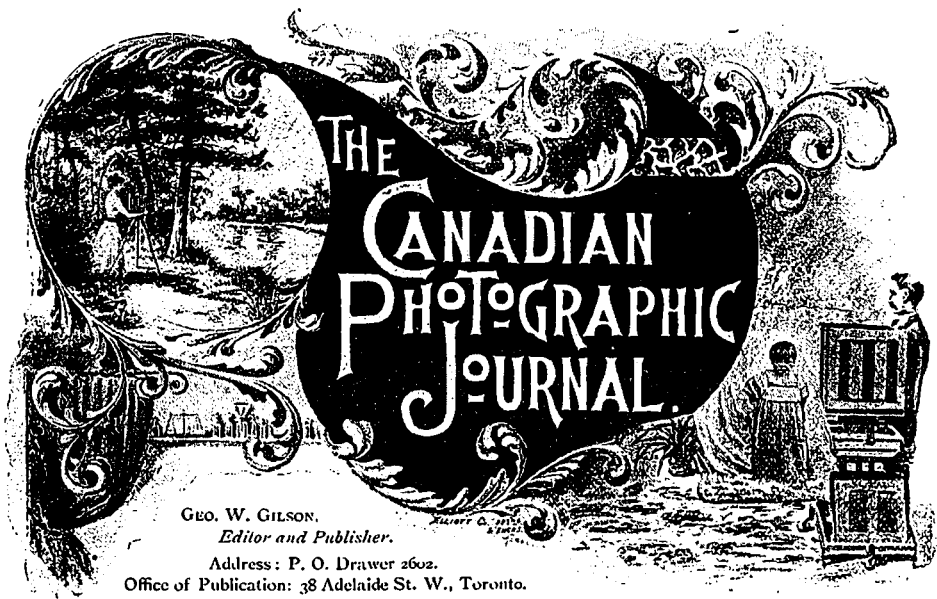




J. Frank Jackson,

Barrie.

**STANLEY PLATE
AMERICAN ARISTO PAPER**



GEO. W. GILSON,
Editor and Publisher.

Address: P. O. Drawer 2602.
 Office of Publication: 38 Adelaide St. W., Toronto.

W. ETHELBERT HENRY, C. E.,
Associate Editor.

Sarnia, Ont.

Devoted to the Interests of the Professional and Amateur Photographer.

VOL. II.

Toronto, July, 1893.

No. 6

NOTICE.—Owing to an unavoidable accident, the continuation of the article on shutters now running in this journal, will not appear in this issue. It will, however, begin again in August.—ED.

Our Illustration.

OUR frontispiece this month shows just the everyday work from the gallery of J. Frank Jackson, of Barrie. The quality of the work is first class, and proves Mr. Jackson to be among the *first* in his profession. Mr. Jackson is a staunch advocate of American Aristo Paper and Stanley Plates, both of which receive full justice in his hands.

Mr. Jackson's charming pictures show well the beautiful results these brands of paper and plates are capable of yielding when in the hands of a master.

To Our Supporters.

UPON accepting the position of associate editor of this journal I cannot resist the opportunity of making an appeal to my friends and co-workers. It is the earnest desire of the editor and myself to make this journal of interest and use to all who avail themselves of its pages, and to do this your co-operation is essential. I ask photographers—amateur and professional alike—to send any items of news connected *in any way* with our beloved art and science. Will you, reader,—I mean *you, personally*,—be so kind as to send early notice of any photographic event? Will you, when you note any interesting fact in practical work, acquaint us thereof? Rest assured that if such fact is not an important discovery, we shall not blazon it forth nor shall we sneer at you for submitting it to us. Should

your discovery be of value to the fraternity—and remember how many simple accidental discoveries *have* proved of inestimable use—we shall give you full credit for having freely given your knowledge to your brother-photographers through our pages.

And you, brother, who encounter a difficulty sometimes;—I mean *you personally*—write to us and state your trouble freely, our answers column is ever open to you, and we will there always render that assistance that is assured by a competent staff of skilled workers in the practical departments.

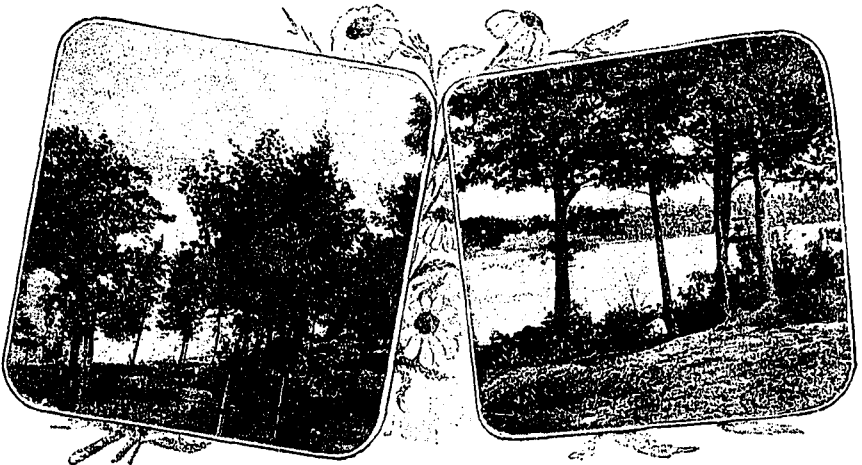
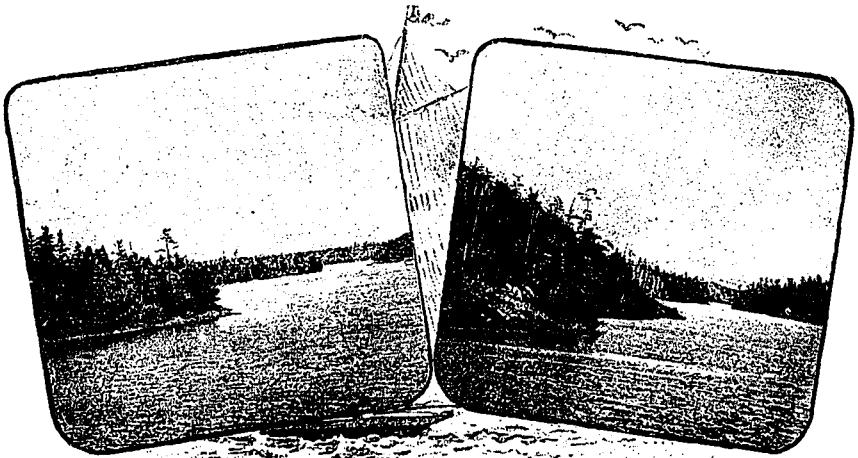
And you, fellow-worker who may possibly sometime have a grievance: to you our correspondence column will be open, in it you may ventilate your grievance and demand a public reply,—all we ask is moderation of language and suppression of personalities.

Manufacturers one word to you: Photographers of all grades recognize in you the valuable means to an end. Without you our beloved art would be virtually at a standstill, and it is mainly through your untiring energy, in placing upon the market instruments of the very latest design, and materials of the highest grade ready for immediate use, that we—that is practical photographers—are enabled to devote our whole time to the intelligent production of finished photograms instead of being perpetually hampered with the necessity of preparing our own dry plates, emulsion papers and the hundred and one other things with which the old-time photographer had to struggle. These difficulties you have removed, and you have placed within our reach materials of the very best quality at very reasonable prices. To you manufacturers I make an appeal, and I make the appeal in the interests of our readers generally, to whose notice we

wish to bring every valuable novelty, whether they be instruments, plates, papers, chemicals or books, *as soon as they are upon the market*. Will you, therefore, when about to introduce a useful novelty acquaint us with the fact? Will you send us the fullest possible information *at the earliest possible moment*? We will be pleased to notice your goods if they tend in any way to the advancement of Photography, and if you will send a *small* block to *The Editor, P. O. Drawer 2602, Toronto*, and an imprint of it to me when sending your particulars, we will always try to afford the necessary space. By this means we hope to bring you—manufacturers and consumers—into nearer relationship to your mutual benefit.

I have only to add that I feel honored by my appointment and shall fulfil my duty toward you all to the best of my ability. I feel a keen interest in a Photographic Journal that is *truly and essentially Canadian*, and I shall do all in my power to assist in forwarding the interests of members of our fraternity.

I shall probably be influenced in my work by some years of association with a man for whom I have a deep love, and of whom I cannot speak in terms too high. I refer to H. Snowden Ward, editor of *The Practical Photographer*, and if occasionally I follow somewhat upon his lines, I believe that I shall only be doing the very best in the interests of our supporters. Reader, will *you* write me a few lines—a few words even—telling me which department of this journal gives you most pleasure and the greatest benefit? At the same time if you have anything of interest to communicate will you enclose it? I cannot promise to answer all of you through the mail as I expect to be flooded with letters—one from



BITS OF GEORGIAN BAY SCENERY.

each of you who feel *any interest at all* in our own Canadian Journal—but I will acknowledge each one *in some way*, and I hope that in my earnest wish, and appeal for help, you will not disappoint me. It is hardly my business to speak to you on the subject of subscriptions, and I know that the majority of you who receive the journal have already shown your appreciation by a generous support, but will you go a step farther? Will you—each of you—send us one new subscriber, *just one?* Each new subscription is a fresh link in the chain that binds us to you and strengthens our position as your champion. Remember, this journal is absolutely free and independent, it is not owned nor controlled by any stock house, it is *your own* journal and knows neither fear nor favor in upholding your interests. Think of this, and think what it means to have a journal that is entirely and absolutely Canadian, produced and printed in your own dear land, and then think if we ask too much when we ask for your energetic support.

W. ETHELBERT HENRY.

Sarnia, Ont.

• • •

Wanted.—A Word.

HAS it never occurred to our readers that we are all away behind the times as regards the very product of our profession?

Why will we persistently designate the result of our handiwork a "*photograph?*"

We never hear any, save the most uneducated, speak of sending a "*telegraph*," or receiving a "*cablegraph*," then why should we continue to use a verb in place of a noun. Let us in the cause of reason and common sense, band ourselves together to discontinue

the use of so erroneous a word when speaking of a photographic picture, and in future adopt the correct term—"Photogram."

• • •

An Alleged Novelty.

THE German journals announce with a flourish the discovery of a new process of water marking paper by means of photography. As a matter of fact this "new" process was invented by the late Walter B. Woodbury, and patented by Brown, Barnes & Bell in 1883. A specimen print (named by the inventor, "Photo-filigra-ne") was given in the *British Journal Almanac* for that year. Unfortunately, the process never acquired the popularity it deserved, though it was undoubtedly of great utility. Probably after another German and one or two Americans have re-discovered it, it will be taken hold of by enterprising men and pushed to a commercial success.

• • •

Process Mongers.

NO doubt several of our readers have, one time or another, been victimized by process mongers; men whose sole object in life appears to be prowling about among the studios offering for sale either some wonderful process (that will not work out) or else a formula that has been published months ago in the photographic journals. We are aware that those who read their journals are not so likely to be swindled as those who pride themselves upon never subscribing to their trade literature; but, for all that, cases have occurred in which very able men have been cajoled into parting with considerable sums of money without deriving any benefit whatever therefrom.

Recent experiences tend to prove that the process monger is not extinct—far from it—and we wish to do all we can to put our subscribers upon their guard and to crush this particular parasite out of existence. To this end we invite our readers to send an instance, within their personal experience, bearing upon this subject. Letters should be as short and concise as possible—occupying about one side of a sheet of note paper, or even less.

To the writer of the best instance we shall send the JOURNAL post free for a year. All letters to be sent before the end of the month, addressed to the Associate Editor, "W. Ethelbert Henry, Sarnia, Ontario," and marked "Process" on the top left hand corner.



Photograph versus Picture.

In the *Amateur Photographer* of June 9th, there appears an excellent criticism on a set of prize competition stereoscopic slides, by the veteran stereoscopist, W. J. Chadwick, in which, with reference to one set, the following observation occurs, "they are excellent for what they are, but there is too much *photograph* and too little *picture* about them;" and as the observation applies to at least 90 per cent. of all the work done by at least that proportion of photographers—professional photographers I mean,—both in Canada and her nearest neighbor, the United States, it may well be taken as a text for a short lay sermon.

My brethren, to begin in the orthodox way, for, although not a professional photographer, a more than forty years connection with, and interest in photography in most of its phases, gives me a right to claim kinship with you, my brethren, then, the subject is one in which you are deeply interested, are becoming more and more so every day,

and the time is coming and coming rapidly when your very existence as a professional photographer will depend on a proper appreciation of it.

The subject naturally divides itself into three parts, and, sermon-like of course, should be treated under three heads.

1. What is the difference between a photograph and a picture?

2. Why are so many photographers content to be little more than mere mechanics when they might easily become true artists?

3. What is the cure for this admittedly unhealthy state of matters?

Firstly, then; the difference between a photograph and a picture is not so easily defined as it is readily distinguished. All pictures made by photography are photographs, but all photographs are not pictures. A photograph which is a photograph and nothing more,—and in this discourse I confine myself entirely to portraiture,—is merely a mechanical transcript of whatever may be placed before the lens, without any attempt, or without any successful attempt to arrange the lines of the figures in an artistic way, to remove or conceal objectionable angularities, or to evolve and reproduce emotional expression. Examples of this kind of photography are to be found every where, sown broadcast all over the land, in every domestic album, and in the show-cases of nine-tenths of those who make their bread by what should be "the beautiful art." Recognisable likenesses they may be, and indeed most of them are, but they are bodies without souls, with no suggestion of life or action; lay figures for the showing off of badly arranged drapery; and forms as destitute of muscle and faces as free from texture as is the wooden model of the painter.



HANGING ROCK, CLEAR CREEK CANON.

A photograph that is also a picture is almost as different from all this as is night from day. It must be a recognizable likeness of the sitter, but not merely a topographical delineation of the features; not only so much, and in such proportion of eyes, nose, mouth, cheeks, forehead, etc., all of which are merely the organs on which the soul, the mind within, plays; but it must at the same time convey to the beholder, and to the extent that he may be able to appreciate it, a sense of the beautiful music that the soul or mind thus produces. The figure of even the most awkward of sitters is made up of lines and curves, all of which should be carefully considered and brought into harmonious relation to each other; and

although the ordinary dress of the male portion of modern humanity, and the too frequently deformity suggesting fashions of the ever changing female costume are inimical to true artistic work, the true artist will always find a way of circumventing them, or of making the best of them.

A photographic picture then, while not an idealizing of the subject, is one of which the very most has been made; one to every line of which consideration has been given; in which, during its exposure in the camera the intellectual faculties of the sitter have been brought into play, and that in such a way that, whether it be in action or repose, the *motif* will be clearly apparent.

Secondly; why are so many photo-

graphers content to be little more than mere mechanics, when they might easily become true artists?

For this, my friends, there are several reasons. Many are content to remain on the lower rung because they cannot climb higher. It is easier to go into photography and turn out the kind of work which I have called *mechanical*, than into any other trade, and many have taken to it as a means of living without any proper preparation or suitable training. They do not know the difference between good and bad work, and could not be other than mechanics if they tried. Others there are who have both greater knowledge and ability, but, lacking ambition, are content to drift rather than apply the oar, and as the sitters that actually go to their studios are perfectly satisfied with the work, they spend their large leisure in grumbling at low prices, overlooking the fact that however low those may be they are fully more than the work is worth. There is still another, and pretty large class who, lacking neither ability or ambition, are yet so permeated with a belief in their own greatness as to be unable to learn anything from either the past or the present; and, mistaking grotesque effects for the results of genius, twist their sitters into such forms as were never seen out of their studios. They are of the "know-it-all-already" class, who never open a photographic journal; to whom even the irrepressible demonstrator cannot give a wrinkle on the management of his own plate; and in competition with whom Adam, Salomon and Mrs. Cameron would have to take a back seat.

This is the most dangerous class of all, as, through sheer audacity, they often acquire a name and reputation, especially amongst those whose culture

has not kept pace with the acquirement of wealth, and in consequence of that name and reputation, are taken as models by their less fortunate, because less egotistical, brethren.

Thirdly: What is the cure for this admittedly unhealthy state of matters?

The man who continues to make *photographs* rather than *pictures* because it is less trouble, needs neither thought nor care and pleases his customers, labors under a delusion. True it pleases those who come to his studio, but does he know that for each one who after looking at his specimens goes into the studio, perhaps ten pass on and patronize his neighbor? and the probability is that each one of those ten is both able and willing to pay more for work that satisfies a cultured taste than ten of those who actually become his clients. Can he wonder that those who recognize the difference between a mere photograph and a picture—and the number of such is increasing daily—leave him and go to his neighbor who can make pictures, or even go to the larger cities to get work that but for his indolence and carelessness would have come to him.

The effectual cure, then—and I think I have mentioned it before in these pages—is, for every photographer to become an artist, and let no picture leave his place that does not please himself by coming up to a certain standard. By "please himself" I do not mean that he shall be satisfied, because no true artist is ever so with any of his productions, but only that it shall be the very best he can do, and that however good it may be, he will regard it only as an incentive to do still better.

How is this to be done? Not easily; not without much patient study; but it can be done. You are not all born artists, but all or most of you have the

capacity to acquire the necessary knowledge of composition and light and shade. There are to be got cheaply many excellent books containing all the necessary information, and if you should have a difficulty in finding just what you want, give the editor no peace till he arranges with some suitable man to write a series of articles on the subject in your own journal. Widen your sympathies with, and extend your knowledge of human nature so as to be able to interest your sitters on the subjects that they are best acquainted with and most interested in, and thereby evolve any required emotion or expression, so that, in fact, they shall be in your hands as clay in the hands of the potter.

A strange commentary on things as they are is to be found from time to time in the daily press, where writers, generally women writers, take upon themselves to tell their readers how to behave when they go to be photographed; how to dress; how to pose; what expression to assume, etc. Two examples of such impertinence lie before me now from sources as widely separate as Chicago and Edinburgh. The reformed photographer will not submit to anything approaching such dictation, nor will his clients ever dream of hinting at it, they will content themselves with an indication of the size and style, having confidence in his ability to do the very best for them that can be done, and perfectly willing to pay him any reasonable price without reference to his less artistic neighbor over the way.

Whether or not this desirable reformation is to be brought about depends on you, and on you alone my friends. No one; no association can do it for you. I have recently been wandering to and fro, and have visited studios where the clients willingly paid five,

ten, and in one case twenty dollars a dozen for cabinet photographs, and in no case were those favored mortals possessed of greater artistic or technical ability than some of you already have, or than most of you may with sufficient study acquire. What has been, or is being done, may be done again. Go at it then, my friends; look within. There is more truth in the oft quoted saying that "God helps them who help themselves" than some people seem to believe.

JOHN CLARKE.



WE have received from the C. E. Hopkins Co., samples of their carbon tissues and transfer papers. Owing to detention in the Customs office, they came to hand too late for notice in this issue. We will give them a thorough trial, and report in the August number.



Each new subscriber helps us to give you better value for your money. We wish to give you the biggest value in the world; will you help us to do this?



Metol.

THE sample of this new developing agent, sent to us for trial by the Canadian agents (Messrs. J. G. Ramsay & Co., Toronto), has received a thorough test with very satisfactory results. As our readers are doubtless interested in whatever tends to the improvement of their business, we will lay before them in a brief form the result of our experiments.

In the directions for use, sent out by the makers, three different formulæ are given: a two solution metol-potash, a two solution metol-soda, and a concentrated solution in which the metol and its accelerator (soda), are combined.

Our trials were limited to the use of the first formula, which is as follows :

SOLUTION A.

Metol.....35 grains.
Water 8 ounces.

When dissolved, add

Sulphite of Soda..... 6 drams.

SOLUTION B.

Water 8 ounces.
Carbonate of Potash..... 6 drams.

For ordinary studio portraits, take of A. 3 ozs., B. 1 oz.; for extra soft negatives, take of A. 3 ozs., B. $\frac{1}{2}$ oz.; and for hard negatives, take of solution A. $1\frac{1}{2}$ ozs., B. $1\frac{1}{2}$ ozs., water, 1 oz.; for landscapes the mixtures are to be diluted up to six or even eight ounces.

Our first trial was made in the development of a plate ($6\frac{1}{2} \times 8\frac{1}{2}$), which had had an exposure of about $\frac{1}{150}$ second, using stop $f/22$; the subject being the Atlantic Express emerging from the Canadian portal of the St. Clair tunnel.

Development was started with the formula recommended for ordinary studio negatives, with a small addition of bromide of potassium, and the image started into view in about five seconds, rapidly acquiring detail and density in all the requisite proportions until development was complete. Three other negatives were developed, each having received rapid shutter exposures though widely different subjects, and in each case development was completed in less than ten minutes. The negatives were highly satisfactory, being full of half-tone, with high lights well pronounced yet without any approach to hardness. The plates used were the Stanley Red Label.

We next exposed some Eastman bromide paper and developed a batch of contact prints, using a similar developer, diluted to about twice its bulk. Development started at once and was completed about as rapidly as when

using the iron developer. The color of the prints was perfect: cool rich blacks and pure whites so peculiar to this paper.

Since those first trials we have put the developer to additional tests, and, without jumping to the conclusion that metol is bound to supersede pyro, we are warranted in saying that *at present* there is no developer in the Canadian market so capable of rendering delicate half-tones; soft, yet well defined, high lights; and clean quick printing color so desirable in these days of aristo printing.

We have occupied considerable space with this subject but we feel assured that metol has a great future and will be heartily welcomed by all who give it a fair trial.



What is the Value?

HERE is an easy and efficient method by which photographers may readily estimate the value of their residue? Take, say, 30 grains of the silver residue; mix it with 90 grains of saltpetre, and fire it on a block of wood. Wash the residue in water, dry it and add to it twice its bulk of the following mixture: Six parts saltpetre, two parts fine sawdust, and one part flowers of sulphur. Mix thoroughly; ignite as before, and cool the whole in water. Weigh the button of metallic silver thus obtained and compare with its original weight (30 grains). Rule of three will decide the value of each pound of residue.



The possession of our medal or certificate will not simply indicate that the winner was the best of a certain number of competitors; it will signify that he has *attained our standard* and is fully competent in that particular branch. (See page 167).

Our Forthcoming Competition.

WE have much pleasure in announcing that we have decided to hold a series of progressive competitions in all the practical branches of photography. These competitions will be OPEN TO ALL SUBSCRIBERS, and no entrance fee will be charged.

We wish to offer some inducement for elevating the quality of work produced in Canada, and, with this object in view, we are preparing a very handsome medal and certificate. In awarding these honors we shall not bind ourselves to award only one, two, or three, in any particular branch, as we have observed instances of very glaring injustice in similar cases. Neither shall we be governed by the number of competitors. Our manner of award will be upon a better foundation, and will be governed entirely by a system of marks based upon the *merit of each competitor*. Thus: If one hundred photographers compete in any particular branch, and out of that hundred only two are considered up to our standard, then only two awards will be made. On the other hand, if there be only six competitors and they each attain our standard (which will be a high one), we shall make six awards.

We shall, in an early issue, give a small reproduction of both medal and certificate, and we hope our readers will enter energetically into each competition as it is brought forward, and so give us the satisfaction of feeling that we are doing something towards raising the general status of photography.

In our next issue we shall publish the rules and conditions by which our competitions will be governed, together with particulars of our first subject.

Correspondence.

NEW YORK,
June 15th, 1893.

Editor Canadian Photographic Journal.

DEAR SIR,—Our attention has been directed to circulars and letters sent out by several firms, in which the claim is made that each of the said firms has secured the sole privilege for the erection of a dark-room at the World's Columbian Exposition.

We do not claim that we have the only dark-room at the Fair, but visiting friends will find ample accommodation for the changing of plates, etc., at our exhibit, and any assistance required will be cheerfully rendered.

Yours very truly,
E. & H. T. ANTHONY & CO.



Notices.

THE publishers of *Cycling* (5 Jordan St., Toronto,) are offering great inducements to subscribers. We have received a specimen copy of their premium photogravure of "Canada's Racing Men," which is a capital engraving, well printed by Bingham, of Toronto, on fine English coated paper—size, 28 x 42 inches. The engraving, which is given free of charge to each new subscriber, reflects great credit upon the printer and photographers concerned in its production.

• • •

A new monthly publication has been started in England, in which photography will be duly recognized by the painters. *The Studio* is well gotten up, and its printings and illustrations are of the highest class. We advise every photographer who loves his art to send to his bookseller for a specimen copy.

We have received from Mr. E. C. Landon, of Montreal, samples of his gelatino-chloride paper. We have tried the paper personally and have distributed samples of it among some of our professional workers, who give a good report of it. It assumes a reddish color while printing, but this gives way to very pleasing tones in the subsequent operations. In his letter to us Mr. Landon says: "Photographers need not worry about the customs dues on foreign goods, as I have decided to sell at the lowest American prices." It is well to be up to date, and we advise our readers to try a sample packet of this paper and compare it with others in the market.

...

A very dainty catalogue is that of the exhibition of the Photographic Society of Japan. It is the work of T. Hasegawa, of Tokio, and is printed on the *Crepe* paper of Japan. Each page is decorated in odd designs done in the beautiful colorings for which the Japanese are noted, and which no one outside of Japan seems able to imitate. The exhibition itself we notice fully in another column. For this most interesting account of the exhibition and the doings of the society we are indebted to Prof. W. K. Burton, through whose influence and energy the Society of Japan owe the pleasure and profit of having the present large exhibit of foreign work at their door, as it were, and to the *Japan Mail*. We are also thankful that the proof sheets sent us were not printed in Japanese, as all our Japanese type is at present set up in borders, for which it is admirably adapted.



The sea contains in solution 2,000,000 tons of silver.

Tenth Annual Convention of the Photographic Association of Canada.

THE Tenth Annual Convention of the Photographic Association of Canada, will be held in Victoria Hall, Queen Street, Toronto, (a few doors east of Yonge St.) on the 1st, 2nd and 3rd of November, 1893, and which promises to be one of the greatest Conventions ever yet held in this country.

In past years the Executive have been somewhat hampered in their efforts on account of not having sufficient funds to pay Professional Demonstrators and other expenses incidental to holding a convention on a large scale, but we are glad to say that our financial condition has so improved that we are enabled to provide something on a more elaborate scale this year, and our coming convention promises to excel all previous efforts.

The large amount of prize money, the new equalization plan of distribution of prizes, the omission of names of the exhibitors, the grand lantern slide exhibition, demonstrations and addresses by Mr. J. F. Ryder of Cleveland, and other prominent American photographers ought to be attractions sufficient in themselves to induce every progressive photographer in the Dominion to make a special effort to be present and exhibit some of his work.

Every one will have an equal chance of winning a prize whether from a town or city, as the exhibits will be judged by their merits and not according to largeness of display.

\$270.00 of the prize funds will be distributed according to the following plan which ought to leave a place for everyone whose work is worthy of a prize.

This is the plan: The exhibits will be judged allowing ten points each for perfect lighting, posing, retouching, printing, chemical effect and neatness of exhibit, making a possible 60 points in all.

Any exhibitor whose work reaches a standard of 35 points or over, out of a possible 60, will participate in the higher division of prize money. Anyone whose work reaches 25 points out of a possible 60, will participate in the lower division of prize money.

It is estimated, according to previous years, that these prizes will be worth \$12 and \$17 respectively, being governed, of course, by the number of successful exhibitors. *This only applies to Classes A. and B.*

Every exhibitor will be required to send one of his best Cabinet negatives (*the one he thinks nearest perfection*) from which Messrs. J. G. Ramsay & Co., have kindly volunteered to make transparencies and provide a lantern fog exhibiting the same at the Convention, and while reflected upon the screen will be criticised by competent judges, pointing out the defects and good qualities. This will be an excellent means of education.

Another new feature is that names will not be allowed on any display. Each exhibitor must attach a motto or word to his exhibit, a duplicate of which must be sent in a sealed envelope to the Secretary when making his application for space, and which will not be opened until after the awarding of prizes has been completed, which proves at a glance that no partiality can be shown.

Let everyone put forth his best efforts and the Convention will be a sure success. Come yourself, and induce your neighbors to come also. Come loaded with hard questions. Come

determined to do and get good. Come with the thought of doing good to others. Come to promote peace and harmony. Come with a right motive and you will return with a rich reward.

Yours very truly,

J. C. WALKER,

E. POOLE,

President.

Secretary.

The following prize list gives full conditions upon which one can become a member of the Association and participate in the competition for prizes.

Conditions upon which one can become a member and participate in the competition for prizes:—

Must be a professional photographer and reside in Canada and pay an initiation fee of Two Dollars, which must be sent to the secretary when making application for space together with one Cabinet Negative (for transparency) and motto or word, the name and address in full in a sealed envelope which will not be opened until after the awarding of prizes has been completed, a duplicate of motto or word must be attached to each exhibit. No person can receive more than three prizes but may compete in all classes.

KNOWLTON'S PRIZES.

CLASS A.—\$135. The Stanley Dry Plate Co. of Montreal offer \$135 in Prizes for the best twenty-four cabinet and eight 8x10 or larger Photos to be made on Stanley Plates and prizes will be competed for according to the equalization plan.

Anyone whose work is awarded 35 points out of the possible 60, will participate in the higher division of prize money. Anyone whose work is awarded 25 points out of the possible 60, will participate in the lower division of prize money.

It is estimated that these prizes will be worth \$12 and \$17 respectively. Governed, of course, by the number of successful exhibitors.

CLASS C.—\$30. For views interior and landscape.

For the best eight 8x10 or larger views and twelve smaller. Must be made on Stanley Plate. 1st prize, \$13; 2nd, \$10; 3rd, \$7.

CLASS D.—Also \$15 for the best six Photos (cabinet heads) of the same person not retouched. Quality to be considered, lighting, posing and chemical effect.

1st prize, \$10; 2nd, \$5. *Negatives must also be exhibited.*

CLASS E.—\$17.50. For the three best Photos 8x10 representing any three phases of human character.

1st prize, \$10; 2nd, \$7.50. Stanley Plates.

ANDERSON & ROBINSON'S PRIZES.

CLASS B.—\$135. The Anderson, Robinson Co. of Hamilton and Toronto offer \$135 in prizes for the best twenty-four cabinet and eight 8x10 or larger Photos to be made on Eagle & Starr Plates, and prizes will be competed for according to the equalization plan as above explained.

CLASS C.—\$30. For views interior and landscape.

For the best 8x10 or larger views and twelve smaller. Must be made on Eagle & Starr Plates. 1st prize, \$13; 2nd, \$10; 3rd, \$7.

CLASS D.—Also \$15 for the best 6 Photos (cabinet heads) of the same person, not retouched. Quality to be considered, lighting, posing and chemical effect.

1st prize, \$10; 2nd, \$5. *Negatives must also be exhibited.*

CLASS E.—\$17.50. For the three best Photos 8x10 representing any three phases of human character.

1st prize, \$10; 2nd, \$7.50. Eagle and Starr Plates.

HOPKINS' PRIZES.

CLASS F.—\$25. For the best twenty-four cabinet prints and eight 8x10 or larger on Omega Paper.

1st prize, \$12; 2nd, \$8; 3rd, \$5.

CLASS G.—Also \$25 for the best twelve cabinet prints and six 8x10 or larger, on Vici Paper.

1st prize, \$12; 2nd, \$8; 3rd, \$5.

CLASS H.—\$25. Views, Landscapes and Interiors.

For the best twelve 8x10 or larger views and twenty-four smaller.

1st prize, \$12; 2nd, \$8; 3rd, \$5.

ASSOCIATION PRIZES.

CLASS I.—\$25 is offered for twenty-four cabinet prints and six 8x10 or larger on Platinum Paper.

1st prize, \$12; 2nd, \$8; 3rd, \$5.

EMPLOYEE PRIZE.

CLASS J.—\$12. For the six best cabinet negatives, prints before and after retouching.

1st prize, \$6; 2nd, \$4; 3rd, \$2.50.

CLASS F.—For the best twelve cabinet prints, heads and figures.

1st prize, \$6; 2nd, \$4; 3rd, \$2.50.

P.S.—Negatives for transparencies if *carefully packed* in cabinet plate boxes can be sent by mail.



Photography at the Industrial Exhibition of 1893.

Below we give the Prize list offered to the Professional and Amateur Photographers by Canada's Great Fair, held September 4th. to 16th. We hope to see both classes well filled.

CLASS 126.—PHOTOGRAPHY—BY PROFESSIONALS.

SEC.	1st.	2nd.
1. Portraits, collection of, plain.....	\$ 8	\$ 4
2. Portraits, collection of, colored... ..	10	6
3. Enlarged portrait, plain.....	4	2
4. Landscapes and views, collection of.....	6	4
5. Enlargement, landscape or interior.....	4	2
6. Portrait finished in black and white.....	8	6
7. Portraits on porcelain, china or enamel.....	5	3
8. Best collective exhibit / 1. Silver Medal of photography.... / 2. Bronze Medal		
9. Best collection illustrative of the various processes and progress of photography since its discovery.....	Diploma	

[In colored photographs, the name of the artist who colors, as well as the name of the photographer, and duplicate plain copies of exhibit, to be attached to all specimens.]

CLASS 127.—PHOTOGRAPHY—BY AMATEURS.

The exhibits in Sections 6 and 7 of this class must be amateur work throughout and the work of the exhibitor, and in all other sections the same, except printing.

Amateur photographers are to be understood as those who do not habitually sell or offer for sale their productions, and who have not at any time heretofore done so.

SEC.

1. Best six landscapes....	{ 1. Silver Medal 2. Bronze Medal
2. Best six marine views..	{ 1. Silver Medal 2. Bronze Medal
3. Best three portraits....	{ 1. Silver Medal 2. Bronze Medal
4. Best three interiors....	{ 1. Silver Medal 2. Bronze Medal
5. Best three genre pictures.....	{ 1. Silver Medal 2. Bronze Medal
6. Best three bromide enlargements over 2 diameters.....	{ 1. Silver Medal 2. Bronze Medal
7. Best six lantern slides..	{ 1. Silver Medal 2. Bronze Medal
8. Best general exhibit of amateur photography....	Gold Medal

Entries positively close August 12th.

[*Anthony's Photo Bulletin.*]

Ivorytypes.

BY GEO. G. ROCKWOOD.

RECENTLY, in overhauling my establishment, I unearthed some ivorytypes which were made fully twenty or twenty-five years ago. They were in such a fine state of preservation, and make such beautiful and permanent pictures, I am about to revive them.

As many of the fraternity don't know how to make these pictures, I send you a description of the methods used. I think they will be a good thing to reintroduce. Many fine styles of pictures have had their "day," and have been dropped for some novelty—often, I think, unwisely. The ivorytype is one of the illustrations of this tendency. It is no step backwards to make them.

PROCESS.—*First.*—Make a print on plain paper, strong and brilliant; now edge a common clean glass to the width of a quarter of an inch with glue or starch; dampen your print a little and put it on the glass, picture side up. When dry, the print will be stretched nicely on the sheet of glass. The glass should be a little larger than the desired picture, for the reason that when colored and completed it is cut off from the glass. Having your print in this condition, stretched on the glass, it is to be very brilliantly colored in water-colors; altogether the picture presents a dark, strong, brilliant effect. Lay this, glass and picture, upon a flat slab of soapstone—of course, the picture side up—and gradually heat the soapstone on a gas or oil stove until the plate is hot enough to melt wax. Now break a cake of white wax (not paraffin) in two, and rub the surface of the picture with the wax, which gradu-

ally melts and saturates the picture. Your picture at this stage looks very much like a "gone goose." Now cut it very carefully at the edge with a sharp knife and lift the picture off from the glass; you will then have a translucent picture. Now heat a sheet of white *plate* glass in the same manner as you did the other, and when hot lay your wax, *face down*, upon the glass; it will soon melt and adhere to the glass. With a piece of wax (the sharp edge of the wax used as a squeegee), rub out the air bubbles; so soon as this is done, pick up your glass and let it cool. Now put drops of wax around on the picture to keep the cardboard from absolute contact with it, and put a piece of cardboard behind it, and you have the prettiest picture on earth.



A Well-Merited Compliment.

The *British Journal of Photography*, in its notice of the Philadelphia exhibition, says: "The Photographic Society of Philadelphia are certainly entitled to the honor of having issued the first and most ornate catalogue yet known in the history of the art science.



Mr. B. F. Stewart, who has been connected with the gallery of Mr. G. E. Whitten, of Orillia, for the past nine years, has severed his connection with Mr. Whitten, and has accepted a position as manager of the gallery of E. W. Ross & Co., of North Bay. Mr. Stewart has been very popular in Orillia, and on the evening of June 21st some fifty of his friends tendered him a reception in the parlors of the Grand Central Hotel, to enable them to express their regret at his departure from among them, and to present him with a very elegant pair of cuff buttons

and watch charm in gold, with raised monogram on each, accompanied by an illuminated address. A number of speeches were made, among them one by ex-Ald. Whitten, who spoke in high praise of his late employee. Mr. Stewart, although taken by surprise, managed to respond feelingly, and the balance of the evening was spent in having a general good time.

. . .

Mr. G. E. Whitten, of Orillia, has been doing a large amount of work for the exhibition of the Ontario Government at the World's Fair.



Exhibition of the Photographic Society of Great Britain.

WE call the attention of our readers to this, the premier photographic exhibition of the world, in the hope of seeing our dearly loved Canada properly represented.

The exhibition will be held in Pall Mall, from September 25th until November 15th, 1893. Medals will be placed at the disposal of the judges for the artistic, scientific and technical excellence of photograms, lantern slides, transparencies and apparatus. The names of the judges are a guarantee of just awards. They are: P. H. Emerson, B.A., M.B.; J. Gale, F. Hollyer, F. M. Sutcliffe, and J. B. B. Wellington. Scientific experts; Messrs. Chapman Jones, F.I.C., F.C.S., and Andrew Pringle, F.R.M.S.

Blank entry forms and any further information respecting the exhibition can be obtained from the assistant secretary, P.S.G.B., 50 Great Russell street, London, England.

We hope our readers will make a great effort to show the Mother Country what Canadians can do.

Face Outlines Easily Sketched.

ASTONISHING RESULTS OBTAINED FROM THE SHADOWS OF A BALL OF CRUMPLED PAPER.

ANOTHER and a novel conceit in shadow effects has been discovered by a clever New York artist. It is to the effect that a wad of paper crumpled up into a ball will always cast a shadow whose outline will be that of a human face.

According to the American Pressman, Mr. Thomas Edison, the wizard of electricity, first pointed out his eccentricity to Mr. Phil Goatcher, the artist. Mr. Goatcher thereupon showed it to an assemblage of brother artists, who promptly came to the conclusion that things were slipping away from them when a way had been found by which the merest tyro in art could get an outline for a profile with so little labor or application of talent. I tried it myself. The effect was really astonishing. Try it yourself and you will also be astonished. This is the way to try it. Take a piece of newspaper, squeeze it into a fairly symmetrical ball, and then throw it on a piece of hard white paper placed under a brightly burning gas jet so that the shadow will be sharply defined. Then take a pencil and trace the outline of the shadow. It will prove to be the outline of a human profile. Toss it down as many times as you like and trace the outline. It will always be the drawing of a human profile. Never anything else. It never misses fire.

Mr. Goatcher says that either from one end of the shadow or the other you can trace it. You can try it a thousand times, if you like. Just touch in a few lines for suggestion, as roughly as you have a mind to, to indicate the eyes, turn of nostril, end of mouth or style of hair (though you will see that in

most cases either the hair or a hat is suggested by the shadow), and you will be astonished to find what the least touch of imagination will do.

You may squeeze up any kind of paper into any size of ball and the thing works as sure as Sunday. But the queerest part of it is that you never get the same face twice. Nature herself is not more prolific in variety of forms and expressions in human faces than is this ball in the differing character of its shadow profiles.

Some of them will be as regular and perfect as the highest type of Caucasian beauty, others touching the very limit of absurd distortion. Every profile will be a study for a physiognomist. It is drawing made easy with a vengeance.

"What is the use," said Mr. Goatcher "of spending half your life learning a difficult art, and then waking up some fine morning to find that some fellow, who doesn't even know the rudiments, has invented something that will do all the mechanical work, either in painting or sculpture, while the artist lies stretched on a lounge, enjoying his smoke and looking at it?"

But this is a great thing for the cartoonist and other illustrators. For example, they can spend half an hour tossing a ball on the paper and sketching the shadows, and by these means lay up a surprising stock of faces, each one delineating some special trait of human character—a stock from which they can make selections at any time. A new ball and new shadows will always furnish fresh additions to the collection. There is no end to the variety."

Whether this system of getting profiles from shadows will ever be put to any practical use is a matter of very much doubt in the minds of many artists to whom I have mentioned the

subject, but one thing is certain, it is a very pretty and pleasing amusement for a dull half hour. Children can sketch faces as well as grown-up people. It is a diversion that can do them no harm and may help to develop their sense of the artistic.



The Photographic Exhibition in Tokyo.

We have heard much during the past few years of photographic progress in Japan, and have seen many striking examples of the work done in Tokyo, Yokohama, and Kyoto. Beyond doubt it is very excellent work, and the promise it gives of rapidly becoming better, justifies the interest taken in it by public men and encourages the zeal of the Photographic Society, which, since its organization a few years ago, has grown to be an imposing and influential body. But Japanese photographers and artists of all kinds labour under a serious disadvantage in the remoteness of their country from the great centres of scientific and technical progress. The Japanese student of painting, eking out, in the vast majority of cases, a hand-to-mouth existence and unaided by munificent patronage, cannot go to Rome to breathe the atmosphere of Art's birthplace and derive inspiration from contact with its immortal masterpieces; cannot go to Paris to sit at the feet of the modern giants; cannot escape from his tiny room in a by-street or suburb, and from the companionship of squalid surroundings and hopelessly straitened circumstances. The Japanese student of photography is similarly handicapped. He lives far beyond the great stream of intellectual interactions and inventive interchanges. He hears of what is going on in the world outside him, but does not see it, or at best obtains only such fitful glances that they give little useful insight. But the Japanese photographer has now been materially helped along the path of progress by the action of the London Camera Club, which has sent to Tokyo a splendid

collection of photographs displaying all the best results achieved by all the latest methods, and thus bringing Japan into direct touch with the world of Western photographic art.

We believe that the credit of this most beneficent affair rests primarily with Professor Burton. His high reputation in the field of scientific photography and his wide circle of photographic friends and connections, enabled him to prefer to the Camera Club a request that carried weight and enlisted support. To his exertions, and to the untiring energy he has employed on behalf of Japanese photography, this country owes the remarkable exhibition of 296 photographs, opened in Uyeno Park from the 14th instant. A private view of the pictures was given on the preceding day by kind invitation of Viscount Enomoto, President of the Photographic Society of Japan, and was largely attended by the leading residents of the capital. The building chosen for the display, or to speak more correctly, the only building available at this moment, is not well fitted for such a purpose, being totally without attractive features of its own. But light and space are abundant, and the photographs have been disposed in a manner that we can not too highly praise. It need scarcely be added that the arrangements for the comfort of the guests on the 13th instant—music, refreshments, and so forth—were thoroughly good. To each person was handed a descriptive catalogue printed on tinted crape with charming decorative designs on every page, a work of art in itself. As for the photographs, it was in many cases difficult for the uninitiated to realize that such pictures were nothing more than mechanical reproductions. The impression conveyed was rather that of fine steel engravings, crayons, sepia paintings, pencil drawings—anything, in short, except the product of the camera. In truth, one is immediately taught by such a display that photography has entered a new era, that it has passed into the hands of artists from those of artizans, and that the goal towards which it is pushed is to hide the camera completely and

approach as closely as possible to the easel and the canvas.

We do not propose to speak here of the various technical methods represented in the Exhibition. That branch of the subject must be reserved for a future notice. Our theme for the moment is the artistic side of the display; its pictorial rather than its photographic features. What conspicuously attracts attention is that to this mechanical work, at the outset wholly objective, there has now been imparted a strongly subjective character. The artist makes himself felt not merely when he reproduces landscape, but even when he takes a likeness. Instead of thinking only of the object represented one instinctively turns over the leaves of one's catalogue to look for the name of the artist. There are, of course, "tricks of the trade," which, however striking their effects, offend by their artificiality. The use of the flash light is an instance. Lyddell Sawyer's pictures, for example, and R. H. Lord's, beautiful and interesting as they are, suggest too much clever mechanism. "The boat-builder" (No. 5), "Reflections" (No. 3), "The Toper" (No. 8), "Idle Moments" (No. 17), and so forth, will be scanned admiringly by many eyes, but are not pictures that would improve upon acquaintance. Then, again, there are faults of technique that recall the still tentative character of the art. In No. 15 ("How's that"), for instance, we have a delightful subject spoiled by a monstrosity: the hands of the figures present themselves under a magnifying glass instead of through the lens of a camera. No. 43, suggests the idea that a solid section of sea has been set up as a wall beside a group of women who sit and lie gossiping at its base. Moreover, the greatest artist is evidently not yet absolute master of his methods.

F. M. Sutcliff's "Water Rats" (No. 54) is one of the best things in the whole exhibition, but the same artist's "Hurricane Corner" (No. 60), and "Among the Breakers" (No. 61), leave a great deal to be desired. As for Henry Stevens' flower studies (Nos.

117, 118, 119, 120, and 123) they are most aggravating. Paper blossoms equally stiff and formal would be rejected as failures in millinery. Speaking of failures, attention must be specially directed to Henry Vander Weyde's remarkable work with the "Photocorrector" (*vide* Nos. 169, 170, 171 and 172). This artist has devised a mechanical process—the secret of which remains entirely with himself—for correcting the faults of a negative. If the hands or head of a portrait be out of proportion, his "corrector" puts them right in a few minutes. In one picture he shows us a female figure seated on an artistically false plane with respect to the environment, and in another the same figure, after ten minutes' exposure in the "Corrector," has risen to a proper and pleasing level. These results are most interesting and curious. We do not know whether Weyde's remarkable machine could be utilized to correct faults due to the difficulty of combining different negatives in the same picture. If it possesses that capacity, a pretty wide field for its employment offers even in the admirable pictures of the Camera Club, for the defective joining of negatives often produces lines that could never exist in nature. But, on the whole, photographs calling for the use of the "corrector" or inviting unfavorable criticism of any kind, are rare exceptions in this collection. The great majority of the exhibits are surprisingly beautiful. It is hard to particularize amid such universal excellence. The four sent by Bernard Alfieri (Nos. 19, 20, 21 and 22) are types of a numerous class—lovely bits of soft, delicate work and feelingly selected subjects. In Nos. 39 and 40 we have crystal clearness of detail combined with exquisite lightness and grace, while 19, 20 and 22 suggest pencil drawings rather than photographs. Hector Colard's series, Nos. 230, 237 and 238, seem to take us as far away from the camera as it is possible to get; and Tyser's, 163, brings us back to it almost as closely as did the photographs of twenty years ago. In snow scenes, Mrs. Main—*vide* Nos. 165, 166 and 167—is very successful,

but the Exhibition contains nothing of this type equal to Ogawa's latest work. Ogawa, indeed, is competent in certain lines to stand abreast of the best artist's of the Camera Club, but he is probably the only Japanese photographer of whom that may be said. Very interesting are the works of Geo. Davidson (Nos. 82 to 89), and R. Briant (Nos. 146 to 157), representing the school that eschews everything like a sharp edge or clearly defined outline. Nature, indeed, always deals in masses and never in lines, yet it is not possible to say that these lensless photographs reproduce Nature truthfully, however correct may be the theory underlying the method. Mr. P. H. Emerson sends a beautiful series (Nos. 260 to 271). One examines them with more than common interest, knowing the immense influence which this artist has exercised on photography. To Emerson, indeed, more than to any other single worker, may be attributed the disappearance of the old-style photograph and the birth of the processes to which we now owe so much; a change not to be over-rated, seeing that it has induced artists to take up photography as a study worthy of the best intellects and the highest ideals. Nos. 181 and 295 deserve special notice, the first because of the artist's absolute success in concealing every evidence of art; the second, because of its extraordinary softness and absence of all perceptible debt to any mechanical process. Shapoor N. Bhedwar, a Hindoo artist, sends a series of very fine photographs—Nos. 135 to 140. They are technically perfect, but as works of art they do not stand on so high a plane as some of their fellow-exhibits; the grouping of the figures is too studied. This fault is often perceptible, especially when attempts are made to pose models in positions of passion or strong emotion. Great painters conceive such situations with more fidelity than models act them, and the photograph is seldom really successful when applied to these purposes. We need scarcely say that the instantaneous process is admirably represented. Nos. 221 and 222 are good types, powerful and picturesque.

Several interesting examples of single colours obtained by the carbon process are exhibited. "The Sea Dream" (No. 113), by W. Clement Williams, will probably attract much attention as a monochrome of this class, but for our own part we find it somewhat heavy, its sea solidified and its sky stereotyped. We prefer such seascapes as those of Bennett (*vide* Nos. 105 to 109).

But space fails to particularize even roughly all the beauties of the display: the portraits (especially those of Mrs. Cameron and Fred. Hollyer) the twilight and night effects, the moonlight scenes, the peeps of exquisite landscape, the seascapes, and so forth. It must be sufficient to say that the collection shows modern photography under all its most artistic and scientific aspects, and constitutes such a display as is not likely to be again visible for many years in Japan. Perhaps we ought to explain that though we have spoken of 296 pictures only, the total number actually shown is 341, but the last forty-five, sent by the Foochow Camera Club, have no business to appear at all. Why they were sent and why they have been hung we fail to understand. It is scarcely necessary to suggest that no one taking any interest in art should fail to visit this exhibition. Nothing like it has hitherto been organized in Japan. The Japanese public owes much gratitude to the Photographic Society of Japan, and to the Camera Club of London.



The Influence of the Hand Camera.

BY WALTER D. WELFORD.

(London and Provincial Photographic Association)

THE spirit of exaggeration is one of the necessary evils attending the development of photographic civilization.

For years hand-camera workers have been pushing to the front, and striving to make the general photographic public decent and respectably minded citizens. But the dawn of reason has only just arrived, and, though tardily admitted, the *raison-d'etre* of the hand camera is now recognized. It is possible for the veriest fanatic to now address an ordinary society upon what, in his opinion,

are the points of hand-camera work, that is, he can now do it without the sneers and quiet scoffs of the old-timers. So that in venturing to address myself to the decent and respectably minded body of men that compose the London and Provincial Association, I feel that, whatever the criticism may be, it will be just and generous. Above all things, I am sure you will fight, when the time comes, with interest in, and appreciation of, the hand camera itself. The battle hitherto has been between a small body of earnest men determined to advance, whilst opposed to them were thousands of skirmishers, who were too busy with other things to pay much attention to the invading force. The battle-cry of one was "We are here, and we've come to stay," answered impatiently by the skirmishers, "Tut, tut! run away, little boys, and play," or "Bother these folks, what can they do? what rubbish to trouble us!" The first sign of the dawn of reason I detected some time ago, when I heard that a member of the London and Provincial Association had actually agreed to look at a hand camera, and it was thought to be a reasonable supposition that, ere long, he might actually handle the monstrosity. And now—well,

"Do I dream, do I doubt,
Or is visions about?"

Of course I mean *visions* of hand cameras. I hope you will correct me if I am wrong, but I believe you actually have men now who *use* a hand camera. What has happened to the poor London and Provincial Association? Has it been having too much "spirits" of late?

I said at the commencement that exaggeration is necessary nowadays. If a man wants to sell his camera, he asks £5 10s. for it, so that he can get £4 10s. by "reduction in the camera." You may perchance imagine I am on the same tack, that I am claiming (or rather, shall claim directly) a good deal too much for the influence of the hand camera, so that I can climb down a little to appease your wrath, and yet get pretty well all I wanted to. Personally, by the conviction of experience, I believe all I say. You may not; that is your fault. In a few years' time they will be accepted as facts.

The influences of the hand camera run in several directions. For convenience' sake I have classified them into two

Photographic,
Mental or physical.

By an "influence of the hand camera" I

mean some power or incentive towards improvement, in which the hand camera has been the sole—or, at least, principal—factor. To make a definite start thereto, I claim that it has been of considerable use in improving photographic materials, apparatus, etc.

Speed of Plates.—Much interest has of late centered round the great efforts of some of our platemakers to obtain the maximum rapidity of emulsion. The makers would hardly do this unless to supply a want; that must be admitted. The point is, from what does the demand spring? I allege from the hand camera. But it may be said, instantaneous photography in the ordinary camera must not be overlooked. Certainly not, nor the fact that the reduction of exposure in a studio of portraiture, especially baby and child studies, for dimly lighted interiors, and for portraiture by artificial light, is a convenience the desirability of attainment of which, no doubt, has helped in the same direction. There are possibly other causes which I have not enumerated. I admit their power, but deny their importance as compared with the requirements of the hand-camera worker. You may mass all these factors in a lump, and still the hand camera towers above that lump as a mountain to a pin-hole. The increased speed of plates is due to the hand camera, and, whatever weight other considerations may have added, they have only been as a single black pin is to a full box of white. It is there certainly, but it does not make us buy the box. If there be any gain to photographers by the increase of plate speed, to the hand camera the credit must be placed.

Apparatus.—In several directions the influence may be seen. In order to diminish the enormous disparity in bulk and weight between the ordinary and the hand cameras, the former have been cut down in every possible direction. A hand-camera worker grumbles at the unnecessary weight of his 10x8 ordinary. Result, improvements and new patents galore. The necessity of reducing the shutter to small dimensions, in order to go inside the limited space of a modern hand camera, has brought upon the market a number of small and ingenious shutters. Possibly some of these and other improvements in apparatus, such as lighter tripods, dark slides, and the use of aluminium, would have arrived in due course. But we've got them *now* and the hand camera did it.

Small Work.—Although it cannot yet be said that the day of small work has arrived, yet I claim that we are now appreciating quarter-plate prints very much more than we did. This has been a gradual growth truly, but a *resume* of exhibitions during, say, the last two years would certainly prove the existence of the growth. In the old days the reports were something like this: "Mr. Blank shows a frame of snap-shots, which, as such, are very good." "As such," indeed; that is where the blind bigotry crept to the front. It was usual in those days to term them "snap-shots." Never mind if evidences of composition, careful treatment, and individuality were visible in the prints—that did not matter. They were snap-shots—no more, no—well, I cannot say no less, as no further degradation of photography could be, they imagined. They were taken in a hand camera, and that damned them for all time. But now—they are snap-shots no longer, but prints the same as the rest. The influence has carried us toward the recognition of merit in the smaller sizes of prints, so much so that ordinary quarter-plate and 5x4 are constantly represented.

I'll admit that we have not yet reached rock bottom on this question, for, undoubtedly, small work does not receive its full meed of recognition; nor can it be said that hand-camera work is yet free from enemies. Even now, some puffed-up, unmitigated egotist of the high-art school waxes wroth occasionally, and provides padding for one of the photographic publications. He is usually one of those to whom photography must mean "art" or nothing. Well, we hand-camera workers do not suffer very much; I presume we have the proverbial duck's back. Anyway, Mrs. Artist Partington has no broom capable of keeping back the tide of the hand camera. Personally, I consider any man, who believes that photography is entirely concerned with art, science, or, indeed, any *one* branch, to the exclusion of every other, may safely be written down an ass. Hobbies may be ridden to the death, but they must not be allowed to order all others off the road.

Increase of Photographers.—Another very powerful influence is that of increasing the number of photographers. I don't think it can be denied that the principle of "You press the button, we do the rest," has increased the number of workers considerably. Many hundreds of the outside public,

to whom the very mention of a camera, tripod, lens, etc., would have frightened into fits, have bought a hand camera, to do "button-pressing" for themselves. Many of these must have been seduced into our ranks; for the step, from having "the rest" done by some one else to the doing of it themselves, was one of the easiest transition. Upon this point let me not be misunderstood. I cannot claim that all the "button-pressers" have become photographers (this is a terse way of putting it), but certainly a good many have been so pleased with their new hobby that they have made the plunge.

Better Posing of Figures.—This is another influence I claim. Of course, I know full well that all good photographers pay, and have paid every attention to this matter; but my point is that the hand camera has stimulated effort in the same direction amongst the lesser workers. Let us suppose a case, of Smith, a half or whole-plate man, and his friend Brown, a snap-shot man. Smith is a careful worker of several years' experience, whilst Brown is but a beginner. Upon a comparison of results, Smith finds that in all his pictures there is too much staring at the camera if he introduces figures in the scene. He finds in Brown's shots, poor though they may be either artistically or technically, that, at all events, every one is not rooted to the spot, looking at the camera, and having the appearance of plaster-of-paris images plumped down into the landscape, wishing they hadn't come, and wondering how they are going to get out. He takes the lesson to heart, and improvement in this respect follows. I am not saying this without authority, for I have seen the change in the work of many of my friends.

Illustrated Journalism has benefited considerably by the hand camera, as witness the reproductions of shots in the *Fall Mall Gazette*, the *Westminster Gazette*, and other up-to-date periodicals. The hand camera gives the power of depicting life and incident, which to the ordinary camera are impossibilities. This leads me to my last point in this section, but it is in no way least. Indeed, I would lay considerable stress upon it. It is the influence of

Life and Character Studies.—As photographers we ought, I really believe, to feel a considerable amount of shame at the neglect of such a fine opportunity. If so be a hundred years hence it may be asked what has photography done, is the reply to be that it has produced pictures (at least the art photographer

calls them so, though the painter will in no wise admit the fact) and pictures only? Certainly not. We can point to its use in astronomy, microscopic, medical and many other directions including the preservation of historic buildings and spots of interest. But will it not be asked at once, "why did you not with the ample means at your command preserve for us the dress and fashion, the characters and incidents, the every-day life and bustle of the street?" Are we to answer that we sat at the feet of art masters who taught us so much about the diffusion of focus, the rules and canons of art, the composition, light and shade, freedom of treatment, idealism, realism, impressionism, and a few more "isms," that we either had no time, or were afraid to descend to such commonplace work as the life and character of the present century? I trust not, and sincerely hope a better account of our duty can be given. Here with the hand camera we have the opportunity of portraying for posterity life, life with its joys and sorrows, its sunshine and shadow, its comedy and pathos. The hand camera can in many cases do this better than the artist, and at all events we can do very much more in a given time. I have on many occasions fallen foul of photographic survey work, especially when any limitations of size or anything else debar hand-camera prints. Because that means the exclusion of life and character which I firmly believe will have much more interest for future generations than these old mills, river banks, abbeys and castles, churches and public-houses (interior and exterior of each, of course), wandering brooks, etc. These may be stamped with the individuality of the artist; they may have clouds skillfully printed in from another negative; they may show the stream from the artist's house looking south, from the west, from the east, with the artist's house in the distance, and from round the corner; they may be sharp all over, or sharp nowhere, but there is no life about them. Certainly, a farm laborer, say, may be introduced into the stream picture, but he will have his best go-to-meeting clothes on, be gracefully posed, and wear an expression upon his face a conjunction of care whether the cow is likely to get into the field, if this operation will keep him later at work, and whether he'll get a copy of the print. We may also be able to show studies of natives taken in the studio, with impossible backgrounds and sitting upon papier-mache rocks, or standing in the street

spruced up for the occasion, carefully posed, erect and manly, wondering what would happen if the show "bust."

After all, is there no art in the portrayal of life and movement? Is there no art in depicting the emotions and feelings by the expression upon the countenance? Are we to shut our eyes to the pathetic or humorous side of living nature? Must all art consist of dead tree-trunks, printed in clouds that run over the trees and landscape as if they were not quite sure just where they ought to be, and streaks of sunlight caught on the spree?

Must we produce representations of nature in an intoxicated state, or, as Captain Abney expressed it, "makes one perfectly sick to look at"?

No, good army of hand-camera workers, let not your hearts be troubled by this high art falutin. Keep steadily on the way of life and character, which is one of the hand camera's strongest directions of work, and the future will bless you equally with those who portray nature rubber-stamped with their own originality or eccentricity.

I have wandered slightly from my subject, but the influence of the hand camera is, and must be still more, felt in the direction of immortalising the men and women of to-day.

Mental and Physical Influences.—I now come to a somewhat more difficult subject to tackle, viz., the influences, physical and mental, of the hand camera. I don't expect you will agree with me upon some of the points at all, for the reason that, until a man has become a really earnest worker of some experience, these influences can hardly be understood. The hand camera, to my mind, exercises a considerable power of education, both mentally and physically. At all events I have so found it. As the two points are so interweaved one with the other, it will be necessary to treat them together. The directions I refer to are principally increased speed of artistic perception, improving the vision, and quickness of action and decision. It is, perhaps, true that the class of work principally undertaken by each worker will make this point of lesser or greater importance. One who goes in for street work or rapidly moving objects will benefit more in these respects than the landscape worker. I still hold the opinion that successful hand-camera workers are born rather than made. Nevertheless, I cannot lose sight of the educational power of actual practice, for, speaking personally, the

hand camera has quickened my thoughts and actions to a not unimportant degree. Speed in work and thought in these go-ahead times is not to be sneered at, and I do positively assert that I can work at greater speed, think, and decide more quickly than before using a hand camera. Take the question of focussing rapidly, and, to illustrate it best, let it be tried on a full-size focussing screen upon an approaching object. A few trials will prove how much more quickly it is possible to decide when actually sharp, and to fire the shutter, than it was at first. The whole question of thought and action following therefrom is quickened. To illustrate this, let me mention another capital test, that by electricity at the Aquarium, a test of vision and action. A pistol is held in the hand and a disc is watched. At a certain time a definite object passes this disc, and the task is to quickly fire the pistol, an electric arrangement of a black band registering the time that elapses between seeing the object and firing the pistol. Take any ordinary photographer (he must not be a shooting man, however), pit him against an experienced hand-camera worker, and the difference in the fractions of the second will be startling. Nay, further, let the hand-camera worker first try after a month or two's absence from the camera, and then, second, after he has been with it in the streets that day. He will be struck with the improvement. I therefore claim that the hand camera so improves our vision, our thoughts, our actions, in the direction of speed as to materially alter even a man's character. He decides and performs the result of the decision more quickly. He becomes sharp, prompt, and decisive, and past hesitations vanish. The hand camera, therefore has considerable influence in altering the mould of the man.

I am ready to admit that the second division of influences may not appear of very much account, but am, nevertheless, convinced that, even if that is so, it is because I have not the ability to put these considerations before you properly. They wander afield somewhat from photography into other domains of study, with which I cannot claim much acquaintance as yet.

In conclusion, I claim for the hand camera the following points:—1, Increasing speed of plates; 2, Improving apparatus generally; 3, Causing greater attention to small work; 4, Increasing the number of photographers; 5,

Naturalness of posing; 6. Aiding illustrated journalism and the study of life and character; and 7, Improving mental and physical action.

The paper is no weak-minded, cover-all-the-ground sort of attempt, but may almost be termed a fighting one. It is not hedged in with "buts" and "perhaps" and admissions or concessions, so as to prevent discussion or criticism. I have said what I believe and what I am prepared to defend from any honest enemy. And in that spirit I offer it to-night in the words of Hamlet,—

"Our thoughts are ours; their ends none of our own."

WALTER D. WELFORD.



Mr. H. Snowden Ward, editor of the *Practical Photographer*, left England, en route for New York, on July 1st. A number of other accomplished photographers accompany him, and by the time this journal is in the hands of our readers the majority of the party will be enjoying the wonders of the World's Fair. It is said—mind, we only whisper it—that friend Ward will take a bride with him on the return journey. He has our hearty good wishes.

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LAWRENCE, Mass.,

June 15th, 1893.

Eastman Kodak Company.

GENTLEMEN,—I enclose two photos, an albumen and a Solio print, which have been in my showcase side by side, at entrance on south side of building, exposed to strong light on south side of building for the past eight months. The albumen print, as you will see, is discolored, while the *Solio* is as bright and fresh as the day it was toned. I consider this a fair test, and demonstrates the relative permanency of the two papers.

Yours truly,

(Sgd.) W. H. ALLEN.

Answers to Correspondents.

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

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

All communications for this column to be addressed

W. ETHELBERT HENRY,
SARNIA, ONTARIO.

Miss R. A.—Certainly, an ordinary collodion positive may be burnt in on glass, but the result will be pale and disagreeable. First tone the image *thoroughly* in bichloride of platinum, then place it in acidulated water until the film becomes detached and replace the glass by an enamel placque or china tablet. When dry, burn it in the usual way and the result will well repay you.

• • •

JUMBO.—Yes, there is a metal which has the peculiar property of expanding as it cools, and for this reason it is chiefly used in stereotyping. It is made of lead, 9 parts; antimony, 2 parts; bismuth, 1 part.

• • •

FERROTYPYPER.—With much pleasure we give you the best formula for collodion for tintypes:

Ether and alcohol, equal parts.	
Iodide of ammonium.....	3 grs. to the oz.
Iodide of cadmium.....	2 " " "
Bromide of cadmium.....	2½ " " "
Gun Cotton.....	5 to 6 " " "

The collodion keeps well and improves as it becomes riper. Let us hear how you succeed, and write freely if you want further help.

• • •

AGGIE.—Do not believe in the specious circulars of the "Diamond Cameo Patentee." It is simply the old, old story of sticking a photo on glass and coloring it from the back. Their "licences" are not worth the paper they are printed on, and the "process" itself is about as old as the hills.

KAMINISTQUIA.—Your pseudonym put me in mind of the good old days on the C.P.R. The most reliable way to clean an engraving is to put it on a smooth board and cover it thinly with common salt finely powdered; squeeze lemon juice upon the salt so as to dissolve a considerable portion of it; raise one end of the board and slowly pour over the engraving (from the top-most edge) boiling water from a tea-kettle, until all the salt and lemon juice are washed off. The engraving, which will now be found quite white and free from stains, must be dried slowly without removal from the board. If dried by the sun or fire it will probably become tinged with a yellow color.

Your other query is being answered fully by mail as requested.

. . .

BERT, W.D., C.F. DAY, J. BARRIE, HATTIE AND SERPENTINE will please accept my warm thanks for their very kind congratulations.

. . .

E. STILLMAN, A.E.I (Ottawa), AND P.E.N.—Full directions by mail.

. . .

FEDERAL.—To mount prints in optical contact with glass for window decorations and other purposes: Soak the clean glass in a tray of hot water, and in another put the prints to be mounted. Make a weak solution of gelatine (about 25 grains to the ounce) and put this in a receptacle having an outer jacket of warm water to keep it in a melted condition.

Dip a sheet of glass and a print into the gelatine, and see that no air bubbles form on either; put the print face down on the glass, and lift them both together from the gelatine. Then gently pass a squeegee over the print to expel the surplus gelatine, and clean the face of glass with a damp cloth.

J.E.—You can readily remove the gelatine films from your waste negatives by immersing them singly in a tray containing water, 40 ounces, hydrofluoric acid, 2 ounces. The edges of the film will soon lift from the edges of the plate, when the entire film may be stripped away:

. . .

M. asks—What is the law? If a person sits for photos, approves of the proof, pays no advance, and then leaves the finished work on your hands, can you sue without delivery of them, the work of course being good? **Ans.**—Not with certainty. Deliver the photos personally to the sitter or his agent; or send by registered mail. Then sue for the full amount of bill, subpoena any necessary witnesses to prove your case, and, when judgment is given, *ask for your witnesses' expenses.* Better retain a good lawyer who will run your case to a successful issue, and saddle the defendant with the costs. Probably a sharp letter from your lawyer, *with his bill for same enclosed,* will render any further action unnecessary.

. . .

J.T.A.—Very glad to hear you are over your toning difficulty. The portrait you submit is thoroughly well lighted and very pleasing in tone. It is evident that the development of your negative is as nearly perfect as can be. It is admirable throughout.



“The student should carefully study the matter of copyrighting, for he will find both publishers and photographers are, as a rule, ill-informed on the copyright law.”—*P. H. Emerson.*

[A full and instructive article on “Canadian Copyright and How to Secure It” will appear in our next issue. Eds. C. P. J.]

An Excellent Mountant.

We have used the following for several years and can highly recommend it. It will keep indefinitely without losing its sticking properties :—

Bermuda arrowroot (best).....	3½ oz.
Gelatine (Nelson's No. 1).....	160 gr.
Methylated spirit.....	2 oz.
Carbolic acid (pure)	12 min.
Water (cold).....	30 oz.

Mix the arrowroot into a stiff cream with two ounces of the water, while the gelatine is placed to soak in the remainder. When the gelatine is softened and the arrowroot well mixed, pour all together into an iron saucepan and bring to the boiling point. Keep at this heat for about five minutes, being particularly careful to stir continually from the moment the mixture is placed on the fire. When sufficiently cooked, pour into a basin to cool; when cool, add carbolic acid and spirit (previously mixed) in a thin stream with constant stirring. Then bottle and keep well corked.



Practical Formulæ for Practical Men.

The *Journal de Pharmacie* states that if, to a strong solution of gum arabic measuring 8½ fluid ounces, a solution of 30 grains of sulphate of aluminum dissolved in ⅔ of an ounce of water be added, a very strong mucilage is formed, capable of fastening wood together, or of mending porcelain or glass.

• • •

Corks may be rendered perfectly ether-tight by coating them with a solution prepared from four parts of gelatine, fifty-two parts of boiling water, and one part of ammonium bichromate (added to the filtered gelatine solution), and then exposing them for a few hours to sunlight.

According to Mr. A. Lainer, the addition of a small quantity of iodine to the developing solution gives increased rapidity to its action, greater density to the high lights and more delicate gradation in tone. A convenient solution may be made by dissolving ten grains potassium iodide and five grains iodine in one ounce of water. From five to ten drops of this may be added to two or three ounces of a pyro, eikonogen or hydroquinone developer.

• • •

The *Photo. Industrielle* informs us that an excellent cement may be made with gelatine for repairing articles of glass, wood, porcelain, leather, etc. To prepare it take one part of hard gelatine, which is to be dissolved with the aid of heat in one part of acetic acid, and then add one part of alcohol. This composition should be kept in a well-stoppered bottle. To use this cement it is necessary to heat the bottle in warm water.

• • •

CERAMIC ENAMEL PROCESS.—To prepare enamels by the pigment process make a mixture of—

Gum arabic.....	3 parts.
Distilled water.....	30 "

Filter through flannel. Then add—

Sugar	1 part.
Bichromate of potash.....	2 parts.
Glycerine.....	5 "

And as much liquor ammonia .880 as will make the solution light yellow. Black porcelain color previously mixed with flux is added till a drop looks quite opaque on glass. A sheet of glass is coated with vaseline and polished and coated with the above till quite black when looked through. This is then dried in an oven. When half dry, a sheet of damp, stout paper is squeezed into contact and the whole thoroughly dried at 50 deg. C. When dry,

the paper and film is stripped from the glass and exposed for a short time under a negative. The porcelain on to which the image is to be burnt is coated thinly with a solution of—

Gum arabic.....	5 parts.
Bichromate of potash.....	1 part.
Distilled water.....	500 parts.

It should then be dried and exposed for some hours to a bright light to render it insoluble. The exposed tissue is made limp in water, squeegeed into contact with the porcelain, and developed with warm water exactly as in the carbon process, then half dried by flooding with spirit. Then completely dried with a gentle heat and coated with a varnish composed of turpentine and tar oil. As soon as the varnish has become tacky, it is dusted all over with flux and burnt in a muffle. The above was translated by Mr. E. J. Wall, in *The Amateur Photographer*, from *Die Photeramik*. We add the composition of a suitable black powder from the same book, as follows:—

Oxide of cobalt	2 parts.
Sulphate of zinc.....	1 part.
Sulphate of iron.....	2 parts.
Sulphate manganese	2 “
Saltpetre	12 “

The flux given in our February issue will be found suitable, viz.:—

Red lead	4 parts.
Powdered silica	1 part.

Isochromatic Photography.

IN the course of an able article on this subject, a writer in *Photographic Scraps* says:

“Some of the advantage of iso plates, above and beyond their color sensitive-ness, will be found to embrace, in portraiture, the non-exaggeration of freckles and other facial blemishes, so that retouching is much reduced. Their sensitiveness to colored articles of attire

would alone suggest the desirability of their use in the studio, whilst the fact that they work well in the studio in a yellow or bad light and late in the evening, without a yellow-glass screen, and when ordinary plates fail, should at once decide the question of their supreme value to such as have to carry on work during dull weather. In landscape work, clouds come out very perfectly in iso plates. In distant views, iso plates tend to avoid faintness of the distance, which almost always occurs when a dull blue haze hangs over everything. Iso plates are very discriminatory of the different kinds of foliage, and I hear on all sides unqualified approval of slow iso plates, used with a pale yellow screen, whenever old paintings are to be copied.

Although the method of Tailfer and Clayton of colour-sensitizing can be applied to almost any grade of plate, it is questionable whether other than two rapidities are really wanted. All I consider necessary is a plate of ordinary rapidity for use with yellow screen, for copying, for still landscapes and for architecture; and a rapid plate for use principally without the screen, for instantaneous purposes, and for brief exposures, either out of doors or in the studio.

There seems to be some diversity of opinion whether iso plates have any actual advantage over ordinary plates when used without the yellow screen. My own experience is that the screen does, under certain circumstances, increase the effect, even up to exaggeration, so that it is a dangerous weapon, as results are then as false as those given by ordinary plates. There is no hard-and-fast line to be drawn where the screen should be used and where not; circumstances alone can control that.

The use of iso plates calls for no very abnormal treatment. Their sensitiveness, not only to white light, but also to the colored light of the dark room, necessitates greater care to avoid light fog, so that only deep red light should be used when changing plates into or out of slides, and in development it is advisable to shield the plate from even the direct red light by keeping the dish in shadow, and only bringing it into red light just to see how development progresses.



The Photographic Society of Japan.

The annual meeting of the Society was held at the Seiyoken, Uyeno, on Saturday, 20th May, at 5 p. m., Prof. D. Kikuchi, M.A., in the chair.

The minutes of the last regular meeting having been read, the Secretaries were called on for their report, and read the following:—

Your Secretaries have again to report the successful working of the Society for a year. There are now 171 names on the list of members. It has been found that the plan of holding monthly meetings at a fixed time and place has worked very well. There have been more meetings than in former years, and the attendance has been better than it was. It would take too long a time even to enumerate all the processes that have been demonstrated or discussed, the apparatus that has been shown, etc. It is enough to say that those who have attended the meetings regularly can have no excuse for being behind the photographers of other nations, in any matter connected with the technical side of photography. There has been a large increase in the number of amateur photographers in the country, and it is pleasant to note the earnestness displayed by those who take to the use of the camera with no view of making a money profit by it. By far the most important event of the year, for the Society, has been the opening of the Exhibition that now surrounds us. It cannot be but that photographers in this country, whether

professional or amateur, will profit by seeing the best pictorial photographic work produced by any other countries in the world. Thanks are certainly due to the Camera Club of London, and particularly to Messrs. George Davison and Andrew Pringle for sending us this magnificent Exhibition. We have to record, with deep sorrow, the death of Dr. G. Wagener during the past year.

The Treasurers were then called on for their report.

Mr. A. J. Hare explained that, on account of Mr. Kajima's unintermittent labor in connection with the Exhibition by the Society during the past month, it had not been possible to finish the balance sheet. The Society was, however, in a flourishing condition financially, and a balance sheet would be ready within a few days, and would be printed in the report of the annual meeting. Mr. Edmond R. Holmes and I. Ishidzu were appointed auditors of the balance sheet.

The following gentlemen were then unanimously elected members of the Society:—

Prince K. Sanjo, Count J. Omura, Dr. W. Vander Heyden, Lieut. T. H. James, and Messrs. W. J. S. Shand, W. Gordon, M. Kondo, M. Suyenobo, C. Otsuki, S. Yamamoto, M. Date, M. Nakakura, R. Shimoka, E. Block, G. Henry, E. A. Hornell, Marquis A. Tokugawa, and Prince T. Konove.

After this the officers all resigned. It was proposed by Mr. J. Milne, seconded by Dr. Augustus Wood, that the whole of the officers be re-elected. An amendment was proposed by Mr. A. J. Hare to the effect that Mr. W. K. Burton be proposed as Vice-Chairman, and Dr. Augustus Wood be proposed as the Foreign Secretary. The amendment was duly seconded, put to the vote and carried. The original proposition as amended was then put to the vote and carried.

It was then proposed by Mr. Y. Ishikawa, seconded by Mr. K. Ogura, that Prince A. Tokugawa and Marquis T. Konoye be elected Vice-Presidents. They were unanimously elected. It was proposed by Mr. W. K. Burton, seconded

by Mr. A. J. Hare, that Dr. Professor J. Scriba, Professor John Milne, F.R.S., and Mr. O. Keil, be elected Vice-Presidents. They were unanimously elected.

The proceedings ended with a vote of thanks to the Chairman.

After the meeting some forty to fifty members sat down to dinner in the large room of the Seiyoken. Prof. D. Kikuchi, as Chairman, proposed success to the Society, and Dr. Divers, as Vice-Chairman, proposed the health of Mr. G. Henry and Mr. E. A. Hornell, to whose untiring energy for several days was due the excellent way the photographs were hung.

Mr. Hornell, in replying, said that, speaking as an artist, he considered the work of the Japanese photographers quite up to that shown at the present Exhibition. He said some very bitter things about the Exhibition of Oil Paintings held next door to that of the photography, as also did Mr. Henry. Various other speeches were made, and after dinner Mr. Milne showed the slides that he was about to exhibit in America on behalf of the Photographic Society of Japan. Taking it all through, the evening was a great success.

It has been arranged that Her Majesty the Empress will visit to-day (23rd inst.), the Exhibition being held in present to Uyeno, Tokyo, by the Photographic Society of Japan. Since we wrote our notice of the Exhibition of Foreign Photographs, a separate Exhibit of Japanese Photographs has been added. These will be viewed with special interest in consideration of the opinion expressed by one so capable to give judgment as Mr. E. A. Hornell concerning the comparative artistic merits of the works of Japanese and foreign photographs.



Want the Duty Removed.

AMONG the recent petitioners at the capital for tariff reform were the Canada Smelting and Refining Company, of London, an industry established for the purpose of smelting and refining precious metals. Their application was prompted by the fact

that the custom house authorities in this city wished to tax them 20 per cent. upon their first consignment of raw material received from New York. The raw material consists of sweeps in gold and silver, such as the waste metals from the manufacturing jeweler's work bench, and the scraps, etc., from silver plate factories; also all *photographic waste* containing gold or silver. This stuff is admitted free into the United States. The sweep smelters across the line take advantage of this, and four or five times a year all the large Canadian trade centres are visited by their travelers, canvassing for these sweeps, which is reduced in the home factory with great profit to the reducer. That is all right; but the Dominion Government has placed sweeps in the unenumerated list, thus laying on it a duty of 20 per cent. This practically prevents Canadian sweep smelters from competing in the United States market, while all Canada is opened to the latter. It was to protest against this unjust discrimination that the customs authorities were appealed to.

Last week the manager of the Company, Mr. Fred. T. Trebilcock, in company with Mr. Charles A. Grant, manager of the Montreal Watch Case Company, had an interview with the Comptroller of Customs, Hon. N. C. Wallace, and the Minister of Finance, Hon. George E. Foster. Mr. Grant urged the removal of the duty from the sweeps, thus allowing the Canadian smelter an opportunity of purchasing his raw material without being taxed the 20 per cent. This would place him on an equal footing with his American competitor. Mr. Grant said that Mr. Trebilcock was a thorough, practical and ingenious man, and deserved credit for starting works in Canada, which were much required by and would be

of great advantage to all interested in jewelry manufacturing and in other lines in which gold, silver, platinum and precious metals were needed. Mr. Grant said he would be able this year to give his sweeps to the new Canadian industry.

Mr. Trebilcock was called upon, and practically illustrated his requirements. He placed on the desk a box of gold sweepings—a portion of the consignment held in London. He explained how it was reduced to fine dust, then smelted, producing a bar of metal and by another process reduced to fine gold. The sweepings went up the chimney in smoke and were thrown off in a slag and worthless dross; and as gold and silver bullion was on the free list the Canada Smelting Company had to pay literally 20 per cent. duty on smoke.

The Ministers promised to do what was best in the matter, and try to have it put on the free list by special order-in-council immediately after this session of Parliament.

The Company, which has opened the only assay office in Canada, expect to do business in the United States as well as Canada, if the disadvantages of the present duty are removed and they are given an equal chance to compete with their American rivals. It will prove quite an industrial acquisition to the city.

A New Firm.

THE Photo Supply Co., of Toronto, recently conducted by Mr. J. D. Manchee, with Mr. R. Petman, Jr., as manager, has changed hands, Mr. Manchee selling to Messrs. Howell and May, who intend carrying on the business under the same style and name and at the same address, 54 Yonge Street. The personal of the new firm is such as is sure to command

success, both being pushing, hard workers and with good business heads.

Mr. D. J. Howell is well and favorably known to the photographic fraternity, both professional and amateur, being for a number of years bookkeeper and salesman with Messrs. J. G. Ramsay & Co., and later in the same capacity with Messrs. S. H. Smith & Co. He is a rather clever photographer as an amateur, having won a number of first-class medals and later in his short career as professional with Farmer Bros. having successfully undertaken some rather difficult work. He is thoroughly and intelligently conversant with the art-science of photography and with the requirements of the trade.

Mr. C. F. May, as yet little known in photographic circles, has been successfully connected with the paper and stationery trade in Toronto and Oshawa. He is (by the way) a son of Dr. S. P. May, Superintendent of Education of Ontario, and has a good business training. Together they make a strong team.

The ambition of this new house is to keep right up to date with all that is newest and best in photography, adding from time to time such new features as the trade will be glad to avail themselves of. Although competition is keen among the stock houses, especially in Toronto, there is always room at the top, and if perseverance and hard work, with their ability and personal influence are worth anything, they are liable to get there.

Their advertisement on another page merits your attention.

If photographers all over the country would urge upon lawyers the importance of patronizing photography, they would win more cases than they do, as photography is an indisputable witness.
Dr. E. L. Wilson.

Free Dark Room.

Editor Canadian Photographic Journal:

Owing to the fact that a charge of \$2.00 per day is made by the World's Fair authorities for the privilege of making pictures on the Exposition grounds, we deemed it important that a plan be adopted whereby success would be assured every Kodaker who pays for this privilege. We have accordingly secured the concession for a film dark room, which will be open about June 15th. Competent attendants will be in charge to set right anybody that may have trouble in operating the Kodak. They will be prepared to reload Kodaks and also to make any slight repairs that may be necessary. A number of Kodaks will be kept on hand which will be loaned to replace any that works unsatisfactorily. It will thus be seen that with the fine quality of film which we are now putting out, failure will be almost an impossibility. As our concession is *exclusive*, no other manufacturers of hand cameras are in a position to give their customers the advantages which we offer.

The Kodaker thus has an advantage that no other "camerist" enjoys. With the services of our attendants at his command, the free use of our dark room, the special Columbian spool with a capacity of from 100 to 350 exposures, and the *privileges of exchanging his Kodak for another* if it is not in perfect working order, *success is assured.*

Yours truly,

EASTMAN KODAK CO.



A RECORD.—Messrs. Werner & Son, of Dublin, have just produced a direct portrait negative 64 in. x 38 in., which we believe, is the largest direct portrait ever made. Three or four years back a landscape negative was made (in the

United States, of course), on a plate 8 ft. x 6 ft., but we think it cannot have been a great success, for we never heard of any prints from it being shown. Messrs. Werner's negative was made on an Edward's plate, in a camera built to take plates up to 78 in. long. The lens used was a Ross doublet of 5 in. diameter, and the exposure was 10 seconds at $f/16$. The plates cost £4 15s. each. Both the negative and prints from it will form part of Messrs. Werner's exhibit at Chicago. Mr. and Mrs. Werner are members of our party. visiting the United States. this year.—*Practical Photographer.*

• • •

Artists, and especially portrait painters, are troublesome sitters under the lens. This is the testimony of one who has photographed most of the Royal Academicians. Millais just sat himself down and said, "You must photograph me like this." There was nothing else to be done. He was tremendously impatient, though gentlemanly and genial in his manner. The most troublesome sitter was Sir Frederick Leighton. This was partly from hurry, and partly from exceptional nervousness. But his legs were not long enough. He wanted to appear tall, and so the portrait had to be made a three-quarter length.—*Til-Bits.*

• • •

THE RIGHT PERSON.—Stranger (at the door)—I am trying to find a lady whose married name I have forgotten, but I know she lives in this neighborhood. She is a woman easily described, and perhaps you know her—a singularly beautiful creature, with pink and white complexion, seashell ears, lovely eyes, and hair such as a goddess might envy.

Servant—Really, sir, I don't know—Voice (from head of stairs)—Jane, tell the gentleman I'll be down in a minute.—*Yankee Blade.*

(Photo Society of Great Britain)

Photogravure; or, Photographic Etching on Copper.

(Continued from the June Number)

The film of gelatine is very susceptible to change of temperature or dryness of the air, and it is as well to avoid leaving the plate after development in a warm room. I have had many films cracked completely off the plate by bringing the plate out of a cool room into a moderately warm one. This danger can be completely avoided by flooding the plate after all moisture has been expelled with a mixture of glycerine and methylated spirit in the proportions of one part of glycerine to twenty of spirit; but the use of glycerine for this purpose brings in another evil which is almost as bad as the one it is meant to cure. The glycerine is very difficult of removal from the margin of the plate, and I have found that if any trace of it is left upon the plate, the varnish does not afford protection against the mordant, and after the plate is finished the margin of the copper requires repolishing. Another effect of the glycerine is to make the gelatine film more pervious to the mordant. In fact, the moisture of the glycerine keeps the film in a more or less spongy, and therefore porous state, as well as by diluting to a certain extent the mordant, enabling the latter to penetrate the film more easily. I do not consider this an objection except that, if it is only used occasionally, it introduces an element of uncertainty, so that one cannot rely so absolutely upon getting the exact effect desired; so that I prefer except during very hot weather to trust to avoiding the stripping of the film by keeping the plate, between development and etching, in a cool room. There is no opportunity, or at least I have found none, of re-

touching upon the resist except to the extent of stopping any pin holes with a fine sable brush and black varnish, and of course whenever a spot of varnish covers a portion of the plate, in the finished print that spot will be represented by a white mark, so that spotting is to be avoided as much as possible. The only other method of retouching which I have tried is by increasing the thickness of the film by painting it over in places with a solution of bichromated gelatine; and this is such a very delicate operation that I consider it unsatisfactory; and, moreover, the plate must always be exposed to the light to render the gelatine insoluble.

The plate is now ready for etching, and I will give you a list of the etching solutions to be employed; they are five in number, and consist of solutions (in water) of perchloride of iron of different strengths.

No. 1 should be made to register on Baume's scale 45°, the percentage of perchloride in this solution is 47, and the specific gravity is 1444.

	Percentage.	Specific Gravity.
No. 2.—40°.....	41 1375.
No. 3.—38°.....	38 1339.
No. 4.—35°.....	35 1315.
No. 5.—27°.....	27 1225.

The solutions are given in the order in which they are to be applied to the plate, and it will be observed that No. 1 is the strongest. A peculiar feature about the action of the mordant through the resist is that the stronger the solution the less penetrating power it has. A solution at 45° will only penetrate the thinnest film of gelatine, while a solution at 27° will penetrate almost any thickness, and I take this to be the result of two causes; first, the tanning action of the perchloride upon gelatine which renders the film more or less impenetrable, and secondly the viscosity of the solution itself.

The principle, then, upon which the etching is conducted is that No. 1 solution will penetrate and etch the deepest shadows of the picture, which will of course be covered by the thinnest film. No. 2 will attack the plate through that portion of the film which is next thinnest, and so on until No. 5 solution is weak enough to penetrate the thickest film which represents the high lights of the picture, and complete the etching of the plate. It requires some experience to decide exactly how long each solution shall be allowed to work before the plate is transferred to the next weaker, but a good guide is to allow each solution to operate until the darkening of the copper (which is the evidence of the etching) ceases to spread to a thicker portion of the film. When this occurs it is known that the particular solution in use has reached a portion of the film the thickness of which bars its further progress, and the plate should then be transferred to the next solution. Of course you will understand that the action of each solution, after the first, is cumulative, the portions of the plate attacked by No. 1 solution will be also etched by each of the four succeeding solutions, and the action of No. 2 solution, and indeed of each solution, will be continued by each succeeding one. In the dark portions of the picture the danger is that in biting to the necessary depth the bitumen ground may be undermined by the mordant and so the grain be destroyed. This is due to the lateral as well as vertical action of the mordant. The place attacked by it being increased in width as well as in depth. What one really requires is to have a ground abundant in quantity and of a coarser nature in the portions of the picture to be deeply etched, so as to make allowance for part of the grain being lost through the

lateral action of the mordant ; but the difficulties of obtaining a ground which shall differ in character in one place from that in another are very great, but it is the one part of the process which is in need of improvement. I may say that for some time past Mr. Wilmer and I have been experimenting with a view to obtaining what I may term a "selective" grain, and our experiments so far have been very encouraging, but they are so far incomplete that I don't feel at liberty to lay them before you on the present occasion. The etching as a rule will take from eight to twelve minutes according to the character of the picture. The times will be something as follows :—

No. 1, one minute.

No. 2, two or three minutes.

No. 3, about three minutes.

No. 4, about two or three minutes ;
and

No. 5, until the highest lights of the picture have been discoloured by the mordant and from half a minute to a minute longer.

It is quite impossible to tell beforehand the length of time that the plate will require to remain in a given solution, except No. 1 solution ; it depends so very much upon the hygrometric state of the atmosphere at the time and the depth to which the resist has been printed. This is a matter for experience, but with the remarks I have made upon it, and by having regard to the rule as to changing the solution immediately the action of the preceding solution ceases, you should have no difficulty in producing a plate that will yield a print. With regard to solution No. 1 (45°), generally speaking, it is not advisable to allow it to act for more than a minute, otherwise the shadows print too black and the true gradation of the negative is lost.

The temperature of the etching solutions also greatly affects the rate at which the etching proceeds; it is therefore advisable always to use them at the same temperature, say 70° Fahrenheit.

Now a word as to making up the etching solutions. The most convenient way is to put about 7 lbs. of perchloride of iron (the solid, not the solution) into a large glass bottle with a wide mouth and pour boiling water upon it sufficient to cover it; after standing for sometime with an occasional stir the perchloride will be dissolved. The liquid can be drawn off, after settling, with a syphon without getting any of the sediment which will be found at the bottom of the bottle.

The solution as it is drawn off will be found to register between 43° and 45° on Baume's scale. A portion of it can be evaporated down to form solution No. 1 at 45° and water can be added in order to obtain the four other strengths. The strength of the solutions can be ascertained by filling a tall jar with the solution and testing it with Baume's hydrometer for heavy liquids. It is as well to give all the solutions a few minutes' boiling as it tends to make them more transparent, and the progress of etching can be more readily observed under them when etching the plate.

With reference to watching the effect of the etching; if the resist printed on standard brown tissue has been printed to a depth only just sufficient to give the details in the shadows, no difficulty should be experienced in watching the darkening of the copper beneath it. There is, however, another tissue which the Autotype Company specially prepare for photogravure work in which the pigment is of a bright transparent red. My experience with this tissue is somewhat limited and I do not, as yet,

feel justified in recommending it to you as superior to the standard brown; but the ease with which the progress of the etching can be watched is very greatly in its favour, and if the tissue is suitable in other respects (and as the Autotype Company prepare it for this especial purpose I have no reason to doubt that it is not entirely suitable) it will soon supersede standard brown entirely.

The plate having been etched, it is removed from the last etching solution and quickly washed under a tap, rubbing the film with the fingers until it has been removed from the plate. This will be found quite easy to do, as the film appears to have become rotten under the action of the perchloride of iron. After drying the plate, the black varnish is removed from the margin and back with a pad of cotton wool moistened in benzole, and the benzole at the same time removes the ground from the plate. Another pad of cotton wool is then taken, a small quantity of spirits of turpentine is poured upon the plate and the plate is again rubbed. After drying, the plate is further cleaned with cotton wool moistened in methylated spirits and dried, and the final polishing is given with the washed whiting and 5 per cent. solution of ammonia, which I have previously mentioned, the plate being gently rubbed with a circular motion, left to dry, and then the whiting having been rubbed off with a dry piece of cotton wool, the plate is ready for printing.

[To be continued.]



Truthful But Artful.

She—Did you ever kiss any other girl, George?

He—None half so sweet as you, darling.