

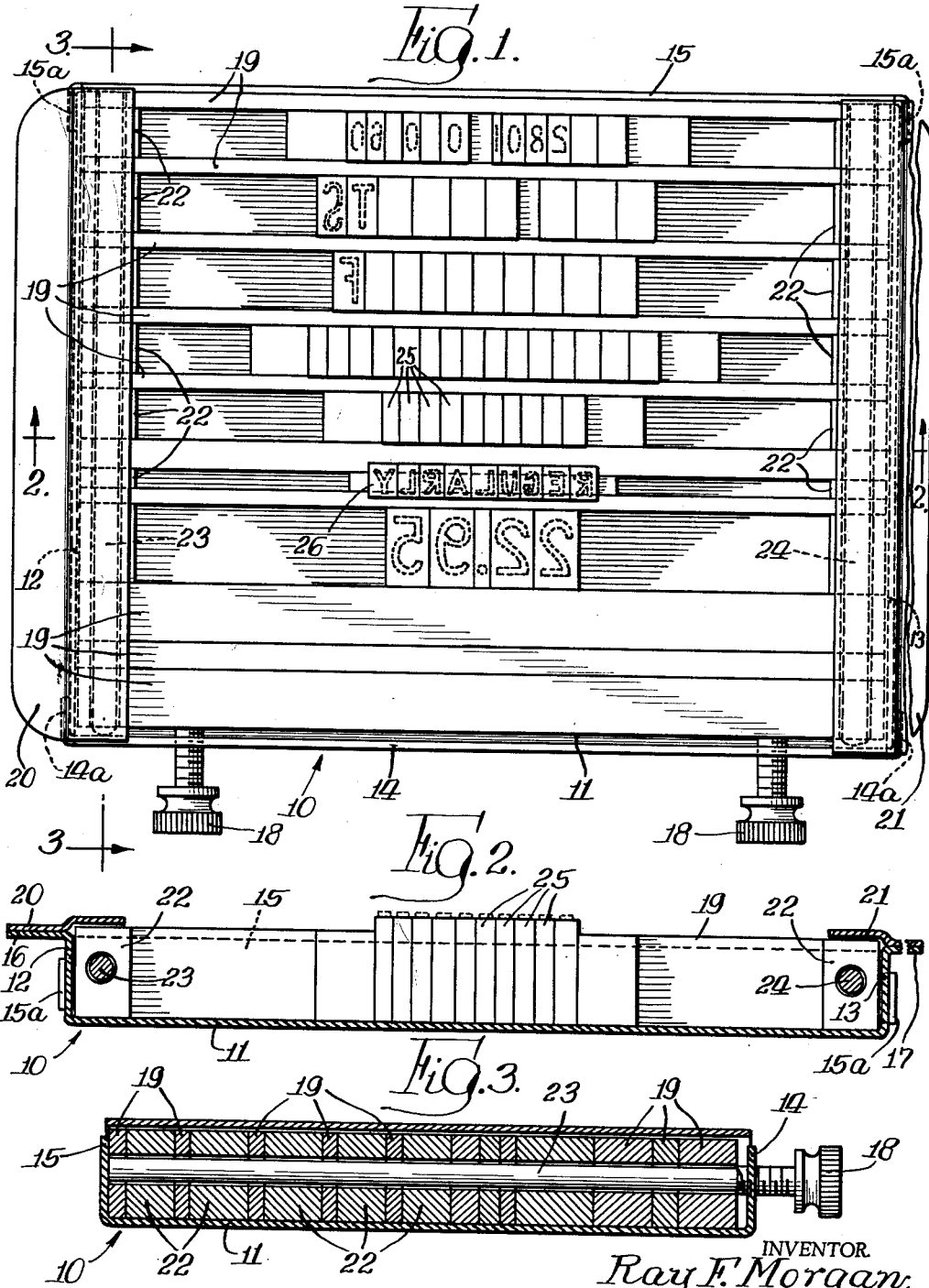
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R. F. MORGAN

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LAYOUT CHASE

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INVENTOR  
*Ray F. Morgan*  
BY *Brown, Jackson, Bortels & Brown*  
*Attys.*

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LAYOUT CHASE

Ray F. Morgan, Northfield, Ill., assignor to The Morgan Sign Machine Co., Chicago, Ill., a corporation of Illinois

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My present invention relates generally to type chases and more particularly to a layout chase for sign printing machines.

Conventionally, in preparing signs in small quantities, type characters displaying the desired letters and numbers are suitably assembled in the horizontal bed of a hand operated sign printing machine or press. A hand ink roller is normally used to apply ink to the type characters, and after a sign card has been placed over the inked characters are usually assembled within and removed from the sign card to effect imprinting of the card.

In the use of such sign printing machines, type characters are usually assembled with and removed from the bed of the machine on an individual character or individual line basis. This procedure is extremely inconvenient and time consuming, particularly when a series of signs with a uniform message pattern, but with different message details, are being printed in succession.

It is an object of my present invention to provide a layout chase, particularly adapted for use in connection with sign printing machines, in which the layout of the sign, that is, the type size for each line and the spacing between lines, is predetermined, so that a series of signs, differing in details but having a uniform format, appearance and composition, may be conveniently printed in succession, simply by changing type characters within each line where necessary between printings.

In accomplishing this object, I propose to provide a layout chase comprising a rectangular frame, a plurality of parallel spacer slugs arranged within the frame, quads disposed intermediate of the spacer slugs at the ends thereof, and elongated means transversely intersecting the spacer slugs and quads for maintaining them in assembled relation. Type characters displaying the desired letters and numbers are adapted to be inserted between successive spacer slugs intermediate of the quads, and the type characters, spacer slugs and quads are adapted to be fastened or locked within the frame of the chase. With this chase arrangement, type characters may be easily substituted in the form during the printing of a series of different signs, without affecting uniformly in the layout of each sign.

It is another object of my present invention to provide a layout chase, as described, wherein the frame thereof has an enclosed bottom portion for supporting type and slugs, thus permitting type characters to be disposed within and removed from the bed of a sign printing machine quickly and conveniently as an assembled group.

It is a further object of my present invention to provide a layout chase, as described, wherein inwardly directed flange means are arranged along the tops of two opposing sides of the frame and overlie the ends of spacer slugs for retaining the latter within the frame.

It is a still further object of my present invention to provide a layout chase, as described, wherein outwardly directed flange means are arranged along the tops of two opposing sides of the frame to facilitate grasping and transporting of the frame.

Now, in order to acquaint those skilled in the art with the manner of constructing and utilizing devices in accordance with the principles of my present invention, I shall describe in connection with the accompanying drawing, a preferred embodiment of my invention.

In the drawing:

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FIGURE 1 is a plan view of the layout chase of my present invention with type characters assembled therein;

FIGURE 2 is a vertical sectional view of the layout chase of FIGURE 1, taken substantially along the line 2—2 in FIGURE 1, looking in the direction indicated by the arrows; and

FIGURE 3 is a vertical sectional view of the layout chase of FIGURE 1, taken substantially along the line 3—3 in FIGURE 1, looking in the direction indicated by the arrows.

Referring now to the drawing, there is indicated generally by the reference numeral 10 the layout chase of my present invention. The chase 10 comprises a horizontal lower wall or bottom portion 11, vertical side walls 12 and 13, and vertical front and rear walls 14 and 15. The described elements serve to define a rectangular frame having an enclosed bottom portion. As used herein, the term rectangular frame includes a square frame. To add rigidity to the layout chase 10, the front and rear walls 14 and 15 may be formed, respectively, with projecting end portions 14a and 15a that may be bent about and suitably secured, as by welding, to the outer face of the side walls 12 and 13. To facilitate grasping and transporting of the layout chase, outwardly directed side flanges 16 and 17 are preferably provided along the top edges of the side walls 12 and 13. In the fabrication of the layout chase 10, the bottom wall portion 11, side walls 12 and 13, front and rear walls 14 and 15, and side flanges 16 and 17 may be integrally formed, as by stamping, from a single sheet of metal.

The bottom portion 11 of the layout chase 10 serves to support type and slugs arranged within the confines of the side walls 12 and 13 and front and rear walls 14 and 15. To make type and slugs fast within the frame of the chase 10, suitable securing means, for example in the form of thumb screws 18, are threaded through the front wall 14. A layout chase which is constructed in the manner described, and which serves to support type and slugs as noted, permits type characters quickly and conveniently to be disposed within and removed from the bed of a sign printing machine as an assembled group.

Arranged within the layout chase 10 are a plurality of parallel spacer slugs 19. Cooperatively related the ends of the spacer slugs 19 are flange means 20 and 21 arranged along the top edges of the side walls 12 and 13. The flange means 20 and 21 preferably comprise outwardly directed portions which are suitably secured, as by welding, to the outwardly directed flanges 16 and 17, and inwardly directed portions which overlie the ends of the spacer slugs 19 for retaining the latter within the layout chase 10.

Disposed intermediate of a preselected number of the spacer slugs 19 at the ends thereof are quads 22. Aligned transverse openings are formed in the corresponding ends of the spacer slugs 19 and in the associated quads 22 immediately below the inwardly directed portions of the flange means 20 and 21. Arranged within these openings are elongated means in the form of parallel rods 23 and 24. The rods 23 and 24, which intersect the slugs 19 and quads 22 and extend between the front and rear walls 14 and 15, serve to maintain the spacer slugs 19 and quads 22 in assembled relation.

Type characters displaying the desired letters and numbers are adapted to be inserted between successive spacer slugs 19 intermediate of the pairs of quads 22. Each line may be comprised of individual pieces of type 25 for each letter and space, or a logotype, or a Linotype slug. Linotype slugs may be cast with character faces of the same size as the body of the slug, or may be cast, as shown at 26, with character faces that overhang one or more of the adjacent spacer slugs 19. Normally, the

body of type in each line will be the same thickness as the quads 22 in the corresponding line. However, those skilled in the art will readily recognize that type of less thickness than the corresponding quads 22 in the same line may be used with the suitable addition of spacing leads.

By maintaining the spacer slugs 19 and quads 22 in assembled relation, a constant predetermined spacing is maintained between the separated spacer slugs 19. The measure of space between any two spacer slugs 19 and the ratio of the spaces between successive spacer slugs 19 is determined by the relative thickness of the corresponding pairs of quads 22 between the spacer slugs 19. With this predetermined spacing relationship, a series of signs having a uniform format and appearance may be conveniently printed in succession. That is, with the type size for each line and the spacing between each line being predetermined, a series of signs with a uniform message pattern thereon, but differing in message details, may be conveniently and quickly printed successively in a hand sign printing machine simply by changing or substituting type characters within each line where necessary between printings. In the fabrication of the layout chase 10, it will be understood that the thickness of the several pairs of quads 22 will be selected to accommodate a compatible ratio of type sizes and to meet the requirements of ultimate users.

Now while I have shown and described what I believe to be a preferred embodiment of my present invention, it will be understood by those skilled in the art that various modifications and rearrangements may be made therein without departing from the spirit and scope of my invention.

I claim:

1. A layout chase comprising a rectangular frame having an enclosed bottom portion for supporting type and slugs, a plurality of parallel spacer slugs arranged within and extending between two of the sides of said rectangular frame, flange means along the top of said two sides of said frame directed inwardly and overlying the ends of said spacer slugs for retaining the latter within the frame, quads disposed between successive spacer slugs at each of the ends thereof whereby spaces are defined between the successive spacer slugs intermediate of the quads for receiving the bodies of type characters, a pair of parallel rods one each underlying each of said flange means and extending transversely through said spacer slugs and said quads for maintaining the spacer slugs and quads in assembled relation, and means for making the slugs and type fast within the frame.

2. The layout chase of claim 1 wherein flange means are provided along the top of said two sides of said frame directed outwardly to facilitate grasping and transporting of the frame.

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