

Proceedings of Societies.

PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN.

The ordinary monthly meeting of the above Society was held on Tuesday evening, the 13th inst., at 5A, Pall Mall East, Mr. JAMES GLAISHER, F.R.S. (President), in the chair.

The minutes of the previous meeting having been read and confirmed, Messrs. W. E. Debenham and George Renwick were duly elected members of the Society.

Mr. A. COWAN then read a paper entitled "Gelatino-Chloride Emulsion for the Camera," in the course of which he remarked that, whilst on all hands the beauty of the process was acknowledged, it was still thought to be too slow for the camera; but he wished to show that the process could be rendered as rapid as the gelatino-bromide, and still retain the variety of tone obtainable with gelatino-chloride. With regard to the latter process, he was of opinion that no great variety of tone is obtainable by simply altering the exposures when using a fixed developer, but he found that with the ferrous-citrate developer, without any oxalate, a great variety of tones can be got by enormously increasing the exposure, and very greatly restraining the developer. He had made experiments with ferrous-oxalate, and had not found any change of colour with any amount of exposure, but simply a denser deposit; and he found that the slower the image comes up, the warmer the colour, and *vice versa*. The method by which he procured his gelatino-chloride emulsion was that given by Dr. Eder in the YEAR-BOOK for 1882. Mr. Cowan handed round for inspection several transparencies illustrating the different varieties of tone he had obtained by the different methods. At the conclusion of the paper,

Captain ABNEY said that perhaps he himself had worked more with the chloride than anyone present. Last year, when in Switzerland, he took, for experimental purposes, a lot of gelatine boiled chloride plates, and he thought they were more brilliant than bromide plates, but there was no difference between the two in rapidity. In summer he found the chloride plates equally as good as the bromide. Some time ago Mr. Cowan had only tried the iron developer, but he (Captain Abney) thought the ordinary pyro developer could be used by diminishing the ammonia in the solution; then chloride will come up more rapidly than the bromide plate. In relation to the development of plates by the different salts of iron, he might say that the ferrous-citrate was twenty times quicker than the citrate of iron developer. Mr. Cowan told him he could develop a plate with the ordinary oxalate of iron, but he must confess that when he had tried it, it had not been so successful as it ought to have been. The great secret of making the chloride emulsion was to use plenty of hydrochloric acid.

Mr. W. BEDFORD said he had tried the boiling process, and also the simple emulsifying process, and his experience was that when the emulsion is boiled, all chance is lost of obtaining that beautiful warm colour which all aim at getting. He thought Mr. Cowan had succeeded in getting a rapid process with warm tones, which he (Mr. Bedford) considered a great advance. He thought Mr. Cowan was much to be commended for his diligent experiments.

Mr. W. K. BURTON wished to ask Mr. Cowan what was the guide as to when the boiling had been sufficiently performed, and what was the limit of sensitiveness.

Mr. COWAN said it was scarcely in his power to reply to this question, having only made one boiled emulsion, and that took half an hour. He remarked that Mr. Bedford had stated that the boiled emulsion loses the power to get the warm colours; he himself did not think that this was the case. He would like to ask Captain Abney whether it is correct that exposure only will alter the colour.

CAPTAIN ABNEY said with regard to colour with ferrous-citrate, if you reduce the strength of the solutions so as to take the same time as the ferrous citrate, you get the same colours. He had sometimes been able to get a perfect pink picture with ferrous-citrate by reducing the strength. With regard to Mr. Burton's question what was the guide as to sufficiency of boiling, he said that you must judge by the colour. If you go beyond a colour like emerald green, you get fog; but the best time to stop is when you arrive at sky-blue colour; that is the point where the emulsion is most free from any tendency to fog, and the safest point after that is when you get the green colour. He thought a quarter of an hour, or, at the most, twenty minutes was quite a sufficient time for boiling.

At the suggestion of the CHAIRMAN, a warm vote of thanks was accorded to Mr. Cowan for his paper.

The CHAIRMAN announced the receipt of some coloured pictures for exhibition, remarking that, as the colouring was mechanical, and not photographic, they would not, perhaps, possess much interest. These were handed round for inspection. He also announced that Mr. Cade had written asking him to bring before the notice of the members the proposed Photographic Copyright Protection Association, and said that he had been asked to inform them that a meeting would be held on the subject at Messrs. Elliott and Fry's, on Wednesday evening, the 14th inst., at seven o'clock. He also appealed to the members for the loan of photographs to cover the walls of the room, as the pictures now hanging would be removed before their next meeting.

Mr. JOHN SPILLER asked, with regard to the date of the technical meeting, whether it might not be advisable to pass this meeting over, as it fell on Tuesday in Easter week, and he thought there would be but a meagre attendance on such an occasion.

The CHAIRMAN replied that this question had already been considered, and as the notices of the meeting had been sent out, it was deemed advisable to adhere to the date fixed.

The meeting was then adjourned to Tuesday, the 10th of April.

Some lantern transparencies were afterwards exhibited in the Society's new lantern by Messrs. Cowan, England, and Bedford, illustrative of the various tones obtainable by the different processes for preparing the slides.

LONDON AND PROVINCIAL PHOTOGRAPHIC ASSOCIATION.

A MEETING was held on the 8th inst., when Mr. W. M. ASHMAN presided.

After discussion on the question of "Bath for Fixing Negatives,"

Mr. HENDERSON read a paper on "Washing Leucine out of Emulsion" (see page 171).

Mr. HADDON also read a paper entitled "Freeing Emulsion from Soluble Colloids" (see page 164).

Mr. BROWN did not think the precipitate obtained by Mr. Haddon on the addition of absolute alcohol to the leucine was iodide, as he himself had obtained it when iodide was not present. The lower the temperature, the more precipitate he obtained.

Mr. HADDON said it was not soluble in cold water. He thought it was not possible to get rid of all the leucine. It was found that gelatine will dissolve a much larger proportion of lime (phosphate) than water will in its pure state.

Mr. HENDERSON said that gelatines which were stated to be some of the hardest in the market, very soon lost their setting properties with ammonia.

Mr. HADDON said, in answer to a question, that more gelatine would be precipitated with hot alcohol than cold.

Mr. W. COBB had tried the new reducing agent called "brilliantine," and found it gave no better results, if so good, as the formulæ already given for the purpose.

Mr. W. E. DEBENHAM, as an illustration of the fact that parchment paper was not a safe septum to employ for dialysis, showed two samples of a gummy-looking substance, the result of dialysis, with a septum that to the eye appeared perfect, of an ounce of meta-gelatine. The larger sample, weighing rather more than twice as much as the other, was the product of the washing water evaporated down, whilst the smaller one was what was left in the dialyser dried.

Mr. P. J. Keate was elected a member of the Association.

EDINBURGH PHOTOGRAPHIC SOCIETY.

THE fifth ordinary meeting was held in 5, St. Andrew Square, on the 7th inst., Mr. JAMES HENDERSON in the chair.

The minutes having been approved, the following gentlemen were elected ordinary members:—Mr. Charles G. C. Christie, Captain F. F. Parkinson, Mr. Samuel Hunter, and Mr. J. Macnaughten.

The first paper was by Mr. ANDREW B. STEWART, on "Gelatine Plates for Transparencies" (see page 165).

In proposing a vote of thanks to Mr. Stewart, Mr. W. T. BASHFORD said he considered the paper read was of great value as a record of failures, a feature in our experiments too often kept in the background. The varying stages in Mr. Stewart's progress towards success were extremely interesting, and the result as to