

W. H. MERRILL.
METHOD AND APPARATUS FOR MARKING X-RAY NEGATIVES.
APPLICATION FILED JUNE 21, 1909.

966,696.

Patented Aug. 9, 1910.

Fig. 1.

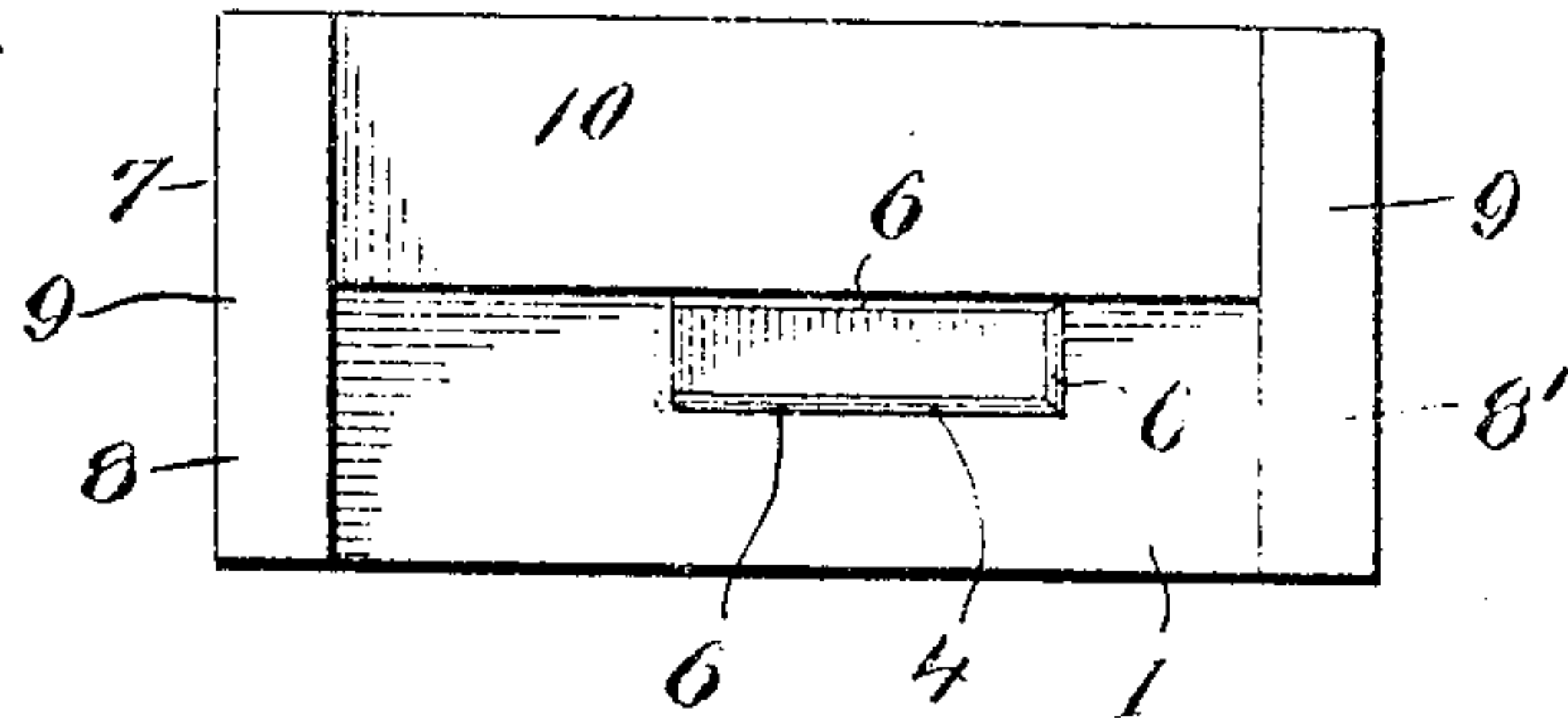


Fig. 2.

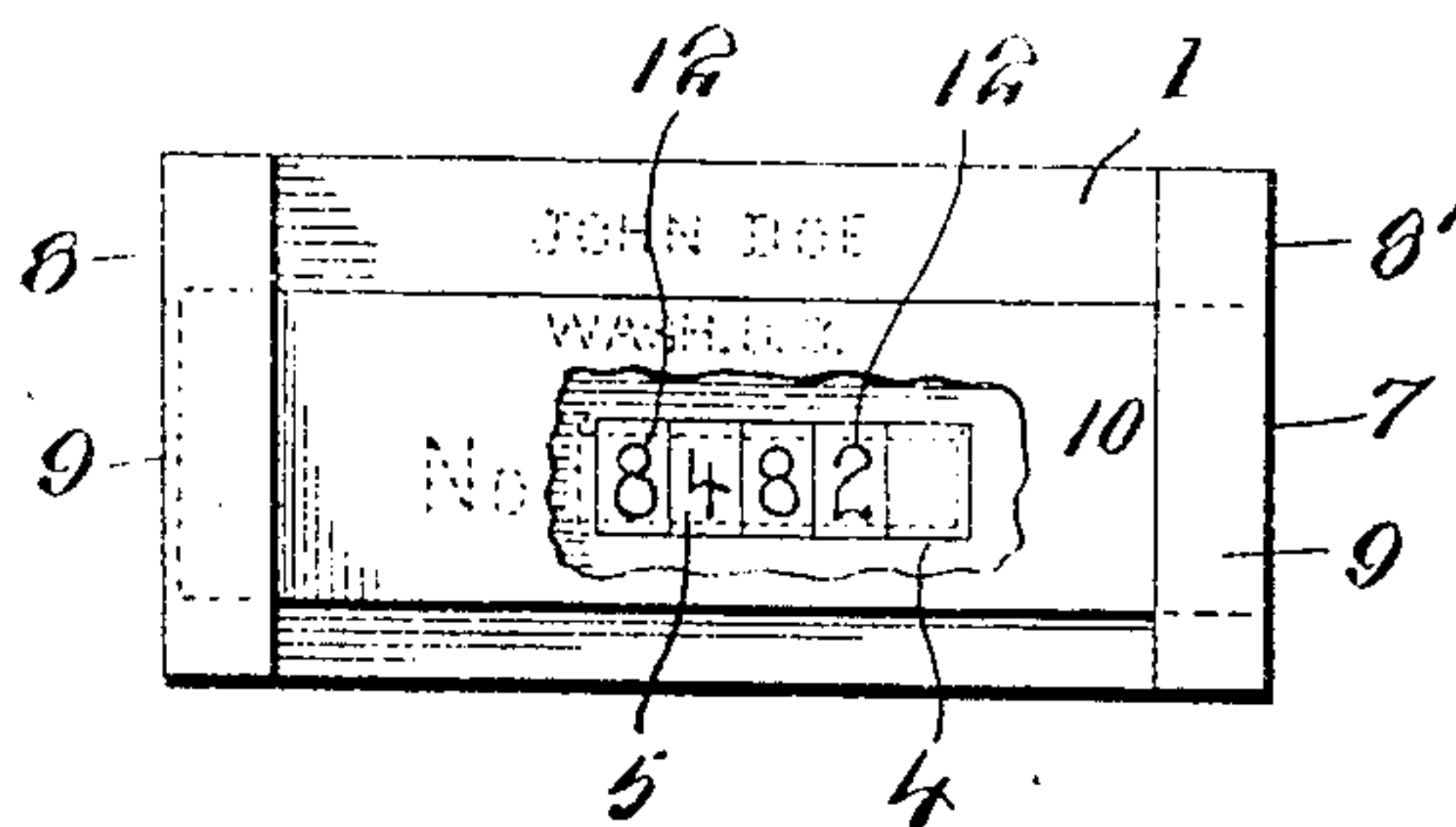


Fig. 3.

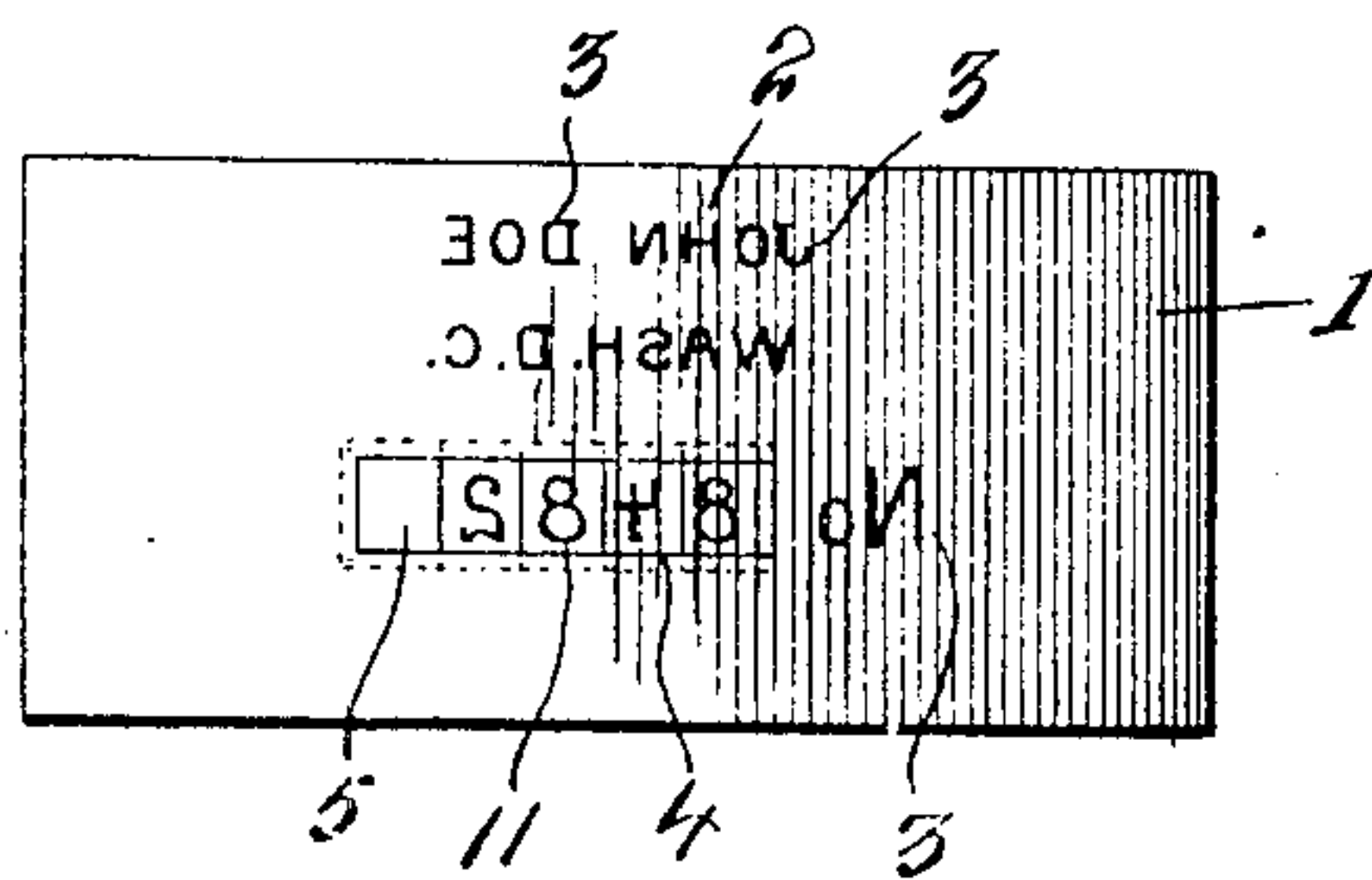


Fig. 4.

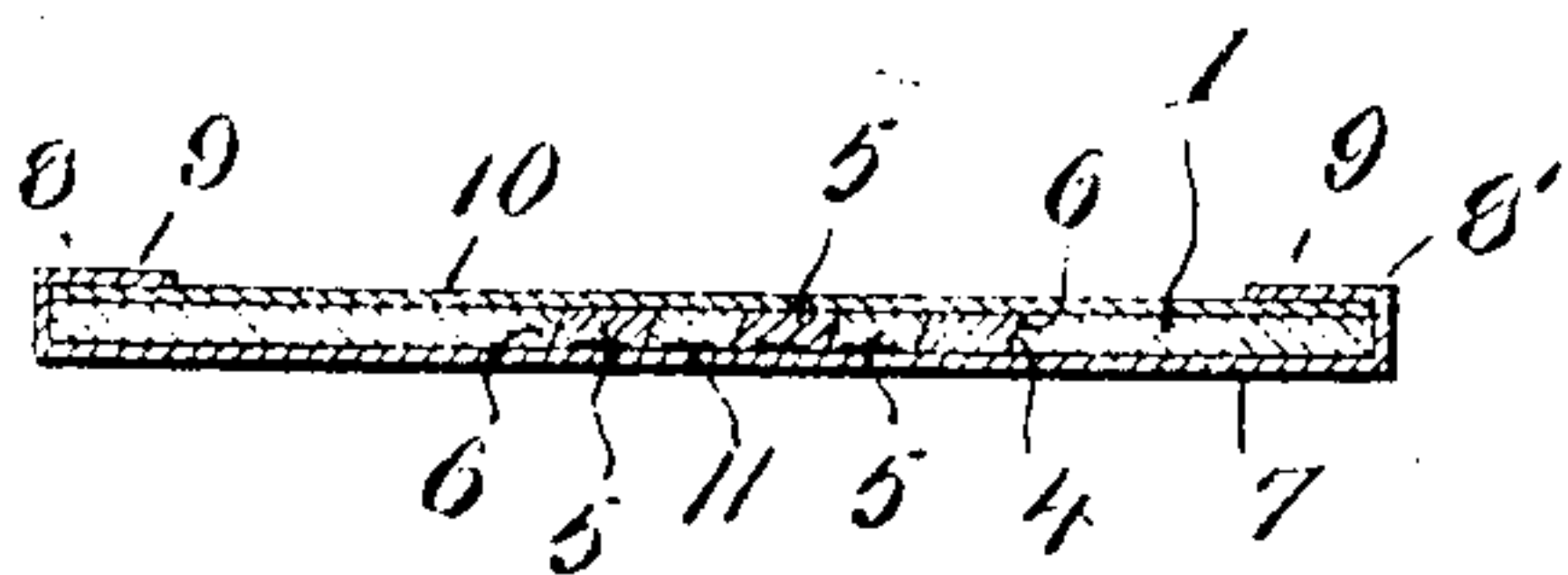
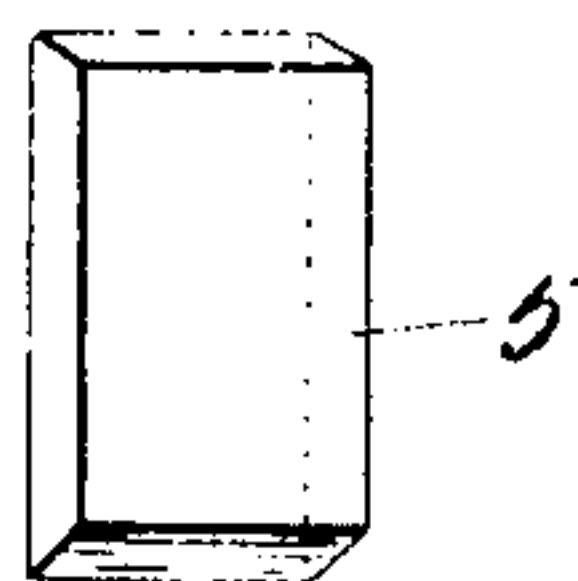


Fig. 5.



WITNESSES:

H. F. Roy
L. T. Callahan

INVENTOR
Walter H. Merrill
BY *Robert H. Young*
Attorney

UNITED STATES PATENT OFFICE.

WALTER H. MERRILL, OF WASHINGTON, DISTRICT OF COLUMBIA.

METHOD AND APPARATUS FOR MARKING X-RAY NEGATIVES.

966,696.

Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed June 21, 1909. Serial No. 503,559.

To all whom it may concern:

Be it known that I, WALTER H. MERRILL, a citizen of the United States, residing at Washington, in the District of Columbia, have invented new and useful Improvements in the Method and Apparatus for Marking X-Ray Negatives, of which the following is a specification.

My invention relates to the method and apparatus for marking X-ray negatives or skiagrams with characters by which same may be identified.

The object of my invention is to produce a method and apparatus by means of which distinctive marks or characters may be photographed upon the negative or skiagram with the making thereof by which the subject of same may be identified after development.

A further object of my invention is to produce a plate or frame of a substance which is transparent to the X-rays upon which is suitably engraved and filled with a material which is opaque to such rays, the delineation of which will therefore be imprinted upon the sensitive plate, and a still further object thereof is to produce a plurality of type blocks adapted to be carried upon said frame, the body portion of which is made of said transparent substance, and suitably engraved and filled to form opaque characters, the said plate or frame and type carried thereon, when thus prepared, being adapted to be placed upon the sensitive plate and photographed with the subject thereon to identify same.

To these ends, my invention includes the combination and arrangement of component parts to be hereinafter described and more particularly pointed out in the claims.

In the accompanying drawings illustrating my invention, in which like characters indicate similar parts, Figure 1 is a top plan view of my type holder with the type removed; Fig. 2 is a similar view with the type placed therein; Fig. 3 is a view of the under side of the plate carried in the holder; Fig. 4 is a longitudinal sectional view of the holder, and Fig. 5 is a detail view of one of the type.

Referring now to the drawings, 1 designates a plate made of a substance which is transparent to the X-rays, such as aluminum, which may be engraved with words or characters at 2, said lines of engraving being filled or inlaid with a substance 3 which

is opaque to the X-rays. Copper amalgam has been found most satisfactory for this purpose, as it will, when filled therein, expand and adhere to the plate, but I do not limit the filling to this particular metallic compound, as others may be successfully employed.

As shown in the drawings, the plate 1 has a rectangular opening therein at 4 to accommodate type blocks 5 of material similar to the plate 1, and the sides of said opening may be beveled at 6 to engage the beveled edges of the type blocks to support same therein. The plate, thus described, may be incased in a frame 7 of similar transparent material, which completely covers the engraved side thereof, and turns back upon the opposite ends 8 and 8' forming the flanges 9, between which and the plate 1, the keeper or longitudinal plate 10 is loosely carried to permit its being adjusted transversely to cover or uncover the type carried in the holder to secure same in place.

The type blocks 5, before mentioned, are engraved and inlaid with characters, letters or numbers 11 upon their lower faces in like manner and of similar material as those upon the plate before described, and upon the opposite face, the character on each type may be suitably printed or marked at 12, to facilitate their arrangement in the holder.

In the operation of producing a skiagram, the plate and type thus described, may be laid upon the sensitive plate, the type blocks having been suitably placed within the holder and arranged to make the desired record. The X-rays will pass through the material of which the plate and frame are composed, but will be arrested by the opaque substance inlaid upon the plate and blocks, and thus produce the impression thereof upon the negative or skiagram.

My invention will be readily understood from the foregoing description and by reference to the accompanying drawings, and it will be appreciated that the parts and combinations thereof, may be varied within a wide range without departing from the spirit and scope thereof.

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

1. In a device for marking X-ray negatives, the combination with a frame of aluminum, of characters inlaid thereon of copper amalgam, said frame having a cut out por-

tion, blocks of amalgam carried therein, and characters of copper amalgam inlaid on said blocks, substantially as described.

2. In a device for marking X-ray negatives, the combination with a plate of aluminum, of characters inlaid thereon of copper amalgam, said plate having a cut-out portion, a frame for holding said plate, blocks of aluminum having characters of copper amalgam on one side and the same character indicated on the opposite side, carried in said cut-out portion, and a sliding keeper adapted to hold the same therein, substantially as described.

3. In a device for marking X-ray negatives, the combination with a plate of alu-

minum, of characters inlaid thereon of copper amalgam, said plate having a cut-out portion, a frame for holding said plate, blocks of aluminum having characters of copper amalgam thereon the sides of said blocks being oppositely beveled to overlap, carried in said cut-out portion, and a sliding keeper adapted to hold the same therein, substantially as described.

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

WALTER H. MERRILL.

Witnesses:

R. H. YOUNG,
L. T. CALLAHAN.

Correction in Letters Patent No. 966,696.

It is hereby certified that in Letters Patent No. 966,696, granted August 9, 1910, upon the application of Walter H. Merrill, of Washington, District of Columbia, for an improvement in "Methods and Apparatus for Marking X-Ray Negatives," an error appears in the printed specification requiring correction as follows: Page 2, line 1, the word "amalgam" should read *aluminum*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 30th day of August, A. D., 1910.

[SEAL.]

F. A. TENNANT,
Acting Commissioner of Patents.