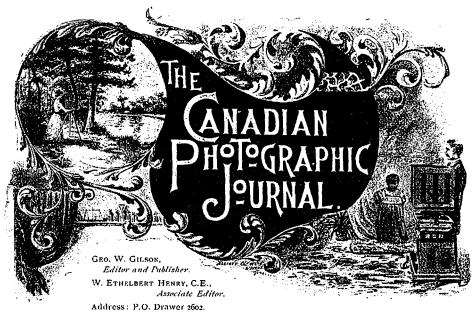
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Devoted to the Interests of the Professional and Amateur Photographers.

Vol. II. Toronto,	Hovember,	1893
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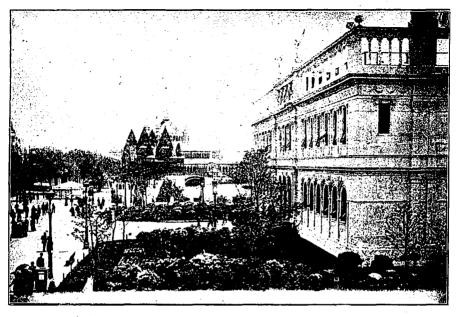
OUR ILLUSTRATIONS.

The lovely view which is our frontispiece this month, will undoubtedly prove a pleasing change to our readers, after such a long series of portrait work as we have had.

The work is entirely the production of Mr. H. C. Tugwell, of this city, and is well up to the usual high standard of this gentleman's work. A portion of the credit for the artistic merit of the picture is, however, certainly due to the material used; for "N.Y." Aristo. paper lends itself to this class of work exceptionally well, having a range of tones adapted to yiew work and giving the same beautiful effect that has made it so successful in the professional studio. The plate used, "The Star," has also played well its part. The "Eagle" and "Star" plates as manufactured by Messrs. Anderson & Robinson, have rapidly worked their way to the front and now occupy a high place in the estimation of Canadian plate users. Our illustration shows well their marked adaptability for view work.

No. 10.

The beautiful views of the World's Fair, which Mr. Walter E. H. Massey has kindly furnished our last two issues, have attracted a great deal of attention and comment. Mr. Massey was wonderfully successful in his results, and happy in the selection of his views. We have much pleasure in presenting our readers this month with another set of four charming pictures by Mr. Massey.



VIEW FROM THE INTRAMURAL ELEVATED RAILWAY—WOMAN'S GUILDING ON THE RIGHT.

THE P.A.C. OF 1893.

The convention of 1893 has come and gone, and, we feel sure, has left all who attended greatly benefited. Although not quite so largely attended as some preceding meetings, it was, in many ways, undoubtedly one of the most successful conventions we have ever had.

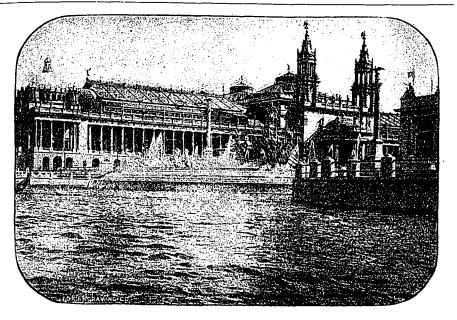
The banquet was a most pleasing feature and a drawing card; and the result of the few hours spent together in such a pleasant way, will be felt for some time to come in the closer cementing of already existing friendships and the smoothing over of old differences.

Who could resist extending the hand of good fellowship, even to one's most bitter opponent, after partaking of that which so effectively disarms a man—a good dinner—and followed up by the few speeches, not too many nor too long, but each one brimful of a good feeling that appealed directly to everyone present?

The new plan of distributing the prize money seemed to meet with general approval; and if prizes must be given to insure attendance of exhibitors, it may be as good a plan as any upon which to secure general satisfaction.

The work shown, as a whole, was of a high grade. The great improvement, not only in the merit of the pictures themselves, but in the taste and care shown in the mounting and arranging as well, must have been gratifying to all.

The cloud which for a short time hung over the few opening hours of the convention, threatening to burst, happily at its darkest moment passed over, giving way to sunshine, which was all the warmer for the passing darkness, and with the exception of a



PHOTO, DY W. E. H. MASSEY

THE GREAT MACMONNIES FOUNTAIN IN FULL PLAY. MACHINERY HALL IN THE BACKGROUND.

few hours wasted on that vexed question, prizes, and the disappointment at the non-arrival of some expected guests, everything went off as merrily as the proverbial marriage bell.

We feel that we can say, without fear of contradiction, that for average quality of work shown, our 1893 convention would be a credit to any land under the sun.

THE CONVENTION.

Victoria Hall, Toronto, Nov. 1, '93. The morning was taken up by the final arrangement of exhibits. At 4.30 p.m., President Walker (now of Woodstock) called the meeting to order, after which the minutes of 1892 were read by Secretary Poole and adopted.

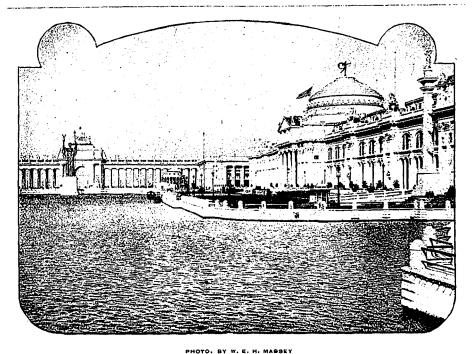
President Walker then gave the following brief but hearty address of welcome:

PRESIDENT WALKER'S ADDRESS.

Ladies and Gentlemen, Officers and Members of P. A. of C.:

It affords me a great deal of pleasure to again look into the faces of so large a number of the representative photographers of Canada, and to extend to you a most hearty greeting.

We have come together once more, as has been our custom for the past ten years. Let us try and promote those principles that weld our hearts together as one man. Fraternity is the pivot upon which hangs the success of this and kindred gatherings, and I trust that true brotherly feeling may so pervade this meeting that we shall all return to our homes with a higher conception of the true ideal of life, and with the feeling that, after all, there is something more true and noble than gratifying our personal and selfish ambitions. It is not my purpose at this time to make any remarks along the line of the progress of the art and science of photography. In this advanced age, we are so favored with photographic literature, that hardly does a new invention, or even a new formula, suggest itself to the mind of the inventor before it is flashed to the uttermost parts of the land, so



VIEW ON GRAND BASIN. AGRICULTURAL PALACE ON THE RIGHT.

that he who runs may read. It is true that there have been some notable advances made in photography since our last meeting, but I will leave their discussion to others.

I see with us this afternoon quite a goodly number of prominent American brethren, to whom I am sure you will all extend a most hearty greeting. I see Mr. Mora and his assistants, of Rochester, and Mr. Albert Harry, and others.

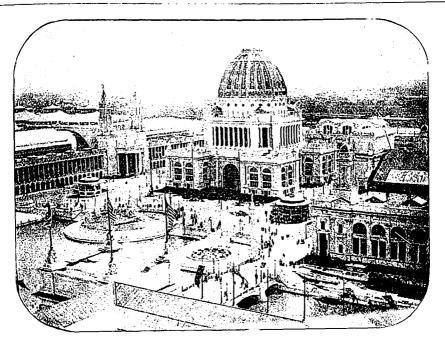
You will all join with me in giving them a hearty greeting. We also have with us Mr. and Mrs. Clarke, representing the American, and Messrs. Gilson and Henry, the Canadian photographic press. You will join with me in giving them a hearty welcome. We are also very glad to see Messrs. Stanley, of Montreal (whom we are glad to see with us), and J. C. Anderson, of Toronto, to whom we are largely indebted for the handsome list of prizes which we are able to offer you this year. Your committee has been faithfully at work, as you will see from the elaborate programme which they have been enabled to place in your hands, and we trust that this tenth Annual Convention will record itself as the most successful and progressive that has ever been held in our fair Dominion. I now take much pleasure in declaring the convention open for the transaction of business.

Right here, the differences existing between Mr. Stanton and Mr. Walker were amicably adjusted.

Mr. Still (Orangeville) requested an extension of time on his report as to crayon frauds, etc., which was granted.

Mr. Cunningham reported as to his interviews with various lawyers and members of Parliament on the same question, showing that it was a most difficult matter with which to deal.

Considerable time was then taken up in the considering of the proposed constitution and by-laws, which were taken up clause by clause. This matter not being finished at 6 o'clock, it was carried over to the following morning, and meeting adjourned until 8.30 p.m.



PHOTO, BY W. E. H. MASSEY

PANORAMIC VIEW FROM THE ROOF OF THE MANUFACTURES BUILDING. (LOOKING TOWARD THE ADMINISTRATION BUILDING).

Meeting called to order at 8.30 p.m. Letters of regret at not being able to be present as promised were read from J. F. Ryder, of Cleveland, and J. Landy, Cincinnati.

Secretary-Treasurer Poole gave his report as to financial condition of the Association.

E. POOLE, IN ACCOUNT WITH PHOTO, ASSO-CIATION OF CANADA.

DR.

Balance from 1892	\$ 36	09
Members' annual dues, 1893	139	00
Sub. prizes, Stanley Dry Plate Co.,		
\$150, less collection	149	87
Sub. Robinson, Anderson & Co., in ad-		
dition to trophy	30	00
Sub. C. E. Hopkins (Omega paper)		
\$100, less collection	99	62
Sub. CANADIAN PHOTO. JOURNAL	20	00
-		

Travelling expenses of committee,		
railway fare only	\$10	50
Two sets circulars	5	50
Postage and clerical work	6	85
Badges	7	00
Hack hire for Miss Washington	ı	75
Cash services of Miss Washington	5	00
Lumber and carpentering	23	25
Clerk	5	00
Rent of hall, and doorkeeper's at-		
tendance	27 ²	00
Stationery, ink, etc		65
Prizes to C. S. Cochran, \$50 ; Messrs.		
Walker, \$65 ; Baikie, \$35 ; Kellie		
& Co., \$30 ; Murray, \$60 ; Park		
Bros. \$10; Still, \$40; Barrett,		
\$10; Leatherdale, \$15; Curtis,		
\$10	325	00

65

57 08

Cĸ.

	\$474	58
Balance from 1892	. \$ 30	i og
Members' dues	. 139	00
Prize money	. 299	49
	\$171	=8

Balance on hand....

\$474 58

 Expenses of Association
 \$ 92 50

 Prizes
 325 00

 Balance on hand
 57 08

\$474 58

Audited by E. STANTON, FRANK COOPER.

Messrs. Mulholland and Jarvis were appointed to interview the city press as to giving reports of proceedings, etc., in the local papers. Mr. Cunningham then arose and spoke most feelingly of the absent brother, Mr. George Knowlton, whose enforced absence, through severe illness, was felt by everyone present. The high position Mr. Knowlton holds in the esteem of Canadian photographers was instanced by the wrapt attention given to Mr. Cunningham during the twelve minutes that he spoke in glowing terms of the well-known characteristics of the manly, honest, ever the same under all circumstances, George Knowlton.

Mr. Cunningham closed his remarks by moving that the Secretary be instructed to telegraph Mr. Knowlton the greetings of the Association. This motion being doubly seconded by Mr. Gilson and Mr. Stanton, it was carried with great fervor, and the following telegram prepared :

TORONTO, NOV. 2nd, 1893. To Geo. Knowlton,

P.O. Box 803,

Auburn, Maine.

Photo. Association sends greetings. At banquet also many kind remarks and references. E. POOLE, Secretary.

The following telegram was received in answer from Mr. Knowlton :

LEWISTON, Maine, Nov. 2nd, 1893. To E. POOLE,

Sec'y P.A. of C.

Greetings and remembrances received. Many thanks. Success to convention.

GEO. KNOWLTON.

The members then formed in a double line and proceeded to Harry Webb's, where a most substantial banquet was served ---(account in other columns).

HALL, NOV. 2ND. Meeting called to order at 10.30 a.m.

The Committee on Prizes reported as follows :

We, your Committee *re* Prizes, beg to report as follows :

Believing that it is not within the province of a convention to award prizes, and that the same is not beneficial to the majority of the members, we would recommend that all prizes be abolished for the year 1894. We consider that it would be conducive to a better feeling among the photographers of Canada, and that the money donated by manufacturers (if any) should be spent for the general good of all members of the Association.

FRANK COOPER, E. STANTON, A. M. CUNNINGHAM.

By motion, report was referred back, to enable committee to devise some plan whereby, if prizes were given in '94, a fair and equitable manner of distribution thereof can be secured. This matter of prizes was left in the hands of Executive Committee for 1894, who reported later as follows :

The report of the Executive Committee *re* Prizes :

We beg to report that as the classification in the prize list differs from that of last year in a large measure, we recommend that unless in any instance there is a positive breach of the motion as to winners of first prizes, all exhibitors participate according to the award of the judges.

J. C. WALKER, FRANK COOPER.

By motion, the constitution and bylaws as read and amended, and now read by Mr. Cunningham, were carried.

By motion it was arranged that the judges this year be appointed as follows: The Executive Committee to appoint one, the Association to appoint one, and the two thus appointed to appoint a third. The Secretary was then instructed to telegraph Cramer Dry Plate Works, "Where is Mr. Bassett?" who had been engaged, at quite a high figure, to give a demonstration; to which a reply came, "Too busy to attend."

A motion was then made and carried: "That if any prizes be not awarded, the money be placed in the treasury, if no objections were made by the donors."

After losing considerable time over the mooted question of prizes, it was moved and quickly carried : "That the matter be referred to the Executive Committee, and the programme be proceeded with." An interesting and instructive paper was then read by Mr. W. Ethelbert Henry, on "Money-Making Specialties for Photographers." Mr. Henry's paper was heartily received, and a vote of thanks tendered him.

A paper by G. Hanmer Croughton, of Rochester, on "The Art Side of Photography," was read by the Secretary, the gentleman himself being unable to come at the last moment. Mr. Croughton's paper was well received, and hearty vote of thanks given him. Mr.Croughton sent letter regretting his inability to be present.

On motion, it was agreed to have a demonstration in lighting and posing, in Mr. Westlake's studio, 147 Yonge street, and that J. Fraser Bryce (he arriving at that moment, and consenting to do so) act as demonstrator, with the understanding that, as h's voice was not in good working order, Mr. Cunningham would do the talking.

A letter was then read from Mr. D. H. Hogg, offering \$50.00 for benefit of Association next year. Messrs. Mulholland & Sharpe offered same amount. Mr. Stanton, for Cramer Dry Plate Works, offered same amount, although he stated that he was unauthorized to do so, yet Mr. Cramer was always ready to respond to anything of that kind.

It was then moved and carried: "That the Government be interviewed on the question of tariff on paper and plates," and committee was appointed.

HALL, Nov. 3RD. The demonstration at Mr. Westlake's studio was largely attended, and proved to be one of the features of the convention. Mr. Bryce was at his best, and those who were present derived great benefit from witnessing his masterly handling of light and subjects. After the demonstration, the members assembled at the hall. The attention of the members was called to some large photographs on the platform, presents from Mr. Stein, of Milwaukee ("The Smithy"); and from J. Landy, of Cincinnati ("Man, Know Thyself" and "Moses Coming Down from the Mount").

On motion, duly seconded, it was decided to accept the artistic work of these gentlemen, and use them to form the nucleus of a valuable photographic collection, which will be added to from time to time, not more than three (3) in any one year, the selection to be made by the Association; and further, that the thanks of the Association be tendered to the donors of the three pictures just received, and that Messrs. Stein and Landy become, and are hereby considered, honorary members of this Association, and that hereafter the authors of accepted photographs shall be considered honorary members.

Mr. S. H. Mora, of the Eastman Kodak Company, then read a most interesting paper on "Gelatino-Chloride Papers: Their Advantages and Manipulation." Mr. Mora's paper was much enjoyed, and received a vote of thanks.

Mr. Stanley gave notice of a motion re prize moneys, etc.

AFTERNOON SESSION.

The following report by Committee on Crayon Frauds, was read, and by motion adopted :

To the Photographic Association of Canada:

GENTLEMEN,—Your committee to whom was referred the matter of crayon fakirs and frauds, report :

That after communicating with the Attorney-General, and getting the assistance of a lawyer, to look into the statutes, we found that County Councils have no power to impose a tax on pedlars of pictures or tickets. We attended the Legislature twice and urged that the statutes be so amended as to enable County Councils to pass a by-law imposing a tax on pedlars of the above class; but as we had been delayed by the death of the late Mr. Bigelow in preparing a bill, and as requests of a somewhat similar nature had been thrown out in committee, we were advised to have a bill prepared and presented at the next session of the Legislature, covering the several points, and also to secure the co-operation of as many influential members as possible.

We, your committee, would therefore recommend, that the matter be fully discussed, and that a committee be appointed, composed of members who live in Toronto, to prepare or get a bill prepared and presented at the next session of the Ontario Legislature, and that the several members of this Association request their representatives in Parliament to support the measure.

All of which is respectfully submitted.

W. STILL, Chairman.

It was then moved by Mr. Stanley, seconded by T. Baikie : "That clause 2, sec. vi, of adopted by-laws be amended by adding :—But in such cases, competition shall not be limited to the use of any particular plate, paper, or other form of photographic goods." Carried.

Mr. Stanley then offered \$50.00 towards funds of Association. Mr. Anderson followed with an offer of \$50.00 (omitting the ten cents this year). Officers elected for 1894 :

President, A. M. CUNNINGHAM, Hamilton.

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- rst Vice-President, J. FRASER BRYCE, Toronto.
- 2nd Vice-President, F. COOPER, London.
- 3rd Vice-President, W. J. JOHNSON, Picton.
- Sec.-Treasurer, E. Poole, St. Catharines.

Matter of incorporation, and diplomas for apprentices, was left in hands of Executive Committee. Vote of thanks was tendered (heartily) to stock dealers and manufacturers for the treat given by way of banquet.

The judges having "tied" three persons as retouchers for third prize, the Sec.-Treasurer was authorized to pay all three the full amount of third prize.

Moved by E. Poole, seconded by C. S. Cochran: "That we heartily tender our thanks to the judges, S. H. Mora, Esq., W. H. H. Clarke, Esq., and W. C. Duryea, Esq., for the equitable and satisfactory way they discharged their duties." Also a hearty vote of thanks was tendered to the visitors from United States.

AWARDS OF JUDGES-NOV. 3, 1893.

- CLASS A (Stanley plates)—Chiaroscuro, Beatrice, Artibusque, Excelsior, Sunbeam (short 4, 8×10), Uno (short 5, 8×10), Eureka (short 3, 8×10), Rustic, Knack.
- CLASSE (Stanley plates)--Knack, Chiaroscuro, Uno.
- CLASS D (Stanley plates)—Artibusque, Will Get There.
- CLASS E (Stanley plates)-Knack, Artibusque.
- CLASS B (Star plates)-Phos., Unpretentious.
- CLASS C (Star plates)-No Name, John.
- CLASS D (Star plates)—Unpretentious, Bohemia.
- CLASS E (Star plates)-Phos., Unpretentious.
- CLASS G (Hopkins)-No exhibit.
- CLASS H (Hopkins)-Phos.
- F. HOPKINS, (Omega)-Rembrandt, Phos., Excelsior, Premo.
- CLASS t (Association prize)--Chiaroscuro, Knack, Uno.

EMPLOYEES CLASS (Retouching)-Uno, Touch-
em-up, (Sapientia Stabilitas, Presto, Re-
condite—tied for third place).
EMPLOYEES CLASS (Printing)-Sapientia Sta-
bilitas, Presto, Uno.
Chiaroscuro C. S. Cochran, Hamilton.
BeatriceS. King, Barrie.
ArtibusqueK. W. Snider, Hamilton.
Sunbeam J. F. Jackson, Barrie.
Uno Murray & Son, Brockville.
EurekaW. Johnson, Picton.
RusticW. J. Mertens, Stouffville.
RembrandtC. S. Cochran, Brantford.
UnpretentiousF. G. Westlake, London.
KnackS. J. Jarvis, Ottawa.
PhosE. Poole, St. Catharines.
ExcelsiorJ. T. Baikie, Chatham.
Premo
Will Get There.
No Name Seaton McCully, Toronto.
JohnAngus Barrett, Cannington.
EMPLOYEES.
UnoIn Murray's employ.
Touch-em-up J. A. C. Morrow, Hamilton.
Sapientia Stabilitas, D. F. Yerex, Hamilton.

Sapientia Stabilitas, D. F. Yerex, Hamilton. Presto.....C. M. Presby, Ottawa. ReconditeB. J. Mahon, London.

THE WORK EXHIBITED.

One word would well describe the entire exhibit this year, "excellent," but as we fear our readers will hardly be content with that description, we must "bring up more detail" in our description. This we might call, working up the "shadows." Beginning with our friends from the States, we come first, as we enter the hall, to the extensive display of the Eastman Company, in charge of Mr. Mora and a staff of assistants. Mr. Mora made many warm friends, both for himself and his firm while here. The display on solio and enameled bromide made by the Eastman Kodak Co. was an excellent one and attracted the attention and admiration of every photographer present. The exhibit was made up entirely of prints 8 x 10 to 28 x 32 and well merited the praise bestowed upon it, the unanimous ver-

dict of all present being that it was one of the largest as well as the best exhibit ever made at any meeting of the Association. The prints were of all kinds of subjects, from the light atmospheric effect of white drapery to the solid effect produced by a strong negative, showing the wonderful latitude the paper allows in the negative.

Among the well-known photographers whose work formed part of this beautiful display were Morrison, of Chicago; J. F. Ryder, of Cleveland ; Phil Ryder, Syracuse ; Elton, Palmyra; McMichael, Buffalo; and Henderson, Montreal. A 14 X 17 character print from the studio of Pifer & Becker, Cleveland, O., was exceptionally fine and so universally admired that we have decided on reproducing it in our Christmas number. Watch for it, as it is an artistic gem and an excellent study. The Company was ably represented by Mr. Mora, manager of the Solio department, and Messrs. Robertson, Horgan, and Curtiss, who made several demonstrations showing the ease with which soft, rich, but brilliant, effects could be produced The prints were mounted on Solio. and delivered to the photographers, who carried them home as souvenirs of the convention.

As usual, the Cramer Dry Plate Co. was on hand with an exhibit of work from the leading photographers of America—and the exhibit was the admired of all beholders. In the collection were to be found specimens from the studios of Dana, Stein, Rosch, Sommers, Bell-Smith, Strauss, Steffins, Morrison, and many others, who use only the wonderful plates made by Cramer; wonderful in the fineness of their texture, in their rendering of true color values, their reliability—every emulsion in a certain grade being prac-

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tically the same, and in the great rapidity of the "Crown" brand.

Prominent in the exhibit was a marvelously fine specimen of photography from a plate 20 x 40 inches, of a view in Yellowstone Park. Nothing so fine of this size has ever before been placed on exhibition in Canada. Photographers throughout the country are indebted to the indefatigable energy of Mr. Cramer, which has enabled him to place upon the market plates of unrivalled merit.

Mr. Eldridge Stanton, of Torontothe popular agent of Mr. Cramer in Canada-was in charge of the exhibit, and was on hand throughout the convention, with the best interests of photographers at heart.

Mr. Hopkins was a little unfortunate in not being able to be at the convention himself, and, through some difficulty in the Custom House, the most of his exhibit was detained so long as to prevent its being shown. He had. however, some very striking samples of the carbon paper made by his firm. The Hopkins "Omega" paper, so well known, was well represented through the exhibits.

Messrs. Bradfisch & Pierce had on view six large frames of choice pictures by Baker, of Columbus, and other noted artists; the effects shown were "B.P." has been well to very fine. the front among the favorites in Aristo. papers, and much attention was given to the "B. & P." exhibit. Besides a fine showing in the exhibit of Snider, of Hamilton, it was well represented on all sides of the hall.

The exhibit of the "Eagle" and "Star" Dry Plates was small, but very choice. We noticed some studies by H. Simpson, and by Bryce, that spoke volumes for these plates.

on hand with some very good specimens of work done on his Canadian Aristo paper "O.K." A good deal of interest was taken in this Canadian paper, and a good many took home samples of it to try. Some work done on it while Mr. Landon was here proved very satisfactory. Mr. Landon has worked hard to give Canadians a good Canadian plate, and is now putting every effort into the perfecting of his paper. We wish him success, and hope his efforts will be appreciated.

The Stanley Plate exhibit this year was as usual, most excellent, and while the genial Geo. Knowlton was much missed, still Mr. Stanley ably represented his firm and made a host of friends. The quality of the Stanley plates is too well know to photographers from one end of Canada to the other (and the States as well) to need any lengthy description. Of the large number of prominent photographers whose work was shown in the Stanley exhibit, we must mention Notman, of Montreal; Cochran, of Hamilton and Brantford; A. G. Pittaway, Ottawa; Edy Bros., London; Lees of Hamilton; some instantaneous work by W. Ethelbert Henry, Toronto; some nice things by Jarvis, of Ottawa; J. Thompson, New Westminster; Lepries & Lavergne, Montreal; and some excellent views by Trueman & Caple of Vancouver, and others. The Stanley plate was also well represented in the different exhibits. The work of the different contributors shewed well the good working qualities and wide range of the Stanley Plate.

In "Artibusque Faveo," Mr. Snider, of Hamilton, we have a new exhibitor. His work proved to be well up in quality to that of the older members. He shewed some excellent 8×105 , and Mr. E. C. Landon, of Montreal, was a handsome frame of World's Fair pictures; also three good character studies. The work was done on both "Stanley" and "Star" plates, and "B. P." Aristo. paper.

"Unpretentious," F. G. Westlake, London, used American Aristo. and "Star" plates. We noticed three very good samples of large work, and well executed character studies. The quality of the work was decidedly good.

"Rustic," W. J. Mertens, Stouffville, enjoys a reputation for good work, which is fully sustained by his convention pictures. We find a few gems here that we have already noticed in former issues.

"John," Mr. Aug. Barrett, showed his usual good work. In place of "the clock," of last year, Mr. B. had several "moonlight pictures" of interest.

"Phos.," E. Poole, St. Catharines. A choice collection of good portraits and views, showing the conscientious work of an artist; in fact, just such work as we expect from this good workman. Mr.Poole used "Star" plates and "Omega" paper, and in his hands they were made to show all their good qualities.

"Uno," Murray & Son, Brockville. The Murray exhibit this year was fully up to former ones, and, but for the unfortunate loss of six large photos., which were taken by some unknown parties from the hall, would have scored very high. As it was, twentyeight points were obtained, which was very good considering the loss. Besides portrait work on "N.Y." Aristo. and Platinotype paper, a large number of the noted views of the St. Lawrence River, of this firm, were shown. All the work on "Stanley" plates.

"Premo," W. Still, Orangeville. Mr. Still seems to have a "corner" on good subjects; likewise on good work. Some of his large heads were extremely pleasing, and the quality of his work, as a whole, was commendable.

"Eureka," W. Johnson, Picton. The exhibit of Mr. Johnson, on "Stanley" plates and "Omega" paper, was not large, but made up in quality what it lacked in quantity, and fully sustained his high reputation as a "medal winner." Some poses of a child and large dog were very clever.

C. S. Cochran : "Chiaroscuro," Hamilton studio; "Rembrandt,"Brantford studio. Mr. Cochran's exhibit was, as usual, one of the features of the convention. Mr. Cochran exhibits, as he does everything else, "for all there is in it," and spares no trouble or expense to have his work right. This fact, combined with the very important one of turning out work excellent in quality and original in pose, makes Mr. Cochran a successful photographer, whose pictures are "things of beauty." Besides his usual amount of work both large and small on the usual paper, some exquisite Platinotypes were The entire exhibit was most shown. artistically arranged.

"Excelsior," Mr. T. Baikie, Chatham. The exhibit of Mr. Baikie, on "Stanley" plates and "Omega" paper, was well worth considerable study. His large work was exceedingly good, and the graceful posing and nice use of pleasing accessories shown in his cabinet photos. was most noticeable.

"Beatrice," S. King, Barrie. Mr. King's exhibit attracted considerable notice, both for the quality and finish of the work and the tastefulness of arrangement. Some of his work was particularly good.

"Sunbeam," J. Frank Jackson, Barrie, showed some of the excellent work for which he is noted. Mr. Jackson has a faculty for making American Aristo. paper fairly speak.

THE BANQUET.

At nine o'clock on the evening of the 2nd, after a short business session at the hall, the members to the number of some 65, formed in line and proceeded to Harry Webb's to partake of a banquet, provided by the generosity of the stock houses, and given under the able management of Mr. J. G. Ramsay.

After considerable attention had been given to the satisfying of the inner man, President Walker rapped for order and proposed a few toasts, which were well replied to. "Our American Friends" was taken care of by Mr. W. H. Clark and Mr. S. H. Mora: the American Press, by Mr. Clark for "Our Canadian Journal" Mrs. Clark. was responded to by the Editor, Mr. Geo. W. Gilson, and the associate Editor, Mr. W. Ethelbert Henry. "The Stock Houses" called out some good speeches from D. H. Hogg, J. G. Ramsay, D. J. Howell, and a song without words (or music) from Fred "The Manufacturers" Mulholland. was well taken care of by Mr. Stanley and Mr. Landon, both of Montreal. Mr. Stanley spoke in glowing terms of Mr. Knowlton, who had hitherto represented them in Canada, paying a high tribute to his honesty and business ability, showing how by his own efforts he had carved his way from a boy, working at odds and ends in their factory at Maine, to the management of their Canadian factory. The trust put in Mr. Knowlton was complete, and it had never been abused in any His remarks were single instance. received with great applause. Mr. Stanley then briefly outlined the future policy of his company in Canada, assuring the photographers of Canada that their interests would ever be of first importance to the makers of

the Stanley plate. Mr. J. C. Walker then made a few very impressive remarks regarding Mr. Knowlton's wellknown qualities. After characteristic speeches from Mr. Eldridge Stanton and Mr. Poole had been attentively listened to and applauded, Mr. I. T. Aitkins, of Sudbury, was called on for a song, and responded by singing "There is not another like it," a jolly topical song that fairly "caught the house." Mr. Aitkins possesses an excellent voice, and rendered the song admirably. The members then rose and sang "Auld Lang Syne," and thus ended one of the most enjoyable features of the convention.

CONVENTION NOTES.

The Convention of 1894 will be held at Toronto.

The Question Box was well stuffed this year, many amusing questions being fished out of it.

Mr. Stanton, in the absence of Mr. Bassett, criticised the different slides of professional work as they were passed through.

No one seemed able to "follow the leader" when our little, but sprightly, Secretary vaulted the chair. It was most gracefully done.

The Lime-light exhibition was a good feature, and much enjoyed by all. Mr. Ramsay deserves great credit for the excellence of the slides made by him from negatives sent in by different photographers.

The demonstration at the Westlake gallery was voted a decided success. Mr. Bryce seems to grasp in a moment just what to do with light and subject, and never hesitated a moment as to the proper lighting of the many different subjects presented. It was a treat to see him work. During the balloting for place to hold Convention next year, some one suggested Hamilton; one of the members facetiously inquired: "Where is Hamilton?" and Mr. Aitkins suggested that "Sudbury might be more *exciting*."

Mr. H. Nelson was on hand with a few of his old-time "good ones," which were well received, especially his "James Street, Hamilton." We were, however, disappointed at not seeing his "House at Muskoka," on the screen.

The display made by the "N.Y." Aristotype Co. on their "N.Y." paper was really magnificent, and, considering the short time in which it was prepared, reflected great credit upon the Company, and their agents for Canada, Messrs. Mulholland & Sharpe. The entire exhibit was gotten up in two or three days, and was of additional interest as being all Canadian work. Most of the pictures were from the gallery of Messrs. Park Bros., and the ease with which this paper can be worked, and at the same time be made to yield the exquisite tones it is capable of, is well demonstrated by the fact that Messrs. Park Bros. turned out the pictures they did in such a short time. The exhibit was in the hands of Mr. Lindmmuth, one of the Company's most popular demonstrators, who gave a number of interesting demonstrations. The entire display was in silver frames, and was most attractive.

TORONTO CAMERA CLUB.

OFFICERS FOR :894.

A. W. CROIL, -	-	President.
W. H. Moss, -	-	 1st Vice-President.
GEO. H. GOODERHAN,	-	- 2nd Vice-President.
E. M. LAKE, -	-	 SecTreasurer.

Owing to lack of space our usual Camera Club notes are unavoidably held over until December issue, Christmas number.

EDITORIAL CHAT.

The Photo-American is nothing if not progressive. Vol. 5, No. 1 just at hand, sports a bran-new cover, a decided improvement on the old one and withal, very artistic.

THE well-known gas engineers of Warrington—Messrs. Fletcher & Co. have introduced some new enamels into the market. One of these, a transparent one, can be applied in so thin a film that the most microscopic details of the metal upon which it is used are unchanged. The transparent enamel is chiefly used as a protective coating for cast iron gas rings, bunsen burners, etc., which are thus proof against the inroads of rust, dirt, and smoke.

At the second session of the International Union of Photography recently held in Geneva, there were a large number of members and delegates present from all parts of Europe. After an interesting account, by M. Jansen, of the photographic work of the recent Eclipse expedition and an exhibition of pictures in "Natural Colors," by Lippmann's method, as well as several excursions and receptions during the week, the proceedings were concluded with a banquet. The meeting, as a whole, was conducted on similar lines to the British Convention.

The British Journal contains a useful pointer regarding skylights, the putty of which has become cracked by the hot summer sun. After a few words of advice as to the advisability of attending to painting before the advent of autumnal rains, the writer continues: "But is ordinary lead paint the best for the purpose? We ask this question, as we were recently told by an old hand that the outside of his studio had not had a coat of paint for years, and was still perfectly watertight. At the close of each summer he had the sash bars carefully ' painted' with ordinary gas tar, to which some tallow had been added, remarking that with paint the heat frequently caused it to blister and the putty to crack. With tar, however, the case was different, the heat caused the tar to soften and, if excessive, to run slightly and thus fill up any cracks, if any occurred in the putty, and also bound it to the glass." There is a certain degree of novelty in this system of treating the outside of photographic studios which may prove useful to those-and they are not a few--with leaky roofs in a chronic form.

THE valuable experiments in the production of photograms in natural colors that have been so long and persistently undertaken by M. M. Lippmann and Lumiere, have at last borne fruit. AtthelatePhotographicCongress assembled at the Society of Arts, very fine specimens were exhibited, and approved even by that astute authority on such matters, Captain Abney. Our old friend, Richard Keene, of Derby, writes us in this connection : " Amid all the work, I ran away for a few days to London to hear papers and see the wonderful photography in natural These are a marvelous stepcolors. out, and may lead to something generally useful." Owing to lack of space we are unable to reproduce a valuable article on the subject recently published in The British Journal of Photography, but we intend to do so at the earliest opportunity, as we feel it is a subject of intense interest to all concerned in the advancement of photography.

IN a recent number of The Studio, appears a criticism of some platinotypes by Mr. Richard Keene. His "Salisbury Cathedral," with two urchins wading in a stream in the foreground, is compared to one of Turner's illustrations to Rogers' " Italy," in its exquisite perception of the planes and atmospheric graduations "that the most accomplished engraver could never, hope to attain." Mr. Keene, whose couple of dozen prize medals have been wrested from competitors in all parts of the world, is undoubtedly a master whose footsteps anyone might be proud to follow.

OUR valued friend and contemporary, The British Journal of Photography, in its issue of October the 20th gives the following notice of Mr. Massey's work at the World's Fair: It puzzles us somewhat to know precisely by what means Mr. W. E. H. Massey managed to snatch, under the very eyes of the vigilantes of the Chicago Exhibition, such a fine set of pictures as he has obtained, judging from such samples as have been given in the CANADIAN PHOTOGRAPHIC JOURNAL. The subjects are sharp, well selected, and fully exposed. The artist gives a graphic account of the petty harassments to which he was subjected by the agents of the concessionaire; but as we read, he eventually circumvented them by the expedient of hiring a gondola, or an electric launch, and photographing therefrom while going, in some instances, at full speed past the respective subjects which he has so ably snap-shotted. "The magnificent buildings," he says, "have been grouped with the greatest care, and with the surrounding landscape-which is like a fairyland, beautified with artificial lakes and canals, the latter

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spanned here and there with handsome white bridges—combine to make up a veritable paradise."

WE direct the attention of our readers to the able article by *Technique*, on the use of single or compound lenses or parts thereof, published in this issue. The article, which appeared in *Photographic Scraps*, should prove specially interesting to those gentlemen who are competing for the casket of lenses offered in our Class A. Professional photographers should read it attentively, not only because it is of considerable value, but because we hope to shortly offer another set of combination lenses for professional work.

THE editors of The Practical Photographer (England), send us a very kindly and encouraging letter, and compliment us upon the institution of our series of examinations for assistants, and others desirous of holding our certificates of proficiency. We are more than glad to hear that so estimable a journal as The Practical Photographer thinks the move a good one-so good indeed as to be worthy of establishing in England. We take this as a very high compliment-coming from such a source. In the same letter the editors say: "We would suggest that your position in this matter might be stronger if you induced one or two leading professional photographers to act with you as judges." We have arranged for two gentlemen of high reputation to cooperate with us in this capacity throughout the whole series of examinations.

We are pleased to learn that Messrs. Boorne & May, of Calgary, N.W.T., whose photographs of scenery and life in the Northwest bear a world-wide reputation, have been awarded the medal for "General Excellence" for photo. views at the World's Fair; also a diploma for "Instructive Ethnological Studies" on their collection of Indian photos. The honors obtained were certainly well deserved.

DEVELOPERS FOR GELATINO-CHLORIDE TRANSPARENCIES.

BY W. ETHELBERT HENRY.

The developers used in lantern slide work are so numerous that it would be useless to attempt anything like a recapitulation of them; I shall, therefore, confine myself to those best adapted for use with chloride emulsions, similar to the one published in THE JOURNAL last month.

In my estimation the most agreeable results are obtainable with such reagents as quinol, eikonogen, metol amidol, and glycin, and of this group I prefer quinol, used as recommended by Mr. Clement Leaper. The formula stands thus :

AQuinol 43 grs.
Sodium Sulphite
Ammonium Bromide 2 grs.
Water 10 oz.
B.—Ammonium Carbonate . 200 grs.
Water 10 07.

Use equal volumes.

This developer gives a brilliancy in both high lights and shadows that is much sought after by slide makers.

Another very reliable formula, given some years ago in *The British Journal* of *Photography* is given in the form of permanent ten per cent. solutions, and is well adapted for negatives as well as transparencies. The solutions recommended are :

Dissolved in methylated spirits 31/2 oz.

To develop negatives, take one part each of A and B to seventeen parts of water.

For developing gelatino-chloride transparencies, however, it is necessary to use at least thirty parts of water to each part of A and B, and add a few drops per ounce of a ten per cent. solution of potassium bromide.

Those of my readers who are in the habit of using the iron developer for bromide paper will find it work equally as well with the chloride lantern plates, and by modifying the developer, various effects of color may be obtained-thus :

No. 1.—Oxalate of Potash $7\frac{1}{2}$ oz.
Water 25 oz.
No. 2.—Sulphate of Iron 1 oz.
Water 5 oz.
Sulphuric Acid 3 drops.
No.3Bromide of Potassium 240 grs.
Water to 1 oz.

For use pour one part of No. 2 into four parts of No. 1-never the reverse, or a heavy precipitate will be formed.

Mr. England, a well known professional slide maker, strongly recommends this developer as being the best for producing a variety of tones, from crimson to black, at will. He advises for warm black tones, the addition of two drops of No. 3 to each ounce of mixed developer-the plate having been exposed in contact with the negative for about a second in diffused daylight; or one inch of magnesium ribbon burned at a distance of one or

the negative. For warmer tones it is only necessary to increase the exposure and the amount of restrainer (No. 3) in This may be easily calcudue ratio. lated when we reflect that fifty times the normal exposure and the addition of three drams of restrainer will give crimson tones.

The development of slides that have received so long an exposure, and a corresponding amount of bromide, necessarily occupies considerable time, but as the work, in such cases, can be done by ordinary gas light (not too much, of course) the work will not After fixing, which seem tedious. should be done in a clean bath of :

> Hvpo 4 ounces

immerse the plates in a clearing bath made thus :

> Hydrochloric Acid..... ¹/₂ oz. Saturated Solution of Alum 10 oz.

After an immersion of about three minutes, wash thoroughly, and mount in the usual way.

MONEY-MAKING SPECIALTIES FOR PHOTOGRAPHERS.

BY W. ETHELBERT HENRY. ASSOCIATE EDITOR CANADIAN PHOTOGRAPHIC JOURNAL.

[Read before the Photographic Convention at Toronto.] Mr. President, Ladies and Gentlemen:

With the Christmas season staring us in the face, I feel that I cannot do better than direct your attention to the benefit to be derived from adopting a special line in addition to the ordinary routine of studio work. Although I shall mention several lines that prove attractive to the average customer, it by no means follows that I recommend any person to adopt more than one-to do so would mean to two feet, according to the density of incur an amount and diversity of trouble that would render an adequate remuneration out of the question. Doubtless several of you are already doing what I intend to propose, and I think you who have tried it, will be able to bear me out, when I state emphatically, that a "special line" *pays.*

Among the most remunerative attractions. I think an enlarged portrait upon opal, of a size not exceeding 10x12, is well worthy of first place; and for several reasons :---the chief of which is, they are comparatively novel, so far as our Dominion is concerned; again (this from my own experience) the purchasing public will have them. They are easily produced, either upon the ready prepared opal plates, sold at a very reasonable price right here in Toronto, or upon opal glass, coated with the gelatino-chloride emulsion, given in the last issue of the CANADIAN PHOTOGRAPHIC JOURNAL, page 284, or by making a reversed print on transferrotype paper, and transferring this to a sheet of opal glass; or (in any color) by means of the simple and beautiful carbon process.

The next specialty worthy of your earnest attention is a well finished print on gelatino-chloride paper, which is probably well known to you.

The print must be toned as thoroughly as possible, but not mounted nor burnished in the usual way. While it is still wet from the last washing water, place it face down on a sheet of ground glass (or the mat-surfaced side of a sheet of celluloid is even better), driving out the excess of water with a squeeze. If ground glass is used, it is necessary to first prepare it, either with powdered talc or with a waxing preparation. Let the print dry thoroughly, then strip it, and placing it face down on a sheet of clean paper, cover it with a coat of paste and mount it on a well selected plate sunk board. Should any shining specks be visible on the print when finally dry (and they are almost certain to occur), they may be readily removed by applying a little powdered pumice stone and rubbing it in with the palm of the hand.

Another really capital subject for a specialty is a small bromide enlargement (say 8×10) well mounted on India tinted plate sunk boards, and neatly framed. Such a portrait costs little to produce, and may be sold at a remunerative rate to the mass of the general public, who would think several times before spending ten or twenty dollars in an enlarged portrait that is often big enough to dwarf the walls of a small room.

Now, supposing a sitter orders a dozen cabinet portraits (at, say \$5.00), what is easier than to show a few specimen opals of various sizes and suggest them as "very acceptable" Christmas presents? The chances are you will book an order for a few cabinet-sized opals at \$1.00 each, and one or two $6\frac{1}{2} \times 8\frac{1}{2}$ at \$2.00 each. These prices may seem low to some of you present, and high to others, but they are the prices I have invariably charged, and I believe them to be fair ones, without a vestige of ratecutting. Of course, the prices will vary with location of studio and class of customers-only do not let them go below these prices, or they will become unpopular.

In some districts of so vast a country as our beloved Canada, the class of portraits I have mentioned will not commend themselves to the popular taste; some customers want something more *showy* or fanciful:--let them have it; nothing is easier. To such people I would extol the virtues of portraits on cream or white silken ribbon for use as book markers, or upon one corner of a square of silk to be worked into a cushion, or one of the thousand and one little ornaments that would promptly occur to a feminine mind *if you only started the idea*.

Portraits upon the dials and domes of watches are also becoming fashionable, if I may judge from the repeated enquiries we have on the subject through the columns of our journal. These, also, are very readily made, either by means of a collodion transfer, a transferrotype print, or the carbon process, of the simplicity of which 1 have no doubt our friend Mr. Hopkins can convince you in a few words, although I can assure you it is as simple as "rolling off a log." One thing only I wish to impress upon you (and it comes from away down bottom of the heart) do not kill the fashion by charging too low a price.

In a recent American trade price list, issued to photographers, I notice these portraits on watch dials charged at \$5.00 each: this is too much because it leaves no profit for the photographer; but on the other hand I know of a gentleman right here in the city who does them for \$1.00 only, and this I consider altogether too cheap; cheap enough, in fact, to ruin the fashion and make it die a sudden death.

Leaving watch dials, I wonder if any of you have ever tried decorating lamp shades, celluloid whisk holders, and dozens of kindred things?

The work is very easily accomplished by any of the processes I have mentioned, and the articles are useful and sell well to private customers, and, when embellished with local views, dealers in notions are always willing to take them up. Of course, when supplying the trade from stock negatives, and in quantity, a reasonably low price will still leave you a good margin of profit—to say nothing of the advertisement you would gain by printing your name unobtrusively in the corner of each view.

In some of the cities and larger towns a ten dollar specialty may be very easily and successfully run in connection with the portrait studio.

This line would probably consist of a nicely finished bromide enlargement, about 14×17 , well framed. Now, as really excellent bromide enlargements of this size can be obtained from a trade enlarger for about \$2.50 or \$3.00, and a really handsome frame for another \$2.00 (at most), there is a very neat margin of profit for the photographer.

Now, I am well aware there are plenty of towns in Canada where the local photographer exposes an enlarged portrait to view in his window, and occasionally effects a sale; but this is not enough. To run a specialty successfully entails the judicious use of printers' ink. No, gentlemen! I am not trying to suggest an advertisement in the CANADIAN PHOTOGRAPHIC JOUR-NAL-I mean printers' ink as applied to the columns of the local papers. Make friends with the local pressmen, and you may depend upon it the local pressmen are valuable friends, and can do much to help a man forward. Insert small reading notices every week, bearing in mind to change them judiciously, but whatever you do, always harp on the one string. Always associate your specialty with your name, and your name with your specialty.

For instance, if you decide to adopt the opal portrait as your "special line," take care to have, in addition to your usual business card in the local papers, a few reading notices scattered here and there. In small towns the price is only about a cent a word, and the pressmen are mostly good-natured fellows who will often give you a "puff" on their own account. Well then, having pre-supposed the opal your special line, let us suppose your name is Nemo, your reading notices will run somewhat thus : "Are you in the swim? Surely you have seen Nemo's Opal Portraits "; or, " Nemo's Portraits on Opal tablets resemble China placques;" or, if you are troubled with hawkers of "fifty cent portraits and frame extra," you might try for a change, "Why buy crayon caricatures from foreign pedlars, when you can have Nemo's lovely portraits on Opal? Satisfaction guaranteed."

There is no need for me to lay more stress on this point, but *I know* that advertising pays. Try it on occasion in other ways. Invest in a few thousand dodgers bearing a few words that can be read at a glance, and let the principal capitals be NEMO and OPAL PORTRAIT.

On every possible occasion *rub in* the fact that you have a specialty that is successful, and I think you will agree with me that a specialty of this kind pays.

I daresay some of you may think there is no opening in your districts, because of the free portrait pedlars and the clothing firms who give away an enlargement with \$10.00 worth of goods; I used to be under this impression, but have long ceased to hold it. During a residence in both large and small towns, where free portrait parasites swept everything before them, I have been agreeably surprised by the business I have done in enlargements.

Of course I have advertised freely, always mentioning one or more of the local photographers (who would not go to the expense themselves) as agents for my permanent enlargements.

As a result I have done work for, I may safely say, dozens of free portrait victims, and in one town I sold ten dollar enlargements in the very teeth of a dry goods man, who was giving away a very fair portrait with ten dollars' worth of goods. This is not "hearsay"-it is cold fact-therefore I can safely urge any photographer, battling against unfair competition, to keep up his courage and his price, and with a little judicious advertising he will find his business will increase, despite the rate-cutter, the free portrait man, and the pandering draper.

Simply let the public know that your specialty is good, that it is not made for sale only, but to endure the ravages of time, and you will find you will have little difficulty in obtaining your price. If you still have doubts on this subject, you may easily test it for yourself, as I have done : Take two bromide enlargements of precisely the same size and subject, and finish them so that one is indistinguishable from the other, save that one has a little less time and care bestowed upon it during the final washing. Frame them alike, and when an enquirer calls to see your specimens, produce them and show the most expensive one first. Suppose you name \$15.00 as your price, and your customer murmurs something about "free portraits," produce the other and point out the fact that no difference is apparent, yet you could supply such a portrait at \$10.00, only you could not guarantee it. You will find the "bogey portrait" a very handy weapon, because it points to the reason why the clothing people can "give away" a portrait on condition that \$5.00 is paid for the Of course if, perchance, the frame.

lower-priced portrait was ordered, the usual care would most probably be bestowed upon it, for one's own sake, but usually the "not guaranteed" is productive of good results.

Gentlemen, I trust you will pardon me for thus straying from my subject, and permit me to urge those of our brother workers who have not yet tried *pushing* a specialty to do so. By doing so it is bound to pay, and to keep the name of the local photographer constantly before the public.

A specialty, if well and conscientiously produced is, like the red N.Y., an excellent advertisement in itselt, and a well-pleased customer is bound to recommend you to her friends.

Now, when a sitter seems to want an enlarged portrait (or opal, or whatever specialty you happen to have adopted) I would suggest that you address him somewhat thus, especially if he is a prominent man in the locality : "Now Mr. ----- if I make a thor-oughly satisfactory portrait of you, would you be willing to take it and pay the price-on the distinct understanding that you need not accept it unless you are positively satisfied?" Usually he will promptly acquiesce, and you have a capital chance of an advertisement right away. People seeing his portrait in your show window naturally think it is ordered, and they, or their wives, must follow suit; in fact, "they must be in the swim."

Probably several of the gentlemen present to-day have "been there" already, and to them I apologize for occupying their time, but I hope that my words may meet the ears of some of the younger members who have not yet tried *pushing* a specialty, and to them I offer no apology, I simply reiterate--specialties pay.

GELATINO-CHLORIDE PAPERS, THEIR ADVANTAGES AND MANIPULATION.

BY S. H. MORA, ROCHESTER, N.Y.

(Read before the Photographic Convention at Toronto.)

At the present time, the question "What paper shall I use?" is one that is agitating the minds of a large percentage of the photographers throughout the world, especially in Canada and the United States.

The subject is one of great importance to all, and requires careful thought and consideration. That the old standby, albumen, is doomed, is apparent to any one who is in a position to judge. It has held its place longer than any other process in photography; it has outlasted its associate, the wet plate, but now in its turn must step down and out, giving the place to its successor, Aristo.

The Aristo. family is a small one, there being only two members. Collodion, the elder, has by hard work obtained a good start, and is well on the road leading toward success; but Gelatine, the younger, is a healthy child, a long-winded sprinter, and at his present easy gait will pass under the wire and take first place without any apparent effort.

It would probably be more interesting to you could I take up both kinds of emulsion and dissect them piece by piece, giving the advantages as well as the disadvantages of each, but, inasmuch as I am connected with one of the principal manufacturers of Gelatine paper, business courtesy, as well as personal inclination, would prevent my calling your attention to the defects in goods manufactured by our competitors.

When a photographer has decided to adopt a chloride paper, the first consideration should be : "What brand

will produce the most uniform and best average prints?" We presume that he has been in business for some time, and has a number of negatives that were made for albumen paper, from which he is constantly receiving orders. In order to retain this duplicate trade, he should aim to produce better prints from the negatives than were made on albumen, consequently his decision must be in favor of a gelatine paper, as it allows a great deal of latitude in the negatives and will produce superior prints from negatives that were made for albumen. In fact, the negative which is best suited to a gelatino-chloride paper is the one that has been fully timed and developed so that it has snap enough to make a good albumen print.

The second question to be decided is : "What paper will produce the most uniform and even results with the least labor?" That this question also would be answered in favor of gelatine paper is an undisputed fact, as it does not curl or crack, and can be printed from unvarnished negatives without any danger of staining them; the results obtained with it are perfectly uniform and even, and are secured with an amount of ease and certainty that proves a delightful surprise to the former user of albumen paper.

The third question that presents itself is : "How much waste will there be ?" The photographer changing from albumen to a gelatine paper will probably be subject to some loss for a time until his printer becomes experienced in manipulating the paper and is competent to handle it to the best advantage, after which the amount of waste will be reduced to a minimum, as it is possible to obtain 144 good prints from a gross of paper. In making large prints, the amount of waste is very small; as the paper lies perfectly flat in the solutions it can be handled to good advantage, and will permit of an amount of rough handling in the final washing that would totally destroy albumen or collodion papers.

In estimating cost, the three previous questions have to be taken into consideration; quality, ease of manipulation, and small amount of waste, the cost of the paper itself being a minor question.

There has been so much said in the last few months about permanency, that we should consider this subject for a moment. Some claim that a gelatine emulsion is not as lasting as albumen. This claim has been proven to be a false one. That photographers have failed in producing permanent results with a gelatine paper is a fact, but it is also a fact that there have been as many who haved failed to produce permanent results with albumen or collodion papers. My honest belief is that all of the papers made to-day are permanent, in the way in which we understand the word, when properly An intellihandled in manipulation. gent photographer can easily answer the question to his own satisfaction by referring back to the negatives which he has made. He may find that there are some that have turned color, but if they have turned in spots it would. indicate insufficient fixing. If they have turned over the entire surface, he will notice a crystallization of hypo, indicating insufficient washing. But, he will find that a large majority of his negatives are as clear to-day as they were when made several years ago. The same thing will apply to gelatine paper, as the base (gelatine) is the same and, consequently, will not turn any more than the negative ; the chemical emulsion is practically the same as a collodion emulsion. There is there-

fore, no good reason why one paper should not keep as well as the other. A large number of photographers have tested the permanency of a gelatine emulsion as compared to albumen or collodion, and I have yet to hear of a single case in which it did not hold out as well, or better, as albumen or collodion. While on this subject I will say that if you doubt these statements, they can easily be proven by yourself and to your entire satisfaction. Take home with you a sample package of Solio; tone it exactly as per the instructions, fix the subsequent fixing bath, wash thoroughly and mount, and then expose them to the light with a mask over one-half of the face. This test will settle all doubts in your mind as to the permanency of gelatino-chloride papers.

To successfully work a gelatine paper, it requires that a printer should forget that he knows anything about the business except how to make vignettes and handle prints. He should take the instructions sent out by the manufacturer of the paper he is using, place implicit confidence in and follow them to the letter. He may have some technical difficulty, but the chances are that he will not. If the combined bath is used, the paper requires altogether different handling from albumen; in fact, to tone prints in the same way you would tone albumen : that is, put a few in at a time, when they are toned take them out and put more in would be a certain method of producing prints that would be unsatisfactory and that would not last. To insure the best results with the combined bath and gelatine paper, mix the ingredients, excepting the gold and lead, several days ahead, which allows the solution to ripen. There are a number of different combined baths on the market,

and in selecting the one you intend to use, the point to guard against is a bath containing acid chemicals (which gives a strong acid re-action) without giving any alkali to offset them. combined bath should be used cold to prevent the liberation of sulphur; for this same reason you should select the bath containing the smallest amount of acid, and the largest amount of alkaline, chemicals. A combined bath must be used acid, as alum is an acid compound that will not stay suspended in a neutral or alkaline solution; consequently you can only add enough alkali to neutralize the excess of acid in the alum.

A good gelatine paper, or one that is coated evenly, can be toned with either a separate or combined bath, the bath to be used depending in a measure on the tones which the customer requires. The combined bath is best suited for a warm or medium tone, and the separate bath for the medium or dark tone.

In handling prints with the separate bath, the manipulation is practically the same as with albumen paper. It may take a little more preliminary washing, and the toning bath must be tested more carefully, so as to have it as near neutral as possible. Prints should be thrown from the toning bath into a weak salt solution and allowed to lie there for a few minutes, and then, if the batch is a large one and will take some time to tone it, they should be put in clear water. The fixing bath should contain alum (with enough alkali to neutralize the excess of acid in alum) and sulphite of soda, the sulphite acting as a restrainer to prevent the prints toning down while in. the fixing. The final washing should be a thorough one, the prints being kept in motion constantly so as to

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secure a thorough elimination of the The mounting is done in the hypo. same manner as with albumen paper. The combined bath is a very simple one, and can be worked by any one possessing an ordinary amount of intelligence; the only place in which judgment is required is in taking the prints from the toning bath at the The solutions are mixed right time. by weights and measures. To tone the prints, you take a given number of prints to a given amount of solution, and to be successful you must use a thermometer, keeping the temperature at about 50 degrees Fahr. This reduces the whole process to a mathematical calculation. The operator working to a given rule knows that he will produce certain results. An important element in handling prints in the combined bath is to keep them moving constantly, as, when the prints are first put in, the silver has to be fixed If they are allowed to mat out. together, the small amount of hypo solution between prints will not be sufficient to take up the silver. As a result there will be an excess of silver over hypo and consequent sulphurization. This can easily be prevented by putting in fourteen or fifteen prints at a time, turning all the prints over each time this number is added. A second important point is, that this solution should not be used a second time. All the prints that you expect to tone in it should be put in at once, one at a time of course.

To tone with the combined bath ----Ist. Mix the solutions carefully according to formula; dissolve the hypo and alum together; dissolve the borax in hot water and add while hot.

2nd. Estimate the number of prints in the bath, and to each fifteen cabinets or their equivalent allow eight ounces of A and one ounce of B solution. Reduce the temperature to 50 degrees Fahr., and immerse prints in the toning bath one at a time face down; when ten or twelve prints are in, turn them face up and see that there are no air bells on the prints. Then put in a few prints as before, turn them face up; handle over those already in the tray, and repeat in this manner until the entire batch is in the toning bath.

3rd. Now draw all the prints to one end of the tray, and as rapidly as possible throw them one at a time to the other end, repeating this handling until the prints are toned.

When toned, throw the prints into a salt solution and from there to the subsequent fixing bath, which should be used to ensure the thorough fixing of prints and their permanency.

The chemicals to be used with gelatine paper are the same as you have always used, except the alum; this should be a crystalized or ground article, and not fused or burned.

It will probably surprise some of you to learn that one of our best points often works to our disadvantage; that is, the paper lying perfectly flat in the solutions. This makes it very easy to handle the prints, but it frequently happens that a man who has had no previous experience with the paper does not notice how flat the prints lie, and allows them to mat together in the toning, fixing or washing solutions. You will all realize that prints allowed to mat together in this way are liable to be defective. It is of great importance that the final washing should be done by hand, or with a tank that will keep them in constant motion.

In conclusion I want to say a few words for Solio. Although but little over a year since its first introduction it is to-day on the top rung of the ladder, and still climbing. The phenomenal demand for it, which obliged us to enlarge an already large factory, could have been caused by nothing short of real merit. Its uniformity and the ease with which soft, rich, but brilliant effects are produced, have combined to bring it into general use over almost all of the civilized world.

Our three coating factories, two in Rochester, one in Harrow, Eng., are equipped with every device that a year's experience at coating emulsion papers could suggest, and that money and skill could procure. We have made an almost perfect paper in the past, and intend to make strenuous efforts to produce, if anything, a better one in the future, and are confident that if you will give Solio a trial sufficiently thorough to become accustomed to working it, and able to produce the best results that can be obtained with it, you will become a convert to, and an enthusiast in favor of Solio.

THE ART SIDE OF PHOTOGRAPHY.

BY G. HANMER CROUGHTON, ROCHESTER, N.Y.

(A paper read at the Photographic Convention of Canada.)

It is only natural that in a convention of professional photographers, the manipulative and mechanical sides of photography should receive a large share of attention.

It is of course of the utmost importance that a photographer should be thoroughly acquainted with the capabilities of the various lenses in use, with the various brands of plates, and the developers which will best bring out the chemical qualities of each brand; but now the manipulative difficulties have been so largely simplified, that the photographer buys some one else's brains with every box of plates (as an old wet plate man late of this city used to say when dry plates were first introduced) it leaves a deal more time and opportunity for the exercise of artistic knowledge and taste, which was impossible with the old wet process.

The present generation of photographers know nothing of the difficulties which beset the practice of photography before the advent of the gelatinobromide dry plate, the amount of trouble and study necessary to keep collodion baths and developer in harmony, the annoying failures due to dirty or sweaty glass, and the many other annoyances too numerous to mention, but which the older men who have gone through it all look back upon with wonder and self pity; even then, if his chemicals were working all right, he had to be hurried in his attempts at posing, lighting, etc., because of his anxiety lest his plate should dry before he was ready to expose it. The wonder is that under such difficulties there should have been any artistic work turned out at all. As it was, a photographer was satisfied if his plate was clean and he made a good photograph; the artistic photographer had perforce to be indifferent to chemical or manipulative excellence --- in fact, some of the most artistic photographs of that most artistic photographer Rejlander, were most abominably bad from a manipulative standpoint.

But the dry plate of commerce has changed all this. Some other fellow's brains are exercised in providing us with a plate that gives us results that the old wet plate worker never aimed at; and all this without a thought or worry on our part. It is always ready,

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we need not hurry ourselves for fear of its spoiling while we arrange light, pose, etc.; and naturally the character of the work has changed. Where manipulative excellence is so easily attained (when I say easily attained I mean in comparison with the old wetplate method) there is something else wanted to mark the difference between the works of different men. The touchstone of success now, is the possession by the operator of artistic knowledge and taste, so that his photographs may be something more than mere maps of faces or landscapes.

The man who makes the best photographer at the present time is one who has studied art before he touched photography; because he can look upon it from a different standpoint from the photographer who is studying art because he finds he is going to the rear The photographer has got without it. into a rut-he is studying nature through the one eye of his camera, he is handicapped by his experience under the skylight, he must divorce himself from photography for a while and try to see it from an outsider's point of He should study the human view. face under every aspect of light and shade out of the skylight (as an artist who paints from the life has to); he would then see that there is no part of the human face, even in the darkest shadow, which can properly be represented by black, and he would try to light his sitter under the skylight so that there would be no shadow deep enough to compete with the shadows of the drapery. He would also discover that there was no part of the face, even in brightest light, which could be properly represented by white paper, not even the highest Let a white handkerchief lights. color come in contact white or

with the flesh, and this will be seen at once.

Now, take up the average photographer's portrait, and you will see that the high lights will, in tone value, equal the lights on white drapery, and, passing through the intermediate gradations, will end in the deepest shadows, being as dark as the shadows of black drapery. This is an effect much aimed at by photographers, under the mistaken idea that the more extended the scale of tones on the face, the more artistic it is. The so-called Rembrandt portrait is an exaggeration of this idea. I do not wish to be misunderstood on this matter. I am not arguing for a photographic picture with a limited scale of tones. On the contrary I like to see a photograph with the scale extended from white to the deepest shade possible, but with very little, indeed, of the two extremes; but all these tones should not extend to the flesh. If, for example, say there are nine tones in the picture, from the white lace at the neck to the shadows of the black dress, the flesh would not have more than five of those tones, beginning with the highest lights upon forehead, nose, and check, which would be a tone lower than the white lace, and ending with deepest shades under the eyebrows, nose, and chin, which would be three shades or tones lighter than the shadow of the black drapery; in this case the flesh keeps its place in value of tones.

In composition of line in posing, the photographer is handicapped by traditions and the desire to make something striking when really the most artistic pose will be the most simple. The two greatest of England's portrait painters, Sir Joshua Reynolds and Gainsborough, are examples of simplicity and grace in pose. Although

Gainsborough gave more action to his sitters than Sir Joshua, there is never seen the exaggeration of pose which has become so common in photographic portraiture, where the neck is screwed around in the most unnatural manner. and then, because the muscles and cords of the neck are shown swelled and twisted, as they must be when subjected to such an unnatural strain, the retoucher is set to work to touch them out, and you have the absurdity of a head in a strained position with regard to the shoulders, on a neck in perfect repose. This to an artist who is acquainted, even in a slight degree. with the anatomy of the human figure, is an abomination. There is in one of the journals a picture of this kind which I suppose the photographer must have thought was a triumph, or he would not have had it published as an example to be followed. A lady stands with her back to the camera. turning her head and eyes, so that something more than a profile is seen. The exertion necessary to do this must have been painful, and it has that effect upon the beholder. Then to emphasise this screw-like pose, the drapery of the long skirts is pulled and wound around the base of the figure till you feel quite certain that the lady must remain in that extremely painful pose till some one comes to unwind her.

When will photographers learn that care and simplicity is the chief aim and end in posing?

As in posing, so with light and shade, and the use of accessories and backgrounds. The simple is ignored and complications are the rage. The adage of Sir Joshua Reynolds that the head is the true portrait, and if more than the head is introduced it must be kept in subordination, is certainly not heeded

in the average photographic portrait. On the contrary, they remind one of a story told of the critic, John Ruskin, who was asked to criticise a full length portrait of one of England's aristocrats by Saut. Those who are acquainted with this artist's work will appreciate the joke. Ruskin, beginning at the lower part of the canvas, praises the drawing and painting of the boots, commended the texture and handling of the pants, paid the artist a well-deserved compliment upon the masterly way he had painted the velvet coat, and then, raising his eyes with the greatest surprise, said, "Bless my soul, here's a head, too!" The application of this story you can make for vourselves.

In closing these random remarks I would only refer to the tendency of photographers to copy each other. One man makes a sweet thing of a lady in white, posed in front of a very light background, the whole being a most masterly artistic study in a limited scale of tones. This is greatly admired, and the background maker has quite a rush of orders for this same light delicate background, and it is used upon every occasion with every kind of sitter and drapery; and we see the abomination of a boy in black velvet posed in front of an almost white background, out of harmony in every respect, and reversing the recognized order of things by making the outline of the black velvet against the white background the point where the eyes fall first, while the head is of least importance.

I feel that I have only been able to skim the matter in this paper; the subject is one which would require a volume, and it has already been done better than I can do it. The best book I know which will be of most use to photographers is Burnett's essays, and any of H. P. Robinson's writings; but I would earnestly urge photographers to studyfaces everywhere—in thehome, in the streets, in the cars, under every aspect of lighting, and see how different faces appear when not under the skylight; and try to modify their light so that the faces of their sitters look as they do when in an ordinary lighted room. Above all, avoid heavy shadows in flesh with too extended a scale of tones.

CUPID IN OUR RANKS.

The many friends of Miss Margaret J. Dukelow, of Brockville, were undoubtedly very much surprised on the morning of 28th of October to find that this popular young lady had quietly, and without the knowledge of anyone except her immediate relations, taken to herself or rather been taken by a husband the evening before, and was already far on her way to the World's Fair and an extended bridal tour. The happy man was Mr. H. H. Bryant, the popular eastern manager of the Singer Sewing Machine Co. We had the pleasure of meeting the bridal couple during their brief stay in Toronto, and found them blushing, happy, and handsome. A card just received, informs us that Mr. and Mrs. Bryant will be "at home" after November 20th.

We also have the pleasure of announcing the marriage of Mrs. L. Black, of Gananoque, to Mr. W. B. Finlay, also of that place. The marriage took place at the residence of the bride, and was very quiet, only a few intimate friends being present. Mr. and Mrs. Finley attended the convention.

Both the couples have our hearty congratulations.

ELEMENTARY STEREOGRAPHY.

A PLEA FOR STEREOSCOPIC PHOTOGRAPHY

BY THOMAS BEDDING.

(Read before the North Middlesex Photographic Society.) (Continued from last month.)

Conceive a bank of reeds in your foreground, a stream of water, with a gnarled tree overhanging it, a distance of shelving bank studded with brake and bramble-each of us can recall dozens of such rural vignettes, but most of us would not think them worth a plate in the monocular camera. Yet how entrancing and riveting in its realism. how astonishing to note each nodding reed standing out like life itself, each bough, twig, and branch solid and round against the sky, the liquid transparency of the water, the wonderful effect of distance, in this simple picture when binocularly treated, and how one is tempted to stretch out one's hand--to look behind the picture, as it wereto grasp the substance of what, after all, is only a shadow ! An old cottage behind a rustic gate backed up with sheltering trees, a crazy bridge over a willow-lined river, shipping, most architectural subjects, interiors, tree studies, flowers, statuary, portraiture-all pay for binocular treatment. Nevertheless. open landscapes and seascapes, and subjects on one plane, however truthfully rendered, fail in binocular effectindeed, long-focus work generally is scarcely satisfactory, and in that category possibly come instantaneous views of rapidly moving objects, though street life, and scenes deriving animation from the presence of people and other animals form capital subjects. Hand-camera studies of animated life always convey to me the negation of animation, but binocular hand-camera work gives me an idea of movement-of having a

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better approach to visual effect. Some binocular street scenes of Plymouth, taken by Mr. Seaman during the late convention, struck me as wonderfully successful in that respect. With a stand camera it is not always possible to obtain such pictures, and therefore a hand camera must be used. Hence I regard the stereoscopic hand camera as the hand camera of the future. It will be a valuable adjunct to stereography. refrain from saying how much it will benefit its users physically and mentally, how much it will increase the rapidity of plates, sharpen our nerves, add to our weight and our banking account. assure artistic expression to all our pictures, and decrease the distance between us and the photographic millen-For I do not, alas ! make hand nium. cameras, do not sell them, have not a mandate to boom the hand camera, and sing its praises on every conceivable Hence this silence. occasion.

Reverting, however, to selection of subject, it will, I think, be found that there are more subjects within the scope of the binocular camera than the monocular--that is, there are subjects which are worthless as single pictures which well repay binocular treatment. Of course, the ideal amateur should be ready for both kinds of pictures as occasion may arise.

STEREOGRAPHIC PRINTING.

Stereoscopic negatives should be well exposed, and, if anything, incline towards softness, so that the prints may be without violent contrasts of light and shade, and too prominent highlights printing out white. Indeed, flatlooking prints are preferable for binocular examination. I have a daughter aged eight. When she first saw some stereoscopic slides she thus summed up their principal charm and commonest

defect, "They look quite real," she said; and of one of them, "Did it snow when you took that picture?" This snowiness is fatal to the best results, and, if unavoidable in the negative, should be obviated by a careful sunning down of all white patches in the prints. A'surface paper is essential, as all rugosities are magnified in the stereoscope. Gelatine or collodion prints are preferable to albumen prints; enamelled bromide prints are also suitable. Tone is, of course, a matter of individual taste, but warm tones are, I think, more agreeable than cold ones, and contribute better to fidelity of effects.

We come now to a part of our subject which is very puzzling to the beginner, that is the transposition, trimming, and mounting of the prints. Still, all difficulty vanishes if we consider for a moment what it is we desire to produce in our finished print. We have The one taken taken two pictures. with the right lens must come on the right side of our mount; the one taken with the left lens, on the left side of the But in the print from our negmount. ative the two pictures occupy reverse positions, so that the print must be cut in two in order that the two halves may be made to change places. For the sake of brevity, I will summarise the procedure necessary.

1. Both prints must have an identical base-line.

2. Each print must be two and a half inches wide.

3. Three inches in height will be sufficient; a little more or less is immaterial.

4. Trim the prints so that on the left of the right-hand picture and the right side of the left-hand picture a little more of the subject is seen than on the other sides of the pictures. Or; to put it another way, the sides of the

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prints which come together in mounting should each show more of the subject than the outside sides. A difference of from one-sixteenth to an eighth of an inch is usually a sufficient margin.

5. Allow a space of from one-sixteenth to an eighth of an inch to separate the prints.

6. Trim by foreground objects and let a distance of not more than three inches separate them.

Spots or other defects in one of the prints show in the combined image, but if one print be printed a little deeper than the other it is hardly appreciable.

STEREOSCOPIC TRANSPARENCIES.

We must concede that stereoscopic prints do not compare in beauty of effect with stereoscopic transparencies; but I do not go so far as some in counselling transparency making alone, for in the preparation of prints one can graduate in small niceties of stereography, and let them find ultimate expression in transparency work. Besides, sensitive paper is cheaper to learn on than glass plates. In actual practice, transparencies are easier to make than prints. What I have said of the desirable qualities of stereoscopic prints as compared with monocular prints applies, in a like degree, to binocular transparencies as compared with lantern slides. The ideal brilliancy, clearness, and transparency of the latter are not necessary; indeed, they are in the nature of draw-Of the methods of making backs. glass stereographs, commend me to that by copying in the camera. The following outline of a working method will supply such details as will enable an amateur to undertake stereoscopic transparency making at a very small outlay of ingenuity and money. At the

back of an open box, having a central partition, the negative is placed in a suitable holder, inverted as regards top and bottom, film side out, and facing the light, which may be either direct The binocular camera or reflected. used for the negative should be fixed to a rigid board and register secured between negative and ground glass. The space between the objective and the negative holder should preferably be covered in with opaque material. The two images, as seen on the ground glass, will not be inverted, and will be in their proper positions as regards left and right, and consequently will not need transposition. The same rules as to identity of base-line and inclusion of subject must be observed as with prints, but you will easily see that they are considerably simplified. I myself use a special camera for the purpose. When the transparency is developed and dried, it is masked and bound up in the usual way, and, being viewed through its glass support, is backed up with either plain or ground glass.

For viewing slides and transparencies, a stereoscope of the familiar Holmes form will be found convenient, but it is very seldom found made in accordance with theory, as it should be so adjusted as to allow of the separation of the lenses to suit degrees of separation found in the eyes of individuals.

THE STEREOSCOPIC REVIVAL.

I quote this oft-used term only to anathematise it. It is time we heard the last of it, for stereography is well past the revival stage. For a long time anterior to 1887 it was virtually moribund, but in *The British Journal Photographic Almanac* for 1887 appeared an article by the Editor which handled the subject in a succinct and instructive form, and was instrumental

in rescuing stereography from neglect. Mr. Chadwick, of Manchester, subsequently devoted a great deal of attention to the subject. Some of his writings have been republished as "The Stereoscopic Manual," which, with the Almanac named, will tell a beginner all he need know at the outset. If he cares to dive into the profundities of the stereoscopic and binocular vision, let him consult Brewster's "Stereoscope." I conclude with a question. Why do not promoters of photographic exhibitions have classes for stereographs? A double end would be gained. Photographic exhibitions which stand sadly in need of novel attractions would possibly secure one, and stereography among amateurs would receive an encouraging fillip.

THE KODAK IN OPERA.

The ballet girl as a "kodaker," is now delighting the opera goers of London. Whether appearing as sailor, soldier, bandit, or fairy, she has long held an important place in the popular As Robin Hood's merry men, fancy. as the Forty Thieves, or as the sweet fairy nymphs, the public love her, collectively, of course. As a kodaker she must be irresistible. It is in "Utopia," Gilbert and Sullivan's new opera, that she assumes this role. Two modest maidens describe themselves in a song in which the following sprightly stanza occurs :

"Then all the crowd take down our looks In pocket memorandum books. To diagnose Our modest pose The Kodaks do their best : If evidence you would possess Of what is maiden bashfulness, You only need a button press— And we will do the rest." These two modest maidens and all the girls of the chorus carry kodaks.

That the song and chorus is charming goes without saving. The names of Gilbert and Sullivan are a sufficient guarantee of that. But have the managers stopped to consider what the effect is to be on the front rows? There is in this seeming trifle a financial problem beside which the silver question pales into insignificance. Through the innocent kodak the Behring Sea troubles are likely to once more agitate the civilized world ! Think of a bald-headed man-and most likely married toolooking into a battery of fifty kodaks ! The kodak buttons click in unison. Too late, the horrible idea comes to him that fifty witnesses to his frivolity are contained in those fifty little black His hard old heart beats wildly boxes. and a sea of crimson rushes up his massive forehead, across the broad expanse of unadorned cranium, and disappears in the row of fringe on the back of his neck. With a wild rush he leaves the theater, and hastening home. he pens, with trembling hand, the check that is to buy for his unsuspecting spouse the sealskin that has long been her earthly ambition.

If the kodak becomes a stage fixture, will it not be the direct cause of the extermination of the seal? And, will not opera houses be built hereafter without any front rows?—*Rochester Democrat*.

DUTY ON SMOKE.

In further reference to the articles on this subject in our July and August numbers, we are pleased to inform our readers that an Order-in-Council has now been passed placing jewellers' "sweeps" and photographers' waste on the free list when imported by

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Canadian refiners for the purpose of being refined in their factories in Canada. Mr. Trebilcock, of the Canada Smelting and Refining Works, has worked long and hard for this change, and has our congratulations on having won his point at last.

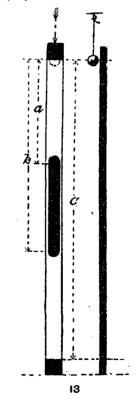
[Pacific Coast Photographer.]

SHUTTERS THEORETICALLY AND PRACTICALLY CONSIDERED.

BY SANDFORD ROBINSON, PH.B. (Concluded.)

The method of dividing the rod into feet, tenths, etc., is the usual one, but I can suggest a better way which will dispense with the division lines on the rod and thus enable the camera to be placed at a greater distance from it. Paint the rod, as before, a dead black. Have two white bands at each end and measure accurately the distance between the edges of the bands for the length of the rod. Suspend the white ball immediately in front of the rod with its center accurately opposite the lower edge of the upper white band. The whole rod being shown on the ground glass, proceed as before. Measure accurately with dividers and fine scale the distance shown on the negative between the bands. See diagram 13, in which this distance is represented by "c." Measure also the distances "a" and "b," being the distances fallen by the ball at the time of opening and closing of the shutter. Find the proportions borne by these two distances to the distance "c." Apply these proportions to the known length "c" of the rod itself, and we have the absolute distances fallen by the ball at the two periods mentioned. We can in this way obtain these distances more accurately and with less trouble than by the previous method.

It must be borne in mind that a rod 10 feet high will only answer for short exposures. The ball will fall $16\frac{1}{2}$ feet in the first second, $64\frac{1}{2}$ feet in the first two seconds, $144\frac{3}{4}$ feet in the first three seconds, and so on. To fall 10 feet it will take about $\frac{6}{10}$ of a second. If it is desired to test the time of an automatic time shutter, we must employ another method involving uniformly varied motion. If a perfectly spherical ball be rolled down



an inclined plane, starting by gravity alone, its time can be readily calculated. Assume a perfectly smooth board 10 feet long. Have one end of it say 5 feet higher than the other. A ball would roll down in about 1^{1} , seconds. The time that it takes a ball

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to roll from the highest end of the inclined plane to any point on it is found by the formula

$$t = \sqrt[1]{\frac{2}{gh}}$$

in which "t" = time in seconds. "1" = length of plane.

"g" = 32.0833 and "h" = height of upper end of plane above the lower end.

Proceed as in the case of the vertical rod, calculating the times of first and last positions of the ball, and taking the difference. The time can be varied by altering the inclination of the plane. Thus if the 10 foot board be elevated at one end but 21/2 feet instead of 5, the ball will roll down it in about $1\frac{1}{2}$ seconds. The time varies directly as the length of the board and inversely as the square root of the height of the higher end. The times required by the ball to roll down any two planes having the same height, are to each other as the lengths of the Hence the ball would roll planes. down a board 20 feet long, having as before a height of 5 feet, in 2°/o sec-Up to 5 or 6 seconds this onds. method could be used, and above that a stop watch would probably answer the purpose.

The foregoing method will not apply in all cases to the focal plane shutter. As already found, we can obtain the time of a gravity shutter, like the "Alligator Jaw," directly, it being itself a falling body. With the focal plane shutter we have a different proposition to consider. Let us suppose a rod 10 feet high giving an image on the plate 5 inches high. Let the ball drop the whole 10 feet. It will do it in .79 or very nearly 4-5 of a second. The image of the ball will, of course, cross 5 inches of plate in the same time. Assume that the slot of the shutter crosses the plate at a rate that will give an exposure of 1-100 of a second. It will therefore cross the 5 inches of plate, or the distance fallen by the image of the ball, in 1-5 of a second, showing that its velocity is four times that of the *average* velocity of the image of the ball. It is evident that if the slot started before the ball, or the upper edge of the former started at the same time, the image of the ball could not overtake it, and there would be no impression. We must therefore start the ball first and catch it before it reaches the bottom of the rod. We have then the old algebraic problem of the two couriers.

As an example let us assume that the ball has reached the half-way or five-foot mark on the rod at the instant that the lower edge of the shutter slot overtakes it. (Of course it will be understood that the image of the ball is traveling upward on the plate and the shutter moving in the same direction. It being simpler, I neglect this reversal and assume that both are traveling downward.) At this instant the upper edge of the guarterinch slot would be just one quarter-inch above the image of the center of the ball. As the slot is moving at the rate of 5 inches in 1-5 of a second, it is moving also at the rate of 25 inches in 1 second. Calculating the velocity of the ball after a fall of five feet by the formula.

$$v = \sqrt{-2gh}$$

in which "v" is the velocity due to the fall of "h," or 5 feet, and "g" is 32.0833, we have its velocity at this point equal to 17.91 feet per second. This would make the velocity of its image on the plate equal to 8.9 inches per second. Problem : When will the upper edge of the slot catch the center of the ball? It will catch it in .01553 seconds. The image of the ball will show a distance fallen corresponding to this time, assuming that there is no acceleration in its velocity during this time. As there is, however, a constant increase in the velocity of the ball, it would gain some extra distance on the shutter and the time would be more than .01553 seconds. This figure will do, however, for the purpose of my illustration. The assumed time of exposure was 1-100 of a second, but we find that the calculation shows more than this by more than 55-10000 of a second. The true exposure of 1-100 might be calculated from this, but it becomes rather too abstruse a proposition for any one but a mathematician, and is therefore not practical. If we assume that the slot is traveling downward, the image of the ball traveling, of course, upward, we will find the time to be less than 1-100 of a second.

In addition to this it will be found that to give a height of 5 inches on the plate, a 10foot rod (with a 7-inch focus lens) would be but 14 feet from the camera, too close to obtain a sharp image of the ball. Moving the camera farther away will result in a reduction in the height of the image of the rod and a corresponding reduction in the velocity of the image of the ball, thus increasing the disproportion in velocity between that and the slot. To make the two velocities equal would require in this case that the lens be placed but 2.4 feet from the rod. This is therefore an impracticable method. Let us therefore move our shutter horizontally, the slot being vertical. We may now catch the ball anywhere. The forward edge of the slot having caught the center of the ball, the rear edge has one-quarter of an inch to travel before it also overtakes the center. In this time the ball will have fallen a certain distance, and from this distance as shown on the plate, we can calculate the time taken by the slot to move its own width. The center of the ball falls in a mathematical line (having neither breadth or thickness), and it is this line, exposed by the forward edge of the slot and obscured by the rear edge, that we theoretically photograph for the purposes of our experiment. The time found is therefore that taken by one edge of the slot to move a distance equal to the width of the slot, and this is the time of the shutter as well as the time of the equivalent exposure of the plate. As, however, the bottom mathematical line of any strip of the plate, of a width equal to that of the slot, is not finally cut off from exposure until the lapse of twice this time after the first exposure of the top line of the same strip, it follows that a moving object of dimensions greater than a mathematical line will have its successive lines parallel to the slot successively exposed, and therefore, so far as displacement is concerned. it has had twice the time of exposure indicated by the nominal time of the shutter. The duration of opening is therefore truice the calculated time and the effective exposure equal to the calculated time of the ball.

For exposures not very much shorter than those of the Prosch, we must, in comparing with that shutter, use therefore the calculated time of the ball's descent and take 87 per cent. of that. For extremely short exposures, measured by thousandths of a second, we may neglect the displacement, which becomes

practically nil, and take the time of the ball as indicating the duration of opening and the effective exposure. As under these circumstances the shutter will allow the full illumination of the lens, it will be represented by .7854 and thus show a much greater effect than any other form of shutter. Enough has been said to show that there can be no fixed rule with reference to a focal plane. It is. first and foremost, a rapid shutter and subject to rules only when giving extremely short exposures. With exposures not shorter than those usually obtainable with other shutters it it subject to all sorts of conditions, and can only be accurately compared with others by taking these conditions into account. The speed of the shutter, the speed of the object, the distance of the object and the size of its image, the direction of the motion of the object with reference to the direction of motion of the slot, whether the same, the opposite or at right angles to it, etc., are all factors in the problem. At high velocities these factors disappear, and as other shutters cannot reach such velocities, we cease to compare. The focal plane is therefore sui generis, and stands alone.

I have devoted more space than I otherwise would to the discussion of the method of obtaining the speed of shutters, because by it additional light is thrown on the previous portions of this article in regard to the theory of that important instrument.

[THE END.]

TRANSFERRING TITLES TO NEGATIVES OR IMPRESSIONS OF BLOCKS TO GLASS FOR LANTERN USE.

Mr. H. Kraus, of Brooklyn, has devised a very simple and easy method of transferring an impression from type or from an engraved block to glass, thus giving a convenient method of titling negatives, or of transferring type matter or an impression from a wood block to glass for lantern purposes. Mr. Kraus's method consists in making a kind of transfer-paper, on which the desired inscription is either written with indelible or water-proof ink, or else printed in type with ordinary printer's ink. THE CANADIAN PHOTOGRAPHIC JOURNAL.

The transfer paper is made as fola piece of ordinary lows :-- Take smooth paper, bend the upper and lefthand edge upward at right angles about a quarter of an inch, and fasten the paper with three pins to a smooth board on the right hand lower corner of the same, and in such a manner that the two flat edges of the paper will extend a full quarter of an inch over the edges of the board. Next, the paper must be coated by flowing it over with a thin insulating varnish made of raw rubber dissolved in benzole. After this coating is dry the paper is coated again with a thin solution of gelatine, and dried. In order to transfer the inscription the bits of paper should be trimmed, soaked a moment in cold water, and pressed on the negative, the surplus moisture removed with blotting paper. When perfectly dry the back of the paper is thoroughly moistened with benzole, which readily dissolves the insulating film of rubber so that the paper can be stripped off, leaving the thin gelatine film containing the printing The printing or the plate. on writing will, of course, be reversed. The same paper can also be transferred to plain glass. In this manner excellent and inexpensive lantern slides for advertising purposes can be produced.

NOT A FAVORABLE OCCASION.

Missionary—I have come, my benighted brother, to lead your people to a better life.

Native—Got no time now. King taking amateur photographs, queen trying on crinoline, and people all learning to ride bicycles. Better try the next village.

A NEW GELATINO-CHLORIDE PAPER:

DEVELOPMENT OF PARTLY PRINTED PROOFS.

The Paget Prize Plate Company, after considerable experiment, are just placing a new gelatino-chloride paper on the market, and last week we accepted an invitation to attend at the Company's premises at Watford for the purpose of witnessing a process they have worked out, whereby advantage is taken of the circumstance that weakly printed images on gelatinochloride paper may be developed up to full intensity by ordinary alkaline development, and toned and fixed in the usual manner. The Company anticipate that where a number of prints are wanted from one negative a saving of time may be effected, and thus a professional photographer would find it advantageous to utilize the daylight for rapid underprinting and subsequent development in preference to printing right out, which would take very considerably longer.

On the occasion of our visit a number of portrait, landscape, and architectural negatives were used for making the exposures. These latter varied from two minutes in the shade (approximately one-tenth of the time necessary for printing out) to fifteen and twenty seconds in the sunlight. Included among the prints made was a vignette, this being selected in order to show that the paper does not give The prints when taken double tones. from the frames just showed the finer details. They were then placed in a solution of potassium bromide 1:20, in which they acquired a yellow tone, and were then washed in plain water. After the washing they were treated with a developing solution as follows:

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SOLUTION 1.

Hydroquinone
Sulphurous acid
Sodium Sulphite
Potassium bromide 60 grains
Water to 30 ounces
SOLUTION 2.
Caustic soda 1/2 ounce
Sodium Sulphite 1 "
Water to 30 ounces
SOLUTION 3.
Bromide of ammonium t ounce
Carbonate of ammonium
Distilled water to 30 ounces

The carbonate of ammonium should be in clear lumps. If from exposure to the air it has become coated with the white powdered bicarbonate, the latter should be scraped off.

For use: Two parts No. 1; one part No. 2; two parts No. 3.

Development was complete in about five minutes, the picture then presenting the appearance of washed, untoned albumen prints, rather less in depth; the right moment to stop development in the gelatine prints being just when the finest details are disappearing.

After about ten minutes washing, the prints were placed in the toning bath, the following "separate" bath being the one employed :

The toning action started rapidly and was completed in from six to ten minutes, according to the particular peculiarities of the print. The prints, as was afterward shown, did not lose in the fixing solution, and they were adjudged to toned sufficiently by transmitted light, that is, when so viewed, the yellow color in them should have disappeared. In all, some thirty-six prints were exposed, "bromised," washed, developed, washed again, toned, and fixed, and several of them dried off with spirit, in about two hours and a half.

Some of the wrinkles that came out in the course of the demonstration might be of service to others taking up partial development of gelatine papers, which Mr. W. I. Wilson anticipates will be largely done. While two minutes in the shade may be accepted as the minimum printing time, a little, or even much more, is not at all hurtful as it comes to this, that, provided the minimum exposure has been given, any stage of under-printing, however slight, is amenable to development. Slow and tolerably well-restrained development appears to be the best adapted Washing for the case. between the various operations assumes the greatest importance, particularly between development and toning, the more thoroughly the print being washed the better the toning action proceeds. Another feature of the process is that if a print, when in the toning bath, should be found to have been underdeveloped, the toning solution can be removed, and the print well washed, redeveloped up, and toning again proceeded with ; also that over-developed prints are easily and harmoniously reduced in a very weak solution of cyanide of potassium.

Comparing several developed prints with those printed out in the ordinary manner, no difference in quality could be detected, while the whites of the former were as pure as could be desired in every way. The demonstration was highly successful, in fact; and the Paget Company should receive the thanks of many a professional photographer for having put him in the way of a useful device.—*The British Journal of Photography*.

OUR great double Christmas number 25 cents, by mail 30 cents.

THE CANADIAN PHOTOGRAPHIC JOURNAL.

BOOKS AND PICTURES RECEIVED. -

Received from Messrs. Scovill & Adams, New York, too late for notice in this issue, "Industrial Photography," and "Photography at Night," both by P. C. Duchochois.

The tenth edition of Taylor, Taylor & Hobson's catalogue, just received, is handsome in appearance, and contains, besides a full list of their popular goods, an appendix on "The Principles of a Lens' Action," explaining in a simple way the principles which govern the formation of images by lenses and some useful hints on how to preserve lenses.

From Mr. John Carbutt we have received a very neat leaflet containing the article, "Orthochromatic Photography and its Practical Results," read at the World's Congress of Photography. It also contains a half-tone engraving of his display at the World's Fair, price list of goods, and numerous testimonials as to quality of his orthochromatic plates and films.

We are in receipt of a valuable book of reference --- the Columbian edition of the microscope catalogue published by The Bausch & Lomb Optical Co., Rochester, N.Y. It is without doubt the most complete list of the kind ever sent out, and is in itself a valuable guide to all interested in microscopy. Nothing is omitted; the most complete photo-micrographic outfits, binocular and single microscopes, dissecting needles, cover glasses, and text books in all branches of this most absorbing science—all are included. The publishers have our hearty congratulations on the production of so valuable a work.

The llford Year Book for 1894, published by the Britannia Works Co., of Ilford, London, England, is just re-This, the second year book ceived. published by this firm, comprises a diary with pencil attached, a pocket book, several pages for recording exposures, a calendar and handily arranged tables of weights and measures besides a complete description, with prices, of their goods. It is a most handy book, and an ornament to the pocket. It is safe to say that all who see it will buy it. The price, twentyfive cents (or thirty cents post free from the publishers) should place it in the hands of all.

The most complete catalogue of photographic instruments and accessories that we have seen for some time, is that of W. Watson & Sons, of London, England, for 1893-4, just to hand. Its 120 pages are profusely illustrated and show most everything under the sun. The quality of the goods manufactured and sold by this firm is so well-known now in Canada, that any commendation from us is hardly necessary. The fact that they have been awarded 31 medals at leading international exhibitions of the world, and that they received at the World's Fair three highest awards, being the highest recompense obtained by any English optician exhibiting, is very convincing evidence as to quality. Messrs. Watson & Son will, no doubt, be pleased to send intending purchasers a copy of their interesting catalogue for reference.

Amateurs:---- Watch for announcement in January number; it will be of great interest to you all.

OUR NOTICE BOARD.

Messrs. Percy Lund & Co. (Memorial Hall, London, E. C. England) have sent us their latest price list of materials for use in the photo-mechanical processes. The prices are most reasonable---startlingly so, in fact, to one accustomed only to American lists of such goods. The day is rapidly approaching when most photographers will install a plant for using one or other of these processes, and we advise our readers to write to Messrs. Lund & Co. for their list, and study it carefully.

Messrs. Mulholland & Sharpe have sent us samples of "Kalona," a collodion paper made by the same firm as make the celebrated "N.Y." Judging by some prints we saw recently, we expected to be unable to secure anything but brown tones. Not so, however. By following the very simple directions sent with the paper, we were much gratified with the lovely range of tones obtainable. We secured, without the slightest difficulty, any desirable tone of brown, purple, and black, with absolutely pure whites. It is an excellent paper.

We direct the attention of our readers to the advertisement of Messrs. J. H. Dallmeyer & Co. (Ltd.) of London, Eng-The lenses turned out by this land. firm have for many years been almost universally known and admired, and are already in use in many of our leading Canadian studios. The series of telephoto lenses are of so recent date that we doubt if many of our readers know of their vast capabilities beyond the specimen photograms lately published in The Practical Photographer. We recommend anyone desirous of studying

the subject to procure a copy of the manual "On the Telephotographic Lens (Illustrated), "published by Messrs. Dallmeyer, and noticed in their advertisement in the current number.

Harry's Electric Retouching Device, advertised in this issue, was undoubtedly one of the principal features of the convention. Mr. Harry, and his able demonstrator, Mrs. Harshman, were in attendance, and proved very popular with every member of the association. They effected many sales among those present. The machine weighs but an ounce and a quarter, and is built of vulcanite and silver-plated metal.

The current of electricity required amounts to only one-tenth of an ampere, and the pencil, which gives a fine direct stipple, vibrates fully 2,000 times per minute. Blending and modelling is easily accomplished, and any length of retouching lead may be used.

The device furnishes the "touch," which all agree is the most difficult feature to acquire in learning retouching, and as the battery furnishes the motive power, it is only necessary for the operator to lightly guide the machine, which will do the work as fast as anyone can guide it.

By an ingenious arrangement, the mere turning of a stud from left to right gives shorter and more rapid strokes for fine work, while turning it to the left causes a longer and slower movement best adapted to large surfaces.

The price, considering the great efficiency of the work, is very reasonable.

PROFESSIONAL PHOTOGRAPHERS !- Next month we shall announce something specially interesting to you regarding your negatives of pretty children. Doubtless you think it is about time we brought this matter to a headso do we.

CORRESPONDENCE.

To the Editors :

GENTLEMEN,—The article by Mr. Welford, in your October number, seems to me to be rather hard upon people who are anxious for a brotherly feeling among photographers.

I think that a little "*talkee*" is productive of considerable good, and international schemes a step in a very desirable direction.

As for speeches that aim at a complete unification of Great Britain and her colonies, I for my part do *not* believe them to be "bunkum," neither do I believe that any paper has yet intimated that "every English photographer is dying to fraternise with the Americans." I earnestly believe that Canadian photographers have a deep respect for their British and American brethren (if I *may* use this term), and I, for one, am sorry to see such a paper written by an English journalist.

The article appears to me to be the result of a disappointment, and contains an amount of bitterness that is objectionable to a well-ordered mind and heart.

Judging from the account given in your journal, the efforts of Mr. Ward at the American Convention were undoubtedly appreciated by Americans not treated by them as "merely bunkum"—and I am only sorry Mr. Welford did not attend our Canadian convention and take a lesson from the hearty and *manly* manner in which we welcomed our American visitors, and the cordial clasp of brotherhood that was extended between the two nationalities.

Perhaps he would have softened somewhat had he been present at our banquet, and noted the jolly time enjoyed by all present. I believe I express the feeling of all photographers on this side the Atlantic when I declare that such exchange of sympathies are *not* "inane little sentimentalities," but are "robust manliness."

With cordial fraternal greeting, I am,sirs,Yours faithfully,Toronto, Nov. 4th.FRATERNITY.

[We heartily agree with the feelings of our correspondent. The article was published as received by us, and was printed to give our readers that side of the question. We are glad "Fraternity" has expressed what we believe to be the feeling of Canadians and Americans alike.—EDITORS C.P.J.]

To the Editors:

GENTLEMEN, --- You will be interested in comparing the article by our Mr. Wm. Taylor, entitled "The principles of a lens' action" contained in the accompanying catalogue, with a paper on "The action of a lens simply explained" in the convention number of the *Photographic Times* of New York, and signed Mr. Walter E. Woodbury.

This paper was written by our Mr. W. Taylor, and published first in the *English Amateur Photographer* in 1888, and ever since in our lens catalogue.

Mr. Woodbury has taken pains to print our diagram with black lines on a white ground, instead of with white lines on a black ground, and this change is fairly characteristic of his work throughout.

Our sentences have been cut up and mixed together in some cases, while in others they are almost literally transcribed.

The plan and thought in the paper is ours, while to Mr. Woodbury belongs the doubtful credit of attempting to claim it as his own.

Yours faithfully,

TAYLOR, TAYLOR & HOBSON. [Dictated by T. Smithies Taylor.] Leicester (Eng.), Oct. 25th, 1893.

ANSWERS TO CORRESPONDENTS.

MAX .- The article on gelatino-chloride emulsion, in October number, will answer your inquiry fully.

CHAS. R. ROWE (COVENTRY, ENG.)-Your post-card criticism is an impertinence that we cannot overlook. Do you suppose that we were unaware that the diversity of type in our September issue was undesirable? It was not our fault; it was due to the unexpected failure of the firm who had hitherto done our printing, and the firm who undertook the work at a moment's notice was not properly prepared-as we thought the editorial note on page 237 would sufficiently explain.

We have been connected with high class publications long enough to know that the setting up of THE JOURNAL is not absolute perfection, yet we are doing our best to make it so; as our steady improvement ought to sufficiently indicate to any right-minded man. We never object to criticism, indeed we like to have it from any one, when tendered in a becoming manner. Such criticisms as yours, however, coming from one connected with a contemporary, and crowded on a penny post card, we take as a direct insult, and we will thank you in future to send such communications in an envelope, or publish them in your paper.

Regarding the last two lines contained on your post card, we thank you for your offer, and beg to decline it.

W. BULL.-The Autotype Manual, published by "The Autotype Co." 74 New Oxford street, London, W.C. (England), is the best work extant upon this subject. It will be sent post free to Canada for \$1.50, and it is known as "The A.B.C. Manual of Autotype." Kindly mention this JOURNAL when you write the firm. Yes, the Hill Norris collodion-plate factory is at last in operation. Many thanks for the valuable suggestions and your kindness in pushing our circulation. Wa know you will be glad to learn that our subscribers are now coming along at a lively enough rate to cheer even the heart of an editor.

THE EDITORS, The Practical Photographer (Eng.)-We thank you sincercly for your hearty encouragement and kind wishes, as well as the valuable suggestion you make regarding our Retouchers' Examination, We have secured the services of two prominent photographers, who are acknowledged masters in all branches of portraiture, to co-operate with us in judging the work sent in, and their signatures will be endorsed upon the certificates of proficiency. We intend to issue such certificates in each separate branch, and from time to time, award a medal to the photographer who attains the greatest number of marks in all subjects. We will write you fully, with regard to other matters, by an early mail.

J. FAIRBAIRN, DESERONTO .- Copyrighting the views after they have been pirated by another is no protection to you; for this reason: the defendant would claim that he had copied the prints before registration, and prove his case by quoting dates and producing in court the original photogram to show that it was not marked "copyright" prior to his piracy. We have a very low opinion of the person capable of copying another man's work, and we sympathize with you heartily. Treat the fellow with silent contempt and, in future, secure copyright before publication.

AMATEUR PRIZE COMPETITION.

CLASS A.-LANDSCAPE.

Entries for our competition are now coming in rapidly. We are pleased to state that we have been so fortunate as to secure the services of Mr. James Esson, of Preston, Ont., as judge. Mr. Esson has a world-wide reputation as a landscape photographer, and combines an artist's perception of the motive and composition of a picture with the ability of an educated worker of many years' experience in all branches of photography, and of art to judge if the mechanical work on a picture has been correctly done. As a large number of entries have, naturally, come in from Toronto amateurs, we have thought it best to select some one outside of Toronto as a judge. In Mr. Esson we have a gentleman who will judge without favor, and in a manner satisfactory to all. We give the rules in full in this issue, together with description of prizes (note additions made). Entries will close with the last mail received on December 1st. and as the time remaining is short, we would urge all intending to compete to send in their pictures at once-don't delay.

SITUATIONS WANTED

A YOUNG man wishes a situation; has had six years with J. Fraser Bryce. Can assist at operating and is good at bromide work; can also do dark room work well, address H. S. CARR, P.O. Drawer 2602. 11

Toronto, Ont. A GOOD all-round man of considerable experience desires position, address W. A. SEABROOKE International Bridge, Ont. 11 AS retoucher, by young lady. Is also a Crayon Artist. Address " RETOUCHER," Care Box 195, Port Colborne, Ont. 9

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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. Querics 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 to THE EDITORS.

FOR SALE.

AN 8 x 10 Bausch & Lomb "Universal" Lens. This Address "UNIVERSAL,"

Care of P.O. Drawer 2602, Toronto, Ont.

ATTACHED pair of 4 x 5 Gunlack Optical Co. Rapid Rectigraphic Lenses with Rotary Stops. Very fine, and only used a few times. Will be sold singly if fine, and only used a few times. fine, and only used a few times. Will be sold singly a desired. A snap for someone wanting the best 4 x 5 lens made. Write for particulars to "CASH,"

Care of P.O. Drawer 2602, Toronto, Ont. τn

FINE Photo Studio for sale, cheap if sold at once, address "PHOTO," Care of P.O. Drawer 262, Toronto. 11

FOR sale or exchange: One pair stereo Dallmeyer Lenses, central stops, 6 inch focus, as good as new, cost me 531.00. Also 5x8 Camera, rubber bellows, single swing, rising front, 14 inch extension tolding bed and six double-plate holders. All in good working order. Will exchange for accessories, address 11 W. E. WHITEN, Orillia, Ont.

ONE 50 Exposure Roll of Blair Film ; size, 5 x 7, late E 50 Exposure Asnap. cmulsion. A snap. ELLIOTT ILLUSTRATING CO. 31 King St. East, Toronto.

\$650.00 SPOT cash, not \$645.00, will buy a gallery worth \$1.000 of any man's money, situated in a town of 4500 with shoot of any mail's money, since a rinnype outfit and the best kind of new irxi4 box, with lenses to make any size photo in fact, carpets, acces-sories, and everything new and in splendid condition. If you have ready money and want it, address care P.O. Drawer 2602, Toronto, Ont.; if not don't. 11

SITUATIONS VACANT.

WANTED at once-NTED at once-Agents for this Journal. Liberal commission paid. Write at once for terms to P.O. Drawer 2602, Toronto.

WANTED-A Crayon Artist, one who can work an Air Brush. Address "ARTIST,"

Care of P.O. Drawer 2602, Toronto.

SITUATIONS WANTED.

B^Y experienced printer and operator. Samples of work will be sent on application. P. O. Box 151, Simcoe, Ont

FIRST-CLASS retoucher would like situation, is also a good printer, and will work for moderate salary. Address

"PHOTOGRAPHER," 157 King street E., Hamilton.

GOOD workman in any branch of Photography desires position. References and samples of work.

B. R. CHANNEN, 262 Broadway, Buffalo, N.Y.

ADY retoucher of large experience desires position,

MISS R. FREEMAN 123 Beaconsfield avenue, Toronio.

SITUATION wanted by first-class retoucher, good assistant operator, and general all-round man. Samples submitted if required, address J. W. GREEN, 58 West avenue, S., Hamilton.

SITUATION wanted by an Ar workman in all bran-ches of the business. First-class retoucher. WM. TAYLOR, Toronto, Ont.

YOUNG lady desires position in studio; is a good retoucher, etc, address II MISS M. KIRK, 119 Bay street, Toronto.

YOUNG man of considerable practical experience desires position in good gallery, where it would be possible to improve in the different branches of photography, address

"IMPROVER." Care of E. Poole, St. Catharines, Ont.

WANTED, position by good all-round man, address A. FORTY, 11 Ingersoll.

GANADA SMELTING AND REFINING WORKS

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and Gold and Silver Solutions, etc. All kinds of Ore, Jewelers' Sweeps, Photograph Waste, Old Gold or Silver or Plated Metals or any kinds of Residue containing Gold and Silver, smelted and refined, and cash sent promptly to cover same. References : THE BANK OF BRITISH NORTH AMERICA, London.



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Special attention and prompt returns given for Jewelers' Sweeps. Photographers' Waste,