

is to a portrait photographer, and should not be regarded as so much waste paper, as is too frequently done, but it should be made to throw out and relieve the principal subject, by the direction of the cloud lines opposing the lines of the landscape, by the opposition of light and shade, either to produce relief or breadth, and to generally assist in the production of pictorial effect: unless, indeed, as sometimes occurs—a fine sunset, for example—the sky be the chief object represented; then the landscape must be subordinate.

Leaving out of consideration the latter case, let us see how far its employment as a means of effect is legitimate, especially when printed from a separate negative to the landscape to which it is joined in the finished print: the only way, in my opinion, by which the fullest value can be obtained, and the utmost amount of pictorial effect can be produced; and that not by blind chance, of which Ruskin tells us to be independent—as would be the case if taken with the landscape—but with that certainty which a knowledge of art give to its votaries. It will not be necessary to give any definite instruction for the use of the sky, as the readers of these articles will, by this time, or after they have read the chapters on chiaroscuro which are to come, be able to artistically apply an object that is infinitely varied, to suit all circumstances of composition, and is for ever changing in its light and shade and form.

Many ingenious arrangements have been devised for the purpose of securing the sky on the same plate as the landscape, and I believe there are now no chemical or mechanical difficulties in securing the two by one operation which a clever photographer could not successfully combat; but before you cook your hare you must first catch it. Now, however natural any sky that may happen to be in the heavens at the time the photograph is being taken, it only occasionally occurs that it is the best, or nearly the best, for pictorial effect. This being the case, it is for the operator to select a sky that will best suit his picture; and in doing this he must have a sufficiently critical knowledge of nature, and the various phases she assumes, to prevent him departing from the truth of nature. He must keep strictly to the truth of nature—that is absolutely imperative—but he may select the best and most picturesque nature he can get. The intelligent student will be ever on the look-out for what is beautiful, and when he sees a fine effect he will always examine the causes by which it is produced, and note them in his pocket-book, although he may not have his camera with him at the time.

What the photographer has to do, then, is to select and use a probable sky to increase the beauty of his work; but it must be such a sky as would render it impossible, not only for the carping critic, but also the real man of science, to say it is not true. It must, indeed, be so true as to defy the adverse criticism, as a fact, of the most learned meteorologist. Surely no very impossible task to an observing student!

While the foreground of a picture should contain the keynote of the composition, the sky should always preserve harmonious relation to the whole picture. The various effects of cloud and sky which may be introduced in landscape photography afford a vast scope for the display of the art capacity of the operator. He can, by a well-chosen effect, bring an otherwise unimportant and somewhat tame distance into better keeping with the remainder of the picture; he can by its means supply a deficiency in some of the most important lines of the composition; or he can, especially in pictures with figures in the foreground, use an effect of cloud or atmosphere to give not only relief to the principal object, but to correct the foreground and the distance; for although the sky is really behind the picture, still it may form the connecting-link between any two grades of colour or masses of light and shade.

Just a word in my next in reference to the absurd notions of those who hold—I can scarcely say believe—that the truth of nature is violated if a sky is added to a landscape from a second negative, and that those who select nature "maintain in idea that the artist is greater than the Divine

Maker" of nature, which they quote, and pervert to an unintended use, from Ruskin, and then, as far as this part of my subject is concerned, I have done.

ADHESIVE MEDIUMS—A WORD OR TWO IN FAVOUR OF PASTE.

BY A PRACTICAL MAN.

As some little attention is now being directed to "indiarubber solution" and other adhesive mediums, a few hints may be acceptable in regard to the old domestic "familiar"—paste. Paste is considered a very simple thing to make. So it is, when you know how. Milk is a very simple thing to boil; potatoes not less simple; but how rare to find them properly prepared; the first without being allowed to boil over, and the second without being reduced to a watery smash! The general fault in paste making is in not having it sufficiently smooth and sufficiently boiled—not burnt. Pastes may be made of dextrine, rice, starch, or flour. Paste made with flour was extensively used by the old water-colour painters: Turner, Girtin, Varley, Walmsley, and others. If paste were guilty of all that is sometimes laid to its charge by photographers it could scarcely fail to injure the tints of many of the delicate water colours used by these masters in producing their charming effects. Yet their drawings in the folios and in the frames of collectors have suffered no further change than that of receiving the "golden tinge of age," a very different thing from the sickly yellow tone of a decaying fading-away photograph. The greater part of the pictures alluded to have been in existence more than half a century, and, from their present perfect state and freshness, seem to have received but little or no harm that can be laid to the charge of "paste;" it being also a generally understood fact that Turner freely used paste to the backs of all his drawings, his fleecy cloud effects, &c., being produced on the fronts by copious washing and sponging.

To keep paste from becoming mouldy, put in a few shreds of isinglass and a little essential oil of cloves. A good serviceable paste is made by first preparing a bason or cup full of strong starch, according to quantity wanted, to be made with hot water poured from the spout of a tea-kettle with the steam well up. When the starch paste has become cold, put it into a wash-hand basin or pan, and rub well up with the hands—in fact, wash the hands in it; then return the same to the cup or basin, and put on one side to ripen. This will be known to have taken place when the paste loses its blue tinge, and becomes white. It will now be found as thick and smooth as butter, and can be spread over paper with the finger, so as to form a clean and even film. This paste may be mixed with prepared gum; one part gum to two of paste. The gum should be dissolved in clean soft water, and then strained through flannel for use.

A general mistake in the pasting process is that the paste is used too thin, and not allowed time to soak into the paper; but the moment the paste is applied down it goes, and then commences all the eel-like evolutions of twisting, turning up, and cockling. There is nothing more convenient for the photographer in pasting operations than the old "napkin press" of thirty years ago, when napkins and finger-glasses were in vogue. These presses have a drawer underneath, the bed of which is of inch-deal, on which is placed any article—napkin, book, paper, print, or cloth—that wants pressing to take out the creases and folds. A piece of board, somewhat smaller than the bed, is now placed over the articles, and the screw turned that works down from the top rail. This arrangement will allow the article to remain under pressure as long as may be needed, or till such time as they are firmly set and dry. Much of the failure attending adhesive methods and processes is more from the careless and slovenly way in which the thing is done than from the materials themselves. The addition of a few drops of the ten-grain solution of carbolic acid, as described in a