P. T. DODGE.

LINOTYPE MACHINE.

APPLICATION FILED DEC. 31, 1904.

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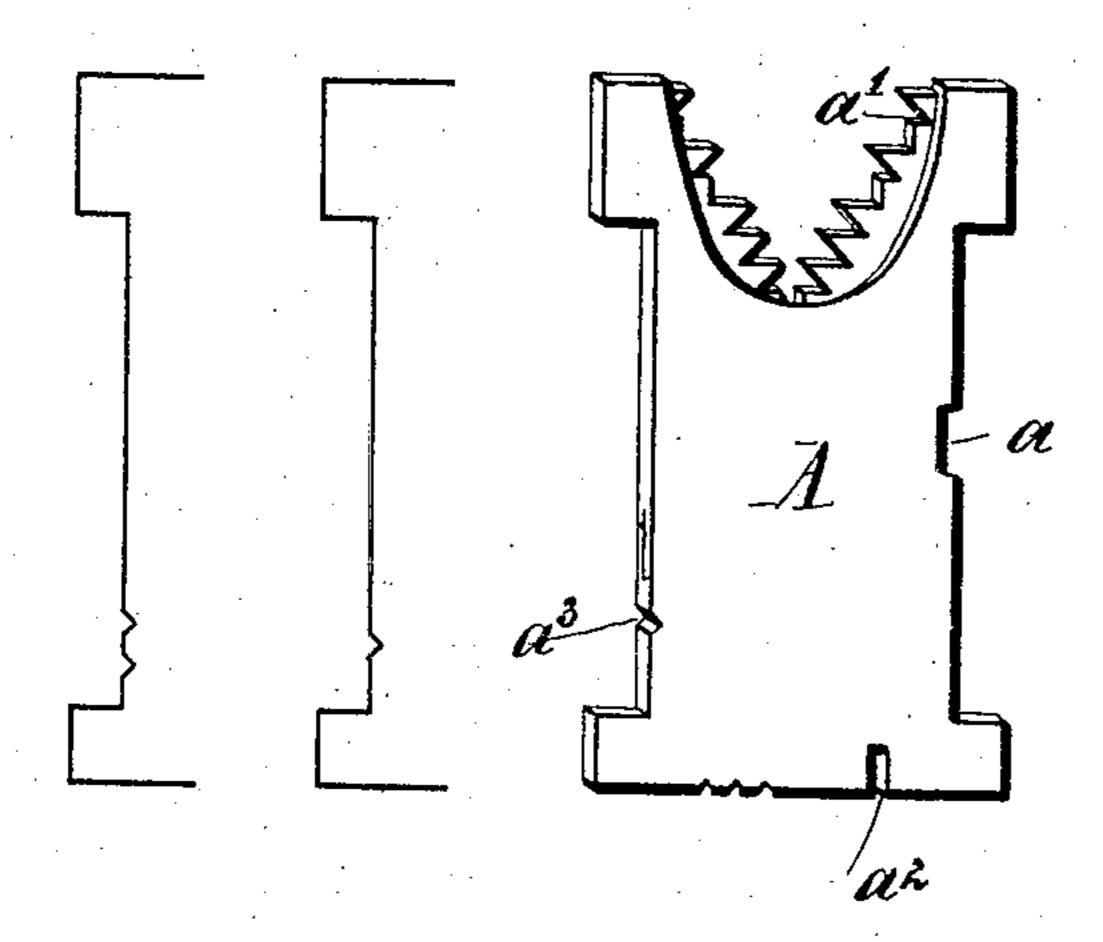
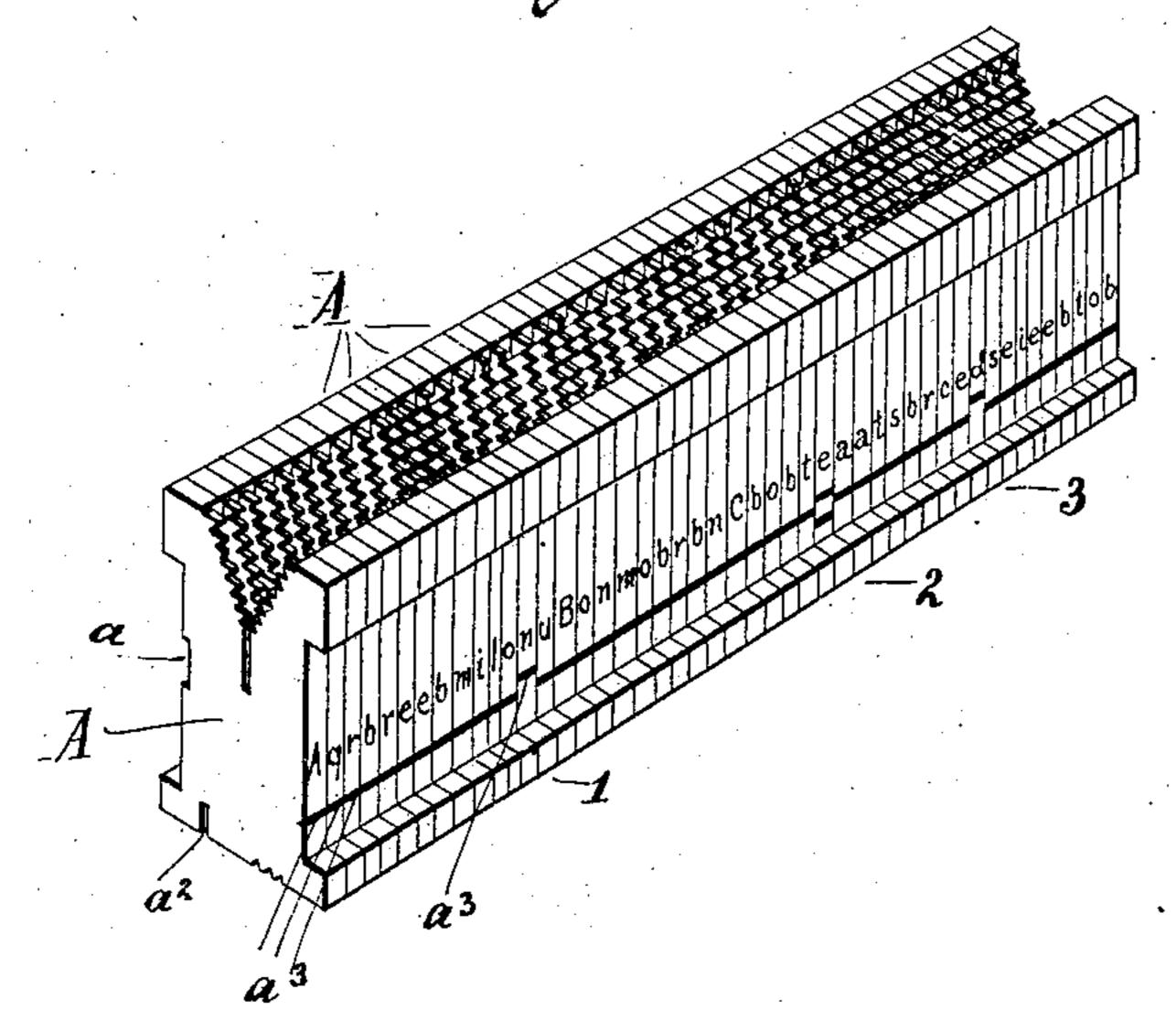


Fig. 2.



Witnesses D. Pehi-Palmedy

Inventor

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## United States Patent Office.

PHILIP T. DODGE, OF BROOKLYN, NEW YORK, ASSIGNOR TO MERGEN-THALER LINOTYPE COMPANY, A CORPORATION OF NEW YORK.

## LINOTYPE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 786,199, dated March 28, 1905.

Application filed December 31, 1904. Serial No. 239,117.

To all whom it may concern:

Be it known that I, Philip T. Dodge, of Brooklyn, county of Kings, and State of New York, have invented a new and useful Im-5 provement in Linotype-Machines, of which

the following is a specification.

My invention relates to matrices employed in the Mergenthaler linotype-machine, such as shown in Letters Patent No. 559,000 and 10 analogous machines, wherein the matrices representing individual characters are selected successively and assembled in line in the order in which their characters are to appear in print, so that the composed line may 15 be used in connection with a slotted mold to form the type characters on the edge of a magazines of these machines are adapted to | ing a composed line of matrices, three of receive a great variety of fonts of matrices 20 representing type characters of different sizes and styles. As the matrices are of substantially the same form externally, it sometimes happens that matrices of a wrong font will find their way into the machine, the re-25 sult being the production on the slugs of improper or inharmonious characters, the existence of which is not discovered until a proof has been pulled, at which time it is too late to make correction.

30 It is a common practice to provide the matrices with large notches in the lower end, differently located for faces of different sizes, as six-point, eight-point, &c., and to provide the machine with font-distinguishers coöper-35 ating with the notches to permit the passage of the proper matrices and to prevent the passage of others. In this manner the passage of matrices representing characters of different sizes into the magazine is prevented; but it 40 does not prevent the passage into the magazine of matrices bearing faces of the same size but different styles—for example, a sixpoint light-face and a six-point bold-face.

The aim of my invention is to enable the 45 operator during the composition of the matrix-line to detect instantly the presence in the line of an improper or inharmonious character; and to this end it consists in pro-

viding the matrices in that edge which is exposed to the view of the operator during 50 composition with transverse lines or marks indicating by their different locations the various faces, the marks for a given face having one and the same location, so that when the matrices are assembled side by side in 55 line their face-distinguishing marks will aline or register. If a matrix of improper face finds its way into the line, its distinguishing-mark will stand out of line with the others and instantly attract the attention of 60 the operator.

Referring to the drawings, Figure 1 is a side view illustrating matrices of different faces provided with my face-distinguishing printing-slug or linotype cast therein. The marks. Fig. 2 is a perspective view show- 65

which are of wrong font.

The matrices A are of the form commonly employed in commercial linotype-machines, consisting each of a flat plate of brass or like 7° material having in one edge a character or matrix proper "a," in the upper end a series of distributing-teeth a', and in the lower end the usual font-distinguishing notch  $a^2$ .

In carrying my invention into effect I pro- 75 vide the matrix in the front edge—that is to say, the edge opposite that containing the character "a"—with one or more transverse notches  $a^3$ , having a distinctive location for each face of a given size. In other words, 80 six-point matrices carrying a light-face character will have the notch in a different location from other six-point matrices carrying black faces, italics, or characters of other styles. When the proper matrices—that is, 85 matrices of the same face—are assembled side by side, their face-indicating notches  $a^3$ will register and form a bold continuous line in front of the operator. If a matrix of improper face finds its way into the line, its 90 mark will stand out of line or out of register with those in the other matrices, as indicated at the points 1, 2, and 3 in Fig. 2. This break in the continuity of the line will be instantly distinguished by the eye and will at- 95 tract the attention of the operator to the fact

that the matrices must be removed from the machine.

It is to be noted that the face-distinguishing notches of my invention are not to be confounded with the font-distinguishing notches  $a^2$  and that one does not take the place of the other. By means of the font-distinguishing notches and the coöperating parts of the machine the passage of characters of different sizes to one line is mechanically prevented. By means of the face-distinguishing notches the operator is enabled to instantly detect the presence in the line of matrices bearing improper faces and which are not arrested by the font-distinguishing devices.

Having described my invention, what I claim is—

1. Matrices for a linotype-machine, provided in the exposed edges with face-distin-

guishing notches, substantially as described and shown.

2. A matrix for a linotype-machine, provided in one edge with a matrix character "a," and in the opposite edge with a face-in- 25 dicating mark  $a^3$ .

3. The matrix for a linotype-machine, provided with the usual matrix character "a," in one vertical edge, distributing-teeth at the upper end, a font-distinguishing notch  $a^2$  in the lower end, and a face-distinguishing notch  $a^3$ .

In testimony whereof I hereunto set my hand, this 30th day of December, 1904, in the presence of two attesting witnesses.

PHILIP T. DODGE.

Witnesses:

JOHN F. GEORGE, M. A. DRIFFILL.