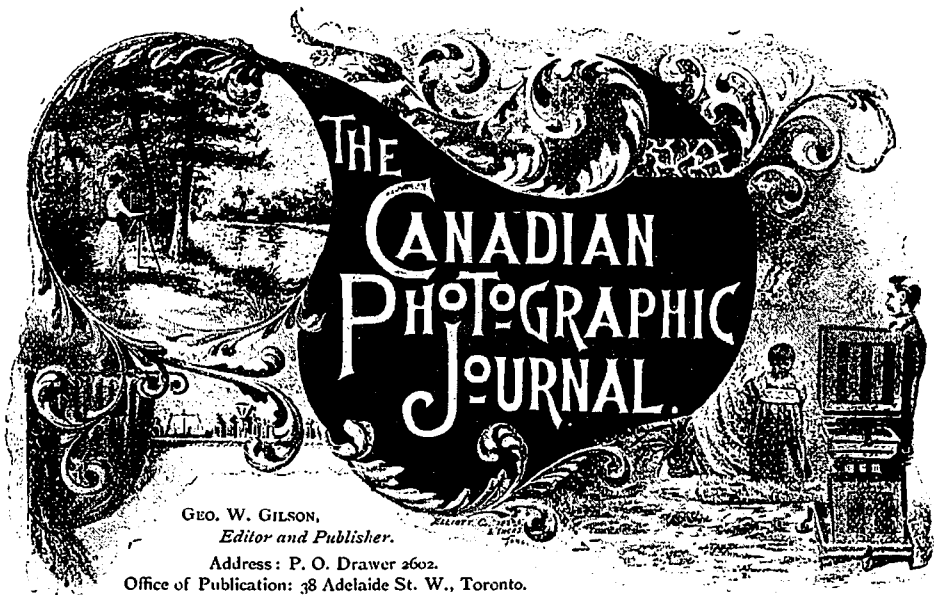




KALONA PAPER.



GEO. W. GILSON,
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W. ETHELBERG HENRY, C. E.,
Associate Editor.

Sarnia, Ont.

Devoted to the Interests of the Professional and Amateur Photographer.

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Advertising:

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Our Illustrations.

Our illustration for August is a most interesting one, owing to the fact of so many of our photographers having lately tried, and with considerable success, the paper on which it is made. "Kalona" is a collodion paper made by the firm who are known in most quarters of the Globe by their N. Y. Aristo Paper. "Kalona" is said to tone easier, and with less gold, than any paper of its kind, which is a great point in its favor, and is probably one of the many reasons for its present popularity.

Prizes v. Academy.

THE account of the successful and interesting meeting of the English Convention which appears in another column of this issue suggests a few words regarding our own P. A. C.

As a starting point for a serious talk on the question of our Canadian Convention, the following queries suggest themselves.

Do we get the best value from our Convention for the time and money spent in attending? If not, what changes can be made on the lines upon which it is now held, to give attending members more of an intellectual, educational, and social treat, and induce the hundreds of good men, not now

members, to join the Association, and not only to join but to attend the meetings?

The intention of this article is *not* to answer this question, nor to seemingly dictate as to what shall, or shall not be done by the Convention, but simply to make a few suggestions which have occurred to us, and leave the answering of the questions and the consideration of the subject to the members of the Convention, and, that much larger body, the Photographers of Canada who at present are not members.

Is it *necessary* to have prizes?

Is it right or just, in fact, to place one, of two or three photographers from a certain town above these others because there are not enough medals to go round, or because the prize-man's exhibit is executed upon X's paper for which a prize is offered, the other two being unfortunate enough to exhibit on paper or plates of another make. Is it justice to place an inferior workman over his superiors and permit him to take a valuable prize because he uses X's paper?

Again, say what you will, what chance does the photographer from a small town, whose sitters are principally good people whose lives are passed in the everyday toil of farm life, who do not want nor will not pay for fancy work, but who only too often demand tints at four for a quarter?

This man, even though he loves his art and does conscientious work, what chance does *he* stand as a prize winner against his brother photographer of the large city with his numerous appliances, and expensive accessories--which through the magnitude of his business he can well afford, not to mention his highly paid assistants, and his well dressed patrons used from there cradle to courtly society, and taught graceful

posing and Delsarte with their alphabet.

Against the modest display of the one, is put the elegantly framed and expensively gotten up exhibit of the other, and the result is that the other, who of necessity has with his own hands performed his work in the face of many disadvantages, is discouraged at the thought of ever achieving such greatness. The bitter thought that fate has not given him the chance, even though she has the talent, to become an equal of his brother artist, often blinds his eyes to the good that might come to him through careful study of this big man's work. The iron has entered his soul, and instead of being benefited and encouraged by what he sees, the curse of the tempting prize list which he feels is beyond his reach, has done its work, and he goes home worse by far for his visit to his Convention, perhaps to have the "green eyed monster" aroused within him by the sight of his opponents medal won in a class given by a manufacturer, and for which perhaps but one or two competed.

While the change made in the arrangement of the prize list this year, by the promoters of the convention may be a step in the right direction, it is not to our thinking, the proper way to meet the emergency. As long as the prize list remains *the* feature of the Convention, so long will discord and hard feeling exist, and just so long will many true artists stand aloof.

We say without fear of contradiction that of the honorable body of men who comprise the P. A. C., the large majority would undoubtedly be glad to see the prize list abolished and something in harmony with a profession as high standing as that of Photography, substituted.

As a suggestion for reform let the Convention be run more on the lines of an academy. Let the honor to be gained lie in the fact of work submitted by competing Photographers being *accepted and hung on the wall* according to *merit* by a competent hanging committee. Let the manufacturers who have so generously contributed in the past, continue to do so, use the fund thus obtained to secure the best demonstrators of the times; give the manufacturers a chance to demonstrate their own goods. From the funds give a banquet to all members at which all could meet in friendship, and with feet under the mahogany and good viands before them, talk over old times, smooth over old sores, listen to eloquent remarks on things new in Photography, exchange ideas and break up, feeling that you have gained a new lease on life and ambition by having attended the Convention of the P. A. C.

This is the example set us by our Mother Country, can we do better than follow her good taste.

Let us hear the views of *each of you* on our suggestions.

Look out your baby negatives.

Home Made Rocks.

W. ETHELBERG HENRY.

MOST photographers making portraiture their specialty, have sometime or other felt the need of rocks and other small accessories of this class, upon which to group their child sitters. Of course, many studios are already provided with such things in sufficient number, but in some cases stools and small chairs have to be utilized with an outdoor background, thus producing a mixed-up appearance far from effective.

Now it is a very simple matter to make a lot of such rocks or tree stumps which shall be light to handle and yet be a first-class imitation of the real article.

The principal thing necessary is a framework, which may be easily made of a small wooden box with a few rough lumps of wood nailed thereon in such positions as will chiefly tend to make a comfortable seat and yet assume somewhat the outlines of a natural rock. The framework being prepared, soak a lot of newspapers in a paste made of

Flour.....	1 pound
Alum.....	2 ounces
Water.....	3 quarts

thoroughly boiled and constantly stirred for about ten minutes.

Work into this paste as many newspapers as possible, until the consistency of the whole is about that of soft putty. This papier maché is easily fixed on the framework in any desirable shape by means of a few long wire nails, and it will in a few hours become thoroughly hard. When quite "set" in the desired shape, cover a large sheet of paper with a liberal coating of common glue and squeeze it into position over the whole "rock" and induce the errand boy to "sit it into shape." When thoroughly dry it may be painted with a mixture of white lead, turpentine and japan, containing sufficient lampblack to reduce to the tint required by the operator.

"Imitation Opals" next month.

Look out for our article upon the simplest method of preparing gelatino-chloride emulsion for making lantern slides by development. No extra appliances needed. Can be prepared by any photographer.

A New Antiseptic.

MR. WORRELL, chemist to the Thorncliffe Collieries, (Eng.), has discovered a new chemical which possesses greater antiseptic properties than even pure carbolic acid. This substance is, furthermore, non-poisonous whether taken internally or through the skin. It is to be hoped photographers will soon have an opportunity of testing its wonderful properties as a preservative for mountants, etc., where, hitherto, carbolic acid has been used. The new material has been named "Izal."

Prizes Valued at \$150.00.

CANADIAN PHOTOGRAPHIC JOURNAL
AMATEUR COMPETITION.

CLASS A., LANDSCAPE—This competition is open to all Amateurs and will be governed by the following simple rules:—

1. Open to all Amateurs.
2. All photos sent in will become the property of this JOURNAL. They will form the nucleus of a Loan Collection which will be circulated, free of charge, among the amateur photographic clubs of Canada, with a view to mutual improvement.
3. Competitors must send not more, nor less, than three mounted views.
4. No restrictions as to size.
5. Any make of plate, and any printing process, may be used at the option of the competitor.
6. Name and address of competitor, together with name of plate and printing process, as well as any other information likely to be of service to amateurs, *must be clearly written on the back of each photograph.*
7. The views sent in will be judged on their merits alone—totally irrespective of size,—according to the following points:—
 1. Artistic selection of view.
 2. Chemical manipulation, comprising the development of original negative and the quality of printing.
 3. Technical work, including judicious trimming, care and skill exercised in mounting, taste shown in the proper selection of the mount and the general finish of the picture as a whole.

In this Competition we offer as a **First Prize, a Magnificent Casket of Lenses**, now being manufactured for us in the Old Country by an eminent firm of opticians. The contents of this casket (which is lined with velvet and richly covered in morocco) comprises eleven Rapid Rectilinear, eleven wide angle rectilinear, and seven view lenses. With these lenses it is possible to adopt *sixteen different foci, ranging from four to twenty-nine inches*, covering any sized plate from $3\frac{1}{4} \times 4\frac{1}{4}$ to 24×28 inches.

The latest improvement of the well-known "Iris" diaphragm will be fitted throughout.

The *Second Prize* will be a handsome Silver Medal.

The *Third Prize*, a handsome Bronze Medal. These medals will be struck from a special die, now being made for this Journal.

The *Fourth Prize* will consist of a year's subscription to the CANADIAN PHOTOGRAPHIC JOURNAL.

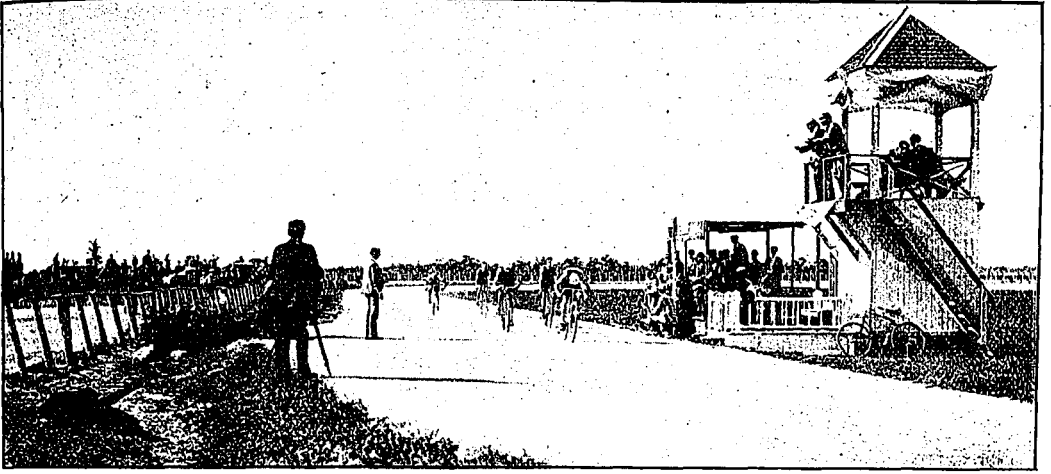
Pictures for competition must be received *not later than December 1st, 1893.*

Prize winners will be announced in our elegant Christmas Double Number.

Concerning Copyright.

THE question of securing copyright in a photographic picture should be of vital importance to our readers,—particularly those resident in Canada.

A photographer, having produced a picture likely to prove of great pecuniary value, is usually anxious to secure to himself the well-merited reward of his labor, and it is particularly exasperating for him to find, after the lapse of a few weeks, that the local stationer has pirated his production and had it reproduced by some distant firm, probably in the States or Germany.



Stanley Plate.

W. E. Henry, Photo.

A SNAP SHOT AT THE LATE C. W. A. MEET, SARNIA.

This miserable reproduction is probably offered at a tithe of the sum the original author charges for prints, and the consequence is, his pocket suffers considerable loss.

Such piracy is a crying shame, and we deem it high time that our home photographers had proper protection.

We have a law of copyright, certainly; but may we ask if it is considered reasonable that a photographer, who is paid say, 50 cents a copy for his prints, should be charged the same fees as the painter, who probably receives a thousand dollars for his picture?

And yet, according to the Copyright Act, the two men are charged precisely the same fees.

According to the Copyright Act, a photographer desiring to secure the sole right to his property must deposit (together with his fees) two copies of his photogram with the Minister of Agriculture, and must cause to be printed upon the face of each copy published the following words: "Entered according to Act of the Parliament of Canada, in

the year—, by A. B., at the Department of Agriculture."

On the other hand, a painter has but to send a written description of his work and need put no inscription upon his painting,—his signature (according to the Act) being "*deemed a sufficient notice of such proprietorship.* 38 V., c. 88, s. 9."

Now why, in the name of common sense, should this distinction be made? Why must a photographer be bound to deface his work, and at the same time be obliged to pay the same fees as a painter?

Again, so far as photographers are concerned, the fees charged are altogether unreasonable, and to a great extent prohibitive.

We have received numerous letters upon this subject, and among them one from Mr. John Sampson, of Nanaimo, B. C., which contains a very sensible idea, for which we here tender him our thanks.

Taking advantage of his valuable hint, and using it in connection with

our own ideas on the subject, we offer, in the interests of the fraternity, the following suggestion to the government as worthy of profound consideration.

We ask them, in all seriousness, to provide photographers, desirous of availing themselves of the privilege, with a steel impress stamp bearing the name and address of the purchaser, together with a registered number and the word "copyright." Let each applicant defray the cost of his stamp and pay a certain fixed sum yearly in advance for the privilege of using it. The number on each stamp would, of course, be duly recorded in the office of the Department. The owner of the stamp (for the time being) to have the right of using it upon *every photogram issuing from his establishment*, and, in the event of his wishing to discontinue his yearly payment and registration, the return of the stamp to the Department at the termination of any year to be deemed sufficient notice.

Upon the receipt of each year's payment, let the Department issue a certificate which, in the event of piracy, should be admitted to any Court of Justice as *prima facie* evidence of the existence of registered copyright.

Of course, in the case of private sitters, the use of this stamp would not be admissible for a simple reason: if a sitter orders portraits, then the copyright in the photogram of his features is his own property—for which the photographer employed receives payment.

On the contrary,—if the photographer asks a person to give him a sitting and presents him with a copy of the resulting photogram for his trouble, the copyright is then vested in the photographer.

In view of the present controversy in England, we offer our suggestion

to our English *confreres* of both classes. The idea is not copyrighted—we have no string tied to it—and we think it would give them a hint towards the settlement of their difficulty.

Next month we shall publish an article descriptive of the present method of securing copyright, together with the necessary forms.

Duty on Smoke.

IN our last issue we called attention to a serious grievance now being placed before the government authorities by Mr. Fred. T. Trebilcock, the able manager of the Canada Smelting and Refining Co. of London, Ont.

The object of *all* true Canadians should be to heartily encourage any industry established in their own country that tends to the employment of home labor; especially so in a case where the purchase of foreign material cannot by any possible stretch of the most vivid imagination be construed as an injury to any Canadian firm.

The object of the Canada Smelting and Refining Co. is the purchase of jewellers' "sweeps," photographers' residues, and waste of any kind containing traces of gold, silver, or platinum.

The refining of this waste takes place in the heart of Canada and is undertaken by Canadian workmen, whose wages are spent in Canada to the general advancement of the country.

Now, according to Act of Parliament, if this firm were to buy a consignment of gold or silver bars refined by our American cousins, the Government of Canada *would admit such bullion free of duty*.

But on the other hand, supposing they purchase from an American photographer an accumulation of residues

paper clippings, and other rubbish supposed to contain the precious metals, they are bound to pay a duty of 20 per cent. for the privilege of bringing it into Canada, to extract, in this country, the amount of bullion present.

This appears to be offering a premium to the firm to remove their extensive industry from Canada to the United States, where Uncle Sam is only too glad to receive them with open arms, and allow them to import, *absolutely free of duty*, all the waste they can collect from Canadians.

Is it likely that such a far-seeing firm as the Canadian Smelting and Refining Co. intends to pay hard cash for American residues to bring them over to Canada, to pay rent and taxes, as well as wages, to Canadian workmen for smelting, and yet work at a loss? Why the idea is preposterous; hence the money spent in the purchase of American waste is an ultimate gain to Canada.

The company's assay office is the only one in Canada, and it is to be sincerely hoped that the government will not dally with the subject, but take the earliest opportunity of relieving the firm of the burden of duty at present imposed, and give them *at least* an equal chance with their American rivals.

Look out your baby negatives.

Our Competitions.

CLASS I.—RE-TOUCHING.—As announced in our July issue we now publish the rules governing this competition:—

1. Open to all subscribers.
2. Each competitor to send in two cabinet prints from the same negative of a head and bust. One of the prints to be taken before and the other after re-touching the negative.
3. Any plate and any printing process may be used at the option of the competitor.

4. Full name and address of the re-toucher to be legibly inscribed on the back of each photogram.

5. All prints sent in will become the property of this journal.

6. Each competitor attaining our standard number of marks will receive a handsome certificate of proficiency in re-touching.

7. All prints must be mounted and must be received at Toronto not later than November 1st, 1893.

The attention of assistants is called to the fact that the possession of our certificates in any branch of photography will entitle him to a first consideration at the hands of any one desiring a competent assistant

Specially designed silver and bronze medals, with subjects and name of winner inscribed thereon, will be awarded to the winners of a specified number of these competitions, should we find that sufficient interest is shown in the present subject. We shall announce these in a future issue.

For further particulars see p. 167, July issue.

All competing prints to be addressed,

THE EDITORS,

CANADIAN PHOTOGRAPHIC JOURNAL,
Toronto, Ont.

P. O. Drawer 2602.

Our Half-Tones.

BY the courtesy of W. Miln, Esq., proprietor of *Cycling* we are enabled to give our readers a view of the finish of the Three-mile Canadian Championship, which was run at Sarnia during the late C. W. A. meet. The original negative was taken upon a 6½x8½ red label Stanley plate. Out of thirty-four instantaneous exposures made during the races upon plates of this well known brand, not one was marred by the slightest blemish. This, we consider, speaks highly for our home manufactures.

We are officially informed that out of the five judges appointed to make the awards at the forthcoming exhibition at Bristol (England), *three are non-members of the association.* This is as it should be, and it is time we had a similar arrangement at the Annual Convention of the Photographers' Association of Canada. If the association would appoint judges who had no personal interest in, or knowledge of, the exhibitors, they would find the membership rapidly assume important proportions. This is especially desirable in an exhibition whose prizes are chiefly provided by the manufacturers. In our forthcoming exhibition about \$470.00 are provided by manufacturers, while the association only grants \$50.00. Surely our judges should not be members of the association.

We are pleased to note that the silver medals of the Society of Arts (London, Eng.,) have been awarded to T. R. Dallmeyer for his paper on *Tele-photography*, and to H. Vanderweyde for his paper on *The Pictorial Modification of Photographic Perspective.*

Mr. Walter Sprange, of Beech Bluff, Mass., is working day and night upon the "Blue Book" of amateur photographers, which is to be a directory of the various photographic societies in the United States and Canada. He advises us that the delay in the publication of the work is caused solely by the difficulty he experiences in gaining sufficiently authentic information of the many "defunct" societies (listed in the other annuals) to warrant his "obituarizing" them. He deems it advisable to mention the fact of their non-existence, to save others the expense of continually writing to them hereafter.

Mr. W. E. Woodbury, son of the late W. B. Woodbury, has joined the staff of the PHOTOGRAPHIC TIMES, and will no doubt prove a valuable acquisition to this most interesting journal.

England has submitted important evidence, consisting of photographs of seal grounds and the slaughter of seals, before the Behring Sea arbitration. Photography is, slowly but surely, taking a front rank as indisputable evidence.

The Duke of Newcastle and Mr. Gambier Bolton stayed three weeks at Chicago and are now on their way to Honolulu *via* San Francisco.

The Practical Photographer in its July issue, says:—"Though we do not appreciate the general principle of limiting the edition of anything that is good or beautiful, it is a most cheering to see it applied to professional photography. Mr. W. Ethelbert Henry is offering for subscription a 'photogram' of one of the principal Sarnia churches, and the edition is limited to one hundred signed copies." In the same issue we note an advertisement of a new edition of Burnet's Art Essays, "strictly limited to 200 copies." This book is issued by the publishers of THE P. P., and is certainly both good and beautiful. Why limit the edition?

Our esteemed contemporary, *The Photographic Times*, in its issue for July 18th, publishes a frontispiece that should achieve fame for its incongruity if for nothing else. The subject is a charming young lady apparently in the act of taking a snap-shot. She is dressed in what appears to be a light waterproof cloak and cape, and a straw hat of the "sailor" class. She is stand-

ing upon a strip of grass mat which traverses a plank floor diagonally from right to left. The lines of the plank floor run from left to right and are palpable upon each side of the strip of grass mat. The background, whose base forms a sharply defined line, is a representation of the depth of winter, and forms a glaring contrast to the mass of dark planks and other matter which should—at that time of year—have been covered with snow. The young lady, who has an earnest expression upon her charming features, is standing well erect grasping the bulb in her left hand, while her right fist is prettily but firmly pressed upon her hip. This pose forces the arm into an acute angle, chiefly adopted by old English fishwives, and known by them as “puttin’ yet arm akimbo.” The incongruity in this print is particularly noticeable, being so entirely different to the many excellent studies that have hitherto been presented by this well-known journal.

Our Notice Board.

MESSRS. PERCY LUND & CO., of Bradford (England), have just issued a re-print of BURNET'S ART ESSAYS, a book invaluable to every photographer wishing to excel in his art. This edition is the only one in the world now in print, and we strongly advise our readers to take advantage of the low price at which the book is offered and buy a copy before the edition is exhausted. The large paper edition, cloth bound, is sent, post free, by the publishers for \$1.50, and the edition is limited to 200 numbered copies.

The **Hotype Co.** of New Brighton, N. Y., send us samples of their Collodio Chloride papers; our report will appear next month.

By the courtesy of The Photo-Supply Mfg Co., of Brooklyn, we have had the pleasure of testing a full line of their carbon tissues. They are very easy to handle, are readily soluble and give exquisite results. In addition to the usual photo-brown and engraving black, the colors comprise blue, green, yellow, carmine and rouge. Now that this charming permanent process is again coming into favor we think our readers will be glad to try their hands in printing carbon transfers upon toilet bottles, etc., for sale as Christmas presents. The only weak point we notice—and an important one—is the book of instructions. This is not lucid enough for a man totally unacquainted with the process; it should be re-written and some of the principal points treated at greater length. Our readers can obtain price lists and instructions by addressing the company, as per advertisement.

We have received from the Dixon Crucible Co., of Jersey City, N. J., samples of their artists' graphite pencils. These pencils are of excellent quality and well adapted to the requirements of the professional re-toucher.

The new “catalog” of Benj. French & Co., whose advertisement of the popular “Euryscope” lenses appears in our advertising columns, has been received. It is very complete.

The **Bristol International (trien-nial) Photographic Exhibition** will be held in the galleries of the Academy of Arts, in Bristol, from December 18th, 1893, till January, 22nd, 1894. The judges comprise four well-known photographers and one eminent painter. Especially worthy of note is the fact, that *three of the judges will be non-members of the association.* The prize

list is a large one and includes a champion gold medal, twenty silver and fourteen bronze medals. All branches of photography have received attention. Pictures from Canada may be sent by mail, unmounted, and the council will have them mounted at the cost of the exhibitor. All pictures must arrive at Bristol not later than December 1st. Full information and entry forms may be had on application to the Hon. Sec., F. Bligh Bond, 36 Corn St., Bristol, Eng. Canadians may rely upon strictly honorable awards at this exhibition.

Rapid Toning.

Mr. W. D. Welford, in a paper read before The London and Provincial Photographic Association, claims certain advantages for the use of a concentrated gold bath in toning gelatino-chloride prints. The following is the bath he so strongly recommends :

- Bicarbonate of soda 1½ drams.
- Chloride of gold..... 4 grains.
- Water..... 6 ounces.

The author claims, among other advantages (?), rapidity of action and the possibility of careless toning without the appearance of defects in the finished prints.

For our part we prefer toning in a bath over which we may have some sort of control ; but if Mr. Welford's bath turns out to be the great boon it is supposed to be, we hope the manufacturers of gelatino-chloride papers will not omit to bestow upon its originator some mark of their appreciation.

It is said to be getting the fashion to address and stamp envelopes on the back. With the direction written across the folds, the letter cannot be opened by an unauthorized person without the fact being detected.

The Constituents of Light.

The different qualities of colored light in 1,000 parts of white light are given below :

Red.....	54 parts.
Orange-red.....	140 "
Orange.....	80 "
Yellow-orange.....	114 "
Yellow.....	54 "
Greenish yellow.....	206 "
Yellowish green.....	121 "
Green and greenish blue.....	134 "
Sky blue.....	32 "
Blue.....	40 "
Violet blue.....	20 "
Violet.....	5 "
	1,000

It will thus be seen that the visible rays are considerably in excess of the chemical ones, a fact which would lead us to conclude that the present sensitive photographic mediums utilize only a small portion of the total light given off from a subject.—*Anthony's Bulletin.*

Practical Formulæ for Practical Men.

CARBUTT'S ACID FIXING AND CLEARING BATH.

- Hyposulphite of soda 16 ounces.
- Sulphite of soda 2 "
- Sulphuric acid 1 drachm.
- Chrome alum..... ½ ounce.
- Warm water..... 64 ounces.

Dissolve the sulphite of soda in eight ounces of the water; mix the sulphuric acid with two ounces of the water, and add slowly to the solution of soda sulphite; dissolve the chrome alum in eight ounces of the water, the hyposulphite in the remainder, then add the sulphite soda solution, and last the chrome alum. This fixing bath will not discolor until after long usage, and both clears up the shadows of the negative and hardens the film at the same time.

A USEFUL ENCAUSTIC PASTE.

Pulverized gum arabic 2 parts.
 " sugar 5 "
 Transparent soap (grated). 10 "

Sufficient water to moisten the soap and dissolve the whole. Add ten parts of grated white wax and boil all together over a sand bath with constant stirring in an earthen jar capable of holding five times the quantity. Perfume as desired. This preparation gives a hard elastic finish to albumen or gelatine prints.

TO REMOVE SILVER STAINS.

Professor Stebbing gives the following simple receipt for removing silver stains from negatives:

Soak the negative in a flat tray containing—

Ammonia forte..... 1 part.
 Water 1 "

And rub the spots occasionally with a tuft of cotton.

PROF. SMIDT'S ONE-SOLUTION METOL DEVELOPER.

Sulphite of soda 8 ounces.
 Carbonate of potash..... 4 "
 Water..... 50 "

When dissolved add:

Metol 1 ounce.

For use dilute one part with four parts of water.

A DEAD BLACK FOR METALLIC DIAPHRAGMS.

Copper nitrate 1 ounce.
 Water 4 ounces.

Heat the diaphragms in the flame of a spirit lamp. While hot, dip them in the copper solution; withdraw after a short immersion, and, without drying, again heat them in the flame until they assume a dull red color. When cool, the result will be a fine dull black.

CHEMICAL CEMENT.

A useful cement for repairing chemical or electrical apparatus is often a great convenience. The following is recommended:

Resin 10 ounces.
 Wax 2 "
 Red ochre 2 "
 Plaster of Paris 2 drams.

The P. A. C. at Chicago

THE Convention of the P. A. of A. held at Chicago, July 18th to 21st, inclusive, was not as largely attended as others that have gone before. This was, no doubt, owing largely to the great counter-attraction, the World's Fair. This coupled with the Congress on photography, which was held one week later, had a tendency to destroy the interest in the Convention.

The large display by the stockdealers, which has formed no inconsiderable part heretofore, was conspicuous only by its absence. These gentlemen had gone to a great deal of trouble and expense on their exhibits at the World's Fair, and judged rightly that their friends the photographers would look them up there. The hall in which the meeting was held, while it gave a good light in which to exhibit pictures, was totally unfit for either speaking or hearing, which perhaps accounts for the very small preparation that had been made in the way of a program.

We had hoped some real practical papers would have been prepared for discussion, and the Convention would have taken a more educational turn. Many of the members present had come with the full expectation that such would be the case—it was rather discouraging, then, that some papers, over which the writers had spent a good

deal of time in preparation, should have "been taken as read."

The display of work was on the whole, excellent, though presenting comparatively little that was new. It is not the purpose of this article to single out the merits of the respective exhibits by the different photographers, of course the leaders were all well represented, and competition for the prizes was keen, and kept the judges studying to decide where the "plums" should fall.

AWARD OF PRIZES.

GRAND PRIZE.—Heimberger & Son, 1st; Baker & Co., 2nd.

Class A.—Julius Strauss, 1st; Montford & Hill, 2nd.

Class D.—Heimberger & Son, 1st; Fowler, 2nd.

Class E.—McCrary & Benson, 1st; Fowler, 2nd.

Class H.—Beck, 1st; W. H. Irskin, 2nd.

Class I.—Chas. Hetherington.

Class J.—Pifer & Becker, Diploma; L. C. Overpeck, Diploma.

Class K.—K. Gregor, 1st; Reutlinger, 2nd; S. W. Bhedwar, 3rd.

Class C.—Steckel, 1st; Stein, 2nd; Gilbert & Racon, 3rd.

Diploma for most tastefully arranged exhibit: J. de Vos, Warsaw, Ind.

Class B.—Steckel, 1st; Dana, 2nd; Coover, 3rd.

Class F.—James Inglis, 1st; E. Long & Son; 2nd.

Foreign Prizes:

England, McGregor, 1st; France, Reutlinger, 2nd; India, Bhedwar, 3rd.

Awards for the Murdock Aristotype Paper:

Class A.—1st, Premium, \$500, Stein.

Class B.—2nd, Premium, \$200, Eltem.

Class D.—4th, Premium, \$100, Schumacher.

Class E.—5th, Premium, \$50, Sargent.

Sweepstakes, Diamond Medal, Scott.

Prizes in the \$1,200 kloro contest given by the Photo Materials Co., of Rochester, N. Y.

Class A.—\$500, Rosch, of St. Louis, 1st.; \$150, S. L. Stein, of Milwaukee, 2nd; \$100, Scott of Chicago, 3rd.

Class B.—\$150, Cornell, of Rochester, 1st; \$75, Root, of Chicago, 2nd; \$50, Ulham, of St. Joseph, Mo., 3rd.

Class C.—\$100, Strinjssor, Appleton, Wst. 1st \$50, H. Levin, Chicago, 2nd; 3rd, Thrown out. Not merit enough.

Of course this is the day of prepared papers, and the rate at which these are multiplying, they threaten to banish albumen in the same way that dry-plates disposed of collodion a few years ago.

A great variety of papers were shown at the Convention, each one of which had a long list of good qualities to recommend it to the use of the photographer. While platinotype has many admirers, yet the demand seems to be for the more highly finished Glatim or Colodio Chloride papers.

The American Aristo Co. have a magnificent display in a gallery all by itself, in the centre of which was a unique group by Strauss, "The largest photo in the world." Their demonstrators were kept busy showing the ease with which they manipulated this paper, and the delightful results to be attained with it.

Canadian Photographers were well represented at the Convention; we noticed the following gentlemen present: S. J. Jarvis, Ottawa; Mr. Johnson, Picton; Eldridge Stanton and Messrs. Shorey & Ward, Toronto; C. S. Cochran and A. M. Cunningham, Hamilton; E. Poole, St. Catharines; Geo. Knowlton, Montreal; and Messrs. Hopkins & Green, of St. Thomas.

The members of the Executive of the Canadian Association were promised prints from some of the finest photos exhibited at Chicago, they will form an interesting collection at the convention in November.

C. E. Hopkins, so well known to photographers in Canada, was on hand with a greater variety of attractions than ever before. In addition to a magnificent display on Omega and Vici papers,—both of which need no introduction to our readers,—he showed an endless variety of carbon prints and opals, in all shades of the rainbow. While carbon printing is by no means new, still we bespeak for it a revival as there is a peculiar charm about the prints that is not reached by any other process.

So much has been said pro and con concerning the use of the combined toning and fixing bath, that the photographic fraternity is much interested in any authentic evidence that it can get on the subject, for this reason the display of the Eastman Kodak Co. was one of the centres of attraction at the Convention. Displayed side by side were two prints from the gallery of W. H. Allen of Lawrence, Mass., which had been displayed in his show case for eight months, one was on solio toned on the combined bath, and the other, albumen toned and fixed separately, the albumen print was badly discolored while the solio remained unchanged. Another picture in evidence was an albumen print, toned on the combined bath by E. Decker of Cleveland, in the year 1860, which was remarkably well preserved, and showed less discoloration than the card on which it was mounted.

Perhaps the most interesting part of the exhibit was a display of a hundred or more prints, showing the method used to test the permanency of each solio emulsion. One half of each of these prints had been covered by a card, and the other half exposed to a

strong light, for a period ranging from four months to over a year, in nearly every case these prints were so well preserved, that it was impossible to detect which side had been covered. All were toned on combined bath giving indisputable evidence of the success of combined bath with Solio.

The Eastman demonstrators were on hand and gave a practical exhibition of the working of the paper, and many prints were carried away as souvenirs of the Convention.

Cramer's display was up to its usual high standard of excellence. Mr. Cramer was present as jovial, whole-souled as ever, shaking hands with everybody; and, by the way, we have since learned he has secured Eldridge Stanton to represent him in Canada. We congratulate Mr. Cramer on securing the services of that able gentleman, who will no doubt call on you all in the near future and demonstrate Cramer plates.

The M. A. Seed Dry Plate Co. in addition to a grand display of photographs, showed a number of negatives developed with different developers, which formed a delightful study to the operator, and showed the wide range obtainable on Seed plates.

C. B. Stanbury, formerly with S. H. Smith & Co., is now chief "hustler" for Sweet, Wallack & Co., Chicago; he was glad to see old friends, and sold them some nice bills of goods.

The new officers of the Association are: Adam Heimbürger, Pres.; Geo. Bassett, 1st Vice-Pres.; Rad Coover, 2nd Vice-Pres.; E. Rosch, Sec.; Mr. Snyder, Treas.

The P. A. of A. will meet next year in St. Louis; Denver was next in favor.

The usual amount of grumbling was indulged in when the prizes were awarded.

S. H. Smith, of the S. H. Smith Co., Limited, Toronto, was the only representative of Canadian stock houses at the Convention.

Mr. H. Snowden Ward, editor of the *Practical Photographer*, was introduced to the members of the Convention by the President, and made the following remarks, which were listened to with great interest:

Mr. President, Ladies and Gentlemen.—I did not expect when I came here, to be called upon to say anything at this time, though I attended this convention with the intention of saying something, which I feel is not merely personal, but is a message from the British photographers to the photographers of America. I may say on behalf of the British people, and British photographers especially, that the effort that has been made this year to increase the friendship between the different members of the English speaking races by the holding of the World's Fair in Chicago has been very much appreciated, and as I had something to do with the photographic arrangements for a party of British photographers visiting this country, I know that our interest is not in any sense represented by the number of our visitors. I came across the Atlantic with the remnants of what had been a party to attend this convention; we had actually booked passages for sixteen of our photographers, including a number of very well-known men. A number of others are already in the country and, I hope, will be in attendance.

Unfortunately, however, various circumstances caused the number of our party to drop from sixteen to five, and the number who had actually booked their passages for attending the World's Fair—something over sixty, I believe—dropped to about twenty-three. But I wish to say that the actual number in

attendance does not in any sense represent the interest felt.

At our convention in Edinburgh last year we had three American visitors present. It was the first time that any foreigners had been at our British convention. We had three Americans, one Austrian and one Frenchman, and we called it, in our own little way, an international convention. The American visitors were the guests of honor, and, I believe, that at the convention this year, which has just closed and from which I expected to have some correspondence by this time, a resolution was introduced to the effect that all members of the Photographers' Association of America should be considered honorary members of the Photographic Association of the United Kingdom (applause), and that all American photographers travelling in Great Britain during the early part of July, which is the time that our convention is held, are invited to take part in that convention, and to use all the privileges that it can offer. At the present time there is a very great wish to increase the feeling of unity, to increase the mutual knowledge of the English speaking people on our side. I have no doubt that many of the members here present are aware that we sent this year to Philadelphia what I believe was a very good and representative exhibition of English work. I had something to do with the arranging of that on the other side, and I know that several of the exhibitors there were people who had never competed for prizes. They were people who would not there compete for prizes, and some of them were people who had never before exhibited. They simply sent their pictures because they were invited by a representative body of Americans. A few of those pictures, I believe, are here, and we are very sorry that the arrangements for sale, etc., had prevented the whole of the exhibit being removed to this place. But with regard to the photographs that you will find in the English building at the World's Fair it is perhaps interesting to note that that is the finest collection of English photographic work that has ever been shown in the world. There are several of our best workers whose work has never been seen in England, whose work was not even contributed to the International exhibition at Vienna, though that was very vigorously pushed and was very largely contributed to. But many of the people who are exhibiting here are exhibiting absolutely for the first time, and that, I think

is an indication of the feeling toward America in the old country.

There are in England a very great number of well equipped photographic associations, and I believe that among them it is a matter of regret that a considerable number of American photographers at one time and another travel through portions of the old country and never attempt to make their acquaintance. We regret this, because we can not always know all the people in the country; we can not always send them individual invitations, but the principal photographic associations in Great Britain and Ireland will be proud to have any facilities they can extend used by American visitors. I am only personally able to speak on behalf of the societies of which I am a member. The Photographic Society of Great Britain, which is our parent society and, I believe, the oldest established photographic association in the world, has in the past always welcomed all American visitors. The Photographic Club, which is one of our associate institutions, the London and Provincial Photographic Association, the Hackney Photographic Society, the South London Photographic Society, which represent five of the first half dozen of our photographic organizations in London, are all anxious to extend any friendship and any assistance that they possibly can to our American cousins. I do not mention the name of the Camera Club, because I am not a member of that club, but I believe that they would be equally hearty in their welcome. I know that they have been to individuals, and I believe that they would be to all. And in regard to the provincial societies in Liverpool and Manchester, in Birmingham and Edinburgh, in Glasgow and in dozens of other places the welcome extended will be very hearty; with regard to our exhibitions, we hope that in future there will be much more American work represented. Our Photographic Society of Great Britain holds its annual exhibition, as it has done for over thirty years, and the several smaller exhibitions will always be proud to devote more space on their walls as may be necessary to the American photographers, and we hope that in every way possible the feeling of fraternity, the feeling of unity, the desire to learn and to teach each other will spread everywhere as far as it possibly can until we shall cease to ask whether the work is done by an American or by a Briton. (Applause.)

The World's Congress Auxiliary of the World's Columbian Exposition.

The following introductory remarks were made by James B. Bradwell, Chairman of the Committee, on opening the Photographic Congress, August 1st, 1893.]

PHOTOGRAPHERS OF THE WORLD'S CONGRESS AUXILIARY.

Ladies and Gentlemen:—It is perhaps not out of place for me, representing the committee on the Congress of Photographers that called you together and selected the persons to present papers for your consideration and discussion, to say a few words (not of welcome, for this is your Congress, but relating to the Congress itself).

Fifty-five persons, representing Europe, Asia, Africa, America and the Islands of the Sea, have accepted invitations to prepare papers and deliver addresses upon photography and the processes dependent thereon. Twenty addresses from persons whose residences are so distant that they are unable to attend the Congress, have been received by the committee and will be read and discussed. The other addresses will be delivered by the authors in person. This is an age of illustration and it has come to stay. Not the illustration of the old wood-cut with which the spelling books and readers of our youth were thought to be adorned, but of the beautiful silver print, the photogravure, the life-like half-tone, and other light printing processes.

The program presents a great variety of talent and subjects:

"Color Photography" is represented by Fred. E. Ives, its ablest exponent in America; "Isochromatic Photography" by G. Cramer and "Orthochromatic Photography and its Practical Application," by John Carbutt, once a Chicago photographer. These gentlemen are

the proprietors of two of the most extensive dry-plate establishments in the country and will do their subjects ample justice. "Photography in Natural Colors," by the eminent artist, Edward Bierstadt, of New York. "The Present and Future Possibilities of Photography" has been assigned to the enthusiastic W. I. Lincoln Adams, of *The Photographic Times*, and to Leon Vidal, an eminent artist of Paris and professor of the National School of the Decorative Arts. "Winter Photography in the Alps" is aptly treated by Elizabeth Main. Dr. John Nichol, of the *Photographic Beacon*, well-known both in America and Europe as an able writer and a skilful photographic artist, still holds his subject within his photographic breast, but we have no doubt it will be entitled, "Words of Wisdom from the Watch Tower." "Amateur Photography" was very appropriately selected by Miss Catharine Weed Barnes (now Ward) and "Photographers' Efforts at Union," as appropriately selected by H. Snowden Ward, of London, England, and in the light of Mr. Ward's efforts at union we have no doubt his paper will be exceedingly interesting. "Electric Lighting in the Studio" has a skilful exponent in Henry Van der Wede, of London, England. "Portraiture" is treated by Shapoor N. Bhedwar, of Bombay, India, in an exceedingly able and interesting manner. "Posing and Illumination," by E. M. Estabrooke, of Elizabeth, N.J., will repay a careful examination. "The American Bibliography of Photography" is to be treated by C. W. Canfield, of New York, an able and experienced photographic writer.

"Photography Applied to Scientific Research," by Prof. Romyh Hitchcock, of the Smithsonian Institute, will be a paper of lasting value. "The Finer

Division of the Silver Haloids for Scientific Work," by Thos. W. Smillie, of the Smithsonian Institute, will be of unusual interest to the scientific photographer. "The Hand Camera—Its Aims and Objects," by Walter D. Welford, of London, England, will be instructive to all not skilled in the use of this instrument. "Film in Relation to Amateur Photography," by Gustave D. Milburn, of Rochester, calls attention to a matter not generally known in relation to films when rolled. "The Camera as a Source of Income Outside the Studio," will be treated by Mrs. Elizabeth Flint Wade, of Buffalo. "America's Share in the Development of Photography" will lose nothing at the hands of Julius F. Sachse, editor of the *American Journal of Photography*. "Carbon Printing" has been assigned to W. A. Cooper, one of Chicago's oldest and most expert process workers. "Fine Line Screens and Their Use," by M. Wolfe, of Dayton, who was not the first to discover their use, but was, we believe, the first in America to make them publicly an article of merchandise. "Photo-Mechanical Processes in England" receives the attention of W. T. Wilkinson, the author of a work on Photo-Engraving. The beautiful process of Photogravure has been selected by the artistic and well-known Ernest Edwards, of New York, and Photo-Mechanical Printing up to 1893, by Prof. Jacob Husnik, of Prague, Austria, author of four works on mechanical printing.

The learned professor expects to surprise Americans. We have no doubt he would be surprised if he could be present and hear the discussion that his paper will occasion. America is not behind the age in either photography or process work. "Support-Reflection—Its Sources, Its Effects, Its Reme-

dies," is to be treated by I. T. Sandell, of Thornton Heath, England. There have been so many improvements in photographic lenses recently that anything upon this subject by scientific and practical men is of interest to all photographers. "Tele-Photography" will receive the attention of Edward Bausch, of Rochester. The address of Thos. R. Dallmeyer, of London, whose name is known wherever photographic lenses are used, arrived but yesterday, and its title on the programme should be changed to "Tele-Photographic Systems of Moderate Amplification." "Recent Improvements in Photographic Lenses," by Professor W. K. Burton, of the Imperial University of Tokyo, Japan, is upon a subject of much interest, and will rank high among the able papers of the Congress. "Photography as an Aid to Education, will be demonstrated by Professor Charles F. Himes, of Dickinson College. "The Camera and the Pulpit" will be the subject of a discourse by Rev. A. W. Patton, of Joliet. M. A. Seed maker of the celebrated dry plates that bear his name, will speak of coarse-grained negatives, and tell how to prevent them. Dr. Eilerslie Wallace, of Philadelphia, has a very readable paper upon medical photography in general. "Photography in Surgery," I am pleased to say, will be treated by a woman, Mrs. Dr. G. F. Sears, of Chicago.

In this connection I may be permitted to say that in all the departments of the Photographic Congress, men and women are upon an equality. Notwithstanding the continued efforts of Mrs. N. Grey Bartlett, chairman of the woman's branch, and the entire committee, but five women have been found in Europe and America to accept invitations to deliver addresses.

"The Sensitiveness of Photographic Plates" is the subject selected by the cautious and accurate Professor G. W. Hough, of the Northwestern University. Andrew Pringle, of London, is to tell of "The Services of Photography to Medicine." "Negatives for Lantern Slides and Enlargements" is the subject of F. A. Bridge, Hon. Secretary of the Photographic Club, London. "Marine Photography" is assigned to one of its ablest exponents, Henry G. Peabody, of Boston.

"Photography for Illustrating the Practice of Medicine and Surgery in a Great Hospital," by Professor O. G. Mason, of Bellevue Hospital, will interest not only photographers but all who are in the practice of medicine and surgery.

"Photography as Applied to Medicine," by Professor Albert Londe, of Paris, is a paper of great scientific value and interest." "Photography as Applied to Surgery," by Professor A. S. Murray, of Johns Hopkins Hospital, is a practical paper. The beautiful landscapes of Colorado, taken in the pure air of the mountains, will receive the attention of W. H. Jackson, of Denver.

The paper of W. Jerome Harrison, of London, contains valuable suggestions as to the desirability of establishing an International Bureau to record and to exchange photographic negatives and prints. I would recommend that this paper be taken up out of its order, read, and referred to a committee with instructions to consider whether some plan cannot be adopted to carry out the suggestions. "Photography without a Lens," is illustrated by Captain R. Colson, of Paris. "Universal Standards in Photographic Apparatus" is to be advocated by Henry Sturney, of London. "The Latent Image" has

been selected by Miss Adelaide Skeel, of Newburgh, as her theme. In brief, this is a portion of the literary bill of fare which has been prepared for your consideration.

In view of the great number of papers, and the shortness of time, I would recommend that the reading of no paper be allowed to occupy more than twenty minutes, and that in discussing questions relating to the papers no person be allowed to occupy more than five minutes. Suggestions following the reading of a paper are often more valuable than the paper itself.

Can we estimate the value of portrait photography better than to ask, what would a photograph of Columbus be worth to-day, if it could be produced of him as he landed upon our shores four hundred years ago? Are his portraits satisfactory? We may admire the work of the great masters of the past and the portrait painters of the present, but no human hand can equal the sunlight of the Almighty for reproducing the life-like and accurate features of the human form. We depend upon photography to give us pictures of our friends as we see and know them now. Is there any art or science upon which so much depends as photography? The newspapers, the magazines and the books of the world are illustrated by its aid. The astronomer, the surgeon and physician, the architect, the engineer, the minister, the lawyer, and the judge in the administration of justice, all, more or less, are aided by photography.

The object of this Congress is to bring together the photo and the photo-mechanic artists of the different countries in the world to compare views and methods and profit by the experience of each other.

The scientific men of the world are at work to develop and perfect photo-

mechanical art, and such rapid progress is being made that the man who is in the front rank to-day may find himself in the rear to-morrow. The slow, wet photo process, once universal, has given place to the rapid dry-plate except for process work and lantern slides. Some claim for half-tone work that a slow, dry-plate is even better and gives a truer reproduction. The asphalt, the swelled gelatine, and the wash-out gelatine processes, once so popular, have almost passed into disuse. The half-tone etchings on zinc once in general use for fine book and magazine illustrations have very generally been superseded by the fine half-tone enamel copper process. This is undoubtedly the best and cheapest process, all things considered, up to date, for fine book illustrations, as the blocks work nicely with type and when properly made may be used to make electrotypes.

Blocks made by this process with a coarse line screen and deeply etched may be run upon a country cylinder press where common news print paper is used and poor ink.

With few exceptions the world over the great dailies use the old wet-plate process and the etching in line upon zinc for purposes of illustrations. I look forward to the near future when the half-tone process will be generally used by our great city dailies.

Half-tone blocks may be made without etching by taking a slow dry-plate, exposing it under a line-screen, and after development subjecting it to heat and placing it in a chemical solution. An electrotype may be made from this negative, which will have all the relief required to run on the printing press. In fact, the dry-plate half-tone negative itself thus treated may be cemented to a wooden block and run on the printing press with type within an hour from the

time the exposure was made on the photograph to be copied.

I have no doubt there are those within the sound of my voice who will live to see the time when photographic reproductions will be sent from country to country as quickly as we do telegraphic messages to-day.

W. Jerome Harrison says: "The international photographic survey of the heavens has now been in progress for six years; some thousands of negatives of the stars have been obtained, and when this survey is completed the present face of the sky will be known with an accuracy which the astronomers of a pre-photographic age never dreamed of."

In conclusion, may I not ask who shall say that the camera, adjusted by the hand that feels and focused by the sensitive eye that sees beyond, with the aid of intensely sensitive dry-plates, shall not bring to light and view the forms of our departed friends and solve the problem of immortality and life.

Isochromatic Photography.

[Read at the World's Congress of Photography by G. Cramer.]

AMONG the great discoveries and achievements that characterize our present century and have accomplished results never before dreamed of and formerly deemed impossible, photography holds a prominent place in practical utility and as a helpmate to art and science.

Portraiture has been brought to simplicity and in the fraction of a second we can now secure the features of those who are dear to us. Foreign countries and nations are brought to our sight in pictures produced by the camera, movements of animals, too quick to be distinguished by the human eye, are truly and accurately recorded by the highly

sensitive photo dry plate, the stars are photographed as well as the minute bacilli and bacteriae, whose multitudes inhabit the drops of water and the cells of animal life and which in many instances are the causes heretofore unknown of disease.

Since photography has rendered it possible to secure the rays of light to the sensitive plate it has been the aim of scientists and practical workers to bring it to perfection and the greatest improvements have been achieved in the preparation of dry plates ready for use and of the utmost sensitiveness. The greatest desideratum, to obtain photographs in natural colors, is now brought in the reach of possibility as shown by the fine specimens of reproductions which are on exhibition in the photographic department of our great World's Exposition, and the time may not be far distant that portraits and landscapes are photographed in all the beautiful tints and colors as seen in nature. The most important step in this direction was the production of color-sensitive plates by which one of the shortcomings of photography is corrected, that is the insensitiveness of the ordinary plates to the yellow, orange and red colors which cause these colors to appear much darker while the blue and violet appear much too light in the ordinary photograph.

The aim of isochromatic or orthochromatic photography is the production of plates equally sensitive to the different rays of the spectrum, so that in the monochrome of the finished picture all the colors are rendered equally correct in their respective values.

This color-sensitiveness is obtained by the addition of certain ingredients, mostly of the eosine group of aniline dyes, to the sensitive bromide of silver emulsion and the plates so prepared

are called isochromatic or orthochromatic plates.

A great drawback to the introduction of the isochromatic plates into general use has been the necessity of a color screen in order to obtain the isochromatic effect. A yellow glass has had to be placed before or back of the lens, or a yellow pellide in place of the diaphragm, to filter the light and to subdue the greater actinic power of the blue and violet rays. The isochromatic effect being increased in the same proportion as a screen of deeper yellow color is used, it necessarily follows that the required exposure is prolonged in the same ratio, and to such a degree that the use of a color screen for portrait work and instantaneous exposure is out of the question. If the yellow screen is not perfectly even in structure and thickness, and absolutely plain, it will cause distortion of the image by aberration. Change of chemical focus and reflection may also be caused by its use, and, therefore, it is apparent that plates which produce the most isochromatic effect without the aid of a color screen are the most valuable. As such plates can now be obtained, which combine great rapidity with good color-sensitiveness and are no more difficult to work than ordinary plates, their advantages should be appreciated by the photographic fraternity.

In portrait photography, the blue eyes, auburn hair, are rendered more truthfully, imperfections in the complexion, such as freckles, are less noticeable, and dresses of any color are photographed correctly, so that ladies need no longer consult the photographer as to what color of dress to wear when having their pictures taken.

In landscape photography the main advantage of the isochromatic plate is that distant objects are photographed

much more distinctly than with the ordinary plates. A slight haziness in the atmosphere is neutralized by the use of an isochromatic plate, while an ordinary plate would not produce any satisfactory result under the same circumstances. White clouds in a blue sky cannot be photographed except with the isochromatic plates, and how much clouds add to the beauty of a landscape is known by everybody. In sunset scenes the superiority of the isochromatic plate is as apparent as in the autumn landscapes with their wealth of yellow and orange tinted foliage.

In seascapes or marine views the horizon is not lost, water and sky being properly rendered.

In commercial photography the instances where isochromatic plates should be used are too numerous to mention. Wood-work, which is generally of a yellowish tint, is photographed more perfectly; inscriptions on wagons, railroad cars, samples, floral designs, etc., etc., which may not show at all when photographed with an ordinary plate, are perfectly reproduced.

Now for the copying of paintings in oil or aquarelle, nothing but an isochromatic plate should be used and its advantage for this class of work is most strikingly apparent. In an old oil painting the lights are generally yellow while the half-tones are of a bluish tint. It is impossible to obtain a good copy of such a painting with an ordinary plate. Plates of full isochromatic effect are necessary for this purpose.

Another advantage of the isochromatic over the ordinary plate is its greater sensitiveness when the light is yellow, as is frequently the case in fall when the sky is cloudless, or in photographing by gas-light.

I have now said enough of the advantages of isochromatic plates, and

beg to be excused if I have made statements of facts supposed to be well known, but the isochromatic plates being undoubtedly the plates of the future it seems to me that their full value should be more generally understood and appreciated.

Correspondence.

ROCHESTER, N. Y., JULY 14TH, 1893.
CANADIAN PHOTO JOURNAL.

G. W. Gilson, Pub., Toronto, Ont.

Dear Sir,—In view of the fact that certain photographic concerns have published notices which give the impression that we have not the sole privilege for a dark room on the World's Fair Grounds, we should be pleased to have you publish a copy of the enclosed letter from Mr. Higinbotham, manager of the photographic department at the World's Fair. It is right to the point and explains itself.

Thanking you in advance for the anticipated courtesy, and hoping that you will avail yourself of the privilege offered in our Dark Room when you visit the World's Fair, we remain,

Yours truly,

EASTMAN KODAK COMPANY,
By L. B. Jones.

WORLD'S COLUMBIAN EXPOSITION,
DEPARTMENT OF PHOTOGRAPHY,
CHICAGO, JULY 11TH, 1893.

The Free Dark Room Building erected by the Eastman Kodak Company and the G. Cramer Dry Plate Works, near the south-west corner of the Horticultural Building, is the only dark room authorized on the World's Fair Grounds,

H. D. HIGINBOTHAM,
Manager.

To the Editor of THE JOURNAL :

Dear Sir,—In addressing a few words of greeting from British to American workers at the P. A. of A. Convention, I stated that there was a movement on foot in the Photographic Convention of the United Kingdom to make all members of the American convention honorary members of the

British one, and to invite all Americans to our convention. A motion to this effect had been laid before our Plymouth meeting, by myself. I expected official notification of the result before the close of the P. A. of A. meeting, and intended to suggest that a reciprocal motion should be made. The notification did not come till too late, so I wish to communicate it through you, giving the particulars from a press report :—

“Mr. Combrano brought forward a letter which he had received from Mr. Snowden Ward, suggesting that a rule should be made whereby members of foreign conventions should, when in England at Convention time, be made honorary members of the Convention. This being approved, was proposed by Mr. E. J. Wall and seconded by Mr. Combrano. Carried unanimously.”

May I take this opportunity of thanking the American convention and many of its individual members, for their kindness to our British visitors. One of our members who left home with many insular prejudices, writes of his trip as “the most enjoyable experience of my life” and adds: “I can never forget America or the Americans.” I think he may speak for us all,

Yours faithfully,

H. SNOWDEN WARD.

“Gelatin Chloride Emulsion for Lantern Slides by Development,” will appear in an early issue.

A CURIOUS GENEALOGICAL TREE.—Fraulein Knickerbocker: “Your genealogical tree has many serious gaps in it. Thus, I find there is no mention made of a great-grandmother on the father's side.”

Fraulein Half-shoddy “Ah! you see my great-grandfather was a confirmed bachelor.”—

(*Pacific Coast Photographer*).

Shutters Theoretically and Practically Considered.

BY SANFORD ROBINSON, Ph. B.

(Continued from June number.)

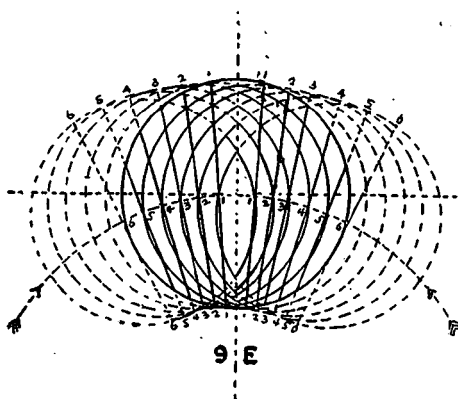
III.

SEGMENTAL SHUTTER.

The writer has been asked what amount of illumination would be given by a shutter opening from a diameter of the lens in a manner similar to the Prosch, but having two circular orifices instead of the radical orifices of the latter. I have never seen a shutter of this kind nor do I think such a one is on the market. As, however, there is a constant tendency to make shutters with circular orifices, and as many have an idea that this shape is the only proper one, I have thought it best to analyze this possible form. It will bear to the Prosch somewhat the relationship of the drop with circular orifice, to the drop with radial orifice. The opening will consist of successive segments of a circle, for which reason and for lack of a better name I call it the "Segmental Shutter." The opening would be a sort of cross between that of the Bausch & Lomb and that of the Prosch. Calculation shows the amount of illumination to be .3342, this being 74 per cent of the illumination of the Prosch. Diagram 9 E shows the positions of the edges of both forms at various periods during the opening and at the same times. It is plain that the area of the segment at the middle of the lens, which gets the most exposure, is much less than that of the strip of the Prosch getting the same exposure. The discrepancy grows less until strips 3 and 4 are reached, the sum of the areas of these two being exactly equal to the sum of the areas of the two lunes 3 and 4, of the Segmental shutter.

The times and areas being the same, the illumination is the same for this part of the opening. From this point on to the circumference, the lunes of the Segmental shutter have a greater area than the corresponding strips of the Prosch. These greater areas of the former occur, however, at the part of the opening where the duration of exposure is decreasing rapidly and the extra area gained is not sufficient to overcome the great loss of illumination at the middle.

For instance, the area of the segment No. 1 is .0312 and that of Prosch strip



No. 1 is .0837. The average duration of exposure of each is .917. This makes an illumination for area No. 1, for the Prosch of .0763 and for the Segmental of .0286, or a difference in favor of the Prosch of .0477. Lune No. 6 of the Segmental has an area of .0837 and Prosch strip No. 6, an area of .0312. It will be observed that the areas are exactly reversed. The average duration of exposure of No. 6 is .083 giving an illumination for the Segmental of .0069 and for the Prosch of .0026. Difference in favor of the Segmental .0043. We, therefore, have a difference for the sums of the illumination of 1 and 6 of .0434 in favor of the Prosch, which doubled for the two

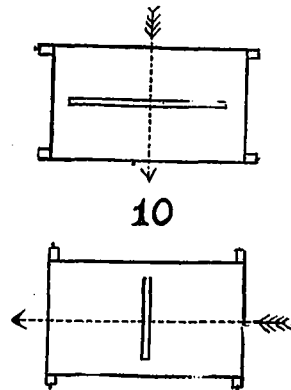
sides make a total for these strips and segments only of .0868. Carrying out the same calculation for all the segments and strips, we will have a total difference in favor of the Prosch equal to the difference in total illumination of the two shutters already found.

In closing this branch of the subject, Plate A is introduced to show graphically the difference in shape and area of the orifices exposed by the Prosch, Segmental, Gregg and Bausch & Lomb shutters in the same time or times of opening. The circle of the exposed orifice is divided for convenience into six parts. Of course, each shutter exposes an infinite number of such parts and the more divisions there are made, the more closely the total quantity of illumination may be obtained. Having, in the case of the Drop shutter, adopted six divisions, that number has been adhered to for all the others. This is a sufficient number for the purposes of comparison, and the percentages would not be materially altered by using more divisions. It will be observed that the great difference in favor of the Prosch form occurs at the beginning of the opening and continues in its favor until about half the opening has been reached. Although after this the areas of the other forms exceed those of the Prosch the duration of exposure of the divisions decreases in a very much greater ratio than that of the increase of area; and consequently the illumination gained by the increase in area is not sufficient to overcome the loss during the first half of the opening. To this is due the superiority of a shutter opening clear across the lens on the line of one of its diameters.

We now come to an entirely different class of shutter, known as the

FOCAL PLANE.

In this class we may include the Gravity or so-called, "Alligator Jaw" shutter. The Focal Plane Shutter, as its name implies, operates close to the plate. Briefly described, it is a curtain with a slot which may be made of any width desired. See diagram No. 10, which shows the shutter with both a horizontal and vertical slot.



This shutter gives great illumination with great quickness of exposure, with at the same time a comparatively slow motion of the shutter itself. Its principle can be most easily described by taking an example. Suppose we are using a 5 x 7 plate and that the slot moves across the narrowest dimension of the plate, that is, a distance of five inches. Suppose the slot (which would be seven inches long), to be one-quarter of an inch wide. Suppose the shutter moves with such velocity that the slot crosses the plate in one second. The slot being one quarter of an inch wide, and there being twenty quarter-inches in five inches, each quarter-inch of plate would get an exposure of one-twentieth of a second. Each successive quarter-inch getting the same exposure, it follows that the whole plate will get but one-twentieth of a second exposure, although it has taken the

slot twenty times that time, or one second to cross the plate. The ratio being twenty, we could, therefore, with a quarter-inch slot, obtain an exposure of one one-hundredth part of a second with a motion of the slot across the plate of one-fifth of a second. If the shutter were so timed that the slot crossed the plate in one one-hundredth of a second, the exposure would be the two-thousandth part of a second.

If the plate were an 8 x 10, there would be in the eight inches, thirty-two spaces of one quarter inch each. If the slot crossed this eight inches in one second as in the previous example, each quarter-inch and the whole plate would get but one thirty-second part of a second exposure. Therefore the whole time of the movement of the slot would vary according to the size of the plate to obtain the same exposure, the *velocity* of the slot remaining the same. In the case of the eight-inch plate, to obtain an exposure of one-twentieth of a second, the slot would have to cross the plate in one and three-fifths seconds. As compared with a drop-shutter crossing an opening of say one and one-quarter inches in one one-hundredth of a second, the focal plane slot moving across five inches of plate and giving the same exposure as the drop-shutter, that is to say, one one-hundredth of a second, would travel with only one-fifth the velocity of the drop-shutter, because it moves four times the distance of the drop in twenty times the time. Moving in the same time it would have to move with four times the velocity, but as it moves in twenty times the time of the drop it would move with a velocity of four divided by twenty or one-fifth.

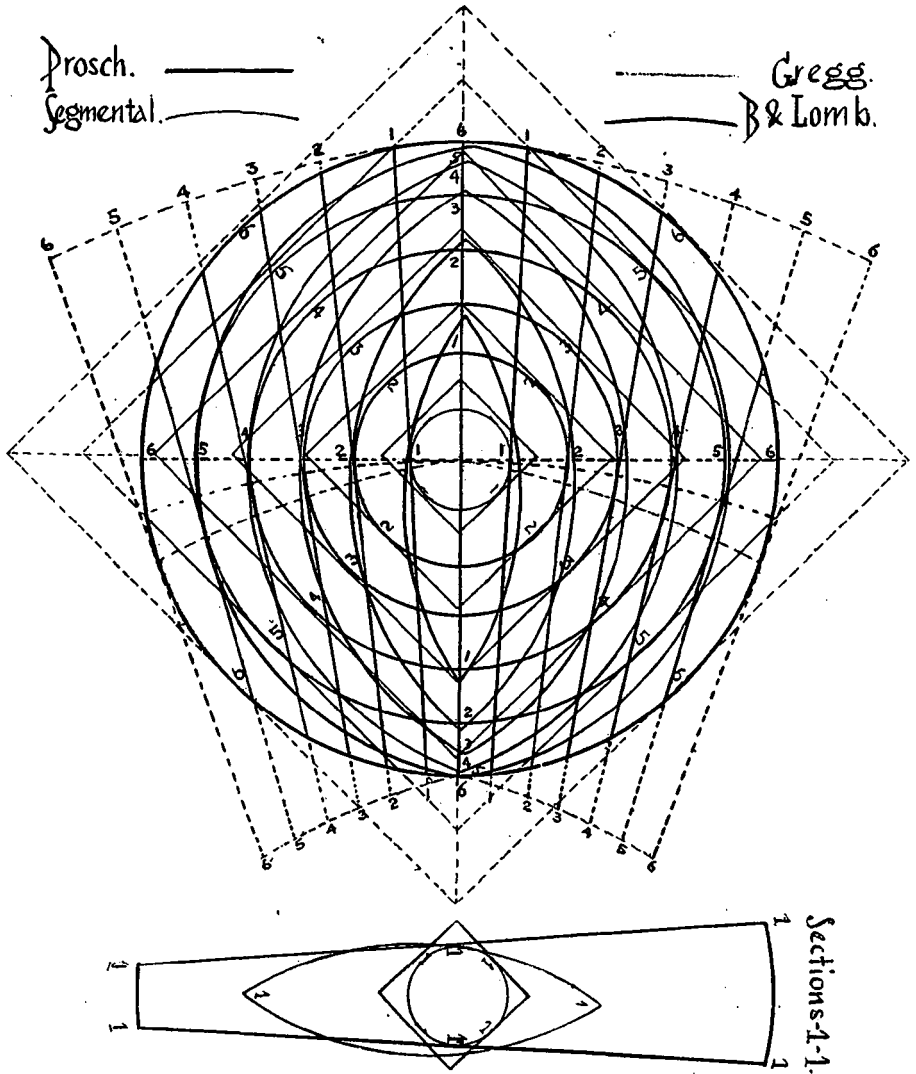
This is a very great difference in the velocity, and therefore an immense

advantage possessed by the focal plane over the drop or other forms of shutter. If the focal plane were to move with the same velocity as the drop it would give an exposure of but one five-hundredth part of a second. Making the slot narrower would decrease the time of exposure, and the speed of the shutter could be correspondingly reduced. I have in this article adopted the quarter-inch slot as a convenient dimension for the purpose of illustrating the action of the shutter. Any acceleration due to gravity in the case of a falling shutter, or retardation in the case of a rising shutter, is inappreciable and may be neglected. It is supposed that this shutter, on account of the very short exposures obtainable with it, will greatly facilitate scientific research, in which photography now plays such an important part. As researches of this kind are almost invariably made with reference to moving objects, for which extreme shortness of exposure and great accuracy are essential, let us see if the focal plane possesses the necessary qualifications. I propose to show that at ordinary exposures it is very inaccurate, and for scientific and other purposes *only correct with extremely short exposures*. I can again best explain my meaning by an example.

The principal use of instantaneous work is to photograph moving objects. Outside of scientific work the moving objects most frequently photographed are yachts and other sailing vessels, steamboats, horses and other animals. Let us take the following example :

A yacht having a mast 60 feet high.
 Speed of yacht 10 miles per hour.
 Distance of yacht from lens 100 feet,
 Focus of lens 7 inches.
 Plate 5 x 7 inches.
 Width of slot $\frac{1}{4}$ inch.
 Speed of shutter so timed as to give an exposure of 1-100 second.
 Slot horizontal and moving vertically.

"Pacific Coast-Photographer" . + Plate-A +
 + Sanford-Robinson-on-Shutters +
 - Diagram-showing-orifices-exposed-by-
 - different-shutters-for-same-
 - duration-of-opening +



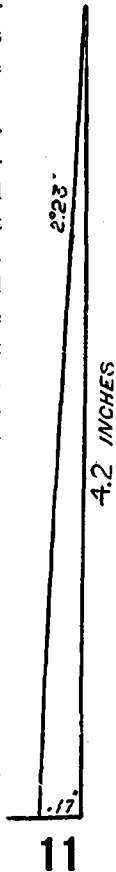
To simplify the present example I will assume that the mast is vertical. As shown before, the slot would cross the plate in one-fifth of a second. The mast would make an image on the plate 4.2 inches high. The slot in moving over this distance of 4.2 inches would take very nearly $\frac{1}{6}$ of a second. The yacht travelling at the rate of 10 miles per hour would move at the rate of 14.66 feet per second, or in $\frac{1}{6}$ of a second a distance of 2.44 feet. Therefore, after the slot had exposed the top of the mast the base would have traveled 2.44 feet before the slot had exposed it. This on the plate would be .17 or about $\frac{1}{6}$ of an inch, which would give an angle from the vertical of $2^{\circ} 23'$, an angle very perceptible, as will be seen by reference to Diagram No. 11, which is drawn to scale.

If a tall electric light pole and buildings were photographed from a train moving at the rate of ten miles per hour, with the other conditions of the example the same, we would find the pole and buildings all "out of plumb," and making an angle of $2^{\circ} 23'$ from the vertical. As the masts of vessels have a rake aft, this rake would be increased.

As most moving objects, like vessels, steamboats, etc., have comparatively high vertical lines, it would seem that a slot moving vertically, like that in the example, is moving in the wrong direction. Let us, therefore, move our focal plane shutter horizontally and have our slot vertical and see what the effect will

be. Take the same yacht and assume that the hull is 60 feet long. This would have, like the mast, a length on the plate of 4.2 inches. The mast being vertical or nearly so, would be exposed by the slot simultaneously at top and bottom. There would therefore be no perceptible distortion of the mast, although its horizontal dimension would not be absolutely correct. In traversing the length of the hull, however, assuming that the slot travels in the same direction as the vessel, it would take $\frac{1}{6}$ of a second to move from the stern to the bow, but the vessel would have advanced in this time a distance of 2.44 feet. An additional time would be taken by the slot in catching up with the bow. Calculation shows that by the time the slot had caught the bow the vessel would have traveled 2.52 feet. We would therefore have a picture of a vessel 62.52 feet long instead of 60 feet. While the mast and hull in the example were of equal length, our picture would show a hull of 2.52 feet longer than the mast. If the vessel and slot were travelling in opposite directions the effect would be to correspondingly shorten the hull. There would be no other distortion of the hull, and its direction of motion is parallel to that of the slot, and not, as in the first case, at right angles to it. It would therefore appear that there will be in the case of vessels, less visible distortion with a horizontally moving shutter than with a vertically moving one, although in either case an incorrect picture is obtained. On the other hand a horse is longer horizontally than vertically, and possibly a vertically moving shutter might give the least distortion.

It must be admitted that the drop or any other form of shutter will have theoretically the same inaccuracy due



11

to the motion of the object between the times of opening and closing. It is, however, in such a minute degree that it is practically of little moment, and it is unavoidable in any shutter, for no shutter is "instantaneous," in spite of the name as applied to the taking of very quick pictures. Some time must elapse, or a picture cannot be taken at all. While the drop is crossing the lens in $1/100$ of a second, the vessel in the example advances $1,466$ feet, and the image on the plate but $1/100$ of an inch, or about $1/17$ of the distance advanced with the focal plane shutter. If the focal plane exposure be made extremely short, say $1/1,000$ of a second, the lapse of time between top and bottom exposure becomes less and the distortion is reduced. Take the case of the yacht already considered. We have seen that a drop crossing the lens in $1/100$ of a second allows the image on the plate to advance about $1/100$ of an inch. The focal plane, to permit no more displacement than this, must move at such a rate as to expose the whole length of the mast in $1/100$ of a second. The image of the mast being 4.2 inches in length, the slot must cover that distance in the time given. There being about 17 quarter inches in that distance, each quarter inch must be crossed in $1/1,700$ part of a second. The whole time of the shutter in crossing the 5 -inch plate would be $1/20$ of this, or $1/85$ part of a second.

I confess freely that I have never developed a plate exposed for so short a time nor anywhere near it. I am willing to confine my efforts to development of much longer exposures, and if I can get a good development from one of say $1/300$ or $1/500$ of a second I am quite satisfied. Most scientific work requiring mere outline,

these infinitesimal exposures become valuable, and below them, as I have shown, the work must be incorrect. For instantaneous exposures, measured by a few hundredths of a second, the work is very inaccurate, and it only approaches accuracy with exposures measured by thousandths.

The slot of a focal plane shutter gives to each ray that reaches the plate a time equal to the nominal time of exposure. That is, if an edge of the slot takes one second to cross a quarter-inch strip of the plate, the slot being one-quarter inch wide, each ray that reaches the plate will be cut off by the other edge of the slot in just one second. It operates, therefore, with reference to the plate precisely as the drop shutter operates with reference to the lens. Also as in the case of the drop, in giving an exposure of one second to each ray, it uses twice that time between the *first* opening and the *final* closing. That is to say, the time that elapses between the *first* exposure of the *top* of any quarter-inch strip by the *lower* edge of a quarter-inch slot and the final closing of the *bottom* edge of the strip by the *upper* edge of the slot is in this case *two* seconds. The total illumination of the plate must be the same as that given by a drop shutter with a square orifice. This we have found to be represented by the quantity $.7854$. In comparing it with a shutter of the Prosch type, we must therefore pursue the same course as we did with the drop, and divide the time or the illumination by two. This gives, as the illumination of the focal plane, the same result as the drop, that is $.3927$. The Prosch type giving an illumination expressed by $.4506$ will, therefore, give more illumination than the focal plane in the

same time, that is, the time that elapses between the first opening and the final closing of the shutter. It is the general impression that the focal plane will give more illumination than any other form of shutter, but it is evident that this is *not always* the case. Nevertheless, when we arrive at such velocities as to practically do away with displacement by reducing it to an infinitely small amount, we can entirely neglect the difference between the effective and total time and call the illumination .7854, the greatest obtainable, and therefore the focal plane becomes at these high velocities as near a perfect shutter as can probably be devised, a brevity of exposure being attainable with it impossible with any other form.

The example of the yacht which I have given is intended as an analysis of the peculiarities of this shutter, and I think a clearer idea can be obtained in this way than in any other. It is very obvious that the principles of this shutter vary with the conditions. In the case of the yacht mentioned it should have been taken in much less time, and with the capabilities of the shutter for speed and illumination a fairly correct picture could have been obtained with no visible distortion, and, if done with a suitable lens and light, with no difficulty of development, in a time approaching the $1/1,000$ part of a second.

Some time ago there appeared in a photographic periodical a picture of some pigeons in the act of alighting on the ground. According to the accompanying inscription it was taken with a 3 B Dallmeyer lens, with full opening, on a Cramer 50 plate, with a focal plane shutter, in the $1/1,000$ part of a second. A 3 B Dallmeyer is a portrait lens of $3\frac{1}{2}$ -inch opening and

a back focus of 8 inches. An examination of the picture shows that the distance must have been from 8 to 10 feet. Nearly every bird is "fuzzy," and as those nearest the margin are sharper than those in the middle, it is plain that this was not caused by lack of diaphragming, but by the motion of the birds themselves. As it must be remembered that the motion of the pigeon just in the act of alighting on the ground is comparatively slow, and as the picture also shows fuzziness in the bodies as well as the wings, it does not give one a good idea of the capabilities of the focal plane shutter, for it would seem that in such a short time of exposure, even at such a short distance, a much sharper picture should have been obtained. It is probable, therefore, that the taker of the picture did not take into consideration the difference between the total time that his slot exposed the bird and the nominal time of exposure or effective time of action of each ray. If this is so, it will further demonstrate what I have shown on this point. The displacement of the birds is due to a time double that of the nominal exposure, or $1/500$ part of a second. At a distance of only 9 feet it can be seen that visible displacement ought to occur in this time.

[To be continued.]

Clara: Well, aunt, have your photographs come from Mr. Snappeschotte's?

Miss Maydeville (angrily): Yes, and they went back, too, with a note expressing my opinion of his impudence.

"Gracious! What was it?"

"Why, on the back of every picture were these words, 'The original of this is carefully preserved.' What business is it of his if I am a little old?"

The Photographic Society of Japan.

A REGULAR monthly meeting of the above mentioned society was held at the rooms of the Geographical Society of Japan, Nishikonyacho, Kiobashi, Tokyo, on Friday, 2nd June, Mr. Edmund R. Holmes in the chair.

The minutes of the last meeting having been read and approved, the following gentlemen were duly proposed, seconded, and unanimously elected as members.

Dr. A. Lenze, German Consul-General, Messrs. T. Hasegawa, H. Heckert, T. Naruta, K. Okawa, S. Yamamoto, M. Yegi, and K. Yesaki.

Mr. C. D. West showed some very good hand-camera work by Mr. H. Baehr.

Messrs. Bradfish and Pierce had sent in some ready sensitized paper of two different kinds. One had a polished surface, and appeared to be a gelatino-chloride paper; the other had a matt surface. Mr. K. Arito was able to state that the paper was in no way discolored, so that there was evidence of its good keeping qualities, and that it printed brightly and clearly. He had not, however, had time yet to tone any proofs. Mr. I. Tanaka was instructed to experiment with the paper and to report his results to the next meeting.

Work done by the anastigmatic lens of Carl Zeiss, of Jena, was shown. The examples showed a most remarkable uniformity of definition from the centre to the extreme corners of the prints. Mr. W. K. Burton explained that these lenses were of large angular aperture, of flat field, and at the same time without astigmatism. There were various lenses that combined any two of these qualities, but, so far as he knew, this was the first that combined the three. The form of the Zeiss

anastigmatics, even of large angular aperture, was such—being mounted in a short tube—that they could be used as wide angle lenses if stopped down. He would, however, be in a position to report more fully to the Society on these lenses in a month or two.

A letter was read from Mr. T. Kiyokawa, stating his opinion that there ought to be a certificate of membership of the Society, and making various other suggestions. It was decided that the letter was a matter that it was best to leave to the Committee.

There was a discussion as to the manner of disposal of the donation made to the Society by H. I. M. the Empress on the event of her visit to the exhibition, there being a general feeling that this money should not go into the ordinary funds of the Society, but should be used to provide some permanent memorial of the visit. It was eventually decided that the money should be used to pay for the striking of a small silver medal to commemorate the event, and to be presented to each member of the Society.

After the regular meeting there was an extra-ordinary meeting, to consider the matter of the secretaryship. It was proposed, seconded and carried that Mr. W. K. Burton be elected "Corresponding Secretary" in addition to Mr. I. Ishikawa and Dr. Augustus Wood, ordinary secretaries.

Look out for our "pretty children" competition.

The latest fad to be indulged in at the seaside this summer is "penthomancy," or fate by footprints. A paper says it has superseded palmistry, and now it will be possible to tell by toe joints and curves whether you are amiable or not, why you are not happy, though married, and all the rest.

(Photo Society of Great Britain)

Photogravure ; or, Photographic Etching on Copper.

BY HERBERT DENISON.

(Continued from the July Number).

The next thing to be done is to pull a proof from the plate with a view to see what corrections are necessary ; any portions of the high lights which have been etched too deeply may be reduced by burnishing with a steel burnisher ; any other faults, such as those caused by spotting out pin holes, may be filled in by an instrument called an etching needle, or dry point, and portions which print too light may be strengthened with a roulette. This is a little wheel with a serrated edge, set into a handle something like a penholder. As this wheel is drawn over the surface of the copper, the teeth cause small indentations in the plate which, if the work is skilfully done, fairly match the bitten portions. If the plate generally has not been etched sufficiently, the remedy is to re-etch the plate, and this is done by rolling-up the plate with a gelatine roller, using a special ink composed of—spermaceti, 14 ozs. ; stearine, 6½ ozs. ; white wax, 6 ozs. ; asphaltum, 2¼ ozs. The asphaltum is first melted and the other ingredients added gradually. This is mixed with an equal quantity of lithographic ink and made thin enough for use with turpentine. After rolling-up, the plate is slightly warmed and then re-etched with a solution of perchloride at 40°. I am of the opinion, however, that if a plate needs much retouching, it is far better to commence afresh than to spend much time in doctoring the plate by any of these methods ; they are at the best poor substitutes for original work, and they require considerable skill and experience to carry them out properly.

I described last week in a general way the method of printing the plate, and as this evening, through the kindness of the well-known copperplate printers, Messrs. Brooker & Co., of 78 Margaret Street West, we have the advantage of the presence of their foreman printer, I do not think it necessary to say anything more on this subject. Mr. Reardon will demonstrate to you the printing, and I am sure you will learn more from seeing him do the work than from any verbal description I could give you.

The only matter that now remains for me to bring before you is the steel-facing.

I have no personal experience of the process, but through the kindness of Mr. Howard Farmer, of the Polytechnic Institution, from whom the information was obtained, I am able to give you details which will, I think, enable you to do your own steel-facing. Up to the present time I have had my plates steel-faced for me.

From an amateur's point of view I am not at all sure that steel-facing is advantageous. A plate without steel-facing will stand about twenty or twenty-five impressions, and these are as many as one usually requires. At any rate, it is sometimes convenient to be able to give as a reason for ceasing further distribution of prints, the wearing out of the plate.

A wooden box is required to hold the steel-facing solution ; a box for plates 12 x 10 should measure 24 x 12 x 20 deep. Brass rods run the whole length of the bath, and from them are suspended the copperplate and a plate of iron measuring 22 x 18, and a quarter of an inch thick, face to face.

The solution in the trough is composed of one pound of salammoniac and one gallon of water.

The electricity is supplied by a battery consisting of a stick of carbon in a porous cell, this cell being surrounded with a plate of zinc, the whole being contained in an earthenware jar.

In the outer cell is sulphuric acid of the strength of 1 pint to 10 of water, and in the inner cell is bichromate of potash, 3 ozs. to 20 of water. The rod from which the iron plate is suspended is connected with the carbon anode, that supporting the copper, with the cathode (zinc). The current is allowed to pass through the trough for two days before it is ready for work.

The plate must be cleaned very carefully before steel-facing. First clean with turpentine and a nail-brush, then with benzole and rinse under the tap; it is now put into a strong solution of caustic potash, 1 lb. to 10 pints of water and left for half-an-hour. The plate is further rubbed and cleaned alternately with nitric acid, one to twenty, and with whiting and water, and these operations are repeated until the plate is chemically clean.

The plate is cleaned at the back, and a piece of copper wire is soldered on, and by this the plate is attached to one of the brass rods opposite the plate of iron. The plate is moved up and down in the solution and examined occasionally. A sufficiently thick coating will be obtained in about half-an-hour.

More photograms have been sold of the present Lady Clancarty than of any other society beauty.

The vegetable colors are faster than most of the aniline colors, though not so brilliant.

The successful wide-awake photographer is the reading photographer.

J. R. Swain.

Japanese and Foreign Photographs.

THE Exhibition of photographs sent by the Camera Club and now on view in one of the Hakurankai buildings in Uyeno Park, has been enriched by the addition of a number of photographs from Japanese ateliers. This bald statement of fact suggests at once the attractive idea that here, for the first time, an opportunity is presented for conclusively comparing the photographic achievements of Japan and England. But a moment's consideration will show that the circumstances of such a comparison would be unfair to Japan. It is, indeed, somewhat extravagant to speak at all of a comparison on equal terms. Whatever knowledge Japan possesses of photography, she has acquired within the past fifteen years, so that her acquaintance with the art, if measured by time alone, is scarcely a third of Great Britain's. Nevertheless, her success has been sufficiently marked and has attracted sufficient attention to justify her treatment as a competitor. That much granted, however, there still remains the fact that she enters the lists at Uyeno without special preparation. The Camera Club had an interval of many months for getting together choice productions, whereas the Japanese photographers, in obedience to a sudden after-thought were obliged to send in any pictures that they happened to have ready. These things must be taken into full consideration before passing a final verdict on the comparative merits of the two schools. Nevertheless, when every reasonable allowance is made, it seems to us that Japan still occupies the second rank. Her colored photographs, indeed, are admirable. Nothing approaching their level comes from the West. Probably this superiority is easily accounted for. In Japan, the

artist's reward is still so small that the best experts in water-colors are content to devote their time and talents to photograph tinting. Among recent experiences we call the case of a painter holding a leading place among the members of the Meiji Fine Arts Society, and distinguished by some excellent work in oils, who gladly agreed to color a series of Nikko photographs—many of them showing a wealth of elaborate decoration—for the wretched reward of five *sen*, or about three half-pennies per picture. Where such painters can be procured on such terms, it is plain that English competition labors under a great disadvantage. At all events, we have never seen any English colored photographs that could hold their own against the pictures sent to this Uyeno display by Messrs. TAMAMURA and TONOKURA of Yokohama, for example. The former's exhibits are especially remarkable. Their photographic character is entirely effaced, and one's sense of color and delicate execution is wholly captivated by their exquisite tones and wonderful clearness and softness. Some artificiality is unpleasantly perceptible in this artist's picture of ducks swimming, but his peony spray and his group of girls fishing are veritable gems. Many other lovely specimens of tinted photographs are shown, but we cannot speak of them in detail. In this branch of the art Japan easily takes first place. In the matter of coloring by mechanical processes also, she makes an excellent showing, though it is plain that in this line her efforts have been more limited than those of her Western competitors. Mr. OGAWA's snow scenes, however—chromo-collotypes—stand pre-eminent, and offer this feature of special interest that they invite comparison with the Camera Club's exhibits in precisely the

same line. Yet another point is scored by the Japanese. Mr. MIZUNO displays photographs in gold and silver on dark lacquered grounds, which are absolutely unique. The process is unknown outside the atelier where it is applied. It is a Japanese invention—the only invention that stands to Japan's credit in the field of photography. We do not insert that parenthesis in a critical spirit. The charge of want of originality sometimes preferred against Japan, because she has hitherto imitated the West without making any inventive additions to the borrowed civilization, has always seemed to us distinctly unreasonable. Has the West made any inventive additions to Japanese decorative art—an art that has evoked European admiration and provoked European imitation quite as emphatically as Western sciences and industries have appealed to Japan? Familiarity must precede invention. The mechanical inventor in the West is the man who has lived for years in the company of machines, and has learned to feel their movements and gauge their capacities to a hair's breadth. We must wait many years still before we can reasonably estimate Japan's inventive genius. Meanwhile, this gold and silver process in photography belongs to her. As an artistic achievement it does not, we think, possess much value. The exhibit in gold—a photograph of Queen VICTORIA—can not be called pleasing. But the exhibit in silver—a charming little landscape—ranks high in the decorative scale. This picture of HER GRACIOUS MAJESTY suggests a criticism that should be brought strongly to Japan's notice. There appears to be a lamentable absence of taste and judgment in the bordering and framing of pictures. The Yokohama artists have devised a frame exquisite in itself, a frame of reddish

brown lacquer showing a leaf scroll in its transparent depths. But they appear to consider such a frame suited to any and every photograph. Their mistake, however, is trifling compared with the extraordinary blunders committed by other photographers. It sounds a small matter, but though every foreign artist knows that the best picture ever painted may be ruined by clumsy mounting and framing, the Japanese do not seem to have yet discovered that elementary truth. Reverting, however, from special comments to the general question, the verdict will be, we think, that whereas the Camera Club's photographs are generally pictures, the Japanese photographs are almost always photographs. In other words, the former have succeeded in subserving technique to art, whereas the latter are still busy with the art of technique. There are, of course, exceptions. Mr. ARITO's work—*vide* his Meguro landscape and his Water-mill—stands on the same plane as the work of the Western artists. So also do Count TODA's tiny landscapes. Mr. MATSUCHIYEN's sea-scapes, Mr. NARA's cat, and several of Mr. KAJIMA's exhibits. The last named is an amateur. One of the richest merchants in Tokyo, and representative of a very old family, he spends large sums annually on photography, out of pure love of the art, and gets results that justify him. A specimen of his application of photography to silk, a large picture of the celebrated Mito Yashiki Garden, is a beautiful production, soft, clear, and in every respect charming, though the difficulties of using such a material have evidently not been quite overcome. Even more lovely is a sea-scape shown by him, with the waves falling over a rock in the foreground and the immortal Fuji-yama in the

distance. But these admirable efforts do not disturb the general conclusion that Japanese photography has not yet passed into the hands of artists. The technique is perfect, but the inspiration is still wanting. Nevertheless, we are persuaded that if the Japanese would make a serious effort, they might send to London a display of photographs calculated to greatly enhance their reputation and charm the British public. We sincerely hope that they will do so.

H. M. S. Victoria.

A recent number of *The Sketch* publishes an enlarged copy of an instantaneous Kodak shot taken by a surgeon on H.M.S. "Collingwood" during the sinking of the ill-fated "Victoria."

The photogram shows the steamer's propellers and part of her keel in the air, just as she was taking her headlong plunge amid a dense cloud of smoke and steam. The "Camperdown" is also shown. The view is most painful in its realism, but must be of immense value as an indisputable witness of the position assumed by the warship while sinking.

The Convention Number of the *Photographic Times* (issue of July 14th.) is a masterpiece of Photographic Journalism. Richly illustrated, and full of interesting and entertaining matter, it is a most welcome visitor to our *sanctum*, and should not be missed by anyone interested in photography.

While Speaking of the *Photo Times* we call the attention of our amateurs to a very interesting series of competitions gotten up by that journal for their readers' pleasure and also *profit* (for the prizes are most generous ones). It should be well patronized.

An Interesting Wedding in the Photographic World

It is with pleasure that we have to chronicle this month an event that will undoubtedly bring England and America into closer relation, photographically. This is the marriage on June 15th of Miss Catherine Weed Barnes of Albany N. Y. to Mr. H. Snowden Ward of London England.

Both bride and groom are widely known on both sides of the Atlantic, Miss Barnes as the editor of the *American Photographer* and one of America's first amateurs, Mr. Ward as the Editor of the *Practical Photographer* and a prime mover in many photographic matters in England.

The ceremony took place at St. Peter's Church, Albany N. Y. at 11 a. m., the Rev. Dr. Battershall officiating. After a breakfast at the residence of the bride's father at Thurlow Terrace, Mr. and Mrs. Ward left for the World's Fair and an extended trip to St. Louis and other Western Cities. On August 13th. the happy couple sailed for England and home. Mrs. Ward will be associated with her husband in the editorial work of the *Practical Photographer*.

MR. ALFRED STIEGLITZ, with whom most of Canadian amateurs are acquainted by name through his most interesting writings, has been selected to fill the place of Miss Catherine Weed Barnes, (now Mrs. Ward,) as editor of the *American Amateur Photographer*.

In an article which appears in the June number of the *Studio*, the question, "Is the camera the friend or foe of art?" is replied to by several well-known artists. A consensus of opinion seems impossible. Sir Frederick Leighton only says "that photography

may be of great use or the reverse to an artist, according as it is used with or without judgment and intelligence." Mr. Alma Tadema briefly expresses his conviction that the camera has had a most healthy and useful influence on art, and is of the greatest use to painters; and Sir J. E. Millais says the same thing more briefly still. Mr. W. P. Frith takes his stand on the other side, and condemns the camera utterly. Mr. W. B. Richmond states the pros and cons in a lengthy letter written in short paragraphs, and reading like the syllabus of a lecture. Mr. J. T. Nettleship observes that "faulty or careless observation needs no camera to detect it."

Our prize competitions are available for anyone engaged in the practice of photography—no class distinctions.

Dark Rooms at the World's Fair.

Editor Canadian Photographic Journal.

DEAR SIR,—Certain parties having a joint interest in a dark room on the World's Fair grounds would have your readers believe that it is the *only* authorized one. Permit me to say, however, that the one entered from my exhibit at Post R 103 section E. Liberal Arts Building, was erected by written authority to the Blair Camera Co. and myself. The comfort from heat and safe lighting of the room is testified to by the number using it in preference to the one standing in the glaring sunlight.

All photographers, professional and amateur, are welcome to make use of our dark room to change their plates and films.

Respectfully yours,

JNO. CARBUTT.

(From Report by the Am. Photographer.)

The Photographic Convention of the United Kingdom.

THE seventh annual Convention was opened at Plymouth on the 3rd inst., when the members were received by the Mayor, Mr. W. Law, in the Athenæum. The attendance was not so large as at Edinburgh last year. Still there was a fairly large gathering.

Among the company were a number of ladies.

The Mayor, who wore his chain of office, tendered a hearty welcome to the Convention, and congratulated the members on the prospect of fine weather. They would, he was sure, find an abundance to delight them in the district, with its wealth and variety of foliage and flowers, hills and dales, woods and moors, tors and rivers, and a sea coast of great beauty. They would, he was sure, feel amply repaid for the long journeys they had undertaken. Of the historic associations of Plymouth and its famous Hoe all had heard, and with Dartmoor at its back, they would find much to interest and to admire, and especially in the neighbourhood of Tavistock and Ivybridge, both of which the Local Committee, he was glad to see, had included in the week's programme. It was a real pleasure to him that the Convention at Plymouth occurred during his mayoralty, and he trusted everything would be as merry as marriage bells. On Thursday the ancient borough, of which the Prince of Wales was steward, would celebrate the wedding of the Duke of York and Princess May, and part of the programme might possess peculiar attractions for visitors from inland towns, as off the Hoe would be presented the sight of a burning ship at sea. They also intended to

make the day pleasantly memorable by entertaining 20,000 school children and a large number of aged poor. Again, he would say he felt it an honor to receive the Convention in such numbers, and would add the hope that they would be so impressed with the beauty of the place and the heartiness of the people that it would not be long before they came again.

Mr. Bothamley said, in the absence of Mr. George Davison, last year's president, he had two duties to perform; The first was to acknowledge the Mayor's most hearty welcome. Plymouth they all associated with those great sailors which had made England what it is to-day; and they recollected that in Penzance, still further west, was born one of the greatest chemists that ever lived—Sir Humphry Davy—who was associated with Wedgwood in some of the very earliest photographic experiments ever made. It was, however, the feeling of good fellowship so characteristic of photographers that had brought them so far west to enjoy and make pictures from some of the finest scenery the United Kingdom could boast of; and he was sure the local committee would do its best to make their visit pleasant and profitable. His second duty was to introduce to them, as president, Mr. George Mason, a good photographer, an active supporter of the Convention from the very beginning, and a very good fellow.

PRESIDENT'S ADDRESS.

At the Bath Photographic Convention meeting, Mr. Traill Taylor said that, up to that point in the history of the Convention, the presidential chair has been filled consecutively by representatives of the following departments of the art-science, viz. the literary, the scientific, the chemical, the professional, and last year the chair was most ably filled by Mr. Davison, who might, with every confidence, be

termed the artistic. And now come we this year to what is known as the commercial element, for you all know that the commerce of photography is what fills up the most of my time and study, and in this phase of the art-science I am most at home. The commerce of photography may seem at first sight the most commonplace and least attractive of all its various branches; but this is not so, for more or less it embraces all, and it will be found to be the most essential element in the whole—it is the leaven that leaveneth the whole lump. Only in so far as any profession is found to be for the general good, so is it essential, and by its claims proving good or bad so will it succeed or fail. All our introductions, experiments, discoveries, and inventions—and their name is legion—are but means to an end, and the end is commercial.

I fancy I can hear the enthusiast exclaim, "Oh, no, that is not so. The glory of discovery is the reward. The love of the work is ample repayment." That's all very well, and I believe that he who says so has perfect confidence in his statement. Yet, "What is it worth?" Is really the point to be solved on the introduction of any new thing? It may seem a very poor platform on which to place the work of the enthusiast and the investigator, embracing as it does years of experiment and labor—that on which is marked "What is it worth?"—but I fear that with but few exceptions it comes down to that at last.

There are exceptions to every rule, and all of us have met the enthusiast who, for the love of the thing, only goes on working untiringly in one groove or another, using both time and money for the advancement of the art-science, anticipating no profit from his labor, the pleasure of overcoming difficulties and the joy of "finding out" being his end and aim. But, even in such a case, what has been discovered, if to spread and flow, it must come to the river of commerce. If one happen to have income enough so as to render his position independent of any thought of repayment, he may sneer at the position herein taken up; but, nevertheless, it is a fact that commerce is the stream into which all the tributaries flow. Looking back to the beginning, we find Niepce straying along the country roads trying to gather stones suitable for his photolithographic experiments, his correspondence with the Paris lithographer, and his partnership with Daguerre, all have a commercial leaning. We also find his brother, who, in his

own time, was as great a scientific enthusiast as himself, determines to leave his home, and resolves to come to England, feeling sure that it was a better field for the success of his inventions. And have we not the notable cases of Daguerre and of Mr. Fox Talbot protecting their inventions? What for? For a profit, of course!

Whether we agree regarding the position I take up, that the end and aim of all our work tends to commerce, I have no doubt we will be at one on the various items that I intend to touch upon to-night, for they are in their very essence the work of the business. And, first, I would make a few remarks upon the Convention itself and its membership.

Last year was the most successful of all our meetings; but the Convention meetings, since the very start, whether large or small, have ever shown great vitality. Still, the professional has not given it neither the attention nor the support that I feel it was his duty to do, and that the institution deserves.

The greater part of the success of our meetings is due to the support and enthusiasm of the amateur element, and why should this be? Surely there ought to be some equality of representation. The profession, as a body, is large enough and influential enough to at least treble its present representation; but I fear that it is the spirit that lacks energy and enterprise. At first there was a considerable outcry about the time the meeting was held being unsuitable for many in the profession. To meet this objection, the date has been changed two or three times, I think; this with some little advantage perhaps, but not much.

Taking professional photographers collectively, I feel that if they tried they could make this meeting for themselves the most pleasant and profitable outing of the year. Every one that has been with us knows that this is an honest statement, and, if they would only gather round in numbers, they would find it a gain both in health and business. The lines on which our Convention is run commend themselves, and are better, in my opinion, than those adopted by our American friends. To a great extent the American Convention is a dealers' show, a good enough thing in its way, but the platform upon which we meet is more independent, and the principal business of our gathering is educational and social, the dealers' part being a mere detail, and never interfering with the more salient points for which we meet.

The professional who joins us in this week's outing, by personal contact and general interchange of ideas and experiences alone, is bound to learn more than he would in a hundred times the time spent in less congenial and less favorable circumstances, so that, even as a paying speculation, I look upon the Convention as a profitable investment to any member with his eyes and his ears open. Hence I would that the professionals bestir themselves, and make a fairly representative turn-out. If they but did this, the institution would be, beyond doubt, an assured success for all the coming years—a centre where the representatives of all the various societies might meet in a broad union once a year.

The National Association of Professional Photographers should find the time and places of the Convention a fitting opportunity for their meetings. There they could be in numbers and could easily arrange to hold their own special meetings during the week to suit themselves without in any way interfering with the general arrangements of the Convention.

All being in one town at one time, more meetings could be held, larger audiences could be got, and they would be far more likely to command attendance than where they have to travel, in many cases, long distances for single meetings.

Last year Messrs. Fall, Whitlock, and O'Neill made a move in this direction, and I have no doubt that their endeavors then tended to the growth and influence of the Society. This Association, worked on broad lines, should be a power for good to the whole profession; there are so many questions of importance, such as insurance, copyright, holidays, legal defence, prices, and many other subjects that are of great commercial interest to the whole profession alike.

One thing might here be noted, that the obtaining of a closer union between the individual members of the profession is what should be aimed at if success is to be the result in this as well as all other like institutions; and this is the greatest difficulty to be overcome, for the photographer does not take so kindly to unity as most other professions do.

Here I would say a few words on behalf of the Photographic Benevolent Association. This society should have much more consideration and sympathy from the photographic worker. On investigation, I find that most of the funds and the greater proportion of in-

terest and work is undertaken by the kindly well-wisher, and that don't-care-about-it apathy still belongs to the working photographer. As I have elsewhere said, every *employe* in the photographic trade in the United Kingdom holds a special interest in this society, and half-a-crown a year is all that is necessary to be paid up by any one of them to place themselves in the position of membership, which, in cases of need, gives them the advantage of becoming participators in the funds of the society. About a half-penny per week—just think of it!—and for this fraction, if paid by the body of employers, the income of the society would be raised to £400 a year, and, if the employers also joined, the return shown could not be less than £500, at the very minimum, of our outlay. Look at the power for good this would place in the hands of the Executive. If every employer would interest himself to induce his *employes* so to assist themselves, the feat would be accomplished, for they could not fail to be successful, and thus the many rivulets would swell the greater river.

For the promotion of union in the profession, I think that the institution of the "Central Photographic Club" is no mean factor.

It opens up an avenue of social intercourse and information, and anything of such a nature must help to advance a man in his business; it gives him the opportunity of being up to date, and that is one of the essentials of successful trading.

A placing of meeting where, at all times, the country member comes in contact with his compatriots in the city, and where he at once gets into the centre of that which most interests him—and the friends from the provinces will also keep the city members acquainted with what is going on in the country districts—and these advantages are to be obtained at a merely nominal outlay. This institution should have the fullest support of the profession.

The affiliation scheme of the Society of Great Britain is also a march in photographic progress that should help to draw photographic societies together, and, if taken up with a will, must result in an intercourse that is bound to be beneficial to all, the interchange of papers and slides alone being of great moment and importance, especially where societies are too small or too young to be able to produce new subjects or original matter without help from wider fields.

The progress of the year shows steady advancement; nothing startlingly new, but there's not a week passes without the introduction of some ingenious device or discovery which tends to save labor or to perfect results.

It has been stated that there are more patents taken out in connection with photography than in any other trade of like dimensions, and, looking at the continuous stream of applications for protection, it is easy to believe.

Printing-out papers is one phase of photographic work that has made a marked advance in the currency of the year. Gelatino-chloride paper has come into almost universal use, the beauty of the finished results secured by the use of this paper tending greatly to its growing popularity. Collodio-chloride paper has also grown considerably in demand, as it is considered by many to allow of a greater variety of tone, and also that it is more permanent than the gelatino-chloride, but to prove the latter requires the test of time. The new cold-bath process paper introduced by the Platinotype Company has also made a rapid stride to the front, and is now almost universally adopted. The advantage of local development by its use being rendered sure and easy was a great recommendation to its success, and where it has been fairly tested, the hot bath has been laid aside for this more perfected process.

Stereoscopic photography, which, like the sleeping beauty, has been lying dormant for so many years, lives and breathes again. A great advance has been made, and considerable work has been done in this department during this last year, and it still goes on increasing. A big future may be anticipated for it.

The hand-camera competition still runs on without impediment. The originality and ingenuity displayed and expended on the construction of these little instruments is perfectly astonishing, and the excessive number of forms placed upon the market—each professing to be the best—is marvellous. By their results ye shall know them. The work produced by them is to be found broadcast in all sorts and conditions of illustrated papers, photographic and otherwise, ranging from very bad impressions up to charming productions. So much in favor has the hand-camera become, that I have no doubt but that the larger proportion of the apparatus brought for use by the members of the Convention will be found of this description. If the advances

during the year have not been made by leaps and bounds, they are at least sure.

In lenses, the Zeiss, the Dallmeyer Telephoto, and the Ross Concentric are increasing in demand. Isochromatic plates are taking a firmer hold, and the Sandell has been adopted by many.

The journalism devoted to the profession seems to be out of all proportion to the extent of the trade they cater for, but I suppose time will try them, and the weakest will go to the wall.

And now I will leave the various members, in their various classes, during the Convention, to thrash out their various themes, one by one, scientific or chemical, each in his department, be it development, speed, light, color, or optics, each of them needing its own specialists to do it justice.

I hope you will all spend a happy and enjoyable week.

On the motion of Mr. Martin, supported by Mr. Bothamley, the President was thanked for his able address and the Mayor for his cordial welcome.

Light refreshments were then served, and the rest of the evening was devoted to the excellent exhibition arranged in the art gallery and to views shown by the optical lantern.

The exhibits, whilst not very numerous, are decidedly good on the whole.

Mr. Hawke, of George Street, Plymouth, shows a series of prints of the Duke of Edinburgh from thirty-one negatives taken in forty-two seconds. W. G. Tweedy shows some capital examples of panoramic photography. Mr. Yeo shows some of his now well-known child studies, as well as some charmingly colored prints; and Heath, of Plymouth, has some good work, and a life-size carbon enlargement by Elliott and Son, of Barnett, of H. R. H. the Prince of Wales. Martin and Co., of Southgate, have a good enlargement of their well-known ice crystals.

The Eastman Photographic Materials Company, of 150, Oxford Street West, have an excellent exhibit of

prints from Lafayette's negatives on a new paper they are introducing under the title of "Nikko," which certainly gives charming results. It strikes one as being a very highly-glazed bromide paper, and as very fine sepia tones are to be obtained on it with comparatively easy results, and from the delicate tint of the paper, it is likely to speedily become a favourite. Solio prints were of course exhibited, both enamelled and matt surface, and with pleasing subjects and fine tones bore good testimony of the capabilities of the paper.

Messrs. Morgan and Kidd, of Richmond, filled one wall with examples of bromide and carbon enlarging, one bromide being eight feet long. They also have some excellent collotype prints of great variety of color.

Schwarz and Co., of 9, New Broad Street, had a good show of the new developers, amidol, metol, and glycin, both in bulk and cartridge form, as well as all Dr. Andresen's chemicals.

Fuerst Bros., of 17, Philpot Lane, E. C., also show the new developers, with examples of work done by the same.

Taylor, Taylor, and Hobson, of Leicester, showed their standard flanges which have proved so useful and easy in practice. These attracted considerable attention.

On Tuesday, 4th inst., an excursion was made by steamer up the Yealm and Tamar, but a thunderstorm and continuous rain completely spoiled the day from a photographic point of view.

On Wednesday, 5th inst., the general meeting was held, and the invitation of the Phot. Soc. of Ireland to visit Dublin in 1894 was accepted.

The President then asked the meeting to accord a very hearty vote of thanks to the Mayor of Plymouth for his most generous reception of the

Convention, to the Plymouth Institution for the loan of their premises, to the Local Committee for all they had done to make the meeting pleasant, and to the leaders of the excursions. If Tuesday's excursion might be taken as a sample, then they had a store of interest and beauty to come. Of course the weather could not be commanded, but in spite of thunder and lightning and the torrents of rain, all managed to enjoy themselves, and the little sing-song in the saloon was by no means the least enjoyable feature.

A cordial vote of thanks was given to Mr. Cembrano, the Hon. Sec., and,

Mr. C. H. Bothamley, in proposing it, said the prospects of the Convention had never been so bright, and that was due largely to the efforts and tact of their Hon. Secretary.

Mr. Cembrano, in reply, said with this meeting his first year's service came to an end, and he was pleased to say that for the first time in the history of the Convention there was a balance on the right side. It amounted to £15 19s. 9d., and next year he hoped it would be doubled, although the number of members was certainly a good deal less. So far he had received subscriptions from 173, which was a good deal more than he expected, considering the great attractions in other parts of the country this week.

Messrs. John Howson and Webber were elected auditors.

The following motion, submitted by Messrs. H. Snowden Ward and E. J. Wall, was recommended by the council for adoption:—"Resolved, that the Photographic Convention of the United Kingdom acknowledges the courtesy of the Photographers' Association of America in inviting British photographers to attend its Conference this year as honorary members, and this Con-

vention wishes its Committee to add to its rules one to the following effect:— That all members of the Photographers' Association of America be considered honorary members of the Photographic Convention of the United Kingdom, and if travelling in the United Kingdom at the time of the Convention, are invited to take part in its proceedings."

Mr. Wall, in proposing the adoption of the motion, regarded it as a first step towards a Photographic International Union.

The Hon. Secretary seconded the motion, remarking that he had received courteous and encouraging messages from the Photographers' Association of America.

The motion was carried unanimously.

At noon the official Convention group was taken in the Guildhall Square by Mr. Heath, of George Street, Plymouth; Mr. Scorer, of Havant, also took a group on a plate 28 by 20.

Reassembling in the Athenæum at three p.m. the serious business of the meeting was begun by the following gentlemen reading papers:*

Mr. E. J. Wall, a paper on Recent Developers.

Dr. Mitchell, of Philadelphia, a paper on Lantern Slide Making.

Mr. Guardian, one on Artistic Expression with the Hand Camera.

S. Herbert Fry, a paper on Multiple Films.

After the reading of Mr. Fry's paper there was a brief recess for dinner, etc., and the members assembled at the Town Hall, Devonport, where they were met by the Mayor, Alderman W. Waycott, who entertained them, and an exhibition of slides by Mr. Coombs, of Devonport, and Mr. Keene, of

Derby, was followed by extremely interesting slides from the Marine Biological Laboratory at Plymouth, which were capitally described by Mr. Cunningham, illustrating the development of crabs, soles, and jelly-fish, etc. Papers by Messrs. Pringle and Rudolph were to have been read, but in their absence Dr. Rudolph's paper on Anastigmatic Aplanatism and the Ziess Anastigmatic Lenses was taken as read.

On Thursday following, in the most glorious weather, there was an excursion to Totnes and down the Dart, and although the scenery here is magnificent, there was, unfortunately, not much chance of even pea-shooting, but at Dartmouth there was plenty of work for both hand and stand cameras. Returning to Plymouth, the evening was occupied with listening to a paper by Mr. C. H. Bothamley, and papers by Hurter and Driffield, Burton, and Lambert were taken as read, the members being anxious to get out on the Hoe to see the illuminations, fireworks, etc., amongst the same being a schooner filled with tar-barrels, which was set alight.

On Friday, 7th inst., excursions were the order of the day, Lydford, Bickleigh Vale, Keyham, and Cattewater being on the programme, though several preferred to make small excursions on their own account. In the evening the dinner was held in the Western Law Courts, Mr. George Mason presiding. Vocal and instrumental music was provided by Messrs. Werner, Fry, Welford, Lewis, Mason, Lawrence, Mowll, Fuerst, and Mrs. Mason and Mrs. Mitchell, the *pieces de resistance* being topical rhymes by Messrs. Bothamley and Lyell.

On Saturday, 8th inst., the Council met, and Sir Howard Grubb was elected President for 1894.

*Lack of space this month prevents our giving our readers any of these most interesting papers. We hope, however, to publish most of them shortly.—Eds.

The Astrolabe.

The Use by Columbus and Champlain of This Instrument.

Toronto may claim a special interest in the history of Columbus, as one of her citizens, Mr. R. S. Cassels, possesses an astronomical instrument such as was used by him in his voyages. An account and photograph of this is given in Mr. J. C. Hamilton's book, "The Georgian Bay," lately published in Toronto.

The instrument so pictured was one actually used by the famous Samuel De Champlain in his Canadian travels and voyages, and was lost on his trip up the Ottawa, at Muskrat Portage, near the railway station called Cobden, in June, 1613. Here it lay for 254 years, till found in 1867, and secured by Mr. Cassels.

"The first application of the astrolabe by Europeans, to navigation, was made in 1481. Seamen could, by its use, ascertain the distance of the sun from the equator. Four years later Columbus used it, and advanced into unknown seas with confidence, being able to trace his course by means of the compass and astrolabe.

"This instrument has since been improved and modified into the modern quadrant. ("The Georgian Bay," page 142) Mr. Cassel's interesting relic, of which a photograph is given in the volume referred to, is thought to be the only specimen of the kind in America, and will, no doubt, be of interest to the distinguished Spanish officers in charge of the caravels. Though this instrument was first applied to navigation by the Portuguese and Spaniards, yet it is, as Mr. Hamilton, on the authority of several writers quoted by him, points out, of much more ancient origin. It was used by the Assyrians and may not have been original with

them, but this and other astronomical science and lore inherited by that conquering race from a more ancient people, whose literature and arts of civilization they adopted, as Europeans have since cherished the learning of Greece and Rome."

Geoffrey Chaucer, the father of English poetry, wrote a treatise on the astrolabe, which he addressed to his son Louis, a boy of ten years, in which he fully describes the instrument and the mode of its use. He says: "Put the ring of thine astrolabe upon thy right thumb, and turn thy left side against the light of the sun."

The astrolabe is a relic of ancient and prehistoric science. The specimen referred to is of special interest, owing to its connection with Canada's greatest explorer, and to the fact that such an instrument was actually used by Columbus in his American voyages of discovery. It is of plate brass dark with age, about six inches in diameter. The date 1603 is engraved on it by its Parisian maker. Its disk is marked with numbers representing 360 degrees; a movable needle passes across it, turning on a pivot fixed in the centre of the instrument. When held up towards the sun, and a sight taken through points marked on the needle, the observer was enabled to ascertain the figure showing the altitude of the sun at the time, and applying with this figure to navigation tables, the distance of the vessel from the equator was ascertained.—*The Mail*.

"The student of photography who wishes to produce artistic work must not hurry or over-produce. One *picture* produced in a month would be well worth the time and trouble spent on it."

P. H. Emerson.

British Conventions.

BY H. SNOWDEN WARD.

Delivered at the P.A.C. at Chicago.

The Photographic Convention of the United Kingdom was formed in 1886, as the result of a suggestion mooted in the photographic papers of that summer. The first meeting was very hurriedly arranged and was held in Derby, as being a central and easily accessible town. Excursions were arranged and held, papers were read and followed by discussions, and though only forty-six members attended, the meeting was voted a success, and it was decided to hold it annually. An honorary committee was appointed, with Mr. J. J. Briginshaw as Secretary, and great preparations were made for the second convention, which was held in Glasgow.

To a great extent this Glasgow meeting settled the form and many of the details of procedure for subsequent conventions. The Glasgow photographers, both professional and amateur, are great enthusiasts, and they made considerable preparations for the reception of the visitors. There were six well-arranged and largely attended excursions, and six practical papers were read at the afternoon meetings by representative men. There were one hundred and ninety-three members.

Birmingham, the third year, was an unfortunate convention. The local society, a very strong and influential body, made the local arrangements, providing an excellent meeting room and exhibition, and a fine series of excursions.

There were two hundred and thirty-two members.

Bad weather spoilt some of the excursions, and when the reckoning came to be made it was found that the arrangements had cost far more than the very modest income of the convention. The central committee disclaimed responsibility, and suggestions were made that the local committee had been unwarrantably extravagant. The local committee reported that all their expenditure had been authorized from headquarters, and the quarrel led to a very bitter correspondence in the photographic press.

In the end a subscription was made to cover the deficit, but the soreness was not completely healed.

In 1889 the location was changed to London, a large and expensive hall was engaged, and efforts were made to induce the dealers and

manufacturers to take space and make a good exhibition of apparatus, etc. An exhibit of pictures was also arranged. A series of eight useful papers and discussions was provided, and four excursions. A very large and successful excursion was expected, but the promoters were doomed to disappointment. Only two hundred and twenty-five members joined, so that there was again a deficit.

To those who did attend, London itself proved a greater attraction than the convention, so that the excursions were neglected. The attendance at the indoor meetings was almost *nill*, and the dealers were so disgusted at the attendance on the opening night that some of them did not complete their exhibits. The large hall had been engaged, largely in the expectation that the general public and London amateurs would attend in large numbers at the exhibition, discussions, etc., but hardly an outsider put in an appearance. At the end of the meeting things looked black, and there were rumors that the convention would not be able to continue, but fortunately a few brave spirits determined to try again, and their experiences at Birmingham and London proved useful.

Chester, one of our finest historic cities, offering numerous fine opportunities for excursions into North Wales and elsewhere, was chosen for the fifth convention, which was in many respects a success, though the attendance was small (only one hundred and fifty) and some of the arrangements and incidents of the meeting gave rise to strong criticism. As there is no purely photographic society in Chester, a local committee was formed of the members of the Philosophical Society. The Mayor and Corporation granted the use of the ancient City Hall, where a small but interesting exhibition was made, and the Mayor in person welcomed the visitors at a *conversazione* held on the opening night. Some good work in the way of papers was presented to the meeting.

The sixth convention was at Bath, and had a very small attendance (one hundred and four members), but was a thorough success from the point of view of those who did attend. Again the city provided a meeting hall, and the Mayor received the visitors on behalf of the local committee. The excursions were most interesting, especially one to Abbey, the home of Henry Fox Talbot, the father of photography. Here the party was received by the son of Fox Talbot, who showed numer-

ous examples of his father's work, dating back as far as, probably, 1835. Portfolios of prints and paper negatives, bundles of experimental results, half finished successes and failures and many prints from the Pencil of Nature were reverently examined.

Last year the Convention paid its second visit to Scotland, and first to Edinburgh, and we had a meeting that was a notable success in many respects. It was, for the first time, international in character, as we had the pleasure of welcoming three American visitors, including Miss Catharine Weed Barnes and Dr. Charles L. Mitchell, and two continental workers, including Dr. Liesegang. It was the first convention at which ladies attended the Convention dinner and the success of that experiment was such as to encourage its repetition. The Lord Provost of Edinburgh welcomed the visitors, the Royal Geographical Society of Scotland (?) provided a meeting and exhibition room; the excursions were well arranged and, with one exception, well attended, and even the indoor meetings had good attendance and good discussions. The hospitality of the local members, both individually and collectively, was unlimited, and with fine weather and the many attractions that Edinburgh presents the meeting was a grand success. The number of members was two hundred and forty-six.

This year Plymouth is the rendezvous, but as I spent Convention week aboard the good ship "Arizona," steaming westward to join the present Convention, am unable to report from personal experience upon the success of the meeting.

A few particulars of the method of conducting our Convention may be of interest. Membership is for one year, and practically covers the week of the Convention only. There is no entrance fee, and the annual subscription is five shillings (\$1.25). The management is entirely honorary, and consists of a president, secretary and committees, all elected annually. The convention usually has invitations in advance from various photographic societies to meet in their towns; for instance, at the last Convention invitations were read from Plymouth, Hereford (?) and the Photographic Society of Ireland. In such cases the inviting society forms a local committee and makes all local arrangements, subject to the approval of the general committee. As the meeting is of a semi-scientific character and not in any sense a profit-making concern, there is no

great difficulty in securing rooms free of charge from the local authorities. As already indicated, there is a small exhibition of pictures and apparatus, a series of excursions and meetings for discussion of photographic subjects. The general committee arranges for special fares (when possible) to the place of meeting; for special rates at the hotels and generally for special facilities, permissions to photograph in private grounds, etc., etc.

Each member is provided with an elaborate programme of arrangements in the form of a little book, and also with a Convention button which forms an unobtrusive distinguishing mark. The Convention opens with a *conversazione*, generally provided at the expense of the local committee or a few local members, and finishes with a Convention dinner for those who care to attend it, at a charge of five shillings, in addition to the membership fee.

I imagine that many Americans will wonder how so much can be done on so small a subscription. But as the management is all honorary, the expenses are very small.

That the membership should be so small will also be a cause of wonder. It is also a cause for regret, and seems to be due to the fact that British photographers are slow to take interest in a thing that does not offer them very definite advantages. It is to be regretted that few of those who attend the Convention one year and are unable to do so the next year, continue their subscriptions. Therefore the number of members in any given year represents the number actually in attendance and when the meeting is held in any but a fairly accessible district, the number decreases.

I don't know that there is anything further that I can say with regard to the outlines of the British Convention. In many respects it is different from your own, as I have pointed out, and in some ways it is similar. Whenever any of our American friends are in our country, they are invited to be with us, and I hope that in the years to come many of you will be able to learn, by practical experience how we conduct our meetings. (Applause.)

HAVE you a friend interested in photography? If so, show him a copy of this Journal. Each extra subscription helps us to give you bigger value. You, *individually*, will reap the benefit.

Film in Relation to Amateur Photography.

BY G. D. MILBURN.

Read at the World's Congress of Photography.

The subject of celluloid film is of considerable interest to a great number of photographers. The two chief points to be considered are :

First. The reason for substituting celluloid film for glass as a support for sensitive bromide of silver emulsion.

Second. Its practicability, and in what form.

The first can be answered very quickly, namely : the main object is to overcome bulk and weight. The question then arises : Is this greatly to be desired ? Yes, to the tourist pursuing photography as a pleasure, as well as the out door photographer, a light, compact outfit is a great desideratum. For instance, go back to the old wet plate days and compare that outfit with one of the present day and note the greater opportunities of the latter.

The second point is more open to discussion, especially considering that manufacturers of the rolled celluloid film have made complete failures of producing the commercial article. But perhaps before we go any further it is as well to explain the difference between rolled celluloid film and cut-sheet film. It should be understood that the former is made by spreading celluloid in a plastic or semi-fluid state on a long table made of several plate glass slabs and allowing it to dry, while the latter is sliced by machinery from a solid block of celluloid. Cut-sheet film, when properly manufactured, is allowed to get well seasoned (several months' seasoning) before it is coated with the bromide of silver emulsion, thereby partially insuring the sensitive emulsion from coming in contact with the harmful volatile parts of the celluloid. On the other hand, the rollable film, from necessity, is coated with the bromide of silver emulsion within ten or twelve hours after the celluloid is first spread on the glass table. To this, in some extent, is due the rapid deterioration of the bromide silver emulsion. It also accounts for the edges of a rolled film drying, leaving the centre full and baggy, and in practice making a sharp picture one of the impossibilities. Rollable film is usually coated with a sensitive emulsion before the celluloid is stripped from the table, which makes the

stripping a very delicate operation—its adhesiveness causing endless trouble with electricity, producing in the negative fine branch-like markings.

It will be remembered that I have mentioned the table upon which the celluloid is spread as being long. Several glass plates are joined to make the whole. To a casual observer it would seem as if the glass plates could be so well joined that the joints would not materially show in the film, but, alas, not so ! contraction and expansion play an important part and will not permit it ; the result is that the semi-fluid celluloid enters the joints and very annoyingly appears in the finished negatives, giving the impression of the celluloid having been crudely joined. This nuisance, as if not satisfied, goes still further, and often imprints itself on several of the adjacent layers of film in the roll.

But the most serious defect with the rolled film will be found in its sensitive surface contracting when first spooled. It is a well-known fact that in rolling or bending any substance the inner side contracts and the outer side expands, the particles striving to re-arrange themselves to the new existing conditions.

So with the rolled film, which is necessarily spooled when fresh, a condition where the gelatine and silver particles are to a greater degree susceptible and ready to conform to the new condition brought about by rolling under tension. The particles soon become set, and although the film is unwound for the exposure, long enough time is not allowed before exposure for the particles to again re-arrange ; therefore the exposure is made when the gelatine and silver particles are in a contracted state. In development, the gelatine particles swell and assume about the same relation as when the emulsion was first spread upon the celluloid. Coarse, grainy and foggy negatives must be the result, and to this rough treatment of an extremely sensitive substance must be attributed a generous share of the rollable film failures.

Cut-sheet celluloid film, as before stated, is well seasoned before being coated with emulsion and is transparent and practically lies flat. Then what have we to contend with in manufacturing a reliable practical cut-sheet film having all the desirable qualities of a glass plate, and still embodying the two chief qualities, *i. e.*, lightness and compactness ? This, and nothing more ; make the celluloid after seasoning inert and inactive to the bro-

made of silver emulsion and devise practical mechanical instruments in which to use it.

I believe this will be accomplished soon, and when it is, glass plates will be a back number for outdoor photography.

Mr. J. E. Thornton, of the Thornton-Pickard Manufacturing Co., England, paid Toronto a visit late in July. We regret extremely that pressing business out of town prevented our having the pleasure of meeting Mr. Thornton.

The Shutters manufactured by this firm, and known as the Thornton-Pickard Shutters, are very popular in Canada, and deservedly so, for they stand among the first of easy-to-work, durable and generally good, all-round shutters. The firm are contractors to Her Majesty's Government, and can boast of having the largest sale in photographic shutters in the world.

A Few Press Notices.

Mr. W. Ethelbert Henry, of this town, has been appointed Associate Editor of *The Canadian Photographic Journal*, a Toronto publication in high standing among professional and amateur photographers throughout the country and one of great excellence, editorially and typographically, etc.—*Sarnia Observer*.

From *The Canadian Photographic Journal* for June, we learn that our townsman, Mr. W. Ethelbert Henry, has been appointed Associate Editor for that bright monthly. *The Photographic Journal* is to be congratulated on having secured the services of Mr. Henry, whose love of his noble art is with him an overmastering passion. We shall be sorry if Mr. Henry's acceptance of the position should necessitate his removal from Sarnia, where he has many warm friends.—*Sarnia Canadian*.

The proprietors of *The Canadian Photographic Journal* are fortunate in having secured the services of Mr. W. Ethelbert Henry, C. E., as Associate Editor to that high class magazine. Mr. Ethelbert Henry is well known as a clever writer and a thoroughly practical man, two accomplishments that are rarely found combined.—*Photographic Times*, (N. Y.).

Is the Sun Blue?

Some years ago Prof. Langley gave expression to the idea that the sun is not white, but blue, its apparent whiteness being due principally to the absorptive action of its own atmosphere, but in quite an appreciable degree to that of our air. After several years of further research, the Boston Globe says, the professor was able to show that the sun, although we regard it as white, is blue, or at least bluish. He reasoned in this way;

It appears to us when setting—that is, when we look at it through a long range of our atmosphere—to be red, or orange, or yellow, according to the state of the air. When the sun is high above the horizon the action of the air is similar, but less intense, thus making the sun's disc yellower than it actually is.

Moreover, the extreme edge of the disc is less bright than the centre, although it is a fact that just as much light is emitted from the former portion as from the latter; this can only be due to the absorptive action of the solar atmosphere upon the light.

A further proof is given in photographs of the sun. It will be observed in these that the darkening toward the edge is distinctly noticeable.

This shows that the rays which produce the photographic image (principally blue indigo and violet) are affected to a greater degree by the sun's atmosphere than those which form the ordinary visual image of the sun.

Thus, after a series of detailed experiments, Professor Langley demonstrated the accuracy of his theory that the sun is really blue, its apparent color being the result of the absorption executed by its vapory atmosphere upon the rays of light as they passed through.

Have you any negatives of pretty children?

Answers to Correspondents.

Arrangements have been made with a photographic expert of acknowledged ability, whereby our readers may have the benefit of his experience, through this column, absolutely free of charge. Queries must be received by the first of the month to ensure their appearance in the current issue.

Correspondents requiring detailed advice by mail, must enclose a fee of One Dollar.

All communications for this column to be addressed

W. ETHELBERG HENRY,
SARNIA, ONTARIO.

C. R. R. (England)—I thank you for kind ongratulations, and am glad to hear you have congenial employment.

Regarding your private enclosure, we have made all arrangements for many months ahead. Thanks all the same.

Charlie,—To mount prints in optical contact with the glass paper weights, use a warm solution of gelatine. See answer to "Federal" in our July issue.

H. N. McDonald.—Accept my warm thanks or your kind and helpful letter. The knowledge that we have such friends among our readers makes our work a pleasure. Probably before this meets your eye, I shall have time to write you personally as requested.

W. A. (Winnipeg)—The following is the best formula I know for making french polish reviver, it will make the woodwork of your camera almost equal to new and is capital for any french polished surface.

Linseed Oil.....	10 ounces
Spirits of Camphor.....	1 ounce
Vinegar.....	2 ounces
Butter of Antimony.....	4 drams
Ammonia.....	2 "

TO THE MANY CORRESPONDENTS who have so kindly written in response to my request in the July issue.—I thank you all most heartily and only regret I have been unable to acknowledge through the mail. Owing to the immense amount of work that has devolved upon us in organizing the competitions announced this month, and the trouble we have had in obtaining anything like suitable terms for the supply of the magnificent casket of lenses we are offering, private correspondence has been almost entirely out of

the question. During August I hope to have the pleasure of writing personally to most of our subscribers who have so kindly expressed their appreciation of the journal and their congratulations to myself.

W. E. H.

Owing to the great pressure on our space this month, several replies are unavoidably held over until September issue.

(Eds. C. P. J)

A Business Change.

We note that the firm of S. H. Smith & Co., stock dealers, Bay St., Toronto, have made a change. A stock company has been formed with a largely increased capital.

The new company is composed of the following:—J. W. Seymour Corley, Geo. G. Eakins, S. H. Smith and other stockholders.

Mr. Smith, so well known to all users of photographic stock in Canada, will act as business manager, and with the increased facilities of the company, business will no doubt move at a lively rate at the old quarters.

A correspondent suggests that photographs should be dated by photographers. He remarks, with a great deal of truth, that very often the age of a person when a certain photogram was taken is forgotten in after life, and that many portraits thus lose a great deal of their interest. The suggestion is a very good one, and we do not see any reason against its being carried out. No doubt any photographer would be glad to print the date on the negative if he were requested to do so.

The Wedgewood family own the first photogram or sun-picture (heliotype) ever taken. This photogram was taken in 1793 by Mr. Thomas Wedgewood, a son of the celebrated potter, Josiah Wedgewood. It is of a Savoy-

ard piper in the costume of his country. There is a facsimile of it in a book entitled "A Group of Englishmen," by the late Miss Eliza Meteyard, published by Longmans, Green & Co., in 1871, and in a foot note it is stated that "when the photogram was shown at a meeting of the Photographic Society, it was particularly admired by the late Lord Chief Baron Pollock, Bennett Woodcroft, and other members." The impression, though faint, was clear enough to be engraved some twenty-five years ago. One of the earliest photograms taken by Professor Draper, of New York University, in the autumn of 1839, is to be exhibited at Chicago. This photographic portrait of his sister was sent by the Professor, early in 1840, as a present to the late Sir John Herschell, by whose family it has been preserved to the present day, in exactly the same state in which it was sent to England. The loan of this interesting photogram for the Chicago Exhibition has been made by Sir William Herschell at the request of the Chancellor of the New York University, transmitted through the American Ambassador in London. The lady of whom it is a portrait still lives at the age of eighty-seven, and a recent portrait will be exhibited side by side with the earlier one, and will thus enable comparisons to be made as to the progress of the photographic art during the last fifty years.

Eternal vigilance is the price of high-grade work.
J. F. Ryder.

DURING a recent interview, Mr. Philip Barrand (of the noted firm of Barrands, Ltd.) said: "Our photograms of theatrical scenes have always been in demand. Of course, we didn't take these at the theatre during a performance. Our method was as follows.

We took a portrait of the scene in which the characters are to appear when the stage was empty. Then the different actors in the play came here, donned their theatrical costumes, and were photographed in the positions they were supposed to be in the scene. This done, it was an easy matter to give them their proper place in the empty scene which we had already photographed. We were very successful in our representations of Mr. and Mrs. Kendal, in various plays, Mr. Beerbohm Tree and his company in 'A Man's Shadow,' Mr. Willard in 'Judah,' and several scenes from 'Antony and Cleopatra.'

"I don't think I shall be going too far if I say that there is one side of photography in which we practically stand alone. So far as I know, no other firm produces group photographs where three or four hundred portraits appear, each portrait being as good a likeness of the person represented as you may find. Thus, we have done in this way the members of several legal circuits, different associations and other gatherings where each person present desired to possess a good portrait of his fellow barristers or members. These are all done in the way in which we photograph theatrical scenes, each figure being placed in the picture separately from the others. You would be surprised to hear the number of sittings needed for this kind of work. For instance, we take each individual in several different poses in order that he may choose the best for reproduction in the large photograph. In this way, I take it, we generally manage to satisfy everybody, and turn out a photogram which is a pleasant memento to those present on the occasion when the portraits were supposed to be taken."