

March 6, 1951

W. B. WARD  
BULLETIN BOARD

2,544,404

Filed Sept. 6, 1946

2 Sheets-Sheet 1

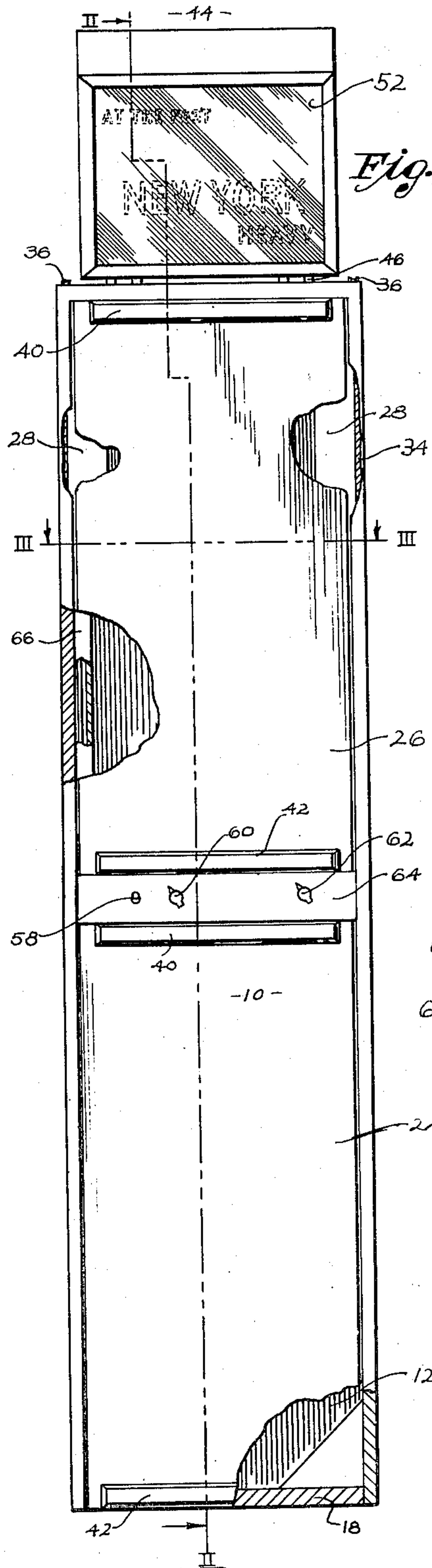


Fig. 1.

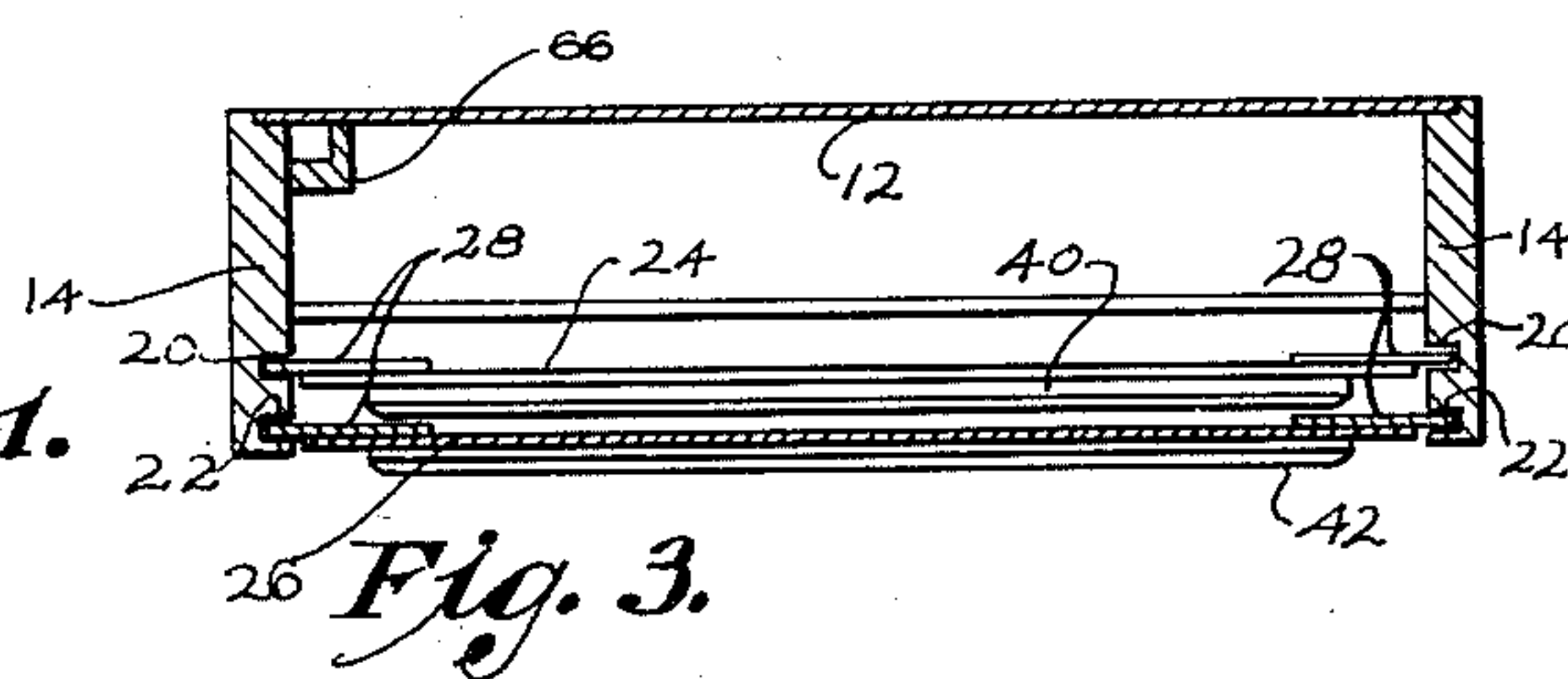


Fig. 3.

Fig. 2.

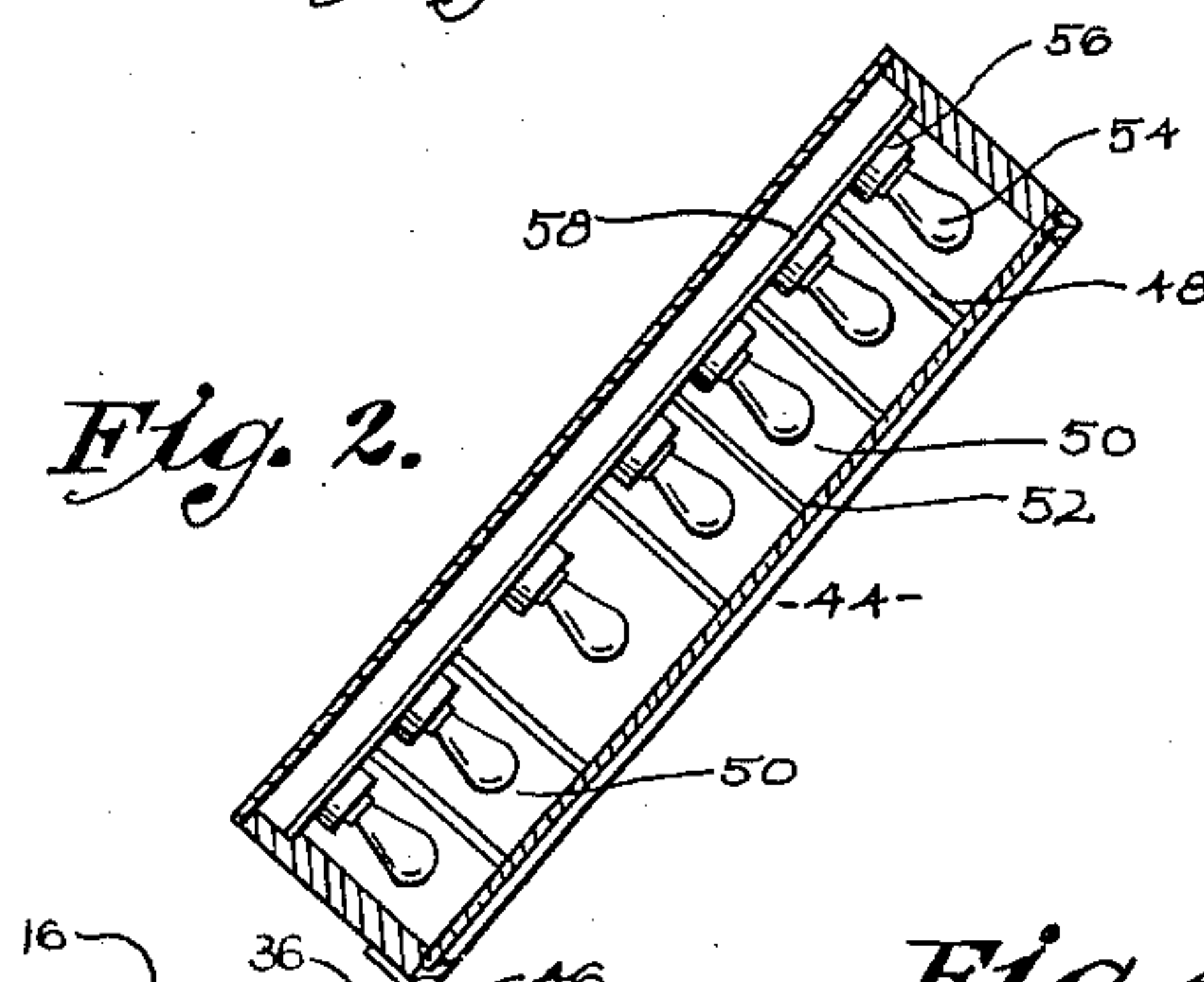


Fig. 4.

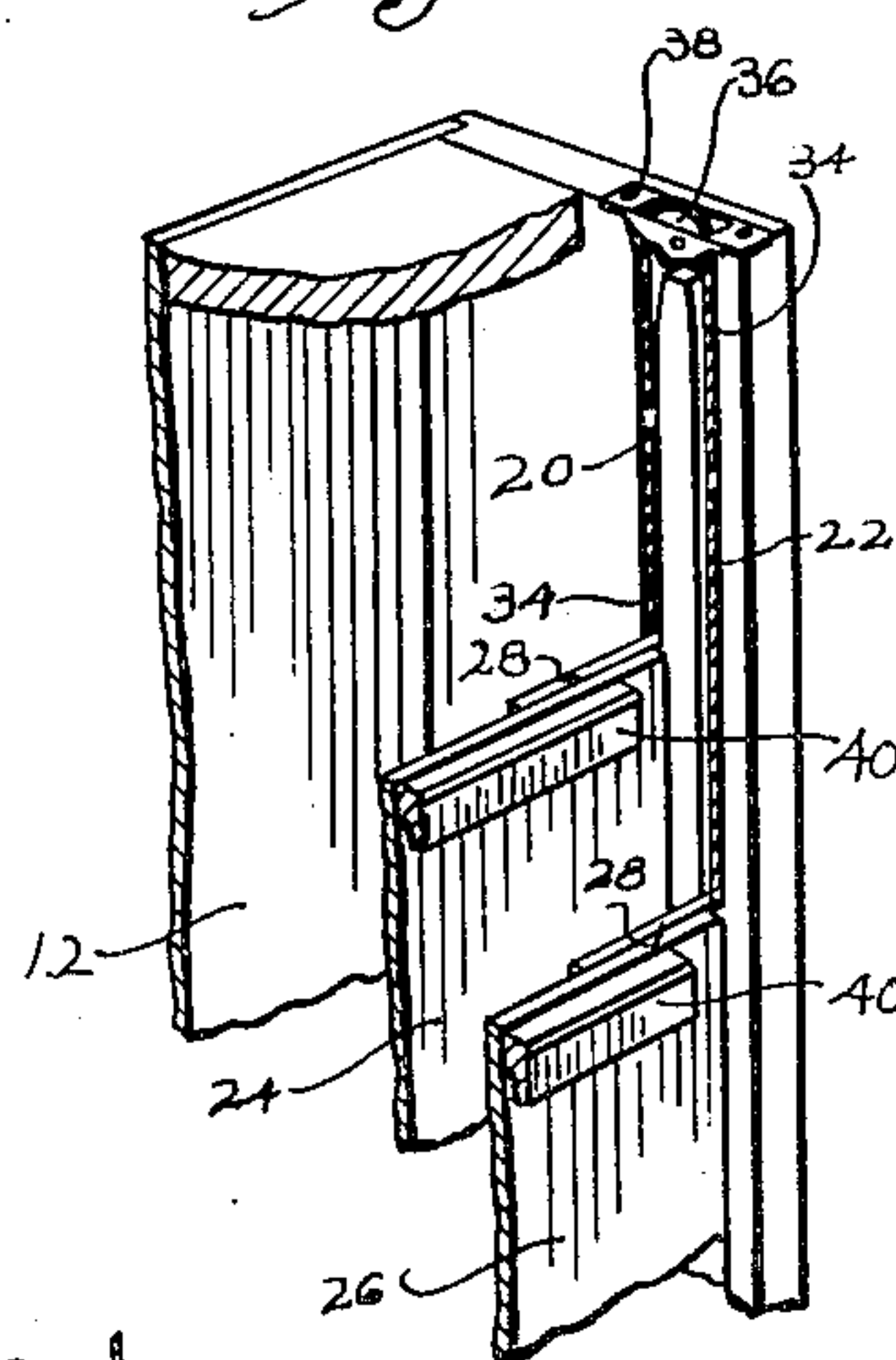


Fig. 5.

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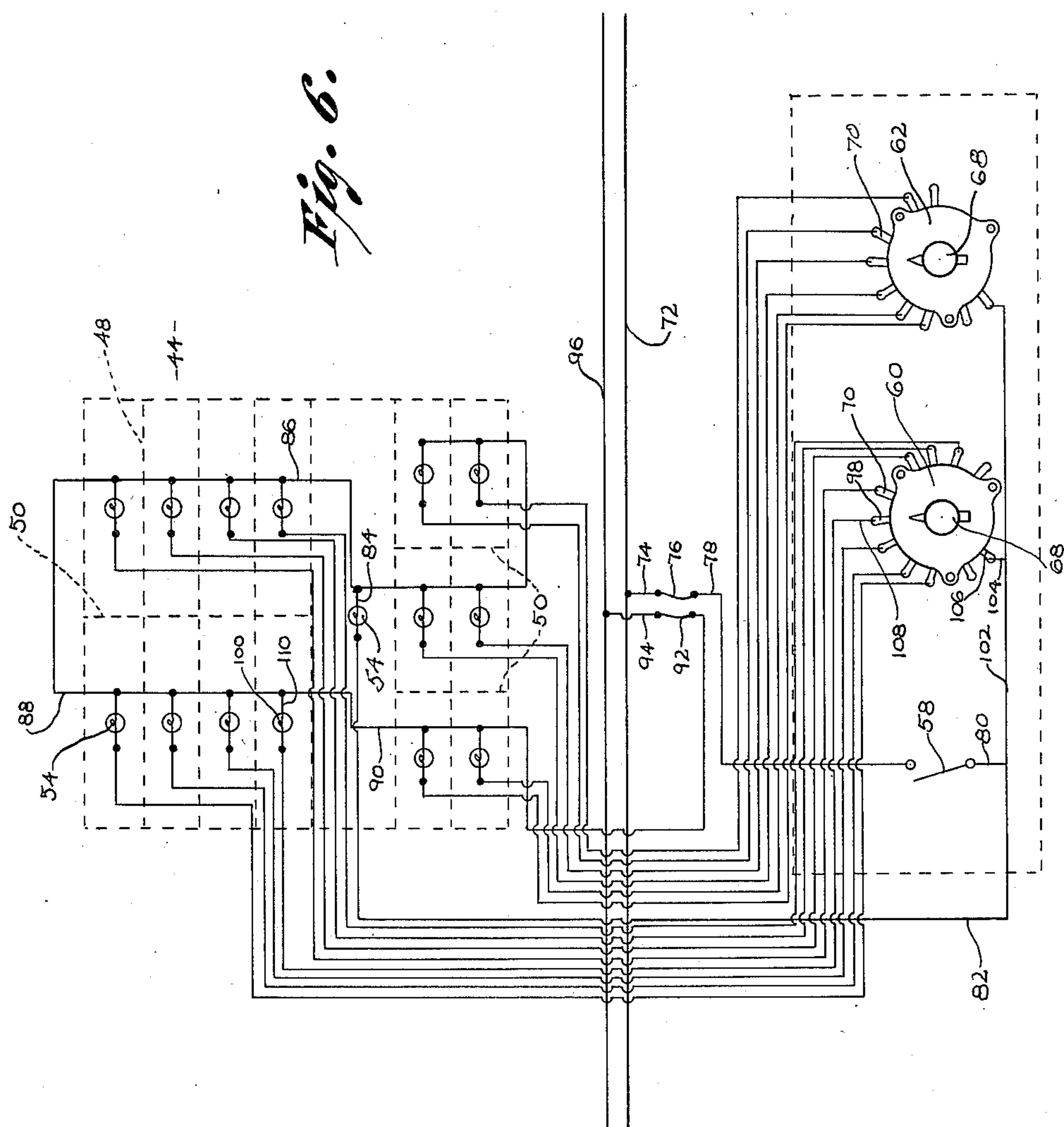
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2 Sheets-Sheet 2



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## UNITED STATES PATENT OFFICE

2,544,404

## BULLETIN BOARD

William B. Ward, Kansas City, Mo.

Application September 6, 1946, Serial No. 695,126

## 1 Claim. (Cl. 40—65)

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This invention relates to bulletin boards particularly adapted to display sheets of printed matter and the like to a group of observers when the same must be quickly changed from time to time and having as a part thereof, means for conveying certain information to the observers pertaining to the particular display sheet being carried by the bulletin board.

The primary object of this invention is the provision of a bulletin board having a pair of shiftable panels each provided with quickly releasable means for holding a bulletin sheet on one face thereof, and having a cable and pulley assembly permitting movement of either of the panels to and from a predetermined position and so interconnecting the panels that the weight of one of the panels will hold the other panel in said position.

An important object of this invention is to provide in a bulletin board having the aforesaid shiftable panels as a part thereof, a compartmented case hingedly mounted above the panels and having a number of lamps in the compartments for illuminating the bulletin sheets when one of the panels is moved to the operative position, which case has a translucent plate provided with indicia thereon pertaining to data on the sheets, that is made visible when certain of said lamps are lighted.

Other objects will be made clear or become apparent as the following specification proceeds, reference being had to the drawings wherein:

Figure 1 is a front elevational view of a bulletin board made in accordance with my present invention, parts being broken away to reveal details of construction.

Fig. 2 is a cross-sectional view taken on line II—II of Fig. 1 looking in the direction of the arrows.

Fig. 3 is a cross-sectional view taken on line III—III of Fig. 1.

Fig. 4 is a fragmentary, detailed perspective view showing the manner of mounting the panels.

Fig. 5 is a fragmentary, detailed perspective view of one of the panels showing the mounting means for the cables to the panels; and

Fig. 6 is a wiring diagram showing the manner of energizing the electric lamps.

A bulletin board as set forth in the preferred embodiment thereof in the drawings is contemplated for use at a horse racing track where spectators must be accurately informed of certain facts about the races, not only at the particular track but elsewhere, and other data such as the condition of the track, results of the race, etc.

The bulletin board unit consists of a hollow cabinet broadly designated by the numeral 10 having a back wall 12, side walls 14, a top 16 and a bottom 18. Each of the side walls 14 has a pair of longitudinal grooves 20 and 22 formed spaced-apart, in the inner faces thereof, which grooves extend the entire lengths of the walls 14.

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An inner panel 24 and an outer panel 26 are slidably mounted in the grooves 20 and 22 respectively through the medium of guide strips 28 that extend the entire length of each panel 24 and 26 and are mounted on the inner faces thereof along each longitudinal edge. These strips 28 extend laterally from the edges of the panels 24 and 26 to ride in the grooves 20 and 22, and a U-shaped cross-bar 30 is fixed to the upper edge of each strip 28 by screws 32 or analogous fastening means.

These bars 30 provide means for mounting the ends of a cable 34 that passes from the panel 24 over a pulley 36 to the panel 26. There is a cable and pulley assembly on each of the walls 14 and the pulleys 36 are rotatably mounted in brackets 38 set in the upper edge of the walls 14 so that the axis of rotation of the pulley 36 is midway between the grooves 20 and 22. Therefore, as the panels 24 and 26 are shifted, the cable 34 will be guided in the grooves 20 and 22, and it is readily seen that since the panels 24 and 26 are identical, their weight will be substantially the same. This fact plus frictional engagement of the strips 28 with the grooves 20 and 22 causes one of the panels to be held at the upper end of the cabinet 10 by the weight of the other. When panel 24, for instance, is in such position near the top wall 16, upward movement, by the user, of the panel 26 will cause the panel 24 to move downwardly to a point where it will hold the panel 26 against the wall 16.

A pair of strips 40 and 42 mounted on each of the panels 24 and 26 near the upper and lower edges thereof respectively are grooved as clearly illustrated in Figs. 2, 4 and 5 to hold a bulletin sheet, usually of heavy cardboard, the nature and purpose of which will hereinafter be more fully explained.

A hollow case broadly designated by the numeral 44, and hingedly mounted to the top wall 16 as at 46, is divided into a number of compartments through the medium of a number of horizontal and vertical partitions 48 and 50 respectively, shown in Fig. 2 and schematically by dotted lines in Fig. 6. This case 44 is hollow and closed in on all sides, the front wall thereof being formed from a plate 52 of translucent material upon which certain indicia is marked in opaque letters.

Behind the plate 52 and within each of the compartments formed by the partitions 48 and 50, a lamp 54 is mounted for illuminating the bulletin sheets on the panels 24 and 26 and for making the indicia on the plate 52 visible to the spectators. These lamps 54 are mounted in conventional sockets 56 fixed to a false bottom 58 of the case 44.

The lamps 54 are controlled by a toggle switch 58 and a pair of selector switches 60 and 62, carried by a support 64 mounted within the cabinet 10 midway between walls 16 and 18 thereof. The



length of each of the panels 24 and 26 is less than half the length or height of the cabinet 10 so that the switch board or support 64 is exposed to permit manipulation of the switches when the panels 24 and 26 are at the upper and lower ends respectively of the cabinet 10. The wires for supplying energy to the lamps 54 extend from the switches 58, 60 and 62 into the respective sockets 56 through a hollow conduit 66 mounted in the cabinet 10.

Referring now to Fig. 6, it will be seen that the case 44 is divided into three units or zones of lamps 48, namely an upper zone illustrated as having two rows of lamps 48 of four each, a middle zone having one lamp, and a lower zone having six lamps. Obviously, any number of lamps may be used and arranged in any suitable manner, but as illustrated the switches 60 and 62 control the upper and lower zones of lamps 54 respectively. Since the switches 60 and 62 are identical, only one will be explained, and it consists of a manually rotatable contact arm 68, movable over a number of fixed contacts 70, each corresponding with a respective lamp 54. The single lamp 54 comprising the middle zone of the case 44 is energized when the switch 58 is closed, through the following circuit:

From lead line 72, through wire 74, a safety fuse 76, wire 78, closed switch 58, wires 80 and 82, said single lamp 54, wires 84, 86, 88 and 90, fuse 92, wire 94, to the other side of the main source of supply 96.

With the switch 58 thus closed, any one of the lamps 54 forming the upper zone of case 44 may be energized by operating the switch 60. The circuits for each of these lamps 54 are identical, therefore only one will be traced. Assuming that the rotatable contact arm 68 of the switch 60 has been moved into engagement with a contact 70 designated by the numeral 98, the circuit for energizing one of the lamps 54 designated by the numeral 100 is traced as follows:

From lead line 72 through wire 74, fuse 76, wire 78, switch 58, wires 80, 102 and 104, contact plate 106 of switch 60, contact arm 68, fixed contact 98, wire 108, lamp 100, wires 110 and 90, fuse 92, wire 94 to lead line 96.

The circuits for energizing the lamps 54 forming the lower zone of the case 44 are similarly traced through the selector switch 62 upon bringing the arm 68 thereof into contact with any one of its fixed contacts 70.

The portion of the plate 52 covering the upper zone of the case 44 has printed thereon such indicia as: "At the post," "Coming out," "They're off," "Photo finish," "Official," "Not official," "Foul" and "Dead heat."

The lower zone of plate 52 carries the words "Heavy," "Slow," "Fast," "Muddy," and other indications of the conditions of the race track.

In actual use a large number of units are placed in side-by-side relation, each being independently operable, and each referring to a particular horse racing track. Thus, the middle zone of the plate 52 has the word "Chicago," "New York," "California" or the like printed in relatively large letters thereon.

It is clear from the foregoing that the name or locations of the track may be made visible by closing the switch 58 to energize the lamp 54 in the compartment of the case 44 immediately behind this lettering on the plate 52. Then by operating the switch 60, the lamp 54 for illuminating the lettering with respect to certain facts concerning the race will be energized. And,

similarly, the condition of the track may be made known by selectively closing the switch 62.

It has been found desirable to have a thermostatic control for each of the lamps 54 of the upper and lower zones of the case 44 for the purpose of causing the lamps 54 to alternately burn bright and dim to attract attention to that portion of the lettering plate 44 which is made visible. This control consists of a bi-metallic thermostat inserted in each of the sockets 56 before the lamp 54 is placed therein, as is well-known in the art and for that reason, not illustrated in the drawings.

The face of the bulletin sheets placed on the panels 24 and 26 will have printed thereon the names and numbers of the entries with a space for noting the order of finishing. When one of the panels 24 or 26 is near the top of the cabinet 10, the lower panel is in a position where the operator may change the bulletin sheet for the next race and the upper sheet will be illuminated by one of the lamps 54 that is lighted, particularly by the centermost lamp which burns steadily when switch 58 is closed.

The case 44 may be tilted to a position for making such illumination possible and at the same time place the same in a position where it is most easily seen by the spectators. Any means for holding the case 44 in such adjusted position may be used.

Manifestly any number of modifications may be made in constructing a bulletin board in accordance with my present invention without departing from the spirit of the invention or scope of the appended claim.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

In a bulletin board of the kind described, a cabinet having means for mounting a bulletin sheet on one face thereof; a case carried by the cabinet on one end thereof; a number of partitions in the case for dividing the case into a plurality of compartments; a translucent plate forming one face of the case, said plate having indicia thereon above each compartment respectively; a lamp in each compartment for rendering said indicia visible; and a switching device adapted to close an electric circuit through selected lamps, said case being hingedly mounted on the cabinet for adjustably tilting the same to a position for directing rays of light emanating from lighted lamps through said plate, toward the bulletin sheet for illuminating the same, said switching device being mounted in the cabinet, one of said panels extending above and one below said device when in operative position, for exposing said device whereby the same is accessible to the user.

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