Oct. 13, 1959 D. G. ASHBY ET AL 2,908,025

DEVICE FOR COATING A PHOTOGRAPHIC PRINT

Filed Sept. 30, 1957 2 Sheets-Sheet 1

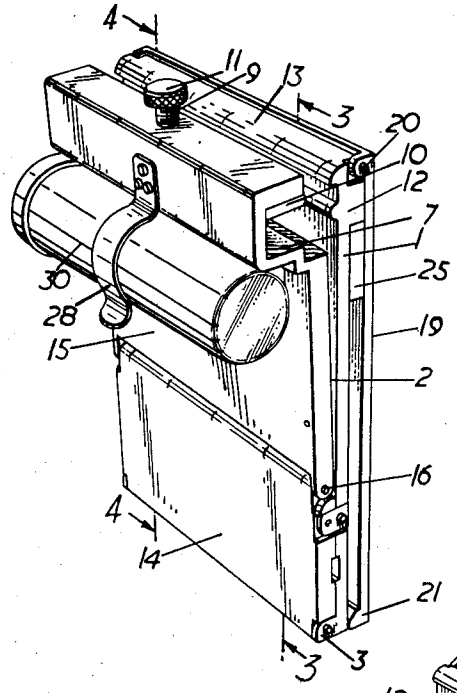


FIG. 1.

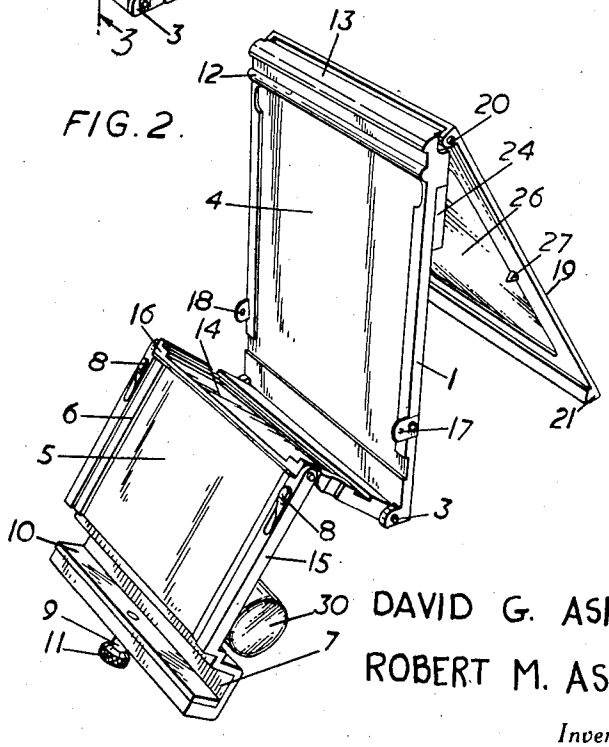


FIG. 2.

DAVID G. ASHBY
ROBERT M. ASHBY
Inventors

By Wenderoth, Linde & Ponack
Attorneys

Oct. 13, 1959 D. G. ASHBY ET AL 2,908,025

DEVICE FOR COATING A PHOTOGRAPHIC PRINT

Filed Sept. 30, 1957 2 Sheets-Sheet 2

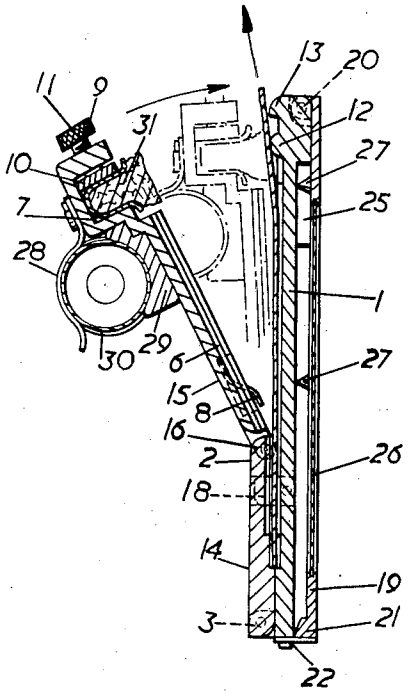


FIG. 3.

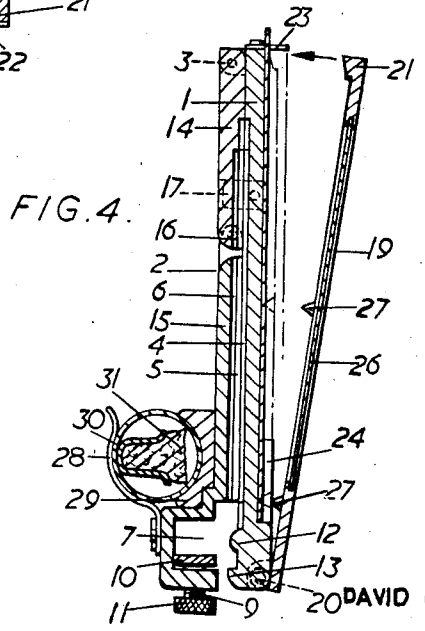


FIG. 4.

DAVID G. ASHBY
ROBERT M. ASHBY
Inventors

By Wenderoth, Lind & Ponack
Attorneys

United States Patent Office

2,908,025

Patented Oct. 13, 1959

2,908,025

DEVICE FOR COATING A PHOTOGRAPHIC PRINT

David Glynn Ashby and Robert Marcus Ashby, Hazlemere, England, assignors to Polarizers (United Kingdom) Limited, London, England

Application September 30, 1957, Serial No. 687,179

Claims priority, application Great Britain October 4, 1956

7 Claims. (Cl. 15—118)

This invention relates to a device for use in the finishing of positive prints of the kind which are produced in a camera directly after exposure of a photo-sensitive emulsion by selective control of the development of a negative image in the emulsion.

In the use of such cameras it has been found to be desirable to apply to the positive print after it has been obtained from the camera, a coating which protects it from the effects of handling and abrasion. Such coating is also designed to prevent fading of the picture. It is desirable also that the positive print does not come into contact with any part of the human body before the coating is applied. Moreover, the coating takes time to dry and during the drying process it is desirable to keep the positive print free from dust and/or abrasion. Furthermore, since the positive material has been held in a tight roll in the camera the print will tend to curl when it is removed from the camera and it is desirable to remove this curl, for example by drawing the back of the print over a straight edge before, during or after applying the coating.

It is accordingly an object of the present invention to provide a device which enables these operations to be carried out quickly and simply.

According to the present invention, the device comprises two plate-like members which are hinged together and are so shaped that when in contact with one another they define a recess adapted to receive the positive print and one of the members is provided at a part remote from the hinge with means for holding a pad adapted to be moistened with the coating liquid whereby, as a print inserted into the recess is withdrawn therefrom, its surface is held in contact with the pad and is thus coated with the liquid. Conveniently, the other plate-like member is provided with a ridge or like projection in a position where it operates to press the print against the pad. This other plate-like member may also be formed, at a point remote from the hinge, with a straight edge, preferably having a rounded contour, over which the print may be drawn as the print is pulled out of the recess whereby to remove curl.

In order to facilitate the insertion of the print between the two members and also to prevent the print from being touched by the fingers, one of them may be formed in two parts which are hinged together and so arranged that the inner part, that is the part adjacent the hinge of the two members, may be closed on to the other member to form a recess in which the edge of the print may be located before the outer part is closed on to the other member.

In one constructional form of the device of this invention the two plate-like members are generally rectangular in shape and may be formed of a metal or a suitable plastic. The two members are hinged together at one of their shorter edges and the facing surfaces are formed each with a shallow depression of a size suitable to receive the positive print. The depression in that one of the surfaces which in use faces the sensitive surface of the print may be bounded by a slightly raised margin which engages the edge of the print and assists in preventing contact of the sensitive surface with the surface of the depression. At the edge of the members which are remote from the hinge one of the members is provided with a trough adapted to receive and hold a pad or applicator which is saturated with the coating liquid and which is normally provided with each picture roll. The corresponding part of the other member is formed with a raised ridge or projection which, when the members are closed together, assists in forcing the surface of the print into contact with the pad. The extreme edge of this other member is also suitably rounded or profiled so as to provide a straight edge over which the print may be drawn in order to remove curl.

To facilitate the introduction of the print between the two members, one of them is formed in two parts which are hinged together on an axis parallel with the axis of the main hinge and suitable means such as spring catches or the like are provided to hold the inner part, that is the part adjacent the main hinge, in contact with the other member before the outer part is closed on to the other member.

The device of this invention may also include means for storing a coated print while it is drying and such means may comprise a third plate-like member which is hinged with one of the other members and is shaped so that when closed on to the other member and held in position by a spring catch or the like, there is provided a recess in which a print may be accommodated. Conveniently one of the two facing surfaces of this recess is provided with projections or spikes which engage the coated surface of the print at its edges so as to hold it out of contact with the surface of the member.

The invention will now be more particularly described with reference to the accompanying drawings in which:

Fig. 1 is a perspective view of one form of apparatus when closed;

Fig. 2 is a perspective view of the apparatus of Fig. 1 with all the hinges open;

Fig. 3 is a section along the line 3—3′ of Fig. 1 illustrating the operation of coating a print; and

Fig. 4 is a section along the line 4—4′ of Fig. 1 illustrating the operation of storing a coated print with the pad stored in its container.

Referring to the drawings, two plates generally denoted by numerals 1, 2 are hinged together by hinge 3 along one of their shorter sides. Plate 1 is provided with a shallow recess 4 of such dimensions that it will readily accommodate a positive print from a camera therein. Plate 2 is similarly provided with a shallow recess 5 which is bounded by a slightly raised margin 6. Plate 1, at the end remote from hinge 3 is provided with a trough 7. A screw-threaded hole in one side of trough 7 holds a screw 9 one end of which is rotatably mounted in a bar 10 disposed within trough 7. The other end of screw

9 terminates in a knurled knob 11. Rotation of screw 9 moves bar 10 within trough 7.

Plate 1 is provided with a projection 12 which underlies trough 7 when plates 1 and 2 are in the closed position. The edge 13 of plate 1 is rounded.

As shown in the drawings, plate 2 is formed in two parts, respectively denoted by numerals 14 and 15, which are hinged together at 16. Spring catches 17, 18 mounted on opposite sides of plate 1 serve to hold part 14 in contact with plate 1 so as to define a recess within which a photographic print may be inserted prior to processing.

A pair of leaf springs 8 on opposite sides of part 15 of plate 1 urge it slightly upwards; this is found to be of advantage when closing the loaded apparatus and in assisting in preventing excess pressure from being applied to the surface of photographs during treatment in the apparatus.

In the apparatus illustrated a third plate 19 is provided which is hinged to plate 1 at 20 and has an upward projection 21 along its opposite edge. The plate 19 may be held in the closed position by means of spring catches 22, 23. Projections 24, 25 on the underside of plate 1 assist in defining a recess within which a freshly processed photographic print may be placed and viewed through a window 26 in plate 19 whilst it is drying. A plurality of spikes generally denoted by 27 engage the wet coated surface of a print and thus hold it out of contact with the surface of plate 19.

A clip 28 mounted upon the outside of the trough 7 and a shaped supporting member 29 may be provided to hold the container 30 within which the pad or applicator 31 is kept when not in use.

To use the apparatus part 14 of plate 2 is closed, being held in the closed position by means of spring catches 17, 18. The print to be processed is inserted in the recess thus formed with the surface to be finished facing outwards. The applicator 31 is, meantime, inserted in trough 7 and bar 10 moved forward in trough 7 until applicator 31 is tightly held in position. Part 15 of plate 2 is then closed; only a protruding end of the photographic print-carrying material can now be seen. Whilst holding part 15 tightly closed, the protruding end is pulled in a somewhat downward direction over rounded edge 13. The emergent print is coated with the material carried by the applicator 31. The treatment may be repeated if desired. The treated print is now ready for storing. Plate 19 is opened and the print placed in between projections 24, 25 with the treated surface facing outwards. The print can then be viewed through window 26 without fear of its surface being damaged whilst it is drying.

The device of the invention enables a positive print to be coated and uncurled substantially simultaneously and in a quick and simple manner. It also enables the print to be dried in a situation substantially free from dust. The device may be made in a number of different forms and if desired may be constructed in such manner that it can be detachably secured on the back of the camera. It may also be arranged to hold the container in which the pad or applicator is housed when it is not in use.

We claim:

1. A device for finishing a positve photographic print by the application of a coating liquid to the image-carrying surface thereof which comprises two plate-like members hinged together along one edge and so shaped that when the hinge is closed and they are in contact with one another they define a recess adapted to receive a positive photographic print and one plate-like member is provided at a part remote from the hinge with means for holding a pad adapted to be moistened with said coating liquid whereby when a print inserted into the recess is withdrawn therefrom the image-carrying surface is held in contact with the pad and is thus coated with the liquid.

2. A device for finishing a positve photographic print by the application of a coating liquid to the image-carrying surface thereof which comprises two plate-like members hinged together along one edge, a recess formed in the facing surface of at least one of said plates and adapted to accommodate a positive photographic print prior to said treatment, a transverse arcuate ridge formed upon the facing surface of one of said plates near the edge remote from said hinge and means for holding a pad adapted to be moistened with said coating liquid in a position overlying said arcuate ridge.

3. A device for finishing a positive photographic print by the application of a coating liquid to the image-carrying surface thereof which comprises two plate-like members hinged together along one edge, a recessed portion formed in the face of at least one of said plates so that when the hinge is closed a pocket is formed between said plates, which pocket is adapted to acommodate a positive photographic print prior to treatment, one of said plate-like members being formed in two portions which are hinged together, a transverse arcuate ridge formed upon the facing surface of one of said plates near the edge remote from said first hinge and means for holding a pad, adapted to be moistened with said coating liquid, carried upon the other of said plates in a position overlying said arcuate ridge.

4. A device for finishing a positive photographic print by the application of a coating liquid to the image-carrying surface thereof which comprises two plate-like members separably mounted in contact with each other and so shaped that when in contact they define a recess adapted to receive a positive photographic print, one of said plate-like members being formed in two portions which are hinged together, means for holding a pad adapted to be moistened with said liquid mounted upon the facing surface of one of said plate-like members so that when a print inserted into said recess is withdrawn therefrom the image-carrying surface is held in contact with said pad and is thus coated with liquid.

5. A device for finishing a positive photographic print by the application of a coating liquid to the image-carrying surface thereof which comprises two plate-like members hinged together along one edge, a recess formed in the facing surface of at least one of said plates and adapted to accommodate a positive photographic print prior to said treatment, a transverse arcuate ridge formed upon the facing surface of one of said plates near the edge remote from said hinge, said remote edge being formed as an arcuate straight edge over which a print may be pulled as it is withdrawn, and means mounted upon the other of said plates for holding a pad, adapted to be moistened with said coating liquid, in a position overlying said arcuate ridge.

6. A device for finishing a positive photographic print by the application of a coating liquid to the image-carrying surface thereof which comprises three plate-like members, the first and second plate-like members being hinged together along one edge by a first hinge, and the first and third plate-like members being hinged together along one edge by a second hinge disposed upon the opposite side of the first plate-like member, the first and second plate-like members being so shaped that when the first hinge is closed and the plates are in contact they define a recess adapted to receive a positive print and one of said plate-like members is provided at a part remote from said first hinge with means for holding a pad adapted to be moistened with said coating liquid whereby when a print inserted into the recess is withdrawn therefrom, the image-carrying surface is held in contact with the pad and is thus coated with the liquid and the second and third plate-like members being so shaped that when the second hinge is closed a recess is formed between the second and third plates in which a finished print may be stored.

7. A device for finishing a positive photographic print by the application of a coating liquid to the image-carrying surface thereof which comprises three plate-like mem-

bers, the first and second plate-like members being hinged together along one edge by a first hinge and the first and third plate-like members being hinged together along one edge by a second hinge disposed upon the opposite side of the first plate-like member, a recessed portion formed in the face of at least one of the first and second plates so that when said plates are closed a recess is formed therebetween adapted to accommodate a positive photographic print prior to treatment, a transverse arcuate ridge formed upon the facing surface of one of said first and second plates near the edge remote from said first hinge, means mounted upon the other of said first and

second plates for holding a pad, adapted to be moistened with said coating liquid, in a position overlying said arcuate ridge and the second and third plate-like members being so shaped that when the second hinge is closed a recess is formed in which a finished print may be stored.

References Cited in the file of this patent

UNITED STATES PATENTS

1,876,744	Posgate	Sept. 13, 1932
2,546,738	Gendernalik	Mar. 27, 1951
2,819,484	Fouse	Jan. 14, 1958