No. 766,037.

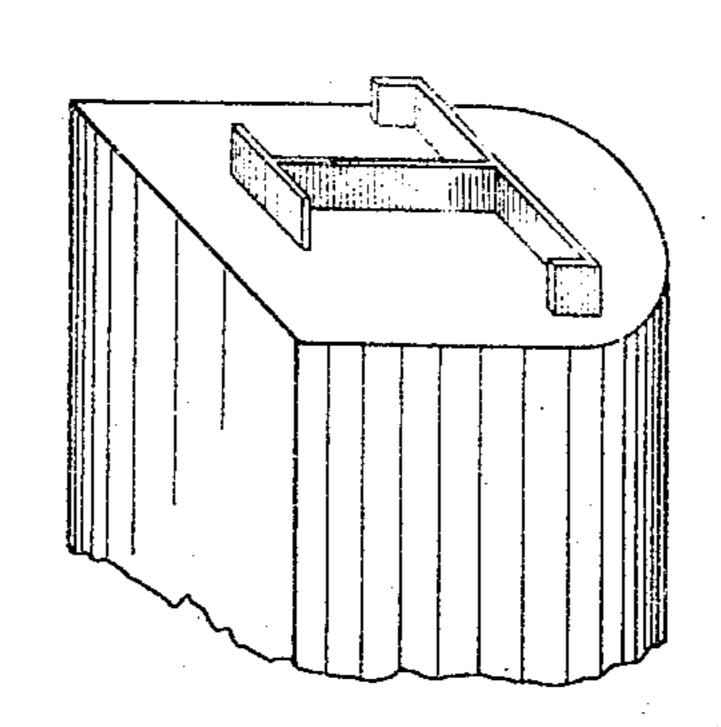
PATENTED JULY 26, 1904.

C. B. HERRMANN,

METHOD OF PRODUCING STEREOTYPE PLATES FOR PRINTING PURPOSES.

APPLICATION FILED MAR. 28, 1904.

NO MODEL.



MITNESSES A. Lee Helms Walton & Coleman

INVENTOR

Carl Borro Herrmann

By

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his ATTORNEY

## United States Patent Office.

CARL BORRO HERRMANN, OF BERLIN, GERMANY.

METHOD OF PRODUCING STEREOTYPE-PLATES FOR PRINTING PURPOSES.

SPECIFICATION forming part of Letters Patent No. 766,037, dated July 26, 1904.

Application filed March 28, 1904. Serial No. 200,452. (No specimens.)

To all whom it may concern:

Beit known that I, Carl Borro Herrmann, whose post-office address is No. 7 Meinecke-strasse, Berlin, Kingdom of Prussia, German 5 Empire, have invented a new and useful Improved Method of Producing Stereotype-Plates for Printing Purposes; and I do hereby declare that the following is a full, clear, and exact description of my invention, which will enable others skilled in the art to which it appertains to make and use the same.

The usual method of producing stereotypeplates consists in taking a mold from the composed types, from which mold the plate is cast. 15 It has also been tried to impress the types directly in the prepared material by aid of impressing-machines, and to thus prepare matrices for casting therefrom the stereotypeplates. This method has, however, failed, be-20 cause it was impossible to obtain impressions of uniform depth. Narrow letters, such as "i" or "t," will notwithstanding all precautions taken penetrate deeper into the material than broad letters, such as "M" or "W," 25 on account of the less resistance they meet with, and consequently the face of the letters on the plate cast from such a matrix will not be in a perfect plane.

The object of my present invention is to 30 produce by the aid of a keyboard impressionmachine a matrix from which the stereotypeplate is cast, which after a very simple additional treatment presents the face of all letters in a perfectly even plane, so as to allow 35 a good impression to be taken therefrom; and the invention consists in so making the impressions in the material that the portions projecting from the plate cast therefrom and which form the types from which the impres-4° sion is taken present perfectly vertical faces, and then to shave off the top surfaces of the letters, so that they all project in a perfectly uniform height from the base of the plate. To this purpose I use on the type-bars of my 45 impression-machine, which machine for itself forms no part of the present invention, but which may be somewhat similar to a type-

writing machine, types the heads of which have true vertical sides for a distance from the base that approximately corresponds to 50 the depth to which the type on the key of the machine being struck penetrates into the material, so that the whole depth of the impression made has the accurate form of the letter.

It may in some cases be of advantage to 55 sharpen the very top of the types for facilitating the penetration into the material; but I found this not to be necessary. Anyhow if types are used with sharpened and pointed top faces the plate cast from the material will 60 neverthless present all types in proper form when the top surface of the same is slightly shaved off.

The material into which the impressions are made may be good cardboard, such as 65 press-board.

On the hereto-annexed drawing, the single figure of which is a perspective view of the upper portion of a type-bar provided with a type having the characteristics hereinbefore 70 noted, I have illustrated by way of example and on enlarged scale the kind of type I use in my impression-machine. If this type is impressed into the material, a cast taken therefrom will be in a shape absolutely identical 75 therewith, and it is evident that the top surface may be shaved or ground even for some distance without in any way changing the form of the letter.

What I claim as my invention is—

The method of producing stereotype-plates, which consists in making, in a suitable material, impressions, adapted to cast therefrom a plate, with types having vertical side faces, casting from the mold so formed the said plate, 85 and shaving off the upper face of the types thereon, essentially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CARL BORRO HERRMANN.

Witnesses:

HENRY HASPER,
WOLDEMAR HAUPT.