Dec. 27, 1949 A. MORO 2,492,311

ANNOUNCEMENT PANEL

Filed Dec. 20, 1946 2 Sheets-Sheet 1

FIG. 2

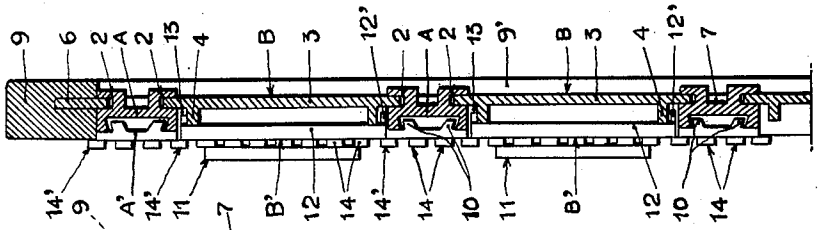
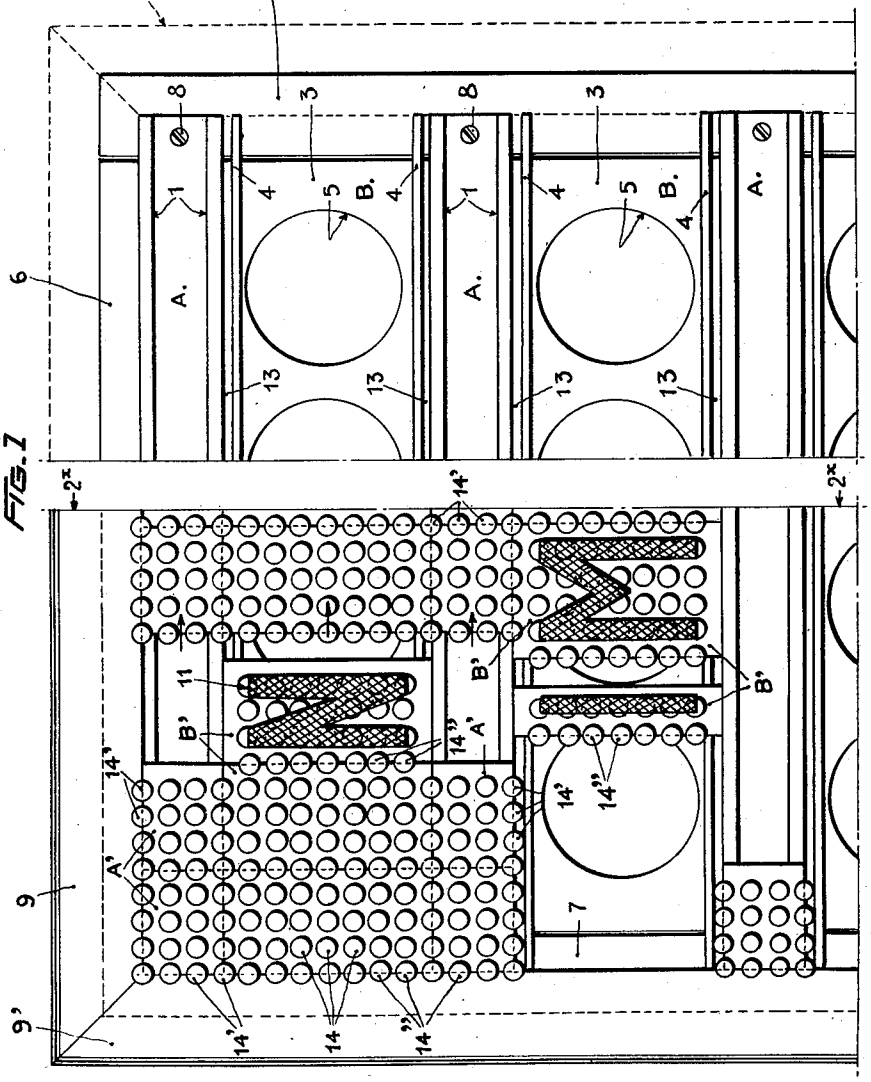


FIG. 1



INVENTOR
A. MORO
By Glenn Downing Rickle
Attys

Dec. 27, 1949 A. MORO 2,492,311

ANNOUNCEMENT PANEL

Filed Dec. 20, 1946 2 Sheets-Sheet 2

FIG. 3

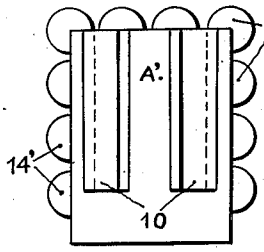


FIG. 5

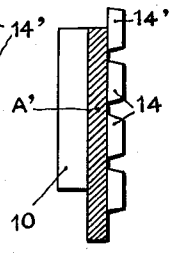


FIG. 6

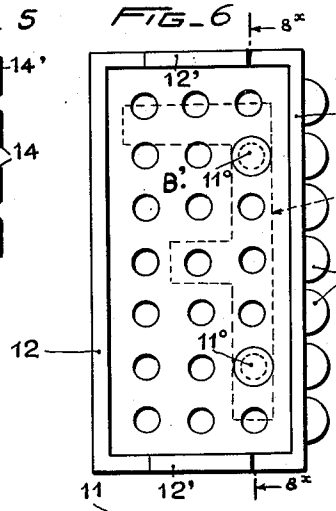


FIG. 8

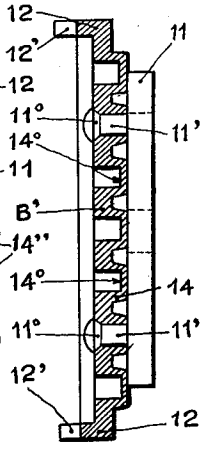
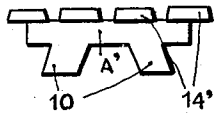
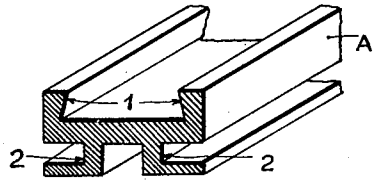


FIG. 4





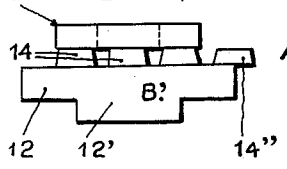


FIG. 7

FIG. 9

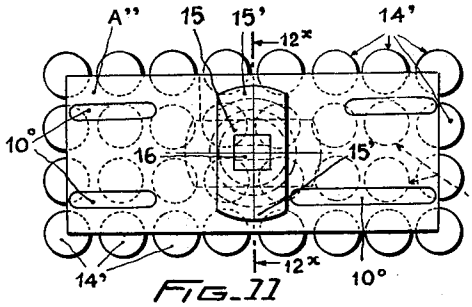


FIG. 11

FIG. 12

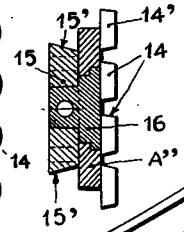
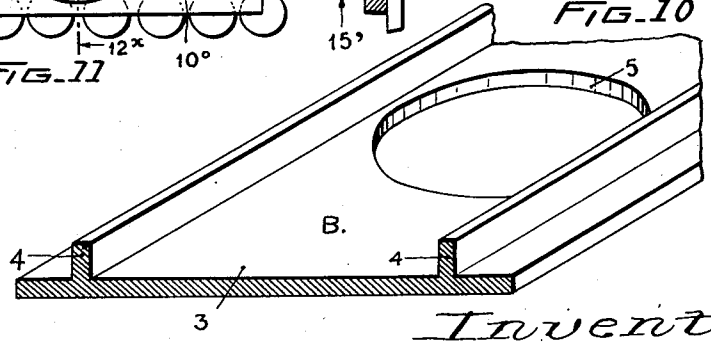


FIG. 10



Inventor
A Moro
By Glascock Downing Seibold
Attys

Patented Dec. 27, 1949 2,492,311

UNITED STATES PATENT OFFICE

2,492,311

ANNOUNCEMENT PANEL

Antonio Moro, Turin, Italy

Application December 20, 1946, Serial No. 717,542
In Italy February 9, 1946

9 Claims. (Cl. 40—140)

1

This invention relates to composite panels or composing sticks for movable type letters, and to type or letter units for use in connection therewith, for composing panels for announcements, advertisements or the like. This composing stick comprises a chase or frame formed by a plurality of profiled bars arranged horizontally and parallel to one another, the bars being of two different profiles alternating with one another, one capable of receiving and retaining small movable plates designed to form the spaces between the successive lines of lettering and the other designed to accommodate small plates, also movable, for supporting letters, locked in position by the space-line plates, while the junctions between the various plates forming what may be described as a mosaic are masked by covering means.

One form of construction of the invention is illustrated merely by way of example in the accompanying drawings, in which:

Figure 1 shows in front elevation the composing stick as a whole, with some of the little plates;

Figure 2 shows a cross-sectional elevation thereof on the line 2*x*—2*x* in Figure 1;

Figures 3, 4 and 5 show on a larger scale a space-line plate in rear elevation, end view and cross-sectional elevation respectively;

Figures 6, 7 and 8 are similar views of a letter-carrying plate;

Figures 9 and 10 show in perspective the two different kinds of profiled bars;

Figure 11 shows a larger scale, in rear elevation, a terminal locking plate for the series of space-line plates; and

Figure 12 shows a cross section thereof on the line 12*x*—12*x* in Figure 11.

The chase of the composing stick, as shown in Figures 1 and 2, consists of a plurality of profiled bars of the forms A and B, which are shown on a larger scale in Figures 9 and 10 respectively. The space-line bars of the form A have at the top a dovetail-shaped groove 1, and at the sides, near the bottom, two deep straight grooves 2 opposite to one another. The letter bars B, on the other hand, consist of a flat portion 3, with two projecting rails 4 arranged parallel to one another at a certain distance from the longitudinal edges of the flat bar, which is provided with apertures 5 in the area between the two rails 4. The bars B are coupled to the bars A by inserting the lateral edges of the bars B in the opposite lateral grooves 2 in the flanks of the bars A, to which the rails 4 are parallel, thus providing longitudinal grooves 13 between the rails 4 and the

2

sides of the bars A. The assembled device, which terminates at the top and bottom by two bars of the shape A, is supplemented above and below by blades 6 inserted in the grooves 2 that are still left unoccupied by bars, and at the sides by other blades, which are inserted in notches provided in the ends of the bars A, and fixed therein by means of screws 8. The completed chase is usually enclosed in a frame 9, 9', of wood for example, having at least one of its side bars 9' removable, with a view to the initial mounting, in the bars A, of the space-line plates, as will be more readily understood from what follows.

The little plates also are of two kinds, A' and B', and besides being shown in Figures 1 and 2, they are shown in detail on a larger scale in Figures 3, 4, 5 and in Figures 6, 7, 8 respectively. These plates are in general moulded under pressure from a phenolic and thermoplastic resin or other suitable plastic material of a similar nature. The small rectangular plates A', which are the ones that are to form the line-spaces, are adapted to be threaded into the dovetail-shaped groove 1 in the bars A by being slid in an axial direction, and with this end in view they are provided underneath with dovetail-shaped projections 10. The little rectangular plates B', on the other hand, are the ones that are to support the type 11, and are adapted to be applied flat upon the bars B, by introducing the tails 12' projecting from their lower perimeters 12 into the grooves 13 between the rails 4 and the flanks of the bars A, as shown in Figure 2. The plates A', on account of their dovetail engagement with the bars A, are securely held on the latter, and can only be removed by unthreading them in an axial direction. The plates B', on the contrary, can be removed by simply lifting them off their supporting seats. Means hereinafter described are however provided for locking plates of both kinds, A and B, in position, when once the composing has been completed.

The rectangular plates A' and B' are of such dimensions that when the composition has been finished they are in contact with one another end to end along their adjacent edges, and form a sort of mosaic. The junctions between the various elements A' B' of this mosaic, and between these elements and the frame 9, 9', are masked by providing the external plane surface of these elements with projecting bosses, in the form for instance of little discs 14, uniformly distributed over the said surface. Some of these bosses overhang certain edges of the contour of the elements, beyond which they project, so as to superpose

themselves on the surface of the adjacent elements, thus masking the junction lines, while at the same time they lock the elements in position. Thus each element A', along the edge adjacent to a companion element or to the frame 9', and along its parallel edges perpendicular to the first one, is provided with bosses 14' overhanging the said edges, as shown in Figures 1, 3, 4 and 5. Each element B' on the other hand is provided along only one of its edges adjacent to another element B' with bosses 14'', as shown in Figures 1, 6, 7 and 8. Thanks to this arrangement each element B' is locked in its place by the projecting bosses 14' of the adjacent elements A', and also by the bosses 14'' of the adjacent element B', which prevent it rising from the plane of the chase, while at the same time leaving it free to slide axially along the grooves 13.

At the end of each row of space-line plates A' is ranged a special terminal locking plate A'', shown in detail on a larger scale in Figures 11 and 12. This locking plate A'', which is not provided underneath with the dovetail-shaped projections 10 of the plates A', but merely with alignment projections 10°, is not engaged by axial sliding in the dovetail-shaped groove 1 of the bars A, but is applied flat thereto on these bars, as the plates B' are applied to the bars B. The plate A'' is provided at the rear with a revolving bolt 15, with its end 15' bevelled, rigid with a disc 16 rotatably mounted in the body of the plate and adapted to be controlled from the outside by means of a key. The locking plate A'' presses upon the bar A at the end of the row of plates A' while the bolt 15 is in the position marked in dotted lines in Figure 11. Then, upon rotating the disc 16 through 90 degrees, the bolt 15 is carried into the position shown in full lines in Figures 11 and 12. The ends 15' of the bolt then engage in the dovetail-shaped groove 1 in the bar A, and the plate A'' remains locked in place, together with all the plates A' in the line.

The type characters 11, which may also be made of a phenolic and thermoplastic resin or other plastic material, are fixed flat upon the bosses 14 of the plates B' by means of shanks 11' with which the type characters are provided at the back. These shanks 11', threaded into holes 14° provided in each plate in correspondence with the bosses 14, are then up-set or riveted over hot at their ends, thus forming a retaining head 11°.

It is not essential that the plates B' should all be of the same breadth. Thus for example for the letter "I" and for the numeral "1" a minimum breadth is sufficient, but for "M" or "W" a much greater breadth is required, and for other letters and numerals an intermediate breadth. All this will be clear from Figure 1.

To effect the composition, and bearing in mind that the space-line plates A' always remain in position on the chase, all that is necessary is to remove the terminal locking plates A'', shown in Figures 11 and 12, in order to provide a clear space for applying, one at a time, plates B' with the type characters relating thereto, then sliding them axially along the bars B until they completely fill all the lines. When the composing has been completed, the plates A'' are replaced, and the entire mosaic remains locked. If it is desired to remove or change one or more of the type characters of the composition, first the locking plates A'' of the space-lines adjacent to the line in question are removed, and then the plates A' and also the plates B' are displaced by sliding them towards the right so as to isolate the plate B' bearing the type character to be changed, for instance the "N" in Figure 1. When the removal and substitution have been effected the entire assembly of plates is closed up again, and the plates A'' are replaced.

With the device described above it is possible to set up announcement or advertisement panels which can be changed or adjourned as required, and which present an agreeable appearance, with great clearness and legibility.

It will be readily understood that the invention is not restricted to the particular arrangements hereinbefore described and illustrated, but that modifications may be made therein without going outside the ambit of the invention.

I claim:

1. A composite announcement panel, comprising: a plurality of parallel horizontal profiled space-line bars, a plurality of parallel horizontal profiled letter-carrying bars alternating with the space-line bars, some of the bars being formed with grooves in their upper and lower edges in which the lower and upper edges of other bars engage, space-line plates adapted to be removably mounted on the space-line bars, letter plates adapted to be removably mounted on the letter-carrying bars and to be locked in position by the space-line plates, characters such as letters attached to the letter plates, and means for masking the joints between the various plates.

2. A composite announcement panel, comprising: a plurality of parallel horizontal profiled space-line bars, each of the space-line bars being formed with a horizontal groove of dovetail-shaped cross section in its front surface, and with grooves in its upper and lower edges, space-line plates adapted to be removably mounted on the space-line bars, each of the space-line plates being formed with dovetail-shaped projections on the back, adapted to be slid endwise into the dovetail-shaped grooves in the space-line bars, a plurality of parallel horizontal profiled letter-carrying bars alternating with the space-line bars, the edges of the letter-carrying bars engaging in the upper and lower grooves of the space-line bars, letter plates adapted to be removably mounted on the letter-carrying bars and to be locked in position by the space-line plates and characters such as letters attached to the letter plates.

3. A composite announcement panel, comprising a plurality of parallel horizontal profiled space-line bars, each formed with grooves in its upper and lower edges, a plurality of parallel horizontal profiled letter-carrying bars alternating with the space-line bars, the lower and upper edges of the letter-carrying bars engaging in the upper and lower grooves of the space-line bars, two horizontal rails on the front of each letter-carrying bar, leaving a substantial plane area between them, but spaced so far from the upper and lower edges of the bar that when these edges are engaged in the grooves of the space-line bars a groove-like space is left between each of the said rails and the adjacent edge surface of the space-line bar, space-line plates adapted to be removably mounted on the space-line bars, letter plates adapted to be removably mounted on the letter-carrying bars and to be locked in position by the space-line plates, projections on the rear of the letter plates adapted to be engaged in the said groove-like spaces, and characters such as letters attached to the letter plates.

4. A composite announcement panel, compris-

ing: a plurality of parallel horizontal profiled space-line bars, a plurality of parallel horizontal profiled letter-carrying bars alternating with the space-line bars, some of the bars being formed with grooves in their upper and lower edges in which the lower and upper edges of other bars engage, space-line plates adapted to be removably mounted on the space-line bars, letter plates adapted to be removably mounted on the letter-carrying bars, characters such as letters attached to the letter plates, and bosses uniformly distributed over the front surfaces of the space-line plates and of the letter plates, some of these bosses extending beyond the edges of the said plates so as to overlap the edges of adjacent plates, thus masking the junctions between the plates and locking the plates together.

5. A composite announcement panel, comprising: a plurality of parallel horizontal profiled space-line bars, a plurality of parallel horizontal profiled letter-carrying bars alternately with the space-line bars, some of the bars being formed with grooves in their upper and lower edges in which the lower and upper edges of other bars engage, space-line plates adapted to be removably mounted on the space-line bars, letter plates adapted to be removably mounted on the letter-carrying bars, characters such as letters attached to the letter plates, bosses on the front surfaces of the space-line plates, extending beyond the upper and lower edges and one vertical edge of each plate so as to overlap the edges of the letter plates above and below them and the adjacent edge of one companion space-line plate, and bosses on the front surfaces of the letter plates, extending beyond one vertical edge of each plate so as to overlap the adjacent edge of one companion letter plate.

6. A composite announcement panel as claimed in claim 4, wherein the bosses are in the form of discs.

7. A composite announcement panel, comprising: a plurality of parallel horizontal profiled space-line bars, a plurality of parallel horizontal profiled letter-carrying bars alternating with the space-line bars, some of the bars being formed with grooves in their upper and lower edges in which the lower and upper edges or other bars engage, space-line plates adapted to be removably mounted on the space-line bars, letter plates adapted to be removably mounted on the letter-carrying bars and to be locked in position by the space-line plates, characters such as letters

attached to the letter plates, terminal plates each adapted to be applied flat to a space-line bar, and anchoring means for releasably securing the terminal plate in position at the end of the space-line bar, and thus locking the space-line plates already mounted thereon.

8. A composite announcement panel, comprising: a plurality of parallel horizontal profiled space-line bars, each of the space-line bars being formed with a horizontal groove of dovetail-shaped cross section in its front surface, and with grooves in its upper and lower edges, space-line plates adapted to be removably mounted on the space-line bars, each of the space-line plates being formed with dovetail-shaped projections on the back, adapted to be slid endwise into the dovetail-shaped grooves in the space-line bars, terminal plates each adapted to be applied flat to a space-line bar, movable dovetail-shaped anchoring means releasably engaging in the dovetail-shaped groove of a space line bar for securing the terminal plate in position at the end of the space-line bar, and thus locking the space-line plates already mounted thereon, a plurality of parallel horizontal profiled letter-carrying bars alternating with the space-line bars, the edges of the letter-carrying bars engaging in the upper and lower grooves of the space-line bars, letter plates adapted to be removably mounted on the letter-carrying bars and to be locked in position by the space-line plates, and characters such as letters attached to the letter plates.

9. A composite announcement panel comprising: a plurality of parallel horizontal profiled space-line bars, a plurality of parallel horizontal profiled letter-carrying bars alternating with the space-line bars, some of the bars being formed with grooves in their upper and lower edges in which the lower and upper edges of other bars engage, space-line plates adapted to be removably mounted on the space-line bars, letter plates adapted to be removably mounted on the letter-carrying bars and to be locked in position by the space-line plates, characters such as letters, and projections on the rear of the characters, each of the letter plates being formed with apertures to accommodate the projections at the rear of the characters, and each character being firmly secured to a letter plate by inserting its projections in the said apertures and forming rivet-like heads on the projections.

ANTONIO MORO.

No references cited.