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"THE KITTEN'S BREAKFAST."

From the book of "THE EICKEMENER STUDIES NO. 1."

THE

Canadian Photographic Journal.

DEVOTED TO THE INTERESTS OF THE PROFESSIONAL AND AMATEUR PHOTOGRAPHER.

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

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

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

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

Address all communications to

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TORONTO.

EDITORIAL CHAT.

WE want each and every one of our readers to feel that he or she is personally interested in this JOURNAL. Criticise or praise as you feel it needs; we want your help in many ways. It is necessary to our further success. It is necessary for the making of this JOURNAL what you want it to be. If you disagree with a statement made in its pages, don't waste your arguments on the stove, or the camera, or the office cat, but make them to us, to our readers. Your opinion will be of interest to hundreds of brother workers. Why not let them have it? Send in items of news from your vicinity. Send in useful hints, formulas or dodges that you think will serve to ease the path of a brother worker and make the struggle easier for him.

A FEW remarks by our esteemed friend, Charles Hetherington, at a late convention, are worthy of a place in the memory of every photographer. In substance Mr. Hetherington said : "We are here to learn something that will be of practical benefit to each and every photographer in attendance. Unless this end is accom-

plished, we will go home with a feeling that it did not pay us to attend the convention. In order to accomplish what was desired in this respect, every member must make up his mind to work, and work hard, for the general good of his brother photographers. If a man knew something in regard to manipulation in lighting, printing, toning, mounting, developing, varnishing, posing, or any of the little details of the photo business, it was not only his privilege, but his duty, to 'spit it out,' and not keep it locked up in his little heart, with the key thrown away."

IN our travels through Canada we have found all too prevalent the idea of keeping carefully to oneself the little time or money-saving dodges, the developer or toning bath that works so well in "our" gallery, or some other thing that is religiously guarded as a trade secret. This feeling generally goes hand-in-hand with the similar one that every other photographer in the town is an enemy, or is at least only awaiting a chance to get the better of you, and must be treated accordingly. Both feelings are wrong. Both are a drag upon the advancement of the profession and the photographer. Let us consign such feelings to the dark ages of which they savor; and conduct our business in a way creditable to man and the advanced world in which we live. Be friendly with your opposition; confer with him frequently; exchange ideas with him. When you attend the convention, learn all you can and teach others all you can. Continue this method of receiving and giving benefit with your trade journal. "Do as you want to be done by " holds good in photography as well as in other things. Do this and your business will reward you, to say nothing of your conscience.

ANOTHER one of those rare instances in which the "forked fury" has drawn a photograph upon glass is reported from the observatory situated on Mount Arie, near the summer resort of West Baden. One of the astronomers of that institution, on making an examination of the object glass of one of the telescopes, was surprised to find a perfect photograph of a flower upon both lenses of the instrument. It is believed that the photograph was drawn by lightning, the glass having been left exposed during a storm on one of the upper platforms of the observatory. The flower is one known only in the Mount Arie country.

IN regard to the Great International Prize Photographic Exhibition, an account of which appears in another column, we wish to say that, if desired to do so, we will receive and forward the entries of any of our photographers who may wish to enter work in this exhibition. We have a few entry blanks for distribution. In sending entries to be forwarded, it will be necessary to also send amount of entry fees and postage *both ways*.

"THE KITTEN'S BREAKFAST."

The picture entitled as above, the work of Mr. R. Eickemeyer, jun., and entered by him in the late Toronto Camera Club Exhibition, was the piece de resistance of the exhibition. It attracted a great deal of attention, and created much comment as to the means adopted by Mr. Eickemeyer to obtain a photograph-evidently taken in a house-room under subdued light where very quick exposures would seemingly be impossible-and yet portraying several small children, and a kitten lapping milk, with no sign of movement, and every line in the picture graceful and Many theories were advanced artistic. by visitors, many laughable, and a few probable.

In answer to an inquiry from Mr. A.

H. Howard, who "wrote up" the exhibition for this JOURNAL, as to how the picture was made, Mr. Eickemeyer replies as follows:

' DEAR SIR,—I write to thank you for your very kind words of praise in the CANADIAN PHOTOGRAPHIC JOURNAL in reference to my exhibit at Toronto. It gave us all much pleasure, especially my sister, who posed with her children in 'The Kitten's Breakfast.'

"As the picture seems to have excited considerable comment, I should like to tell you all about it, but the story would be a long one, indeed. There is no trick about the photograph, either in the negative or the printing; it is simply the result of a time exposure in the studio at my home. The accessories were gathered from different parts of the house.

"I am a great lover of things pertaining to colonial times. Furniture of that period, with its noble lines, with the sitters in the simple gowns of that time, constitute material for an endless variety of charming results. Most of my pictures are as carefully thought out as though they were to be paintings instead of photographs, and as I long since realized the limitations of photography in picturemaking, I try to make my compositions as simple as possible.

"Last summer I was fortunate in having my Saturdays to myself, and I utilized much of the time in getting this picture—for a kitten, together with a family of wide-awake children, are not very easy to keep quiet, even for three seconds, and it was not until I had made nine or ten negatives, and had used the best part of three Saturdays, that I got what I wanted.

"I might have succeeded easier and quicker by double printing, but I do not believe in that method, even for skies, as it savors too much of things mechanical, and besides is untruthful. While those pictures which have been most difficult to make are not always the successful ones, it was a pleasant coincidence to receive on the same day letters from Toronto and Calcutta, the latter telling also of the success of "The Kitten's Breakfast," and the award to it of the special medal presented by His Excellency the Viceroy for the best picture in the International Exhibition of the Society of India.

Yours truly,

R. EICKEMEYER, JUN. Yonkers, March 28th.

PLATINO-SOLIO PRINTS.

The great strides made into public favor by the mat surface pictures is shown by the number of mat surface papers lately placed on the market in response to the demand for this class of paper, and, indeed, the number of photographs seen everywhere in "mat" or "platino" effects would prove the fast-growing popularity of this style of work.

The latest to enter the field is the Eastman Kodak Co., with directions for making mat surface or platino effect pictures from prints on their "solio" paper. The process is easy, and will at once recommend itself both to the busy photographer and to those who have hesitated to bring out mat surface pictures on account of having to break in their printer (or themselves) on a new kind of paper and new toning baths, with perhaps a small demand in prospect.

To secure the "mat" effect on solio paper, the process, as given by the makers, is as follows : Treat the paper as usual for solio prints for platino effect. After burnishing grind the face of print with fine ground pumice stone, rubbing with the hand all over the surface until the gloss is removed. Brush off the print with a camel hair brush or a tuft of absorbent cotton. It takes about a minute to do the work on a cabinet print, and the results obtained are as rich and brilliant as can be produced on mat surface paper.

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A GOOD METOL DEVELOPER AND A USEFUL HINT.



GHT in line with our remarks in "Editorial Chat." this issue, is the following interesting letter from Mr. Forde. a valued subscriber, of Schreiber, Ont. Mr. Forde shows the right spirit, that of trying to help one another. We hope to have numerous

PHOTO BY G. WORTHINGTON, TORONTO.

communications of this kind in the future. The letter is as follows :

SIR,—Enclosed you will find a formula for a Metol developer that I have used for some time. I have seen so few descriptions of this reagent published that I would like to place this formula before anyone using Metol as a developing agent, feeling sure that they will like it when once accustomed to the manipulation of it. For producing negatives suitable for a printing paper like "Aristo, Jun.," it is the best I have tried, not excepting the Metol Bicarbonate developer published by the Cramer Co.

The other item is a way I have of reducing the printing intensity of a negative. It is very simple, and anyone can satisfy himself that it is all that is claimed for it by trying it on an old negative. I have never seen this wrinkle published, and do not know but that it may be commonly known among the fraternity. In any case, it will do no harm to print it for the information of some of your readers, if you deem it advisable.

Yours truly, Schreiber, Ont. JOHN FORDE.

METOL-POTASH DEVELOPER.

- 1. Metol..... 60 grains Sulphite sodium...480 grains Water (pure)..... 10 ounces
- 2. Carbonate potash . . 480 grains Water. 10 ounces

For use, take 1 ounce of No. 2, 3 ounces of No. 1, and 2 ounces of water. Add a few drops of 10 $_{o}$ of bromide potassium solution, if required. If stronger or weaker negatives are wanted, increase or reduce the quantity of water added. For over or under exposures, proceed as with Pyro. Can be used repeatedly, and makes very even negatives.

To REDUCE THE PRINTING DENSITY OF A NEGATIVE.—When the negative is thoroughly dry, hold it for a moment under the water-tap until the film is evenly wet, then set it in the rack to dry. After drying, if still too intense, repeat the dose. It will be found that this simple plan will reduce a negative evenly, and with no danger of spoiling it. Try it with an old negative, and satisfy yourself that this plan will do what is claimed for it.

METHODIZING.

BY FLOYD VAIL.

I have had occasion, at different times, to start beginners in photography. In my early experience I found they were prone to neglect some of my instructions, with consequent failure; that they would omit to focus (with a hand-camera), to pull a. slide, insert a stop, etc.

I have lately made it a point to make out an orderly mode of procedure, or to methodize their operations, by which every step is taken in order *a la carte*, until the

operator becomes so habituated to the process that he works intuitively. The result has been than an omission seldom occurs, and the initial efforts in taking photographs are no longer attended with discouraging failures.

All this has suggested to me that a similar plan might be advantageously followed in the more advanced steps of After one has mastered photography. the rudimentary or mechanical features, after acquiring to a greater or less degree the more advanced knowledge of composition and art, and learned to think out subjects to be embodied or represented by means of photography, one will find it of immense benefit and a great aid to success, if one adopts a systematic method of working. By methodizing, many failures may be obviated; excellent results will be thereby obtained.

Over and over again splendid ideas are seen in photographs, but the setting of the pictures is poor and devoid of art principles, even in cases where it is known art knowledge is possessed; and the lacking of almost perfect success can be attributed to but one cause—want of method.

Some order like the following, it seems to me, would be a great help, until one becomes so accustomed to the plan that one acts habitually:

Lines-Balance, variety, contrasts, etc. Light and Shade-General (or mass) gradations, etc.

Subject—Presented in relation to above. Principality, unity, concentration, simplicity, etc.

Sky—Contrasts for correction, repetition of landscape forms, etc. On same or separate negative.

Expression, Effect, Action, etc.

This is only a suggestion. It may be varied to suit the photographer that uses it. This systematic arrangement, which is very simple, may be found very useful to the one employing it, whether out of doors or in the studio; whether by the amateur or professional; and it may, with advantage, be adopted by others connected with photographic matters.

Some editors of photographic periodicals might, with credit to themselves and benefit to their subscribers, follow such a plan. One often reads in such journals contributions and editorials inculcating what to do and teaching what not to do, and perhaps on other pages of the same issue seeseveryrule laid down broken in the illustrations selected and printed to adorn (?) the magazine. This shows that these editors, much as they may know (or profess to know, and don't), select their illustrations haphazard, with no set rules in mind, being governed entirely by their individual tastes or impressions.

One reads a criticism by such editors of pictures that have appeared in an exhibition, and if one has seen the pictures referred to, it is apparent either that the critic does not know what he is writing about, or that he just glanced at them, without following a method of examination, and wrote from impression instead of knowledge-doing injustice thereby to some, bestowing unmerited praise on others; and then, likely, on the very next page is seen a monstrosity in black and white, which is supposed to be the embodiment of the editor's ideas; and one knows, if the illustration is a specimen of the liking of the aforesaid individual, he either missed his calling or is pursuing it without system or method.

The scheme I propose, or a modification of it, written on a card and followed by judges at exhibitions or competitions in coming to their conclusions, would aid them materially, I think, in reaching a correct result. It would take themselves out of the proceeding and put the dictum

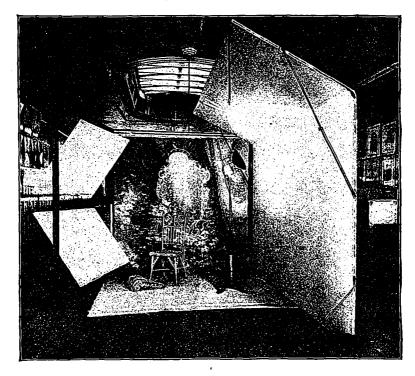
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of art in; it would help to do away with much of the just "kicking" one hears, and would raise many such judges in the opinion of others who know a thing or two themselves.

Methodizing will hamper one's actions but little, and then only for a short time. It soon becomes a habit.

It will do no harm to try my suggestion, and it may prove of great assistance. duced, the success of the electric light has been great, it being already in use by many of the leading American galleries as a necessary addition to their skylight, and, as mentioned, has entirely displaced the skylight with some.

The apparatus, which is known as the Anthony Electric Light Apparatus, consists of a self-feeding, automatic arc lamp and a rheostat. The lamp, which rests on



ARRANGEMENT OF ANTHONY'S ELECTRIC LIGHT APPARATUS.

ARTIFICIAL LIGHTING FOR THE STUDIO.

THE ELECTRIC LIGHT.

We have at last arrived at the time when the photographer may discard the skylight wholly. That this is not a supposition, but an actual fact, is proven by the knowledge that several progressive American photographers have already done so. Although only recently intro-

a support from the floor, as shown in the illustration, consists of an apparatus holding two carbons, with the necessary adjustments, surrounded by a reflector. When adjusted the carbons burn steadily with a light of about five thousand candlepower or twenty-five amperes. No adjustment is necessary except to replace the carbons as they are burnt out, and to adjust them so that they are within an eighth to a quarter of an inch apart, with the lower one slightly behind the upper one.

The rheostat consists of a device containing a number of resistance coils which are made according to the voltage of the current for which it is intended. It may be placed in any inconspicuous place out of the way.

Of course this light is only available when a current from an electric lighting company can be had. The electric lighting company put in the necessary wires and a switch.

The light is not thrown directly on the sitter, but reflected from a screen, as shown in the illustration. The necessary apparatus consists of a background, headscreen, large reflecting screen, and smaller double-reflecting screen for the side of the sitter farthest from the light.

The reflecting screens are simply and readily made. The large reflecting screen, on which the light is thrown, is ten feet wide by seven feet high, with a piece jutting out from the top at an angle of forty-five degrees, to a distance of four feet. It can be made by stretching plain, white oilcloth over a framework of this description, and on this pasting ordinary white drawing paper. This screen reflects the light on the sitter in practically the same manner as though it were the light coming from a skylight. The second screen is the ordinary side reflecting A double transom one, as shown screen. in the illustration, where the general arrangement is made evident, has been found the best.

The light is of the same rapidity as daylight, and is perfectly uniform and steady. Every effect possible with a skylight may be obtained with it and the screens described. The lamp and screens are light and easily moved, and may therefore be adjusted to obtain any effect in any position.

For ordinary portraiture and small

groups this light is all that can be desired. We have seen groups of ten to twelve persons successfully photographed with one lamp; but for large groups two or more lamps may be necessary. But for large groups where artificial lighting is adopted exclusively, a large flashlight machine should be included as a very necessary part of the outfit. This is also useful for work away from the studio. The best machine for this purpose is the Williams' Flashlight Machine, which we hope to



MADE WITH ANTHONY'S ELECTRIC LIGHT APPARATUS.

describe in an early issue, with some illustrations of large groups made with it. With this and the electric light the photographer may successfully cope with any subject.

We present our readers with a few specimens of work done by the electric light, sufficient to show the quality of the work. These are all by prominent American photographers, who have the light in daily operation as a supplement to their daylight exposures.

Compared with daylight the advantages of this light are many. Ability to work at any hour independent of the state of the weather or time of day; economy and comfort to sitters, as well as better business and show-window facilities through the possibility of using ground floor rooms; thorough control of lighting and exposure, and a regularity of results which leads to economy in time, labor and materials.

The light is not dangerous, and no knowledge of electrical matters is necessary. It is clean; free from any smell or dirt.

That this light will make great changes in our business we have no doubt. It is here to stay, and those who first avail themselves of its advantages will profit by it at the expense of their more conservative fellow-craftsmen.

MR. STEFFENS' DEVELOPER.

The following is part of a letter from Mr. M. J. Steffens, of Chicago, whose reputation as a photographer is worldwide. This portion refers to his developer and mode of handling it. "We are sure that those who try it will be surprised at the magnificent results," so says the *Professional Pointer*.

His scheme for heating the bottom of the tray and the back of the plate for undertimed negatives, and also to aid in the development of white drapery, is invaluable, and has been used by him for several years.

Mr. Steffens says :

"In lighting my subjects I make it a point to avoid strong highlights and deep shadows, and am careful to give full time in making exposures.

"I have experimented with a great many developers, but the one that suits me best is the following :

"No 1.-1 oz. Eikonogen ; 1 oz. Hydro-

quinone; 3 oz. granular C. P. Sulphite Soda; 90 oz. water. Dissolve the Eikon ogen in boiling hot water and shake ten minutes after it is dissolved, then add the Hydroquinone and Soda.

"No. 2.—5 oz. Carbonate Potash; 60 oz. water.

"For use I take 3 oz. No. 1 to τ oz. No. 2.

"The above stock solutions keepindefinitely. I always save my old developer, and for full-timed exposures I use old and new developer mixed about equal parts. If plates should be overtimed I use all old; for undertimed, all fresh.

"I use my method of heating with it for undertimed exposures without fear of injuring the film. This simple method, which I consider invaluable, is as follows : I have under my developing table a small Bunsen gas burner, under a tin pipe, with elbow running up to the table, in which is cut a hole about eight inches in diameter; over this hole I set my developing-tray, on strips of wood, that hold the tray about half an inch from the table top, giving draught for the heater below. This burner furnishes a gentle heat to the bottom of the tray and *back* of the plate. I do not keep the tray over this long enough to heat the developer. I am careful to watch this point by keeping my finger in the developer while over the heater, and as soon as I find that the developer is being affected in the slightest degree by the heat I remove the tray from over the heater. The result is that I have a negative with all the qualities of a full-timed exposure. Ι presume that many of you have not the facilities for using gas, in which case an ordinary kerosene lamp can be utilized by making a tin box to set the lamp on the floor; cut a couple of holes in the bottom to give it draught, and run about a two-inch pipe with an elbow from the top of this box up to the top of the developing table. Have a funnel-shape

opening to this pipe to fit the opening in table.

"Aside from the benefit I derive from this heater for undertimed negatives, I find it invaluable in the development of white drapery—I get highlights that I have never been able to produce with any other method.

"For fixing, I take ten ounces Hypo Soda and one half-ounce granular C. P. Sulphite Soda, and make the bath a strength that will fix in *not less* than ten minutes."

CHROMOTYPIC WORK IN THE __STUDIO AND PRESS ROOM.

BY MACFARLANE ANDERSON.

Typic blocks for reproduction of colored subjects and scenes from Nature are daily and hourly receiving more attention at the hands of engravers, printers and those engaged in the different offices of illustrative work. Within the past few months there has appeared a plethora of colored cuts in the journals devoted to these arts; samples of work from firms bidding for public favor, showing the usual amount of efficiency and deficiency, the natural outcome of a new science in more or less untrained hands.

Whatever litho and gelatine block printers may say or feel at this time regarding the adoption of this new system of typic color work, the fact remains that the merits and advantages of this new process are in every feature superior to anything heretofore introduced. As it is not my intention to discuss the relative merits or demerits of stone, type and gelatine printing methods, but simply to put before the worker actual facts in reference to the subject in hand, he will make his own deductions and draw his own conclusions from the matter placed before him.

In the first place, I would have attention drawn to the fact that much of this color work appearing of late, erroneously named "photochromotype," is only so in name, and must not be confounded with the photo mechanical color process, and what it is capable of doing. Further illustrating this remark, I will choose as a late example the August frontispiece of the Inland Printer. The colored view in this number is an example of the conglomerate style, and seems to have been executed by men who have for once overreached themselves; that is, so far as the negative and block making is concerned.

In place of the subtile shades and tints blending and diffusing themselves into each other, which would have been the case with the true photochromic process, we have a subject weak and flat in colorrendering, quite devoid of atmosphere and effect, with not one virtue to recommend it to us in place of the chromolitho work it is meant to displace.

An examination of this view will show that the vellow, red and blue printings. which should have been the fundamental colors with which to build the picture, have been relegated to a secondary position. the principal effect being secured by printing over the blocked-out colors, a half tone cross line printing in black. A fine object-lesson in this class of color work was lately presented to the readers of the January, '95, Photogram. This picture, also erroneously named "Photochromotype," has no more legitimate claim to the name than a house painter to the status of a royalacademician. It is an excellent example, however, of "how color work should not be done," the block color work in the cheap books of our boyhood meeting all demands in this line.

Much time, skill and work have been spent on the production of these blocks. It is this that impels me to state that, had

the originators of them worked as understandingly as they did perseveringly, then there had been quite a different consummation to their labors.

Now as to some of these defects and their remedies, the diseases and their cures, in this new system of color work.

It has been advocated by the German school that, in procuring absolutely correct color value negatives, the dyes used to impregnate the individual color plates must give, as their complementary color, the exact color of the pigments printed with, or, in other words, must have the same absorption bands. As perfect color value work has never been produced by this manner of procedure, it is open to many objections. It is also worthy of note that the principal workers in the world to-day have set aside this theory as untenable, and proceed on their own individual experiments to obtain their results.

Whether one uses color sensitive plates or not, the fact remains that proper color screens or filters must be used with the plates to secure good results, as no sensitive plate has been produced, as yet, that is capable of producing the correct values without them. My method of proceeding is to make trial exposures on the make of plate I am going to employ for my work; in this instance, photographing the pigments I have to use in the printing of the colored pictures. It will be found in every instance that the screens giving satisfactory color values, when tested in this manner, will prove to be correct when used in the field. To those who might not care to take this trouble, I would recommend the use of color filters made by Carbutt, using such plates with . them as fulfil the test as above stated-Ortho or ordinary, as found best.

Next, let me direct attention to the colored printing pigments used in this work. These must be of such a nature that, when printed over each other, black is the Any inks used in this process result. that are incapable of producing their secondary colors on superimposition, must be rejected. The tertiaries must likewise be obtained in similar manner. Any shade of grey, resulting from exact tonalities, in all three negatives. Bearing this in mind, it will be seen that a worker with his brush is able to eliminate defects and secure certain qualities in his work by a judicious use of Chinese white on the transparency; still, as the slightest difference in any of the tonalities creates great changes in the resultant color picture, it will require much judgment and thought, and should only be attempted by an artist, or one who is capable of accurately weighing color values in his mind's eye.

In the third printing, blue, should the color work seem flat, weak and insipid, showing a decided want of effect, add a small piece of fine black, half-tone ink to the blue, then try again. This simple experiment will prove to the Vogel clique the unsoundness of their doctrines.

Concluding, let me ask those lacking an art-school training or artistic cultivation to keep their eyes upon Nature, drawing lessons in color or harmonies as they pass through life from her ever varying face. If the laity have waited half a century for "pictures in colors," let the producers encompass work wherein pulses the breathing soul and all the eloquence of an individual touch. The chromo poster, brethren, belongs to the past century; in painting with Nature's brush, let there be seen the color of Nature's face.

OUR "LADY AMATEURS."—Owing to the late arrival of a few of the prints for this interesting page, the illustration will not appear until next month. The page illustration will be made up of work done by our lady subscribers. We should be pleased to receive a print for use in this way from those who have not as yet sent one.

THE PRACTICE OF PHOTOG-RAPHY.

BY THOS. F. HOWER.

SERIES I.-EI.EMENTARY PAPERS. INTRODUCTORY.

The first papers of this series are written for those who attempt photography with only the aid of the ordinary instruction book ; for those who have followed, so far as they know, the guidance of those same little books, but dissatisfied with the results, and having wisdom enough not to blame their materials, are looking to be shown the prevention, or remedy, for their mistakes; and, best of all, for those who do not yet possess a camera, but have a good healthy desire for one, and wishing to make good photographs, are willing to begin right. Beside the mere "how to do it" we hope to teach such practical methods and habits of careful, studied work as will tend to give a higher grade of results than is customary.

Here a protest must be made against the ordinary way of commencing with a detective camera and snap-shot work. In photography, as in other things, there is a certain rate of progression and certain elementary principles to be learned before one can successfully cope with the more advanced stages, and much of the oft-met-with failure and disappointment is caused in striving to master the advanced stages without a previous knowledge of the elementary ones. The best photographic progression for the learner is landscapes, architectural views and interiors-all of these time-exposures-then instantaneous work, snap-shots and flashlights, and later the higher branches, portraiture, transparency, photo-copying, etc. Of course one may, as many have, start with a hand-camera, and after practice and experiment, with care, make good work, but they will not until they have had practice, and the first few results of their work will always be disappointing, and they are apt to lose interest because it is so, where, if they began with a view-camera, and worked up to the instantaneous work, they would find it much more pleasant and satisfying, and be able to make good work without waste of plates and chemicals, and with a gain of interest. And photography is interesting if one will use the patience and care needful to all good work, and curb their natal desire to "photograph the earth."

Among the first essentials to good work are some personal ones : patience, cleanliness and order. Patience to go slow, to study your subjects and make the best use of them, to take one method and stick to it until you win, and to do well everything you do. Cleanliness and order among one's photographic possessions are imperative. Dusty holders, unwashed trays and bottles, the carrying of solutions from one tray to another on the hands, are all detrimental to good work. A place for everything is essential. Many good pictures have been ruined by getting chemicals mixed, or using the wrong solution, through neglecting this.

THE FIELD APPARATUS.

As mentioned above, the best camera for the beginner is a view-camera, one of the back-focus pattern, light, compact and strong, with a sliding bellows, which is the better of a rack and pinion movement, a shifting front and a single swing-back. Other adjustments, while convenient and useful to the more advanced, are unnecessary for the beginner, only tending to confuse him and increase the cost of his outfit. As to size, the best is the smallest that will give satisfaction to the beginner. This has usually been found to The chief object is to get as be 4x5. cheaply as it can be had a good camera,

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that is, not an expensive or a finely made one, but one that is sufficiently well-made as to be strong, compact and light-tight. As, after one has learned the rudiments, they are generally unsatisfied with the camera they learned with, and are then competent to select just exactly what comes nearest to their requirements. The reasons for selecting a small and inexpensive outfit to start are apparent. One of the various outfits for sale by the different dealers, consisting of a camera, lens, plateholder, carrying case and tripod, will be found the best. The lenses in these outfits are what are known as single-view lenses, and while particularly adapted to landscape work will satisfactorily meet the wants of a beginner for every purpose. They should be supplied with revolving stops. The tripod should be firm, and telescope or fold in three sections for convenience when carrying. The telescopic or sliding style, or those with a sliding section, are the best, as they admit of keeping the camera low or adjusting it to irregularities in the surface of the ground.

It is the usual custom to purchase a few extra plate-holders, only one to hold two plates comes with the camera, but this is inadvisable, as they are a detriment to the learner, encouraging a multiplicity of exposures and consequent waste of material. One, or at most, two plates at a time, with thorough care and study given them, will leave the learner with a larger bank account, better and more satisfactory pictures, and greater-knowledge than the heedless exposure of many plates in the rash desire to take everything in sight.

For field use (focussing and exposure) you will also need a focussing cloth about a yard square, perferably of black velvet or some other soft, opaque material. The addition of a piece of ribbon or tape about six inches long, sewn to each corner of the cloth, will also be very useful. Though not at all necessary, a focussing glass is useful and convenient. It enables the operator to obtain a sharp (clearlydefined) image on the ground glass.

These articles comprise all that are necessary for field use, and may all be neatly packed in the carrying case, with the exception of the tripod, which should be folded and strapped together.

THE DARK ROOM.

For the opening of plates and the filling of the holders and for the chemical manipulation after exposure, a room perfectly free from all light is required. The light with which to see when performing the various operations is that coming through a pane of ruby glass, or a sheet of ruby fabric, from either outside the room or the flame of a lantern made for the purpose.

It is best, when possible, to have a room used exclusively for that purpose. It need not be large, though the larger it is the better, as the gas from your light and your breath will soon render the air in a small room impure, and in summer decidedly hot. Almost every house has a room, or rather closet, which will answer your wants, though, if you can, it is better to build one for the purpose. If nowhere else, a dry and well-cemented corner of the cellar will be found an ideal place, as it will be cool in summer and usually free from intrusion. Around the two open sides you can construct a wall of ordinary flooring or weather boarding nailed to up. rights, with a door at the farthest corner from where you intend developing. If you are not troubled with mice, a cheap and durable wall may be made of builder's paper, well lapped and nailed to uprights. made of builder's lath. If you build a room it would be well to build a small shelf supported by a bracket on the outside at the side you intend to develop, with a small window fitted with a frame-

of ruby glass, extending up from the shelf. By putting a lamp on the shelf you will illuminate your dark room and keep the heat outside, and save the trouble of a ruby lantern. It should be built at the same height as the developing table inside.

You can ventilate your room in the following manner: Have made at the tinsmith's four tubes of tin such as is used to carry water from the roof, the shape of the letter J, the long side about ten inches long, the short side half that length. At the top of the long end have a flange, and after cutting two holes at the bottom of the wall of the room and two at the top the size of the inside of the tube, attach these tubes over the holes by nailing the flange. The tubes should be painted a dark color inside and out to prevent reflections of light.

If you have running water, and can convey it to your room, and can place a sink and waste pipe in your room, you are fortunate, as plenty of good water is a requisite, and running water one of the greatest conveniences. However, we suppose you have not this, as few amateurs have, but we give a very simple way by which you may attain like results.

You will need a sink at the end of the room at which you are going to develop. A very good way is to make a table or shelf, or use an old table with a rectangular opening, at least 24x15 inches cut in the top. Into this fit a zinc or galvanized iron tray about four inches deep. From a hole in the bottom of this have a small pipe leading to a pail or other receptacle for your waste water, or, if possible, to a connection with a drain pipe in the house. The latter will save you the trouble of carrying it away and the disagreeable consequences of letting the waste pail overflow. Any tinsmith will make you a tray and pipe of this kind quite cheaply.

Next construct a small platform or shelf to hold your water tank. The bottom of

this should be slightly above the top of your table. If you do not mind the filling, the tank should be a small barrel with a wooden tap placed in the bottom. One of the barrels know as a "half barrel," in which salted meats and fish come, can be bought at the grocer's, and after being cleaned will be very suitable. A large pail with a stop-cock placed in the bottom is also good. Over the stopcock or tap draw the end of a piece of rubber tubing, which is sufficiently long to reach to any point of the sink.

Make a small platform of slats slightly separated, or of a piece of board with holes bored in it, to rest over your sink and hold your trays when in use. Have it about a third of the length of the sink and loose, so that it may be slid to either end as wanted.

While a sink and a water-supply such as described is necessary for those who intend doing much photographic work, or for those whose time is limited, and is a great convenience, well worth the trouble of making it, to those doing any work, even though it be only a plate a week, yet it is not absolutely essential. By building a shelf or placing a table where the sink would be, and using one pail to contain fresh water and another waste water, and having an extra tray or two for washing, one can do a limited amount of work, in fact all that is necessary for the learner to do.

And, again, neither is a room exclusively for a dark room necessary. While certainly to be advised where possible, yet if one can do all their dark-room work by night, they can use any room from which they can exclude all light. The bathroom or the kitchen (after the kitchen divinity has departed) make good places on account of the supply of running water, though any convenient room may be used.

Returning to the dark room, it is advisable to have plenty of shelf-room, when convenient, to store negatives, chemicals, trays and other accessories. A small, narrow shelf, about fourteen inches long, should be built at one side of the developing table. This is to hold the solutions, graduates, etc., required within reach when at work. Behind this shelf fasten a sheet of white paper. This will enable you to see your articles much better in the dim light of the dark room.

Now, as to the utensils required. There is, first, the light. If you can have a window with a shelf outside to hold a lamp, as previously suggested, you will merely need the necessary panes of glass of the It has been found most adcorrect tint. visable to place a sheet of ground glass next to the light to diffuse it. Next to this a sheet of *deep* orange glass. This light illuminates the dark room fairly well, and by keeping the developing tray shielded from its direct light, except when examining the plate, it will be found perfectly safe. Another pane of ruby glass, or a sheet of ruby fabric, will also be necessary to be added to the others when filling the plate-holders and when beginning development. The best size for this window is 8x10 or 10x12, and it should be directly in front of the developing table. If you cannot have a window of this kind, you will need a ruby lantern. This should be a good one, burning oil. Much of the success of developing depends on a good safe light, and a few extra dollars spent here will be money saved. The very cheap lanterns are invariably unsatisfactory. They have an insufficient draft, become overheated and the solder melts. or the glass cracks and a new lantern must be had.

You will require at least three trays, one shallow the same size as the plate you work, the others deeper and a size larger. The first is for the developer, and should be of hard rubber or papier maché, the others are for the alum solution and fixing bath, and may be of any material. Each tray should be marked by writing its use on a piece of paper and glueing the paper to the end of the tray. When it has dried it should be well rubbed with vaseline to render it waterproof. These trays must never be used for any other purpose than for which they are marked. If you have running water you will need a negative washing box; if not, you must have several extra trays for washing the plates—the number depending on •the number of plates you may develop at once.

You will need three glass graduates, one for eight and one for two ounces, and a minim glass to measure drops; a couple of glass funnels, and a pair of balances to weigh grains. To weigh more than an ounce the ordinary house scales will answer. A camel's hair brush for dusting plates will be needed. It should have a screw-eye placed in the end of the handle, and be hung on a nail at one side of the developing table. A negative-lifter will be found convenient, and several wellwashed bottles of various sizes are indispensable.

A comfortable stool or chair placed before your developing table, and a box or canister to receive papers, strings, burned matches and other refuse, complete the dark-room essentials, though some other articles, such as negative racks, etc., may add to its convenience.

(To be continued in our next.)

INTENSIFICATION.

" DRY PLATES."

We have been asked many questions lately about the intensification of negatives, and under the impression that it might be helpful to some of our readers, we have gathered here a number of methods, new and old, for giving density to their plates. Our own experience is that it is difficult to get a better intensifier than the perchloride of mercury and ammonia method, and we therefore place it first :

А	Mercury bichloride	1 dram.
	Ammonium chloride	
	Water	4 ounces.
в	Ammonia 880	ı dram.
	Water	4 ounces.

Wash negative thoroughly; soak in A till bleached. Again wash well, then place in B till dense enough. A may be used over and over again.

2. MERCURY INTENSIFIER, WITH SODIUM HYPOSULPHITE.

- A Mercury bichloride .. 30 grains. Water 3 ounces.
- B Potassium iodide.... 45 grains. Water..... I ounce.
 C Sodium hyposulphite I dram. Water..... I ounce.

Pour B into A, then add C. Intensify negative in this solution, then wash well.

3. FERROUS OXALATE AND SILVER INTENSIFIER.

- A Silver nitrate 120 grains. Water, distilled..... 3 ounces.
- B Potassium bromide ... 90 grains. Water, distilled..... ¹/₂ ounce.

Pour B into A in a bottle; shake; allow precipitate to settle; pour off clear fluid; add water; shake; allow precipitate to settle; pour off water. Do this several times. Add to the precipitate:

C Sodium hyposulphite..240 grains. Water, distilled..... 4 ounces.

This solution must stand for a few hours, then filter. When you wish to intensify, soak well-washed negative in solution C for five minutes. Drain, then re-develop with ferrous oxalate developer.

4. MERCURY AND SILVER INTENSIFIER.

A Potassium bromide.. 40 grains. Mercury bichloride... 40 grains. Water...... 4 ounces. B Potassium cyanide... 40 grains. Silver nitrate..... 40 grains. Water..... 4 ounces.

Wash negative, bleach in A, intensify in B. If too dense, reduce in weak fixing bath.

5. URANIUM INTENSIFIER.

A Uranium nitrate.... 15 grains. Potassium ferricyanide 15 grains. Water..... 4 ounces.

Intensify well-washed negative in this solution, rinse and dry.

6. COPPER INTENSIFIER.

Bleach well-washed negative in A, again wash well, then develop with pyro soda.

7. BROMO-IODIDE OF COPPER INTENSIFIER (Dr. W. H. Jenner's Method.)

Every trace of the hyposulphites of silver and soda derived from the fixing bath should be removed from the film, otherwise most annoying stains result during the progress of the intensification. This can be done by a thorough fixing of the negative in fresh hypo, followed by a prolonged washing. To ensure the destruction of any hypo remaining, the negative, after fixing and washing, is immersed for five minutes in a saturated solution of alum and again washed in a stream of water for a quarter of an hour.

To this solution is added, with constant stirring :

Iodide of potash..... 16 grains. Bromide of potash.... 40 grains. Water 2 ounces.

A slight precipitate of iodide of copper of a deep yellow color forms. It is allowed to subside, and the clear solution decanted for use. To Intensify.—The negative, if dry, is soaked in water until the film is thoroughly wet, then immersed in a developing-tray in a sufficient quantity of the above solution of bromo-iodide of copper to just cover the plate, and exposed to direct sunlight or strong diffused daylight. The film rapidly bleaches and becomes a canary-yellow color; the action is continued until the bleaching is uniform over the plate, and the shadows viewed by transmitted light are clear and transparent, the operation usually requiring five to fifteen minutes.

The negative is removed from the copper solution and washed for a quarter of an hour in a stream of cold water. The intensifying solution may be used repeatedly, and, if necessary, may be strengthened by the addition of a few drops of a solution of one part iodide and 3 parts of bromide of potassium in 100 parts of water.

The bleached negative may be darkened by a strong solution of sulphite of soda, in which a few grains of nitrate of silver are dissolved. Superior results are obtained by development with hydroquinone. Any of the published formulas, or the hydroquinone developers sold ready for use, may be employed. Old developer answers the purpose well, even after repeated use.

The color of the resulting negative is strongly affected by the composition of the developer. With Seed's Hydroquinone Developer, light brown to sepia shades are produced. Eikonogen does not appear to work well; rodinal gives brown to dark iron-grey shades.

The following formula produces beautiful rose-red and claret shades :

Hydroquinone	90 grains.
Sulph. of soda (crystals)	1 ounce.
Carb. of soda (granular)	. ¼ ounce.
Bromide of potash	6 grains.
Water	8 ounces.

By varying the proportion of hydroquinone and sulphate of soda, fine shades of sepia, dark brown and iron black are developed.

The development may be conducted in strong daylight; the action, however, is more quickly accomplished by full exposure to sunlight.

The negative is placed in a developingtray with a sheet of white paper beneath it, to accelerate by reflection the action of the light. Just enough of the developer is added to cover the plate; the tray is exposed to bright sunlight and rocked, to prevent unequal darkening. The action of the developer is continued until the desired shade is obtained, when the negative is then thoroughly washed in a stream of running water and dried.

It is said that negatives thus intensified are unaffected by exposure to light and apparently undergo no greater deterioration by action of time than those that have not been subjected to intensification.

THE CAMERA IN THE MISSION FIELD.

Algoma and the West.

BY REV. P. L. SPENCER.

To any person seeking objects of missionary interest in Canada, the "big teaching wigwam," commonly known as the Shingwauk Home, will well repay a brief visit. Situated on the left bank of the rushing river of St. Mary, about two miles below the ambitious town of Sault Ste. Marie, it presents to the summer tourist, standing on the deck of one of the Georgian Bay steamers, an extremely picturesque appear-Named after the late Chief Augusance. tine Shingwauk, of Garden River, built with money gathered in England by Rev. E. F. Wilson and his travelling companion, Chief Buhkwujjenene, and opened by the

Bishops of Algoma and Huron a year after the laying of the foundation-stone by Lord Dufferin, it has a history full of attractive incidents. For twenty years it has served the useful purpose of a boarding school and training institution for Indian boys of various tribes. A memento of one's visit in the form of a photograph of a group of forest children, with the large, vine-covered stone building as a background, is sure to interest one's friends. Other attractions are to be found in the stone and timber edifice known as the Bishop Fauquier' Memorial Church, the hospital and the industrial building. These, with other erections of less importance, constitute a small village, and speak volumes for the zeal and enterprise of the late principal and original promoter, Rev. E. F. Wilson.

Between this part of Algoma and the town of Port Arthur there is little of special interest. A circumstance worthy of note, however, is that one missionary, whose field of labor is traversed by the C.P.R., uses the railway almost exclusively in visiting church stations and parishioners. Between Saturday evening and Monday morning he travels five hundred miles, and conducts two services and a Sunday School. His mission extends from Chapleau to Schreiber, a distance of 250 miles.

Port Arthur's growing rival, Fort William, situated on the Kaministiquia River, possesses, as one of its attractions, a remnant of the Hudson's Bay Company's fort, erected probably when the century began with the figures 17. This relic is the stone fur-house of the ancient factory, now used by the Canadian Pacific Railway as a building in which to generate steam power for conveying coal from deck to dock. Thus, though the present town is extremely modern in its general characteristics, it can boast of an origin which carries one back to the time when the Indian whoop, instead of the locomotive whistle, was wont to disturb the forest solitudes, and when the trail and not the track marked the way to the white man's habitation. Near to this old storehouse stand at short intervals the three huge grain elevators, A, B and C, capable of containing three million bushels of Western wheat, "No. 1, hard." What a revolution has Time wrought !

Taking away with us shadows of these material contrasts, we speed onward towards the prairie city. The hours, which threatened to be dull and wearisome on account of the absence of farm and settlement scenes, are brightened by the conversation of the passengers, who, like ourselves, are destined for the west, and whose acquaintance is therefore welcomed by us. The young people find a cause of wonder and a source of amusement in the frequency with which the train burrows into the opposing rock, while the older members of the party comment upon the wonderful engineering skill that has thus penetrated granite promontories, besides spanning ravines and rivers, and solidifying marsh, swamp and sloughobstacles inferior only to those which afterwards confronted the iron horse in the mountain region of British Columbia.

Occasionally one meets among one's travelling companions a person whose loquacious propensity brings him into passing prominence, and gains for him a lasting place in one's memory. During a day's journey like that under consideration, such a person is apt to provoke a little mirth by his attempts to keep himself and the company in good spirits. One of these irrepressible members of human society, I remember very well. He was very respectful, although inclined to be a little familiar. His friendly salutation, "Good morning, your Reverence," was followed during the day by many a greeting of equally honorable regard.

As the hours sped, his warmth of feeling seemed to intensify, until, observing that I had betaken myself to an upper berth for a little change from the long session of the committee of exploration, his thoughts found expression in the climax, "Is that where you are, your Holiness?"

This enthusiastic son of Erin I parted with when Winnipeg was reached, but I made new friends in the Canadian Chicago. Among the sights to which they introduced me was the portal of the fort which was built by the Hudson's Bay Company about the year 1835, and which, in course of time, became the nucleus of an important settlement, developing in 1875 into a growing city. Fort Garry gate, as it now exists, is an interesting relic; but it should either be removed and re-erected in another place, or it should be "restored" and preserved as one of the chief historical attractions of the Manitoba capital. Unless a little care is bestowed upon the structure, I fear it will soon share the fate of the walls and their enclosed buildings, and disappear altogether. I succeeded in capturing this remnant of a fortified position, and adding it to the trophies previously gained in the course of my expedition. St. John's Cathedral, the successor of a church erected about 1833 with the help of Indian labor, proved another good subject. As one views either the reality or the representation, one's thoughts picture the first Bishop, David Anderson, making his early episcopal tours through his illimitable diocese, with the help of dog-sledge and Indian runner. The mind also follows the course of Bishop Mountain, of Quebec, in his earlier journey from the St. Lawrence to Fort Garry by bark canoe, for the purpose of learning the spiritual needs of Rupert's Land. Bishop Anderson went to the Red River Settlement from England by way of Hudson Bay! Bishop Mountain occu-

pied thirty-eight days between Montreal and Fort Garry, and his French-Canadian voyageurs "paddled their own canoe" 2,000 miles! While this Dominion is still distinguished for its "magnificent distances," the lapse of fifty years has tithed the time required for traversing them.

(To be continued.)

GREAT INTERNATIONAL PRIZE COMPETITION.

The great International Prize Competition and Summer Photographic Exhibition, to be held at the Agricultural Hall, London, Eng., from June 29th to July 6th next, is now fairly launched. There will be two distinct competitions. One under the Conference rules, with H. Horsley Hinton, Rev. F. C. Lambert and H. P. Robinson as judges (whose names will appear on the prospectus), in which the classes are as follows :

- 1. Landscape.
- 2. Seascape.
- 3. Hand-camera Work.
- 4. Figure Studies and Genre.
- 5. Beginners.
- 6. Ladies' Work.
- 7. Animal Study.
- 8. Smoking Picture.
- 9. Architecture.
- 10. Scientific Work.
- 11. Instantaneous and Snap Shot.
- 12. Process Work.

13. Society Competition.

Gold, silver and bronze medals are offered in classes 1 to 4, and silver and bronze medals in classes 5 to 12. The prize for class 13 is an optical lantern. The judging in classes 1 to 8 and No. 13 will be from the artistic standpoint; in classes 9 to 12 other matters will be taken into consideration. The prints need not be framed, and the entrance fee is 15. per print up to a mount or frame of 20 inches; above that, 2s. per print.

The second series of competitions are for amateurs only, who have not previously gained medals or prizes at a photographic exhibition. The judges' names will be announced later. The classes in this are :

Landscape.

Marine.

Portraiture.

Architecture and Buildings.

Holiday Work (set of six).

Snap Shots (set of six).

Frost and Ice Studies.

In this competition the winning pictures (and perhaps a selection from the others) will only be hung. Silver and bronze medals, hand-cameras by the Eastman Co., Adams & Co., and the Vedette Co., are offered. The Eastman Co. also offer f_{3} 3s. and f_{2} 2s. respectively for each first and second prizes upon "Solio" or "Platino-bromide" paper; and Cadett and Neall offer prizes for work upon the "Cadett" plates. The entry fees and most other details are the same as for the other competitions. A somewhat novel feature of the exhibition generally is the fact that Black and White, one of the most artistic weeklies, will publish a special eight-page supplement with their issue of June 20th, illustrated by reproductions of some of the prize pictures, and paying for them at the rate of half a guinea to two guineas, according to the size of reproduction.

The exhibition is being well received upon the Continent, and editors of foreign papers are becoming agents to receive and dispatch competition prints. Work is expected from Australia, New Zealand, South Africa, Japan, America, India, etc., as well as the Continent generally. Prospectuses, etc., may be obtained from Walter D. Welford, General Manager, 59 and 60 Chancery Lane, London, W.C.

SOME MODERN LANTERN SLIDE METHODS.

Remarks on the making of slides by the veteran slide maker, Mr. John Carbutt, are always prolific in instructive pointers. From a "talk" given lately before the Society of Philadelphia we cull the following :

"Slides Nos. 12 and 13 are on gelatinochloride plates, developer, ferrous-oxlate; the difference in the tone from brown to reddish tone effected is by an increase of exposure, restraining with bromide. Slides Nos. 14 and 15 are from same negative by contact, the sky very much scratched by daily use in the factory in testing lantern plates. To remove the defects in the sky is a very simple operation. During the exposure the sky is partly shaded with the fingers closed together, moving the hand slightly. After developing and fixing, the slide is merely passed through or dipped in water to remove the hypo solution from the surface, without any attempt at washing, then, holding the sky part downward, dip a tuft of absorbent cotton in a one per cent. solution of red prussiate of potash: commence at lower edge and carefully work over the surface of the sky and around the building and trees, then rapidly pass the cotton over the entire surface of the slide; quickly immerse in water to stop the action, and wash thoroughly. Where the negative possesses a clean, even sky, do not clean it off; a clean, even tint to the sky is far better than clear glass.

"Nos. 23 to 29 are all developed with eiko-cum-hydro developer without any 'dodging.' Nos. 30 and 31 will illustrate what can be done in developing to secure full values in the negative. The subject is the United States cruiser *Columbia*, from an & by 10 negative. The clouds in the negative are of greater intensity than the highest light on the cruiser, and by continuing the development until the clouds were well defined, the body of the vessel and the water would be too dark; therefore to stop development when the vessel and water were sufficiently brought out would leave the sky blank, as shown in 30. But if after washing off the developer you pass over the vessel and water a tuft of cotton wet with a 10 per cent. solution of potassium bromide, then with another tuft dipped in the developer, you carefully work over the sky, the clouds will develop and thus produce harmonious result, as shown in slide No. 31. The same treatment is applicable to views of water-falls, which are usually surrounded with dark green foliage, as in slides 26 and 29 previously shown, Bridal Veil and Factory Falls, Pike County. When the surroundings were fully developed the slides were washed, then the end of my finger was dipped in the developer (eiko-cum-hydro) and passed lightly over the water part of the view, when detail not before visible made its appearance. The same treatment was adopted in the view containing a light colored stone clock tower, which brought out all the detail of the stone work and face of clock.

"No. 50, and the last view, is to illustrate the producing of unity in foreground and sky with clouds. This negative was made on a 23 ortho film with color screen, F-22, stop, two seconds' exposure, made several years since. When the clouds were fully developed I stopped development, and fixed. The result was that the foreground was under-developed. What I should have done, and what I thought of after it was too late, was to have continued development of the foreground, as in the case of the clouds when making slide of the cruiser. Now, in making the slide now on the screen, I stopped developing the foreground when sufficiently out by applying a 10 per cent. solution of bromide, holding the foreground of the slide downwards. The developer in the body of the film continued its work and brought out the clouds, giving the result now before you. All of the slides shown are varnished with Roxyline enamel, a practice I invariably follow in slide making. Before closing my remarks I wish to call your attention to an aid in securing a sharp focus of the image when reducing in the camera. Ι first get the size of reduction desired and an approximate sharp focus; it is here that at times it is very difficult to decide on the sharpness of the focus. To render this easy of accomplishment I remove the negative and replace it with a positive of a line subject, such as I have here, which happens to be a map of the streets of New York, placing the flim side towards your lens; you can make with ease and accuracy a sharp focus, then replace your negative and make your exposure. I have a 4 by 5 and 5 by 7 transparency which I have the pleasure to present for the use of members making slides in the Society's cameras."

LETTERS TO THE EDITOR.

Editor CANADIAN PHOTO. JOURNAL :

SIR,—I was much interested in reading the article on "The Outlook" in the March number, and would like to ask a question or two, namely: Do photographers assemble in convention to learn how to do business along cheap-John lines, or do they attend for the benefit derived from a mutual exchange of ideas, and at the same time to make and receive suggestions as to how the fraternity can best cope with the snide photographer, ticket-vendors, and those who offer "a handsome Christmas present," "a liberal discount" (for one day only), etc., to all having one dozen photos at their studio ? The writer has never attended a convention, and if the good attained thereby may be judged by the conduct of a worthy ex-president, who remarked, "I would not take \$50 for what I have learned at this convention," it is poor encouragement for myself or others to attend, for thrice since returning from the last convention at which he received so much good (to the value of \$50) has he offered "A present," etc., "A handsome Christmas present," "A liberal discount," etc., to all having one dozen photos at his studio.

Now, Mr. Editor, is not this the very cheap-John clack we have all been warring against? If not, I do not understand what I read or what is advocated at the conventions along this line, and would like to be enlightened. It seems to me, as I have said before, to be very poor encouragement for photographers, as a body, to attend conventions when a worthy ex-chief officer, and one who claims to be ever foremost in all reform towards the elevation of our beloved art, will stoop so low, and further endanger and lower the reputation of our calling by employing the same tactics and tricks as the snides and cheap Johns, of whom, goodness knows, there are plenty everywhere. My sympathy goes out to such a brother under such circumstances. He needs the sympathy of all-good, bad and indifferent. Under such a condition of affairs his confidence in his own productions is forfeited, and proved so beyond a doubt.

The writer is far from wishing to stir up any controversy along these lines, but when one is confronted with bold facts, as already stated, it is unmanly to be silent and sit with folded arms and see the standard of our art trailed in the dust.

Offering premiums to gain trade is about worn out, and the general public are not beginning, but have already begun, to steer clear of such base and unfair competition. In this matter of gaining trade and dollars, if a person cannot get them by skill and square, legitimate business tactics, he should be willing to drop out of the ranks and let those go ahead who will. The writer has no grievances to air in this matter ; but seeing such glaring inconsistencies going on and perpetrated by those who would lead one to think they dwelt only in high places, and whose loyalty only lasts while the conventions last, I have felt constrained to write these few lines, so that others who attend conventions and advocate right principles may know something of what is going on around them. Fraternally,

G. W. DICK.

Woodstock, Ont.

Editor CANADIAN PHOTO. JOURNAL:

SIR,-In March number of your JOUR-NAL appears an answer from Mr. Anderson, of Northport, to my letter of Feb., in which he does not deny any of the assertions I made, but seems to have got his (Irish) Scotch up. I am very sorry not to have pleased Mr. A. by asking for proofs of his ability; but when a person advertises to sell this and that for a consideration, and shows no samples of his work, I considered I was within the bounds of business etiquette to ask for such. You having just given me one of Mr. Anderson's samples of color work, "A Forest Scene," in four printings, black, red, blue and yellow, with a border in faint tint, I have been able to see what Mr. A. can do, per one sample. I will not criticise it, but refer Mr. A. to criticism in March issue, '95, of Paper and Press on the same picture. Mr. A. advertises in March number of Anthony's Bulletin to send 50c. for color picture of his Phusochrome process ; if it is the forest scene, it is worth 50c. to a Scotchman who is simple, for we generally find a simple Scotchman no fool.

Mr. Anderson wants to know who I am : I refer him to the editor of this JOURNAL.

I perhaps have had as much experience in the graphic arts as Mr. A., but I don't want to blow my own horn; I leave that for others to do. Suffice it to say, I have never been out of a position a week for twenty-five years. If Mr. A. wants to see some good color work in three printings, I refer him to the "Fruit, Parrot and Monkeys," by Kurtz; "Fish," in Xmas number of Inland Printer; "Butterflies and Golden Rod," by M. N. & Co., Buffalo; Truth, and others I could mention. I am very glad to hear that Mr. A, is so well learned in the graphic arts, notwithstanding that he signs himself " a simple Scotchman."

Yours, Thos. W. Elliott.

Editor CANADIAN PHOTO. JOURNAL :

SIR,—There are in our town three Two of us do business photographers. legitimately. The third resorts to what I firmly believe to be one of the curses of the profession, the "ticket" game, and at a decided cut on our prices. There is plenty of room and a good living for all three, but by the action of this brother (?) artist he keeps the picture-buying public unsettled and depreciates the value of good work with us, both from a monetary and an artistic standpoint. I wish to ask if you or any of your readers can suggest a remedy for such a state of affairs. Ι find your JOURNAL extremely useful and interesting, and wish you and it all suc-Yours truly, Hypo. cess.

"Silent criticism, after all, is the most crushing," says Montague Marks, in The Art Amateur. "This was felt acutely by a New York gentleman lately, who invited some friends and a connoisseur from abroad to view his art possessions. Picture after picture was passed, with many encouraging smiles on the part of the host, but without a word in response from the distinguished guest. So painful became the tension, I am told, that it was a positive relief to everyone when the party broke up."



MR. WM. CRAIG, of Owen Sound, whose portrait we take pleasure in placing before our readers, is one of the old school photographers of our Dominion. Mr. Craig combines the teachings and experiences of the old days with a thorough appreciation of anything new and up-to-date that will make business or work better. A daughter and a son assist in the work of the studio, and are apt scholars of a good teacher. Mr. Craig began early the use of aristotype paper, and many of our readers no doubt know him through the combined bath he worked out and placed on the market, finding it to work with great satisfaction. Mr. Craig is a member of the P. A. of C., and by keeping abreast of the times has worked up a valuable business with the best people of his district.

NOTES FROM A TRAVELLER.

MR. ITTER, late of Port Dover, has purchased the Briggs' gallery at Simcoe. He is a young man with a thorough knowledge of photography, and will undoubtedly make a success.

MR. E. POOLE, St. Catharines, Ont., our esteemed Secretary, was interviewed lately. The St. Catharinites are wise in their generation, consequently Mr. Poole is kept busy. A kind-hearted, genial gentleman, he endears himself to everyone he comes in contact with. His manner is a tonic to chase the "blues" away.

W. F. CHARLTON, Aylmer, has decided to abandon photography and enter the study of medicine. Mr. C.'s decision will undoubtedly be regretted by the people of Aylmer and surrounding country, from whom he enjoyed a lucrative patronage. His gallery is for sale, and is a rare chance to the party desiring an At location.

MR. WM. STILL, of Orangeville, is progressive, with a capital P. He uses his head as well as his hands, and his patrons believe in large work, of whom he has taken a number of very fine photos. By pushing large work he says he has much more satisfaction and profit than making a bid for small work, and customers are better satisfied. He is right.

MR. J. S. HOPKINS, St. Thomas, Ont., has about "beaten the record" in a Flashlight Apparatus. Having had several calls this winter to make "flashlight" interiors, and not having a machine suitable to his use, he went to work and made one which is a perfect machine simple, yet without a fault. Parties contemplating purchasing a flashlight machine would do well to communicate with him.

BOOKS AND PICTURES RECEIVED.

Developers; their Use and Abuse. By RICHARD PENLAKE. The Country Press, Bradford, Eng. Percy Lund & Co.

This is No. 4 of the "Junior Photographer" series, and like the previous issues of this series, treats of the subject in a simple and easily understood manner. It is well written, giving much valuable information as to developing and developers.

CATALOGUES RECEIVED.

J. H. Dallmeyer & Co., London, send us their new catalogue, showing revised prices on lenses and a considerable reduction on aluminum fittings. Several new lenses are mentioned, and considerable information on tele-photographic lenses and color screens is given. Sent free by the publishers.

The 1895 "Thornton Pickard Catalogue," just received, contains much useful and interesting information and a number of pleasing illustrations. We notice an important addition to the line of popular shutters made by this firm, in the shape of a new Silent Studio Shutter.

They will be pleased to send a copy of their catalogue gratis to those interested in photography.

Parts I. II. and III. of the eighth edition of the "Gundlack Optical Co.'s Catalogues" for 1895 is before us, giving a complete list of the full line of optical goods manufactured by them. Part I. deals with microscopes and accessories; Part II, with photographic lenses; Part III., with telescopes, etc. The lenses made by this firm are of a very high grade, and the new shutter put out by this firm bids fair to equal them in reputation. Prospective buyers should send for this catalogue before buying.

NOTICE BOARD.

The Blair Camera Co.'s advertising announcement appears this month in our advertising pages, and will continue for a space of time. We take pleasure in calling the attention of our readers to their interesting half page, knowing by personal experience that the goods manufactured by them are first-class in every respect. We ask for them a portion of your patronage, feeling that in doing so we further your interests as well as theirs.

"Celerite" paper is one of the latest printing papers in the field. It is particularly adapted for view work, giving a platinotype effect and being very easy to print and tone. A number of our amateurs who have tried it speak very highly of it. The paper is made by J. H. Smith & Co., of Chicago. Mr. C. J. Dorr, of that company, was in the city lately in the interests of "Celerite" paper.

The Ilo Company has placed two demonstrators in Canada in the interests of their very popular "Ilo" paper. Mr. Wertheim, now in Toronto, is one of their head demonstrators, and a very pleasant gentleman to meet. He reports a rapidly growing appreciation of the merits of "Ilo" paper, and is confident that Canada will prove one of their best markets.

Fire at Listowell.—We are sorry to learn that Mr. C. A. Lee and Mr. D. Barber, the well-known photographers of Listowell, were both completely burned out on March 30th, the fire destroying nearly an entire block. We hope these gentlemen were well insured, and are sure that both will have new galleries in working order at an early date.

Wm. Still, of Orangeville, and G. F. Chapman, of Mount Forest, were in Toronto during the past week "sorting up" for spring business. The Interiors shown by Miss J. Mather, of Ottawa, at the late exhibition of the Toronto Camera Club, were quite the best work of the kind we have seen for some time. The arrangement was artistic, and the technical part of the work excellent. Miss Mather's work fully deserved the honor of first prize awarded it.

Mat Solio Prints. — Samples of platino-solio prints, made as described in another column, are before us. The effect is particular velvety and pleasing. Full particulars will be supplied by the firm on application, if needed.

J. B. Colt & Co., of New York City and Chicago, who rank among the leading firms in the world in the manufacture of stereopticons, have removed their New York office and sales-room to Nos. 115 and 117 Nassau St.

Noah Cress, of Petrolia, has sold his gallery to Mr. L. F. Buxton. Mr. Cress is on the lookout for a new place.

W. W. Burgess, Mitchell, has sold out to W. C. Leake. Mr. Burgess is looking for a good gallery.

TORONTO CAMERA CLUB.

Monday, April 1st.—Club night. Open to friends of members. American Lantern Slide Interchange. Set from the Newark and Orange, N.J., Camera Clubs wasshown.

Monday, April 8th.—Canadian Lantern Slide Interchange. Set from St. John, N.B., Camera Club. A breezy description of "The Cruise of the *Micawber*," by Mr. John Miller, illustrated by slides, was given.

Monday, April 15th.—Special general. meeting. For particulars see below. Monday, April 22nd.—Set from American Lantern Slide Interchange. Lantern competition; prize for best slide of a Genre subject.

Monday, April 29th.—Miscellaneous collection of professional slides, kindly loaned by Mr. John Miller. Lantern competition; prize for best slide of a Figure Study.

ANNOUNCEMENTS.

The membership increases steadily, seven new members having been elected during the past month.

The Canadian Lantern Slide Interchange is now under way, and members having slides suitable for the set are requested to bring them to the rooms for selection. Slides should be of general interest as far as possible, and properly centred and matted.

As indicated above, a special general meeting was held on April 15th, at 8 p.m., to consider proposals for the enlargement and improvement of our rooms and studio, and also proposals for affiliation made by the Athenæum Club, and to take action generally in regard to the present lease, which expires September 30th next. The affiliation scheme was declined, the Club deciding to make considerable improvements in the present quarters.

The Progressive Euchre Party held on March 25th was a great success, and the evening was much enjoyed by the large number of members present. The first prize was carried off by Dr. Verner, the second by Mr. W. B. Varley, and the "booby" prize was captured by Mr. F. H. Middleton, after a severe struggle.

The services of Dr. King, Mr. Croil, Mr. Moss and Mr. Bert Smith have been in great demand this past season for lantern exhibitions, and on every occasion the sign "S. R. O." was hung out early.

ERNEST M. LAKE, Sec.-Treas.

MONTREAL CAMERA CLUB.

The regular monthly meeting of the Club was held on Tuesday evening, 2nd inst., when the set of slides sent by the St. John, N.B., Camera Club was shown on the screen. The slides were very well made, and in most cases the subjects were well chosen.

The members are beginning to get their apparatus in order now for the season's work, and if one can judge from the enthusiasm displayed at present, our next season's work will far surpass anything we have done before.

The success of the "At Home" held by the President and officers has decided the committee about holding another shortly. Although the date is not fixed as yet, it will be some time towards the end of April.

The class nights held during the season have been well attended, and the Club has been fortunate in securing in Mr. Clarke a man who can impart the information to the members in a way that can be readily grasped even by the beginners.

A. W. COLE, Sec.-Treas.

SOCIETY OF AMATEUR PHOTO-GRAPHERS OF NEW YORK.

The Second Annual Members' Exhibition was held at the society's rooms from the 19th to the 27th. The awards were:

Class A.—Landscapes and Marines, "The Coming Storm," by Harry Contant.

Class B.—Figure Studies and Portraiture, "Swiss Hayfield," by E. Warrin.

Class B.—Architecture and Interiors, "An Interior," by A. L. Simpson.

Class D.—Hand Camera Work, "Bathing Views," by John W. McKechnie.

Class E.—Transparency, by S. J. Newman.

The "Swiss Hayfield," by E. Warrin, also received the medal given by President R. A. B. Dayton for the best picture exhibited. The exhibition was well attended.

An interesting exhibition of the slides of the Minneapolis Camera Club and the Hartford Camera Club was given on the evening of the 29th.

Photographical Section of the American Institute.—During the early part of March, Prof. D. L. Elmendorf gave a very interesting exhibition of slides taken by him in the Alps with a Dallmeyer Tele-Photo Lens. His lecture accompanying them was bright and instructive.

On the evening of April 2nd, Mr. Frederick E. Ives, of Philadelphia, described and profusely illustrated his method for the reproduction of colors by photography, showing the wonderful advances recently made.

Columbia College Photograghical Society.-The society is giving a course of lectures on Photography at the College The first on "Photomicography," Hall. by Prof. Louis H. Landy, was illustrated by exhibits and views, and was very interesting. It was given on the evening of the 20th; the second, on the 28th, by Prof. Chas. F. Chandler on "New Photographic Processes," dealing chiefly with the newest methods for the reproduction of natural colors, was attentively listened to by a large audience. Prof. Chandler dealt with his subject, which he illustrated on the screen, in a very clear, concise manner.

BOSTON CAMERA CLUB.

The Club held its seventh annual exhibition of photographs, the work of members, at the Club Rooms, Wednesday, April 3rd, to Saturday, April 20th, inclusive. A very handsome and artistic catalogue was issued, illustrated by work of members. The exhibition proved a great success.

THE CALIFORNIA CAMERA CLUB.

The annual meeting of the California Camera Club took place on April 2nd. The reports of the Secretary and Treasurer showed the good condition of the Club, which, notwithstanding that unusual expenditures have been made, has a residue in the treasury of 5513.82. The President, Charles Albert Adams, in his address, said :

"When we recall the condition of affairs generally throughout the entire world during the past eighteen months, and when it is remembered that the tidal wave of commercial depression has had its natural effect upon clubs and societies of every nature, the members of the California Camera Club have reason to feel some degree of pride in the condition of the Club."

Mr. Adams spoke of the harmony existing in the Club, and said that the ideas advanced by previous administrations had been zealously carried out.

"The desire of the members has always been to equip the Club with the very best apparatus, and to afford every facility for the convenience and comfort of the members in their photographic work."

Mr. Adams alluded to benefits tendered by the Club to the various charities, which caused much favorable comment both at home and abroad. Continuing, Mr. Adams said:

"I desire to express our appreciation of the many courtesies extended to us by the newspapers of this city. I beg to acknowledge the great assistance that has been given me by Edward Jensen and Miss A. K. Voy."

Mr. Adams' address was received with great applause. The Club elected the following officers for the ensuing year :

President, A. G. McFarland; First Vice-President, A. A. Martin; Second

Vice-President, H. C. Tibbitts; Secretary, C. F. Cormack; Treasurer, E. G. Eisen; Corresponding Secretary, C. S. Close; Librarian, H. C. Owens; Directors, W. E. Goodrum, I. E. Thayer, E. J. Mott, W. B. Webster.

March 24th.—Mr. H. B. Hosmer placed his elegant country villa, near San Jose, at the Club's entire disposal for the day. Here the vast fields and well-kept lawns extend for miles, only interrupted by numerous beautiful streams coursing towards the sea, from the distant mountains. During the day, shelter and pleasure were found in the orchard among the rare and tropical fruits of every clime, and, later, carriage drives and strolls served to make the day pass more pleas-Mr. Hosmer's beautiful steam antly. yacht was also placed at the disposal of those who wished a sea-voyage. "Klam Bake" (whatever that is) or a chowder, with plenty to eat besides, added to the enjoyment of the outing.

April 17th.—Mr. Post, of the Ilo Company, gave an interesting demonstration on printing and toning "Ilo" paper.

ANSWERS TO CORRE-SPONDENTS.

"PRENO."—The lenses you mention are all good, and will cover fully the sizes marked. Either the Zeiss or Goerz will prove everything you wish for in a lens.

"METOL."—This developer on certain brands of plates will often cause a slight fog, such as you speak of. Try another make of plate, or add a few drops of the following to your developer: water, 12 ozs.; citric acid, 1 oz.

J. Y. M. -(1) The preparation of the powder is more bother than it is worth; besides there is some little danger attached to making it. The kind used also depends upon the machine. It can be bought at a very moderate price. (2) Chrome alum is very good, and tannic acid is sometimes used. (3) Mr. Latimer, St. Patrick St. Toronto, does refining; also, F. T. Trebilcock, London, Ont.

Owing to demands on our space this issue, a number of "questions" are held over until next month.

THE PHOTOGRAPHIC SOCIETY OF JAPAN.

The tempestuous weather of Friday evening, February 15th, greatly thinned the gathering at the Photographic Society's Lantern meeting, held in the Masonic Temple. It was matter for regret, for the slides shown were of high merit, worthily sustaining the standard set in previous exhibitions of this kind. First of all was shown a negative taken that day by the incandescent light, an illuminant which Prof. Burton thought not quite so effective for photographic purposes as the electriclight, but still of such a character as to produce good results. The selection of slides illustrating Japanese customs, trades, manners and people, to be sent to the American Lantern Society, were next exhibited, after which Dr. Wood described some slides which had been made from negatives taken in the Hokkaido the previous summer. After an interval, a splendid collection of views on, of, and around Fuji were shown, in the course of which Prof. Burton described the ice-caves which he had stumbled across, as it were, in the course of a survey upon the lower slopes of the famous mountain. He propounded the theory that these marvellous caves had been formed through an accumulation of immense snow-drifts which had been overwhelmed by a huge mass of scoriæ during some far-back disturbance of the volcano; and this snow had gradually turned to ice, first by heat and then through compression. The learned professor arrived at this conclusion upon noticing that the ice of the caves was stratified, a condition not attendant upon glacial formations. A curious thing in connection with these caves is that a long, narrow tunnel, never yet thoroughly traversed, leads from the far end, and through this tunnel rushes a blast of air sufficient to extinguish a torch. Prof. Burton advises

a trip from Yokohama to the neighborhood of these caves, claiming that the scenery to be passed through on the way to them is unsurpassed for grandeur and beauty in the whole of Japan.

THE P. A. OF A.-A LETTER FROM THE EXECUTIVE COMMITTEE.

We, the Executive Committee of the P. A. of A., hereby submit a plan of reorganization of the National Association, to be submitted and acted upon by its members at the Detroit Convention.

We recommend the reconstruction of the "Constitution and By-Laws," as indicated by printed copy herewith, as being the most commendable for future success of the States and National Associations.

The existence of the various State Associations makes it necessary to change the laws and government of the National. Our purpose is not to jeopardize the interests and welfare of the States, *but to aid them*, and to maintain and stimulate a still higher standard of photography in the future.

The past history of the National Association and its yearly conventions has proven to be of great benefit to our profession, and has undoubtedly done more good to photography than any other known means. We therefore trust that each reader of this magazine will give the proposed plan a careful perusal, and thus become thoroughly familiar with its objects.

We believe that the proposed triennial meetings with this form of government will uphold our profession to better advantage than the present system. We also believe that it will stimulate the State Associations to unite and meet in one grand Congress of Photographers every three years.

The amalgamation will undoubtedly prove a lasting benefit to each individual State, and infuse more life and vigor into their organizations. It will allow them a broader scope to advance, and would be a great incentive to improve to much better advantage than their present system of continued meetings within their States.

It would, of course, be necessary that the States hold no local conventions the year of the Triennial Congress. We do not, however, assume any right to interfere with the laws of the State Associations, but we hope they will give us their support and co-operation.

We have endeavored to place the basis of revenue sufficiently low enough to interest the States and the fraternity in general.

Any part of the new laws and Constitution can be altered, omitted or amended at the pleasure of the members of the National Association at the Detroit Convention. We merely, as your Executive Committee, submit the plans for your consideration.

In concluding this letter, we desire to extend our most heartfelt thanks to the photographic press for the publication of this and other matter pertaining to the welfare of the P. A. of A. Especially do we extend our thanks and gratitude for the support and aid granted us by its editors in maintaining the interest of the Association, and their united support in all matters of the past.

Believe us to be most heartily and fraternally yours,

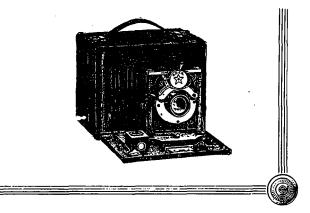
John S. Schneider, R. P. Bellsmith, George Steckel, J. Ed. Rosch, C. M. Hayes.

Executive Committee. THE CANADIAN PHOTOGRAPHIC JOURNAL.

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MANUAL OF THE PHOTOGRAPHERS' ASSOCIATION OF AMERICA.

PREAMBLE.

Whereas the advancement of the Art of Photography and the elevation of the professional character of its members, the establishment of a higher and more perfect system of conducting the business of photography, the promotion of friendly intercourse and feeling, and the unity of purpose in pursuing the direction that points to its greatest success as an art; therefore we, the members of the Convention now assembled in Detroit, Mich., August, 1895, composed of photographers from various sections of the United States, adopt the following Constitution and By-Laws:

CONSTITUTION.

ARTICLE I.

This Association shall be called the Photographers' Association of America. Its aim shall be to encourage the various State organizations, and to promote a friendly intercourse of feeling among such State organizations, and to further unite and encourage the photographers of the United States and Canada in the following objects :

1. To establish the relations between members of the profession and the people at large upon just and business principles, which shall promote public welfare and be of mutual advantage.

2. To improve the science and art of photography by diffusing scientific knowledge among its members, fostering photographic literature, stimulating discovery and invention, and encouraging the production and manufacture of all articles required for photographic use.

3. To discourage and oppose any unjust opposition which tends to hamper the progress of the art. ARTICLE II.—STRUCTURE OF THE Association.

Section I.—The Association shall be constituted as follows :

r. Such State associations as shall become members of the National Association.

2. Such individual members of States and territories where no State or territorial organization exists.

3. Such photographers, inventors and scientific men who may be deemed worthy, of distinction to membership.

ARTICLE III.-MEMBERSHIP.

Section I.—The membership of this Association shall consist of regular and associate members.

I. Regular members shall be such members of State organizations, who are photographers in good standing, or such photographers who reside in a State or territory where no State or territorial. organization exists.

2. Associate members shall consist of manufacturers of photographic materials, dealers in same, and their representatives and employees.

3. All present and past presidents of State associations who become members shall be considered *ex-officio* members of the legislative body of this Association.

ARTICLE IV.-POWERS.

Section I.—Legislative powers shall be vested in the National Association, which shall be composed as follows :

1. The officers as provided in this Constitution.

2. The national representatives legally elected, appointed or selected.

Section VI.—Eminent men in the United States and other countries, inventors, photographers and other scientific men who may be thought worthy of the distinction may be elected honorary mem-

(Continued on page xii.)