

Grand Canal, Venice," is hung so high, for it is such a pleasing one that it invites closer acquaintance. In the somewhat misty distance is the cathedral of St. Mark, and moving in front are the black forms of various gondolas. We pause to regard with interest a little picture by E. S. Padmore (No. 328), "Hartz Cobolds." This title will not seem very explanatory to many visitors to the Exhibition; but for all that it is a good one, for the picture represents some men at their work in the Clausthal mine at a depth of 696 metres below the surface of the ground. Were not the original "Cobolds" the imps which used to haunt these mines? And have they not christened a certain mineral found there—to wit, cobalt? But, apart from its intrinsic merit, which is great, the man who descends into the bowels of the earth to a depth which would be represented by five and a-half times the height of St. Paul's Cathedral, for the purpose of taking a photograph, certainly deserves honourable mention.

We must close our present review by noticing Mr. Ralph Robinson's pictures, which remind us of those of his talented father. One of these has been most rightly awarded a medal, and we have no doubt that, in making that award, the judges took note of the general excellence of Mr. Robinson's exhibit. Three of these are portrait studies printed in red, and very fine they are in quality, helped as they are by good models. All Mr. Robinson's pictures have rough wooden frames with subdued gold and silver enrichments, and, while these are very effective for the portraits, they do not seem to harmonise so well with the landscapes.

EXHIBITION AT HACKNEY.

THE exhibition of the Hackney Photographic Society opened under auspicious conditions on Wednesday last at the Morley Hall, Triangle, N.E. Under the active and efficient management of the hon. sec., Mr. Fenton Jones, the exhibition, which, unfortunately, only remained open for two days, proved, during its short tenure, a decided success so far as the pictures and apparatus were concerned. With regard to the financial success of the venture we have, of course, at present, no data to go upon, but the hall appeared to our representative, who was there on Wednesday, to be well patronised.

The list of awards has not yet come to hand, for they were not decided upon until yesterday, Thursday morning, when Capt. Abney presented the prizes to the winners. The pictures were prettily arranged in alcoves, and well lighted by lines of gas burners above, such as are employed at the Crystal Palace for the same work. Many of the pictures shown were of high merit, but the exhibition unfortunately came too close to our time for going to press to attempt any analysis of them.

The apparatus section did not produce anything very new, but what there was was of the best. Messrs. Adams, Messrs. Watson, and the Platinotype Company—who demonstrated their method by the hot process—were among the exhibitors. We must not omit to mention, too, that Mr. B. J. Edwards—who, by the way, is a native of Hackney—was represented by a fine show of isochromatic pictures and transparencies.

PHOTOGRAPHIC CLUB.—October 28th, smoking concert and exhibition of members' pictures; November 4th, annual general meeting.

NITRATE OF URANIUM TONING PAPER.

BY M. MERCIER.

It is known that some sensitive papers, variously prepared, have the property of acquiring an agreeable tone after a simple fixing, and without having been previously toned. I think I have now determined the special conditions under which this peculiarity is produced. Having the intention, later on, to treat this subject at more length, I will give simply the conclusions of my investigations, conclusions which may be summed up as follows. When we introduce into a sensitive paper, at the same time as the chloride of silver forming its base, a suitable reducing body, capable of reducing the silver salts under the action of light and giving a certain tone, this tone is more or less communicated to the silver reduced by the action of light on the chloride of silver alone. It is thus that sizes made of arrowroot, or more or less condensed starches, albumen, resins, gelatine, &c., yield papers which, after a simple fixing, give different tones. It is thus, again, that the oxalates, the benzoates, the citrates, &c., give, with chloride of silver, prints which have, after fixing, variable tones—purples, browns, or cherry-red. It is thus possible, instead of adding to the paper the already formed reducer, to cause this last to be produced by the action of the light itself. This happens, for example, when we add to the paper a per-salt of uranium, easily reduced under the luminous action to the condition of a proto-salt. Nitrate of uranium, which possesses, besides, precious preserving properties, was therefore already indicated for the preparation of a paper requiring no toning, such as the one I have had prepared under the name of *iso-toning paper*.

The print shows itself as usual, rapidly and with great sharpness. It is fixed directly, and without previous washings, either with pure hyposulphite of soda or, preferably, in the fixing bath of hypo and sulphite of soda. The print is washed and dried; it then acquires a violet-sepia tone, and in a few days gradually becomes darker and very pleasant to the eye. The toning may be instantly obtained by burnishing with the aid of heat, or by exposing the print to heat by any means whatever. An ordinary sad-iron yields excellent results. The print then acquires a beautiful violet-black tone, very greatly resembling the best tones obtained by toning with the gold salts. I will add, moreover, that some sensitive papers acquire by this treatment a more or less dark tone, but then this tone is rarely persistent. The *iso-toning paper* may also be toned with the greatest facility in the weakest gold or platinum baths; nitrate of uranium modifying the action of the bath, it is possible to obtain all shades from purple up to a blue-black. Toning after fixing yields equally excellent results. Yellow negatives, such as those developed with pyrogallic acid, yield, generally, prints having a very beautiful violet-black tone, even without the intervention of heat.—*Bulletin de la Société Française de Photographie*.

THE LANTERN SOCIETY.—Meeting on October 26th at 8 p.m. New oil lamp by Mr. Stocks.

RUDOLPH CRONAU, the eminent author and scientist of Leipsic, Germany, has tendered to the Exposition his extensive collection of paintings, sketches, and photographs, representing scenes in the life of Columbus, and places visited by Columbus during his voyages to the new world. Doctor Cronau has spent a great part of his life in the study of early American history, and has published a work on the subject based entirely upon his personal investigations.—*World's Fair Notes*.