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MACHINE OR DEVICE FOR LABELING X-RAY DENTAL FILMS

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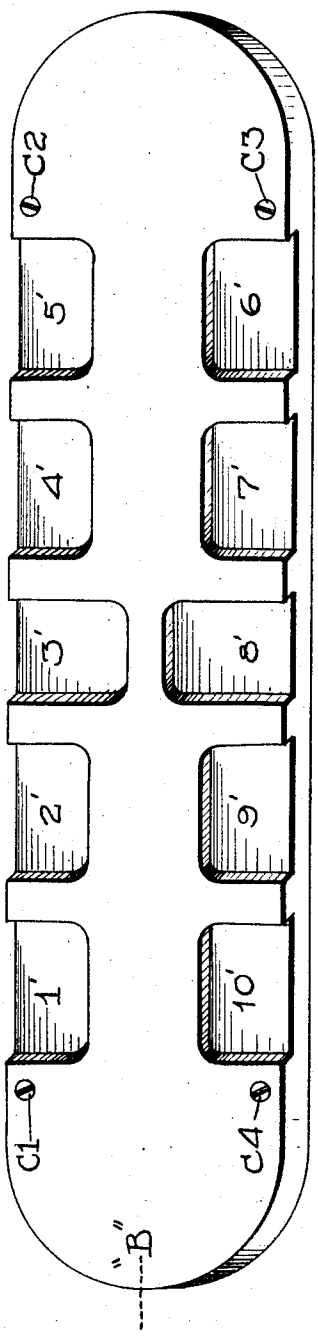


Fig. 1

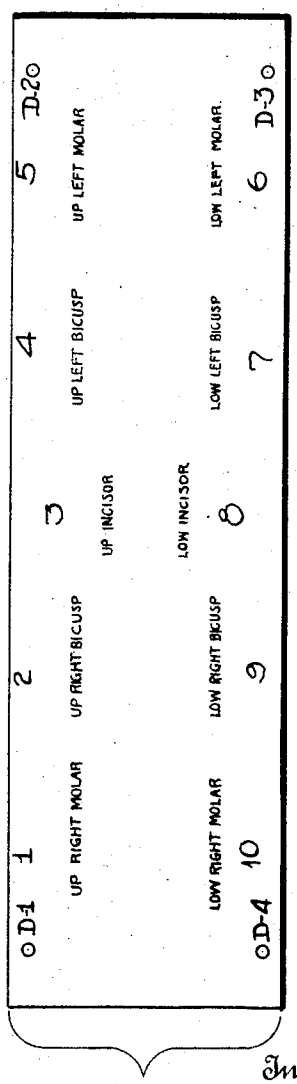


Fig. 2

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MACHINE OR DEVICE FOR LABELING X-RAY DENTAL FILMS.

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This invention relates to photographic identifying means, and has reference more particularly to means for printing indicia on photographs which are made by the X-ray or other processes intended for making photographs of parts of the anatomy, and the said invention as developed is primarily for use in applying indicia to pictures of portions of the jaws, including the roots of teeth, and the application of identifying legends to the teeth in order that the position at which the exposure was made may be definitely determined and in order too, that a person viewing the picture may be informed at once as to the particular teeth which are depicted.

In studying pictures of the jaws and teeth of human beings, it sometimes becomes impossible, after the picture is taken, to identify the side of the mouth which is depicted or the teeth which are shown, and if the roots of teeth have been shown as diseased to an extent that extraction is deemed desirable, it has not always been possible to determine the identity of the tooth that is shown as diseased at the roots.

The invention is of particular importance in enabling an observer to know which tooth or teeth are under observation and to that end, the invention consists in novel means for applying indicia to the picture of the tooth or teeth at the time the picture is taken so that the identify of the tooth or teeth may be definitely determined. To the end in view, the invention comprises as to details, means for holding the films to be applied to certain portions of the holder after the exposures are made, or preferably after each exposure the film so exposed is delivered to the appropriate seat or receptacle of the film holder, and when all of the films which are to be exposed for a certain patron have been exposed and placed in the holder, the films so applied to the holder are re-exposed to Roentgen rays which may pass through apertures delineating the indicia so that the pictures when finished will display indicia of the location of that portion of the jaw which the photograph depicts.

As a further detail of the invention, it is the purpose of the inventor to produce a device which can be expeditiously employed in order that films may be accurately labeled and indelibly marked to avoid possibility or error in order that dentists may determine accurately and quickly the area affected and ascertain whether the plate is for the left or right side so that danger of treating or extracting the wrong tooth may be minimized, if not entirely eliminated.

With the foregoing and other objects in view, the invention consists in the details of construction, and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this applicatinon wherein like characters denote corresponding parts in the several views, and in which—

Figure 2 illustrates a plan view of a plate normally impervious to Roentgen rays, having perforations for the admission of Roentgen rays; and

Figure 1 illustrates a base with relation to which the said plate coacts.

In carrying the invention into practice, a plate A is employed, preferably of metal, impervious to Roentgen rays, such as lead or the like, the same being provided with a plurality of series of perforations, the said perforations being outlined to depict letters and numbers in the nature of legends, and, of course, these legends will correspond to the terms employed for identifying all of the natural teeth. The legends are consecutively numbered for identification from 1 to 10, or more. The base B with which the plate coacts may be made of wood or the like and it is of practically the same dimensions as the plate.

The surface of the block or base has a plurality of recesses or pocket-like receptacles identified by the reference characters 1′, 2′, 3′, 4′, 5′, 6′, 7′, 8′, 9′ and 10′, etc., the same being intended to receive and retain dental films which are held between the perforated plate and the said base. The number of recesses is optional but should correspond to the number of films used in exposing a complete set of teeth. The stenciled characters on each section correspond to and represent the corresponding segment of the jaw exhibited on a single film.

When an exposure is made of a certain segment of either jaw, that film is placed in its corresponding receptacle beneath the metal plate, the films of the upper teeth being located along the upper edge and those

of the lower teeth along the lower edge of the device in appropriate recesses or receptacles. The stenciled characters or indicia denoting the location of the teeth exposed on the film are placed in such position that they are preferably over that portion of the film having the image of the crowns of the teeth when the film lies properly fitted in its recess or receptacle so that when a complete set or the desired part of the set of films is deposited in proper recesses or receptacles and the device is exposed to Roentgen rays, only those rays falling on the films through the stenciled characters in the metal plate cause a reduction of the silver salts of the film, with the result that the characters are blackly imprinted on each developed film across the images of the crowns of the teeth and the label does not interfere with the proper reading or interpretation of the pathology of the roots.

I claim:

1. The herein described film identifying device comprising a base having a plurality of recesses forming seats for sections of film, and a plate impervious to Roentgen rays adapted to be superimposed on the base and having Roentgen ray admitting openings located in registry with the recesses for admitting Roentgen rays to film occupying the recesses.

2. The herein described film identifying device comprising a base having a plurality of recesses forming seats for sections of film, and a plate impervious to Roentgen rays adapted to be superimposed on the base and having Roentgen ray admitting openings located in registry with the recesses for admitting Roentgen rays to film occupying the recesses, the relation of parts being such that the Roentgen ray admitting apertures in the plate will register with the pictures of the crowns of the teeth images on the film.

3. A film identifying device comprising a support for holding a plurality of films in a predetermined order, and a plate impervious to Roentgen rays and having Roentgen ray admitting openings located in registry with the respective films for producing indicia thereon.

4. A film identifying device comprising a plate impervious to Roentgen rays, said plate being of sufficient area to cover a plurality of films placed in the same plane and having portions pervious to Roentgen rays, whereby several films may be simultaneously marked for identification.

5. The method which comprises exposing a film to Roentgen rays passing through an object to be photographed, thereafter shielding the surface of the film from Roentgen rays except for a portion of the surface upon which identification marks are desired and then exposing the shielded film to Roentgen rays.

6. The method which comprises exposing a plurality of films to Roentgen rays passing through an object to be photographed, thereafter shielding the surfaces of the films from Roentgen rays except for portions of the surfaces upon which identification marks are desired, and then exposing the shielded films to Roentgen rays.

Dated December 19 A. D., 1924.

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