Sept. 10, 1929. W. E. COOPER 1,727,336

REVERSIBLE PI-ACARD

Filed Nov. 10, 1924

Fig. 1.

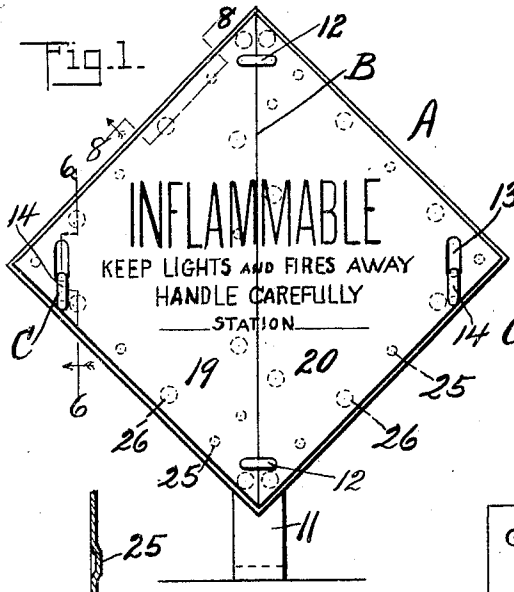


Fig. 2.

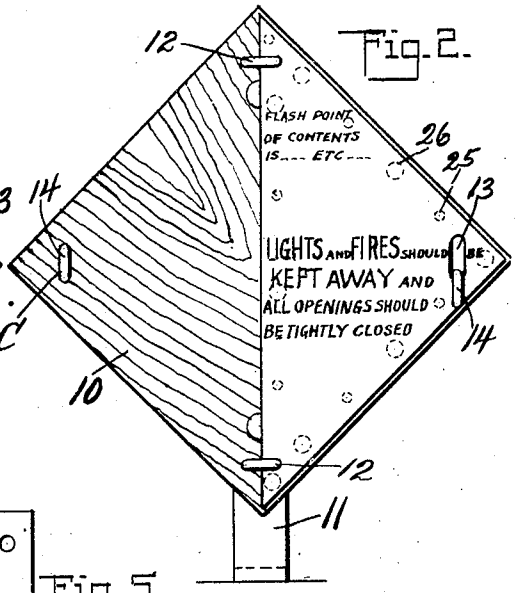


Fig. 8.

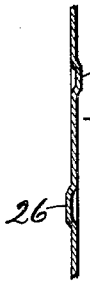


Fig. 5.

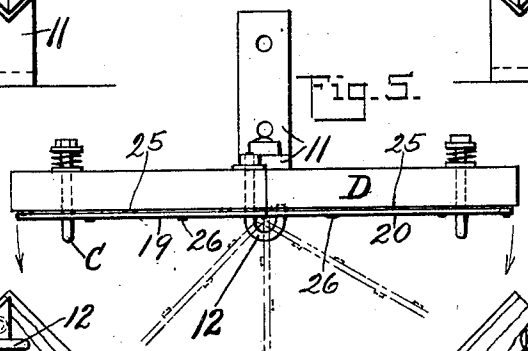


Fig. 3.

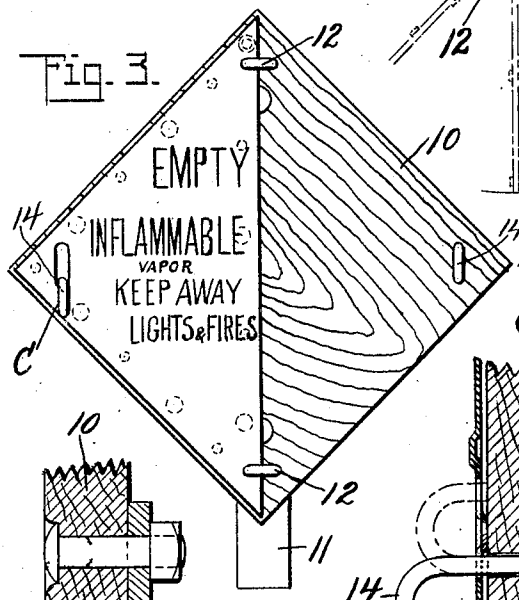


Fig. 4.

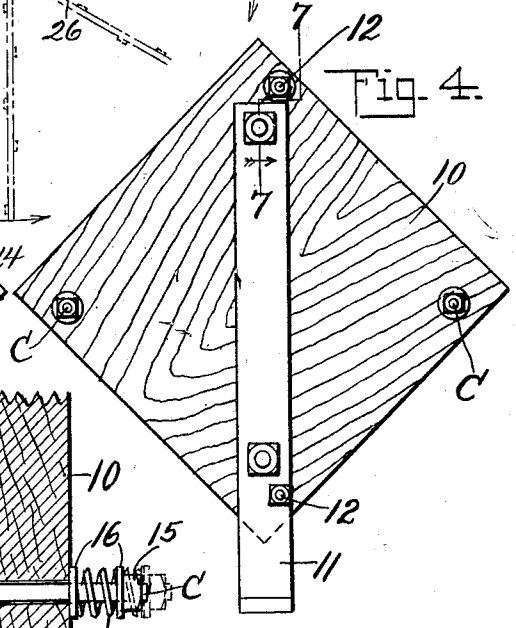
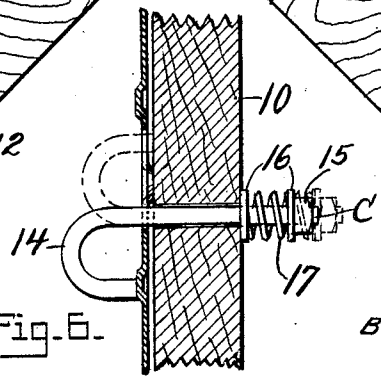


Fig. 7.

Fig. 6.



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UNITED STATES PATENT OFFICE.

WARREN E. COOPER, OF FLUSHING, NEW YORK.

REVERSIBLE PLACARD.

Application filed November 10, 1924. Serial No. 748,804.

My invention relates to reversible placards, and will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawings which illustrate the preferred form of the invention; though it is to be understood that the invention is not limited to the exact details of construction shown and described, as it is obvious that various modifications thereof within the scope of the claims will occur to persons skilled in the art.

In said drawings:

Fig. 1 is a front elevational view of a placard board with a placard thereon which is required by the Interstate Commerce Commission regulations indicating inflammable nature of the lading carried in a tank of a railway tank car;

Fig. 2 is a similar view with the placard of Fig. 1 folded to the right showing at the right hand side of the placard board a placard and with the left hand side of the placard board empty;

Fig. 3 is a similar view with the placard folded towards the left showing a placard at the left side of the board with the right hand side of the board empty;

Fig. 4 is a rear elevational view;

Fig. 5 is a view looking downwardly upon the placard board;

Fig. 6 is a vertical sectional view, the section being taken on line 6—6 of Fig. 1 looking in the direction indicated by the arrows;

Fig. 7 is a fragmentary, vertical, sectional view, the section being taken on the line 7—7 of Fig. 4 in the direction indicated by the arrow; and

Fig. 8 is a sectional view of the placard only, the section being taken on the line 8—8 of Fig. 1.

All tank cars loaded with inflammable liquid are required by the present Interstate Commerce Commission regulations to bear four placards showing the contents of the tanks to be inflammable. After such tanks are emptied these placards must be removed, or as an alternative four "empty" placards, that is, placards showing that the tanks are empty, must be applied. An alternative method within the present regulations of the Interstate Commerce Commission is to use a reversible placard which carries upon one side information as to the inflammable contents of the tank and on the opposite side notice that the tank is empty but contains inflammable vapor, with instructions to keep lights and fires away from the tank.

The invention relates to an improvement in reversible placards and consists in an arrangement for folding the standard or so-called "Inflammable" placard obliquely on its vertical diagonal B, thus permitting the placard to be folded either to the right, as shown in Fig. 2, or to the left, as shown in Fig. 3. Accordingly, the main placard "face" is divided between two triangular parts or members, so that exposure of both is necessary to make it intelligible. This arrangement of folding the placard to the right and left as thus indicated affords distinctive arrowhead-shaped single placards pointing respectively to the right and to the left, besides the quadrangular double placard formed by the two parts when extended and exposed together. For example, when the placard, Fig. 1, is folded to the right as indicated in Fig. 2, the placard face on the other (back) side of the retroverted part which is thus exposed, contains the notation: "Flashpoint of contents is_____" together with appropriate wording with instructions "Lights and fires should be kept away and all openings should be tightly closed". The invention contemplates the use of the wording just quoted, or other appropriate wording, with the arrowhead formed by the now folded placard pointing to the right, and where the tank is empty the placard is intended to be folded to the left as shown in Fig. 3 with the arrowhead thus formed pointing to the left with the placard face on its (back) side which is thus exposed bearing the notation: "Empty, inflammable vapor, keep away lights and fires", or alternative wording. By folding the two halves of the placard to the right, as indicated in Fig. 2, a complete placard is presented which serves to indicate that the tank is

loaded with a liquid which is not classed as explosive by the Interstate Commerce Commission regulations, but yet requires careful handling, and when folded to the left as shown in Fig. 3, another complete placard face is presented which indicates that the tank is empty but probably contains inflammable vapor. Exposure of both halves side by side indicates that the contents of the tank are highly inflammable, as already explained. And the differences of the several complete placard faces exhibited in this manner is emphasized and forced on the attention by the corresponding differences in the outline aspects of these placards, according to which member (if either) is covered by the other, and which exposed.

Thus it will be noted that by the use of a single placard of the size indicated in Fig. 1 cut and foldable along the vertical central line B, three distinct placards are available, and in addition there is provided a well defined signal which may readily be understood to indicate (1) that the tank is loaded with inflammable fluid, or (2) with a fluid which is not ordinarily considered dangerous, or (3) that the tank has been filled with an inflammable fluid and probably contains vapors which are inflammable.

This variety of signals or warnings is provided upon a single placard board and by means of a single placard, which when fully exposed, as in Fig. 1, is adapted to indicate a lading of an inflammable nature, the whole being permanently secured to the placard board and preferably made of metal printed and lacquered so as to protect the printing against the weather.

In carrying out the invention I utilize the ordinary placard board 10 which is secured by one or more brackets 11 to the side of a car and attach to this board the two halves of the placard A by J-bolts 12 which pass through perforations in the metal forming the placard.

The placards or notice sheets are thus securely fastened in position upon the placard board as indicated and are provided with elongated slots 13 through which pass J-bolts C, which J-bolts are provided with nuts 15, washers 16 and interposed springs 17 bearing respectively upon the washers 16, one of which is adjacent the nut 15 and the other of which is in contact with the rear side of the notice board, whereby the curved portion 14 of these J-bolts C is held in contact with the outer surface of the placards. When it is desired to shift either the right or left hand portion 19 or 20 of the placard as indicated in Fig. 2 or 3, the spring J-bolt C at the left or right hand side of the board is drawn outwardly against the tension of the spring 17 and turned to a vertical position so that the curved portion 14 will coincide with the slots 13 formed in the placard whereupon the placard will pass readily over such curved portion of said J-bolt and may be moved to either the right or left hand side of the board as may be desired, after which the J-bolt is again drawn outwardly and the curved portion turned downwardly so as to bear against the outer face of the folded placard.

On one side of the square sheet comprising the two halves of the placard and at right angles to the folded or hinged diagonal cut is preferably printed the conventional Interstate Commerce Commission "Inflammable" placard and on the reverse side of the right hand half thereof the wording necessary to indicate that the tank is empty and on the reverse side of the left hand half the wording necessary to show that the tank is filled with a liquid which is not classed as dangerous within the Interstate Commerce Commission regulations.

My invention contemplates the use of two plates 19 and 20 of uniform size, each in the shape of a triangle, the longest sides of which are hinged together in any convenient manner but preferably as described and as indicated in the drawing so that their combined surface forms a square placard which is hinged along one diagonal, the whole being attached to the side of a railway car by means of staples or U-bolts. illustrated and described, so as to permit free movement of the two triangular pieces on the hinges provided by such U-bolts and permitting three different arrangements of the parts to expose three different notices.

While the requirements of the Interstate Commerce Commission with respect to notices of inflammable contents of tanks of tank cars are at present strictly enforced, I believe that folding a so-called standard "Inflammable" placard such as is shown in Fig. 1 on a diagonal axis so as to conceal the wording may reasonably be interpreted as the full equivalent of removing the placard within the present requirements. I believe further that if the exposed reverse half of the placard bears the wording shown on the optional placard provided by the Interstate Commerce Commission rules, it may also be reasonably considered as meeting the Interstate Commerce Commission requirements, especially as it provides a placard with a distinctive outline which is decidedly different from that of the standard "Inflammable" placard and prevents the possibility of being mistaken for such "Inflammable" placard at a distance, which mistake is liable to happen where the diamond-shape so-called "Inflammable" and "Empty" placards of identical shape are used as now required. In addition to the advantage of a distinctive notice such as the arrowheads pointing to the right or left, my invention provides an additional

signal or placard that indicates at a distance that the car is loaded with a liquid which, while it does not require the same handling as a car bearing the "Inflmmable" placard, still requires the exercise of certain precautions as required by the Interstate Commerce Commission requirements, and although the Interstate Commerce Commission has up to the present made no provision for placarding cars containing liquids which are not classed as inflammable by the commission's present regulations, an additional safeguard is provided by my invention. By leaving one half of the reverse side of my placard blank, I provide a means for obliterating both of the notices now required. In other words, by exposing the blank half I practically remove both the "Inflammable" and "Empty" placards.

My invention provides means of meeting the Interstate Commerce Commission's present requirements and also provides an economical and desirable method of making a reversible and permanent placard which is always available when required.

To prevent abrasion and consequent cancellation of the notices intended to be printed on the placards, the metal upon which such notices are to be printed is embossed in opposite directions as indicated at 25 and 26 in Fig. 8 whereby such embossments will serve as means to space the placards from the notice board and the parts of the placards from each other when they are folded one upon the other.

What I claim is:

1. In a device of the character described, a perforated and slotted placard divided along its vertical axis, means adapted to secure the placard in an open and in a folded position and means integral with the placard adapted to space folded parts thereof.

2. In combination, an upright placard support, a reversible placard comprising a pair of symmetrical sections disposed upright upon the support, means extending through the sections and through the support for connecting the placard to the support and permitting the sections of the placard to be folded one upon the other or unfolded and arranged one alongside the other in a common vertical plane, means extending through the sections of the placard and through the support for detachably securing the said sections against movement when the same are in their folded or unfolded positions, and means carried by one of the sections for bearing upon the other sections to provide an air passage between the sections when the same are in their folded positions.

In witness whereof I have hereunto set my hand.

WARREN E. COOPER.