June 13, 1939. T. S. BUCKLEY 2,162,420

PLAQUE FOR X-RAY MACHINES

Filed Aug. 10, 1938

Fig. 1

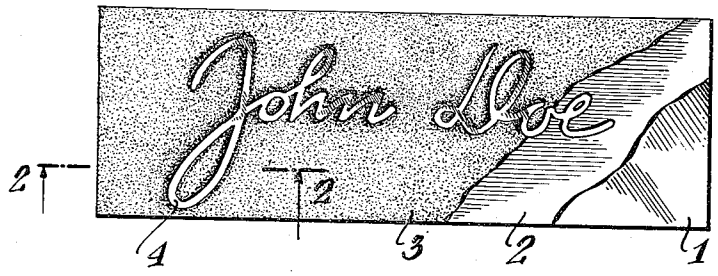
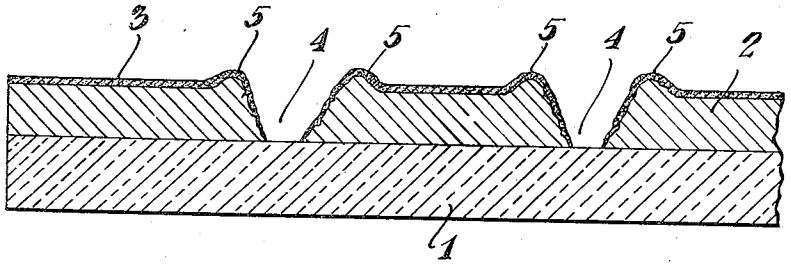


Fig. 2



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Patented June 13, 1939

2,162,420

UNITED STATES PATENT OFFICE

2,162,420

PLAQUE FOR X-RAY MACHINES

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Application August 10, 1938, Serial No. 224,107

4 Claims. (Cl. 250—67)

This invention relates to a removable identification plaque for marking an X-ray negative and to the method of producing the same.

In Patent No. 2,120,064 of June 7, 1938, granted to me is disclosed an identification plaque composed of a backing member, an intermediate layer of plastic material and a covering member in the form of sheet material, the intermediate layer being impermeable and the other members being permeable to X-rays. When the covering of the plaque is subjected to a scribing pressure, depressions are formed therein and the plastic material is displaced laterally with respect to the depressions, thus rendering the plaque permeable to X-rays in said depressions. Plaques of the above character have been extensively and successfully used but difficulty is sometimes experienced if the scribing is done carelessly, i. e. when insufficient pressure is applied, and this difficulty is increased when the cover sheet is unduly thick because the depressions then may not be sufficiently deep which may leave too much of the plastic impermeable material beneath said depressions.

The main object and feature of this invention is to overcome these difficulties.

In the accompanying drawing the invention is disclosed in a concrete and preferred form, in which

Fig. 1 is a face view of a plaque embodying the invention with the several layers partly removed; and

Fig. 2 is a sectional view substantially on the plane of line 2—2 of Fig. 1.

1 indicates a backing member of any suitable material that is permeable to X-rays such as glass. Upon this backing member is deposited a layer of plastic material 2 that is impermeable to X-rays. I have found a composition composed of white lead ninety percent, glycerine nine and one-half percent and a Japanned drier one-half of one percent to be suitable for my purpose. The percentages given are approximate and are by weight and not by volume. I then dust the layer with a metallic powder 3 that is permeable to X-rays, preferably aluminum powder. This powder forms a thin film or sheet as a protective covering over the intermediate layer and any surplus powder is removed as by blowing it off. The edges of the plaque are then painted with ordinary paint.

When the covering member is now subjected to scribing pressure by means of a stylus, such as a pencil, said stylus will penetrate the covering member and the plastic layer substantially throughout the entire depth of the latter until said stylus contacts the backing member. In creating this furrow or valley 4 it is found that the covering member crumbles and, with the displaced plastic material forms lands or hills 5 adjacent each side of the furrow, and that the lands or hills so formed do not have any tendency to return into the furrow. A sharp negative of the inscription can therefore be produced.

The plaque, before being inscribed, will retain its characteristics practically indefinitely.

The picture made by X-rays is referred to herein for convenience as a negative, but the term is not intended to be restrictive, as the invention applies equally to any type of picture made by penetrative rays according to this invention.

I claim:

1. A removable identification plaque for marking an X-ray negative comprising: a backing member permeable to X-rays, an intermediate layer of plastic material impermeable to X-rays, and a powder permeable to X-rays covering the plastic material, said powder crumbling and being displaced with the plastic material when subjected to scribing pressure to form a furrow with adjacent hills.

2. A removable identification plaque for marking an X-ray negative comprising: a backing member permeable to X-rays, an intermediate layer of plastic material impermeable to X-rays, and aluminum powder covering the plastic material.

3. The method of producing an identification plaque for marking an X-ray negative, which consists in depositing, on a backing member permeable to X-rays, a plastic material impermeable to X-rays, and dusting the plastic material with a metallic powder that is permeable to X-rays.

4. The method of producing an identification plaque for marking an X-ray negative, which consists in depositing, on a backing member permeable to X-rays, a plastic material impermeable to X-rays, and dusting the plastic material with aluminum powder.

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