The Photographic News, August 27, 1880.

PHOTOGRAPHY IN AND OUT OF THE STUDIO.

Enlargements on Canvas—Transference of Photographs to Wood Blocks—Portraiture by Artificial Light—Apparatus for the Million.

Enlargements on Canvas.—Regarding few points of photographic practice do we hear of such bitter complaints as those made in consequence of the peeling off of oil pictures painted over a photographic basis. The reasons of this are not difficult to find, as anything of the nature of a film between the prepared canvas and the picture is almost certain to lead, sooner or later, to a woeful catastrophe like that which has happened to the "counterfeit presentiment" of Manchester's civic head; and, moreover, the large amount of money often expended on such undermined paintings makes the complaints both loud and deep when the evil day of destruction arrives. Passing over all film methods as unworthy of notice, the dusting-on process claims our consideration, as some people place much confidence in it, and regard the painting which has been made over a dusted-on picture as equal in stability to one executed directly on the artist's prepared canvas. It is difficult to imagine that this can be the case; as the small amount of mucilaginous, gummy, or saccharine matter which serves to hold the powder colour would be exceedingly likely to completely prevent any true union between the oil paint which forms the general grounding of the canvas, and the painting itself. The ease with which a thin film of foreign matter often prevents perfect adhesion between materials of a similar nature is sufficiently well known to all those who have to do with moulding operations of any kind, and it appears to us that to risk valuable artistic work on a canvas bearing a dusted photograph would not be altogether a discreet proceeding. There is one class of photographic print, however, which appears altogether without objection as an intermediary between the prepared canvas and the work of the artist, this being a picture executed in fatty ink alone. Printer's ink is so nearly of the nature of paint, that it may be assumed to fairly and thoroughly unite with the grounding paint used as a preliminary preparation for the canvas, and also with that applied by the artist. The difficulties of making a fatty picture suitable for transference to the canvas are by no means great; in fact, the operation of performing this is easier, and involves less preparation, than is required to make a dusted picture. A photographic transfer which shall represent the half-tones of a negative as a kind of stipple or grain is easy to make, although the operation of printing from a stone to which the image has been transferred is quite a different affair. When Mr. Bolas was lecturing at the Society of Arts on "Photo-mechanical Printing Processes," he showed a modification of a stipple process due to Asser, and illustrated it by making a transfer from a landscape negative over thirty inches long. The process is briefly as follows:—A sheet of blotting-paper is smoothly covered with a thin paste made by boiling 1 part of flour with 10 or 12 parts of water. When dry the paper is rendered sensitive by being soaked in a 3½ per cent. solution of potassium bichromate, and, after having been once more dried, it is exposed under a reversed negative. When Mr. Bolas illustrated the process at the lecture, he exposed for about five minutes to the light produced by burning magnesium wire, but a few minutes in the sunshine may generally be considered sufficient. The print is next soaked in water to remove the excess of bichromate; and, after drying, it is ironed with a warm flat iron in order to harden the coating on the paper. Being now again moistened, the print is dabbed all over with a stiff hog-hair brush slightly charged with printer's ink, which takes on the exposed portions, and refuses to adhere to the unexposed portions. When the picture is about half dry, it is well rubbed down on the canvas, and allowed to dry in contact with it. All that is now necessary is to soak off the paper, so as to leave the fatty impression behind on the canvas.

Transference of Photographs to Wood Blocks.—The process above described answers completely when the engraver requires a photographic guide on his prepared block, only a direct negative is required instead of a reversed one; and it is not advisable to let the transfer dry on the wood block, as this would involve the application of water. The best way is to pass the nearly dry transfer and the block through a lithographic press, and to strip off the paper immediately afterwards. The use of photo-lithographic transfers as guides for wood engravers is extending itself in the printing trade, and it appears to us to be the best method of securing a photographic image on the engraver's block. It is quite possible to secure a transfer which shall exhibit a considerable amount of half-tone by the ordinary process with gelatinised paper, and such a modified process as that which we described in our leader of the 13th instant will give excellent results in careful hands.

Portraiture by Artificial Light.—The use of ordinary coal gas as a photographic illuminant appears to be exciting much discussion, and its practicability is now thoroughly demonstrated. The ease with which the light can be got into working order, and the fact that expense is only incurred while it is in actual use, are among the most attractive points of the method of illumination in question; but it cannot be denied that the light is rather less actinic than one would like it to be. A paraffine lamp gives a much whiter and more actinic light than gas, and there is no difficulty in arranging a battery of such lamps by soldering the wick-holders into the top of a flat metal cistern. We have occasionally used such an apparatus for heating purposes, and have found the light from it to be remarkably intense and actinic. It may be worth while for those photographers who wish to work during the night to make some experiments in this direction.

Apparatus for the Million.—Mr. Stone is the architect of a quarter-plate camera, with screw adjustment for focussing, and rising front; which, lens and all, can be sold for five shillings. There is nothing improbable in this, and such a cheap apparatus would doubtless cause many new amateur workers to enter the field. The toy-makers, who principally live out Whitechapel way, would no doubt co-operate with Mr. Stone in the commercial production of his apparatus. It is quite a mistaken notion to believe that very expensive apparatus is essential for the production of good photographic pictures. The low rate at which commercial dry plates are now sold is surprising, and surely the profits must be extremely small; yet we have seen some very excellent pictures which were taken on the lowest priced plates.

At Home.

WITH PROFESSOR LISTER, F.R.S., OF KING'S COLLEGE HOSPITAL — PHOTOGRAPHS OF BACTERIA.

The camera has so frequently proved itself of value in scientific research, that there may seem little call to chronicle one more investigation that has been brought to a successful issue by its aid. In astronomy, and medicine especially, has photography proved particularly useful; to-day no observatory is complete without its camera, while the surgeon and the physiologist alike use the sensitive plate as an ordinary means of recording phases of interest. It was but the other day we called attention to the interesting pulse records of Dr. Luys, made by means of camera observation, while we recently described in this journal a photographic establishment in Paris, whose sole duty it is to watch and record the progress of diseases by means of photography.