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PHOTOGRAPHY IN AND OUT OF THE STUDIO

THE RAPIDITY OF GELATINE PLATES—NEW DEVELOPERS—PHOTOGRAPHIC EXHIBITIONS—REVERSED NEGATIVES.

The Rapidity of Gelatine Plates.—Our valued colleague Captain Abney, to whom we are much indebted for an interesting article, full of practical hints, "Lessons learnt during a month's tour abroad with gelatine plates," makes a statement about the rapidity of his own dry plates; he mentions two classes of plates made by himself, "very rapid, and comparatively slow. The former were about fifteen to twenty times more rapid than wet plates, and the latter about four times only." As is known, manufacturers of dry plates go still further in the estimation of the sensitiveness of their plates, as plates of twenty times the sensitiveness of wet plates are often found announced in advertisements. Is this twenty-fold sensitiveness really present? Portrait photographers deny the statement; they declare, that if they want to take a properly exposed portrait, full of details in the shadows, with these particular plates, they need at least an exposure of about quarter of the time necessary for wet plates. With portraits the direct sunlight is excluded, and the reflected light is very much darkened and coloured. The relations are totally different to those with landscapes. With landscapes one-twentieth of the exposure which is necessary for a wet plate is sufficient, if the sky is clear, the sun shines, and no dark objects are in the foreground. Captain Abney gives an interesting example of this: "Snow peaks seen in the distance, foreground of fir tees. No. 2 landscape with angle lens, No. 3 X stop, rapid plate, two seconds' exposure, *mountains rather overdone, foreground rather undertimed.*" We have obtained in twenty seconds with the same lens and the same stop under similar circumstances, with a wet plate, a picture, in which the foreground was by no means undertimed. Rapid plates are scarcely more than ten times as sensitive as a wet plate; those which we have ourselves prepared according to the excellent formula of Captain Abney appeared to be even less sensitive, although they bear comparison with the best plates in the market. Of course we do not venture to draw conclusions from this fact as to the sensitiveness of the plates which the excellent investigator has prepared himself. Here only very accurate experiments, in which wet and dry plates are exposed side by side under circumstances precisely the same, can give information, and different subjects, portraits and landscapes, must be treated in these experiments under different relations of light. We lately made a negative by means of a gelatine plate of a white marble bust, in an open studio, with one-fifteenth of the exposure of a wet plate, and obtained a very beautiful result; when taking a portrait on a similar plate in diffused light, however, we found a quarter of the time of exposure of a wet plate necessary. We believe, accordingly, that assertions respecting the sensitiveness of the gelatine plate have been commonly made too favourable, and this is to be regretted, since less experienced amateurs and photographers are easily occasioned thereby to use too short times of exposure for gelatine plates. Even experienced practitioners may go wrong through it. We prepared this summer a number of gelatine plates with emulsion made by ourselves, and determined the sensitiveness to be two-and-a-half to three times as much as that of a wet plate for portraiture. One of the best known English dry plate makers, to whom we gave our plates for examination, valued the sensitiveness, however, as sixfold. Who was right?

New Developers.—Dr. Eder, the unweary and industrious investigator in the province of photo-chemistry, has, in his latest publication, again made known to us some new developers, and confirmed the statement of Captain Abney, as to the striking properties of hydrochinone as a developer. Perhaps these investigations may lead soon to a new manner of developing for dry plates. Hydrochinone is, however, much too dear to be able to supplant pyrogallic acid; but, as soon as the want of hydrochinone becomes more common, ways and means to prepare it more cheaply will also be found. That reminds us that we paid—eleven years ago—three shillings for a dose of chloral hydrate, which now does not cost as much as sixpence.

Photographic Exhibitions.—We learn, from continental reports, that only 85 exhibitors sent to the International Exhibition in Ghent, held this summer in celebration of the Belgian Independence. Of these, 29 came from Belgium, 10 from England, 10 from France, 18 from Germany, 8 from Austria, and the rest of the European States sent 4. Numerous printing processes were arranged in view in the first line for heliography, phototypes, photo-relief and pigment printing, and ceramic photography; but only at the end of the long prize-list is found a prize of 100 francs, a medal and a diploma, granted for the most beautiful collection of photographs on albumenized paper. Under such circumstances, it is not surprising that portrait and landscape photographers, who predominate generally in all photographic exhibitions, did not feel much attracted by this. The less fortunate exhibitors of silver prints who were honoured with prizes are the following:—V. Angerer, Vienna, for reproductions of oil-paintings and interiors; Maier, Munich, for instantaneous pictures of Munich, on gelatine plates; Annan, Edinburg, for landscapes. The report confirms the idea that the interest for photographic exhibitions is weakened by international exhibitions following one another too qucikly. It has, however, by no means weakened enterprise to undertake new international photographic exhibitions. We hear from Vienna that the Photographic Society there will arrange, next spring, for an international photographic exhibition in celebration of the twentieth year of its formation. The Exhibition will be opened in January. We think the time too early. In the dark days now coming on there is scarcely opportunity to prepare new pictures full of effect for the Exhibition, and, besides, three months from the decision till the opening of the undertaking is too short, especially as no programme is yet given out. We should advise the managers, in order to insure a numerous foreign participation, to adopt the method which the International Photographic Exhibition in Berlin has employed for the last twelve years. The latter nominated an agent for every country, who collected the objects for the Exhibition, and sent them together to Berlin at the expense of the commission of the Exhibition. Participation was thereby extraordinarily facilitated for the exhibitors, and there were, in fact, at each exhibition no less than three hundred exhibitors. We look forward with interest to the programme, and only express the wish that silver photographs may be put somewhat more in the foreground than was the case at the Belgian Exhibition.

Reversed Negatives.—Of the different methods of preparing reversed negatives, as they are necessary for collotype, photo-lithography, &c., may be summarised: (1) exposure with a mirror; (2) exposure with collodion film reversed in the dark slide; (3) removing the film from the glass with gelatine; (4) reproducing the negative by means of the dust process (Obernetter); only the third, it seems to us, is generally employed. Why? Is it the most convenient? We think not; pouring on gelatine solution, waiting for drying one or more days, and sometimes spoiling the valuable negative during removing, is scarcely an easy and desirable method. Compared with this, Obernetter's dust process appears simple. In a few minutes he covers a glass plate with gum and chromate, dries, exposes to the light a few minutes under a negative, and dusts then with graphite; he thus obtains a reversed negative in the space of ten minutes, and equal in delicacy to the original negative. We have seen the process carried out ourselves in Obernetter's laboratory in Munich, and have been astonished at the simplicity and beauty of the results. Obernetter never uses the original negative in his printing process.