

PHOTO BY  
J. J. MILLIKIN,  
TORONTO

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THE  
CANADIAN PHOTOGRAPHIC  
JOURNAL.

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DEVOTED TO THE INTERESTS OF THE PROFESSIONAL AND AMATEUR PHOTOGRAPHER.

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THE  
Canadian Photographic Journal.

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GEORGE W. GILSON, - - EDITOR.

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**Renewals.**—Subscribers wishing the JOURNAL stopped at the expiration of their subscription should notify us to that effect; otherwise we shall consider it their wish to have it continued.

**Articles Solicited.**—Contributions are invited on every subject relating to photography, also practical ideas, helpful suggestions, useful formulæ, etc. Payment will be made on accepted articles if required, but unless distinctly asked for, all articles will be accepted on the understanding that credit on subscription will be considered sufficient remuneration.

**Answers to Correspondents.**—Questions to the EDITOR on any subject pertaining to photography are invited, and will be answered as fully as possible through the columns of the JOURNAL.

**We want Agents** in every city in Canada and the United States to *push* this JOURNAL, with whom *satisfactory* arrangements will be made. We would esteem it a great favor to hear from, or be placed in communication with, persons desirous of *making money*.

Address all communications to

Canadian Photographic Journal,

TORONTO.

EDITORIAL CHAT.

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THE Detroit Convention is a thing of the past, and those photographers who were enterprising enough to attend have returned home filled with new ideas in most every branch of their profession.

THE pictures shown, while not as numerous as in some other years, were conceded by all to be far ahead in quality. Everything went off smoothly, if we may except a slight dissatisfaction as to the prize awards in one or two instances.

WHENEVER prizes are given, especially, it seems, in a photographic exhibition, grumbling will be heard and dissatisfaction felt. Even when it is arranged that everyone gets a prize, the feeling will be found ranking in the minds of some that they should have been placed higher or secured more.

THE photographers of Ohio feel that they have the correct and successful scheme in the Ohio salon that was formed in that State this year. It is conducted on the lines of the Paris and London salons.

THE salon is certainly the ideal exhibition, and generally adapted would raise the art standard of the profession immensely.

WITH the many true artists now in photography, the tendency of the profession is to rise above mechanical excellence and technique, and sordid prize winning to art itself, with the honor of being recognized as one able to create pictures. Such pictures, too, as it will be glory enough to have accepted by pictorial art judges of wide reputation, as worthy a place in the history of advanced photography. Photography as an *art* for *artists*.

WHICH is best, such honor as these or paltry sordid prizes, often wrangled over, seldom if ever elevating?

IN Canada and the States, and other countries as well, there should be a photographic academy, a permanent home for the preservation of the best work of each year. Had this been done some years ago, what an interesting and instructive exhibit it would have made.

NOW for the Canadian Convention, and let every man who has the interest of photography at heart attend. We have not heard anything of the programme as yet, but its sure to be interesting.

## THE P. A. OF A.—DETROIT CONVENTION, 1895.



THE attendance and quality of work shown, and the general interest taken in the convention of the P. A. of A. may be said to have placed it far

and away ahead of any preceding meetings of this body.

The attendance was large and enthusiastic, many of the old officers and members being present for the first time in several years. The good work done by Secretary Hayes and the general feeling of confidence in the Executive Board, combined to bring out many who had about given up attending the convention. The attendance from Canada was exceptionally good, there being nearly fifty present.

Owing to the incompleteness of the exhibits, the opening session of the convention was deferred until Tuesday afternoon, when President Schneider delivered his annual address, as follows :

“ In the name of the Photographers' Association of America I bid you a most hearty welcome, one and all, to this fifteenth annual convention, and may the few hours we spend here together live in your memories as hours of unmixed profit and pleasure. A glance backward will convince you of the many benefits we have derived

from this national association. Let us consider where we stood fifteen years ago, and we can easily note the advancement we, as a profession, have made. The annual conventions have been a benefit direct and far-reaching to those who have attended regularly, and many others own the good effect of their influence, although indirectly applied. Who, then, is there among us who will say that the aim of this association has fallen short of its mark? But let us turn our attention for a moment upon the present, and will we not find that our government, once so efficient, is not adapted to the spirit of the times? State associations are now the order of the day, and personally I earnestly hope to see the time when each state can boast a live and flourishing association within her boundary. The duties which we, as the national association, owe to the state associations, and the best method of discharging those duties will be presented for your consideration in a revision of the constitution, which, I trust, you will give your most careful and unprejudiced attention. I will not here go into details. Sufficient it is to say that the main idea is the amalgamation of the State societies into a grand national association, meeting once in three years, if you, aided by the State associations, deem it wise to make this change.

"This departure once made we may look far into the future, and though we paint it in glowing colors of the modern impressionist, I predict that we shall be in no wise disappointed, for the P. A. of A. will be a staunch ally of the State associations and

vice versa. Before leaving this topic let me add the suggestion that some radical difference be made in our method of handling prizes. If we have a triennial convention, as the new plan recommends, let there be a grand prize offered, for which photographers of each State will first compete—the winner in each state competition being thus entitled to enter the lists of the national competition. Each operator, with the odds thus doubled against him, would be spurred to new effort, and the resulting pictures be immeasurably improved. This, however, is but a suggestion.

"The social side of our meetings not only helps us on to warmer individual friendships, but it engenders in us a pride in our profession, a strong desire to raise that profession to the highest place among the world's occupations. I know that, in the light of the warm and helpful friendships already established, there is no need for me to impress upon you the benefits of our social life. As I look over this assembly and think of the many warm and pleasant friends those conventions have brought me, I can heartily say it is good to be here, and I am confident that you will all join me in the words. I thank you."

The financial statement was read and adopted. It showed the receipts to have been \$4,784.56, and the expenditures \$3,795.

Delegate Wallin wanted to debar trade manufacturers from voting for judges, but after a brief discussion the matter was laid over.

At the Tuesday evening session an exhibition of stereopticon views was

given by Jex Bardwell, the veteran Detroit photographer. He introduced pictures of prominent members of the Convention, a number of humorous views, and a trip to the Channel Islands.

The business meetings were well attended. A number of matters of interest were brought up, among them the report of the Executive Committee on several proposed changes in the constitution, on which there was considerable discussion. It was suggested to form state organizations to hold yearly meetings and send delegates every three years to a convention of the national association.

Appleton, of Ohio, explained the working of the newly formed Ohio salon, and wanted the association organized after the same style as that of the Paris salon. He suggested that competition in the National competition be open only to State prize winners. The matter was left to the following committee for a report: F. D. Todd, Chicago; Pirie Macdonald, Albany; Geo. Steckels, Los Angeles; C. M. Hayes, Detroit; G. Cramer, St. Louis; John Carbutt, Philadelphia.

John Carbutt, E. Decker, G. Cramer and Mr. Appleton, four ex-presidents, were seated on the platform and gave brief addresses.

The afternoon of Wednesday was consumed selecting the judges. The method of choosing consisted of submitting twelve names to the delegates who marked off eight, and from these eight three were drawn, blindfold, from a hat. The eight names placed in the hat were: W. L. Smith, Saginaw; Luke Powers, Buffalo; I.

Benjamin, Cincinnati; Joe Appleton, Dayton, O.; A. S. Robertson, St. Louis; E. B. Core, Cincinnati; Ed. Husher, Detroit; J. Will Kellmer, Hazelton, Pa.

The judges chosen were: W. L. Smith, Saginaw; Ed. Husher, Detroit; J. Will Kellmer, Hazelton, Pa.

Wednesday evening Director Griffith, of the Detroit Museum of Arts, gave an interesting lecture on the value of photography as an art, its advancement, etc. Director Griffith's ideal gallery was applauded. He explained in an eloquent way a gallery, surrounded by a number of operating rooms, commanding a view of the central gallery by secret holes. In this central room were books, papers, musical instruments, etc. The subject would wander in, pick up a book that pleased and smile. Then a servant would enter and tell him to call the following day for the proofs. He was taken at an unexpected moment, and consequently secured the finest sitting he ever had in his life.

J. Ed. Roech, of St. Louis, after heartily thanking Director Griffith for his many services in behalf of the association, read a New York letter urging photographers to unite and copyright their works.

Mr. Bell-Smith, of Cincinnati, was elected President for next year unanimously and with cheers.

The new Vice-President is Mr. Steckels, of Los Angeles, California; and the Treasurer is Mr. Hayes, of Detroit.

The convention closed Friday afternoon with a trip by boat to the St. Clair flats, with lunch and music

on board. The outing being extended to the visitors by the Detroit Photographers. During the afternoon the museum was thrown open to the public and the galleries of the city were closed.

The prizes were awarded as follows:

The special prize, an elaborate silver cup, for the best illustration of Ella Wheeler Wilcox's poem, "Maurine." One picture, thirteen inches or larger. To be framed at the discretion of the exhibitor, with or without glass; the standard of the reward was twenty-one points out of a possible thirty. S. L. Stein, Chicago.

Genre prize, a diamond charm. Three pictures, thirteen inches or larger, on any matt-surface paper, subject to be chosen by the photographer; the title to be appropriately inscribed on each picture. To be framed at the discretion of the exhibitor, with or without glass. S. L. Stein, Chicago.

The grand prize, a bronze or marble figure-piece (portrait photography exclusively). Thirty-six pictures, exhibit to consist of twelve cabinets, twelve Paris panels and twelve pictures thirteen inches or larger. W. M. Morrison, Chicago.

Class A.—Six pictures, sixteen inches or larger, one gold medal, one silver medal, one bronze medal, and one diploma. First, W. J. Root, Chicago; second, Pirie Macdonald, Albany, N.Y.; third, Huntington & Clark, Detroit; fourth, Arthur & Philbric, Detroit.

Class B.—Twelve pictures, Paris panels to sixteen inches, one gold medal, one silver medal, one bronze medal and one diploma. First, Pirie

Macdonald; second, Huntington & Clark; third, Brigden & Geisler, Cleveland; fourth, G. M. Somers, Memphis Tenn.

Class C.—Twenty-four pictures, cabinet to Paris panels, one gold medal, one silver medal, three bronze medals, and one diploma. First, W. J. Root; second, Pirie Macdonald; third, Brigden & Geisler.

Class D.—Rating competition, twelve cabinets only, one silver medal, one bronze medal, and diplomas to all over 21 per cent. First, Batcham; second, Leavey; third, Seabolt; diplomas, Speilman, Springfield, O.; Zweifel, Duluth; Stark, Sioux City, Ia., and Ciario, Newport, Ky.

Class E.—Landscape photography, twelve pictures, seven inches or larger, one silver medal, one bronze medal and one diploma. First, E. C. Berryman; second, Allan Fanjoy.

Class F.—Landscape photography, with figures introduced, twelve pictures, seven inches or larger, one silver medal, one bronze medal and one diploma. F. B. McCreary.

Class G.—Interiors, twelve pictures, seven inches or larger, one silver medal, one bronze medal and one diploma. First, Kimball; second, Leavey; third, Troler; diplomas, McCreary, G. W. Leas, Dennison.

Class H.—Marine views, twelve pictures, nine inches or larger, one silver medal, one bronze medal and one diploma. First, Allan Fanjoy; second, E. C. Berryman.

Class I.—Combination pictures, three combination prints, size to be left to the discretion of the photographer, framed with or without glass, one gold, one silver, one bronze

medal and one diploma. First, Arthur & Philbric ; second, E. Decker, Cleveland.

Class J.—Composition groups. This class to consist of single phot graphs or groups, grouped with back worked



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PHOTO FROM LIFE, BY SARONY

in, one gold, one silver, one bronze medal and diploma. First, Arthur & Philbric ; second, McMichael, Detroit ; third, Van Loo & Trost, Toledo ; and H. W. Minns, Akron, O., diploma.

Class K.—Commercial work, one silver medal, one bronze medal, and one diploma. First, John Betts ; second, C. B. Baker, Detroit ; diplomas, McCreary & Branson, J. B. Schreiber.

Class L.—Most tastefully arranged exhibit, one diploma. P. Macdonald.

Class M.—For best improvement in photographic appliances introduced since the last convention, one diploma. Newcomb Flash Co.

Class N.—Foreign exhibit, best collection of photographs, any size, framed or unframed, to be delivered to the association free of charges, one silver medal and one diploma. First, Lutzel Bros., Munich, Germany ; second, L. W. Kurtz, Wiesbaden, Germany.

Prizes awarded on Climax plates, judges, Core, of Cincinnati ; Brigden, Cleveland ; Alberman, Buffalo. In class A, first, Davis & Sanford, New York, \$100 ; second, O. P. Scott, Chicago, \$25.

Class B, 8x10. Geo. Nussbaumer, Buffalo.

Class C, cabinets and panels. Bateham, Norwalk, O. ; Bowersox, Dayton, O. ; Stout, Unionville, Mo. ; University Studio, Chicago, \$25 each.

Class E (views). Chandler, \$25.

We have only room for a brief mention of a few of the most striking pictures. The Ohio Salon pictures of Baker, of Columbus, were easily the feature of that exhibit. The best, perhaps, was his "Stilling the Storm," an effective bit of work. The sets of children's pictures in sepia, by Arthur & Philbrick, Detroit, were very pleasing. Morrison, of Chicago, showed some beautifully clean work in lighting and posing. His work is always cleanly modelled as to appear almost real flesh. Hollinger, of Dayton, O., exhibited a choice collection of pictures, showing very effective lighting. His work was particularly like a steel engraving. His manner of posing a head gives the effect of its standing out in relief from the paper. Huntington & Clark, Detroit, contained one of the most pleasing pictures of the

convention, a lady's head in profile. The exhibit was artistically mounted direct on broad oak frames. Their exhibits were all of a high order. Stein, of Milwaukee, in a "Saint and Sinner," showed a good subject well handled. "A Study in Black and White" was also very good, being a large picture of a negress and a beautiful white girl side by side. Steckel, of Los Angeles, Cal., tacked up a few pictures, but they were gems, every one. G. Moses, of New Orleans, had some characteristic subjects of colored life. In this branch of work he has the advantage of his brethren of the north in living in the south, where he can get the true atmosphere, and the subject always ready made. His work is all in the genre class, the most notable example being, "Who Struck de Fustest?" Root, of Chicago, showed a very pleasing exhibit. A standing figure of a lady in white silk was excellently handled. "After the Bath," a study by Stein, was very strong in composition. The lines were well handled, and the naked flesh was very natural in tint. His "Intermission" was also good. The work of Pirie Macdonald, of Albany, was fully up to last year, the choice of subjects being better. His work was on carbon, and was well executed and attractively framed.

The exhibit on Climax plates was strikingly handsome. Some fourteen or so 25 x 30 carbon prints in colors, of graceful subjects, made on these plates by Davis & Sanford, of New York City, took the lead, while a number of other leading galleries showed work made on the same plate.

Allan Fanjoy, lately a photographer of Canada, took several prizes for marine and commercial photography.

Mr. Mora had a regular seaside complexion with him. The source of the complexion, however, was a bicycle trip from Rochester to New York and back. Whatever Mora does generally has a solio end to it, and the Eastman demonstrators are now wondering if this long distance business is for pleasure or to test the advisibility of equipping the force with bicycles to tour the country with.

The lemonade bowl of the American Aristo display was well patron-



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ized. The electric fans in this display also did good work. As usual, this firm spared no expense in making it pleasant for visitors.

"Don't fail to visit Belle Ilo," was the attractive card tacked up by the



Ilo people. A happy take-off on the other Belle Isle.

Mr. Carbutt brought with him and distributed some fifty photographs of a group of the members of the first P. A. of A. Convention.

There were seven exhibits on carbon paper.

The photographic press was represented by Mrs. Fitz-Gibbon Clark, of the *St. Louis Journal*, Mr. Todd, of the *Beacon*, and Dr. Nesbitt and Mr. Gilson, of the CANADIAN PHOTOGRAPHIC JOURNAL. Mrs. Fitz-Gibbon Clarke is as young in looks and actions as she was when we first knew her ten years ago.

Mr. John Carbutt paid a pleasing tribute to the efforts of the photographic press in the interests of the convention in a few well worded sentences, and ended by moving that in future they be admitted as members without dues, which was duly carried.

Eldridge Stanton, of Toronto, named Chautauqua as the next place of meeting. A number of other places were urged, among them Chicago and Cleveland, but out of a total vote of 187, Chautauqua received 161, the two other cities named receiving one vote each. The result was hailed with loud applause.

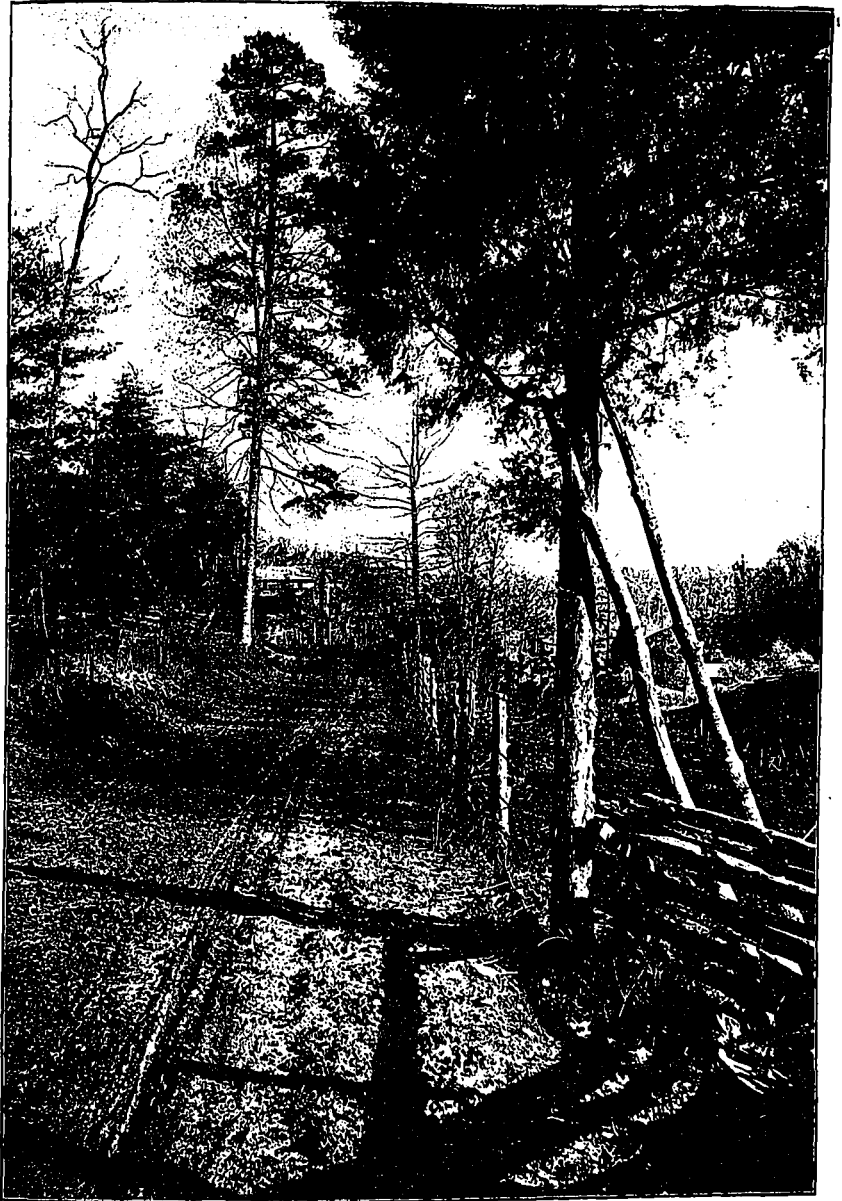
In the name of the association, A. Cramer, of St. Louis, presented A. H. Griffith, director of the Art Museum, with a very handsome ink-stand, gold-mounted, with cloisone trimmings. Mr. Griffiths' secretary, Will K. Bradish, was also presented with a diamond pin for kind attentions during the convention. Jex Bardwell, for the entertainment on one of the

evenings, was made the recipient of a check for \$110, and unanimously elected an honorary member of the association. The retiring president, John S. Schneider, of Columbus, O., was made a present of a magnificent marble timepiece, surmounted with a bronze figure, and J. Ed. Rosch, of St. Louis, Mo., the retiring treasurer, received a beautiful diamond pin. These presentations were marked by abundant enthusiasm, which showed the popularity of the recipients.

M. Rosch announced that the photographic exhibit would remain in place for the next two weeks, after which a representative collection will probably be left to the museum as a permanent exhibit.

#### STOCK EXHIBITS.

A wing of the building that was always crowded to overflowing was that occupied by a very strong combination, composed of E. & H. T. Anthony & Co., with Mr. Pattison and Mr. Stanbury in charge; the American Aristo Co., whose interests were, as usual, well taken care of by Charlie Heatherington; and The "Climax" plate, made by the Standard Dry Plate Co., represented by Mr. C. O. Lovell. An exceptionally clever bit of advertising was here seen, advertising so successful that it formed at once one of the features of the Convention, in point of interest, instruction and amusement, and successfully advertised no less than *seven* different lines. It was done as follows: Messrs. Anthony & Co., who are trade agents for "Climax" Plates and Harry's retouchers—gave out very artistically printed cards, which entitle the holder



FROM AN ARISTO-PLATINO PRINT

## A TENNESSEE ROAD

CANADIAN PHOTOGRAPHIC JOURNAL, July, 1895

to the privilege of having his picture taken. A studio had been arranged, the light used being Anthony's electric light apparatus. The camera used was the "New York outfit," fitted with a patent Vignetter, devised by Rosch, of St. Louis. The holder of a ticket took a seat on the patent chair, was posed, lighted and generally arranged by one of the leading operators of the States, who had been secured for the occasion; and the negative made on a "Climax" plate. His address was then taken, and in due time each sitter will receive a print made on Aristo-platino paper; and the negative, which will have been retouched by Harry's electric retoucher—as a member remarked, on having the idea explained to him, "Well, there's a combination for your life."

The flash-light machines exhibited were given much attention by the visitors, evidently being now considered as an essential instrument in the gallery. The Newcomb machine made a very good impression upon all who saw it work, and this was verified by the judges, who awarded it the diploma offered for the best improvement in photographic appliances for 1895, a great honor.

The "Clifford" Flash-light Company showed an ingenious machine for use in parlor work, in which the lights were placed in a tin chamber that received and retained the smoke after the flash.

One of the most interesting exhibits proved to be Harry's retouching device—a machine for doing retouching by electricity. This device has been on the market now for three years, and

its steady growth in popularity speaks its worth. Mr. Harry has greatly improved his machine, and considers that it is now perfect. Mr. Harry was kept so busy explaining his machine to those interested that several days found him without time to take lunch. He expects to be with us at the Toronto Convention.

The A. M. Collins Manufacturing Company showed their usual fine line of cardboard and mounts. Some of the new lines shown in mounts were very attractive. Mr. Woods was in charge, every one knows the Collins' mounts, and every one knows Woods.

"Ilo" paper was well represented by a good display of work tastefully arraigned, representing a number of well-known galleries. Their exhibit was in charge of Mr. W. F. Miller, or, as he is better known, "Ilo" Miller, and a staff of assistants.

The Eastman Company made no special exhibit, but were well represented on the ground by Mr. Mora, manager of the Solio department, Mr. Marshall, head demonstrator, and Messrs. Campbell and Crowell. These gentlemen seemed to find plenty to do, even without an exhibit. Mr. Mora, ably seconded by Mr. Marshall, seemed ever busy welcoming and entertaining old and new friends, strengthening the ties between Solio and its many friends. Mr. Mora has promised us a fine exhibit for our Toronto Convention, in charge of himself personally and Mr. Marshall.

The Hammer people inform us officially that at the convention they carried off: two first prize gold medals, one first prize silver medal, one second prize silver medal, two

third prize bronze medals, three diplomas of award. This is certainly a great showing.

Mr. G. Cramer and wife, Mr. Emile Cramer, George Bassett, Mr. Cramer's able lieutenant, and our old friend Edgeworth, looked after the interests of the Cramer plate. As usual the products of this plate were everywhere visible, paying tribute to the quality and popularity of these plates.

One of the prettiest exhibits was that of the Photo Material Co., of Rochester. This exhibit was lavishly decorated with flowers and ferns, while soft strains of music stole out from a hidden music box. The effect of it all being very pleasing. The work exhibited was very fine, showing the quality of the paper well.

Allen Bros., the Detroit stock house, best known to Canadians through their agency for the Suter lens, made a fine exhibit of work done by this lens, also of all kinds of photo stock.

There were a great many other exhibits which lack of space prevents our mentioning. A number of the best of them will be with us at Toronto, when we will be able to fully report them.

The following communication from Mr. William F. Miller, representing the Ilotype Company explains itself:

DETROIT, Aug. 10th, 1895.

*To the Fraternity:*

I hereby offer a gold medal for the best illustration of my humorous poem, entitled, "More rain," delivered at the Detroit Convention, said pictures to be not less than Paris panel

size, to be entered for competition at the next convention of the P. A. of A., and award to be made by the judges appointed for the regular competitive pictures. The only other condition attached to this offer is, that a duplicate print of each illustration shall be given me at the close of the convention. With thanks for many favors extended in the past, I am,

Yours sincerely,

WM. F. MILLER.

*To the Photographic Fraternity:*

As there has been a feeling at the various Photographers' Conventions that the manufacturers of photo supplies have been securing too much attention, and that the exhibits made, and the prizes given by them on such occasions rather diverted the interest of the members from the displays and prizes of the Association, we, the undersigned manufacturers of dry plates, hereby agree to make no displays, nor offer prizes of any kind at future Photographic Conventions.

We feel it our duty to take this course, and trust by doing so to have the good-will and wishes of the entire fraternity. We will continue to aid and support the Conventions and will be ably represented, and pleased to meet our many friends on all these occasions.

Yours very truly,

(Signed)

M. A. SEED, Dry Plate Co.

G. CRAMER, Dry Plate Works.

Hammer Dry Plate Co.

## NOTES.

Mr. J. Leask Ross, who is the talented operator for Mr. Morrison, was present, and felt very jubilant over the high honor paid his work. Mr. Ross is a Canadian, like so many of the leading lights of the profession in the United States. The most appreciated words of praise and congratulations he received was a telegram from his father in Owen Sound.

A number of members had provided themselves with one of the Eastman Kodock Co.'s "chic" little pocket kodak, and were very busy taking snap-shots of everything that came their way, to serve as mementos of the convention. A few confined themselves to the exhibits, copying poses, lightings, etc., for careful study at home.

There were a number of "groups" and single figures seen by our reporter after "business hours" that, could they have been seen by the little eye of the pocket kodak and transferred to the little inch and a half by two of film, would have made pictures rich and rare.

The little hammers given as souvenirs by the Hammer Dry Plate Co. were in great demand. The little hammers were only exceeded in popularity by the big Hammers.

Mr. Hammer, his son Fred, who is the popular president of the Missouri Association, the two charming Miss Hammers and Mr. Hoefle who has so successfully demonstrated the Hammer plate, completed a party that extracted as much solid enjoy-

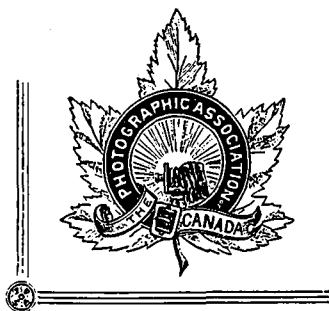
ment out of the convention, made as many friends and did as much business as any group in attendance.

Speaking of the little gold hammer advertisements of this firm recalls one of the many funny things heard at Detroit. As is now generally known, Mr. Hammer's son Fred lately became the proud father of triplets, three as handsome and as promising babies as ever made their entrance on this stage of life, and thereby hangs this tale. Grandpa Hammer, standing in the rotunda of the Cadillac, was approached by a lady anxious to be decorated with a Hammer pin. She said, "Oh, Mr. Hammer, I must have one of those little hammers." Mr. H., with his German accent, replied, "Yes! Vell, just wait a minute and I'll call my son."—Tableau.

Another advertising souvenir that was in great demand was the "Grovercat" gold medal of W. P. Buchanan, of Philadelphia, Pa. It was very handsome in design and was accompanied by a red ribbon, a safety pin and "Little Billie," who made many friends by the graceful winning manner in which he labelled the delegates with the medal of this firm. To see this little *fin de siècle* "tourist" of Mr. Buchanan's exchanging smiles with old and new customers reminded us of the touching lines—

"There never was a minute  
Little Willie wasn't in it."

Mr. Buchanan himself we found one of the most pleasant of men, a through "good fellow" in every sense, and at the same time a man of evident business ability.



## HANDSOME PRIZES.



A. M. CUNNINGHAM,  
Pres. P. A. of C. Hamilton.

The following are offered for competition at the Photographic Convention, Toronto, on Wednesday and Thursday, September 11th and 12th, 1895.

*Portraits.*—For the best twenty photographs, of which six must be 8 x 10 or larger: 1st prize, a magnificent gold inlaid, decorated epergne, value \$40; 2nd prize, a beautiful gold inlaid toilet set, with jewel stand, \$34.50; 3rd prize, a handsome gold inlaid fruit, Venetian hand-laid glass, \$28; 4th prize, a finely decorated fruit dish, \$23; 5th prize, a finely decorated fruit dish, \$20; 6th prize, a large decorated flower vase, \$18.50; 7th prize, fruit or nut dish, satin engraved, gold-lined, \$15.50; 8th prize, satin-finished pitcher, gold lined, \$9.75; 9th prize, a handsome breakfast cruet, four cut-glass bottles, \$9; 10th prize, a bright silver cake basket, \$8.

For the best twelve views, landscape or architectural, not less than  $6\frac{1}{2}$  x  $8\frac{1}{2}$  in size: 1st prize, a handsome jardiniere, value \$18; 2nd prize, a satin-finished ice pitcher, double wall \$10.

*Special.*—For the best single photograph, 11 x 14 or larger: a magnificent mirror, gold inlaid frame, bevelled glass, value \$35. (The picture receiving this award must score 45 points out of a possible 60, and shall become the property of the Association.)

*Employees' Prizes.*—*Printing.*—For the best six prints on any paper: 1st prize, a beautifully decorated vase, value \$9.50; 2nd prize, engraved crystal Cologne, \$6.50; 3rd prize, flower vase, blue malachite, \$4.25. *Retouching.*—For the best retouching on six negatives, any size, prints showing before and after to be submitted: 1st prize, gold inlaid vase, Barbatine, value \$9; 2nd prize, Cologne crystal, engraved, \$7.50.

### RULES GOVERNING EXHIBITS.

The method of judging will be the same as in former years, viz.: Ten points each for posing, lighting, chemical effect, printing, retouching and neatness of exhibit—sixty points in all.

In consideration of the fact that the photographer in small towns is at a disadvantage compared to those in larger places, an allowance of six points (gratis) will be made on all exhibits from towns of less than 7,000 population.

All photos must be from negatives made since November 1st, 1894.

Each exhibit must be accompanied by a representative of the gallery in which the display was prepared.

Any plate and any printing process may be used at the discretion of the exhibitor.

Photographs may bear the name of the exhibitor.

## SOME POINTS IN CONNECTION WITH TONING AND FIXING GELATINO-CHLORIDE PRINTS.\*

By C. H. BOTHAMLEY.



POOLE, ST. CATHARINES  
*See Trans. P. A. of C.*

The object of this paper is to call attention to certain points in connection with toning and fixing, more especially with a view to a better understanding of the changes that take place in what is commonly known as the combined toning and fixing bath. It is sometimes urged that since good results can be obtained by the use of separate and successive toning and fixing baths, the combined bath should be avoided. As a matter of fact, however, there is a somewhat widespread opinion, in which I for one share, that a good combined bath, giving results equally permanent with those obtained by the use of separate baths, would be a very great advantage. From a commercial point of view there would be much saving in the cost of production, owing to the reduction in the number of washings and the labor in general, and from the amateur point of view the saving in time would probably lead to much more printing being done.

The experiments described in this paper, and illustrated by the examples exhibited, are only to be regarded as of a preliminary character, although they lead to some definite conclusions.

One of the oldest of toning processes is that in which the print is immersed in an acidified solution of hypo. Acetic acid was generally used, but a similar result can be obtained by the addition of alum solution. When a gelatino-chloride print is placed in either mixture, it is first fixed, and if withdrawn at this stage and washed and dried, it has the well-known red-brown color of a print fixed in a neutral bath. If, however, it has been allowed to remain in the liquid, it gradually would have acquired a color that cannot be distinguished from the color obtained by gold toning, although, of course, no gold has been deposited. It follows that the so-called "sulphur toning" is subsequent to, and not simultaneous with, fixing. Further, no difference was observed between the effect of a hypo solution that had been acidified some time previously, and was very turbid with precipitated sulphur, and a hypo solution that had only just been acidified and in which the precipitation of sulphur was only just beginning.

The addition of a lead salt, usually in the form of acetate or nitrate, to the combined bath is often recommended, mainly on the ground that it exerts an influence on the molecular condition of the deposited gold, and yields prints of a more desirable color than can be obtained if the lead salts are omitted.

If a solution containing twenty parts of hypo and one part of lead acetate per hundred is used, the prints are first fixed, and subsequently acquire a purplish color, indistinguishable from that obtained with a gold

\*Read before the Photographic Convention of the United Kingdom.

bath, or with acidified hypo. Similar results are obtained with lead nitrate, in place of the acetate. Both solutions are quite neutral in reaction, and do not precipitate sulphur; and hence, although the resulting color of the print is similar to that obtained with acidified hypo, it cannot be ascribed to the sulphur toning, and must be brought about in a different way.

The chief point to be observed is that in acidified hypo or in hypo containing a lead salt, a gelatino-chloride print may acquire a color that cannot be distinguished from the color obtained with gold. Now it is generally admitted that the probable permanence of a silver print is directly proportional to the quantity of gold that has been deposited on the image. It is conceivable that in a combined toning and fixing bath that contained or was supposed to contain gold, and also had been mixed with alum or a lead salt, or both together, the actual toning or color change that took place might be due mainly, if not entirely, to the effect of the alum or the lead salt in the manner just described, and not to the disposition of gold; in other words, the print would seem to be gold-toned, whereas, little or no gold was actually present.

Examination shows that with acidified hypo, or hypo mixed with alum, or neutral hypo containing a lead salt, the toned image contained a notable quantity of silver sulphide, or, in presence of the lead salt, possibly lead sulphide. The quantity, however, is not such as to indicate that the whole of the image has been converted into sulphide, nor as to make it permissible to attribute the change of color to "sulphurization." The

greater part of the image still consists of the silvered compounds as altered or reduced by light.

It was observed by Just and confirmed by Valenta that the paper itself obstinately retains small quantities of lead from baths containing lead salts. Attention has recently also been drawn to this fact by Mr. Baldock at one of the London societies. The fact has been known for some time, and the attention of chemists was called to it several years ago by Mr. L. T. O'Shea. The specimens exhibited show very clearly that pure paper will take up lead from a one per cent. solution of lead acetate with lead nitrate, and retain it even after prolonged washing. It is also clear that in presence of hypo (twenty per cent.) the quantity of lead retained is much smaller, and that it is still further reduced by a second treatment with hypo solution containing no lead. Even in the latter case some lead is still retained, and the quantity is quite sufficient to cause discoloration of the paper in course of time.

The general conclusion, therefore, is that the use of lead salts in a combined toning and fixing bath should be avoided because of the danger of lead being retained by the paper in spite of thorough washing, and that the use of lead salts, of alum, or of an acid should be avoided, because any of them will cause a print to acquire a color indistinguishable from that produced by gold, even though no gold at all has been deposited. It is obvious that in this case the probable permanence of the prints is much lower than if they were properly toned with gold, and the observations



described throw light upon some previously puzzling cases of the fading of gelatino-chloride prints.

Mr. A. Henderson agreed with Mr. Bothamley in all that he had said. He spoke with an experience of thirty years of toning and fixing in one bath, and he had perfect prints in his possession which had been toned with hypo and lead. Mr. Bothamley had experimented upon gelatino-chloride paper. He, thought, however, that if he had experimented with albumenized paper the results would have been different. He would like to know if Mr. Bothamley had experimented with formiate of lead or with formic acid. About thirty years ago Messrs. Devanne and Gerrard had shown that toning was a substitution process, but he took exception to it at the time, and Mr. Bothamley's experiments corroborated his views upon this subject.

Mr. J. B. B. Wellington upheld what he had said at the Photographic Club, and believed that a combined bath was quite as permanent as a separate one. It should, however, be used fresh, and it was not necessary to carry the toning to the black stage. He had just completed a series of experiments, and found that if the prints were immersed in a solution of sulphite of soda first, no yellowing of the whites occurred. If the prints were fixed previously to toning, the whites also were purer, and an additional improvement was also obtained by the use of the sulphite of soda, as there was less double toning if the toning were carried beyond the brown stage.

The President related that some time back he had been making ex-

periments, and had found that after a print had been toned and fixed as Mr. Bothamley described, if the prints were immersed in sulphuretted hydrogen it took a long time to make any change, but if ammonia were added the action of the sulphuretted hydrogen on the silver was considerably accelerated. He would like to ask Mr. Bothamley what was the nature of the red compound left on the paper after the hypo had finished its work.

Mr. C. H. Bothamley, in reply, said he considered the point raised by Mr. Wellington one of extreme interest. It was, however, quite a new idea to him, and he could not at the moment make any suggestions concerning it. He had not experimented with formic acid, but had confined his attention to common salts. He should not be surprised, however, to find that formic acid acts quite differently from acetic acid, formic acid being a powerful reducer whilst acetic acid was not. The point was worth attention. With regard to toning by substitution or deposition he would not commit himself to any definite opinion. There were such extremely small quantities to be dealt with, and it was very difficult to estimate with the eye. Nothing short of quantitative analysis could decide the matter, and with such small quantities that was very difficult. If it were done it would settle the point. As to the exact constitution of the red image he declined to be drawn. All he could say was that a large number of chemical reactions behaved just like finely-divided silver. He did not think that the red image was due to any definite compound of silver.

## ASTIGMATISM; WHAT IT IS AND WHAT IT DOES.



FRANK COOPER, LONDON  
A Vice-President of the P. A. of C.

Since by recent discoveries in the glass-maker's art, and new properties in certain of his productions, the terms "astigmatism" and "astigmatic" or "non-astigmatic" are becoming more common than they were only a few years since, we find them occasionally

glibly made use of by some who have no idea of what is meant by such terms. Questions are sometimes asked about astigmatism of about as intelligent a nature as was put by a purchaser of a lens who stipulated that the one to be supplied must have an optical centre, and that, if this wore out by fair usage, another optical centre must be refitted to it!

It is only since the advent of photography that astigmatism could possibly have applied to any optical instrument, for in no other than a photographic lens is there any recognition of the transmission of a ray obliquely through it, and obliquity of transmission is a condition inseparable from the production of astigmatism, or *astigmatism*, as it formerly was, and still is occasionally, called. There is no astigmatism in a telescope object-glass when employed as such, because the rays pass through it axially, and not obliquely; but, if mounted as a photographic lens, it speedily shows that it,

too, obeys the law which all achromatic lenses have hitherto recognized regards astigmatism.

What, then, is the nature of astigmatism, and by what means is it to be discovered? Let us take any ordinary achromatic objective and subject it to critical examination by means of the ground-glass focussing screen of the camera. The object to be focussed may be a circular white object, the size of a threepenny piece, or it may, perhaps with greater advantage, be a sharply cut white cross, or both, mounted upon a black ground for facilitation of clear observation, or a black cross drawn upon a white card, the limbs of the cross being placed vertically and horizontally. The lens in the camera should be used without a stop, for the larger the aperture the more apparent will be the phenomenon. Let the camera be placed so that the image of the foregoing objects shall be sharply focussed on the centre of the ground-glass screen, and it will be found that the circular one will be quite round and distinct, while both the vertical and horizontal limbs of the cross will be equally distinct, while, if the lens be racked in or out of focus, both will preserve their shapes, notwithstanding the indistinctness of outline necessarily caused by this treatment. The camera is next rotated until the objects are brought to the extreme side of the focussing screen, and the racking in and out proceeded with as before. Neither the disc nor the cross will be found to be sharp anywhere, but it will be noted that, at one position, the disc will be elongated vertically, being oval in shape, while, on racking the lens a

little the other way, the elongation will now be horizontally, but the mean of the two distances will not show it to be of circular form. With the cross, at one distance the horizontal bar will disappear almost, if not altogether, leaving the vertical one only sharp and distinct, to disappear in its turn when, by an opposite turn of the rack, the horizontal one is brought into visibility. The distance through which the lens has to be moved to produce these phenomena shows the amount of astigmatism possessed by that individual lens at that degree of distance from the centre of the ground-glass, for, at the centre, as we have shown, sharpness and correctness of form prevail, the amount of astigmatism usually increasing as the centre is departed from. We say *usually*, but this is not invariably the case, for, in making charts of the amount of astigmatism given right across the whole field by lenses in our own possession, we find that over a considerable portion of the surface adjoining the centre there is no appreciable astigmatism to be found until we approach much nearer to the margin. Noting that there are two foci to every point projected upon the focussing screen, and that one gives the image as a vertical line and the other as a horizontal line; it is a comparatively easy matter to construct a diagram or chart for every lens that passes through one's hands, which will show not only its curvature of field, but the amount of astigmatism from perfection or freedom from this evil at the centre to the full development of the unwished-for propensity at the margin, represented by two lines running alongside each other, and usually

drifting apart as they approach the sides of the plate. It would occupy too much space to give in this article an account of the astigmatometer we devised and constructed for the purpose implied, suffice it to say in the meantime, and pending its publication on some future occasion, the whole capabilities, the failings, and in short, the character in this respect of a lens may be delineated with accuracy on a sheet of paper the dimensions of the ground glass, and this in about ten minutes after erecting the camera.

Having said so much about the nature of astigmatism, we shall dismiss its cause in a rather summary manner, contenting ourselves by a repetition of the explanation we once gave when bringing the subject before the now defunct Photographic Society of Scotland. Astigmatism, we said, arose from the obliquity of the cylindrical pencil of rays causing the aperture of the lens to cut it in an elliptical form. As the refractive power of the margin of the lens is equal all round, it follows that the refractions at the horizontal margins of this ellipse are as great as at the vertical margins, consequently the inclination of these rays towards one another is as great in one case as in the other; or, put it in another form, the angle at the focus, formed by the extreme rays of the pencil, is the same horizontally as perpendicularly; but, as the base line vertically is longer than the horizontal one, it follows that the focus of the vertical rays is further from the lens than the horizontal ones, so that, for oblique rays, there are two pseudo-foci. Now, at the short focus, a point will be represent-

ed by a vertical line; at the long focus, by a horizontal line; and intermediately, by a combination of both. This accounts for the impossibility of getting anything sharp at the margins when some lenses are being employed. It is possible to arrange the curves at the lens so that even with full aperture there shall be what photographers term great "depth of focus," the meaning of which is, that no part will be in sharp exact focus, but that objects situated at varying planes shall be pretty near it. A lens of this character is unsatisfactory, and is to be avoided.

A small aperture to a lens improves the marginal definition, the reason of this being that, as each point of the subject is represented by an irregular dot, the smaller the dots the less does their irregularity interfere with one another. The marginal smudginess which results from astigmatism is, as we have hinted, greatly diminished, and in some cases practically extinguished, by a small stop.

But lenses, formed of special glass, have of late been placed upon the market with a claim of their being free from astigmatism, even when used with a large aperture. This we rejoice at, not merely as an optical feat once thought impossible of accomplishment, but on account of the additional power thus placed in the hands of the photographers who like good definition all over the plate, but who may not desire it at the expense of having to secure it by the use of a small diaphragm. It is a pity that objectives of this nature, from the complexity of their construction—some having as many

as eight individual lenses—and from patent restrictions, are not likely to be supplied at what have been designated "popular prices." The influence of time may, however, aid in the amelioration of this drawback.



J. N. LAPRES

THE above half-tone is from a photograph of Mr. J. N. Lapres, senior partner of the well-known firm of Lapres and Lavergne, photographers, Montreal. Mr. Lapres, although a young man, bids fair to become a Napoleon in the photographic arena. He has been connected with photography for the greater part of his life, but only started a studio in connection with Mr. Lavergne a few years ago, but during that time has accomplished more than some do in a lifetime in the success of his business. Nothing but the finest goods are used in their studio, and their patrons are numbered among the most influential English and French citizens in Montreal.

## A CONVENTION INTERVIEW.

“The new school of photography,” said one of the veterans to a Detroit paper, by way of explaining the vast progress that has been made of late years, “shows an inclination to take advantage of natural positions instead of posing subjects, as used to be the rule. We must still use discretion, however, to remedy any ungraceful position by moving the hand or the head, but we utilize the natural pose as much as possible. A great deal of character is shown in the pose of the head and position of the body, and all that goes to make up a good likeness as well as the expression of the face. Thus we ask a lady to sit naturally, and if she has any native grace she will take up a position that we could not improve upon by twisting her about. This is more noticeable in later pictures of children, which are taken almost entirely in natural positions. The photographer, instead of placing them in a strained position, catches them by a snap shot in a natural position.

“There are some people who have a horror of getting their portraits taken, and we have to resort to all kinds of stratagems. There was an old man whose sons and daughters wanted to have his picture taken, but he was obstinate. I suggested that he should bring his grandchild to be taken, and when he did so, I casually asked him to hold the child’s hands and not move. He did as I told him, and I got a snap shot at him. He never knew that he had been taken, and was very much surprised afterwards when shown a good bust

picture of himself. He was perfectly satisfied in the end. As age creeps on people get more and more averse to being taken, and it is only by removing the traces of age that we get them to accept work at all, although it may be quite artistic in itself. With lady sitters our art has to be applied. When a lady assures us that she has never had a picture that looked like her, we are perfectly sure that she is anxious to be flattered, and it would be suicidal to show the proof before it is properly retouched. Pictures of draped neck and shoulders—or perhaps I might say undraped—are very popular just now among ladies whose natural beauty will permit it, but art can be used in covering up the lack of the necessary qualities to a wonderful extent by improving the lines and rounding the figure.

“One of the latest adjuncts to an operating room is the ‘make-up box,’ where the up-to-date photographer improves the lips and eyes by penciling, strengthens the eyebrows and in many way improves the contour of the face.

“When a lady says frankly that she wants to appear pretty, we do all that for her. If a lady has not a straight nose a line down the side will make it appear so, and lines under the eyes will make them appear large and lustrous. Of course every lady wants to have a ‘Cupid’s bow’ mouth, and that is effected by pointing the lips. A lady may have very thin lips, and still in her photograph she has a perfect mouth, and people wonder how it is done. You need not look astonished; it is done all the time. Look at those pictures on the walls.

Where did you ever see perfect faces like them? They are all touched up that way, but although the public cannot detect it, the photographer can. We have nothing to do with improving the figure further than I have indicated. The dressmaker attends to that.

"We sometimes have a good deal of trouble with people's whims, which break out when least expected. For instance, I made a picture of an old lady who required the lines of her face to be worked out to remove the traces of age. Then the daughter refused the picture on the ground that it was not like her mother. The work done on the negative was removed and it was left as it was originally, but now the mother refused it, as it made her appear too old, and after a protracted debate they agreed to take half the photos in each style. With young ladies of the present day we have very little trouble. In their fresh, bright, chic costumes they make very pretty pictures, especially figure pictures. Even if a girl is lacking in beauty it is almost entirely overlooked if she has a graceful pose and a catchy costume."

The Christ heads, with crowns of thorns, that have been so much discussed, during the past year, are on view at the exhibition. They are the work of H. W. Minns, of Akron, O., and were taken from a living model. The idea was suggested by N. P. Willis' poem, "The Leper," where Christ appears to Helon, the leper, at the well in the desert. The thoroughly masculine character of the face, as depicted in the poem, set Mr. Minns to work to find a model that came up to the ideal. This he found in E. E.

Masterman, a school teacher in New London, O. The crown of thorns was made of branches of a rose bush, and the blood was represented by splotches of paint. The portraits were reproduced in Wilson's Magazine, and caused considerable comment. Many thought it almost an act of sacrilege, but Mr. Minns contended that if there was no objection to the old masters using models there could be none to his doing so in following on the lines of art. Rev. Charles S. Robinson, of New York, had lantern slides made of them, and exhibited them at a magic lantern entertainment in connection with his church. He said that some of his people were shocked, but the great majority commended the idea.

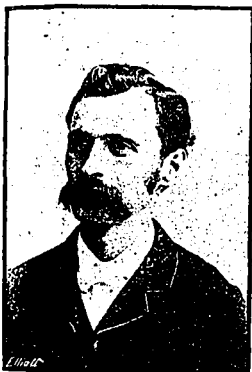
The nude in art has been the subject of innumerable discussions, and now the question is interesting the photographers, a number of pictures of nude children being exhibited on the walls. "What harm can there possibly be in those?" said one of the photographers, indicating a combination picture of a little girl bathing, but suggests only the most perfect innocence and artlessness, and I think the world will be all the better for such pictures."

"That may be," said another, but I don't think that young lady will care to exhibit those photos fifteen years hence."

"I don't see why she should be ashamed of it," said the first speaker, "and she will not be if she has been properly brought up. The clergyman where I live suggested such a picture to me of his little girl and the baby, both nude, so he does not appear to disapprove of it."

## PLAIN SURFACE SILVER PAPER, ITS HOME, MANUFACTURE AND MANIPULATION.\*

BY HARRY WADE.



W. JOHNSON, PICTON  
A Vice-President of the P. A. of C.

Having been asked by your Council to put before you a short account of my method of manipulation for producing prints on plain salted paper, I have strung together a few jottings from my note-book, and will now give you the result, but in doing so I am not laying any claim to originality; they are for the most

part old ideas revived and verified by actual experiment.

Twenty years ago (which was before I began to dabble in photography) every photographer made the preparation of sensitized paper his special study, and knew the theory as well as the practice of what he was using, but in these days of trade production photography is reduced to such extreme simplicity that one has only to follow blindly the printed instructions to obtain certain results; but to be able to vary these results at will it is necessary to have at least some elementary knowledge of the materials in which we are working, and in view of encouraging a thirst for knowledge, a few notes may not be out of place to exhume this beautiful but lost art of silver printing.

In all silver printing-out processes the starting-point is that silver chloride darkens

on exposure to light, the image being of a violet tint, and from which, if placed in water, free chlorine will be liberated. The light therefore converts silver chloride into sub-silver chloride and chlorine gas. When this sub-silver has been formed and is fixed by means of potassium cyanide, ammonia or sodium hyposulphite, it dissolves the silver chloride, leaving metallic silver. One would almost think this would make a printing process, but it is not so, as without some other substance the image does not go deeper than this violet tint, which almost fixes away. However, if brought into contact with some organic substance, such as albumen, gelatine or arrowroot, the image prints of a reddish color, and on exposure to light will go through all stages to almost black; showing that some organic substance is required to aid the decomposition. There is one matter to be noticed if we wish to arrive at this black stage, which is that the silver must be in excess of the chloride in the proportion of one to eight. We will now proceed with the preparation of the paper, which for smooth surface should be a photographic paper, either Rives' or Saxe's, while for rough surfaced-work Whatman's drawing papers are the most suitable.

Now most papers, except blotting and others as porous, contain an organic substance in the shape of size, so that for those who do not wish to go to the trouble of preparing gelatine or arrowroot, the paper can be used straight away, and I find the results are just as good, especially if the image is to be colored upon—although in rough, heavy drawing papers the image is certainly kept on the surface by adding to the salting solution 12 gr. of gelatine to 1 oz. of water. The nature of the size used plays an important part in the color of the image after printing; for instance, Rives' or Saxe's papers are

\* Read before the Manchester Amateur Photographic Society, March 12th, 1895.

starch-sized, which imparts a purple color to the print, while English papers like Whatman's are gelatine-sized, which prints of a reddish color.

Salting the paper is the next step, and we are met on the threshold by the question, Which is the best chloride to use? It matters little, for it may be any chlorine short of chlorine water or hydrochloric acid. The following produce the best results: sodium chloride (common salt), barium chloride, and ammonium chloride; but for myself I prefer the latter, as, besides being the strongest of the three, the image prints of a good toning color. If the others are used, we must bear in mind that for every 100 gr. of ammonium chloride we must use 110 gr. of sodium chloride, or 220 gr. of barium chloride. A medium strength of salting bath for negatives of average density (and here I should like to point out one of the beauties of this process—that is, that you can alter your paper to suit the different qualities of your negatives) is 8 gr. of ammonium chloride to the ounce of water; and if tones tending to a platinum black are required,  $\frac{1}{8}$  gr. of potassium bromide should also be added to an ounce of water; while if results tending towards sepia are required, a minute trace of potassium bichromate should be added, just sufficient to give the bath a pale lemon color. If the negative to be printed has excessive contrasts, the best results are obtained by weakening the bath to 4 or even 3 gr. of chloride to the ounce; but if the negative is thin, we might advantageously increase the strength to 8 gr. per ounce.

For 20 oz. of solution the formula reads thus:

Ammonium chloride....	160 gr.
Potassium bromide.....	3 gr.
Potassium bichromate..	1 gr.
Water.....	20 oz.

We take six sheets of paper, and having marked the back with some distinctive mark, we proceed to immerse each sheet bodily in the solution, brush with a camel-hair brush to free from air-bells, turn the sheet over and brush that side. Repeat this with the other five sheets, and when all are immersed take the bottom one, that is the first, and after draining for a few seconds hang up by pins on a lath or any other means that may be thought best. When pins are used they should be black ones, as contact between the metal and the silver causes decomposition, and consequently discoloration. The paper in this state will keep indefinitely, and is best kept in a book or between blotting boards.

It is now ready for the final stage, namely, sensitizing, and it is in this part of the process that most failures are met with. As I said near the commencement, the average strength should be one of salt to eight of silver, so with the salting formula given, the strength of silver bath would be 60 gr. of silver; nitrate to each ounce of water, and this solution should be either quite alkaline or quite acid. The alkaline bath is made by adding carbonate of soda until red litmus paper turns blue. Paper sensitized on this bath gives the best prints, the only fault being that it does not keep for more than two or three days, so should be used up at once. The acid bath is made by adding 25 gr. of citric acid to each ounce of solution, when the paper will keep for a week or a fortnight without discoloring, although all acid paper generally tones badly, and dries rather weak.

Sensitizing may be done either by brushing or floating. I always use the latter, but a few remarks on both may be of use. The simplest form of brush is a piece of swansdown calico, doubled in two, and in the middle of which a piece



of celluloid is placed. Two quarter-plate pieces of glass are now placed on the outside, allowing about one inch of cloth to project; the whole is now bound with cord or rubber. A piece of glass is obtained about an inch smaller than the paper to be sensitized, and after tucking the sides under the glass, it is placed on some support. The brush is now dipped in the solution and laid lengthwise on, in broad strokes, afterwards in a transverse direction; the paper should now glisten with excess of silver. Take from the glass and pin to a board, when a few drops of nitrate should drop off, to be caught by a piece of blotting-paper, and placed among the residues. The only advantage this method possesses is that a little solution can be made up at a time, and the outlay of a bath is avoided.

The bath I use consists of 1 oz. of silver nitrate in 8 oz. of water, which is quite sufficient to well cover the bottom of a 12 by 10 dish. We take a sheet of paper, curve it outwards, and lay one corner on the solution, and then, gradually lowering the whole, let it remain for a few seconds. Then raise one end, afterwards the other, and if any air-bells be seen they should be touched with a glass rod or match stalk to burst them. Let the sheet remain on the bath till it lies perfectly flat, then taking hold of two of the corners draw it slowly over the edge of the dish, the capillary attraction drawing back the superfluous silver, and hang up by pins till partly or surface dry, but still retaining moistures, when to secure the best results the paper should be floated again. It is very little trouble, and the extra amount of silver taken up is very slight.

After two or three 12 by 10 pieces (or their equivalent) have been floated, a few drams of a strong solution of silver should be added to make up for that taken in

the form of silver chloride in the paper, and before using again should be tested as to its strength by an argentometer. I keep the silver bath always the same strength for hard or thin negatives, altering only the salting solution.

The paper should be dried before the fire before placing on the negative (which should be varnished, or we may be surprised to see some pretty glistening spots of metallic silver on the film, which are very difficult of removal). The printing should be carried rather deeper than is usual with emulsion papers, as much depth is lost in the fixing. After coming from the frame they should be of a purple color, and after being well washed in several changes of water should become of a brick-red tint. If they remain purple in the fifteen minutes' washing, they should be immersed in a solution of bromide of potassium made by dissolving half an ounce of the bromide in 10 oz. of water. A dip in this is sufficient, when they will immediately turn a bright red—just the color for toning. The last washing water should be perfectly clear, having no milkiness, which is free silver nitrate in the form of chlorine.

The image can now be toned in any bath the operator may think fit to use, platinum, or gold with borax, lime, billiard chalk, sodium tungstate, sulphocyanide, or combined toning and fixing, the only difference being that for plain paper the bath should be diluted to half the strength of what is required for a gelatine emulsion paper, as Ilford or Solio.

When sufficiently toned, the prints should be placed in a dish containing a handful of salt to about 40 oz. of water to stop any further action. They are then washed and fixed in a 10 per cent. solution of sodium hyposulphite; ten minutes will be sufficient, when they should be

well washed in running water for two or three hours, and cut, dried and mounted in the usual manner.

Weak or insufficiently printed images can be satisfactorily developed or intensified by means of a solution of gallic acid, 2 gr. to an ounce of water, the print being immersed in the solution without previous washing. When the desired intensity has been obtained, wash well, tone, fix, etc., as usual.

The description of the process is lengthy, but if attempted, will be found extremely simple, and the results, if not a joy for ever, are things of beauty, and will outlast any of the silver printing processes of to-day. (Mr. Wade then demonstrated the practicability of his process by toning and developing different kinds of paper.)

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### OUR ILLUSTRATION.

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We furnish our readers this month a photographic frontispiece made on a brand of gelatine printing paper that is comparatively new to our Canadian workers, although the name of Brown and Palmer is a well-known one in the States. "Malmedy" paper is a thoroughly honest paper, easy to print and tone, yielding results that are very pleasing, as is shown by the illustration.

The negatives from which the prints were taken were made expressly for the occasion by Mr. J. J. Millikin, one of our leading Toronto photographers, and simply show the average work turned out by this gallery.

Mr. Millikin has used "Malmedy" for some time, and speaks very highly of it.

### NOTICE BOARD.

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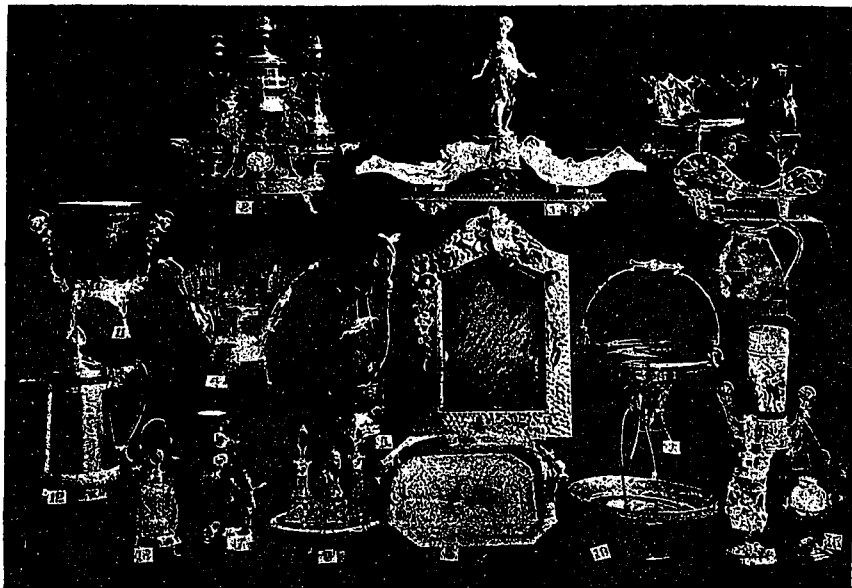
**Cloud Photography**, with Bausch & Lomb Opt. Co.'s Bichromate of Potash Cells. These cells are of great value in outdoor photography for the purpose of straining out—absorbing—the violet and blue rays of light which act most strongly upon the sensitive plate, thus giving an equal amount of exposure to the sky and cloud, and to the objects on the earth. Without this process, the beauty of cloud effects and the increased perspective produced by the cloudy sky are lost, because under ordinary conditions the sky is highly over-exposed, or when cloud effect is sought after, the balance of the plate is under-exposed. Furthermore, these cells are valuable in differentiating the various colors, which abound in almost all landscapes, thus increasing the realistic effects. While we send them out filled with a standard solution, which is tested with the spectroscope, its density may be varied to suit different requirements, thus making them applicable to all classes of work. They can be used with the ordinary plates and the usual methods of development. These cells have been used by the U. S. Weather Bureau with great success for making photographs of Cloud Phenomena, and will be found a very useful adjunct to every outdoor outfit. The cells are formed of a glass ring of equal thickness throughout, cemented between two pieces of optical glass, the surface of which are ground and polished perfectly plane and parallel. Each cell is mounted in a brass ring from which it is removable, this ring being pro-

vided on its inner surface with a cork lining, which is fitted on the hood of the lens, thus permitting the use of the lens with or without the cell. The cell is packed in a box with suitable pipette for filling, also a pair of forceps, and is accompanied by complete instructions.

**The Gundlach Optical Co.** have got out a new lens, as will be seen by a glance at their advertisement in this

## BOOKS AND PUBLICATIONS.

**SPRANGE'S BLUE BOOK** for amateur photographers, for 1895. Edited and published by Walter Sprange, Beach Bluff, Mass. This yearly directory makes its appearance this year in paper covers. It is somewhat bulkier than last year, contains corrected lists of the amateur societies and much information of value.



PRIZES OFFERED FOR COMPETITION AT TORONTO CONVENTION

issue. It is an anastigmat lens, and will be known as the Turner-Reich lens. It works at F. 7. 5. We had an opportunity of seeing one of the first of these lenses tested at the factory. The result of the test proved the combination of the Turner-Reich to be as near perfect as one would think it possible in a lens. One of their catalogues will interest you.

**PENROSE & CO.'S CATALOGUE** of all requirements for photo-mechanical processes. This catalogue is reprinted from the Process Year-book issued by this firm, with the addition of a comprehensive index and revisions to date, and gives a full description of the very complete line of photo-mechanical requirements carried by them.

## PHOTOGRAPHY AND THE INDIAN.

By F.C.S.C.



OUR simple child of the forest has some peculiar ideas on the subject of photography. Deep in his haunts, far from "the sights and sounds of civilization," where the "white-man-with-the-box" has never before penetrated, he regards the invading camerist with the deepest distrust. "What does he point that thing at me for?" he soliloquizes; "that thing that walks on three legs; it must be some new kind of Wendigo. I will go where it cannot see me." And to the despair of the camera's owner, who has been, as he thought, stealthily focusing him, the noble savage stalks away. Persons who have read Fenimore Cooper will have observed that "noble savages" always "stalk"; they never walk in the ordinary manner.

It is hard to determine what the exact causes for this distrust are. Those Indians who have never seen or heard of the camera cannot very well understand its function, and as they do not see any direct result following its being pointed at them, the only natural deduction to make is that it is more or less connected with the evil one. Perhaps it is this very non-committal policy of the camera which inspires the adverse feeling towards it. If it went off with

a bang, like a gun, or performed some other act equally intelligible to the savage intellect, its *raison d'etre* could be determined, but, as it is, it just simply stands there for a little while, blinks for a moment, and then goes away. Now why does it do that? It is obvious that it doesn't do it for nothing, so it must have some ulterior design upon the unfortunate blinked at.

Maybe it has caught a glimpse of the Indian's soul, and will show it to the bad spirit, who will claim him as his own before he can slip into the happy hunting grounds of his fathers. Maybe it has cast an evil influence over him which will cause him to shoot badly in future, or have ill-luck in fishing, or, perhaps, it will make him sick sometime and he will die. These are all weighty matters with him, and are to be considered carefully. No suggestion as to the improbability of these things happening comes to his mind, and, therefore, he thinks the wisest course to pursue is to keep out of danger by not allowing the thing to look at him.

In a certain locality in one of the North-western states, no amount of persuasion or even of money will induce an Indian to stand before the camera. Some time ago, a gentleman there persuaded two young braves to let him photograph them. Shortly after this, on the same day, they happened to disagree with a farmer about the ownership of some horses which, as he had raised them, the farmer, not unnaturally, thought belonged to him. The Indians, though they had not procured them in the ordinary way through the medium of

exchange, yet held the view that the horses were theirs, and, failing to convince the farmer otherwise, they shot him. A change of scene then became necessary for them, so they concluded to go to a distant reserve for a lengthened stay. The man who photographed them was satisfied from the descriptions given that the Indians he had taken and the murderers were the same, so by means of his photos they were identified, brought back, tried, and hanged. If the camera is going to combine with the hated pale-face to curtail the innocent pleasures the down-trodden red man, it is no wonder that those Indians object to it.

Last summer I was going up Rainy River on one of the steamers running between Rat Portage and Fort Frances at a time when, owing to the high water, considerable difficulty was experienced in ascending the rapids. There are no locks or other improvements to render navigation easy, so a method is adopted which works very well under proper conditions.

On the Canadian side of the rapids is an Indian village, the whole available male population of which turns out to warp the boats up. Of course they do not do this from a sense of duty or from the extreme love they bear towards the white man, but because the successful accomplishment of pulling a boat up entitles the band to a present of three bags of flour.

Usually one end of a long cable is made fast ashore and the other end wound in by the capstan, the Indians furnishing relays to man the capstan bars and coil in the slack rope. On

this occasion the length of rope was insufficient to permit of this course being followed, so the Indians remained on shore and hauled on the line instead. The passengers also landed to pull, for as their arrival at Fort Frances was dependent upon their getting the boat over the rapids, all were willing to help. I went ashore with the others, taking with me a small hand camera, thinking that possibly I might be able to secure something.

The combined efforts of both passengers and natives were insufficient to pull the boat up; twice she reached the crest of the rapid and twice she went back. Before making a third attempt, the captain induced a number of squaws, who had been interested spectators of our previous efforts, to help. Now it must not be supposed that the captain in thus requesting the participation of the weaker sex in coarse manual labor was utterly devoid of all those feelings of gallantry which should ever actuate a captain's breast, for, notwithstanding the light in which woman is regarded by other peoples and races, she is unquestionably, among these Indians, the laborer of the household.

With the aid of the increased strength, the boat once more reached the crest and, as before, stopped, but this time she did not go back; the long line of struggling beings, red and white, male and female, threw still more weight into their work, the cable tightened, the boat moved a little, then slowly, very slowly, crept up. It was absolutely necessary that there should be no abatement of the strain on the rope, or we would have

the whole performance to enact over again ; but, after the crest of the rapid had been passed and a fair start made beyond, I thought that the little pulling I was doing could conveniently be dispensed with, so I left the line and prepared to photograph the situation.

That photo would have been my masterpiece. It would have had no equal anywhere on earth. What other circumstances would have furnished the occasion for such a picture? Before we were about one hundred people strung along a rope, fifteen or twenty of them white and the rest copper-colored, the Indian equivalent for the fair sex predominating. There was no defined arrangement as to color or sex, each person had taken hold wherever a vacancy had appeared and the result was that here and there could be seen a white man, an Indian and a squaw, all pulling together, the white man with a must-not-let-her-go-back-again-or-we'll-never-get-her-up expression, the Indian pretending to be doing it all himself, and the squaw hauling like a horse and grinning like an ape.

The moment I pointed the camera at them, every mother's daughter of the squaws dropped the line and fled. I promptly suspended operations and resumed my place in the line. The squaws, seeing that all danger was over for the moment, came back just in time to save the boat from once more going down, and me from becoming an object of the vituperation of an excited river captain, and the not too complimentary language of a profusely-sweating passenger list. As it was, some of the remarks

directed towards me led me to think that the appreciation of the art-science of photography is apt to languish when placed in juxtaposition with the prospect of passing half a day climbing Rainy River Rapids.

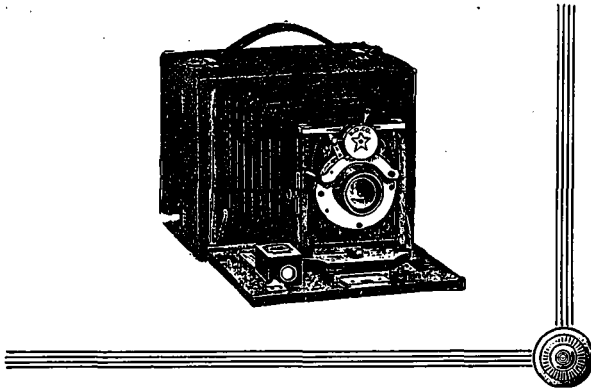
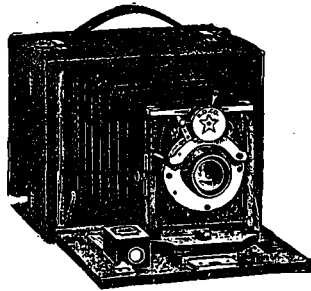
A grand pow-wow, at which several great men and chiefs attended, was once held near Rat Portage, and with the object of photographing some of the scenes I went out to the place of meeting. Each chief had on his Sunday-best, or rather what corresponds in his eyes to a Sunday-best. I suppose he would call it his pow-wow-best, but whatever its proper designation was, it most certainly transformed a harmless enough Indian into a most fearsome looking savage. Two or three huge feathers were stuck in his head-gear, and from various available points on his person hung sundry articles of bead-work adornment, a combination of blanket, buckskin and breeches covering the rest of his body. The usages of dusky society evidently demand that a certain amount of paint shall on such occasions as this form part of the necessary adornment. I believe that this idea obtains also in society more civilized, though not quite to the same extent. The Indian, unlike his white sister, does not attempt to imitate nature, but rather to out-do her, and he succeeds, for of all the most unnatural looking objects, a painted savage is without his peer.

Each one of these fantastically garbed individuals favored the audience with a speech, in which, I suppose, he expressed the "very great pleasure it gave him to be there on such an occasion, and that as he had

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come unprepared to make a lengthy speech, he would make way for Mr. Man-with-the-long-head, to whose remarks he felt sure they would all listen with great attention." Not being able to understand the language used by the learned speakers, I am unable to state positively that these were the exact words used, but, from my experience at other public meetings, I think that they were.

Interspersed between the speeches were exhibitions of the Indian's interpretation of musical art. As the only sources from which he obtains melody—I won't say harmony—are from his own leathery lungs and a sort of deer-skin drum, his repertoire is rather limited, in fact it is confined to those selections with which the spectators of a pow-wow are entertained. The proceedings begin by the drum being placed on the ground, when around it squat a number of individuals who may, perhaps, have a local reputation as talented artists in their particular line. The whole aim of the "musicians" seems to be to pound out a continuous succession of beats on the drum, with no particular idea of producing anything except noise, to which accompaniment each one commences a monotonous, wailing, dirge-like chant, the burden of which to the uninitiated is the constant repetition of the sounds "Hi, yah! hi, yah!" *ad infinitum*. Each of the ornamented braves then commences to dance in a circle around the group at the drum. In his course around he throws himself into a number of contortions and positions, which, for all I know, may demonstrate to the other natives the degree of terpsichorean grace to which

he has attained; or, perhaps, he is going through a series of *tableaux vivants* illustrative of his valorous doings in the days of yore. The white spectator is unable to determine exactly what the performance is intended to represent, and is at liberty to form his own opinion. The next part of the programme, however, he quite comprehends, and if the weirdness of the previous scene has, for the time being, carried him away from all thoughts of civilization, he is quickly brought back again by observing an ancient aborigine doing that office essentially peculiar to civilization—passing round the hat. He stops in front of each white man, and generally succeeds in getting a respectable collection. It is not stated to the charitably-inclined that the proceeds are to be devoted to some humane object or anything of that sort, but as some of the recipients of the fund are subsequently seen to be in that condition which is not produced by drinking tea, it can easily be surmised that the money was well spent in infusing new spirits into the too stolid red man.

Through an interpreter, I requested the pleasure of being allowed to perpetuate to posterity the exceedingly fantastic appearance of the decorated braves. After thoroughly discussing the matter, they informed me that they were prepared to be photographed if I would pay them fifty cents apiece. They were willing to assume all the risk there might be connected with the operation for that consideration. They objected, though, to the drum being included in the arrangement; possibly

(Continued on page xii.)