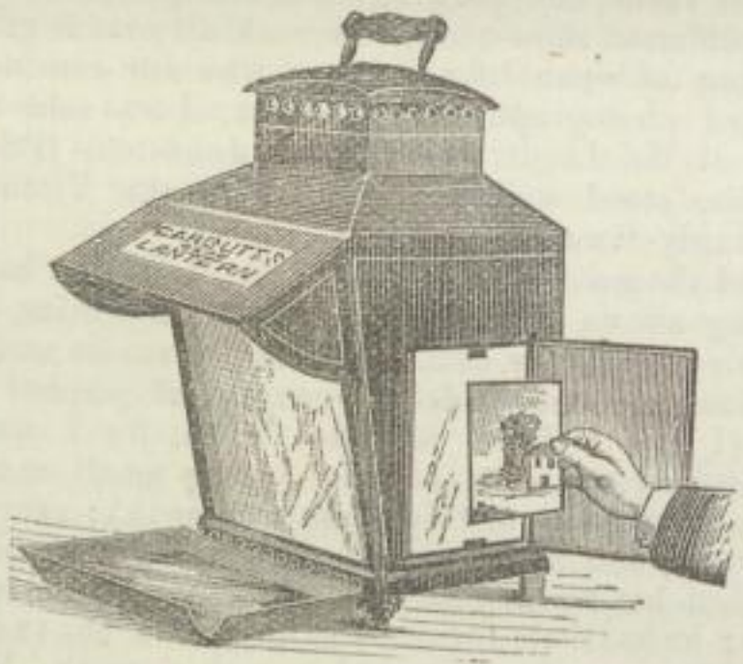
tions, and no danger can possibly arise ; with dark walls the room is gloomy in the extreme, without any advantage.

Lantern arranged for making positives by contact.

Now a word on developing. I have said before, and I repeat now, it should be rapid. Under three minutes should be the average, and such power should be obtained as to avoid intensification. I have elsewhere given the annexed formula as one that develops every plate I know



Lantern arranged for developing, and after fixing, examining negatives by opal light.

with unfailing success, and gives that kind of negative referred to by that most successful artist, Mr. Abel Lewis, who in conversation told me he always got up full density in his dry plate negatives, and never intensified them, preferring them reduced afterwards, if need be, by citric acid and alum, to using any kind of intensifier. I fully endorse this view. Please note this formula :—

A.

Acid pyrogallol	1 ounce
Acid citric	30 grains
Water	12 ounces

B.

Ammonium bromide	300 grains
Ammonia liquor ·880	1 ounce
Water	1 „

Stock solution. Dilute for use thus :—

A.—1 ounce to 15 ounces water.
B.—1 „ 15 „ „

It is a great advantage that these preparations are composed simply of all the materials we have at hand, and that this keeps indefinitely. Development is immediate, and, by adding more of either, fresh energy is imparted. The great antidote to green fog, yellow stains, dichroic fog, &c., is prompt development in strong solution, and then thorough washing in the non-actinic light.

One more point while on these matters. We hear from time to time of dry-plate negatives being soft and pappy after varnishing ; but I have never heard of any going so that have been treated as I will now describe, and never expect to. After well washing from the developer, soak before fixing in *weak* alum, fresh daily (why, by-the-way, do people so strongly object to the "bother" of using alum? it makes the plates much better for retouching, and absolutely insoluble) ; then, after the final washing before varnishing, make them very, very hot, and let them rest so for a short time, and then cool to varnishing temperature. I know from personal experience, and from considerable opportunities of judging, that plates so treated stand being for ever, apparently, in the printing frame successfully, but that plates intensified by mercury, or where alum is omitted, or only a hand warmth used for varnishing, either fade away or become soft and sticky, taking silver off the paper, and thus soon being utterly destroyed.

FRENCH CORRESPONDENCE.

Chromo-Phototype Prints from the Firm of Lahure—M. Lamy's Positive Gelatino-Bromide Paper.

Chromo-Phototypes. — Among the illustrated works in which polychromatic photo-engraving in relief has been employed, we must mention a real gem issued by the firm of Lahure; it is entitled, *Le Conte de l'Archer*. This book is admirably printed as to type, paper, &c., and illustrated by a certain number of chromo-phototypes interspersed with the text, in the manner of Kate Greenaway's publications. The firm of Gillot has executed these pictures with great success from water-colour sketches by M. Poirson. The impressions are taken in six colours, and the result is charming—a real feast for the eyes, and a delight to all bent on progress ; the work is said to be only the forerunner of many others of the same kind.

M. Lamy's Paper.—I have experimented on M. Lamy's gelatino-bromide paper. It is not suitable for positive impressions ; it is covered with too thin a film of gelatino-bromide for that purpose. M. Lamy prepares it by machinery in lengths of five metres, one metre broad. Unfortunately, the toning of these prints is difficult even under favourable conditions. Gold toning just causes them to lose a little of the coldness of their tone, after development, washing, fixing, &c. However, such as it is, the tone is by no means unpleasing ; if it does not rival prints on albumenized paper, it is none the less agreeable, and this extremely sensitive paper, so that a print is obtained in a few seconds by the light of a candle, may render good service in the art of reproduction. If M. Lamy could obtain reversible pellicle paper like M. Thiébaut's, his success would be complete. The development of the print is effected in the same way as ordinary negatives, with a mixture in suitable proportion of two solutions of neutral oxalate of potash and sulphate of iron, to which may be added a few drops of a solution of citric acid.

Leon Vidal.

WASHING LEUCINE OUT OF EMULSION.

BY A. L. HENDERSON.*

Mr. A. Haddon, a few weeks ago, read a paper before you detailing some experiments with a compound called leucine, which I lately introduced. Since then I have made several experiments, which to a certain extent disprove the correctness of the theory that all colloids do not pass through gelatine.

The experiment Mr. Haddon made was to use a piece of filtering paper, impregnated with pure gelatine as a septum. This test, as far as the manufacture of gelatine emulsion is concerned, is not conclusive, as an emulsion contains soluble salts as well as the precipitated bromide of silver, which may render the gelatine somewhat porous. I have repeated Mr. Haddon's experiment, substituting emulsion containing its salts in lieu of the pure gelatine ; and I find not only does the leucine dialyse out, but it will filter through the septum. I propose to demonstrate to you this evening that leucine will dissolve out

* Read before the London and Provincial Photographic Association.