

The green they call Emeraldine, and the blue Azurine. The chemists who devote themselves to colouring matters are said to be at their wits end for names.

The Patentees do not appear to have succeeded in isolating their new colouring matters, for it is specially stated that they are obtained by oxidation in direct contact with the yarn, &c.

In preparing the green colour, they first impregnate the goods with an oxidising agent. They recommend a solution of chlorate of Potash (4 oz. to the gallon), the goods, after steeping, are to be dried and then padded or printed with an acid salt of the base. They prefer a solution of tartrate or hydrochlorate of aniline containing one per cent. of the alkaloid. After the padding or printing, the goods are aged for twelve hours, that time being sufficient for the complete development of the colour.

They also prepare the green by the following modification of the first process:—They mix the oxidising agent with the salt of aniline, and print on both together of course thickening with starch or flour in the usual manner. They recommend the following mixture:—

"Solution of an acid salt of aniline (containing 1 lb. of aniline.)	
Tartrate or chloride of aniline	3 lbs.
Starch or flour paste	60 lbs.
Chlorate of Potash	1 lb.

The chlorate of potash must be dissolved in the starch paste whilst hot, and the solution of the acid salt of aniline we add to it after cooling."

We quote the above literally because it appears to us rather vague. If we understand the directions, they mean that three pounds of a solution of tartrate or "chloride" of aniline are to be taken, which three pounds of solution are to contain one pound of aniline.

The green colour, as produced by the above method, is to be converted into a blue or purple by boiling in a weak solution of soap or alkali, the goods are then to be dried. The soap solution should contain four ounces of printer's soap to the gallon; and the alkaline bath one ounce of caustic soda to the gallon.

The patentees say that instead of the alkaline or soap bath, the goods may be passed through a solution containing one ounce of chromate or bichromate of potash to the gallon of water.

The above colours do not require any mordant.

This patent appears to us to be of great interest. We know that efforts have, for a long time past, been made to apply aniline directly to fabrics, and convert it into colouring matter in the fibre. Some of these efforts have led to disappointment. If yarn, impregnated with a salt of aniline, be passed into a solution of a chromate or bichromate, it immediately assumes a dirty green colour, which acquires a certain amount of purple tone by treatment with soap. If the aniline solution be strong the goods become nearly black in the chromate bath.—*Chemical News.*

Photography.

Photography is an affair of the present century. Its annals covers scarcely sixty years, and may be divided into three distinct periods:—the first extending from the time when science partially revealed the fascinating secret of light-printing, till the independent and valuable discoveries of Mr. Fox Talbot gave the world an art of sterling utility, where it had before possessed only a few curious experiments; the second comprising the years when, protected by Mr. Talbot's care, and in a great degree popularized by the restrictive powers of his patent, the art made slow advances to maturity; the third reaching down to the present time, from the date when the art somewhat ungraciously burst away from the control of its practical originator. As early as 1802, Sir Humphry

Davy and Mr. Wedgwood hit upon a process by which they were able to render paper so sensitive of light that they could produce upon it negative images of objects brought directly in contact with it. They even directed attention to the probable results to be obtained through this sensitive paper and the co-operation of a camera obscura. The pictures, however, produced by Sir Humphry and his coadjutor were transient, and they expressly avowed their ignorance of any means by which the semblances could be rendered permanent. From 1802 till 1834 Sir Humphry's experiments remained, at least as far as the public knew, without being in any way developed or improved upon. In the latter year however Mr. Fox Talbot, by independent investigation and perfectly original experiments, went far beyond the distinguished philosopher. He achieved, like Sir Humphry, pictures, but he also contrived to render them permanent. Mr. Talbot's next step was to discover a process by which he obtained "positives" from his "negatives." On the 8th of February, 1841, William Henry Fox Talbot, of Lacock Abbey in the County of Wilts, Esquire, obtained letters patent for his famous Calotype process. A gentleman of position and wealth. Mr. Talbot made no ungenerous use of his patent. Reserving to himself, as he was well entitled to do, the commercial advantages that might accrue to the parent of so remarkable an invention, he gracefully waived his patent rights in favour of amateur photographers, permitting them without let or hindrance to derive all possible enjoyment from the practice of his discovery, so long as they did not employ it for pecuniary gain. At this date it would be nothing short of repulsive injustice to detract from Mr. Talbot's services. He was indeed the father of the photographic profession, as well as the inventor of the photographic art. From his own funds, as well as by his influence with men of science, he created a new field of industry. At a considerable expense he erected workshops and employed assistants. Before, however, he could reap a reward from his outlay, or even reimburse to himself the large sums absorbed by his operations, the invention of the Collodion process by Mr. Archer in 1850, gave the death-blow to his undertakings. In the memorable trial of *Talbot v. Laroche* in the Common Pleas, December 1854, it was attempted to establish that the unlicensed practitioners of the Collodion process were guilty of infringing Mr. Talbot's rights. The jury, however, declined to adopt that view of the case; and passing over the Rev. Mr. Reade's discoveries prior to 1841, they gave Mr. Talbot the merit of being, within the meaning of the patent laws, the first and true inventor of the Calotype process; but at the same time they found that in producing pictures by the Collodion process M. Laroche had in no way been guilty of violating Mr. Talbot's patent. The decision was most important to photographers. It was given just as the term of Mr. Talbot's patent was at the point of expiration, and was the cause why that gentleman failed to obtain a renewal of his rights. From that time photography has been free from the fetters of letters patent. If that freedom has been beneficial to the artists, it is no less certain that it has been injurious to the originator of their art. The public can, however, console themselves for this unhappy consequence of a useful decision, by reflecting that to a man in Mr. Talbot's circumstances, the position of a victim for the public good is a comparatively easy lot, and Mr. Talbot has