

Aug. 19, 1958

G. H. PAGE
PLANNING BOARD

2,847,777

Filed April 11, 1955

2 Sheets-Sheet 1

Fig. 1.

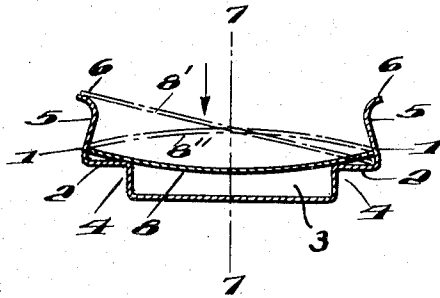
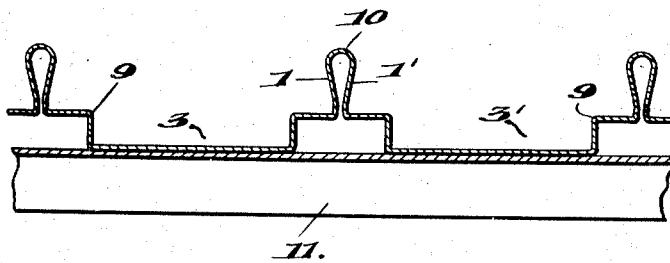


Fig. 2.



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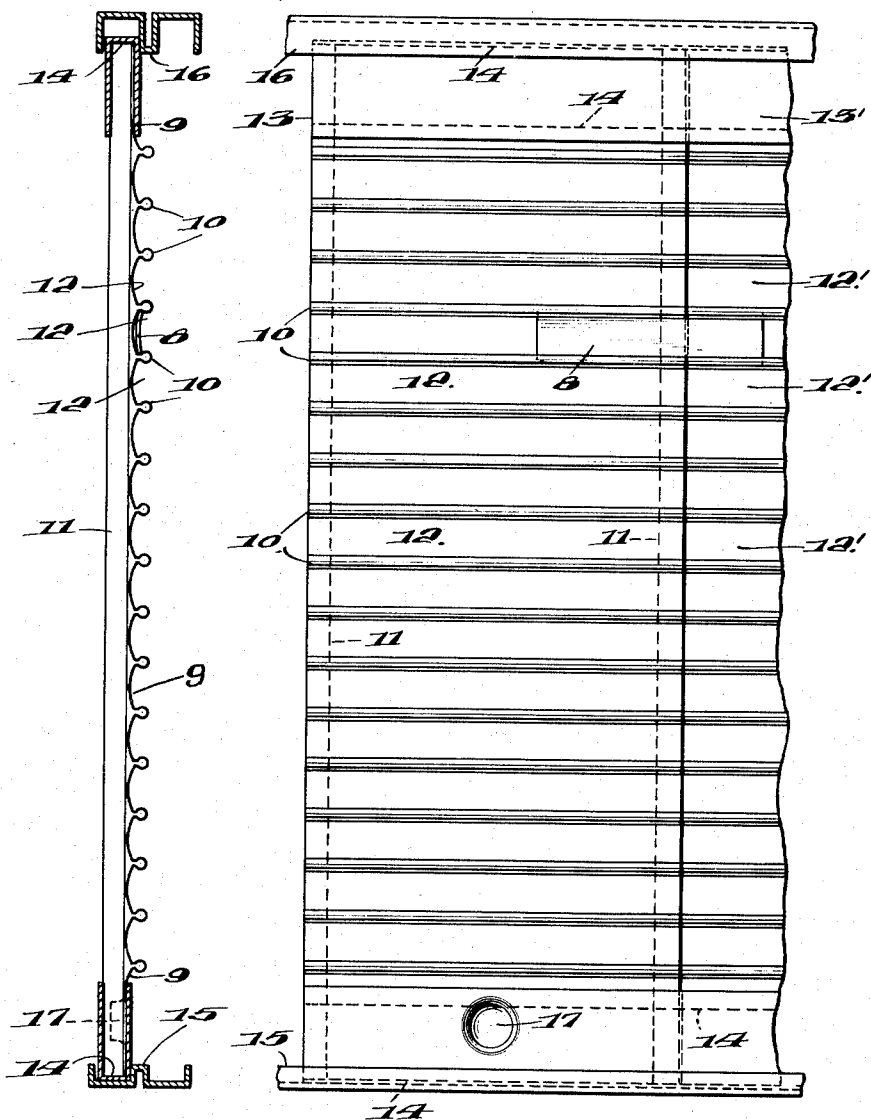


Fig. 3.

Fig. 4.

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PLANNING BOARD

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1 Claim. (Cl. 40—63)

The present invention relates to a planning board consisting of a panel with grooves on the front side of the board for securing planning strips, such as are used, in particular, for registers, graphic representations and for general planning purposes, such as production planning and the like.

The object of the invention is a planning board of the type mentioned in which the panel consists of a plurality of grooves disposed parallel to one another, each of said grooves having a cross-sectional profile widening dovetail-shaped towards the bottom of the groove as seen from the front of the boards so that a flexible planning strip, slightly wider than the groove, can be pressed into the groove from the front of the board and is then held securely between the two lateral flanks of the groove at the point of greatest groove cross-section, and in which in addition the bottom of each groove of the panel has adjacent to the point of greatest groove cross-section a depression of such a form that a planning strip held between the lateral groove flanks bridges said depression.

A further object of the invention is a planning board as specified above in which all the grooves of the panel have the same dovetail-shaped widened groove profile extended to the edges of the board and provided with means by which the board can be placed on sliding rails and can be displaced along said rails parallel to the direction of the grooves.

Finally a further object of the invention is a planning board in which the front of the board provided with the parallel grooves consists of a continuous sheet of metal which is formed in such a way to produce the grooves of dovetail-shaped cross-section in the panel, and in which furthermore the sheet of metal forming the front of the board is secured on sectional supports arranged at the rear of the board.

These and other objects of the planning board according to the present invention will be apparent from the following description when read in connection with the accompanying drawings, in which:

Fig. 1 illustrates on an enlarged scale the cross-sectional profile of the grooves preferably used in the planning board;

Fig. 2 illustrates the construction of the front of the board with several grooves disposed parallel to one another from a single sheet of metal provided with appropriate depressions;

Fig. 3 illustrates a front side of a complete planning board viewed in the direction of the grooves, a simplified cross-sectional profile compared with that of Figs. 1 and 2 being shown; and

Fig. 4 is a front view of the front of the board of a planning board corresponding to Fig. 3 with part of an adjacent board.

The grooves provided in the planning board for securing planning strips preferably have a cross-sectional profile according to Fig. 1. The cross-sectional profile is composed of the two lateral groove flanks 1 and the groove bottom 2. The groove bottom 2 is provided with a depres-

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sion 3 so that adequate shoulders 4 are formed on the lateral groove flanks 1. The two groove flanks 1 each have a bent-in portion, the groove having its narrowest cross-section at the point of the bent-in portions 5. Up to the groove mouth 6 the groove cross-section again progressively increases somewhat. From the point of the bent-in portion 5 towards the groove bottom, the groove cross-section increases dovetail-shaped. Apart from this the cross-sectional profile of the groove is with advantage made symmetrically with respect to a center line 7 disposed at right angles to the groove mouth 6. In the longitudinal direction of the groove, which in Fig. 1 is at right angles to the plane of the drawing, the groove has at all points the same cross-sectional profile. The groove with the cross-sectional profile shown in Fig. 1 may by way of example be made by milling or planing into a solid plate or board of wood, plastics or metal. For producing a complete panel, a larger number of grooves parallel to one another is then machined into a single board or plate.

A flexible planning strip with a width suited to the groove, and of any desired length, is first of all laid into the groove according to the broken line position 8'. The strip is pressed, for instance, with the finger nail in the direction of the arrow into the groove and then the finger is slid over the whole length of the strip in the direction of the grooves, i. e. in Fig. 1 at right angles to the plane of the drawing. After this the strip takes up the position 8 at all points in which position it bends slightly towards the depression 3, rests on the shoulders 4 and bridges the depression 3. The planning strip is thus securely held in the position 8 between the lateral groove flanks 1 and therefore in the place of the greatest cross-section of the dovetail-shaped cross-sectional profile in the groove. The planning strip thus inserted is securely held in any position of the groove, even with the groove mouth 6 facing downwards. A planning strip of not too great a length can, for instance, be displaced in the longitudinal direction of the groove with a finger nail without dropping out. With tougher planning strips the blunt end of a pencil may be placed in the depression 3 of the groove at right angles to the plane of the groove mouth 6 and the planning strip be displaced by means of the pencil resting flatly against one of its ends. In order again to remove the planning strip out of the groove the point of an object, such as a pencil, held obliquely to the direction of the grooves is inserted at one end of the planning strip between the latter and the bottom of the depression 3. Then the obliquely held pencil with its point foremost is pushed through. On pushing the pencil through, the planning strip temporarily takes up the position 8' and with slightly more bending can then easily be lifted out of the groove along the bent-in portion 5. Practically no damage to the edges of planning strips is done so that they can be used several times.

The cross-sectional profile of the groove shown in Fig. 1 has the further advantage that in addition a transparent protective strip can be placed in front of the inserted strip in a like manner, it can be displaced in the groove together with the planning strip behind it and be removed again out of the groove. Furthermore it is possible to place several partly overlapping planning strips in the grooves. The planning strips used may be of heavy paper or cardboard and, depending on the dimensions of the groove, have a width of between $\frac{1}{4}$ " and $\frac{3}{4}$ " with any desired length. However, as the width of the planning strips must fit the dimensions of the groove section exactly, the planning strips are preferably detached from appropriately perforated sheets.

A single groove must consist of a pressed or drawn sheet metal rail having a profile according to Fig. 1. Several sheet metal rails as specified arranged parallel

to one another and each secured individually to a support frame can be assembled to a panel of a planning board. However, it has proved of advantage to produce all the grooves of a panel according to Fig. 2 out of a single piece of sheet metal 9 provided with appropriate depressions. The groove flanks 1 and 1' adjacent to one another of each two consecutive parallel grooves flow directly over into each other in the region of their groove mouths so that between each two grooves a narrow rail 10 with rounded off rail head is produced. The sheet metal section 9 is secured to one or several profile supports 11 of U-shaped or L-shaped cross-section by spot-welding in the depressions 3, 3'. Preferably the profile supports 11 extend in a direction at right angles to the longitudinal direction of the grooves. A planning board produced in this manner is shown in Figs. 3 and 4. According to Fig. 3 a simplified form of the dove-tail-shaped cross-sectional profile of the grooves 12 compared with that of Figs. 1 and 2 is herewith shown. With this execution of the cross-sectional profile the depression in the groove bottom is produced by a considerable curvature of the groove bottom 2. The planning strips to be inserted in the grooves 12 have a width so that in their gripped position 8 they do not quite touch the curvature of the groove bottom 2, but may bridge the curvature of the groove bottom. All the grooves 12 of the planning board 13 (Figs. 3 and 4) are made of a single piece of sheet metal 9 which is held at the face ends of the two profile supports 11 by the caps 14. By means of the smooth caps 14 the planning board 13 can be placed on sliding rails 15, 16 and be displaced along the latter in the direction of and parallel to the grooves of the panel. In addition there is a hole 17 in the lower cap 14 serving as a grip opening by means of which the planning board 13 can be conveniently grasped and either lifted out of the sliding rails 15, 16 or inserted into the sliding rails 15, 16. As can be seen in Fig. 4 the grooves 12 are extended on either side to the edges of the board. The sliding rails 15, 16 each have a cross-sectional profile in the shape of a double U so that the planning board 13 can be inserted either in the rear U-shaped guides or in the front U-shaped guides of the sliding rails 15, 16. The sliding rails 15, 16 and the planning boards 13 and 13' respectively are further adapted in such a manner that a planning board resting in the front U-shaped guides can be slid past and in front of a planning board resting in the rear U-shaped guides of the sliding rails 15, 16.

With the execution of the planning boards described several boards 13, 13' can be placed side by side on the rails 15, 16 in the direction of the grooves. If the planning boards 13, 13' are identical then planning strips 8 (Fig. 4) can be inserted bridging the abutting facing edges of the two boards 13, 13'. In this case such a planning strip is secured by grip fit on the one hand partly in the groove 12 of the board 13 and on the other hand partly in the groove 12' of the abutting board 13'. If several planning strips have been placed over the board edges of two adjacent planning boards in the manner illustrated in Fig. 4, then the adjacent boards 13, 13' are held together positively enough by these planning strips that special coupling means between the adjacent boards 13, 13' are superfluous. In Fig. 4, only the left-hand part of the board 13' is shown for the sake of clarity.

In practical use the planning boards described show great advantages. If, for instance, in placing planning strips 8 on the planning board 13 the edge of the board has been reached then a further board 13' can simply be pushed up against the right-hand edge of board 13 and the planning strips 8 be continued without interruption on to board 13'. If also the board 13' is occupied wholly or partly a further board is added in a corresponding manner. The length of the grooves at one's disposal can be increased at will in this manner without having to place

all the necessary boards in the sliding rails 15, 16 from the start. If finally all the planning strips 8 of board 13 have been shifted on to the board 13' at the right thereof and on the following ones, as, for instance, may be the case with continuous production planning, the board 13 now empty is lifted out of the sliding rails 15, 16. Then the board 13' and all the others to the right thereof which are covered with planning strips are displaced to the left along the sliding rails 15, 16. The empty board 13 lifted out previously can now again be inserted in the sliding rails 15, 16 to the right of the boards previously displaced to the left, where it is ready for renewed use. In this way it is possible to carry on the planning, checking or graphic representation unrestrictedly with a limited number of planning boards without having to interrupt the planning strips 8.

Seen in the direction of the grooves 12 the planning boards 13, 13' may be of similar or varying width. In order furthermore to make it possible to lift out the planning boards in a direction towards the front (to the right in Fig. 3), the flanges of the bottom sliding rail 15 are shorter than the flanges of the top sliding rail 16. Finally a register planning board of similar type, but possibly narrower, can be inserted in the front guides of the sliding rails 15, 16, said forward planning board being freely displaceable in front of the planning boards placed in the rear U-shaped guides of the sliding rails. This and like alternatives also make use of the spirit of the invention as it is laid down in the appended claim.

I claim:

A planning board for removably supporting a plurality of flexible flat indicia strips comprising a flat supporting base, and a unitary facing sheet of uniform thickness secured to said supporting base, said sheet being formed to have a plurality of spaced, parallel rails projecting at right angles to the flat surface of said supporting base, each of said rails having a foot portion of substantially rectangular cross-section with right-angled shoulders at the upper corners thereof and an upper rail portion centrally located on said foot portion between said shoulder portions, said rail portion having angularly arranged walls extending upwardly and outwardly and terminating in a common rounded head having a width greater than the width of the upper rail portion at its point of junction with the rail foot portion, the distance between adjacent rail portions being slightly less than the width of the flexible strips, whereby one of said flexible planning strips may be pressed downwardly toward said base between two adjacent rails and may be supported therebetween in a concave bowed condition by adjacent shoulder portions and adjacent lateral walls of said upper rail portions.

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