

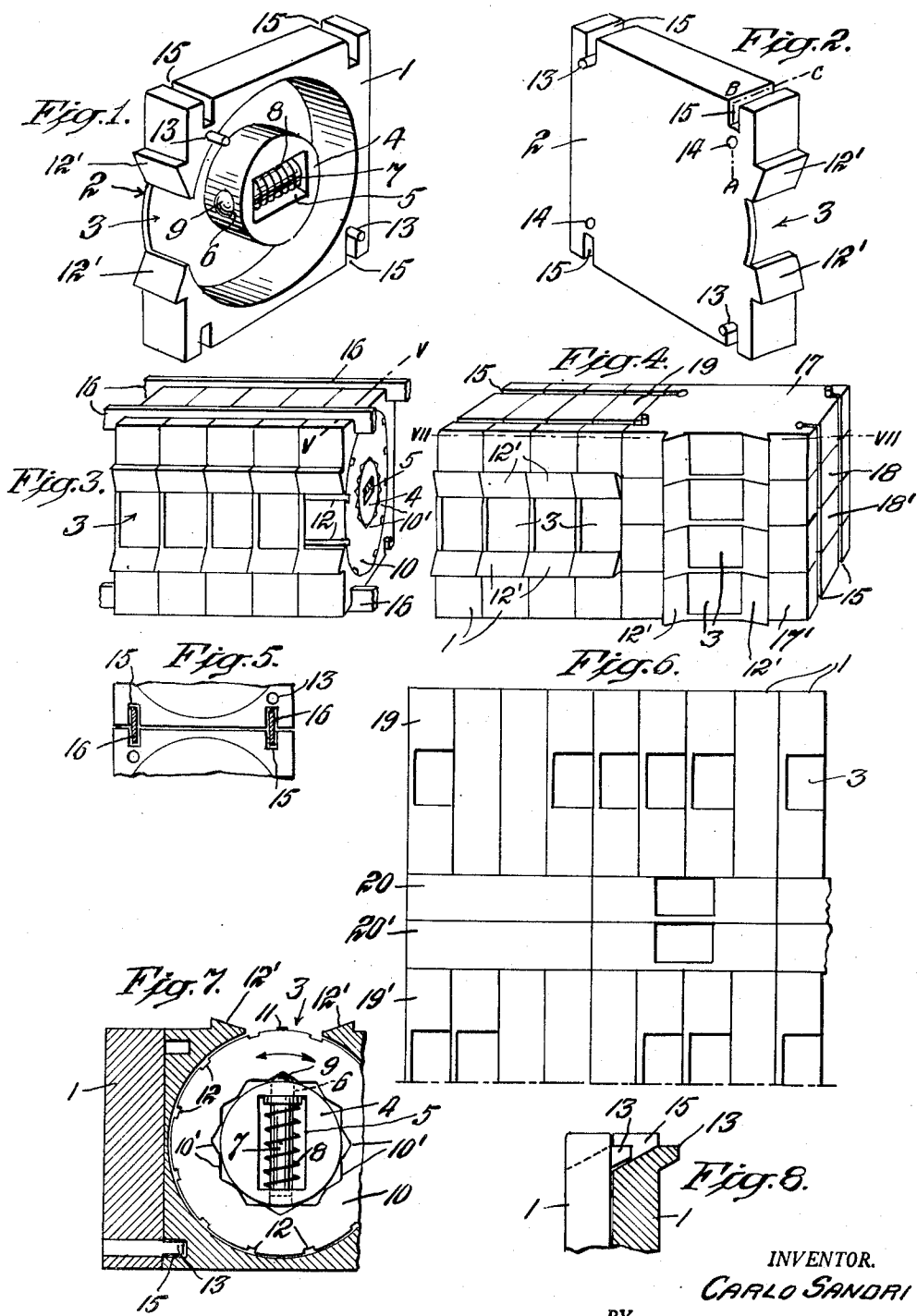
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C. SANDRI

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SYNOPTIC BOARD

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INVENTOR.

CARLO SANDRI

BY

Philip S. McLean
ATTORNEY

1

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SYNOPTIC BOARD

Carlo Sandri, Milan, Italy, assignor to Ray Vir Den,
New York, N. Y.

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The invention herein disclosed relates to synoptic boards which can be adjusted to indicate changing values.

Special objects of the invention are to provide members representing different subjects, values and the like which can be assembled in board or bulletin representing fashion, readily readable, and which can be quickly and easily adjusted as changing conditions require to illustrate and indicate information desired.

The invention accordingly comprises a novel arrangement of indicating members which can be combined and adjusted to afford the information required.

The attached drawing shows diagrammatically, by way of example, a few embodiments of the members constituting the device in question, as well as a few methods of mounting the adjacent members in order to form the synoptic board.

Fig. 1 is a perspective view of the open side of one member;

Fig. 2 shows, also in perspective, the closed side of the said member;

Fig. 3 shows a series of members arranged horizontally one alongside the other;

Fig. 4 shows a group consisting of a series of members arranged horizontally one alongside the other and another series of members arranged vertically one alongside the other;

Fig. 5 shows, on a larger scale, a method of connecting two contiguous members by means of transverse strips which are common to several members;

Fig. 6 shows two superimposed series of adjacent members, separated by members at a right angle thereto which act as spacers;

Fig. 7 shows a section along the line VII—VII and, on a larger scale, a method of connecting two members arranged at right angles to each other;

Fig. 8 as a section along the plane A—B—C of Fig. 2.

The apparatus by which the method of graphical representation of the present invention is realized comprises a plurality of members, each of which consists of a small parallelepiped frame 1 having, on one side, a bottom 2 and on the other side a circular cavity so as to form a kind of box. Each small frame is provided with a window 3 on one of its front faces while at the center of the cavity 2 it has a protruding axial pin 4 provided with a diametral cavity 5 communicating with the outside through a hole 6 provided in the wall of the pin 4. In this cavity 5 there is arranged a shank 7 around which there is wound a spring 8 and which is provided with a spherical head 9 projecting from the hole 6 due to the action of said spring 8. Around the pin 4 there is mounted a ring 10 provided on its inner perimeter with a number of notches 10' into each of which the spherical head 9 of the pin 7 can penetrate so as to establish for each notch a definite position of the ring 10, which position can, however, be changed by turning the ring 10 through the window 3 of the frame 1. The ring 10 is provided on its outer periphery with a number of equally spaced distinctive symbols 11 in a number equal to the number of notches 10'. Each dis-

2

tinctive symbol 11 is separated from the adjacent one by a transverse groove 12 which makes it possible easily to manipulate the ring 10 through the window 3 either by one's fingernail or by means of a suitable tool. The distinctive symbols 11 may be numbers, letters, colors or figures and may also possibly be engraved or in relief, so as to make possible a further distinction also by touch. The upper and lower edges of each window 3 are preferably provided with an inclined plane 12' which tapers toward the outer edge so as to serve as guide during the actuation of the indicator ring 10.

In order to effect the joinder of the individual frames as described above, to produce a synoptic board which can be varied and can therefore easily be kept up to date, and adapted to represent a given situation, each small frame is provided towards the outside with mutual joining members consisting respectively of protruding pegs 13 arranged diagonally and of an identical number of holes 14 arranged at the corners of the opposite diagonal, the pegs 13 and holes 14 being arranged in such a manner that they mutually fit into each other so as to prevent lateral movements of the small frames after they have been placed accurately alongside of each other. Other mutual connecting members consist of grooves 15, all arranged at the same distance from the corners of the frames so as to permit the introduction of strips 16 which are at least as long as two frames and which engage to the extent of one-half of their thickness in an underlying series of members and to the extent of the other half of their thickness in an overlying series, while extending over a number of members in length. The pegs 13 should preferably be arranged below the slots 15 so as to make it possible furthermore to connect adjacent members at right angles to each other as shown in Figs. 4 and 7, in which case the peg 13 will be located in the groove 15 of the contiguous member at right angles to it. In addition to the fitting elements shown in the drawing, there can possibly be used other elements, for instance, elements which project also into the faces adjacent to the front face, namely a half-way projection of two of the slots 15 arranged on one diagonal, while the other two slots 15 remain unchanged. In this way, there can be eliminated the strips 16.

The members should preferably have a length of side which is a multiple of the thickness of the member. This property makes possible connection at right angles, as shown in Figs. 4 and 6, in the manner that the end members 17 and 17' are connected by means of the pegs 13 which enter into the grooves 15 and serve to maintain in position also the intermediate members 18 and 18' which are not connected with the end member 19 of the vertical group of members arranged in a horizontal row.

The arrangement of the pegs 13 below the grooves 15 also makes possible the arrangement shown in Fig. 6, in which two groups of horizontal members 19 and 19' respectively are separated by two parallel rows 20—20' of members arranged at right angles with respect to the aforementioned members. The members 20 and 20' may have, on the plane of the synoptic board, a surface which does not bear any indication, and serve as filler members. In the same way, also in the groups 19—19' some members have the window 3 in visible position while other members have a blank face and serve as filler members.

In Fig. 8 there is shown a section of Fig. 2 along the plane A—B—C and it can be seen in this figure that the slot 15 does not have a horizontal bottom but, rather, its bottom is inclined towards one end, so that it is deeper at the part opposite the part at which the pin 13 is located. In this way, it is possible that the pin 13 of the adjacent member can position itself in the deeper part of the groove 15 instead of in the corresponding hole 14 located under the said groove.

3

It is obvious that the frames 1 as well as the turnable ring 10 may be made of any suitable material whatsoever. However, the invention contemplates that they be made of plastic material and that, in particular, the distinctive emblems carried by the turnable ring may be recessed in the material constituting the ring so as not to run the risk of being erased by the sequence of turning operations.

For the use of the device, after a given value has been imparted to each indicator symbol, for the synoptic board to be prepared, the members are distributed in a plane with the window 3 visible at top, blank filler members being inserted between the indicator members. The quantitative variations of the amounts to be represented are indicated by moving the turnable ring under the window until the desired value has been found.

I claim:

1. A synoptic board comprising duplicate parallelepiped blocks in self-supporting abutting engagement, each block having a circular chamber open at one side of the block and one edge of the block having a window opening into said cylindrical chamber, a circular member rotatably engaged in readily removable relation in said circular chamber and having informative indicia on the periphery of the same visible through the window in the edge of the block in differently rotated positions of the circular member in the block, means yieldingly holding the circular member in different rotatably adjusted positions to thereby expose selected indicia at the window in the block, means on the peripheral portion of the circular member exposed at the window engageable for effecting rotational adjustments of the circular member and interlocking means on opposed abutting faces of the blocks enabling the blocks to be set up in self-sustaining relation aligned in a row

4

with the windows therein aligned for exposure of the informative indicia on the circular members rotatably adjustable in said blocks.

2. The invention according to claim 1, in which the blocks have grooves registering in the assembled abutting relation of the blocks and holding strips seated in said grooves.

3. The invention according to claim 1, in which the blocks have inclined notches in the edges of the same and projecting pegs positioned those on one block to enter the inclined notch of an adjoining block.

4. The invention according to claim 2, in which the grooves of blocks in one row align with grooves in blocks in a superposed row and in which said strips project from the grooves of the blocks in one row into the companion grooves of the blocks of a superposed row.

5. The invention according to claim 1, in which each block has a closed wall at the back of the circular chamber therein so that in the abutting relation of the blocks the closed wall of one block will cover the open circular chamber of an adjoining block.

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