Fine Arts.

REMOVING PRINTS FROM THEIR MOUNTS.

It is by no means an unusual circumstance that, for some reason or other, it becomes necessary to remove a photograph from its mount. Possibly it is mounted on the page of an album, and it may be desired to frame it or transfer it to another; or, on the contrary, it may be framed and it is desirable to place it in an album; or, again, the style of frame and mount is not in accord with others with which it is to hang, or, what is by no means improbable, the print has faded, and it becomes necessary to replace it with a fresh one, retaining the original mount, which bears an autograph that it is important to preserve.

Now, the removal of a print from its mount—as, no doubt, many from experience are aware—frequently proves to be by no means such a simple operation as at first sight it may appear, and the attempt often leads to the destruction of a valuable picture, or—what in some cases is an equal misfortune—the original mount is injured to such an extent that it becomes worthless.

If we could always ascertain the mountant employed much trouble would be saved, as we should then at once know how to proceed. In the present instance we shall assume that we are entirely ignorant of it. The first thing to do supposing the print to be framed, is to take it out, and, if it be in a cut-out mount, to remove that. If the print were framed by a photographer, in all probability it would be simply secured to the mount by strips of gum paper; but if by a picture-frame maker or a professional mounter, it will, no doubt, be glued to the mount, in which case, unless care be taken in separating it, the picture may be torn at the edges. The best plan is to gently force it away from the mount by passing the blade of a palette knife round the opening from the inside. After removal the picture is closely examined to see if any clew can be obtained as to the kind of cement with which it is attached. If it be "rough mounted," probably some of it may have exuded from the edges, and then its color may serve as a guide; for if it be dark in color it is no doubt either glue or dextrine, and if the former it may be detected by wetting it with saliva, when its well known odor will be developed.

India rubber has been so little employed as a mountant that the probability of that having been used is somewhat remote; yet it may have been. In that case, if the picture have been but recently mounted, it may sometimes be removed by raising one corner with the point of a penknife, and then gently peeling it off; or, if the mounting be of an old date, possibly the India rubber may have perished, and then its removal is easy enough. Failing this the picture must be saturated with benzole, and this will soften the rubber and permit of an easy removal. If the mount be of plate paper the benzole is better applied from the back.

We will now suppose that India rubber was not the mountant employed; therefore the print should be immersed in clean cold water, where it may be allowed to soak for an hour or two, trying it from time to time to see if the mountant has softened at all. If so, a longer immersion will, no doubt, allow of its removal. If, on the contrary, after several hours' soaking the cement show no signs of yielding, the print should be put into warm water for a quarter of an hour or so, when, if the mountant be glue or gelatine, the print and mount will be easily separated.

With this treatment most of those materials that are employed for mounting photographs will have yielded, but there are some kinds of starch which will obstinately resist it—even after many hours' soaking in both hot and cold water. When we get an obstinate case such as this, it is better to abandon the idea of removing the print from the mount, but to reverse the order of procedure and remove the mount from the print. Doubtless, from the prolonged soaking, the mount itself will have shown signs of succumbing, and we, therefore, proceed to separate the sheets of paper of which it is composed (one by one) until we get to the last—that to which the print is attached. It is now removed from the water, placed face downward on a plate of glass, and flooded with warm water. The paper is now abraded and carefully rubbed off, bit by bit, with the finger, and with care and patience it may be entirely removed without injury to the picture.

Supposing the print has been mounted in an album, the treatment above described cannot be applied. We must, therefore, proceed as follows: First get two plates of tin, or pieces of waterproof paper (such as are employed in copying books), somewhat larger than the pages, and several sheets of damp, white blotting-paper a little smaller. Now place several sheets of the latter at the back and front of the leaf carrying the print, inclose the whole between the tin plates, and put them under pressure. The tin plates will effectually protect the other leaves of the album from the moisture. After resting for an hour or two (during which time the blotting-paper must be kept damp), if the print cannot be removed the blotting paper should be ironed with a hot laundry iron. After this treatment the print can no doubt be easily removed, and any adherent cement cleaned off with a soft sponge and warm water. The leaf is then pressed between several thicknesses of dry blotting-paper; after which sponged both back and front with strong alcohol, and again blotted off. If this treatment be repeated several times the alcohol will remove the greater of the water, and the leaf when dry will not be nearly so much cockled as if it were allowed to dry spontaneously.

It sometimes happens that it is necessary to remove a print which has faded from its mount, and the latter may contain a title or an autograph, which it is impossible to replace. Under these circumstances we proceed in much the same manner as with the album, taking care, however, that the blotting-paper as well as the water with which it is moistened is scrupulously clean, as plate paper is most easily soiled. In an obstinate case, the print being of no value, it may be rubbed off piecemeal, as was recommended for removing the last sheet of paper, when the mount had to be destroyed. After the print has been "coaxed off" the margin of the mount should be thoroughly wetted, and then dried between sheets of blotting-paper, which will keep it flat. In putting prints on mounts that have borne other pictures care should be taken they are trimmed a trifle larger than the old ones, so that they overlap the space previously occupied.—*Brit. Journal of Photography.*

THE SKIAGRAPH.

A is a looking-glass laid flat upon the table; B and C are wooden frames each holding a square of plain glass. The flower to be drawn is laid between the glasses, which can be kept at any distance apart by means of the parallel links on each side, and the screws at D. A piece of paper is laid upon the upper glass, and by the light of a candle reflected from the mirror, the shadow of the flower is projected through the paper, and its outlines can be easily traced. The paper can then be removed, and the shading and coloring copied from the object, which is held in the same position between the glasses. A skilful draughtsman may despise such aid, but it has been found useful for drawings aiming rather at correctness of shape and size than at artistic effect. The shadows will, of course, be very slightly larger than the object. The machine might also be useful to designers of Christmas cards, or floral patterns of any kind. It can easily be made with a common looking-glass and two picture frames, and a pieces of brass wire. A cardboard screen should be placed at E to prevent the light from falling directly upon either side of the paper. Everything must have a Greek name nowadays, so we call it the skiagraph. —*Knowledge.*

EDISON'S NEW ELECTRIC LAMPS.

Further improvements in his incandescent lamps have been lately made by Mr. Edison, the main features of which will be understood by the following diagrams and description, which latter also includes an account of his new arc lamp. The object of that part of the invention shown by Figs. 1 and 2 is to secure increased economy in the manufacture of the lamps by simplifying the blowing of the glass globes, and secondly, to clamp the leading wires easily and cheaply to the carbon filaments or bridges as they are termed. The blower takes the glass from the melting-pot, and shapes it as seen in Fig. 1, leaving an opening large enough to allow the carbon to be passed into the globe. The leading wires are laid through a glass tube, seen in position in Fig. 2, which has a swelled part to fill up the orifice left in Fig 1. The wires at one end are firmly sealed by melting the glass around them. Where this sealing takes place the leading wires are of platinum, but on either side they are of copper, taking the form of copper ribbon where the connection is made with the carbon filament, in order that they may be wrapped around the bridge and have abundance of surface contact. The wires being sealed in the tube and connected to the bridge, the latter is passed into the globe and the two parts are firmly attached by melting the