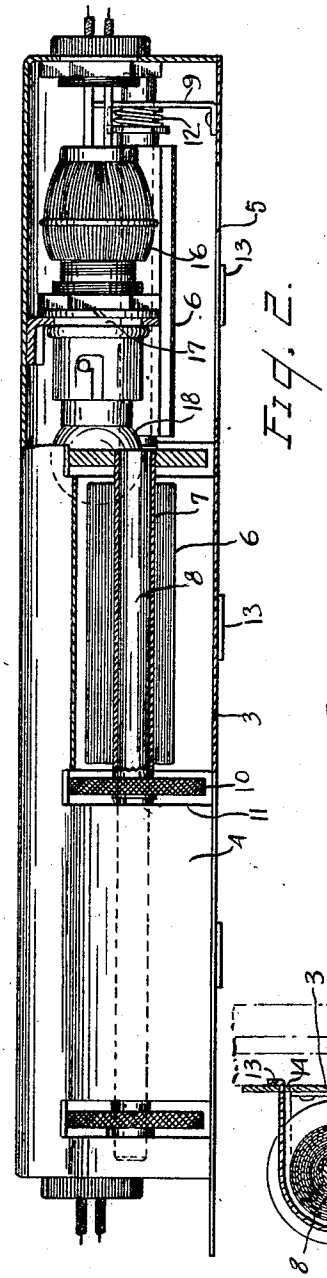


Fig. 2.

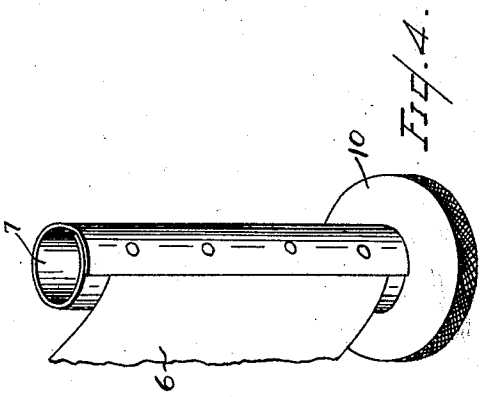


Fig. 4.

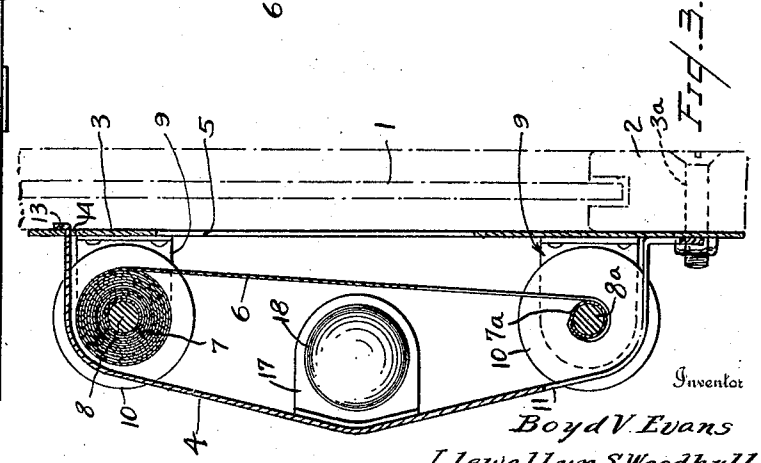


Fig. 3.

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UNITED STATES PATENT OFFICE.

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CHANGEABLE SIGN FOR VEHICLES.

Application filed May 6, 1925. Serial No. 28,470.

This invention relates to changeable sign exhibitors and particularly relates to sign exhibitors for use upon vehicles to furnish variable data as to the route of the vehicle, or other desired information.

It is an object of the invention to mount a sign exhibitor interiorly adjacent to a vehicle window or windshield, so that the exhibited sign may be readily read through the glass.

Another object is to provide an exhibitor for a sign, comprising a plurality of characters, and to provide a simple and compact mechanism for independently changing each of said characters.

A further object is to provide a changeable sign exhibitor, comprising a plurality of webs, adapted to travel within a casing across a suitable sign opening, and mounted upon drums separately actuable, and arranged in coaxial sets.

Still another object is to provide a mechanism of the described character with a common means for restraining a plurality of drums coaxially mounted from accidental turning.

A still further object is to provide a sign exhibitor of the described character, having its parts disposed within a casing, and having actuating members for the separate character-bearing webs projecting from said casing for convenient actuation.

These and various other objects are attained by the construction hereinafter described, and illustrated in the accompanying drawings, wherein:

Fig. 1 is a front view of the improved exhibitor with the supporting plate thereof, partly broken away.

Fig. 2 is a plan view thereof, partly in section upon the line 2—2 of Fig. 1.

Fig. 3 is a vertical sectional view of the same taken upon the line 3—3 of Fig. 1, and disclosing the exhibitor in its position of use with relation to a vehicle window.

Fig. 4 is a perspective view of the drums or sleeves forming a mounting, in the improved sign, for a character bearing web.

In these views, the reference character 1 designates the glass of a vehicle window or windshield, and 2, the frame thereof.

The casing of the improved exhibitor comprises a supporting plate 3 adapted to be attached to the frame 2 by screws or the like 3^a and a cover member 4, detachably connected to said plate, and carrying the mechanism of the exhibitor. Said plate and cover member are both preferably of sheet-metal construction.

Said plate is formed with a row of rectangular sight openings or windows 5, with which are registered webs 6, mounted within the casing for independent vertical travel, each web bearing a series of suitable letters, numbers or other characters, which may be variably combined through relative adjustment of the webs to form selective signs.

The webs 6 are adapted at their upper ends, to be secured to and wound upon alined drums or sleeves 7, and the lower ends of said webs are similarly secured to and adapted to wind upon alined sleeves 7^a. The sleeves 7 and 7^a are respectively loosely mounted upon parallel shafts 8 and 8^a, occupying respectively the upper and lower portions of the cover member 4, and supported by suitable brackets 9 carried by the supporting plate 3.

Upon one end of each sleeve 7 and 7^a there is mounted fast a knurled actuating wheel 10, and the upper and lower portions of the cover member are slotted as indicated at 11 to permit the wheels 10 to project exteriorly of said cover member.

Upon each shaft 8 and 8^a, adjacent to one end thereof, a coiled spring 12 is compressed between the brackets 9, mounting said end, and the sleeve 7 or 7^a, adjacent to said bracket. The expansive effort of each spring 12 is transmitted through the entire series of sleeves 7 or 7^a carried by the shaft mounting said spring, frictionally restraining all of said sleeves from accidental turning.

As a preferred means for detachably mounting the cover member 4 of the casing upon the supporting plate 3, the upper edge of said cover member is integrally formed with a plurality of spaced upturned tongues 13, which are engageable in slits 14 in the upper portion of said plate. This forms in Fig. 1 a hinge connection, about which the cover member may be swung upwardly, so as to allow ready access to the mechanism of the exhibitor. It will be apparent that the tongues 13 may be readily disengaged from the slits 14 when said member is swung to a substantially horizontal position. Normally the lower portion of the cover member is bolted to the plate 3, as is indicated at 15.

For illuminating the described sign, lamp

sockets 16 are mounted in the end portions of the cover member, upon the latter by means of brackets 17, said sockets receiving bulbs 18, the interior face of the cover member serving as a reflector to throw the light emitted by said bulbs through the webs 6 and windows 5.

In the use of the described exhibitor, it is possible to form a large variety of different signs by variously combining the characters carried by the several webs 6. Each of these is actuable upwardly or downwardly, according as the wheel 10 upon the upper or lower sleeve 7 mounting said webs is actuated rotatively. The frictional restraint exerted upon the several sleeves 7 by the two springs 12 is sufficient to prevent any shifting of the webs due to vibration or the like.

The construction is very compact and the use of only two shafts to mount all of the web-carrying sleeves simplifies the construction, and reduces the work of assembly.

The mounting of the exhibitor in the described relation to a window or windshield of a vehicle gives said exhibitor protection from the weather and further locates the exhibitor conveniently for operation, as compared to an exterior location.

What we claim is:

A changeable sign exhibitor comprising a supporting plate formed with a sight opening and having slots at one side of said opening, a translucent sign member mounted upon said plate, and extending across said opening, a cover for said sign member formed of sheet material and having a marginal flange to seat upon said plate, means engaging said flange at one side of said opening detachably securing the cover member to the plate, and tongues projecting from said flange at the other side of said opening and entering said slots to further detachably connect the cover to said plate.

In testimony whereof we sign this specification.

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