

A. C. KNIGHT.
PRINTING BLOCK.
APPLICATION FILED APR. 13, 1914.

1,123,552.

Patented Jan. 5, 1915.

Fig. 1.

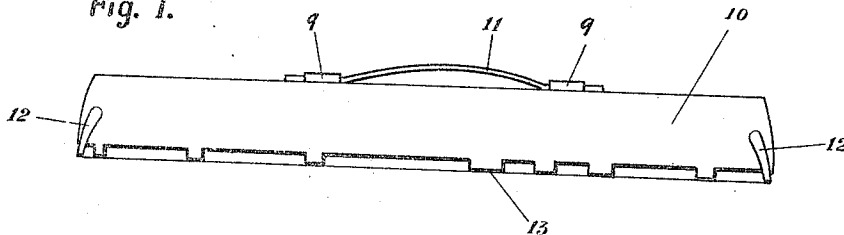


Fig. 2.

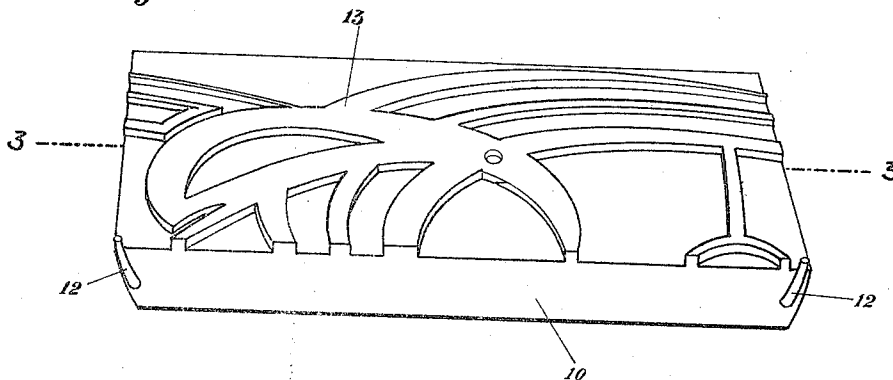
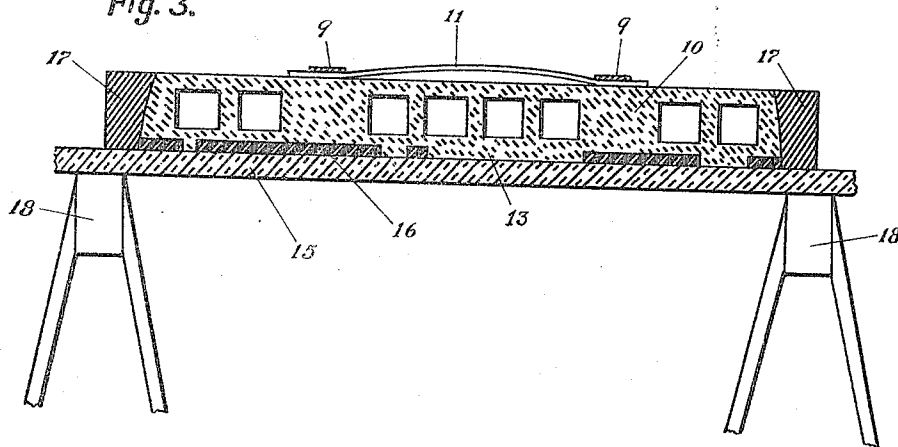


Fig. 3.



WITNESSES:
Arthur Worischek
Walter Huening

INVENTOR
Albert C. Knight
BY
Beck F. Schmidt
ATTORNEY

UNITED STATES PATENT OFFICE.

ALBERT C. KNIGHT, OF NEW YORK, N. Y.

PRINTING-BLOCK.

1,123,552.

Specification of Letters Patent.

Patented Jan. 5, 1915.

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To all whom it may concern:

Be it known that I, ALBERT C. KNIGHT, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Printing-Blocks, of which the following is a specification.

The invention relates to the art of printing, for instance as exemplified in the production of wall-paper, printed textiles and advertising cards and the like.

It has for its object to provide a novel printing block or roller which may be readily and inexpensively prepared, being in the nature of a monolith whose weight makes it particularly adaptable for the purpose in view.

A further object of the invention is to provide a printing block, as aforesaid, wherewith a grain effect—coarse or fine as desired—may be produced.

The nature of the invention will be best understood when described in connection with the accompanying drawings, in which—

Figure 1 shows the printing block in elevation; and Fig. 2 an underneath view of the same in perspective. Fig. 3 illustrates a method of producing the block, part thereof being a section taken on the line 3—3, Fig. 2.

Similar characters of reference designate corresponding parts throughout the several views.

Referring to the drawings, 10 designates a monolith of cement, or of cement and sand in proportions to suit the requirements and as will be hereinafter more fully set forth. In the production of the same, a strap 11 for convenience in handling is secured thereon as by means of metal fastening members 9 embedded in the cement; and registering or "pitch" pins 12 are caused to extend from the block to the height of the relieved printing surface 13 which projects from the underface thereof. The thickness of this printing surface may be varied as found necessary, being cast with the body of the block and corresponds to the pattern it is desired to reproduce on wall-paper, textiles, advertising cards, etc.

In preparing the printing surface, reference being had more particularly to Fig. 3 of the drawings, a plate 15 of sufficiently

hard material such as glass and with the required flat surface is covered with a thin coating 16 of a wax-like substance as bees-wax or modified clay soft enough to permit of incisions being made therethrough to the glass plate 15. A detail tracing of the pattern is made with a suitable transferring ink or a reverse thereof and the same transferred upon the aforesaid coating 16, the transferred portion, and which is eventually to form the printing surface 13, being cut away to the glass. A soft wood cutting tool has been found particularly effective for this purpose enabling a clear cut reproduction of the pattern to be produced in the coating 16. A suitable mold or form 17 is then placed upon the plate 15 about the transferred design and there is flowed over the coating 16 a mixture of cement, or cement and sand, with water, the mixture being made of the proper consistency to readily fill completely the aforesaid design worked into the coating 16. A sufficient quantity of the mixture is flowed into the mold 17 to provide a block of the requisite strength and weight and is then allowed to set. Before completely filling the mold, however, the mixture may be suitably worked into the design to insure a correct reproduction; and if a glass or transparent plate has been employed to receive the coatings, the same may be placed upon suitable supports 18 to permit of inspection of the casting, allowing any imperfections to be filled up or smoothed out while the material is still soft.

Various cements may be employed to cast the blocks with printing surface, for example, Keene's cement will produce a very clean cut printing surface comparable to a type metal cast. By employing Portland cement, a surface producing a fine grain effect is obtained and which may be made to the desired coarseness by the addition of a proper proportion of sand or other granular material. After the block is hardened, it is lifted from the mold and any adhering wax removed from the design which will appear raised above the under face of the block; and upon being suitably inked in manner similar to the inking of a metal or stone printing member, it is ready to reproduce the pattern which has been worked thereon.

A printing block made in this manner may be produced in a few hours and at a cost far below that of the usual wood and brass

blocks employed in the hand printing of wall-paper and into which blocks the design must be laboriously cut, or cut, filed and driven by hand. Moreover, the novel block
5 herein set forth is composed of inexpensive material and whose weight is of material assistance in making an impression. The printing surface is permanent; and by suitably varying the material constituting the
10 same, grain tints are possible and of various grades of texture.

I claim:—

1. A printing block comprising cement

and having a relieved printing surface of said material integral therewith.

2. A printing block composed of cement and sand and having a relieved printing surface of said material integral therewith. 15

Signed at New York, in the county of New York, and State of New York, this 10th day
20 of April, A. D. 1914.

ALBERT C. KNIGHT.

Witnesses:

FRED'K T. SCHULTZ,
LAURA E. SMITH.

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