

prize, and the members had remembered it by electing him on the council.

Obituary notices, giving biographical sketches of the late Vice-president, H. Baden Pritchard; Councilman, C. Jabez Hughes; Henry Greenwood and J. Hubbard, members, were read to the meeting.

Mr. F. COBB said he wished, before passing on to other business, to propose a vote of thanks to the President, who so assiduously had watched over their interest for so many years. When they heard of their President trotting over the Rocky Mountains, they were reminded of Tennyson, and thought perhaps he would "go on for ever."

The vote having been passed by acclamation,

The CHAIRMAN returned thanks. He said it was a great many years since he first took an interest in the Society, at a time when things were different. The difficulties had been overcome, every farthing the Society owed had been paid, and he was glad to see they were about to act as he wished them to do in 1862. He hoped they would have a home of their own, as indicated by the Treasurer. In three or four years he would be eighty years of age, and the time was approaching when he would not be able to attend their meetings.

A vote of thanks was also accorded to the Hon. Secretary, after which the adjourned discussion on Mr. L. Warnerke's paper was resumed.

Mr. INCE, in opening the discussion, said he heard there was a difficulty likely to arise in making enlargements in the camera by means of the new paper. Since the last meeting he had had an opportunity of testing this method of enlarging. The day chosen was a very dull one indeed. The lens was a rectilinear $\frac{1}{8}$, and the reproduction was four times larger than the original. The exposure was twenty minutes. In the process of drying mounted prints, when the same were squeezed on glass, he considered tendency for the water to accumulate in the centre, so that the edges would be quite dry sometimes several hours before the centre; any attempt to detach such a print when partly dry resulted in failure. An example of this defect was passed round.

Mr. A. SPILLER called attention to some small examples of "rapid paper" developed with his "hydroxylamine solution;" he claimed that by the use of this developer, and a mixed hypo and gold toning bath, pure whites could be obtained; and if the wet prints were attached to ordinary autotype flexible support, they would strip off with a surface similar to albumen.

Captain ABNEY had predicted the permanance of this process three years ago, and for the reason that in the first place the image was composed of metallic silver, and that metal was protected from atmospheric influence by the gelatine surrounding it. Every one knew that an unvarnished collodion negative became changed when exposed to the fumes pervading a laboratory; gelatine negatives were unaffected. Whenever there was a definite compound, there they must look for permanence. If oxide of silver could be used, there would not be any fading. Captain Abney then referred to a paper he had read before the Society, in which the value of a citrate salt with a chloride salt was pointed out. He was now able to develop a paper coated with silver citrate and silver chloride in equal quantities, without getting the whites degraded. If organic compounds are employed in the film, the molecular condition upon exposure to light is changed; thus the colours may be altered as desired. Another advantage is the greater range of sensitiveness; silver chloride being sensitive to violet rays, and silver citrate to green rays, which would of course include an ordinary gas jet. He thought it advisable to use a salt affected by gas light, as such a compound would, on account of its greater sensitiveness, be of great pecuniary value to the professional photographer.

The CHAIRMAN requested Mr. Warnerke to reply.

Mr. WARNERKE had less to reply to than he expected; he supposed the subject was as yet too new. The difficulty spoken of by Mr. Ince might be overcome by interposing a thin sheet of Wilesden paper between the print and its cardboard mount. The tones shown by Mr. Spiller were very good, and Captain Abney had pointed out how good effects could be produced. He (Mr. Warnerke) had modified his opinion regarding certain negatives giving a particular tone. In cases where he had used his normal developer, and other portions diluted with two, four, and ten times the quantity of water, far different results were obtained; the more dilute the developer, the softer results. He now used as large a proportion of water as possible. Regarding latitude, exposures ranging from three to one hundred seconds were made, and equal results could be obtained by care in development. By altering the propor-

tion of oxalate and iron, considerable difference resulted; the larger the proportion of iron present, the blacker was the image; in fact, he had been led to consider that development might be arranged to suit the quality of negative, dense negatives requiring weak developers. Certain emulsions gave a more or less definite colour; ammoniacal fuming acted just contrary to its effect in ordinary silver printing—it made toning much slower. Papers treated with gold, platinum, and copper solutions before development, had a marked effect on the results. With copper the image flashed out, and the colour was a weak slaty grey. With gold the quality was much better; the colour being red, it was easily amenable to the toning bath. Treatment with platinum gave a black image, and the experiments pointed to the possibility of determining the tone before development. He did not like the prints when burnished so well as when enamelled, but he thought they might be coated with a hard varnish somewhat similar to that used on phototype prints. He hoped before long they would be able to overcome all obstacles, when it would be the paper generally used. The transparency of the shadows was better preserved, and the whites were equally pure with other processes.

Mr. PAYNE JENNINGS was able to bear Mr. Warnerke out so far as the advantage of weak development was concerned; and he thought mixed hypo and gold toning bath better than any other.

Mr. W. M. AYRES was opposed to the use of an old mixed hypo and gold toning bath.

Captain ABNEY hoped other bromides than potassium would be tested, for restraining purposes, as they influenced the colour.

A vote of thanks to Mr. Warnerke having been passed, Mr. Shew exhibited an improvement on the camera clip shown by him at the last technical meeting (see page 78). Instead of a fixed bridge as before, a sliding jaw had been substituted which could be clamped at any required position up to 10½ inches. It was announced that the next ordinary will take place on Tuesday, March 10th, and the next technical meeting, February 24th. The meeting was then adjourned.

SOUTH LONDON PHOTOGRAPHIC SOCIETY.

THE ordinary meeting of this Society was held on Thursday, the 5th inst., at the House of the Society of Arts, John Street, Adelphi, W.C., Mr. W. ACKLAND, president, in the chair.

The minutes of the annual general meeting held in December, and the lantern meeting held in January, were read and confirmed.

The following gentlemen were elected members of the Society:—Messrs. G. Glanville, Edgar Clifton, and C. Pilkington.

Messrs. W. M. Ayres and E. Clifton were appointed auditors.

The CHAIRMAN announced that the Society's presentation print selected by the sub-committee for 1884 was entitled, "A View on the Lake, Kew," and was from a negative 12 by 15, taken by Mr. E. Dunmore.

With regard to the artistic competitions inaugurated by the Society, the Chairman said that his committee had decided to return to the original system of conducting both the method of fixing the subject, and taking the Society's vote on the pictures, as in the opinion of the committee it was preferable to that adopted last year. For the future two subjects would be selected at each meeting, one being a view and the other a figure subject. Competitors would send their pictures to the Society in time for the following meeting, when the members present would be invited to decide who was successful. Voting papers having been passed round for the subjects to be chosen at the March competition, the Chairman took the vote of the meeting, which resulted as follows:—View—"A Country Lane"; Figure—"A Newspaper Boy."

The HON. SEC. exhibited "Kershaw's new instantaneous shutter." It was a form of curtain-shutter with square aperture encased in a compact box not larger than a quarter-plate. By means of two pinions the curtain could be wound from one wheel to the other for exposure as in Edwards's shutter, and released by a trigger or pneumatic attachment.

Mr. BRIDGE found the shutter to be extremely simple and portable.

The CHAIRMAN then called upon Messrs. Morgan and Kidd to demonstrate the method of working their "New Rapid Contact Printing Process."

Mr. W. T. MORGAN introduced the subject by reading a short paper (see page 105).