Photographic Notes

Electric Photography.

Following up the Henrich Hertz theory of the similarity of the other waves of light to those of electro-magnetism, except that the latter are larger, Professor Dolbear has shown that electro-magnetic waves can act the part of light in taking photographs, which may thus be produced even when the subject whose picture is desired remains in absolute darkness.

An Intensifier for Negatives Reproducing Lines.

Water	1,000 parts
Iodine	14 parts
Iodide of potassium	27 parts

The negative is allowed to remain in this until entirely yellow. It is thoroughly washed, so that the water running from it is colorless. Afterward the negative is placed in a one per cent. solution of Schlippe's salt rendered alkaline by a little caustic soda.—*Paris Photo.*

Photographic Reproduction of Chalk Drawings.

The observation made in this column, says *The Graphic*, with regard to the closeness with which chalk drawings could be copied in photography, received ample illustration in a case that I only heard of the other day. It seems a drawing made by a notable artist was obtained, and carefully copied on exactly the right kind of paper by means of photography. The imitation was said to be so complete as to almost deceive the artist himself. A good many copies of the print were then obtained; they were all carefully mounted in imitation of the original drawing, and these were all pledged at pawnbrokers in different parts of London for various sums. The majority of them were sold, and the affair was only found out by the artist discovering it in the house of a friend, and pronouncing it to be a photograph.—*Scientific American.*

Brown Ferro-Prussiate Prints.

Ferro-prussiate blue prints can be easily transformed to brown by the following process: The blue print, well washed and dried, is plunged in dilute ammonia for two to four minutes, until it is almost colorless; then rinse and immerse it in a bath of tannic acid, where it is left until it is clear and toned. This operation requires about twelve hours. If, at the end of this time, the color is not sufficiently deep, add to the bath several drops of ammonia, and let the print remain in it a minute or two longer, then rinse it in plenty of water. The prints thus obtained are very pretty, and resemble in color sepia drawings. Here are the formulæ for the different baths employed:

Sensitizing Solution.

Tartrate of iron and potash	15 grams.
Red prussiate of potash	12 grams.
Rain water	250 grams.

Solution to Fade the Print.

Ammonia	100 grams.
Rain water	900 grams.

Solution to give the Brown Tint.

Tannic acid	10 grams.
Rain water	500 grams.

—*American Journal of Photography.*

Professional Models.

The *Photographic News* proposes to induce a number of people, both male and female, big and little, to form an association of models, and after sufficient training to frequent the picturesque and other localities to which photographers are mostly attracted. On a stick, over his shoulder, the male would carry a bundle, and the female a basket on her arm, each containing a number of inexpensive but suitable costumes, and, to prevent misunderstanding, a scale of fees.—*Scientific American.*

Exhibition of Photography.

The Executive Council of the Imperial Institute have announced that a special exhibition of photography in its applications to the arts, sciences, and industries will be held at the Imperial Institute, in connection with the United Kingdom section, during the summer season of 1895. An influential committee of advice has been formed, composed of governors of the Imperial Institute and scientific men of well-known standing who are interested in photography; and sub-committees have been appointed in connection with the seven sections of the exhibition, viz.:

Division 1.—The history of photography, including illustrations of early processes, the progressive development of processes, the early processes of photo-mechanical work, and modern photographic literature.

Division 2.—Artistic photography, comprising a thoroughly representative exhibition of all schools, embracing known as well as new works, and illustrations of the present condition of photographic art in the various colonies and in India.

Division 3.—Photography as an industry, demonstrating the apparatus used in photography and the special processes connected with the preparation of lenses, the production of brass fittings, cameras, etc., shown in actual operation; the preparation of dry plates, coating of sensitive media, printing processes, also shown in actual operation; reproduction of pictures, and the production of portraits by daylight and artificial light.

Division 4.—Photography in its applications to industries, such as reproductions having photography as their basis, as applied to illustrated journalism, literature, etc., and industrial applications of photography to ornamentation.

Division 5.—Applications of photography to the sciences, including orthochromatics, optics, stereoscopy, photo-micrography, spectroscopy, meteorology, and magnetism, astronomy, automatic recording apparatus, etc.

Division 6.—Applications of photography to educational purposes.

Division 7.—Miscellaneous applications of photography, including applications of photography to architecture and archæology, to engineering, to military and naval purposes, to legal purposes (such as the detection of forgeries), to surveying, cartography, chronography, etc.

Notification of the exhibition will shortly be transmitted to the principal firms engaged in the manufacture of apparatus connected with photography in the United Kingdom. The Governor-General of India, the Governor-General of the Dominion of Canada, and the governors of the various colonies have, by a recent mail, been requested to invite Indian and colonial manufacturers to exhibit.—*British and Colonial Druggist.*

Pharmaceutical Analysis.

SOME SPECIAL TESTS FOR DRUGS AND CHEMICALS.

It is highly essential for every pharmacist to know how to test the articles he deals in as to their purity and freedom from adulterants. It is, further, important that he should not only have the knowledge, but also put it into actual and regular practice. The public now look *to the skill and training of the educated* chemist for protection from fraud, and expect to find the drugs they purchase from him pure and good. The medical practitioner also entrusts him with the preparation of the means by which he has to combat disease—a position of no slight responsibility. The duty, therefore, lies with every pharmacist to satisfy himself that the drugs and chemicals he uses are free from impurity, and justify the trust reposed in him. The processes included in the following tests have been rendered as simple as possible, so that they may be conducted at any dispensing counter.

ACETUM.—For excess of sulphuric acid, add one grain of chloride of barium to one fluid ounce of vinegar, and filter. The filtrate should not give any further precipitate with chloride of barium. If copper, iron, or lead are present, a black *coloration will be found if the* vinegar be first neutralized with ammonia, and sulphydrate of ammonium then added. Good malt vinegar should dissolve exactly 18 grains of carbonate of magnesium, and no more.

ARSENIC.—To test for the presence of antimony, add dilute hydrochloric acid and pass H_2S through the solution. If present, an orange precipitate will be thrown out. Heavy mineral bodies, such as baryta or lead, may be detected by