

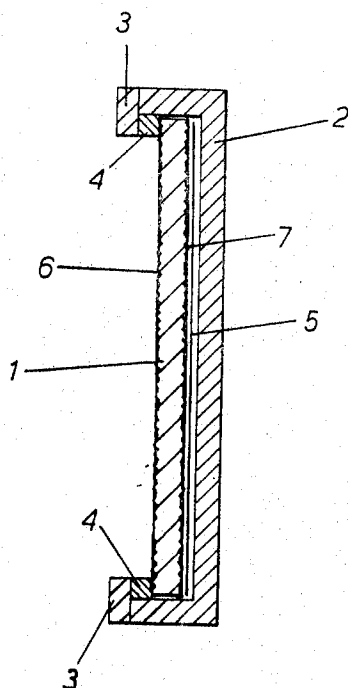
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APPARATUS FOR USE IN THE MANNER OF USING A BLACKBOARD

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3,484,956
**APPARATUS FOR USE IN THE MANNER OF
 USING A BLACKBOARD**

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 40,214/65

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1 Claim 10

ABSTRACT OF THE DISCLOSURE

Apparatus having a repeatedly usable writing surface
 in the manner of a blackboard is constructed with a panel
 of normally transparent material with parallel obverse
 and reverse faces, and with a panel of opaque material
 arranged in contiguity with said reverse face and present-
 ing a design bearing surface showing through the panel
 of transparent material when viewed through the obverse
 face of said panel, said faces being roughened, the obverse
 face to render it receptive to writing and the reverse face
 to prevent a secondary image of the writing on the obverse
 face, and a mounting frame for the panel of normally
 transparent material and for the opaque panel which deli-
 imits a writing area of the obverse face of the panel of
 normally transparent material.

This invention relates to apparatus for use in the man-
 ner of using a blackboard, and has for its main object
 to provide a better surface for receiving inscriptions and
 information, as well as a background which contrasts
 more clearly with the inscriptions or information, and a fur-
 ther object is to devise apparatus of the kind referred to
 which can be used as a screen for a projector.

Apparatus for use in the manner of using a blackboard
 constructed according to the present invention comprises
 a panel of transparent material, having parallel faces of
 which the obverse face is rendered diffuse reflecting and
 the reverse face is sandblasted to prevent formation of a
 secondary image when information appears on the obverse
 face, e.g. when using a crayon, and an operatively asso-
 ciated backing of an opaque material.

The backing preferably consists of a separate backing
 element and may carry graph paper markings or other
 design, but alternatively the backing may be a suitable
 opaque coating, (e.g. emulsion paint), applied to the re-
 verse face of the panel of transparent material.

Apparatus according to the invention may be used on
 easels, in the usual way of supporting blackboards, or may
 be mounted on a wall support. In the latter case the appa-
 ratus may include a frame for the panel, and the backing
 element may be slidably mounted in the frame behind the
 panel to facilitate changing the backing element when
 required. If the backing element is the same size as the
 panel of transparent material, the latter may have a cut
 out portion at one edge to allow the thumb to be used
 in changing the backing element. Alternatively, the back-
 ing element may be of greater length than the frame, and
 may have sections of different surface appearance so that
 movement thereof in either direction can effect a change
 of the background. To facilitate this change of the back-
 ground the backing element may be wound on rollers on
 either side of the panel.

Preferably apparatus constructed according to the in-
 vention comprises a panel of toughened glass, although
 in some circumstances a panel formed from a transparent
 industrial plastic with a sufficiently hard surface can be
 employed.

When the apparatus is intended to be used as a screen
 for a projector, the backing associated with the reverse
 face of the panel may comprise a white pigment.

In order that the invention may be more clearly under-
 stood, a simple form of construction will now be de-
 scribed, with reference to the accompanying diagrammatic
 drawing:

In the drawing a glass panel 1 is shown inset in a frame
 2, the front 3 of the frame being delineated from the
 rest of the frame to give easy access to the panel, and
 between the frame part 3 and the obverse face of the
 panel is a marginal strip 4 of shock absorbing material,
 for example sponge rubber packing material. At the back
 of the panel 1 and in contiguity therewith is a backing
 element 5, the face of which is ruled horizontally and
 vertically to simulate the ruling on graph paper.

The obverse face 6 of the panel may be covered with
 stippling or otherwise sufficiently roughened to render it
 diffuse reflecting, and the rear face 7 is roughened, for
 example by heavily sand-blasting the face, sufficiently to
 prevent the formation of a secondary image on the re-
 verse face when information is written on the obverse
 face.

The diffuse reflecting face 6 of the panel may be of
 sufficiently fine texture so that the inscription may be de-
 linedated by using a pen and water soluble ink.

In the construction described it is possible to remove
 the front part 3 of the frame and then change the opaque
 backing element, either to show different rulings from
 those already described, or to substitute a surface suitable
 for use with a projector.

From the foregoing it will be observed that the diffuse
 reflecting surface of the glass panel is facing outwards, or
 in other words the panel of non-reflecting glass has the
 non-reflecting surface facing outwards, whilst the nature
 of the rear face of the panel is such as to prevent the for-
 mation of a secondary image.

Apparatus according to the invention can constitute no-
 tice boards and it has the advantage that any notice
 written on the obverse face can easily be removed by a
 damp cloth, thereby providing an efficient and continu-
 ously serviceable apparatus of the kind referred to.

I claim:

1. Apparatus having a repeatedly usable writing sur-
 face in the manner of a blackboard comprising a panel
 of normally transparent material with parallel obverse
 and reverse faces, and a panel of opaque material ar-
 ranged in contiguity of said reverse face and represent-
 ing a design bearing surface showing through the panel
 of transparent material when viewed through the obverse
 face of said panel of normally transparent material, said
 obverse face being roughened to provide a fine textured
 diffusely reflecting surface sufficient to render it recep-
 tive to writing as in the normal use of a blackboard, and
 said reverse face being sandblasted to a roughness suffi-
 cient to prevent a secondary image of such writing on
 the obverse face when viewed from the front thereof
 but without preventing observation of said surface of the
 panel of opaque material, a mounting frame for the panel
 of normally transparent material and for the opaque panel

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which delimits a writing area of the obverse face of said panel of normally transparent material.

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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,484,956 Dated December 23, 1969

Inventor(s) Jack Warwick Nightingale

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 2, line 53 "of" should read --with--

line 53 "represent" should read --present--

SIGNED AND
SEALED
MAY 12 1970

(SEAL)

Attest:

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