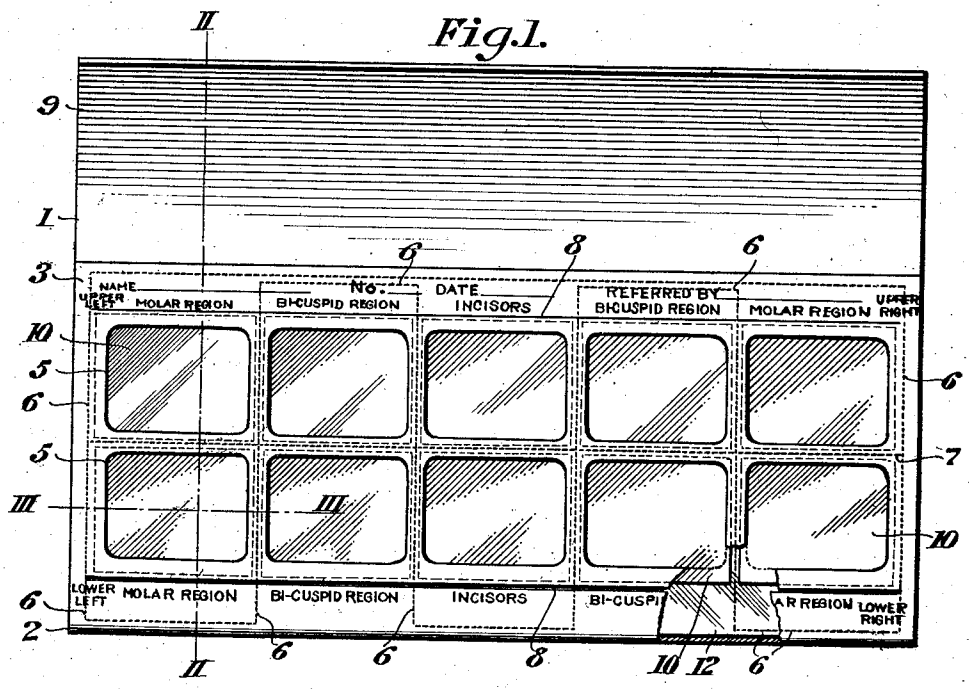
O. A. HELMER.

FILE RECORD AND MOUNT FOR X-RAY NEGATIVES.

APPLICATION FILED DEC. 14, 1920.

1,387,488. Patented Aug. 16, 1921.

Fig. 1.



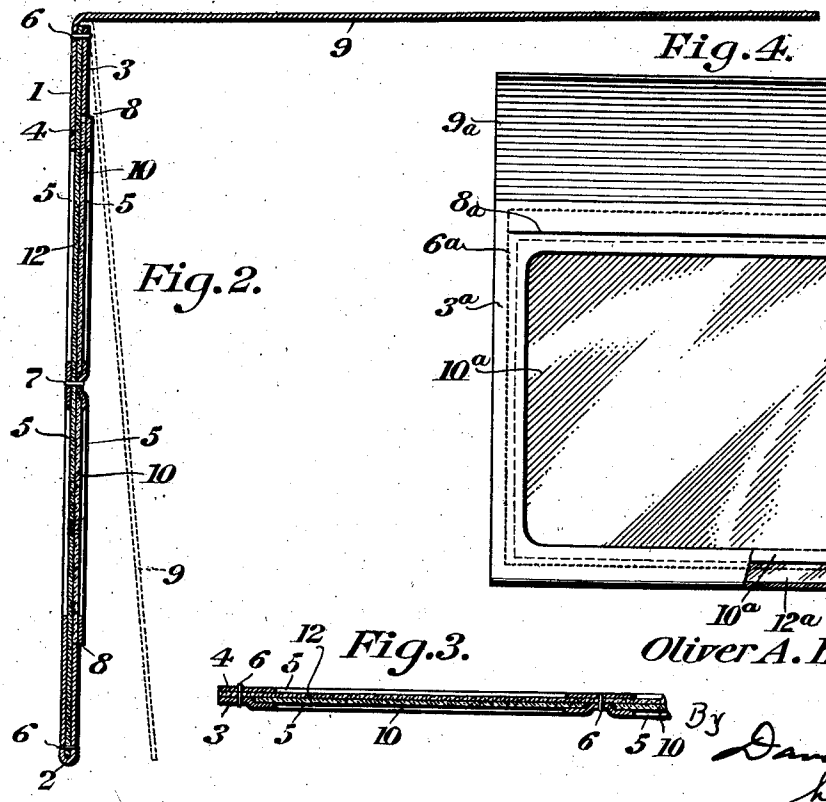


Fig. 2.

Fig. 4.

Fig. 3.

Inventor
Oliver A. Helmer

By Davis Davis
his Attorneys.

UNITED STATES PATENT OFFICE.

OLIVER A. HELMER, OF NEW YORK, N. Y.

FILE-RECORD AND MOUNT FOR X-RAY NEGATIVES.

1,387,488. Specification of Letters Patent. Patented Aug. 16, 1921.

Application filed December 14, 1920. Serial No. 430,592.

To all whom it may concern:

Be it known that I, OLIVER A. HELMER, a subject of the King of Great Britain, and resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in File-Records and Mounts for X-Ray Negatives, of which the following is a specification.

In the treatment of teeth it is frequently necessary to make an X-ray picture so that a proper diagnosis and location of the trouble can be made. The X-ray negative film when finished is examined carefully and the proper treatment determined upon. These X-ray negatives are desirably placed in a suitable holder in order that they may be viewed properly and the holder is desirably formed as a filing card so that a complete record of the case including the X-ray negatives may be put in a suitable filing cabinet and maintained as a convenient permanent picture record of the case.

It is the main object of this invention to provide a simplified and improved filing card and mount adapted to receive one or more negative films, the filing card and mount being in such form that the negative or negatives therein will be completely protected on both sides and securely held to prevent accidental detachment.

A further object of this invention is to provide a mount of opaque material having openings therein covered by flexible transparent or translucent material, means being provided around the margins of each opening to securely hold a negative film in contact with the said flexible material.

Another object of the invention is to provide an opaque flap for the card or mount which will protect the negative when folded close to the body of the mount, and which may also be used as a shade for the negatives when the card or mount is held up to the light for an examination of the negatives.

Another object of the invention is to provide an opaque mount or card having an opening therein and to secure a cross set opening and sheet of transparent or translucent gelatin.

Another object of the invention is to provide an X-ray negative mount and a gelatin sheet of opal color.

In the accompanying drawings:

Figure 1 is a face view of a mount constructed in accordance with this invention, a portion of the structure being broken away to more clearly show its construction;

Fig. 2 a vertical sectional view on the line II—II of Fig. 1;

Fig. 3 a horizontal sectional view on line III—III of Fig. 1; and

Fig. 4 a view similar to Fig. 1 showing the mount adapted to receive a single large negative, a portion of the structure being broken away to more clearly show its construction.

Referring to the various parts by numerals, 1 designates an opaque sheet, preferably of paper, which is folded at 2 to form an inner body member 3, said inner body member being equal in area to the main exterior body member 4 of the mount. Both the inner and exterior body portions are cut out to form registering openings 5, said openings being slightly smaller than the X-ray negatives to be supported in the mount. Between the inner and outer body members is placed a sheet 12 of flexible transparent or translucent material, preferably gelatin, and this sheet and the two body members are connected together by rows of stitches 6 of thread or wire which pass along the upper and lower edges of the body members and vertically between the openings, and also parallel with the side edges thereof. A center line of stitches 7 also secures the two members and the gelatin sheet together between the rows of openings. In the inner member are cut two slits 8, one above the upper row of openings and one below the lower row of openings. These slits provide openings through which the X-ray negative films may be inserted into the pockets formed by the rows of stitches as shown clearly in Fig. 2. In that view 10 designates the negative films in position in the pockets. The gelatin sheet is preferably smooth on both sides and of a clear opal color. I have found that by the use of an opal colored

gelatin sheet I am enabled to get a proper illumination of the X-ray negative while at the same time eliminating all objects beyond the negative. The opal gelatin sheet permits the passage of light rays to the negative but is not sufficiently transparent to permit objects to be seen through it. I prefer to use a gelatin sheet which is smooth on its inner side and to so insert the negatives in the pockets that the image side of the negative will be against the smooth side of the gelatin sheet. In this way all danger of scratching or marking the image on the negative is avoided.

I prefer to use an opaque card in order to concentrate the light on the negative and to cut out all surrounding images which might be reflected in the mount and thereby make the minute examination of the negatives more difficult.

It is to be noted that each negative will be completely supported around the margins of the openings and will be held flat against the gelatin sheet. This also facilitates the careful examination of the picture.

I provide a shield and flap 9 at the upper edge of the body of the mount. This flap is preferably formed integral with the outer body member 4, as shown clearly in Fig. 2. This flap serves as a protecting cover for the mount when it is filed away and also serves as a light shield at the top of the mount when viewing the negatives. This is a great advantage as each mount is provided with a permanently attached or integral light shield which when arranged as shown in Fig. 2, effectually cuts out all light rays from the top, with a result that a very efficient illumination of the negatives by light rays passing through the openings in the exterior body member of the mount is secured.

On the face of the inner body member may be printed suitable headings or indications to receive information as to the patient and case.

The mount shown in Fig. 1 is provided with an upper and lower series of negative receiving pockets and corresponding windows or openings, the upper series being designed to receive pictures or negatives of teeth in the upper jaw and the lower series of openings being designed to receive pictures or negatives of teeth in the lower jaw. The mount is also designed and labeled in such a manner that the pictures of teeth in the upper left jaw will be placed in the upper left side of the mount. The pictures of the teeth in the upper right side of the jaw may be placed in the upper right side of the mount. The pictures of the teeth in the lower jaw may be similarly arranged in the lower series of openings while the incisors or front teeth pictures will be arranged in the center of the mouth, either in the upper or the lower row, as the case may be. By this means the pictures of the teeth will be arranged in the mount substantially as the teeth are in the mouth of the patient. This assists the dentist or operator in fixing in his mind the location of the diseased teeth and also enables him to at once find the picture of the tooth that he is treating or considering.

In Fig. 4 the inner member of the body of the mount is designated by the reference character 3^a, the flap 9^a, the slot to receive the negative 8^a, the gelatin sheet 12^a, and the lines of stitches 6^a. The negative film in this view is designated by the character 10^a.

What I claim is:

1. A mount for X-ray negative films, comprising an outer body member and an inner body member of opaque material and formed with registering openings, a sheet of flexible material between said body members and bridging the said openings said flexible material permitting the passage of light rays therethrough, and lines of stitches connecting the body members and the flexible sheet together and forming a pocket around the openings, the inner body member being slit to form an opening into said pocket and to permit the X-ray negative film to be placed in the pocket and against the inner side of the flexible sheet.

2. A mount for X-ray negatives comprising an outer body member and an inner body member of opaque material and formed with registering openings, a sheet of flexible material between said body members and bridging the openings said flexible material permitting the passage of light rays therethrough, lines of stitches connecting the body members and the flexible sheet together and forming a pocket around the openings, the inner body member being slit to form an opening into said pocket and to permit the X-ray negative to be placed in the pocket and against the inner side of the flexible sheet, and an opaque flap connected to the upper edge of the body portion of the mount.

3. A mount for X-ray negatives comprising an outer body member and an inner body member of opaque material and formed with two longitudinal rows of openings one row being above the other and the openings in one body member registering with the openings in the other body member, a sheet of flexible material between said body members and bridging the openings, said flexible material permitting the passage of light rays therethrough, lines of stitches connecting the body members and the flexible sheet together and forming a pocket around each pair of registering openings, the inner body

member being slit above the upper row of openings to form entrances into the upper row of pockets, said inner body member being also slit below the lower row of openings to form entrances into the lower row of pockets, said slits permitting the X-ray negatives to be placed in the pockets against the inner side of the flexible sheet, and a flap of opaque material connected to the upper edge of the body member of the mount and adapted to be folded over to cover the inner side of the mount.

In testimony whereof I hereunto affix my signature.

OLIVER A. HELMER.