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2,965,235

PERFORATED DISPLAY PANEL WITH MAGNETIC ATTACHMENT MEANS

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FIG. 1

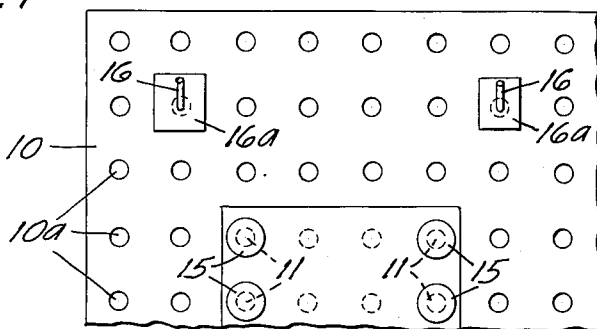


FIG. 2

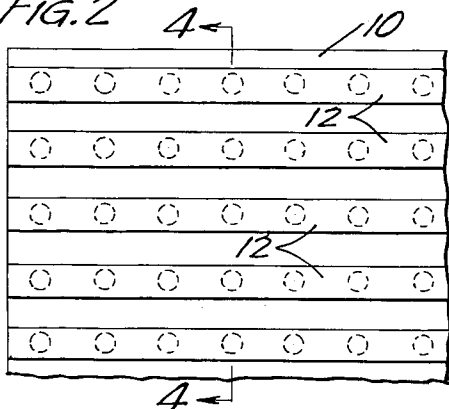


FIG. 3

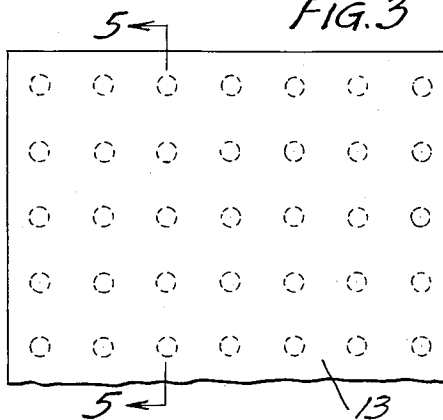


FIG. 4

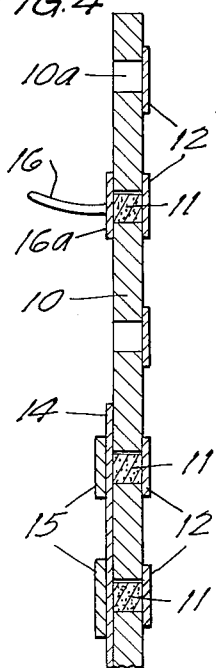


FIG. 5

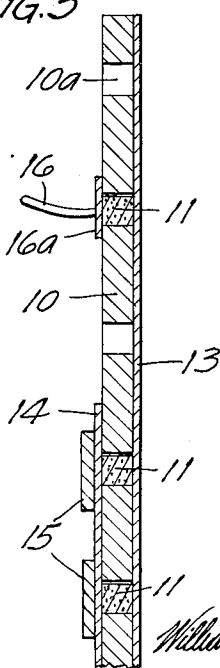
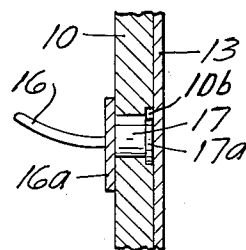


FIG. 6



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PERFORATED DISPLAY PANEL WITH MAGNETIC ATTACHMENT MEANS

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6 Claims. (Cl. 211-1)

This invention relates generally to display boards and more particularly to a perforated panel, specifically constructed to permit articles to be magnetically connected thereto.

It is an object of my present invention to provide a display board including a perforated panel wherein attachment plug members are mounted in selected perforations and are magnetically held therein, whereby the magnetic force combines with the engagement of the plug members in the respective openings to securely hold said attachment plugs in anchoring position.

It is another object to provide a perforated display panel having ferrous metal backing strips and magnetic plug members engageable with said strips through selected perforations and including a mounting element connected to said plug members for attaching said mounting element to the board.

It is still a further object to provide a perforated display panel having a ferrous metal backing sheet mounted across the back of said panel behind said perforations and a plurality of magnetized plug members insertable into said perforations for magnetically attaching said plug members to said ferrous metal backing sheet, said plug members being of a size to closely fit into said perforations to provide positive vertical support therefor and combine with the magnetic force to securely hold said plug member in positively anchored position and means for connecting an article to be supported to the outside to said plug member.

These and other objects and advantages of this invention will more fully appear from the following description made in connection with the accompanying drawings wherein like reference characters refer to the same or similar parts throughout the several views, and in which:

Fig. 1 is a front elevational view of a display board embodying my invention;

Fig. 2 is a rear elevational view of one form of my invention;

Fig. 3 is a rear elevational view of an alternative form of my invention;

Fig. 4 is a vertical sectional view taken substantially along the line 4-4 of Fig. 2;

Fig. 5 is a vertical sectional view taken substantially along the line 5-5 of Fig. 3; and

Fig. 6 is a vertical sectional view through a display board embodying still another form of my invention.

As illustrated in the accompanying drawing I provide a perforated display panel 10 having a grid work of perforations or openings 10a formed therethrough. In order to provide an easily attachable member for any selected opening 10a I use a magnetic plug or attachment member 11 of a size to closely fit into a selected aperture and thereby provide lateral and vertical stability for said plug. In the forms of my invention illustrated in the accompanying drawing said plug 11 is magnetized so as to form a short bar magnet.

In order to hold the magnet plug member in a selected aperture or opening 10a I provide a suitable backing

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behind at least certain of the aperture to which the magnetic plug member will be magnetically attracted. For purposes of this application this will be referred to as magnetic material and will include ferro-magnetic material or other materials having a permeability similar to ferrous materials. In the form of my invention illustrated in Figs. 3 and 5 a sheet 13 of such magnetic material is attached to the entire back side of the panel 10 and, of course, covers the back of each of the apertures or openings 10a.

As best shown in Figs. 1, 4 and 5 non-magnetic sheet material can be quickly and easily applied to the front of the panel by first placing magnetized plug members 11 in selected apertures 10a to fill the same, said plug members being of a length equal to the thickness of the perforated panel 10. A non-magnetic sheet such as the cardboard sheet 14 is placed over or in front of said magnetized plug members 11 and a ferrous metal disc 15 is then placed on the outside of said sheet 14 opposite the magnet 11 and clamps the sheet 14 to the panel 10 by the magnetic force produced by the magnet 11 on the disc of magnetic material 15.

It is, of course, also relatively easy to connect hooks or other attachment members directly to the magnetized plug members 11 such as the hook 16 as shown in Figs. 4 and 5. The outer end of the magnetic plug 11 is securely anchored to the hook 16 as by being welded to a small plate or disc 16a to which the hook 16 is fixed.

As best shown in Figs. 2 and 4 the strips of magnetic material 12 may be provided across the back of the board instead of the sheets 13 of such magnetic material. It is a mere matter of choice as to which is desirable since both perform the same function of providing magnetic material behind the apertures or openings 10a to which a magnetized plug in said openings will be magnetically attracted.

A third form of my invention embodies a slightly modified form of plug member designated by the numeral 17 as best shown in Fig. 6 wherein an enlarged head or flange 17a is provided on the inner end of plug 17 and said flange or head is of the same size as the outer portion of the aperture, or opening, through the panel in order to permit same to be inserted into said opening. However, said opening is countersunk or provided with a recess 10b at the inner end thereof so that said plug member is permitted to drop down into the bottom of the aperture and the flange will mechanically hold and retain said plug 17 in anchored position. A backing sheet of magnetic material such as the backing sheet 13 is provided to hold the plug within the desired opening.

It will be seen that I have provided a relatively simple, yet highly efficient, display board to which articles may be quickly and easily attached for display purposes and which permits repeated use of selected apertures without damage or deterioration thereof.

It will, of course, be understood that various changes may be made in the form, details, arrangement and preparations of the parts without departing from the scope of my invention which, generally stated consists in the matter set forth in the appended claims.

What is claimed is:

1. A generally upright display board comprising a perforated display panel, backing means of magnetic material connected to the backside of said panel behind at least certain of the perforations therethrough, a plug member of magnetized material inserted into a selected aperture to provide positive vertical support for said plug and securely held therein by magnetic attraction between the inner end thereof and the backing of magnetic material, and means for attaching an article to be displayed to the front side of said plug member.

2. The structure set forth in claim 1 and said magne-

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tized plug member being closely received within a selected aperture whereby the magnetic attraction between said plug member and the magnetic backing material combines with the lateral and vertical stability afforded by the panel surrounding said aperture to provide a relatively rigid support for said plug.

3. The structure set forth in claim 2 and a projecting hook member rigidly connected to the front end of said plug member for attaching an article to said display board.

4. The structure set forth in claim 1 wherein said plug member is provided with an enlarged head on the inner end thereof of a size to pass through a selected perforation, said perforations having a countersunk area on the inner surface thereof to permit said head and said magnetized plug member to be displaced downwardly whereby said head engages the back surface of the panel around the lower portion of the perforation to securely retain the plug member in the aperture and combine with the magnetic traction between the plug member and the magnetic backing material to hold said plug member in touching position.

5. A generally upright display board comprising a perforated display panel, a plurality of strips of magnetic material secured to the backside of said panel behind selected perforations, a magnetized attachment plug member inserted into a selected perforation and mag-

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netically held therein by the magnetic attraction between the inner end thereof and said strip of magnetic material, and means for attaching an article to the front side of said plug member.

5 6. A generally upright display board comprising a panel having a number of spaced apertures therethrough, a sheet of magnetic material secured to the backside of said panel behind said aperture and a magnetized plug member inserted into a selected aperture and securely
10 held therein by the magnetic attraction between the inner end of said plug member and the sheet of magnetic material, and means for attaching an article to be displayed on the front side of said plug member.

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