

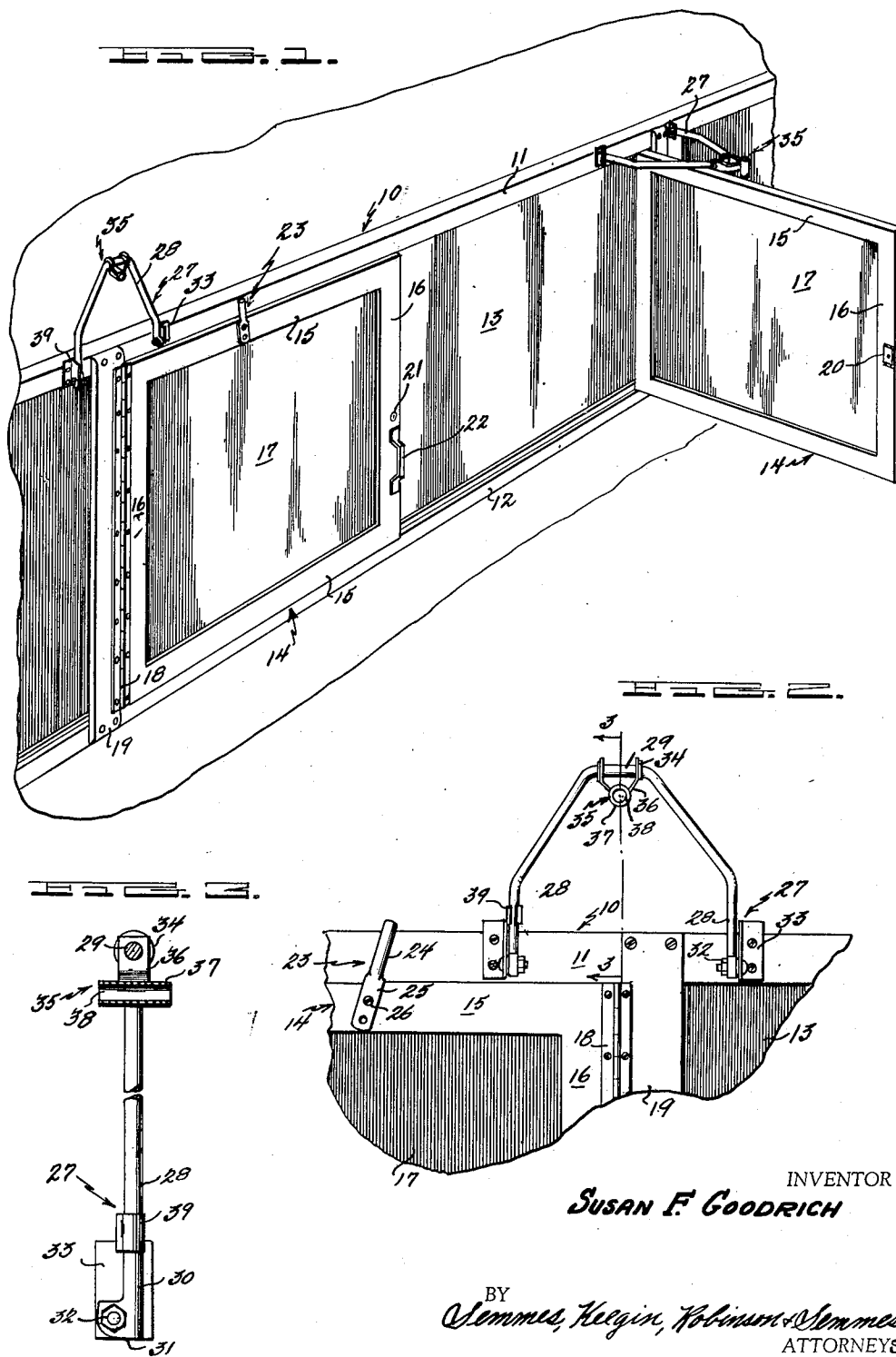
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RECORDING AND DISPLAY DEVICE

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RECORDING AND DISPLAY DEVICE

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2 Claims. (Cl. 35—64)

1

The present invention relates to blackboards and recording and displaying devices of the type used in auditoriums, lecture halls and classrooms, and has particular reference to novel means for providing auxiliary recording and display panels within the confined limits of ordinarily available board space.

Heretofore, various devices have been developed in an effort to increase the available surface area of fixed wall blackboards and other display boards. Portable structures have been employed, but such devices have proved unsuitable either because of lack of stability or because they further crowd an already crowded classroom. Even where devices have been developed for attachment to conventional blackboards, none of them have means for enabling the use of all the panels at one time.

In order to overcome these and other deficiencies, the device of the present invention was developed. This present device is invaluable where an entire class of students may be called upon to perform at the blackboards at one time. Moreover, it permits several recording and display panels to be covered for a time while other panels are in use. The covered panels may later be uncovered to reveal tests or descriptive indicia.

In addition to the above desirable characteristics of the present invention, a primary object of the invention is the provision of means for increasing the available surface area of conventional blackboards without requiring any additional wall space.

Another object of the invention is to provide, in a device of the character described, means for closing off certain panels of the blackboard from view so that text thereon may be withheld from view until desired.

Yet another object of the invention is to establish means for increasing the surface area of conventional blackboards at least threefold by attaching added panels thereto by hinges so that original panels and the added panels may be employed simultaneously.

Another object of the invention is to provide novel means for mounting additional blackboard panels over conventional fixed blackboard panels so that the additional panels may be swung out into a different vertical plane from that of the fixed blackboard and secured in said position.

In general the invention comprises in combination with a conventional blackboard or similar recording and display surface, auxiliary means secured to the blackboard for increasing the available surface area thereof. It is contemplated

2

that at least one auxiliary panel may be secured to a fixed blackboard in hinged relation. This auxiliary panel is provided with at least one projection adapted to engage a yoke-like bracket which itself may be secured to the fixed blackboard for holding the auxiliary panel angularly with respect to the fixed blackboard. A plurality of auxiliary panels may be employed where additional area is required.

In the drawings:

Figure 1 is a view in perspective of the invention showing open and closed panels secured to the basic panel;

Figure 2 is a fragmentary view in elevation of a portion of the invention showing the detailed construction of the auxiliary panel, yoke-like bracket and related members; and

Figure 3 is a view in side elevation taken along line 3—3 of Figure 2 showing the details of construction of the bracket member.

As shown in Figure 1, there is provided a fixed panel 10 having longitudinal supporting members 11 and 12 adapted to secure a recording panel 13 either against a wall structure or upright in a portable unit. This element may be of conventional construction or the longitudinal supporting members may be reinforced sufficient to support heavier auxiliary panels.

An auxiliary panel structure generally indicated as at 14, consists of horizontal cross members 15 and vertical cross members 16 forming the frame 14 for engagement with an auxiliary recording panel 17. As shown in the drawings, recording member 17 is preferably dual surfaced, allowing for recording on inner and outer sides of the panel.

A hinge member 18 is attached on one flange to vertical member 16 of the auxiliary panel and attaches to a vertical support 19 on its other flange, the flange secured to the support 19 being fixed with respect to the base panel 10. Preferably, vertical supporting member 19 is likewise attached to horizontal supporting members 11 and 12 of the fixed panel member 10. On an opposite extremity of the auxiliary panel member 14, locking means 20 may be emplaced, the locking means being adapted for engagement with a twin auxiliary panel 14 or with a vertical supporting member similar to supporting member 19, which vertical supporting member would preferably contain a receptacle for the locking means 20. In Figure 1 receptacle means 21 for lock 20 of one auxiliary panel is embedded within the vertical support 16 of auxiliary panel 14.

A draw handle 22 is attached to vertical sup-

porting members 16 for purposes of opening, closing and positioning the auxiliary panel angularly with respect to the fixed panel. This draw handle should extend outwardly of the frame 14 only sufficiently to provide for parallel abutting contact with the fixed panel. When the auxiliary panel is fully open, the outer recording surface of the auxiliary panel is placed adjacent the recording surface 13 of the fixed panel 10.

Referring to Figure 2, there is provided a projection assembly 23 comprising a tubular portion 24 and a portion 25 adapted to engage the outer surface of horizontal member 15 of auxiliary panel 14. For added stability, the extension 25 can be forked to engage both sides of member 15. Apertures are tooled into the forked portion 25 for purposes of holding a screw member 26 extending through the horizontal member 15. It is desirable to have the projection member 23 arcuately movable for purposes of firmly seating a yoke assembly hereinafter described.

A yoke-like bracket assembly 27 is secured in movable relation with the supporting member 11. (See Figures 2 and 3.) The yoke member 27 has arms 28 which meet at a vertex 29 to form an axle for a projection engaging device 35. As shown in Figure 3, the yoke member 27 is provided with extensions 30 having an inwardly extending flange 31 adapted to seat a bolt and nut assembly 32 against the outwardly projecting portion of angle irons 33. Angle irons 33 are conveniently secured in fixed engagement with the horizontal member 11. Spacers 34 are welded in spaced relation to the cross member 29 of yokes 27. These spacers are adapted to hold the assembly 35 relatively centrally with respect to yoke 27. The projection engaging assembly 35 comprises a U-shaped iron 36 having apertures at the open extensions thereof, suitable for engaging the yoke as at 29. At the vertex of the U-shaped iron there is secured by welding engagement or other suitable means, a tubular member 37 forming a cylindrical channel 38. Channel 38 conforms to the outer diameter of projection 24 and is adapted to close fit therewith.

For purposes of securing the yoke member 27 vertically adjacent the supporting structure when in non-use, clamp means 39 are provided for engaging the yoke member and retaining same in the desired position. The clamp means is integrally welded to one or both angle irons.

It will be appreciated that the yoke member may be pulled downwardly from its vertical station of rest so that the projection engaging assembly 35 may be emplaced upon the projection assembly 23 to hold the auxiliary panel 14 angularly outwardly with respect to the fixed panel 10. While in the open position, the auxiliary panel is retained fixed. (See Figure 1, right auxiliary panel.) Students or recorders may use all of the available space of the fixed and auxiliary panels while the auxiliary panels are kept open. From the foregoing, it is obvious that students and instructors now have area for recording which is approximately at least threefold that previously attained where the fixed and

permanent type of construction alone is employed.

This invention is not only adaptable to fixed structures but also to portable structures where the space for recording may be limited due to size of room, portability of recording structure and the like. Whereas the invention has been described in its preferred form, it is to be noted that various modifications may be made herein including the arrangement of the bracket members upwardly and downwardly of the auxiliary panels, the locking arrangement of the panels, the means for hinging panels and the positioning thereof, without departing from the spirit of the invention as set forth in the claims. It is to be understood that the invention stands limited only as defined in the appended claims.

I claim:

1. A display device having in combination with a fixed panel having a display surface, at least one auxiliary panel having display surfaces on both sides, hinged at an edge to the fixed panel, stud means pivotally mounted on the auxiliary panel, a stud engaging yoke hingedly mounted on the fixed panel and adapted to secure the auxiliary panel in open position with respect to the fixed panel, means for locking the auxiliary panel to secure the auxiliary panel in closed relation to the fixed panel, and clamp means on the fixed panel adjacent the yoke to hold the yoke upright as the auxiliary panel is closed against the fixed panel.

2. A display device comprising a fixed panel having a display surface, an auxiliary panel having display surfaces on both sides, hingedly secured at each longitudinal extremity of the fixed panel so that the auxiliary panels may be swung out at an oblique angle with respect to the fixed panel, a stud on each auxiliary panel, a bracket hinged to the fixed panel above each auxiliary panel and engaging the stud and fixedly securing the respective auxiliary panels in angular relation to the fixed panel.

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References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
135,019	Thorp	Jan. 21, 1873
365,182	Heyer	June 21, 1887
567,758	Wemmell	Sept. 15, 1896
627,396	Daly	June 20, 1899
1,467,476	Farver	Sept. 11, 1923
1,596,457	Scherer et al.	Aug. 17, 1926
1,653,325	Watts	Dec. 20, 1927
1,881,636	Johnson	Oct. 11, 1932
1,958,579	Johnson	May 15, 1934

FOREIGN PATENTS

Number	Country	Date
6,439	Great Britain	May 3, 1887
12,471	Great Britain	June 10, 1908
178,811	Germany	Nov. 19, 1906
32,248	Netherlands	Feb. 17, 1934
133,752	Switzerland	June 30, 1929