

The Photographic News, April 23, 1880.

PHOTOGRAPHY IN AND OUT OF THE STUDIO.

CELLOIDIN—EDWARDS' FORM OF ALKALINE DEVELOPER—
PROPORTION OF DIFFERENT RAYS IN DIFFERENT SOURCES OF
LIGHT—A SINGULAR INSTANTANEOUS PROCESS.

Celloidin.—The Editor, or one of his staff, called attention to celloidin in the last issue of the NEWS, and we have a word to say in its behalf. It is perhaps the very best form of pyroxyline that has been introduced. For making collodion emulsion, Mr. William Brooks has given it an excellent character, which we can fully endorse. It is absolutely free from specks of any description when dried, and gives a beautiful film, capable of giving the tenderest half-tones, and, above all, the latent image—or, as we believe it is considered to be more correct to say, the undeveloped image—is not liable to fade away if the plates be not developed. Mr. Brooks gives an account of plates keeping three months after travelling over the Continent, and then developing with ease, and without loss of detail. In ordinary pyroxylines there are, no doubt, various impurities, and Schering says in his description of celloidin that these impurities—such as dextrine, xyloidine, nitro-mannite—are eliminated by his process of manufacture. Whether this is the case we do not know, but of one thing we are quite certain, and that is that it is a very beautiful preparation, and quite worthy of trial by practical photographers who may still work the dry or wet collodion processes. Celloidin is pyroxyline in cakes, containing 20 per cent. of the pyroxyline; the remainder consisting of semi-evaporated solvents. The necessity for this mode of preparation arose through the German Government absolutely prohibiting the carriage of any form of gun-cotton by rail, and hence the form in which celloidin is prepared. There is another advantage in it also, and that is that it is not at all liable to decompose spontaneously, as is pyroxyline, since it is presumably dissolved immediately after manufacture, and if this precaution be taken there is absolutely no danger of the cotton undergoing any change. It need scarcely be said that Schering is one of the best known German manufacturing chemists, and his name is a sufficient guarantee for its excellence.

Edwards' Form of Alkaline Developer.—The latest improvement in the alkaline developer is due to Mr. B. J. Edwards, and, as will be seen by reference to last week's NEWS, consists essentially of the addition of glycerine to both the ammonia and also to the pyrogallie acid solutions. Now we work gelatine plates, and have always fought rather shy of the ordinary alkaline method, on account of its staining action on the film, and, like our Editor, rather swore by the ferrous-oxalate developer. Well, we have given the new developer a trial, and, so far, are enchanted with it. It flows over the gelatine film with the greatest ease, and, in fact, it is scarcely necessary to use a dish for the operation of developing, since there seems to be no repellent action. The image comes up rapidly and beautifully, and takes density with great readiness. Since trying it, we have almost parted from our old love, the iron developer, as the latter has one disadvantage, which is the liability to form streaks of oxalate of lime in the film, through the chalk present in the ordinary washing water, but which can be removed by the action of very dilute hydrochloric acid, or, as Mr. Warnerke recommends, by citrate of soda. Neither of these chemicals is absolutely without danger to the film, and hence our disinclination to use them. In collodion emulsion films the same danger is not to be apprehended, and we usually give them a wash of hydrochloric acid after fixing and washing, to get rid of these markings, and also to dissolve out any minute particles of the iron salt which may be

precipitated in the pores of the collodion. Photographers cannot do wrong in trying the modified developer, and those who can do so should report their candid opinion regarding it, as we do ours.

Proportion of Different Rays in Different Sources of Light.—Herr Mayer, in the *Photographisches Wochenblatt*, gives a number of comparisons made between the different rays of the spectrum given by sunlight, ordinary skylight, gas-light, and the electric light. He finds that, comparing the electric light and the sunlight together, the former has more yellow light in proportion to the blue than the latter—in other words, the electric light is yellower. At first blush this seems hard to believe, since the electric light always looks so violet-tinted, but it must be recollected that the comparisons are usually made between candle or gaslight and sunlight, and not with daylight, since the electric light is rarely worked except when sunlight has gone. Perhaps the readiest mode of showing the yellowness of the electric light is to cut a hole in a piece of card, place a white screen behind it, and direct a beam of sunlight through the opening in one direction, and of the electric light in another, so as to get the images of the holes always side by side. An examination of the two will at once show that there is a prominent yellowness in the electric light as compared with that from the sun. The difference is, however, only apparent in really bright weather. In the winter time, when the sun is low in the horizon, and when there is usually a good deal of watery vapour in the atmosphere, the tables are turned; whilst in a fog daylight looks absolutely yellow when compared with gaslight. The electric light for the studio is always a sure gain to the photographer, though it must be admitted that the tax he pays for it is rather heavy. Still it is an advantage, and we shall be surprised if it is not soon found in many of the first-class studios. There is no patent that can stop its application, since no principle can be patented. We have seen most excellent portraits taken by its means by amateurs, the light being softened by means of tissue paper, which takes away the unpleasant glare so often felt when the eyes are directly illuminated by it. Our American cousins have introduced what is, perhaps, the steadiest light. The Brush machine is beautifully constant in its action, and the lamps they have adapted to it are admirably steady, there being none of that disagreeable flickering which seems inherent in some lamps. The day will probably soon arrive when a simple application of water power from the service mains will suffice to drive the machine without any expenditure of steam power. A telephone will then be sufficient for the photographer to signal his assistant to turn on the water tap, and the light will instantly be shown. Where we have seen the electric light at work it has generally been necessary to have a gas engine, or other such motive power, and this is a nuisance to a photographer who is not a mechanic, and if it can but be done away with, the never-failing light will be found where at present it can only be dreamt of.

A Singular Instantaneous Process.—It was lately pointed out to us that an entirely new process had been introduced whereby moving objects, such as children and dogs, could be photographed without difficulty. Singularly enough, the *locale* of the process is in Yorkshire, and presumably must have been discovered by one of the tykes that live in that northern county. The description of it—or rather, we should say, the advertisement of its merits—is rather baffling, as it is simply said that it was “our instantaneous ferrous oxalate process,” and Yorkshire was asked to try it. What it means is a little past understanding, unless it means that it is the gelatino-bromide process under another name. If it be so, the description of it is worthy of our very occasional correspondent, Mr. J. L. Toole, and might be, with advantage, amalgamated with his “sesqui-quæ-quod,” which forms such an important part of his lecture on photography.