

(No Model.)

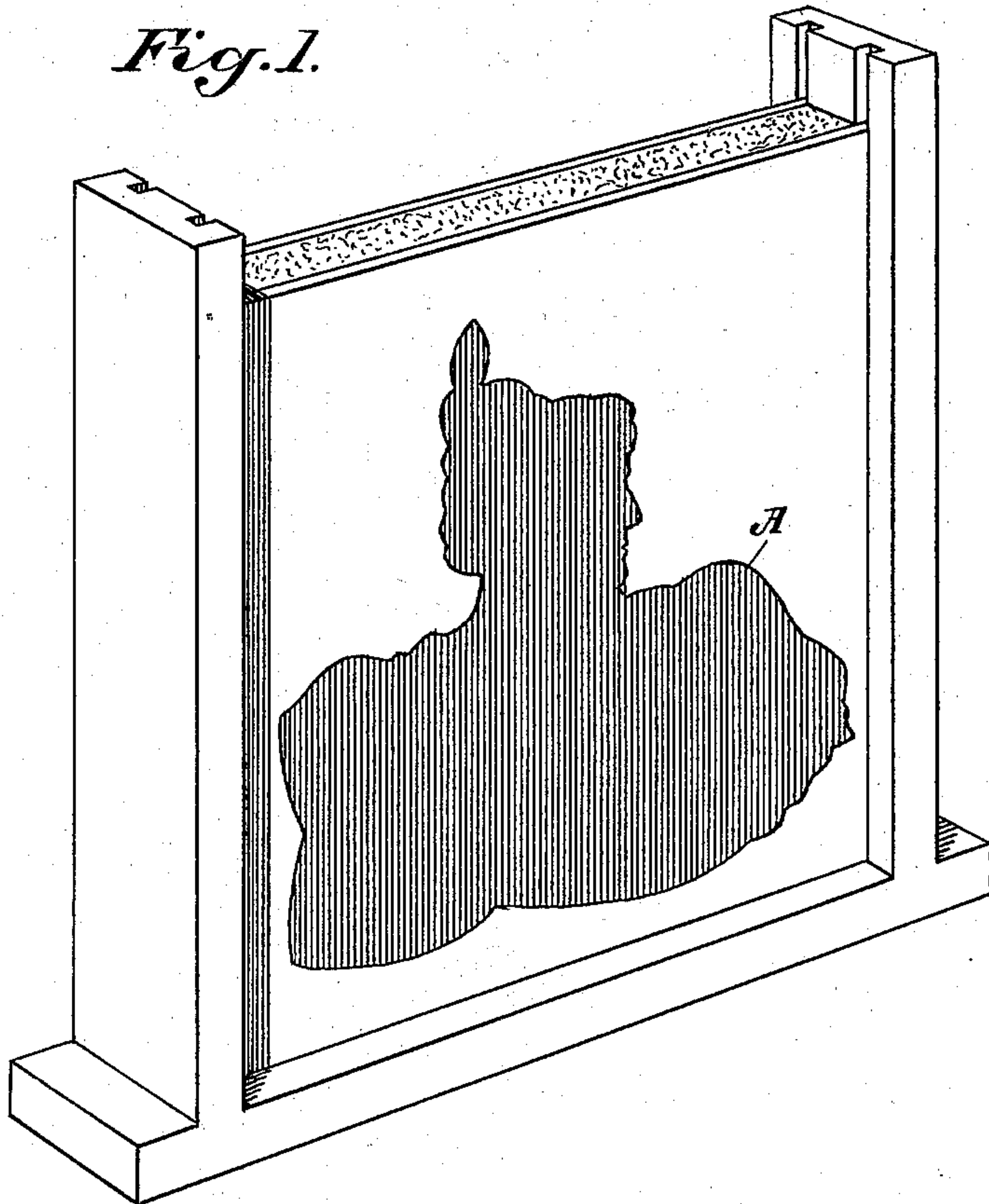
T. C. MARCEAU.

PROCESS OF PRODUCING PHOTOGRAPHS IN RELIEF.

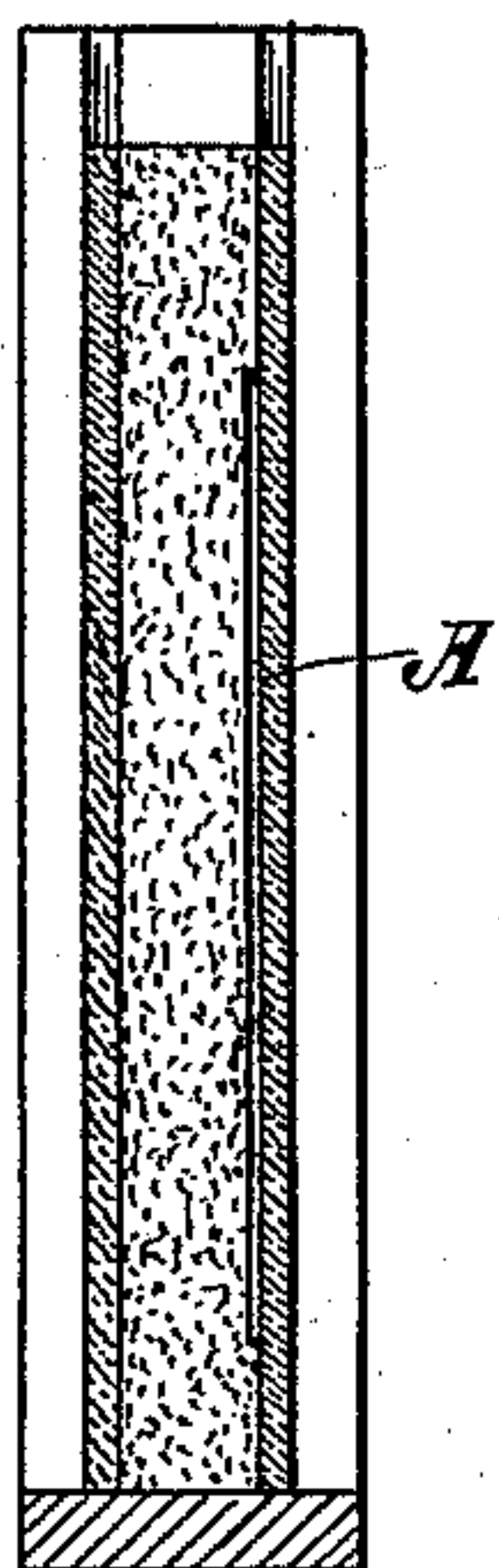
No. 567,748.

Patented Sept. 15, 1896.

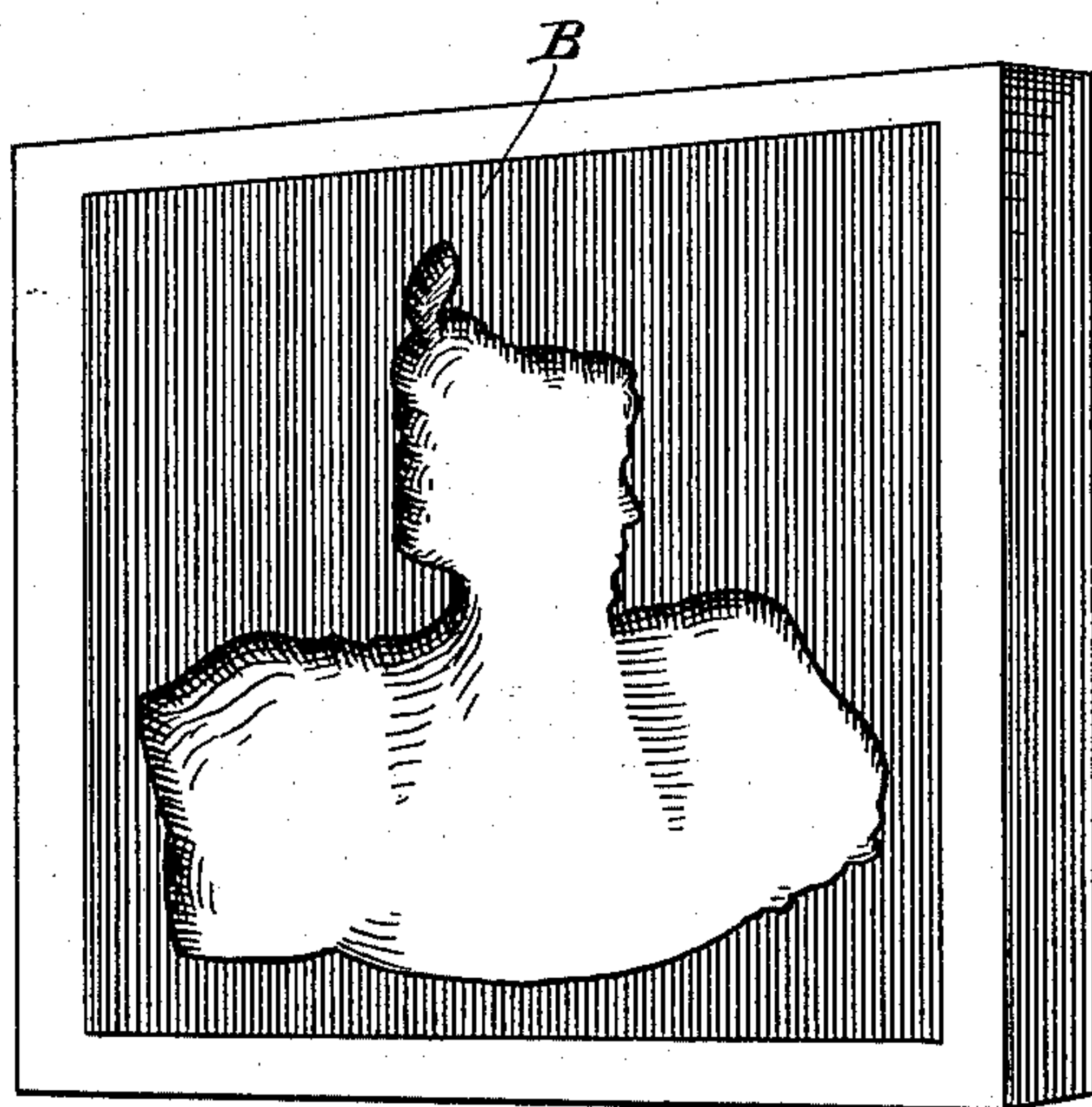
*Fig. 1.*



*Fig. 3.*



*Fig. 2.*



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# UNITED STATES PATENT OFFICE.

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## PROCESS OF PRODUCING PHOTOGRAPHS IN RELIEF.

SPECIFICATION forming part of Letters Patent No. 567,748, dated September 15, 1896.

Application filed June 25, 1896. Serial No. 596,872. (No specimens.)

*To all whom it may concern:*

Be it known that I, THEODORE C. MARCEAU, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Producing Photographs in Relief; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to certain improvements in the art of finishing and mounting photographs after they have been taken; and is especially designed to throw certain parts of the picture up into relief above the plane surface.

It consists in certain details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a view showing the manner of outlining the picture upon the surface in which the corresponding intaglio is to be produced. Fig. 2 is a view showing the means for registering the pictures which are to be afterward thrown up into relief. Fig. 3 is a vertical section through the mold.

The object of my invention is to simplify the methods of making relief-pictures, so that any number of such pictures may be made to accurately coincide and correspond with each other.

In carrying out my process I first prepare a photographic negative in the usual manner. The pictures are then taken from the negative upon sensitized paper, and the outline of those portions which it is designed to show in relief is cut out from one of these sheets and pasted upon a surface of glass, as shown at A.

The paper upon which the pictures are taken is all cut of a certain size, and the negative is marked so that this paper is always laid in the same position upon the negative for printing each picture. The pictures are therefore all in identically the same relative position upon the paper, and they all correspond with the one from which the outline was cut for the purpose of making the intaglio-block.

The exterior portion of the paper from which the outline has been cut now serves as a pattern for the exact registry of each of the pictures which are to be thrown up into relief,

and is afterward used for this purpose, as will be hereinafter more fully explained.

The surface A, upon which the figure is pasted, as previously described, forms one side of a mold, the space between the two sides being sufficient to provide a necessary thickness, and the sides being also connected by edge strips, so as to form an inclosure, as shown in Fig. 1. Into this inclosure I pour plaster-of-paris or other plastic material which will afterward set and become hard, filling the space within the mold. The plastic material flows around the figure which has been pasted upon the glass, and this figure, projecting the thickness of the paper above the surface of the glass, will form a corresponding indentation in the material with which the mold is filled, and which indentation remains after it has set. The mold is then opened, and the hardened material is taken out, the outline or figure is removed from the face of the plaster, if it has adhered thereto, and the perfect outline remains upon the surface. The surface of the block is now excavated or engraved out in the usual manner for producing intaglios, so as to form the various features of the picture to greater or less depth as the shade and contour of the picture demands and the taste of the artist shows to be proper. When this is completed, it is in readiness to receive the pictures which are to be thrown up into a relief corresponding with the depth of the intaglio which has thus been formed. The part B, from which the figure was cut to form the outline upon the block, is now pasted or otherwise attached to the block, forming an accurate peripheral outline around the intaglio, and as all the pictures are in exactly the same relative position upon the printed sheets it is only necessary to register the edges of each sheet with that upon the block to register each picture with the intaglio. The picture is then pressed into the block by any of the usual or well-known means for producing raised surfaces, and those parts of the picture which are designed to be thrown up into relief will be correspondingly forced into the various depressions of the intaglio in the block, remaining there under pressure until dried, after which they can be removed and the pictures mounted in any usual or well-known style for mounting such pictures.



If preferred, the block may be cast plain, and after it is removed from the mold the outline within which the engraving or intaglio is to be made may be marked upon the surface of  
5 the block by laying the cut-out figure thereon and outlining it, and afterward engraving the block and proceeding as previously described.

Having thus described my invention, what  
10 I claim as new, and desire to secure by Letters Patent, is—

1. The method herein described for preparing intaglio-blocks for the purpose of forming relief-pictures, consisting in cutting an  
15 outline of the picture to be thrown up in relief, pasting the same upon the inner surface of the glass or other smooth-surfaced mold, filling the mold with a plastic substance which will afterward set and harden, then removing  
20 the hardened material from the mold, disengaging the picture from its surface, and engraving the surface to correspond with the portions of the picture which are to be thrown up into relief.

25 2. The method of throwing photographic pictures up into relief, consisting in cutting out one of the set of pictures, fixing it upon the inner surface of a mold, filling the mold

with a plastic material which will afterward set and harden, removing the hardened block from the mold and disengaging the picture therefrom, engraving an intaglio to correspond with the outline left by the removed picture, then using the outer portion from which the picture has been cut as an outline by which the other pictures are accurately registered upon the engraved block, and pressing the portions coincident with the engraved surface thereinto so as to throw them up into relief when removed from the block.

3. The method of forming photographic pictures in relief, consisting in cutting out one of a set of pictures, and outlining it upon a block formed by hardening a plastic mass within a mold, engraving an intaglio upon the block to correspond with said outline, then registering the other pictures upon the block, and pressing the portions coincident with the engraved surface thereinto.

In witness whereof I have hereunto set my hand.

THEO. C. MARCEAU.

Witnesses:

S. H. NOURSE,  
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