

No. 847,237.

PATENTED MAR. 12, 1907.

C. E. CARLSON.
PRINTING OR ENGRAVING BLOCK.
APPLICATION FILED OCT. 17, 1905.

Fig. 1.

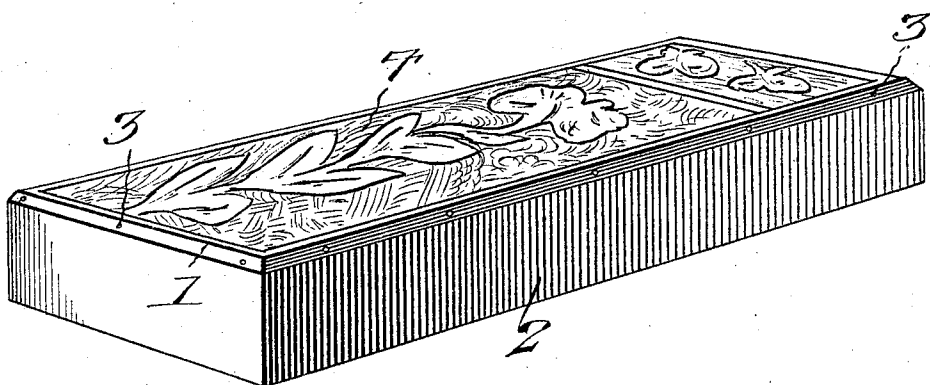
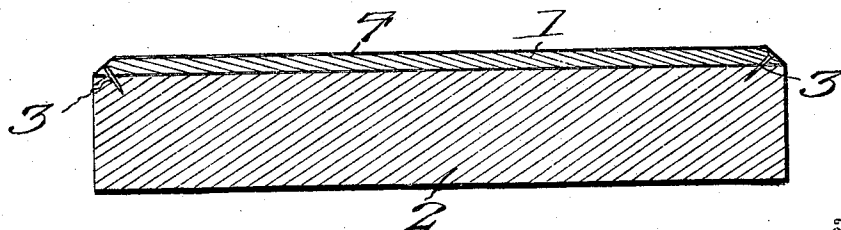


Fig. 2.



Witnesses
Wm. Koerth.
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UNITED STATES PATENT OFFICE.

CHARLES E. CARLSON, OF CHICAGO, ILLINOIS.

PRINTING OR ENGRAVING BLOCK.

No. 847,237.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed October 17, 1905. Serial No. 283,157.

To all whom it may concern:

Be it known that I, CHARLES E. CARLSON, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Printing or Engraving Blocks, of which the following is a specification.

This invention relates to a novel printing or engraving plate.

The object of the invention is to provide a construction whereby a plate for printing or engraving directly on paper and other substances may be easily and inexpensively manufactured.

In the accompanying drawings, Figure 1 is a perspective view of a printing or engraving block constructed in accordance with my invention. Fig. 2 is a sectional view of the same.

In carrying my invention into practice a piece of academy-board 1 of substantially the dimensions required is first prepared for use by rubbing down the face thereof with rottenstone or other smoothing material until a fine smooth finish is produced. The picture or design then to be engraved thereon may be transferred thereto in any of the ordinary ways and the design cut by means of suitable tools. The design may, however, be directly cut without a pattern into the face of the board. Two types of cutting-tools are preferably employed in this part of the process, one having a single stylus or cutting-point for making straight and curved lines and the other a series of needle-points for making parallel lines or blocked surfaces. I do not limit myself in this particular, however, as any other suitable graving-tools may be used. The plate bearing the picture, sketch, or design is then mounted upon a wooden backing or block 2, being preferably secured thereto by means of glue, and the edges of the plate are trimmed down to the size of the backing in the usual manner and fastened thereto by pins or tacks 3. The face or engraved surface of the plate is then covered with a coating of a suitable smoothing paste, which forms a protecting layer 4, and is then rubbed off with a soft rag until it is perfectly smooth and finally allowed to dry, when the plate is ready for use. The

paste smooths down all roughened surfaces and produces a fine finish, which is inexpensively obtained. Carter's so-called "Photolibrary" paste has been found well adapted for the purpose.

As is well known, academy-board is provided with a hard-finished surface or layer, a hard back face or layer, and an intermediate or body portion formed of porous or bibulous paper. The engraving is produced by cutting through the hard-finished face down to this bibulous body portion and the paste then applied. This paste not only smooths down all the roughened surfaces of the cuts, but more or less of it is absorbed by the porous or bibulous body portion and on drying therein hardens the plate, thus rendering it much more durable. Furthermore, the paste also secures the edges of the cut-out portions to the bibulous body, thus preventing the edges from being displaced under the pressure of the press-rollers, whereby the engraved surface will retain its smooth-finished outline for a long period, thus enabling a large amount of matter to be run off on the press without deterioration in the quality of the printing of the engraving from the plate. A simple, easily-prepared, and inexpensive construction of plate is thus produced, which may be used for direct or transfer printing or engraving. The process is also so simple that a plate bearing a simple design may be readily made by comparatively unskilled labor.

The plate may be used as a cheap form or matrix for electrotyping and stereotyping and for printing directly on metal or stone for indirect printing from the latter, thus enabling lithograph work to be easily imitated. An impression may be taken upon the plate from a type-form, cut, ordinary type, &c., and then finished and backed and used as a matrix for the production of duplicates and for the production of tint-blocks, &c.

Having thus described the invention, what is claimed as new is—

As a new article of manufacture, a printing or engraving block comprising a backing, a plate secured to the backing and consisting of a paper-board having a bibulous body portion and a relatively hard-finished face, the face portion being cut down to the bibulous

body portion to form an engraved printing-surface and being provided with a finishing-coating of a smooth-drying paste, a portion of the paste saturating the bibulous body
5 portion at the bases of the incisions, and binding and hardening the edges of the latter, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. CARLSON.

Witnesses:

JEROME G. BEARDSLEY,
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