This invention relates to signs and standards for supporting the same and is particularly useful in presenting a sign to be displayed while resting on a sidewalk or highway for advertising or traffic warning purposes.

It is a particular object of the invention to provide a simple sign and standard in which the standard is readily convertible to support the sign either with the standard compactly folded together and presenting a supporting base for said sign covering a relatively small area, or with said standard expanded to support said sign on a base covering a relatively large area.

It is another object of the invention to provide such a sign and standard which may be manufactured inexpensively from light steel rods and which, when accidentally struck by a motor vehicle, causes a minimum of damage to be suffered by said vehicle.

A further object of the invention is to provide such a sign and standard which, when the latter is supporting a sign from a base covering an extended area, will cause said sign to remain in the position in which it is placed on a sidewalk or highway in spite of this being subjected to winds of relatively high velocity.

Yet another object of the invention is to provide such a sign and standard in which said sign and standard may be locked in assembled relation when said standard is disposed to provide a base covering an extensive area so as to prevent the accidental disassembly of said sign and said standard.

It is yet another object of the invention to provide such a sign and standard which will also provide a mounting means for one or more danger signal flags in the form of sockets adapted to receive the sticks on which said flags are carried.

The manner of accomplishing the foregoing objects as well as further objects and advantages will be made manifest in the following description taken in connection with the accompanying drawings in which:

Fig. 1 is a perspective view of a preferred embodiment of the sign and standard of the invention in which said standard is shown as folded to provide a supporting base for said sign covering a relatively limited area.

Fig. 2 is a perspective view of the device shown in Fig. 1 with the standard thereof converted to provide a broad base for said sign.

Fig. 3 is a side elevational view taken in the direction of the arrow 3 in Fig. 2.

Fig. 4 is an enlarged fragmentary sectional view taken on the line 4—4 of Fig. 3.

Fig. 5 is a similar view taken on the line 5—5 of Fig. 3.

Fig. 6 is an enlarged fragmentary sectional view taken on the line 6—6 of Fig. 5.

Fig. 7 is a horizontal fragmentary sectional view taken on the line 7—7 of Fig. 6.

Fig. 8 is an enlarged fragmentary sectional view taken on the line 8—8 of Fig. 1.

Referring specifically to the drawings, the invention is there illustrated as embodied in a sign and standard which includes a sign 11 made of stiff sheet material and a standard 12 which is preferably formed of round steel rods about ½” in diameter cut and bent to form the various elements thereof and welded together as shown.

The standard 12 includes a pair of frames 13 and 14. These frames are very similar but because of specific differences will be described separately.

Frame 13 includes a pair of long arms 15, a pair of short arms 16, and an outer cross member 17 which unites the outer ends of the long arms 15, said arms and cross member being preferably formed by being bent from a single rod. The angle with which the short arms 16 are bent from inner ends of long arms 15 is preferably 110°, although this angle may vary a few degrees one way or the other from the optimum of 110°.

Bent from the outer ends of the short arms 16 and concentric with an axis to be described later, are latch studs 18. Short pieces of rod have their opposite ends welded to the short arms 16 and long arms 15 to provide braces 19. Also formed of round steel rods, and with its opposite ends welded to arms 15 and 16 at their points of juncture, is a cross member 25.

Flagstick pockets 26 are provided on the frame 13 by welding opposite ends of tubing sections to the arms 16 and cross member 25 (Figs. 1, 3, 4, and 8). The cross member 25 forms a stop at the inner ends of pockets 26 for flag sticks inserted in these pockets.

At least one of the latch studs 18, and, if desired, both of these, is provided with a lock pin hole 27 which is adapted to receive a lock pin 28 having a cross head 29 which is secured to the end of a chain 30, the opposite end of which is fastened to an adjacent brace of the frame 14 (Fig. 2).

The frame 14 includes a pair of long arms 35, outer ends of which are connected by a cross member 36 and inner ends of which are formed integrally with short arms 37, the outer ends of which are provided with eyes 38 formed integrally therewith. In the manufacturing process, the cross member 36, the long arms 35, the short arms 37 and the eyes 38 are formed by bending from a single piece of round stock of the same type of material forming the frame 13 above described.

The angle between the short arms 37 and long arms 35 is preferably the same as that between the short arms 16 and long arms 15 of frame 13.

Braces 39 are formed by sections of rod having their opposite ends welded to short arms 37 and long arms 35. At the rod bends joining short arms 37 and long arms 35, these arms are united by welding thereto the opposite ends of a cross member 48, formed of round rod and which, before being so assembled with the frame 14, has bearings 41 slipped over said member for use in pivotally assembling frames 13 and 14. The bearings 41 are then rigidly united with the cross member 25 as by welding (Figs. 6, 7, and 8).

The sign 11 is provided with holes 50 which are spaced apart horizontally a short distance upwardly from the lower edges of the sign and a short distance inwardly from the side edges thereof. The function of these holes is to receive the latch studs 18 when the standard 12 is assembled with the sign 11 as shown in Figs. 2, 3, 4, 5, and 6.

The two frames 13 and 14, when the pins 10 are removed from the pin holes 27 and in the latch studs 18, are free to be rotated about the pivotal axis, on which these two frames are connected, between two relative positions. In the preferred embodiment illustrated, this pivotal axis is the axis of rotation of the cylindrical rod 40 in the bearing 41. This is the axis about which the studs 18 are concentrically formed as above stated. The reason for this is to facilitate said studs penetrating the
holes 60 in the sign 11 and the eyes 38 when the standard 12 is assembled with the sign 11 gripped between the end cross members 17 and 36 and the outer cross members of the frames 13 and 14 merely form frames for the warning or advertising matter which may be printed on the sign 11, and the sign standard 10 may be readily shifted from place to place by using the end cross members 17 and 36 and hand screw.

Another advantage of the invention is the rapidity and ease with which the sign and standard 10 may be converted from the "fair weather" arrangement of the standard 12, shown in Fig. 1, to the "stormy weather" arrangement of the standard shown in Fig. 2 (and vice versa). This enables the operator to rotate the sign standard 10 until the rate of wind velocity reaches a point where the sign is rocked, or blown over by the wind whereupon the standard may be quickly converted to the arrangement shown in Fig. 2, which offers a broad supporting base and assures that, thenceforth, the sign will not be displaced by the wind.

While only a single form of the invention has been disclosed herein, it is to be understood that many changes may be made in this without departing from the spirit of the invention or the scope of the appended claims.

The claims are:

1. In a sign and standard therefor, the combination of: a stiff sheet sign having a pair of holes formed therein a short distance upward from its lower edge and spaced short distances inward from its side edges; a pair of base frames each including a pair of long side arms, a pair of short side arms united end-to-end with said long side arms, an outer cross member uniting outer ends of said long side arms, an inner cross member uniting the joined inner ends of said long and short arms; a pair of bearings rockably relating said base frames about a transverse axis parallel with said cross members and located to permit said frames to be optionally related in either of two positions, in the first of which said long arms are spaced apart in wide downward angled relation and said short arms extending vertically upward to grip said sign therebetween and hold the latter upright, the second of said positions being the reverse of the first with said short arms spread apart in wide downward angled relation and said long arms extending vertically upward to grip and hold said sign upright; and latch means on one pair of said short arms which extend through said sign holes when said frames are in said first position to hold said sign in assembled relation with said standard so long as said frames remain in said first position.

2. A combination as in claim 1 in which locking means is provided for preventing the accidental withdrawal of said latch means from said holes, thereby locking said sign in assembled relation with said standard and retaining said frames in said first position.

3. In a standard for a sign made of stiff sheet material the combination of: a pair of base frames, each including a cross member on opposite ends of which are fixed, in planes lying at right angles to said cross member, a pair of co-planar short arms united end-to-end with said long arms and related thereto by equal obtuse angles; and bearing means for pivotally uniting said frames on an axis close to the apices of said obtuse angles; and bearing means for pivotally uniting said frames on an axis close to the apices of said obtuse angles to permit said frames to be optionally related in either of two positions, in the first of which said long arms of the respective frames are spread apart in wide downward angled relation to form supporting legs, and said short arms extend vertically upward to hold said sign upright therebetween, the second of said positions being the reverse of the first, with said short arms spread apart in wide downward angled relation to form supporting legs and with said long arms extending vertically upward to hold said sign upright therebetween.

4. In a standard for a sign made of stiff sheet material the combination of: a pair of base frames, each including a cross member on opposite ends of which are fixed, in planes lying at right angles to said cross member, a pair of co-planar short arms united end-to-end with said long arms and related thereto by equal obtuse angles; and bearing means for pivotally uniting said frames on an axis close to the apices of said obtuse angles to permit said frames to be optionally related in either of two positions, in the first of which said long arms of the respective frames are spread apart in wide downward angled relation to form supporting legs, and said short arms extend vertically upward to hold said sign upright therebetween, the second of said positions being the reverse of the first, with said short arms spread apart in wide downward angled relation to form supporting legs and with said long arms extending vertically upward to hold said sign upright therebetween.
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for pivotally uniting said frames on an axis close to the apices of said obtuse angles to permit said frames to be optionally related in either of two positions, in the first of which said long arms of the respective frames are spread apart in wide downward angled relation to form supporting legs, and said short arms extend vertically upward to hold said sign upright therebetween, the second of said positions being the reverse of the first, with said short arms spread apart in wide downward angled relation to form supporting legs and with said long arms extending vertically upward to hold said sign upright therebetween; means for latching said sign in assembled relation with said short arms; and means for locking said short arms together to prevent said frames rotating relative to each other out of said first position, thereby retaining said frames in said position.

5. In a standard for a sign made of stiff sheet material a combination of: a pair of base frames each including a cross member to opposite ends of which are fixed, at right angles thereto, a pair of co-planar long arms having a pair of co-planar short arms united end-to-end with said long arms and related thereto by equal obtuse angles; and bearing means for pivotally uniting said frames on an axis close to the apices of said obtuse angles, with the arms of each frame disposed substantially entirely at all times on the opposite side of a given plane from the arms of the other frame, said plane lying close to and being parallel with said pivotal axis, said pivotal connection permitting said frames to be optionally related in either of two positions, in the first of which said long arms of the respective frames are spread apart in wide downward angled relation to form supporting legs and said short arms extend vertically upward to hold said sign upright therebetween, the second of said positions being the reverse of the first with said short arms spread apart in wide downward angled relation to form supporting legs and with said long arms extending vertically upward to hold said sign upright therebetween.

6. A combination as in claim 5 in which eyes are formed on the outer extremities of the short arms of one of said frames; and latch studs formed on the outer extremities of the short arms of the other frame, said studs extending through said eyes when said frames are swung into said first position, said axis being asymmetrically related to said frames to cause said long arms to be vertical with said frames in their second related position although the outer ends of said short arms are disposed at substantially different radial distances from said axis.

7. A combination as in claim 6 including a sign made of stiff sheet material and having a pair of holes which correspond in spaced relation and location in said sign to match with said eyes when said sign is properly placed between said short arms just before said frames are swung into said first position, whereby said latch studs penetrate said holes in said sign and then said eyes to latch said sign and standard in assembled relation.

8. A combination as in claim 7 in which at least one of said latch studs is provided with a locking pin hole; and a locking pin adapted to be inserted in each such hole for locking said sign and standard assembled together with the frames of said standard in said first position as aforesaid.

9. A combination as in claim 5 in which a tubular socket is provided on one of said frames which socket slopes upwardly and outwardly and is adapted to receive the stick of a signal flag to display said flag alongside a sign supported by said standard, with the frames of the latter in said first position.

10. A combination as in claim 5 in which said bearing means comprises a pair of bearings rigidly mounted on one of said cross members and in which the other of said cross members is journaled.

11. A combination as in claim 5 including a sign made of stiff sheet material and having a pair of holes formed in a lower portion of said sign which holes are in horizontally spaced relation when said sign is in upright position; and a pair of latch studs provided on one pair of said short arms, said studs being adapted to extend through said holes in said sign to latch said sign to said standard when the latter is set up with said sign gripped between said pairs of short arms.

12. A combination as in claim 5 including a sign made of stiff sheet material and having a pair of holes formed in a lower portion of said sign which holes are in horizontally spaced relation when said sign is in upright position; a pair of latch studs provided on one pair of said short arms, said studs being adapted to extend through said holes in said sign to latch said sign to said standard when the latter is set up with said sign gripped between said pairs of short arms; and means for locking said frames against relative rotation when said sign is thus latched in assembled relation with said standard and gripped between said pairs of short arms and with said studs extending through said holes.

13. In a standard for a sign made of stiff sheet material the combination of: a pair of base frames, each including a cross member on opposite ends of which are fixed, in planes lying at right angles to said cross member, a pair of co-planar long arms having a pair of co-planar short arms united end-to-end with said long arms and related thereto by equal obtuse angles and bearing means for pivotally uniting said frames on an axis close to the apices of said obtuse angles to permit said frames to be optionally related in either of two positions, in the first of which said long arms of the respective frames are spread apart in wide downward angled relation to form supporting legs and said short arms extend vertically upward to hold said sign upright therebetween, the second of said positions being the reverse of the first, with said short arms spread apart in wide downward angled relation to form supporting legs and with said long arms extending vertically upward to hold said sign upright therebetween.

14. A combination as in claim 13 including means for locking said frames against relative rotation when the latter are in one of said two relative positions.

15. A combination as in claim 13 in which locking means is provided for locking said frames against relative rotation with said frames related as in the first of said two positions with said short arms extending vertically upward to hold said sign upright therebetween.

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