

Assistant." The eyes are allowed to rest on the slide without any convergence of their axes, so that each eye only sees one picture, and the two pictures, being the images naturally seen of the original solid body by each eye, combine and produce the proper relief. In the plan which you describe, you allow the eyes to converge so as to produce squinting, the right eye seeing only the left picture, and *vice versa*. This method can only be done with prints not transposed properly in mounting.—Ed.]

To Correspondents.

- G. B.—A studio 26 feet long by 14 feet wide will give you facilities for almost all kinds of work; perhaps 6 feet more in length would be useful for card groups. We prefer the ridge-roof, the height at the eaves 8 or 9 feet, and at the ridge 13 or 14 feet. We prefer a north aspect for the principal side-light. You need not necessarily have any glass in the south side at all, as you will rarely need to use it. We cannot, in the space devoted to answering correspondents, give working details for a builder; but you may derive much information from our various articles on studios. Read that, for instance, describing M. Salomon's studio last May. We shall next week, probably, devote an article to some further particulars on the subject. A dark room about 10 feet square will be found convenient in size.
- FORTY-FIVE.—The perfect washing of prints before toning materially delays the toning process; but the omission of washing wastes the toning bath by rapidly precipitating the gold. We prefer, however, to wash slightly before toning, so as not to retard that operation, and thoroughly after, so as not to risk introducing anything into the fixing bath which may cause decomposition. We shall return more fully to this subject in our next.
- J. H.—By all means send the studies of cats, which are capital, and very interesting.
- J. E. E.—You do not state with what you painted out your skies, which are now cracking. We have rarely painted out skies in our own practice, but have found Bates' black varnish answer when we have done so. The use of a mask of black paper, cut as carefully to the sky-line as possible, with a little Indian ink to supplement and form a good junction, is a better mode of stopping out the sky than painting it entirely.
- A. COLLINS.—The tendency in developed prints to turn yellow is often due to the fact that they are not sufficiently perfectly washed before fixing, and a slight decomposition in the fixing bath is produced by the traces of the developing solutions left in the print. We do not like the effect of an enlarged uncoloured print when varnished. It has a vulgar, common effect. 2. We cannot give any certain opinion upon the instrument in question for the purpose you name.
- PERSISTENCE.—Our opinion is decidedly in favour of waxing prints, both as a means of increasing the brilliancy and adding to the stability of the print.
- TIDDY.—You will find the application of a portrait lens to the magic lantern fully described, with a diagram of the apparatus, in No. 378 of the PHOTOGRAPHIC NEWS. You can obtain a Chappuis' reflector of Mr. Chappuis, of Fleet Street. A condenser can be obtained of any dealer in photographic apparatus. Your photograph was duly registered.
- J. T. K.—You cannot legally make use of any copyright design without permission. Write to Mr. Cruikshank (address, Mornington Crescent, N.W.), and ask him. 2. The rapidity of the operations depends much on the power and size of the condensing lens; but the statement that three minutes were sufficient is very vague, and probably not correct, unless for a very small amount of enlargement and with a very thin negative. Of course, the greater the amount of enlargement the longer will be the time required. For enlargement to life-size by means of the lime light we believe the gentlemen you name gave more than six times three minutes. As a rule, we think that the enlarged negative process produces much better results with less trouble than any method of direct enlarging in winter.
- G. O.—The dimensions you name—24 feet by 12 feet—will give you a very good studio. If, instead of placing it north and south, you can place it east and west, so as to present a side to the north, you will obtain better results. Let the form be ridge roof, height about 8 or 9 feet at the eaves and 13 or 14 feet at the ridge. About 12 feet in the middle of the north side should be of clear glass. The south side may be altogether opaque. State any definite point in regard to the building of your studio upon which you may require information, and we can better answer you.
- FOCUS.—If both the lenses you name be used with full aperture the shortest focus will be the most rapid. The flatness of field will depend on the construction of the lens.
- A SUBSCRIBER FROM NO. 1.—Your description of the curved lines is not sufficiently definite to enable us to give you a certain answer. Are the curved lines due to irregular setting and drying of the varnish, or are they due to a partial solution of the film where the wave of varnish has rested? Either cause might produce curved marks. 2. Lampblack mixed with size will do very well for the inside of your camera.
- A. E. U.—The back numbers of our YEAR-BOOK for 1861, 1864, 1865, 1866, and 1867, only are in print. Of the focussing glasses you name we prefer No. 2.
- STANDSTILL.—The addition of a larger proportion of acetic acid to the developer, or the use of one a few weeks old, will prove the simplest remedy. The bath is probably nearly neutral, and has acquired an accumulation of organic matter. If the remedy we mention does not remove the evil, try cyaniding the bath, as we have recommended on former occasions.
- G. R. G.—The use of a solar camera without the sun is a mistake. A condenser is of no use except to condense the direct rays of the sun; and when there is no sunshine it is better to remove the condenser and mirror, and present the negative to the zenith. Direct sunlight is best for enlarging, because you obtain parallel rays. The diameter of your disc of light will of course depend entirely upon the distance of the enlarging apparatus from the screen. Remove the enlarging camera further from the screen, and you obtain a larger disc of light. If a portion only of the cone of rays passes through the negative, then only a portion of the image will be within the disc. Is your apparatus rightly arranged to commence with?

SIDD.—The probable cause of the spots is the albuminized paper having been kept in a damp place.

A BUNGLER.—Double sulphate of iron and ammonia is made by mixing in concentrated solutions 139 parts of protosulphate of iron with 66 of sulphate of ammonia.

JAMES MAYCOCK.—The albuminized paper has probably been kept damp, and damp and heat have caused some decomposition in the albumen. 2. Iodine is not soluble in water; but it is soluble in a solution of iodide of potassium; hence the latter is necessary, in order to form an aqueous solution of iodine. 3. The addition of carbonate of ammonia to the hyposulphite bath, by checking any tendency to decomposition and the liberation of sulphur, tends to perfect fixation and to the subsequent permanency of the print. 4. Perfect washing, although necessary, is by no means a safeguard against change in a print. More prints fade or change from imperfect fixation or changes set up in the hypo bath than from imperfect washing. The best safeguard is the use of strong, fresh hypo, never fixing too many prints in the same bath, nor using it a second day. The "Bangalow" is a little under-exposed. The other is better. There is no commercial photographic printing establishment connected with the News. You will find the announcements of printing establishments in our advertising pages.

W. H. J.—As we read the formula, it is clear that considerable latitude is permissible in the proportions of the developer, the great object being to commence with a very weak developer, and continue until the details appear, and then add that indefinite quantity, a "few drops," more of the concentrated pyrogallic solution, with a drop or two of silver solution to complete the development and intensification. In like manner with the alkaline developer: M. Constant is describing his experience for the use of dry-plate workers, and evidently leaves something to their judgment, and hence is somewhat indefinite. A "few drops" of ammonia solution is evidently to be understood. 2. Your friend is very decidedly in error. The use of simply iodized collodion and pyrogallic acid development for portraiture, either in the open air or the studio, is not more conducive to softness than the use of bromo-iodized collodion and iron development. There may possibly remain amongst old photographers one or two extreme conservatives who adhere to an old and superseded method of practice, but universal experience has determined the advantage of the bromide and the iron salt.

YOUNG.—A condenser suitable for a magic lantern can be purchased for a few shillings; and a photographic lens is not suitable for a condenser. Before attempting to make or work a magic lantern you had better study the subject a little, and understand the requirements. You will find much information in a little work entitled the "Magic Lantern," by a Mere Phantom, published by Houlston at a shilling. 2. In camera printing by gas-light, a screen of ground glass should be interposed to diffuse the light. 3. A card lens of about eight inches focus, which may be used with a very large aperture, will give the best and quickest results in card portraiture. A good half-plate lens may be used with open aperture. Card lenses are not generally well suited for cabinet portraits. The only disadvantage in using a lens for small pictures which is suitable for large ones is that a great length of room is then necessary, and in thick weather the amount of misty atmosphere between the sitter and the lens interferes with brilliancy.

D. S.—The length of the box must depend on the focus of the lenses employed. You cannot do better than follow out the instructions of Mr. Reeves. See also letter in our last on the subject, and read the foregoing answer to "Young." The appliances you possess seem quite adapted to the arrangement described by Mr. Reeves.

EXQUIRER.—Mr. Reeves' description of the mode of using the photographic lens with a magic lantern will be found in the number of the News for December 1st, 1865.

R. TUDOR WILLIAMS.—All the pictures sent are good. The "Haunted Oak" is very fine, as are the "Druidical Stones" and "Caldicot Castle," and also the stereo prints. The interiors are a little under-exposed, but of course are of difficult subjects. We cannot give any certain advice as to the probability of sale: Marion and Co., or the London Stereoscopic Company, will be able to give you the best information.

BETA.—If another photographer have really a copyright in the portrait to which you refer you cannot make an enlargement of it without his consent, as the copyright law gives him a property in any kind of copy of the picture.

CRABBE.—Both cards and cabinet portrait are very good, and the portrait of the poet satisfactory. Some of the ladies' portraits are very pleasing indeed. Thanks for your courtesy. Several Correspondents in our next.

Photographs Registered.

- Rev. J. W. WALKER, Cheshunt,
Photograph of Himself.
- Mr. S. KRUGER, South Eton,
Photograph of Wood Carving of St. George and Dragon.
- Mr. G. WALLIS, Whitby,
Photograph of John Chapman, Esq.
- Mr. C. CORDING, Plymouth,
Photograph of Needlework Altar Piece.
- Messrs. W. and D. DOWNY, Newcastle-on-Tyne,
Two Photographs of Duke of Buckingham.
Photograph of Right Hon. J. W. Henley.
- Mr. F. R. ELWELL,
Two Photographs of Weston-super-Mare Pier.
- Mr. J. BULL, Weymouth,
Photograph of Rev. C. T. Proctor.
- Mr. J. BATEMAN, Canterbury,
Photograph of Canterbury Cathedral.
- Mr. R. B. THORPE,
Photograph of Miss Asenath Jones.
- Miss E. PECHRY, Bath,
Photograph of Frontispiece of Album.
- Messrs. W. W. LAW AND SON,
Photograph of the Lions round the Nelson Column, Trafalgar Square.