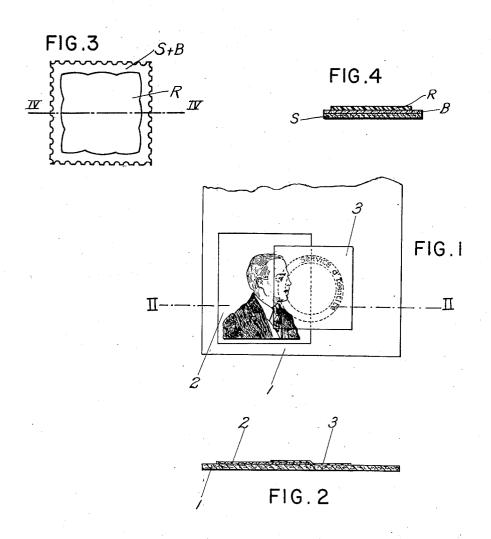
# AUTHENTICATING MEANS FOR DOCUMENTS

Filed Aug. 7, 1947



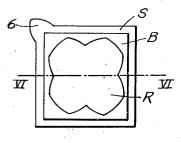
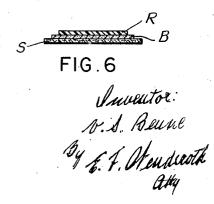


FIG.5



# UNITED STATES PATENT OFFICE

2,604,710

## AUTHENTICATING MEANS FOR DOCUMENTS

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Application August 7, 1947, Serial No. 767,286 In France June 15, 1944

1 Claim. (Cl. 40-2.2)

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The marking ink stamps and embossed stamps which are applied to official documents or the like can be easily falsified and such forgery does not require the use of large, complex, or delicate implements. The stamps, seals, and other authenticating impressions are usually easily accessible on the document to which they are affixed or on which they are impressed. Thus, they can be easily removed and reproduced or altered.

This invention has for its object to provide an authentication seal transferred by decalcomania across a document being authenticated, said authentication seal being covered by a transparent extremely thin layer of gelatin, which gelatin layer is treated with acetic acid after being fixed on the document in order to prevent stripping thereof. This process overcomes the above mentioned disadvantages.

In accordance with the invention, the authenticating impression, instead of being directly applied to the document, is impressed on the inner surface of an extremely thin transparent or translucent film of an adhesive substance, such as gelatine, the monochrome or multicolor impression consisting of a translucent layer of marking ink, and the impressed face of the film is subsequently made to adhere to the document being authenticated, it being thus impossible to remove it without deteriorating or destroying it.

In accordance with one embodiment of the invention, the difficulty in falsifying the inner impression applied on the adhesive film is more markedly increased by a color impression effected by means that are described in applicant's copending application Serial Number 767,287 filed August 7, 1947, and in French Patents No. 654,934 dated May 29, 1928, and No. 670,376 dated February 27, 1929.

One procedure for carrying out the invention, independently of the special color impression is described in connection with the accompanying drawings.

Referring to the drawing in which like reference characters denote like parts throughout:

Fig. 1 is a partial plan view of an identification card made in accordance with the process of the invention.

Fig. 2 is a sectional view taken substantially on the line II—II of Fig. 1, the paper base 1, the photograph 2 and the thin film 3 which bears the impression on its inner surface being greatly exaggerated in thickness for the sake of clearness.

Figures 3 and 4 indicate respectively a plan view and a cross-sectional view along the line

IV—IV of Figure 3 of the deckle edge authenticating structure of the application.

Figures 5 and 6 are a plan view and a cross-sectional view along the line VI—VI in Figure 5 of the authenticating structure in which a tab is provided.

Figures 3 and 4 illustrate the authenticating seal of the invention in which support S is provided with a sinuous or deckle edge. Above support S, a layer of soluble gum B, is placed, said gum being soluble in cold water. A transparent film R is placed above the gum layer B and constitutes the external face of the seal for authentication. In the authentication seal illustrated in Figures 5 and 6, support S is provided with a rectangular border and is further provided with a tab 6 situated at one of the corners for moving the seal as required. Above the support S, the cold water soluble gum layer B is placed and upon this gum layer the transparent film R is placed, said film receiving the external impression of authentication.

In the illustrated embodiment, the document to be authenticated is shown as an identification 25 card having a strong paper base I supporting a photograph 2 fixed to it.

In accordance with the invention, the photograph 2 or a part of it (as shown in the drawing) is covered with a very thin transparent film 3 carrying on its inner face the authentification stamp which is preferably marked in translucent type so that it does not impair the clearness and the visibility of the photograph. In accordance with the invention, the film 3 impressed on its inner face is made of an adhesive substance, such as gelatine, which is readily applied as the outer layer of a transfer paper. The paper is coated by the usual method with gum arabic. However, with a view to the inventive application of the transfer paper, the gum is used in a high concentration such as 12%, while the concentration of the gum for the sensitive gelatine transfer paper does not exceed about 5%. Further, the transferable film comprises a very thin layer of transparent gelatine having a low concentration of 10%, in contradistinction with photographic materials in which gelatine is mixed with a sensitizer such as silver nitrate, this latter being omitted from the transfer paper used in accordance with the invention.

Thus, when the film must receive the impression of an authenticating seal, the latter is impressed on the gelatine coated side of the transfer paper, the impression being made by means of a monochrome marking means or a multicolor printing process. The transparency thus ob-

tained is soaked in a 6.0% aqueous solution of acetic acid and its gelatine coated surface is directly applied on the desired area of the document to be authenticated. Adherence is assisted by rolling with a rubber-coated roller. The paper base of the transfer paper is then removed. As the gum is dissolved in cold water and is present as a thick layer, it may be stripped with the paper base.

its inner surface is made to adhere by means of a pressure roller.

The seal and the photograph are still clearly visible through the transparent adhesive film which, in view of its extreme thinness, is sub- 15 stantially unified with the document and, in any case, cannot be removed without simultaneously destroying it to render useless the impression on its inner surface. Thus, it is apparent that the invention provides an adhesive seal with an in- 20 accessible impression, which insures full security against any forgery or falsification.

In practice, the imitation, reproduction or falsification may be made still more difficult by color printing of the film, as already mentioned, particularly when such printing is made by the process and by means of the apparatus shown and described in applicant's copending application Serial No. 767,287.

The difficulty of falsification may be further 3 increased by providing the impressed transfer paper with suitably arranged perforations, or undulated edges, or polygonal edges at the periphery of the transfer paper rather than having straight edges at such periphery.

The very thin gelatine layer of the transfer paper may be dyed in any suitable manner, the color corresponding to or differing from the color of the document or object to which it will be ap-

To facilitate the transferring operation, that is the stripping of the adhesive paper base, a projecting tab or an edge free from gum and gelatine may be provided on the paper.

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The described authentication means and processes may be used for authenticating the trademarks on the labels or other printed matter accompanying packets of different commodities, or on the flasks, bottles or envelopes used for medical drugs, perfumes and the like.

Having thus disclosed the invention, what is claimed is:

In a document to be authenticated having a As previously indicated, the film impressed on 10 plurality of documents thereon such as a support and a photograph, an authentication seal transferred by decalcomania across said various elements of the document to be authenticated, a transparent extremely thin layer of gelatine covering said seal and said transparent layer being treated with acetic acid after being fixed upon said document in order to prevent stripping thereof.

#### VIRGILE SERGE BEAUNE.

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