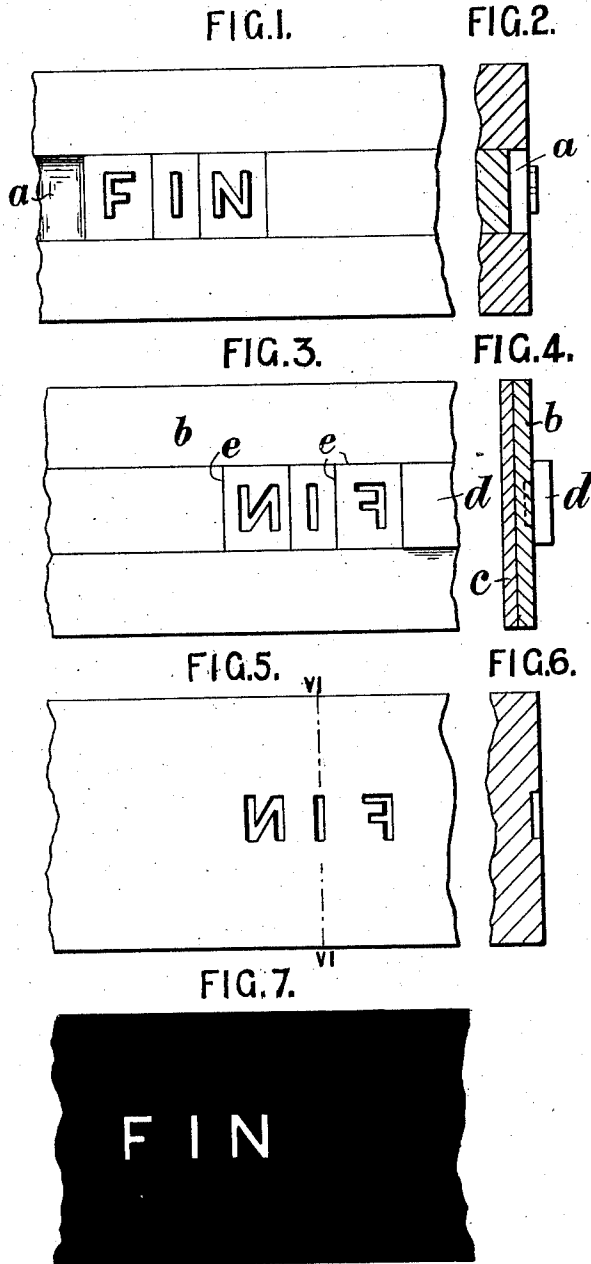


A. O. WATKINS.
PRINTING.
APPLICATION FILED FEB. 14, 1910.

1,025,495.

Patented May 7, 1912.



Witnesses:
C. Krommers
M. H. Darg.

Inventor:
Arthur Octavius Watkins,
By Henry [Signature] atty.

UNITED STATES PATENT OFFICE.

ARTHUR OCTAVIUS WATKINS, OF LONDON, ENGLAND.

PRINTING.

1,025,495.

Specification of Letters Patent.

Patented May 7, 1912.

Original application filed August 7, 1908, Serial No. 447,459. Divided and this application filed February 14, 1910. Serial No. 543,835.

To all whom it may concern:

Be it known that I, ARTHUR OCTAVIUS WATKINS, a subject of the King of Great Britain, residing at London, England, have invented new and useful Improvements in Printing, of which the following is a specification.

This invention relates to the method of producing printing surfaces, being a division of my application filed August 7, 1908, Serial Number 447,459 and patented April 5, 1910, under No. 954,366.

The object of the invention is to produce printed matter having a black or comparatively dark colored background with lighter colored characters and which is advantageously applicable to letterpress printing and to the printing of music and shorthand.

The object of the invention is carried out by first setting up quads, and type having unreversed raised characters, making a mold from said quads and type, said mold having the characters of the type in intaglio therein, and leveling the surface of said mold to the tops of the characters thereby producing a level printing surface having the true forms of the characters in intaglio therein.

In order to enable this invention to be readily understood reference is directed to the accompanying drawings of which—

Figure 1 is a plan view of part of a form of unreversed type with raised characters, Fig. 2 is a part side view of Fig. 1, Fig. 3 is a plan of a mold made from the form shown in Fig. 1, Fig. 4 is part side view of Fig. 3, Fig. 5 is a plan of the mold shown in Fig. 3 after having been leveled or planed down, Fig. 6 is a sectional part side view on the line VI—VI of Fig. 5, and Fig. 7 is a view of a surface printed from the mold shown in Fig. 5.

Referring to the drawings, I take specially made type of brass or other material suitable for giving sharp outlines, the characters being raised but not reversed as in ordinary type, and as an example I have chosen the characters F I N. I then set up the type in a form as shown in Fig. 1, and for the purpose of illustration I have shown depression *a* due, for example, to using a

quad which as usual terminates below the characters on the type and which sometimes has a nick or depression in its top face; the depression will be more apparent from Fig. 2. I then make from the form of Fig. 1 a mold *b* as shown in Fig. 3 having the characters in intaglio the mold being made by any well-known method, for instance by electro-deposition of copper in any well-known manner and I afterward back the copper by metal, if necessary, as shown at *c* in Fig. 4, or I make, for instance, a casting in type metal or other suitable material. The mold *b* has a projecting portion *d* corresponding to the recess *a* of Fig. 1 and projecting ribs *e* due to the junctures of the type and in order to remove these projecting parts, I plane, or cut down or rub down the surface of the mold until it is flat except for the depressions produced by the characters, as shown in Figs. 5 and 6. I then produce the printed matter from this mold *b* or from a stereotype or electrotype made from it by inking same with a black or dark colored ink and impressing the mold upon a white or sensibly lighter colored surface, by preference of a greenish tint because this color is most suitable for the eyes of the reader, whereby printed matter such as is shown in Fig. 7 is produced.

It will be understood that the term "specially made type" is to convey the meaning not only of the actual type but also of any facsimile block made therefrom in any suitable or well known manner and for instance extensively used for printing newspapers.

I claim—

1. The method of producing printed matter having a dark background and lighter characters, which consists in making a form composed of type having unreversed characters, making an intaglio mold from said form, leveling said mold to the tops of the characters of the type, inking the leveled surface, and finally taking an impression of the leveled surface.

2. The method of producing printed matter having a dark background and lighter characters, which consists in making a form composed of type having unreversed char-

acters, making an intaglio mold from said
form, leveling said mold to the tops of the
characters of the type, preparing a stereo-
type or electrotpe from said mold, inking
5 the surface of the stereotype or electrotpe,
and finally taking an impression from the
stereotype or electrotpe.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

A. OCTAVIUS WATKINS.

Witnesses:

R. R. KAHAN,
H. L. SHELLMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
