

have given the professional bread to thousands—an elegant pursuit to hundreds of amateurs, male and female—domestic gratification to the occupants of the cottage and the palace—new powers of observation and research to the philosopher—and ever-flowing fountains of knowledge to every class of society but the blind. As James Watt was not the sole inventor of the steam-engine, nor Newton the sole discoverer of the laws of the planetary system, so Mr. Talbot does not claim to be the sole inventor of photography as an art or a science. Wedgwood and Davy were humble pioneers in guiding the pencil of the sun, and Niepce and Archer have added to its power; and if we may name any other individual in England as the great inventor of photogenic instruments and processes, we are sure that every photographer in the empire will not grudge this tribute of praise to Mr. Claudet, who has so long occupied the highest place in the profession."

PHOTOGRAPHIC NOTES.

Photography at the Great Exhibition.

Colonel Sir Henry James, Director of the Ordnance Survey, shows specimens of a very valuable adaptation of the art, by which the Government saves many thousands a year in the operations of his department, in the reduction, enlarging, and printing of maps and plans. It is termed "Photozincography," and the results are extremely beautiful and interesting. Sir Henry shows adaptations of it to the production of fac-similes of ancient MS.; and one of a page of Domesday Book is shown. The photograph by a simple and cheap process, is transferred to a zinc plate, whence any number of copies can be taken off by the ordinary plate printing press.

F. Joubert exhibits a series of very beautiful pictures burnt in on glass, a marvellous adaptation of the photographic art in an absolutely new direction; and here permanency is obtained, at least so long as the glass will last. By a pure photographic process he produces on the glass, in ceramic colours, a picture which by exposure to heat in the furnace becomes burnt in like any other picture on glass or china. By a careful and artistic manipulation he has been able to produce effects in several colours. The process has been perfected, and a cheap and artistic ornamentation of our windows, whether in portraits of our friends, landscapes of familiar scenes, architectural objects, or statuary, is brought within the means of the many.

Preserving Sensitive Paper.

M. Herm. Krone, speaking at the French Society of the Preservation of sensitive paper, states that it is necessary not merely that the paper should be kept dry and free from the action of the light, but that a certain amount of free chlorine should be present in the preservative cases to convert the particles of silver into chloride. For this, recent chloride of calcium alone is not sufficient. He recommends the following mixture:—

Chloride of Calcium 3 parts,
" Lime 1 part.

The latter, continually exhaling gaseous chlorine, acts chemically; and the former, absorbing all moisture, keeps the paper dry.

Filtering strong Acids or Acid Solutions.

Guncotton is recommended by Bottger for filtering strong acids. He has used it with advantage for nitric acid, fuming sulphuric acid, chromic acid, permanganate of potash, aqua regia, &c.

M. Disderi's Formulæ.

M. Disderi, who is known as the most able and enterprising of Parisian photographers, has recently published a treatise on the art, in which he communicates the formulæ he has found most useful in practice. A quality in the collodion on which he lays great stress is the fact that it will remain humid a considerable time in either winter or summer, thus allowing for re-posing or re-arranging when the plate is in the dark slide, without injuring the film, which will retain its sensitiveness for an hour in winter, and a third of that time in summer. The formulæ are as follows. For winter operation he gives three recipes:—

Alcohol of 820 sp. gr.	400
Ether of 725 sp. gr.	600
Pyroxyline	11
Iodide of ammonium	6
Iodide of cadmium	4
Bromide of ammonium	0.6
Bromide of cadmium	0.4
Iodine	0.5

OR,

Alcohol 820 sp. gr.	400
Ether 725 sp. gr.	600
Pyroxyline	11
Iodide of ammonium	5
Iodide of potassium	5
Bromide of ammonium	1
Bromide of potassium	1
Iodine	0.5

OR,

Alcohol at 820 sp. gr.	400
Ether 725 sp. gr.	600
Pyroxyline	11
Iodide of ammonium	6
Iodide of cadmium	4
Bromide of ammonium	1.5
Bromide of cadmium	0.5

The two first are very vigorous, but are not distinguished by delicacy; the third gives very soft, delicate results. The first is best suited for a strong light, the second for an indifferent light, and the third for a weak light; the whole are intended to be used with a strong bath, as much as 48 grs. to the ounce being recommended. For spring operations he recommends the following formulæ:—

Alcohol of 820 sp. gr.	500
Ether of 725 sp. gr.	500
Pyroxyline	10
Iodide of ammonium	5
Iodide of cadmium	5
Bromide of ammonium	1
Bromide of cadmium	1
Iodine	0.5

OR,

Alcohol of 820 sp. gr.	500
Ether of 725 sp. gr.	500
Pyroxyline	10
Iodide of ammonium	5
Iodide of cadmium	5
Bromide of ammonium	0.5
Bromide of potassium	0.5
Iodine	0.5