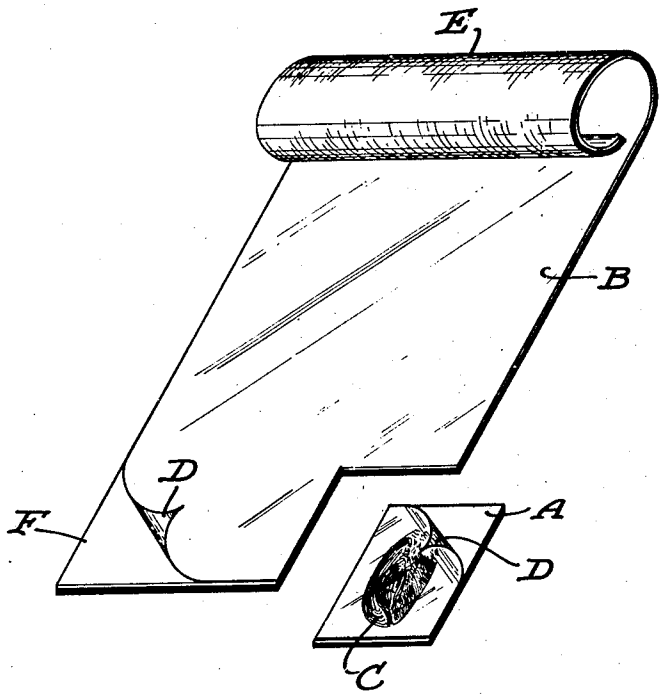
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LATENT PRINT LIFTING MEANS

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LATENT PRINT LIFTING MEANS

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This invention relates to an improved method and means for lifting, transferring and preserving latent finger prints.

Latent prints are to be distinguished from those which are intentionally impressed or transferred directly onto a suitable receiving medium, to give an immediate and permanent record. A latent finger print is one which is not placed directly upon a recording medium for record purposes, being in most cases, inadvertently left upon an article, and discovered at some later time. Obviously, the lifting and preserving of latent finger prints is of great importance in detection and identification procedure.

For want of a more satisfactory method, an investigator has, heretofore, been obliged to make use of the camera for obtaining permanent records of latent finger prints. The photographic method, while capable of being utilized with average success in the reproduction of prints which have been left on flat objects, is of little value for impressions left on curved, angulate or reflecting surfaces. In some cases, the use of a camera is impossible, for example when the print is located in a restricted recess. Such adverse conditions are commonly encountered, and, when a camera is employed, result in distorted or indistinct photographic images. Further, the reproduction of a latent finger print by photography, which will be suitable for identification study, requires, even under favorable conditions, considerable photographic skill and experience.

An object of my invention, therefore, is to provide a method for lifting latent finger prints which may be substituted for present methods, and which may also be employed where the methods heretofore known, have been inoperative.

A further object is to provide a method and means for lifting latent prints, which does not require the extreme care and skill incident to the method heretofore employed.

Another object is to provide facile and inexpensive means for lifting, transferring and preserving finger prints of the class described, the entire means being of such a compact nature, as to permit of their being conveniently carried on the person.

The accompanying drawing is a preferred embodiment of means employed in carrying out my invention, and illustrates how the material used may appear as a commercial article. A small section A of this lifting material, after use, is shown cut from the partially rolled supply sheet B. A lifted finger print C is shown on the small section of material, partly covered and protected by the preferred, transparent covering D. A record of the print may be kept in this form, or the material, with the print, photographed and enlarged for detailed study. My device consists, essentially, of a flexible material, such as a fabric E, having an even coating of a finely textured, gum-like substance F, by which the print is lifted, and upon which it is recorded and preserved. While there are a number of materials suitable for this purpose, I prefer to use a plastic compound, having a rubber base. Crepe rubber, rendered plastic by treatment with a suitable rubber softener, and intermixed in suitable proportions with guayula, cottonseed oil, carbon black, and pine tar, has been found to produce a compound having the desired qualities. The surface is provided with a covering, preferably of transparent material, which is removed when a print is to be lifted, and which, after lifting the latent print, is replaced over the transferred replica thereon, to protect and preserve it. Clear celluloid has been found to be a suitable material for this purpose, not only because of its transparency and flexibility, but also because of its smooth, pore-free structure which, upon application, imparts a lasting, glossy surface to the lifting material. Other smooth-surface materials, such as glass and the like, will at once suggest themselves as substitutes for celluloid, as a covering material. I regard it as desirable, however, that the covering material used, should have a smooth, non-porous surface, due to the fact that such material serves the double purpose of removing inequalities on the surface of the lifting medium, and also serves as a protecting covering for the lifting and recording medium, before and after it receives the latent print. This preparation of the recording surface by a smoothing medium, is of considerable importance to the successful utilization of my means and process.

To lift a latent print from an object, the impression first is lightly dusted with a suitable powdered pigment, for example, aluminum powder, selected in the present instance because of its light color, providing a contrasting image against the darker field of the rubber lifting and preserving medium. Any excess powder may be dusted or blown from about the print, and the remaining particles of pigment adhere to the natural oils which make up the print, and serve to clarify or "raise" it. This process of dusting the print with a pigment, is old in the art; being used in connection with the photographic method.

The celluloid covering is removed from the lift-

ing material, leaving it with a smooth and glossy, adhesive surface, which, when pressed upon the powdered print and lifted, receives a perfect reproduction of the impression. The celluloid covering is then replaced, and the print is preserved for record in this form, or may be photographed and enlarged for more detailed study. It is thus seen that my invention affords a simple device which may be conveniently carried about the person, as in a pocket, and may be easily used; and due to the flexibility of the lifting medium, it is unusually adapted to the removal of prints from any ordinary surface.

It will, of course, be understood that various changes may be made in the form, details of parts, and materials used, without departing from the scope of my invention, and that the particular illustration is only intended to demonstrate, by way of statutory example, the adaptability of my discovery to the attainment of the objects set forth above.

I claim as my invention:

1. The herein described method of recording a latent finger print which consists in applying to the print, substances of light and dark color respectively, one of which substances is adapted to record the print, and the other substance adapted to render the recorded print visible, by contrast, and in smoothing the recording substance prior to its application to the print.

2. The herein described method of lifting a latent print, which consists in treating the print and in applying to the treated print, an adhesively coated fabric of set-resisting character, adapted to record the treated print.

3. The herein described method of lifting and preserving a latent print which consists in treating the print with a light colored material, and in applying to the treated print, an adhesively coated fabric of dark color, adapted to remove and retain the treated print, and in covering the adhesive surface with a transparent protecting member.

4. The herein described method of adhesively lifting a latent print which consists in applying to such a print, a substance rendering the print transferable, without distortion, and in applying to the treated print, a pliable and transferring medium of a color contrasting with said substance.

5. The herein described method of lifting a latent print, which consists in applying to the print a pliable gum-like substance of non-crystalline character and dark color having a surface adapted to receive a gloss, and having sufficient affinity for the print to record the same after such application, in adhesively lifting the print by such substance, and in preserving the print by applying to the print and substance, a less flexible material through which the print is visible.

6. The herein described method of physically lifting a latent print by adhesion, which consists in utilizing an adhesive substance, having transferring affinity for the print, in preparing the surface of said substance, before application to the print, by pressing a smoothing medium onto, and removing it from said surface, and in applying the smoothed surface to the print and the object by which it is carried, and in removing the substance and the print, from the print-bearing object.

7. The herein described method of physically lifting a latent print, which consists in utilizing an adhering substance, having transferring affinity for the print, in preparing the surface of said substance, before application to the print, by treatment with a smoothing medium, in treating the print with a powder of a color contrasting with the adhering substance, and in applying said smoothed surface to the treated print and the object by which it is carried, and in removing the substance and the treated print from the print-bearing object.

8. The herein described method of lifting a latent print which consists in utilizing a dark colored adhesive substance, having transferring affinity for the print, in preparing the surface of said substance, before application to the print, by treatment thereof with a transparent smoothing medium, in treating said print with a powdered substance of light color, in applying said smoothed surface to the print and the object by which it is carried, in removing the substance and the print from the print-bearing object, and in covering the plastic substance bearing the recorded print, with said smoothing medium, as a protecting cover.

9. A step in the described process of lifting latent prints by the use of an adhesive substance having transferring affinity for the print, which consists in smoothing the surface of the transferring substance before application to the print.

10. Means for physically lifting and recording latent prints, including an element having an adhesive surface, and transparent smoothing means for the adhesive surface removably associated therewith.

11. Means for lifting prints comprising a pliable element having an adhesive surface, and a flexible transparent smoothing cover for the adhesive surface, removably associated therewith.

12. Means for lifting latent prints, comprising a fabric-backed material having an adhesive surface, a dusting material for rendering a print visible, and a flexible, transparent, smoothing cover for the adhesive surface, removably associated therewith, one of said materials being of a light color, and the other thereof, of a relatively dark color.

13. As a new article of manufacture, material adapted for the lifting of latent prints, which material comprises an adhesive, print-lifting element the lifting portion of which is of dark color, and a flexible, transparent smoothing cover substantially coextensive, and removably associated with, said lifting element.

14. As a new article of manufacture, material adapted for the lifting of latent prints, which material comprises a pliable fabric backing, an adhesive, print-lifting substance of dark color disposed on said backing, and a flexible transparent smoothing cover substantially coextensive, and removably associated with, said lifting substance.

RICHARD M. JOYCE.