S. TOUSEY.

X-RAY FILM CARRIER.

APPLICATION FILED FEB. 15, 1919.

1,370,858. Patented Mar. 8, 1921.

Fig. 1.

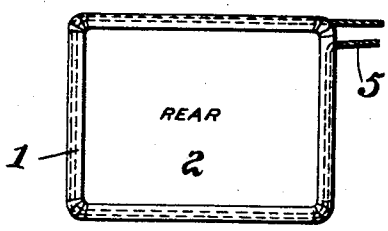


Fig. 2.

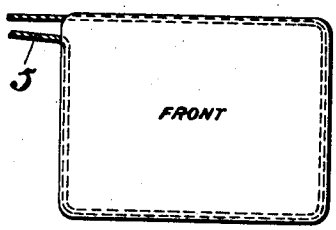


Fig. 3.

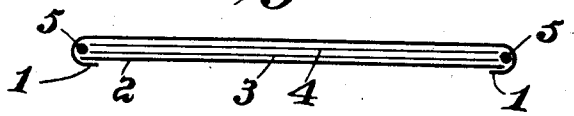


Fig. 4.

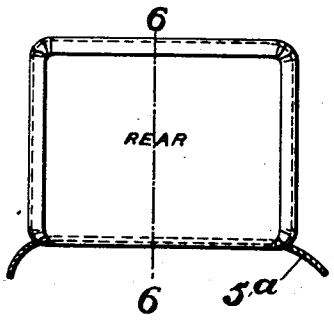


Fig. 5.

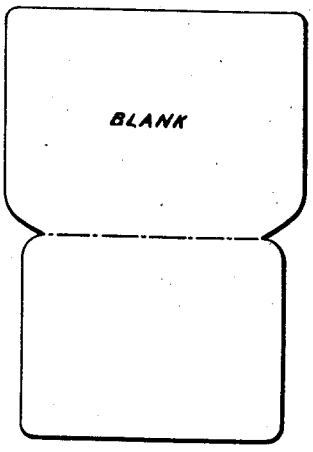


Fig. 6.



Inventor:

Sinclair Tousey,

By Dean Middleton, Duncan & Dean

Attys.

UNITED STATES PATENT OFFICE.

SINCLAIR TOUSEY, OF BROOKLYN, NEW YORK.

X-RAY-FILM CARRIER.

1,370,858. Specification of Letters Patent. Patented Mar. 8, 1921.

Application filed February 15, 1919. Serial No. 277,271.

To all whom it may concern:

Be it known that I, SINCLAIR TOUSEY, a citizen of the United States, resident of Brooklyn, New York, have invented certain new and useful Improvements in X-Ray-Film Carriers, of which the following is a specification.

In the work entitled "*Medical Electricity Rontgen Rays and Radium*," second edition, published by W. B. Saunders Company, Philadelphia and London, 1915, pages 862 and 863, there is described a vertical film-carrier for use in the mouth of the patient and consisting generally of a thin aluminum case to receive the film, having a closing member in the form of a cap which fits over the end of the case. My present invention is an improvement upon this film carrier.

It is desirable to provide means whereby an X-ray film carrier may be removed readily from the patient's mouth without handling the carrier itself, covered as it may be with infected saliva and further it is desirable to provide means whereby the carrier may be opened, when withdrawn from the mouth, without requiring the operator to use his fingers in rupturing the enveloping member or laying back any portion thereof by direct contact of the fingers therewith and furthermore it is of advantage to have means whereby, in case the carrier accidentally becomes lodged in the throat or back of the mouth, it may be readily dislodged and drawn away.

The invention consists in the features hereinafter described and particularly pointed out in the claims.

In the drawings:

Figure 1 is a rear view of one form of the invention.

Fig. 2 is a front view.

Fig. 3 is a sectional view.

Fig. 4 is a rear view of another form.

Fig. 5 is a view of the blank from which the form of Fig. 4 is made.

Fig. 6 is a sectional view of Fig. 4 on line 6—6.

The film carrier is made of thin soft metal such as aluminum and has an edge flange 1 turned over upon itself at the rear face to hold a back plate or sheet 2 also preferably of thin soft metal, with the film 3 and a sheet of black paper 4 inclosed between the front and back. The front of the member which has the flange 1 is transparent to the X-ray and thus a large field of exposure is presented by taking the picture through this front wall.

In order to provide means for enabling the operator to maintain some control of the carrier while in the mouth; to enable him to withdraw the carrier from the mouth without direct contact of his fingers therewith and to enable him to readily open the carrier, while avoiding manipulation thereof by the fingers directly, I provide a flexible member of string form 5 which is laid under the flange and against the wall where the flange is turned, said member having a projecting end or ends of any desired length, for instance such that they will project outside the mouth of the patient and will not become covered or saturated with saliva which might be infected. After exposure of the film the operator by taking hold of the dry protruding ends of the flexible member may withdraw the carrier from the mouth and then by pulling upon the said member the flange may be ripped off to the desired extent or turned back so that access may be had to the film for its withdrawal and development. In doing this the operator may pull upon both ends of the flexible member or string and at no time need his fingers contact with the carrier itself. The operation may be performed quickly and with entire safety to the operator.

If the device became lodged in the patient's throat it may be dislodged by pulling upon the string.

The form shown in Figs. 4, 5 and 6 consists of a back and front member in one piece, the back being folded over upon the rear face of the front portion and the edges of the latter being turned over the edge of the back at three sides to hold it in place.

The flexible member 5^a in this instance is simply laid in at the point where the blank is creased in folding the back and front portions as shown in Figs. 4 and 6.

This flexible member does not extend approximately entirely around the device as in Fig. 1 but only along the edge where the metal is folded. This form presents all the advantages above enumerated that is possessed by the first form. It may be opened by pulling the ends of the string in opposite directions while the device is suitably held or by pulling upon one end. In either case the carrier will be opened from side to side and the film may be withdrawn readily.

I do not limit myself to any particular length of the string as some one of the advantages above mentioned is present in any case in connection with an X-ray film carrier for use in the mouth for even should the string be short a sufficiently long protruding end or ends would be available to enable the device to be readily opened without danger to the operator.

I claim:

1. An X-ray film carrier of impressionable metal for use in the mouth, having a portion turned over upon itself and a flexible member laid within the edge and having a protruding end for opening the carrier.

2. An X-ray film carrier of impressionable metal for use in the mouth, having a front and a back wall in one piece folded to lie face to face and with the edge of one turned over upon the face of the other, and a flexible member lying within the edge when the piece is folded, and protruding therefrom, substantially as described.

In testimony whereof I affix my signature.

SINCLAIR TOUSEY.