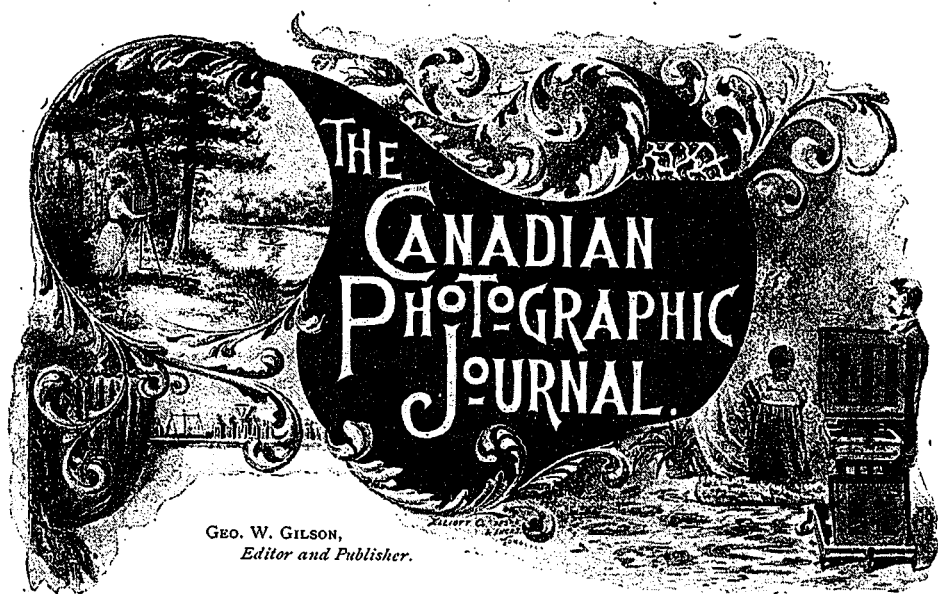




PRINTED ON
"N.Y." ARISTO PAPER

NEGATIVE AND PRINTING
BY G. A. BRIGGS
SIMCOE, ONT.

STUDIO WORK



GEO. W. GILSON,
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OUR ILLUSTRATION.

We present to our readers this month some very excellent work from the gallery of Mr. G. A. Briggs, Simcoe. Each of the different negatives used shows the same careful attention in posing. Those of the children being especially natural and pleasing. Mr. Briggs is evidently an artist as well as a photographer. The Paper used, "N.Y." Aristo, has undoubtedly helped to bring out the good qualities of the negatives.

We also have the pleasure this issue of reproducing some very charming poses from the studio of Simpson Bros., Yonge Street, Toronto. Each picture is full of "studies" of the graceful in posing, and one can secure a good many ideas from them as to the correct basis of artistic grouping.

EDITORIAL CHAT.

It is now time to think about laying in a stock of cloud negatives for future use. During the months of March and April it is possible for a watchful photographer to secure many valuable cloud effects that are almost impossible after the advent of spring.

THE Duke of Newcastle and Mr. Gambier Bolton have been joined at Lucknow by the Duchess. Mr. Bolton will return *via* Malta and Gibraltar; while the Duke and Duchess will travel, *via* Brindisi, to Rome, where they will stay for a while before returning home. Altogether, these enthusiastic photographers have had a most enjoyable tour.

ONE of the latest additions to the ranks of professional photographers is

Miss Alice Hughes, who is possessed of charming manners and is, furthermore, very pretty. Her father was an artist, and it was in order to photograph his paintings that she first took up the study of photography. There is scarcely a beauty in England who has not given a sitting to Miss Hughes.

—

ANOTHER New York contemporary (*The Developer*) has transferred an entire article from the columns of THE CANADIAN PHOTOGRAPHIC JOURNAL to its own pages, without giving this JOURNAL a word of acknowledgement. We are always pleased to have our contemporaries help themselves freely to whatever appears in our columns, all we ask in return is the usual journalistic courtesy of acknowledgement. This is not much to ask, when one considers that it does away with the necessity of sending a remittance to the author.

—

REFERRING to the paragraph that is going the round of the journals to the effect that the substance of which a hornet's nest is composed forms the best material for polishing photographic lenses, *The American Journal of Photography* says: "But you want to do your polishing when the hornet is not around to help you; for what shall it profit a man if he polish even a thousand glass lenses in one day and a single hornet catch him at it." If a few hornets volunteered their assistance, there would be a regular "polishing bee" around that neighborhood. Next!

—

OUR New York contemporary, *The Photographic Times*, in a recent number gives its readers an excellent receipt for making a mountant that will keep. We are glad our contemporary has published the formula,

as from a long personal experience we are convinced it will give satisfaction to all who use it. It strikes us, though, as somewhat peculiar that the source of the extract is not acknowledged—seeing that it is the only one appearing in their "Notes and News" that is appropriated from a photographic journal, practically at home in America. As a matter of fact the paragraph is taken word for word from THE CANADIAN PHOTOGRAPHIC JOURNAL. Why not acknowledge, friend *Times*, seeing that you give credit for far smaller paragraphs on the same page to *Photographisches Archiv*, *The Pharmaceutical Era*, *Electrical Engineering* and some English periodicals, all of which are of less interest to your readers than the CANADIAN PHOTOGRAPHIC JOURNAL.

—

It is really amusing to note what a wordy war has been stirred up among correspondents of the English magazines regarding the adoption of the word "photogram" as signifying a completed photographic picture—leaving "photograph" to signify the act of photographing. One man, who in other respects writes reasonably enough, seems to think that because there are other inconsistencies in the English language (such as "autograph") we ought to be content to still use "photograph" as a noun, as well as a verb. We do not profess to be profound Greek scholars, and our readers are probably as well aware as we are that the noun "photograph" is derived from *phos*, light, and *gramma*, a letter, and signifies practically "that which is written by light." In these days of common sense it seems only right to encourage anything that will tend to simplify language; and a word should indicate at a glance whether a noun or a verb

is intended. While regretting there are other absurdities in our language besides the use of "photograph" as a noun, we are pleased to note there are also a few common sense words to keep "photogram" in countenance, such as, "epigram," "anagram," "diagram" and "telegram."

CLOUDLAND.

W. ETHELBERG HENRY.

The effective portrayal of the many forms of clouds encountered during a March or April day is an interesting study, and a good collection of cloud negatives represents a valuable stock to any wide awake photographer. Of the *study* of clouds I shall say nothing in this paper, as I wish more particularly to deal with securing them on a photographic plate for future use as occasion may suggest.

As the season of clouds is advancing somewhat rapidly it will be well to be prepared to lay in a good supply, and to make the negatives under a full and distinct understanding of what is required. I am aware that the double printing of clouds into landscape is not pursued on this side of the Atlantic to a tithe of the extent it is in England; this is to be deplored, since the presence of an *indication* of clouds enhances the beauty of almost any landscape beyond conception. For the information of those who have but a dim idea of the requisites of a good cloud negative, let me say that in my opinion the principal characteristic should be an image devoid of fog in which the range of half-tone is perfect and the extreme high lights fairly intense. That portion of the negative representing blue sky should have hardly any density at all. There is little or no difficulty in securing the desired result when once we know, even

approximately, what exposure and other conditions are necessary to success.

First, then, as to choice of location, let us avoid as much as possible elevating the lens; that portion of the sky appearing in the average photogram extends but very few degrees above the horizon, therefore if we print into such a picture clouds from a greater altitude, it stands to reason such a picture will be false, and the shape and illumination of the clouds will prove the fact beyond question.

To avoid such incongruities it will be advisable to set up the camera overlooking a plain devoid of tall trees, telegraph posts, or other sky-scraping obstructions which would, by intruding among the clouds, render the negative useless for double printing. If a lake or ocean be within reasonable distance one can set up the camera overlooking the expanse of water and sky some day when clouds are plentiful, and make exposures from morning to night without interruption. If there is much wind—and this will probably be the case if there are plenty of clouds—it will be advisable to attach a firm cord to the tripod head and lash the lower end to a stake fastened in the ground; by this means the hands are at liberty to fight with the focussing cloth without fear of upsetting the camera.

In focussing the image of the clouds it is always well to include the horizon line, so as to avoid the possibility of committing the ludicrous error of printing the clouds upside down. I strongly recommend the use of a slow, thickly coated plate in conjunction with a fairly small stop and a rapid shutter.

Orthochromatic plates will be found an advantage in cases where it is desirable to photograph the light fleecy clouds commonly known as "mackerel's backs" and "mare's tails" which usu-

ally appear against a background of brilliant blue. In such a case I advise the use of a pale lemon color screen, a larger stop, and a shutter exposure.

The developer used should be rich in pyro (or metol, or whatever other reagent you prefer) and weak in accelerator. Aim at bringing out the high lights first and securing good printing power in them by restrained (not weak) developer. My experience is that as soon as the high lights are dense enough, the rest of the negative is just what is wanted, but sometimes I have had to use rather a large amount of restrainer to secure this end.

A few experiments will soon settle the matter according to each person's method of working, and my advice is to make these experiments at the first opportunity and then secure a really good collection of cloud negatives.

GELATINO-CHLORIDE PRINTS BY DEVELOPMENT.

Ever since the invention of the dry plate we have looked hopefully forward to a really quick printing process as the next advance in photography. Much was gained over the old albumen process when the gelatino-chloride papers were introduced; but the photographer continued to be at the mercy of the weather clerk, and "dark days" are still held responsible for broken promises and the consequent bad temper of disappointed customers. But the problem is solved in Solio prints by development.

The formula which we present is not a mere rudimentary experiment, but has been proved a practical working success, giving prints equal, if not superior, to those made by the printing-out process. By this method prints can be made in from one-tenth to one-

twentieth of the time required for printing-out, while the whole process is so simple that any photographer can readily learn it. It is only necessary to print until a fairly strong outline shows, and from this point every bit of detail that was in the original negative can be developed. The developer does the work of the sun, but unlike old Sol, is under the control of the operator.

Great latitude can be allowed in the printing, thus permitting the use of cheap help in the printing room, provided there is a good operator at the developing tray. In fact an entire set of printing frames may be taken in at once without looking at each particular print, any inequalities in printing being easily remedied in the development. It is as easy to tell when to stop the developing as it is to tell when to stop printing by the ordinary method.

The advantages of the process to the professional photographer, especially during dark weather or during the holiday season, are obvious. He is practically independent of the sun, and on the darkest, cloudiest day it is an easy matter to print deep enough in an hour or two so that the prints can readily be developed to the proper point for toning; while, with good sunlight, prints can be made ready for the developer in from one to five minutes, varying of course according to the density of the negatives.

The amateur photographer, who usually has but little time during the day to ride his favorite hobby, will welcome a process that enables him to start a number of prints in a few minutes time and then finish them up during his leisure at night.

The formulæ and method of working, recommended by the Eastman Co., is as follows:

No. 1.	
Hydrochinon.....	½ ounce (avd.)
Sulphite Soda.....	½ " "
Potassium Bromide..	1 " "
Ammonium Bromide..	2 " "
Water.....	.64 " (½ gal.)

No. 2.	
Caustic Soda.....	¼ ounce (avd.)
Water.....	.16 " (1 pint)

No. 3.	
Tannic Acid.....	.8 grains.
Water.....	1 ounce.

To develop 10 or 12 prints take

No. 1.....	5 ounces.
No. 2.....	1 ounce.
No. 3.....	1 dram.

The print which must be immersed, *without previous washing*, directly into the developer, will first fade away to a pale yellow; then will slowly develop up to a point showing about as much detail and about one-half the strength as a finished print, remaining yellow, however. This will take from ten to thirty minutes. If the developer works too fast dilute with water.

As fast as developed throw prints into a solution of 3 drams of Acetic Acid, to one gallon of water. Wash five minutes in frequent changes of running water; then tone in combined bath as usual. *No extra fixing.*

A little extra care should be exercised in putting Solio intended for development into the printing frames and taking it therefrom. It should be done by subdued daylight.

If the prints continue to develop in the toning bath, too much alkali (solution No. 2) has been used in the developer. The prints will appear to strengthen by reason of the change of color in toning but they ought not to increase in detail.

The exact point to which the printing is carried does not seem to make very much difference; so long as the print is under printed, it can be brought up by the developer.

Development is best done by ordinary lamplight without a yellow shade.

Prints made by the above process are rather more brilliant than those fully printed out.

More sulphite in No. 1 tends to make softer prints.

Solution No. 3 requires a drop of carbolic acid if it is required to keep it indefinitely. The tannic acid is only used to harden the gelatine.

STOPPING LEAKS.

BY H. H. BUCKWALTER.

Pinholes in camera bellows are the most annoying of all the stumbling blocks of photography. Failure after failure may result and the most careful examination will sometimes fail to detect the leaks. Frequently a dozen exposures will result in bright, snappy negatives and then a plate exposed as usual will develop a weak, flat image. When the pin-holes are near the plate they will manifest themselves by fog streaks and can easily be located. But generally they first appear at the corners of the bellows and fog the plates by diffused light. Throwing the focusing cloth over the camera is an admirable practice, and sometimes avoids trouble but does not remedy the evil.

Most camera bellows are made "two-ply," with strips of light cardboard in the flat parts of the folds to stiffen the structure. The corners and creases are only two thicknesses, generally black cotton cloth inside and rubber "gossamer" or leather outside. The rubber bellows are particularly liable to leak. The rubber cloth becomes dry and brittle and cracks and scales off, first at the corners and then at the bottom of the creases. One firm of camera makers use a specially prepared cloth, very much resembling book-bind-



NEGATIVES BY SIMPSON BROS., TORONTO.



RIGHT—Wounded
LEFT—Sacrifice of Iphigonia



DANCE OF THE HOUSE

ers' cloth, and this is some improvement on the rubber, but all materials will sooner or later show signs of wear, and admit light where it is not wanted.

A paint that will stop up the leaks and be flexible enough to allow the opening and closing of the camera without stiffness, is very easily made. The expense is nominal. Pure para rubber dissolved in benzole and thinned to the consistency of cream with benzine or benzole is first prepared. For painting the inside of the bellows and leaving a matt surface, enough lampblack is added to slightly thicken the mixture. Several thin coats may be applied, especially in the corners and inside bends of the folds. A few minutes will generally suffice for drying and removing stickiness. Care must be taken not to have the materials near a fire. Bellows that have not shown any signs of leaks are improved and failure avoided by an occasional thin coat of this paint on the inside.

For the outside of the bellows the rubber must be dissolved as before and some asphaltum added. Generally one-fourth the bulk of asphaltum of an equal consistency, or even less, will answer. Too much must not be added or there is danger of brittleness. The first mentioned preparation of rubber and lampblack, will, of course, answer for the outside if asphaltum is not to be had, but it is not as durable and will not allow as much handling. Of course the bellows should be distended to their full length when the paint is applied. Should there be any appearance of "stickiness," a small quantity of lampblack may be applied with a tuft of cotton and the fault remedied.

Another use for the rubber solution (without the black) was mentioned in a recent issue of the JOURNAL. It is

in lettering negatives. Some plain, smooth paper is first given a moderately thick coat of rubber and afterwards a layer of gelatine. The gelatine is preferably made partly insoluble by the addition of chrome alum or bichromate of potash. After the paper is thoroughly dry it may be cut into narrow strips and the title of the negative written on one. Liquid india ink is best for this purpose, and a soft pen will avoid too much cutting of the gelatine film. While the letters are still moist some very fine bronze powder should be dusted over them by means of a tuft of cotton. Then the strip should be damped quickly and placed in contact with the negative. When it is dry the paper support may be removed by soaking with benzole, which readily dissolves the rubber.

Still another use for the rubber solution is in making "transferrotypes." The paper is coated with a layer of rubber, as above, and a coating of gelatino-chloride emulsion is applied in the usual way. Prints are made, toned and fixed, and after washing, applied to the support while wet. A blotter and weight keep it in place until dry and then the paper is removed with benzole, leaving the picture on the support. In this manner many pretty effects may be secured. Porcelain, celluloid, or any substance not affected by benzole are capable of receiving the picture.

Lantern slides may be made in this way, but in the opinion of the writer the prepared slides meet every requirement if properly handled.

BETTER TIMES.—It was Benjamin Franklin who said: "So what signifies wishing and hoping for better times? We may make these times better if we bestir ourselves."

RECOVERING GOLD WASTES.

The following letter from Mr. Meyer Moss of the Moss Photo Co., Halifax, N.S., will, we are sure, prove very interesting to our readers :

To the Editor :

I have just compiled a process to my entire satisfaction, and, as it may be of service to others, I offer it for publication. We make a new toning bath every day. After having used it we empty it into a large glass jar and occasionally add to it a strong solution of sulphate of iron which precipitates the gold in the form of very fine particles of metallic gold.

Probably most all of us know that it has hitherto been a simple matter to wash this precipitate and redissolve it in nitro muriatic acid, when it would be in good form to use over again, but since we have been using gelatine paper we find it quite a different thing to deal with. The printer having told me that he was nearly out of chloride of gold, I resorted to my old expedient of recovering the gold from our two gallon glass jar, which had been filled up many times, the top part decanted off and filled up again, and so on, for six months or more, during which period I had dissolved two five dollar gold pieces into chloride. Having poured it off till I came to a muddy looking mixture, I dumped the remainder into a large funnel in which a coarse filtering paper had been placed, but the mixture was so thick with gelatine that it would not filter a drop ; so thick indeed, that the gold was held in suspension in it. Now, you know that no process can destroy gold. It may be lost sight of in some form or other, but it can always be received in its metallic form if you know how. I knew there was a lot of gold in that unsightly

mixture and I was determined to have it, so I concluded to treat the whole mass, which consisted of gelatine, sulphate of iron, various kinds of dirt and gold. Now if you place a few crystals of sulphate of iron on a fire shovel and hold it over a fire until it gets red hot, it not only loses its water of crystallization, but it entirely changes its nature from a soluble salt to an insoluble oxide of iron, a red powder known in commerce as crocus or rouge. The gelatine when submitted to a red heat will be utterly destroyed except a few particles of carbon, also insoluble. Having debated this in my mind, I emptied the mixture into an iron dish and after boiling it to dryness, continued the heat till the dish and all that was in it was red hot ; on cooling, it was a funny looking mess, just like a lot of dirty iron rust, which it really was. Every particle of this was carefully scraped off the dish and put in a Florence flask, and having poured some nitro-muriatic acid over it, my expectations were fully realized. The acids cut the gold up without affecting the other matter in any way. After decanting the solution of gold off the residue and thoroughly rinsing every vestige of gold out of it, I again added a solution of sulphate of iron to this recovered gold solution, which threw the gold down in the form of a bright yellow powder, which is gold in its purest possible state, this was well washed and again dissolved in nitro-muriatic acid. I now have before me a fifteen ounce glass stoppered bottle full of a deep orange-colored, sparkling solution of chloride of gold.

M. Moss.

A BRIDEGROOM during the first week after his marriage looks like a boy caught in a melon-patch.

IRRESPONSIBLE REMARKS BY A MERE DRAUGHTSMAN.

A. H. HOWARD.

If the able editor of this Journal were called upon, as a gentleman necessarily versed in literary criticism to judge between a poem by—say Browning and one of Goldwin Smith's brilliant essays on political economy, as to which were the more meritorious from a literary standpoint, his native modesty (which I take for granted) would very probably constrain him to decline the impossible task. Or if one of his fair readers—I suppose he has fair readers—should be asked to decide upon the relative beauties of lily or rose, she would in all likelihood get round the difficulty by pronouncing both "just lovely."

Several such problems, however, seem to have presented themselves to the judges in the Competition of Photography, held in February under the auspices of the Toronto Camera Club, which they, of course, were not permitted to settle by either the editorial or feminine method.

In almost every class it seems to have been a case of poetry versus prose.

In the landscapes, for instance, where poetry carried off the first prize in Miss Farnsworth's charming picture, "When the frost is on the pun'kin," the second prize falling to a fine example of pictorial prose by Mr. W. B. Bayley, "Neath lordly oaks."

Somebody has said that God makes many poets but gives utterance to few. Miss Farnsworth has found a means of utterance indeed in the camera. Her work may or may not be lacking in technique from the photographer's point of view—I don't know—to me, her pictures are altogether charming, and breathe a sentiment and an indi-

viduality of which in my limited experience I had hardly thought Photography capable.

"He wants imagination, that's what he wants," solemnly asserts that ponderous old numbskull, mine host of the Maypole in explanation of the flightiness of poor, fanciful, imaginative Barnaby Rudge, and in an unwonted spirit of humility I am disposed to confess that hitherto I have justified to myself a somewhat supercilious attitude towards the camera on exactly the same ground. It lacked imaginative power—it seemed to me to afford little more than a mechanical means of recording matter of fact in a more or less prosaic way.

I am not at all certain, despite my new-born humility that I had not better warrant for my opinion than had old John Willett for his, because until lately I had seen little else than the most commonplace landscapes, always embracing some leagues of not specially interesting perspective, foreground, middle distance and distance all correct and proper according to the rubrics, detail everywhere developed with the conscientious impartiality of the microscope, and the whole finished with a high glaze in imitation of the varnished label that decorates the utilitarian tomato can.

That this has been due rather to want of educating influences among amateurs than to inflexibility in the medium—that the camera is capable of registering thought, emotion, invention, imagination—is amply proved by the clever work shown by Miss Farnsworth, Mr. Stieglitz, Mr. Clarence B. Moore, Mr. W. B. Bayley, Mr. Noyes, Mr. Barker, and others.

These exhibitors have realized that something more—something far nobler—than the perfect development of a plate is necessary to the making of a

picture worthy the name, and realizing this, have striven, with admirable results to absorb the artizan in the artist.

I wish the Club could see its way to providing us with a catalogue at their exhibitions, for, amplified by judicious marginal notes, such a help would prove a very fount of inspiration for the profound reflections I rashly undertook, with insufficient memoranda, supplanted only by a treacherous memory, to record.

Miss Farnsworth's prize genre picture "Apple blossoms" I recall at once, as also her imaginative subject, "When the world was young," and many other gems by the same artist float elusive in my recollection like a faint perfume.

Though Mr. Bayley is generally an exponent of what I have called the prose in art, there are not wanting pictures in his exhibit showing a decided tendency towards sentiment.

"Thank you kindly sir, she said" is a cleverly posed figure of a milk maid, gratified pride struggling with rustic shyness expressed in the downcast eyes and happy smile.

Amongst others by Mr. Bayley that dwell in my recollection are, "Can I kiss it," a tender little scene of home life, "Luncheon," which took second prize in the genre class, and a picturesque view of our own market place, curiously suggestive of a bit of old Antwerp.

Of Mr. Steiglitz's fine exhibit I recall his genre picture "Weary" (awarded third prize), and "A good joke," a capitably posed group of idlers, laughing consumedly. The laughs *are* laughs, not petrified grins.

The genre picture, "Generosity" I very much admired—the work of Mr. Moore, who seems to be always happy in his choice of models as well as in his use of them.

The magnificent picture he exhibited

last year, "The vetran's tale" I think it was called, rather spoiled us for the "Chess problem," which secured second prize in the portraits at the recent exhibition, for though the noble old head must ever compel our veneration, the sentiment is hardly extended to the overcoat, which we recognize again with just a shade of impatience—nevertheless it is a notable picture. A "Quakeress," by the same artist is a dainty little portrait, the demure contending with the piquant most tantalizingly. He also showed some fine landscapes of the impressionsit type, the best to my mind being "The wild fowl's reedy home."

Mr. Noyes' clever portrait, "The Nun," much impressed me, a beautiful face, calm almost to coldness, with eyes upraised in silent supplication. A perfect type of "the world renounced."

But what shall I say of the first prize portrait by Mr. Baker. I might describe it in the characteristic words of the society editor of *Saturday Night* as "a young girl in evening bodice of black satin and with a fine and speaking pair of eyes," but though the speaking eyes spoke for themselves the all important millinery details, I quite overlooked in the absorbing interest with which the beauty of the picture inspired me, and I disdain to quote, even from so undoubted an authority.

No, Mr. Baker's beautiful picture will have to go uncommented upon. I cannot do it justice.

Well my notes are exhausted and so am I. My memory, too, would seem to have been underexposed or something, for I cannot get another picture off it. Under these depressing circumstances I find it expedient to step down with none the less precipitancy that I am apprehensive of having already seriously taxed the patience and forbearance of all concerned.

PHOTOGRAPHY NOT INFALLIBLE.

It is customary in criminal courts to attach great weight to the testimony of experts. The deductions of scientific men are regarded by both judge and jury as the strongest kind of circumstantial evidence. Instances of this kind abound in murder trials in this city, so says an exchange.

Yet, by means of a remarkably interesting set of pictures, reproduced in the *Idler*, it has been shown convincingly that photography is no more to be depended upon than an unscrupulous witness. In other words, photography will tell a lie as readily as the truth. This has been demonstrated in an ingenious manner.

Mr. Gladstone, in a speech of 1890, had made the statement that a certain clergyman in Ireland had been shadowed by a couple of police officers dressed in uniform, which fact, he remarked, "stands upon evidence, because it has been made the subject of a photograph."

In order to prove how illogical was the conclusion of Mr. Gladstone, namely, that a particular event must have occurred, because it was so depicted in a photograph—a certain photographer, skilled in the mysteries of his art, made a number of photographs, depicting events which, under no circumstances, could possibly have occurred. Going to the very root of the matter, he produced a surprising photograph, revealing the venerable Mr. Gladstone himself comfortably lounging before the door of one of the toughest dives in Seven Dials, London. Seven Dials is tougher than old Five Points was in its palmiest days.

Another photograph, equally monstrous, and equally authentic, represents Mr. Henry Irving, the dignified

and somewhat austere tragedian, engaging with Miss Lottie Collins in the highly entertaining and instructive dance which accompanies the singing of "Ta-ra-ra-boom-de-ay." Is it possible Mr. Irving has his lax moments, that during the intervals between the extraordinary mental strain required in assuming the characters of Becket, Henry the VIII, and Louis the XI, the celebrated actor indulges in unseemly dances? According to photography, which has swayed the minds of jurors in much more momentous events, there can be no doubt that this is true. Yet those who know Mr. Irving would rather regard the photograph as a miracle than accept the conclusion it inevitably involves if it is to be considered genuine.

The infallibility of photography in evidence is apparent from a photograph showing a man in the act of shooting another man across a small table. But the remarkable point about this picture is the fact that the person doing the shooting and the person shot are one and the same. Here, then, is a reproduction of an event which, according to the laws of physics could not have occurred. It is not possible for one body to be in two places at the same time. The only alternative is either to deny the law of impenetrability, a law which has never been known to fail, or to deny the evidence of the photograph.

The explanation of the manufacture of the photographs is simple enough. One part of the plate is covered up while the rest is exposed, the part that is covered up will receive no impression and hence will be capable of being acted upon by a subsequent exposure. In other words, the events, or situations, shown in a photograph have not necessarily occurred at the same time. Thus, in the photograph of Mr. Gladstone,

the part where the head and body are to appear is covered up at the first exposure, and the rest of the photograph is taken, then vice versa.

The only difficulty is in making the joining of the two parts of the photograph so neatly that the fraud will not be detected. The joining must not be a straight line, but a jagged one, which is far less easily observed. The diaphanous appearance of the ghost is due to the fact that the lady who assumes that character retires before the exposure is complete, but the rest of the picture comes out in a normal way.

The possibilities of this clever scheme it will be seen are enormous. The most absurdly ridiculous events and situations may be depicted with apparent authenticity, and jurors, if they placed implicit confidence in photographs, might be made to believe almost anything. A man might be represented engaged in animated conversation with a person he had never seen.

A photograph of this kind has actually been "constructed." A man is seen pointing a revolver at another, who has a bullet-hole in the forehead, and looks for all the world as though he had just been shot. This would probably be accepted as strong evidence of murder on the part of the gentleman holding the revolver, whereas, in fact, he had never laid eyes on the man he had apparently slain. Similarly a man has been shown giving himself a light from a cigarette, telling himself a funny story, writing on his own back with a piece of chalk, and cutting his own head off with an axe.

"Art is not to be found by touring to Egypt, China, or Peru; if you cannot find it at your own door, you will never find it."—*Dr. P. H. Emerson.*

A SUGGESTION FOR THE DULL SEASON.

A. M. CUNNINGHAM.



President P. A. of C.

As this is generally conceded to be the quietest season of the year, perhaps a hint as to a "money maker" will not be wholly out of order. To this end

let me suggest that a composition group is usually a safe and profitable speculation for the average photographer, and one that can be easily taken advantage of. I am aware that the very name of composition group is sufficient to bring up before the eyes of many the prospect of lots of work that will have to be done by an outsider that will have to be paid handsomely for, and that a great deal of time and skill will have to be put upon it to make it successful. This is true where full figures are introduced and the position and relative size of each has to be considered and worked out to a sketch previously prepared—but more on this line another time perhaps. It is of a simpler and less complex style of picture that I wish to write at this time and one that, all things considered, pays better. I refer to what is usually termed a "shingled" group, where the pictures consist entirely of cabinet bust prints from which the background has been cut out, and mounted on a stretcher of suitable size, shoulder lapping shoulder, the faces on second row alternating with those in the first, and so on until all are mounted, after which a suitable background is added, or a scroll or other design can be worked in around the figures with good effect, an artist will do this for you at very moderate cost if you can-

not wield the brush yourself. You now have a handsome and attractive picture from which reduced copies sell readily. The points in favor of such a group are many, as it is suitable for any class of subjects, and to the photographer in a small town it works as advantageously as with his "big brother" in the city. As a church choir, the officers of a Sunday-school, a county council, the officers of one of the thousand and one fraternal societies, the local militia and an infinite number of other organizations can with a little tact be induced to have such a group made, you have three possible sources of revenue, first, cabinet orders from the negatives used in making the group; next, copies of the group which can be made in different sizes; and lastly, the sale of the group itself, which is generally sold to advantage to be presented to some popular member, or to adorn the walls of the lodge room, as the case may be.

The only precaution necessary in the making of the negatives is to have the faces as near the same size as you can and all lighted from the same direction, avoid white drapery as much as possible as it forms a poor background for the face that comes in front of it, making it look darker by contrast than it really is.

I have no hesitancy in saying that the returns from such a group will prove entirely satisfactory to the photographer undertaking it, and will in addition to this be one of the best paying advertisements for the amount of money involved that he has ever had.

ARTIST: "Have you taken my picture to the exhibition?" Porter: "Yes, sir; it seemed to please the gentlemen very much." Artist: "What did they say?" Porter: "Oh, they didn't say anything, they only laughed."

RETOUCHING.

(Continued from page 69.)

But whether you photograph landscape, figures, or portraits, you will seldom take a negative that could not be considerably improved by intelligent retouching.

For portraiture it is indeed absolutely indispensable, and the professional portrait photographer owes his very existence to it.

Before it was understood that a negative could be worked upon freely and successfully with a lead pencil, portraits were almost invariably taken of small size, generally of full length, with tiny heads too small to show the imperfections, and photographs of this period are generally found to have been clumsily posed full length carte-de-visite size. The advent of retouching brought an immense extension of business to the photographer. Now large heads are generally made almost in the other extreme, and there is not a photograph of repute that is not from a negative that has been through the hands of the retoucher, and generally to its great advantage.

Let me draw your attention for a moment to an example I have here, it is not an extreme case, but it will serve.

It is a negative I picked out from only a few I looked through, and is an every-day subject with the retoucher.

The lady is not suffering, as she appears at first sight to be, from the ravages of some fell skin disease. You will notice she has rather a pleasant smiling expression not appropriate to one in pain.

It is, in fact, nothing half so serious she has merely been out in the sun, or has used the wrong soap, the one that is *not* matchless for the complexion, and has got a few freckles, slight im-

perfections barely apparent to the eye, but which are maliciously rendered by the lenses as great blotches and splashes, having a perfectly horrifying aspect. I have retouched the negative and made another enlargement from it, and I think you will agree that it is not only a more pleasing portrait, but also much more convincing as a likeness.

The retouching is not flattery, it is an act of simple justice. I willingly acknowledge that, like all useful things the practice of retouching can easily be carried to excess. It must be confessed that it is often used in such an illegitimate manner as to call down upon the art sharp and well-deserved criticism.

A fashionable photographer will think nothing of carving away a substantial piece of a lady's waist if it is not in the same proportion as that of a figure on a fashion plate. He will straighten a nose as a matter of course, if it happens to be a little too retousse or pronouncedly Roman, tint gray hair, and entirely eradicate wrinkles and marks of age of all kinds.

The cost of materials necessary for retouching need not deter anyone from commencing. A penny pencil, or, if the price is no consideration and you are inclined to be luxurious, say a four-penny Faber or Hardmuth; some arrangement in the nature of a retouching desk to support the negative; and a little medium that can be made up for a few pence are all that is absolutely necessary.

The pencils I generally use are Hardmuth HH or HHH leads in screw holder. These or Faber's best pencils are very even and free from grit, and take a very fine point without breaking. They may be obtained in almost any number of H's, according to hardness, and perhaps a beginner would find it easier to

get on with a rather harder pencil at first, but the softer pencil saves time when the touch has become light enough to use it. When you have got the right sort of pencil the next thing is to get the right sort of point on it. This is one of the first difficulties of the beginner. An extremely fine point is absolutely necessary for such delicate work, and it is worth taking pains to obtain. I make the point about an inch, or rather longer, tapering down regularly from the thickness of the lead to the sharpness of the finest pointed needle.

The quickest way to sharpen is to rub down first with fine sandpaper and finish on a piece of ground glass or opal glass. The gelatine or varnished surface of a negative is too smooth to work upon, and offers no bite to the pencil; it is necessary to prepare it in some way. To my mind the most comfortable surface to work upon is obtained on a good hard varnish by grinding the surface with pumice powder. This gives a luxurious surface compared to the usual surface given by a medium.

The varnish must be fairly tough and well baked after the negative is varnished. The grinding down must be done with some care, or there is a danger of scratching or cutting a hole in the negative, especially if the pumice is not fine and free from grit.

A little of the pumice should be taken on the tip of the fingers and rubbed carefully on the parts to be worked upon. With a little practice any surface can be obtained to suit the subject, from a rough surface with a tooth like drawing paper, to a fine surface that will only take the pencil in light fine strokes. I much prefer this surface to any other I have tried, but it has, unfortunately, a serious drawback the density of the

part rubbed down is very slightly increased. In retouching a face the very slight increase in density is generally imperceptible, and when the negative is thin may be a positive improvement. When the face to be retouched is already on the dense side it is better to use a medium. There are a number of suitable mediums sold for the purpose. The medium I generally use is made of one drachm of powdered resin to two ounces of turpentine; it is very easy to make, and answers as well as any other.

The disadvantage of mediums compared with a surface prepared with pumice, is that they are generally more or less tacky and tear off the fine point of the pencil and the bite cannot be regulated so conveniently. However the surface is prepared, it will not take the pencil freely enough to bring up quite transparent places in the film to the density of the lights, and when very transparent places have to be dealt with, such as holes in the film, dust spots and other similar defects, it is best to get them as well covered with the pencil as possible and strengthen to full density with water colors, mixed to match the tint of the negative, stippled on neatly with a fine brush.

A retouching desk is required to support the negative in a convenient position while retouching. The desk should be firm and capable of being arranged at an angle so the light may be reflected through the negative from a reflecting surface arranged beneath. Desks sold for the purpose generally have a mirror for reflecting the light, but unless the light is very weak it is reflected too strongly by a mirror, and white paper makes a much better reflector, and has more mercy for the eyes. A good desk will be fitted with frames to hold different sized negatives,

and a hood to screen the eyes of the retoucher from light other than that passing through negative.

When we have these few requisites, we are ready to commence.

I propose now to show you as well as I am able the usual method of retouching a portrait head with pencil, and afterward I propose to call your attention to retouching methods more suitable to landscape photography. It is a very difficult matter to illustrate portrait retouching to an audience, and I am trying a novel way. I have here a negative bromide enlargement of a head to life size, that is an enlargement made from a positive transparency instead of from a negative. It is a choice subject from a retoucher's point of view, and I am sure that the need of retouching is perfectly obvious to everybody who can see it. I am afraid I should exhaust your patience if I tried to retouch it in anything like a finished manner, but if you can bear with me for a few minutes and imagine it is a negative of small head, and that you are looking *through* instead of on to it, I will show you how I should commence it. When it is necessary to retouch a landscape negative, the need for working upon it is generally from the same causes that call for retouching in a portrait, namely, the modification of tone by color, the defective rendering of gradations of tone through under or over exposure of whole or parts of the negative, or faulty development, distortion by the lens, etc.

The method of working is, however, different. In landscapes it is generally necessary to deal with larger surfaces; the delicate niggled work of the pencil must be exchanged for something broader.

The most useful retouching when broad patches are required to be

lightened or darkened, such as an under-exposed foreground against an over-exposed distance, is done on the back or the glass side of the plate with the stump, or with colored varnishes, or with color applied with the brush.

There are great advantages in working on the back of the plate. There is no risk of spoiling the negative, as any work put on it, if not satisfactory, can be wholly removed, or can be worked upon or corrected by scraping with a knife, and besides the retouching being separated from the printing surface by the thickness of the plate, prints softer and permits of rather coarser working. Suppose we have a tree-trunk in a foreground which is rather under-exposed and which before the distance and denser parts of the negative are printed has darkened into a black stripe without shape or rotundity, it is an extremely easy matter to work upon it from the back of the negative and make it print as light as desired to bring it into proper tone with the rest of the picture. This can be done by coating the back of the negative with matt varnish or covering it with paper mineral (a transparent paper sold for the purpose), and stumping a tint over it with lead. If, however, it is necessary to make a very decided alteration, sufficient density cannot be got with the lead, but with tinted varnish a black object can be modified to numberless tints—to white if necessary.

The varnish may be made up with collodion and thinned with ether, and tinted to the required density with a few drops to the ounce of a strong solution of aurine.

Pour it over the back of the plate so as to cover the part to be modified, and as soon as it is dry scrape it away where it is not required. The same

plan may be adopted to help parts of the negative too dense to print.

Take, for instance, the gleam of sun on water. Very frequently the negative will print with a hard, white, chalky light, omitting altogether the delicate tones that approach the high light. Although they are apparent in the negative, the picture would be overprinted before they were printed out.

If, however, the negative is varnished all over the back with a suitably tinted varnish, and the varnish over the light removed by scraping with a knife, the difficulty would be overcome. This method of treating a negative is extremely simple, and I think can be used with great advantage and effect by every landscape photographer. I do not mean in order to make poor negatives presentable, but there is hardly a negative produced that could not be made more truthful and more beautiful by judicious and intelligent retouching. It puts in our hands a power akin, although remotely, to the painters, who can arrange the tones of his picture according to his feeling and judgment.

In conclusion, I have to thank you for the attention you have given me. I have tried to present the subject in such manner that those of you who have been deterred from practicing retouching, either through doubt of the advantages of the work or of its supposed difficulty, may be induced to make an attempt to master it, and may have the information necessary for a proper start to be made. If I have omitted any detail of the subject necessary to know, or any further information is desired on the points I have mentioned, I should be very pleased to supply it in answer to your questions.

“Continual failure is the road to success—if you have the strength to go on.”—*Dr. P. H. Emerson.*

**PHOTOGRAPHIC ASSOCIATION OF
CANADA.**

The Executive Committee met at Hamilton on Feb. 20th and adopted the following prize list for competition at the next annual convention to be held in Toronto, Oct. 31st, Nov. 1st and 2nd, 1894.

For the best twenty photographs, of which five must be 8x10 or larger, made on any plate and printed on any paper at the discretion of the exhibitor.

1st Prize, \$50.00	2nd Prize, \$40.00
3rd Prize, \$30.00	4th Prize, \$20.00
5th Prize, \$15.00	6th Prize, \$10.00

and \$5.00 to each exhibitor who does not win a prize but whose display is awarded twenty-four points or over. The method of judging to be the same as that adopted last year, viz., ten points each for posing, lighting, chemical effect, printing, retouching, and neatness of exhibit, sixty points in all.

All pictures to be from negatives made since Nov. 1, 1893, to be unframed, and without the exhibitors name; a word or motto to be attached instead, a duplicate of which, together with the exhibitor's name, to be placed in a sealed envelope to be given to the secretary at the time of making application for space, and shall not be opened until the judges' awards are announced.

The following prizes are offered for employees.

Printing—For the best ten prints, any size and any paper:

1st Prize, \$6.00	2nd Prize, \$4.00.
3rd Prize, \$2.50.	

Retouching—For the best retouched negatives, six in number:

1st Prize, \$6.00	2nd Prize, \$4.00
3rd Prize, \$2.50.	

Through the kindness of Messrs. Mulholland & Sharpe, D. H. Hogg, The Stanley Dry Plate Co., The Anderson, Robinson Dry Plate Co., and the Cramer Dry Plate Co., who each

donated \$50 to the Association funds, the above prizes are offered, leaving the annual fees and dues to be expended on attractions for the Convention of which notice will be given later on, but an effort is being made to secure the best of talent to instruct and entertain, and we would recommend every photographer in Canada who can to be present at the next convention of the P. A. of C.

A. M. CUNNINGHAM, E. POOLE,
President. *Sec.-Treas.*

P. A. OF C. NOTES.

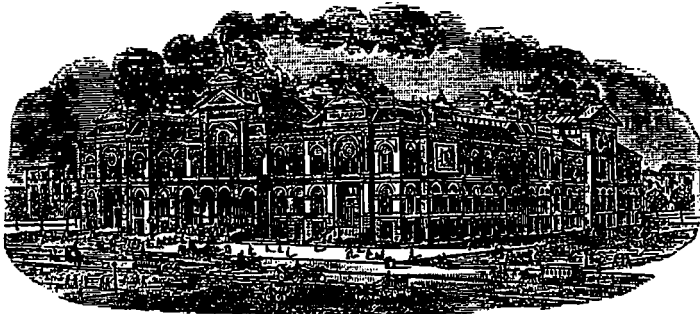
C. S. Cochran of Hamilton was awarded a medal and diploma for his splendid exhibit at the World's Fair.

The funds of the Association have never been in better shape than at present and the outlook for the future looks very promising.

The Constitution and By-laws of the Association have been neatly printed and are being mailed to the members; should you fail to get a copy drop a postal to Sec. Poole.

Mr. Frank Cooper, of London, was the only member of the Executive Committee who was absent at the meeting in Hamilton, he having sustained a severe fall on the ice the day previous, and was considerably bruised and shaken up in consequence.

Sec. Poole on his way home from the Executive committee meeting had a nice walk in the moonlight that he had not counted upon. He boarded the Erie "flyer" leaving Hamilton at 2.30 a.m., only to find it did not stop at St. Catharines, he managed to get off at Beamsville and made the remaining 14 miles on foot reaching St. Kitts at 6 a.m., time 3 hrs. 10 min.



BUILDING IN WHICH THE MEETING OF THE P. A. OF A. WAS HELD.

PHOTOGRAPHERS' ASSOCIATION OF AMERICA.

The annual meeting of the Executive Council, P. A. of A. was held at St. Louis on January 30, Adam Heimberger, president, presiding. The report of the treasurer showed a balance of \$885.60 to the credit of the association.

The following classes and awards for 1894 were adapted :

LIST OF AWARDS FOR 1894.

SPECIAL PRIZE.—*Handsome Silver Cup.*

For the best illustration of David Copperfield, Old Curiosity Shop, Oliver Twist, or any other of Dickens' works :

One picture to be made, 13 inches or larger. Picture to be framed at the discretion of the exhibitor, with or without glass.

GENRE PRIZE.—*Handsome Silver Cup.*

For three pictures made on any mat-surface paper. Subject to be selected by the exhibitor; title to be appropriately inscribed on each picture.

Contact prints, 13 inches or larger.

Pictures to be framed at the discretion of exhibitor, with or without glass.

GRAND PRIZE.—*Diamond Badge.*

(Portrait photography exclusively).

Thirty-six pictures, exhibit to consist of twelve cabinets, twelve Paris panels and twelve pictures 13 inches or larger.

CLASS A.

Six pictures, 16 inches or larger—1 gold medal, 1 silver medal, 3 bronze medals, 1 diploma.

CLASS B.

Twelve pictures, Paris panels to 16 inches—1 gold medal, 1 silver medal, 2 bronze medals, 1 diploma.

CLASS C.

Twenty-four pictures, cabinets to Paris panels—1 gold medal, 1 silver medal, 1 bronze medal, 1 diploma.

CLASS D.

Rating Competition.—Competitors in any other class cannot compete in this.

Twelve cabinets only—1 silver medal, 1 bronze medal and diplomas to all over twenty-one per cent.

CLASS E.

Landscape Photography.—Twelve pictures, 7 inches or larger—1 silver medal, 1 bronze medal, 1 diploma.

CLASS F.

Landscape Photography with Figures Introduced.—Twelve pictures, 7 inches or larger—1 silver medal, 1 bronze medal, 1 diploma.

CLASS G.

Interiors.—Twelve pictures, 9 inches or larger—1 silver medal, 1 bronze medal, 1 diploma.

CLASS H.

Marine Views.—Twelve pictures, 9 inches or larger—1 silver medal, 1 bronze medal, 1 diploma.

CLASS I.

Architectural Views.—Twelve pictures, 9 inches or larger—1 silver medal, 1 bronze medal, 1 diploma.

This class is to consist of views, where the building or detail is the main purpose of the picture.

CLASS J.

Plain Enlargements Made on Any Brand of Paper.—Six pictures, 21 inches or larger—1 diploma. Open to all competition.

CLASS K.

Colored Pastel Enlargement.—One picture, 24 inches or larger—1 gold medal, 1 diploma. Original to accompany portrait.

CLASS L.

Black or Sepia Enlargement (Finished).—One picture, 24 inches or larger—1 silver medal, 1 diploma. Original to accompany portrait.

CLASS M.

Foreign Exhibit.—Best collection of photographs, framed or unframed, to be delivered to the association free from all charges—1 gold medal, 1 silver medal, 1 diploma.

CLASS N.

Best Improvement in Photographic Appliances introduced since the last Convention—1 diploma.

CLASS O.

Most tastefully arranged exhibit—1 diploma.

The following resolution was adopted and will be strictly enforced at the St. Louis convention :

All manufacturers who offer special prizes for exhibits on or with their product, must deposit such prizes, money or otherwise, with the treasurer of the association, previous to the opening of the convention, to be awarded by the treasurer according to the decision of the judges, and that all said competitors must be members of the association.

By unanimous consent the executive officers decided not to compete for any association prizes.

It was deemed advisable by the executive committee to strike out the employees classes, as past experiences have proven a lack of encouragement in that direction.

Convention will be held at St. Louis Exposition hall July 24 to 27, inclusive.

RULES AND REGULATIONS.

Exhibitors in Grand Prize cannot exhibit in Classes A, B and C.

All photographs for Association prizes must be made from negatives taken since last convention.

Competitors in all classes, except Class M, must be members residing in the United States or Canada.

All exhibits must be shipped to reach the Exposition building by July 23, and all charges paid.

Application for space must be made to J. Ed. Rosch, No. 1203 Olive Street, St. Louis, Missouri.

Entries to close positively on Saturday, July 21. No space will be allotted for exhibits after that date.

THE IOWA CONVENTION.

The Photographic convention of Iowa met in Des Moines, Iowa, Jan. 31st and Feb. 1st, with a large attendance. A number of instructive "Talks" were given by manufactures and a valuable paper read by Mr. W. O. Reed on "The Art Technique and Business of

Photography." Gold, silver and bronze medals and diplomas were given and the exhibit is said to have been the best in the history of the association. Fine displays were made by the American "Aristo" Co., the Eastman Kodak Co., the G. Cramer Dry Plate Works, Bradfisch and Pierce Aristo paper and others. Officers for the coming year were elected. February next at Des Moines selected as the time and place of holding next convention.

ENAMELLED TABLETS FOR CERAMIC PHOTOGRAPHS.

Continued from page 64.

The copper foil has next to be annealed; it has to be raised to a red heat, and then to be cooled suddenly, not slowly. Pure copper is almost as soft as lead, and can easily be bent, twisted, or cut into any shape. After annealing it has to be cleaned by being rubbed over with a one per cent. solution of nitric acid by means of a nail-brush, and then rubbed down with powdered flagstone; after this it has to be thoroughly washed, so that it presents a surface of pure metallic copper. Next it has to be brought into shape, and this is done by the aid of a circular or oval plate of zinc or brass with a bevelled edge, cut by a turner, as in fig. 1.

Fig. 1.

The next step is to cut out an oval piece of copper a little larger than the zinc plate; this is done by placing the plate on the copper foil and making a mark round it on the copper by means of a slightly-rounded steel point; the diameter of the pointed steel wire should be about 1-16 in., which would mark an oval on the copper 1-32 in.

larger than the zinc plate. This may

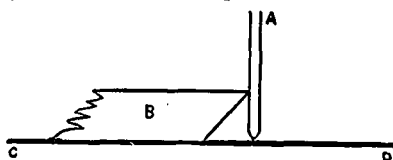


Fig. 2.

be more clearly explained by means of the magnified representation in fig. 2, in which A is a portion of the pointed steel wire, B a portion of the zinc shape, and CD a portion of the copper foil on which the oval is being marked. Many such ovals may be traced on the copper at one sitting, and then cut out with scissors. The blades of the little scissors used by Mr. Haddon were but of about one inch in length. In cutting an oval, it is safer to cut a little outside the marked line than to cut inside thereof.

The copper oval being cut, the next thing to do is to turn up its edge until it forms a very shallow tray. The zinc or brass shape is then placed on the copper oval, so that the copper extends equally all round the shape, the two are held firmly together by means of a screw hand vice, then with a burnisher the edge of the copper is pressed over the edge of the shape, as shown in magnified form in fig. 3, in which the shaded portions represent the jaws of the vice holding the two plates together. A B is the copper plate, turned down at B by the burnisher, but not at A, the handle of the vice being over A, so that the operator



Fig. 3.

cannot get at the oval there. After the copper has been turned down on one side of the oval, the two plates are turned round and again gripped by the

vice, so that the copper can be turned down on the opposite side of the oval. Unless the copper has been thoroughly well annealed, this burnishing down of the edge is rather difficult to do. Should there be a large excess of copper it can be cut down with a pair of scissors and filed. Without the little edge thus made, the enamel would run off, or deformation of the copper support might take place. The little edge should then be filed with an exceedingly finely cut flat file; until the border is of uniform height. He usually filed it upon a piece of boxwood, and at a bench near which there was no enamel, for if any of the fine metallic dust found its way into the enamel, spots would be the result in the form of green specks.

The metal has next to be embossed upon a cavity turned in a piece of hard wood; this cavity may be circular or oval, according to the shape required, and it must be larger than the copper tray which has to be bent to form therein. Fig. 4 represents the wooden block, with the copper tray turned face

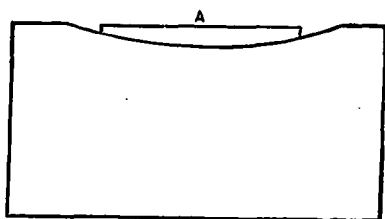


Fig. 4.

downwards over the turned cavity in the block. By pressure with a steel spatula at and about A, the copper tray is bent in until it fits the hollow in the wood, the result of which is a plaque of the section approximately shown in fig. 5, and almost ready for coating

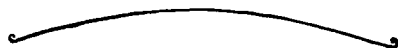


Fig. 5.

with enamel. In this operation the

plaque gets more or less bent, so that when laid with its edge upon a flat table it will touch the table, but at three points instead of all round the edge; while, however, upon the flat surface, it can easily be bent right by the aid of a spatula.

The plaque has next to be "pickled" to remove oxide. This is done in a 20 per cent. mixture of sulphuric acid, with water; this clearing had better continue for three hours, and until shortly before the copper is covered with enamel. If the plaque is wanted at once it should not be pickled cold, but the diluted acid in which it is placed should be raised to the boiling point for one minute, after which it is washed in cold water, then wiped dry with a clean rag. If not to be used at once, it should be placed in perfectly dry sawdust; there is then nothing to do but to brush off the dust before use.

The excess of water is now poured off the enamel in the two vessels; the little copper tray is placed with its concave surface upwards on some concave support, and then the application of the enamel begins. The enamel is in two grades, coarse and fine, and ought to be applied with a hog's-hair brush; as he had neither the brush nor a hog, he deprived a house broom of one of its tufts of hair and tied it round with cotton; this had served him ever since. The enamel must be so far deprived of water as to be creamy; if it is too thick it cannot be spread properly. A little enamel may be put on the copper surface and then rubbed over it with the finger, then with the brush the proper quantity can be spread over pretty uniformly; this is assisted by putting the copper tray on a wooden support, and gently tapping the latter upon the table. The washed fine enamel powder has to be put on the

concave surface of the copper, not the coarse enamel.

The water in the enamel has next to be got rid of. At first he used nothing but blotting-paper for the purpose, but he preferred a few folds of old linen upon a tray; with the copper oval and its wet enamel placed between the folds, at once a large portion of moisture is absorbed, and in time the bulk of the free water is taken up. When nearly dry, and not too dry or too wet, the enamel must be more finely spread by means of a highly-burnished spatula; unless the enamel be in the proper hygroscopic state, it is not possible thus to spread it uniformly.

The backs having been thus coated, it is now necessary to coat the fronts. A small quantity of the washed coarse enamel is spread over the surface, and then brought down to the rounded turned-up edge of the copper. It is difficult to spread it when charged with too much water, for it then drags under the spatula, and uniformity of surface cannot be obtained, but by tapping it and its supporting wooden block upon the table, the surface of the enamel becomes smooth. The moisture is removed by linen as before, and it is left under linen until it is dry enough to be spread by a spatula. The steel spatula used might have been

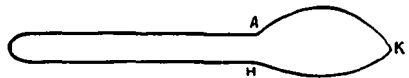


Fig. 6.

about six or seven inches in length; its shape is represented in fig. 6; the curve of its edge A K had a radius of four inches, and the curve of the edge H K had a radius of five inches.

Next the whole of the moisture has to be driven off. Where many plaques have to be dried at one time it may be well to provide near the muffle a large

cupboard, in which cupboard they can be dried in warm air. He had found it sufficient to place them on a sheet of copper with the small flame of a Bunsen's burner underneath; after being so treated for ten minutes they are dry enough for firing. When all the moisture has been driven off, the particles of powder on the upper and lower surface of the copper are simply wedged together, and the slightest touch is liable to make the powder get loose, so the plaques at this stage must be moved only with the greatest care. They have to be placed upon a suitable support for firing; they are sometimes made to rest upon three pieces of hard earthenware, which will stand the heat. As the enamel might stick to the earthenware, the latter is usually covered with rouge or kaolin. As he did not know where to get refractory earthenware in thin sheets, he had tried iron, nickel, and platinum sheets to support the plaques during the firing. Altogether, he thought that he preferred iron. Platinum has the advantage over iron that it does not oxidise. When iron is heated in the muffle, small particles of oxide of iron are thrown off which might fall on the plaque were it there; he therefore put the iron first in the muffle to get the particles of oxide thrown off, then, before it was cold and at the risk of burning his fingers, put on the plaque. After the burning, and when the plaque is separated from the iron, a little oxide comes off with it, therefore it does not adhere to the iron. Nickel in its ordinary state is not the best support, because it does not oxidise to the same extent as iron, therefore is more likely to stick to the plaque. If nickel were to be treated with kaolin, he thought that it would answer for the purpose as well as does refractory earthenware.

Muffles are of two classes, closed and open; both can be heated with coke; retort carbon is preferable to coke, but it is difficult to kindle. He had had no experience with the open muffle, and with it there is the risk of black specks falling on the plaque. The closed muffle can be heated with gas in a gas furnace. When the plaque is inserted, the whole is raised to a cherry red heat. Oxide of copper is then thrown off from the exposed edge of the plaque, and precautions have to be taken to prevent this falling on the face of the enamel; the inside of the muffle is therefore, before the firing, smeared with ordinary red lead and water; under the heat it forms a kind of glaze to which whatever flies to it sticks. He preferred to dispense with the three pieces of refractory earthenware, because, if the lower edge of the copper does not come into contact with a flat surface, the heat usually makes it do so, and should it not do so, while it is still red hot, a spatula can easily be used so as to bring it into the shape required. The plaque must not be put suddenly into the muffle, so that the heat may suddenly transform into steam any traces of moisture present, thereby causing the displacement of particle of enamel, for not alone would one plaque be thus destroyed, but some of the others in the muffle on which the freed particles descended. The plaque having been introduced gently into the muffle gradually acquires a surface like a ploughed field; this is due to incipient fusion; next there is a gradual coalescence until the surface is smooth. Should the temperature not be sufficiently high the surface will become mottled. If the heat be allowed to act much longer than is absolutely necessary, green colouration begins, due to silicate of

copper extending over the enamel. In the muffle the plaque may be turned round upon its support by means of a long piece of thin steel wire, in order to get its different portions in turn over the hottest part; the wire should be long, and it should have a wooden handle for the sake of comfort, the heat being great. In some cases undulations which can be removed will be found on the finished plaque; in such cases it is necessary to take some powdered flagstone wherewith to grind down the surface by the aid of a piece of wood; the powder should be mixed with water, the plaque should rest upon several thicknesses of calico, and the grinding should be continued until the whole surface is mat. Specks should then be removed and the plaque re-fired. Lead does not answer for this grinding so well as wood. By rubbing the surface with a piece of pumice-stone, the flagstone powder is removed.

After the firing any specks on the enamel have to be removed. This is done by means of a length of square steel, measuring one-tenth of an inch on each side, filed down at the end to a pyramid. The specks must not be removed by digging into the enamel; the tool is held nearly parallel to the surface of the plaque, and the surface of the enamel at the place of the defect is scraped horizontally. Plaque makers thus remove the enamel right down to the copper, without removing any of the copper itself; the holes thus made are filled up with fresh enamel, by means of a spatula made of copper wire, and the plaque is re-fired.

SOMEHOW or other even a sensible man never wholly gets over his surprise that other people are not as much interested as he is in the first photogram of his first baby.

THREE PHASES OF PHOTOGRAPHY.

(Paper read by W. O. Reed, before the Iowa Convention.—*Photo Review*).

We have just been discussing photography as a two-sided affair, and whether it is "good work" or "business ability" that avails the most to the photographer. There is, in my opinion, more than two sides to photography; it is in a harmonious trinity of good qualities that success lies. And now I will give you what my opportunities have permitted me to write upon the subject of the three phases of photography. To succeed in photography, experience demonstrates, that, figuratively speaking, we must stand upon a tripod, and that each of the three legs should be a good strong one, if we should avoid taking a tumble. I would name the three supports to successful photography as Art, Technique and Business.

We should have the perception and imagination of an artist when working with our subjects or models under the sky-light.

We should be excellent and accurate workmen in all of the manipulations necessary to the production of photographs.

We should be active, energetic and alert, as also, honest, prudent, polite and pleasant, in our business methods and manners.

THE ART.

In determining what the word Art means, as applied to the practice of photography, we soon find that the doctors do not agree; what is art to one, is extremely artless to another.

One cannot speak or write upon any subject dispassionately, but must, if he says anything at all, give his own personal ideas, else if he did not, he would say nothing new. Consequently we must accept all statements with

some allowance for personal bias; so what little I say that is really new, and perhaps little of it is, just believe as much of, as you have a mind to.

We now have means in our power to go forward toward the making of pictures that shall be more than mere maps of people. While working to obtain graceful positions, or to catch the pleasant expression, we are not limited to the time that plates will remain sensitive, as in days of yore. We can group our figures more freely and in larger fields, thanks to the perfection of modern lenses. We can picture attitudes of action and impulse, that it was impossible to do, even but a few years ago, for the reason that we are using, with results that leave nothing to be desired in harmonious printing qualities, plates that are as much quicker than those of six or eight years ago, as those were quicker than wet plates.

With uniformity in plates and paper and no worrying with baths, it is now high time that we give some consideration to what constitutes artistic photography.

Art in photography should lead us to produce pictures true in line and feature, showing persons in graceful, yet life-like and characteristic attitudes, and objects in harmonious and beautiful arrangement.

And when we have obtained such a happy composition of lines, forms, figures and objects, the same art should teach us to seek for, see and then reproduce, light effects that shall give to each component part the proper relief, vigor or prominence, combined with soft graduation and delicacy of detail throughout the whole.

In arranging and building up our composition, whether it be heads, figures, groups or landscapes, we must

take into consideration what we would make prominent, and then compose accessory figures and objects, so that by their form and color value, they may harmonize or contrast with, lead up to and set out, that to which we would give an artistic accent.

"And how shall we reach excellency in all of this?" you ask. Well, there is no royal road to learning in art, even in the art expressed by photography, and the eye must be educated and our inspiration obtained from and in that great school—experience—and our mistakes shall be our greatest teachers. Study all art and every ones' pictures, but study most your own; study *them* wherever you see them; as negatives and as prints in the printing frames, in the toning and washing, when you are mounting, and then after burnishing, that you may analyze and remember what the faults are and thus hereafter avoid such errors.

A study of the art of the stage and of actors, a general study of human nature and the language of attitude—pantomime—and a special study of the disposition and characteristics of our subjects is necessary to the end that we may picture by the outward form the life within that animates it.

Let us add every day to our liberal education; let us strive to know the people as they appear everywhere, at home and abroad, at work and at play, that we may be better fitted to hold up the mirror to reflect them, not only as they do appear, but as they should appear.

TECHNIQUE.

It is technical excellence that expresses our artistic conceptions, and to the extent of our failures in the mechanical production of photographs are we artistically dumb. If we fail to

express delicately and accurately, our artistic ideals, then they were but idle, worthless dreams.

We are all working with very nearly the same materials and bringing into use the same natural faces to act upon these materials, yet there is a marked difference in the results obtained by different ones of us. Little things,—trifles too small to notice, we would think,—are dealt with and disposed of by us, each in his own peculiar manner, and the united effect of these several trifles, make up the character of our work. Therefore, men that succeed in photography, give close attention to the little things.

Good negatives are the basis of good work in photography.

To make good negatives one must begin by studying the possibilities and limitations of lenses and cameras generally and of his own in particular.

Use portrait lenses for busts and single figures, and rectilinear lenses for groups and views. By elevating or lowering, and with the use of the swing-back, adjust the camera to a secure plane of focus conforming to the composition in the field of the lens and at the same time preserving perpendicular lines, something that in grouping is accomplished best when the camera is considerably elevated, while on the contrary with single figures the camera should be only a little higher than half of the height of the subject.

Development of negatives is best accomplished yet, I believe, by use of pyrogallic acid. By making a solution of sulphite and sal sodas, and then adding as one uses it, from two to four grains of dry pyro per fluid ounce, one has a developer that he can gauge and control to produce any result he desires.

No objection can be made to the extremely rapid plates that are now being produced, I obtain fully better results on the very quickest plates than on the slower ones. Orthochromatic, or Isochromatic plates are now brought to such a degree of perfection, by several makers, that they must soon force their way into every-day use in all of the galleries managed by men who care to excel. If you do not believe this, just try making a negative on one of these plates after the light begins to weaken in the afternoon, and you will be convinced, especially if you will compare it with what you can get on an ordinary plate under the same conditions. Isochromatic plates, when handled in a safe light, are developed just the same as any other plates. We use a lantern with a combination of orange and ruby glasses, and in that light, handle these plates with no more caution than when using ordinary plates, and yet have no trouble in obtaining clear negatives.

During the past year, aristotype or emulsion printing out papers, have fully demonstrated that they have come to stay, or are, at least in their present perfected state, a step forward in the progress of photography, and in advance of albumen paper and silver baths. Those who say, "Oh well, just wait! you will see everyone coming back to the good old albumen paper," are the same fellows, who several years ago, were telling us, "dry plates are a new fangled thing that will soon play out," which leads us to believe that they are decidedly back numbers, that they have a rank growth of moss upon their backs, and that, in the language of Mr. Strauss, they are eminently fitted to saw wood. Much improvement has been made in the last year by the makers of both collodion and

gelatine papers. Lately collodion papers have been put upon the market, that do not curl at all, and that are as tough and pliable as albumen or gelatine papers, and one, especially, works with a very simple combined bath, producing results, that for beauty and permanence, can not be excelled. We have always had the best success, in our work, with the collodion papers, and believe that albumen and gelatine, being organic substances, affected by atmosphere and moisture, and having a chemical affinity for silver, cannot be used for silver printing with that degree of permanency that collodion can, and prints, put side by side in our street show-case, have demonstrated this to our satisfaction. The working of collodion paper is much simpler and easier than the working of gelatine paper, for, with the former there is no complex lot of hardening chemicals, likely to disorganize the toning bath, as there is required with the latter. The splendid evenness of tone from high lights to deep shadows, can no longer be claimed as the good quality of albumen paper, exclusively, for the emulsion papers now leave nothing to be desired in that line.

PRESENT AND FUTURE POSSIBILITIES OF PHOTOGRAPHY.

BY LEON VIDAL.

Read at the Congress of Photographers, Paris, France.

To render an account of the present state of photography presents no difficulties whatever, the facts to its credit being recorded everywhere, so that we need only draw from present sources, the very ancient facts being, so to speak, contemporaneous, in order to trace a complete history of photography up to the present hour, passing in review all its methods, all its countless applications.

And while we are desirous of justifying the very title of this paper, the circumstances allow to foot on the past admitting it to be well known to all of us, in order to arrive at the conclusion as to the future possibilities which we are able to foresee, combining the progress of photography itself with the science of to-day.

We are witnesses of a scientific progress so continuous and wonderful, that it would be rash indeed, even if aided by the most exalted imagination, to indicate the more and more extraordinary facts, reserved to us even by the nearest future. New discoveries in the domain of general science will, without fail, result in unexpected photographic inventions, or in applications of photography to uses of which at the present time not the slightest idea can be formed. This is why we cannot approach the difficult subject which has been referred to us, without a strong sentiment of our complete inability; in other words, this is a new world, inaccessible, which we set out to explore; we would have to give proof of the fervor of our imagination, of a kind of foresight, more than of true science. We would be well inspired, if we could embark on a journey to the beautiful land of dreams to talk to the fairest fairies, and would return to describe our visions and to explain the most fantastic and most wonderful facts, while now we are obliged to appeal to reason—to the reason of to-day—it may be well understood, for our reason changes its basis at every moment according to the conclusions it has to draw from evidence and facts, which yesterday it denied and thought wholly impossible.

But enough of philosophical contemplations, to which, however, we were prompted by a prudence which every one will appreciate.

Being thus under the protection of the unforeseen we may now venture suppositions as fantastic as possible and become prophets without much merit of our own, since the past serves as guide in discovering future possibilities, which, hypothetical as they are, may be admissible because it has been shown that we need not doubt anything in the course of scientific facts.

The past belongs nearly exclusively to Monochromy, designating thus any method which by the aid of light produces an image of only one color, whatever color this may be, and even images with more than one color, obtained by the aid of Monochromy, each having its own color.

The progress in this line has been very remarkable especially since the production of single images took the place of a multiplicity of copies.

First, the paper prints obtained by a chemical process from one and the same plate; then the commercial prints, obtained in a mechanical way with plates prepared by the aid of light, have made photography one of the most ingenious and faithful auxiliaries of the art of illustrating all kinds of publications; in one word, the automatical means of copying the most wonderful and most instructive objects which have ever been imagined. On the other hand, the considerable increase of sensitiveness of the products exposed in the camera to the action of light, together with the invention of the dry film and the consequent portability and easy management, have caused an immense expansion of this art, which now, in every respect, is in the reach of all.

Science has, not less than arts, profited by the progress of photography, which made it an indispensable aid for its most delicate researches. To prove this we only need observe the excellent

and unsurpassed services rendered by it to astronomy, to physics, to the study of the infinitely small, to the rapid and complete registration of all phenomena of light and motion, even of the wonderful rapidity of the minutest organisms. Indeed, there is at the same time an eye and a draftsman. Like the eye it is gifted with the highest rapidity of vision, so much so, that it sees objects as though they were stationary, though they are alive with miraculous swiftness. Ah! it even sees what is invisible to the human eye! The stars bear witness—which, though unknown till now, have been discovered by the photographic eye, into the depths of space inaccessible to our most powerful telescopes. The reproduction of the ultra-violet rays bears witness—which, for our power of vision, belongs to the invisible.

As a draftsman it is unrivalled; for nothing equals the definition of the lines it traces, the accuracy of the endless details it reproduces, the truth of which is such that it has the force of an evidence of a witness. We may add that it is also an artist. Indeed, thanks to entirely successful researches we are able to obtain impressions on the sensitive medium by the aid of light of all colors, in proportion to the degree of luminosity of the different colors.

This progress was achieved but slowly, and now that it has become an accomplished fact and practically within the reach of all, it gains ground slowly, but this can be only a question of time. Since we are able to sensitize our products so as to render them susceptible to impressions of all colors—giving them a perfect orthochromatism—it must also be possible to render them more sensitive to one color than to another.

This possibility of selection must lead to the production of monochromes cor-

responding to every one of the principal colors and consequently to the representation of the color effect of an object of nature, by superposition of the different monochromes, each having its own color.

Therefore, photography, being the most skillful draftsman and lithographer and the most admirable engraver, is also a wonderful expert of colors. But it is even more than this, it is already the artist of entire pieces of art producing by one single action the colors of objects much as it impresses the sensitive monochromatic plate.

And, what a really wonderful idea—we begin to trace on the sensitive film the true image thrown into the camera, with its reality of detail and of colors. And this is our present position.

The development during more than fifty years has been nearly completed, because we have succeeded in passing through all possible phases of the art of designing and of its applications, attaining even to the art of painting.

We say "attain," by which is not meant that we have advanced in the subject of color-photography to a point which we did not gain in monochromatic reproductions.

The most characteristic name which might be given to the present epoch is that of a new era. We are on the threshold of the art of Polychromy. Indeed, in scientific applications the first step counts most, as perhaps it does in every other field. We have only to direct our attention to what is going on in the electric world and then to proceed by analogy. There we have arrived at a point at which even the most fertile imagination could not pass beyond the scientific wonders of the future, even if its flight would lead us into the most fantastic dreams.

No doubt electricity, with its powers,

its invisibility, its enormous rapidity of propagation, will become an ally of photography to aid in the creation of unexpected wonders. Already they speak of plates exposed and developed by the aid of an electric current. Edison is at work to construct an instrument intermediate between the phonograph and his kinetograph, which will enable us simultaneously to see the motions of a person, to hear his voice, his words, put in immediate harmony with gesture, his attitude, the play of his lips and eyes, etc.

This has not only been taken into consideration but can be realized—probably it is realized—at this hour. But this is not all. By electricity similar effects may be and are (why not speak affirmatively since such is our opinion?) transmitted over a distance.

Thus, using the electric telegraph at the same time as telephone and as kinetograph, we will be able to communicate the complete effect of form, motion and sound to points far distant from the scene of action.

So far we have spoken of the form, which involves the idea of outline and details of objects. Will a transmiss of colors become possible? Will we be able to complete the characteristics of an object by communicating through the electric wires not only its outline but also its colors?

Why should we not admit this possibility, extraordinary as it may seem? How to get there? This is the point which no one as yet knows, but considering the present state of our scientific resources, based on the divisibility of matter, it does not seem impossible that we may arrive at results of this kind.

Passing in review the history of development of electricity, are we not convinced that about fifty years ago no one would have believed a prophet of

the future, fore-telling all the present wonders of the spark?

We do not burn the wizards any more, at least in civilized countries, but they are still treated as fools.

Well! We can no longer denounce folly in view of scientific predictions of of the most revolutionary character.

All we are allowed to say is this:

"Who can tell? This may be very possible." Thus we do not risk to engage in a dispute which sooner or later will be decided against us by the facts.

Speaking of the progress of photography which may be realized, we think at once of a higher sensitiveness, which would allow of instantaneous impressions even with the feeble light of interiors.

The sensitive product, or at least its vehicle, shall have the fineness of the collodion of albumen film.

The apparatus, perfect as it is, still shows an incessant tendency to improvement.

From the standpoint of expanding the field of photography until it reaches every home, the ideal will always be an apparatus essentially portable, of small weight and volume, permitting us to photograph without being observed, and containing a number of plates or flexible films, sufficient for a large number of successive exposures.

The favor of the future is evidently the flexible film or the very small plate, so that after a sufficient perfection of the rolling apparatus an endless ribbon may be advantageously substituted for a certain number of single plates.

The rolling device lends itself better to a rapid succession of new sensitive surfaces, but its operation must be made more reliable and easier.

This evidently is a field for the future.

The future will find enough work in the development of photography, and

persons who believe that very little is left to extend its field are badly mistaken.

Well, what is it, they ask? There is the question of colors and saving some perfection in details, that is all, isn't it?

First, in regard to colors, it is by no means a small step forward to bring this branch of reproduction to that degree of perfection which we have obtained in monochromes.

If such a great step has been taken, inducing us to believe in a possibility of reproducing colors, and proving that the means of direct reproduction of colors exist, it is not less true that all is done with a view of applying it to industrial uses, either to obtain simply and easily direct prototypes from nature, or to multiply polychromes with the aid of these prototypes.

The very day this possibility is recognized and justified by facts, nobody will do anything but take polychromes.

But the perfect realization of this hope will not come without extensive further researches.

DEATH OF HARRY ENGLISH.

Harry W. English, a prominent amateur photographer, died March 19th, at his residence, 112 Maitland Street, of pneumonia. He was only 38 years of age, and leaves a widow and three children. He was well known in bicycle and musical circles.

He was a member of the Toronto Camera Club, Toronto Bicycle Club, Royal Arcanum, A. O. U. W., secretary of the Haslam Vocal Society, and later of the Orpheus Society and for eight years choir leader of the Y. M. C. A.

Mr. English was a valued contributor to this journal under the *nom-de-plume* of "Uncle Jason."

PHOTOGRAPHING CRIMINALS IN FRANCE.

The system of photography in use is peculiar to the service, and is the result of its experiments. It is free from all conventional operations, for the photograph is made simply to be recognized. The poses chosen are : A perfect profile, since that gives a sort of anatomical cut of the face ; then a full face view, since there one has the habitual expression and the pose of the head. The picture is never retouched, since scars, moles and spots are such infallible means of identification. Absolute uniformity is sought in the size, form, and style of the different photographs. In order that the distance may be invariable, the chair and camera are screwed to the floor, and there is a perfect system of adjustment. The light is thrown on the face. The result is hard on the subject. One does not care to display his judicial photograph, but for the purpose they are admirably, brutally exact.

SPECIAL OFFER.

Crepe Tissue for Lamp Shades, Decorations, etc. 21 in. wide, 11 ft. long, (all colors).

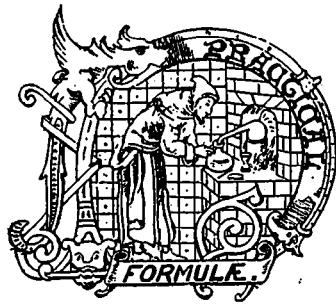
Sent by mail on receipt of 35 cents, or 27 cents by Express.

Picture mats, all kinds, mat boards, etc., at wholesale prices to photographers and dealers. R. A. Becker, 620 Fulton St., Brooklyn, N.Y.

KILL TWO BIRDS WITH ONE STONE.

When ordering goods noticed in our columns, will you oblige us by *mentioning* that you saw the advertise mentin THE CANADIAN PHOTOGRAPHIC JOURNAL ?

This will gratify the advertiser and at the same time, confer a favor upon us.



For
Practical
Men

TO PRESERVE VALUABLE PICTURES.

According to an English paper the preservation of pictures is now a regular scientific proceeding, dependent upon placing their surfaces in a vacuum in order to protect them from atmospheric influence.

In carrying out this plan the picture is enclosed in a metal frame or vase, covering the back and sides, and projecting from the sides like an ordinary frame. In the edges of this case a plate of glass is inserted, just as in an ordinary frame, and hermetically sealed to the metal. The air is then withdrawn from between the surface of the picture and the glass, and thus the picture is in a vacuum.

It is asserted that the effect of this plan is to completely protect pictures from the action of dampness, air, gases, and other causes that operate to destroy paintings exposed or framed in the ordinary way.

TO DESTROY OLD PAINT.

Slake three parts (by weight) of quick lime in sufficient water, and add one part of American pearl ash. Stir well and add water until the mixture is reduced to the consistency of paint. Cover the old paint with this mixture, using an old brush for the purpose, and allow to remain about fourteen hours. The paint can then be easily scraped off with a putty knife or piece of glass.

ALUMINIUM FOR FLASH LIGHT.

Aluminum Powder.....	21.7	parts by weight
Sulphide of Antimony....	13.8	" "
Potassium Chlorate.....	64.5	" "

Observe same care in mixing as in the case of magnesium flashlight.

TO CLEAN THE HANDS

To remove chemical stains from the hands, mix 4 oz. glauber salts, 4 oz. chloride of lime, and 4 oz. of water and store in a wide mouthed bottle. When required for use pour a little into a saucer and rub it well over the stains with pumice stone or an old nail brush.

Stains of nitrate of silver are best removed by means of a solution of chloride of iron.

PHOTOGRAPHIC GEMS.

AMATEUR MASTERPIECES OF CAMERA WORK ON EXHIBITION.

This afternoon and evening and to-morrow an exhibition of photographs taken by amateurs will be on view in the rooms of the Hamilton Association, and a view of them will be a revelation to many of the possibilities of camera results. The pictures, about 150 in number, constitute the choicest specimens of the exhibition recently held under the auspices of THE CANADIAN PHOTOGRAPHIC JOURNAL in Toronto, being the prize exhibits in that competition.

Some of the photographic results achieved seem simply marvellous to those who have not been closely following the progress of the art recently. The pictures by such experts as W. B. Post, of New York, look like exquisitely soft and artistic specimens of steel engraving, while others resemble photography direct from nature. The artistic knowledge and taste evidenced in the

choice of subjects and point of view will also strike the visitor. Among the exhibitors are A. Strieglitz and W. B. Post, of New York; Clarence Moore, Philadelphia; Hon. A. M. Ross, Toronto; E. Mills, Ottawa; R. B. Brayley, Toronto; Wm. Brill, Quebec; Alfred Taylor, Chesterfield, N.Y.; H. English, Toronto; R. E. M. Baine, St. Louis; George Lee and Alf. Baker, of Hamilton, and Roswell Goldie, of Guelph.—*Hamilton Spectator*.

EXHIBIT OF PHOTOGRAPHS.

BEAUTIFUL PICTURES ON VIEW AT THE HAMILTON ASSOCIATION MUSEUM.

Lovers of fine art should not fail to attend the free exhibition of high-class photographic work which will be on view this afternoon from 3 to 5, this evening and to-morrow afternoon in the Museum of the Hamilton Association, Public Library Building. There are 175 gems from the collection of 900 pictures kindly loaned by Mr. Gilson, of THE CANADIAN PHOTOGRAPHIC JOURNAL, of Toronto. The prize-winning pictures represent the well-known names of Alf. Stieglitz, New York; Floyd Vail, Kingston, Ont.; Braybrook Bailey, Toronto; W. B. Post, New York; Clarence Moore, Philadelphia; Robert E. M. Bain, St. Louis; Harry English, Toronto.

Among the honor roll of names Geo. Lees and Alf. Baker, of Hamilton, secured places.

Special mention should be made of Mr. Stieglitz's platinotype-finished prize winners and the figure subjects of Floyd Vail. Mr. Braybrook Bailey, the winner of the gold medal in the recent Toronto Camera Club contest, excels in his selection of foliage effect and rural scenery. Artistic cloud effect and pretty landscape are well chosen

by Mr. W. B. Post, and effective work, well mounted and finished, should be credited to Clarence Moore, E. M. Bain and Harry English.

Miss Brown, of Wisconsin, is a true artist and has reason to feel proud of her set of views. A warm sepia tone brightens the exhibit of Mr. W. S. Wakeman, of Batavia.

Mr. Gilson is to be congratulated in presenting to the public as a free loan the most valuable collection of amateur photography ever shown in Canada, and our art connoisseurs should visit the Museum where the pictures are on view. The members of the Camera Club invite their friends.—*Hamilton Times.*

ON PICTURE-HANGING.

The one thing which is unforgivable in hanging pictures is to "string" them along the walls in a line. Their loneliness is pitiable. Next to that crime is the one of arranging exactly symmetrical groups, suggestive of nothing so much as a lesson in geometry. Group pictures, group them gracefully, [but don't, when one has succeeded in making a graceful bunch on one side of the fireplace, reproduce it exactly on the other side.

According to one who speaks with the emphasis of authority, delicately framed water-colors are the only proper things for the drawing-room, magnificent oils for the library and hall, and etchings and engravings for the dining-room. Meantime, those who do as they please will continue to hang their etchings, water-colors, and oils exactly where they will gain most pleasure from them, taking care only not to place side by side ridiculously inharmonious things.

The smaller the picture or the more

full of detail, the nearer the level of the eye it should be hung. Sometimes two parallel wires are brought straight up to separate hooks on the picture moulding, but generally the old-fashioned angle of wire is made. Gold and silver wires are generally used, but it is said that small steel and iron chains are to be used this winter for hanging dark-framed engravings and etchings. Some of the daintier pictures, instead of being hung from the moulding, have wires stretched tight across the back, and are caught invisibly on small screws.—*American Journal of Photography.*

WORLD'S FAIR SLIDES.

Mr. John Carbutt, jr., has decided to place his unexcelled lantern slides of the Worlds' Fair on the market. The series is probably the best in existence, Mr. Carbutt having had exceptional facilities for the selection of his subjects by being in charge of the Carbutt Keystone exhibit during the whole course of the Fair. 50 cents sent to Mr. Carbutt, Wayne Junction, Philadelphia, will procure a sample slide and complete of subjects.

BOOKS AND PICTURES RECEIVED.

Norman Caple & Co. of Vancouver, B.C., send us their catalogue of views of the North-west. It names a great variety of views of the country covered by the C.P.R. from the Atlantic to the Pacific.

A third edition of Dr. Just's book on "Bromide Paper" has just been issued. This is a very complete work on the various methods of contact printing and enlarging at present in vogue, and is a handy book of reference.

It is fully illustrated with diagrams

throughout the text, is well bound, and has a frontispice on Bromide paper.

Published by Percy Lund & Co., Bradford, Yorks, (Eng.) 156pp., post free, 35 cents.

For many years after Dr. Wilson's reprint of "Burnet's Art Essays" (which was published at \$4.00) it was almost impossible to secure a copy except at a very high price. Messrs. Percy Lund & Co., of Bradford, (Eng.) have now issued an unabridged reprint including all of the original illustrations. Of the educational value of this work it is impossible to speak too highly,—every art student should own a copy and study it diligently.

Well bound in cloth and fully illustrated,—post free from the publishers, 75 cents.

Scribner's Magazine for March opens with the second article by Joel Chandler Harris on "The Sea Island Hurricanes"—this one dealing especially with the great relief work which is being conducted by Miss Clara Barton and the Red Cross Society. The striking illustrations by Daniel Smith, made from sketches on the spot, add to this impression of reality.

Two articles of practical interest to dwellers in American cities are entitled "The High Building and its Art," by Barr Ferree (one of the editors of the *Engineering Magazine*), and "The Cable Street-Railway," by Philip G. Hubert, Jr.

A Travel article of particular interest at this season is a description of "Sub-tropical Florida," by Charles Richards Dodge. The illustrations by Chapman from a fine collection of photographs, are unusually attractive.

The special frontispice is Tito Lessi's "Milton Visiting Galileo," which is

accompanied by a brief notice of the work of Lessi, and a portrait of the artist.

In Fiction this number is notable, containing the first installment of a four-part story "A Pound of Cure," by William Henry Bishop (the author of "The House of a Merchant Prince.") This is a tale of Monte Carlo at the present day, in which a young American and his wife are the principal actors.

The first of Octave Thanet's Sketches of American Types is also published, under the title "The Farmer in the North,"—a very clever and faithful characterization of the types of farmer seen around the State Buildings at the World's Fair, with illustrations by Mr. A. B. Frost.

The third installment of "John March, Southerner" and a short satirical story, "The Summer Intimacy," by George A. Hibbard, in his most amusing vein are also given.

OUR NOTICE BOARD.

Think of getting a late sample copy of a magazine such as the *Cosmopolitan* for a three cent stamp. See our advertisement.

Among the new things being brought out by Messrs. Mulholland & Sharpe for the benefit of their customers is a very fine medium for retouching, under the name "Reloton." Try it.

We would call the attention of our readers to the valuable cup which the Cramer Dry Plate Works will give as a prize at the coming convention of the P. A. C. at St. Louis, Mo., a cut of which appears in their advertisement in this issue. Those interested should send for particulars.

Mr. Jeffrey, Toronto, western agent for D. H. Hogg, showed us recently a most excellent photogram of large size taken by Nottman & Sons, of Montreal, on a 50 times Stanley Plate. The quality of the work, considering that it was a *very* quick "snap shot" in the gallery, speaks volumes for this speedy plate.

The Canada Smelting and Refining Co., of London, Ont., are receiving a great deal of praise for the very prompt and satisfactory returns made by them on photographic wastes sent in for refining. The energy displayed by this firm in putting in such a complete and expensive plant merits the patronage of all.

The Mason and Risch Piano Co., who make their first appearance in our advertising pages for the coming year in this issue, are so well known as the leading piano makers of Canada as to hardly need a word of introduction from us. We simply say to those who intend buying, be sure to hear this piano speak for itself before deciding.

Our printer got rather "mixed" on the following, which appeared in our February issue, so we will let him try it again:—

A correspondent from the wilds of the Northwest asks us to settle for him the question as to whether he should buy a Ross or a Dallmeyer lens for use on 11 x 14 view box. Some one please bring on a few more of those easy questions. Would any one like to know which is best, a dollar or two fifty-cent pieces.

The publishers of *The Practical Photographer* inform us that their journal is now under new editorship,

and that the April issue will have a permanent increase in the number of pages, and also in the number of illustrations. The price will be increased to twopence monthly.

The new editor is said to be Mr. Matthew Surface, a gentleman whose name we do not remember having seen mentioned prior to its announcement in the current number of the *P. P.* We wish the new editor success.

When showing some of Mr. Carbutt's slides of the World's Fair at the Camera Club a short time ago, we received a number of inquires as to the possibility of their being put on the market for sale. At the time we did not know. We are now glad to say that Mr. Jno. Carbutt, Jr., who was in charge of the Carbutt Exhibit at the Fair and thus had exceptional chances to secure good negatives of the most interesting views of the Fair, has put a series of slides on the market, and will send a sample slide and catalogue to any address for 50 cents.

PERSONAL MENTION.

MR. WALTER E. WOODBURY, associate editor of the *Photographic Times*, paid us a visit lately.

The Christmas number of the CANADIAN PHOTOGRAPHIC JOURNAL was a distinct success. The frontispiece is a fine print on American "Aristo" paper, remarkable for the fact that five thousand were printed in two and a half days. The articles are bright and useful and too much praise cannot be bestowed on the publisher for the excellent press work. Our enterprising contemporary across the border has set an example in the way of Christmas numbers that will be hard to beat.—*Anthony's Bulletin.*

"Advertisement is to business, as a mainspring is to a watch. No matter how valuable the watch may be, if it has no mainspring the mechanism is as useless as a broken toy. So it is in trade; no matter how large the establishment, nor how perfect the goods exposed for sale,—without advertisement it cannot move. Without motion it becomes stagnant; once stagnant it is out of date; and it might as well be out of existence as out of date. The fool says: "*Perhaps* I'll advertise to-morrow; the wise man puts not off until to-morrow that which had better be done to-day."—*W. Ethelbert Henry.*

OUR SCRAP ALBUM.

A London newspaper, in an article dealing with the enormous trade that has grown up in connection with photographic backgrounds and accessories, says:

"In some cases, customers have backgrounds painted especially for them, this being particularly the case with actors and actresses whose photographs are likely to sell well, thus bringing a fair profit on the out-lay. There are in London several firms which devote themselves wholly to the supply of photographer's properties, and these sometimes receive curious orders, as in the case of a Lancashire photographer who was about to photograph a man who had been wrongfully convicted of a crime. This photographer required a prison-cell background and properties in the shape of leg-irons, prison utensils and clothes.

All the paintings are, of course, made in distemper, and in a manner specially fitting them for the camera, and the properties are generally "make-believes," also so fashioned in such a way and of such shades as will tend to make them come out well in a picture. Some firms of photographers have on their premises scenery and "props." to the value of hundreds of pounds."

ANOTHER USE FOR PHOTOGRAPHY.—Arrangements are now being made for photographing petitions of more than ordinary length. The petition to Her Majesty against Home Rule prepared and signed by Ulster women, for instance, was so long that it had to be taken to Whitehall in a van, being too large for a cab, and when it reached the Home office was found too large for the lift, and had therefore, to be carried up-stairs. Elongated petitions of this sort will in future be photographed, and so reduced in size as to make it possible for an ordinary able-bodied man to carry one about.

THE SEASIDE PHOTOGRAPHER.

Who makes me dread each year to go
To where the wavelets murmur low,
And golden sands are all aglow?
The seaside photographer.

Who, when I *do* make up my mind
To leave the City far behind,
Is sure my hiding-place to find?
The man with the camera.

Who pops upon me with a "Pray
Will you be taken, sir, to-day?
Come, sir, the lady says I may?"
The pirate in question.

Who thus has often spoiled a "spoon,"
And wrecked a summer afternoon,
Leaving a couple out of tune?
The person complained of.

Who, with ingratiating grin,
Accepts a dime, the wage of sin,
For two atrocities on tin?
The same old nuisance.

Who hunts me up and hunts me down,
In spite of snub, in spite of frown,
Until he drives me back to town?
He does—confound him!

It has transpired that a young woman in Germany, in the hope of softening the heart of an offended lover, had herself photographed in a coffin, and dressed in grave clothes. She then forwarded the photogram to her erstwhile lover, who was so moved by the sight that he went raving mad.



We wish to have this department as complete as possible, and invite Secretaries of Clubs to send us regular accounts of the monthly doings of their Clubs.—[Ed.]

THE TORONTO CAMERA CLUB.

PROF. W. H. ELLIS. M.D.	-	Hon. President.
A. W. CROIL,	-	President.
W. H. MOSS,	-	1st Vice-President.
E. M. LAKE,	-	Sec.-Treasurer.

(Notes from the Secretary's desk.)

The third annual exhibition was held in the Club Rooms, February 19th to 24th inclusive, and was without doubt the most successful in the history of the Club. A large number of American experts were represented, including Miss E. J. Farnsworth, Albany, N.Y.; Alfred Stieglitz, New York; Clarence B. Moore, Philadelphia; Geo. C. Baker, Albany, N.Y.; H. K. Noyes, Kenwood, N.Y.; Mr. Jamieson, Jackson, Mich.; F. H. Zeiger, Niagara Falls, N.Y., and others. The attendance during the week was very gratifying to the officers and during the closing days the pictures were seen with some difficulty, so great was the crowd. Among the more prominent of the Club members who exhibited were Mr. W. B. Bayley, who carried off numerous prizes including the gold medal for the best general exhibit; W. H. Moss, G. Dinelli, A. R. Blackburn, John J. Woolnough, H. M. R. Glover, Ernest M. Lake, Hon. A. M. Ross, W. B. Varley, W. C. Noxon, Dr. E. E. King, J. W. H. Wood, F. D. Manchee, Geo. Ridout, and others. The Montreal Camera Club was repre-

sented by Mr. A. B. Macfarlane and N. Maclaren Trenholme. The Hamilton Camera Club made a most excellent display through Mr. S. Briggs, (Pres.) Alf. H. Baker, John M. Eastwood, R. Mathesius, R. A. Grant, Wm. White, and J. R. Moodie. As was the case last year the matt surface, platinotype, and bromide was in the ascendant, a small number of prints only appearing in the glaze finish.

Among the new friends this year none were more welcome than Miss Farnsworth and Mr. Stieglitz, all their work being of the highest class throughout. Mr. Noyes also had a very excellent exhibit. Mr. Bayley's work was a very high grade and he well deserved the success he obtained. His platinotypes had a peculiarly rich velvety black tone obtained by but few. Mr. Moss had some good things in the Architecture, Interior, and Landscape classes. Mr. Blackburn's "Interior of Holy Trinity Church" was a difficult subject well handled. Hon. A. M. Ross had some good things in both Landscape classes. Mr. Dinelli's flashlights of genre subjects were very clever and among them was his "Just arrived at the Fair." Mr. Woolnough's pair of "Two's Company, but Three's none" was much liked. In the Marine class Mr. Bayley was easily first but

Mr. Noyes was a close second, his "Close Hauled" and "The Girl I Left Behind Me" were both clever pieces of work.

The judges were Messrs. Eldridge Stanton the well known photographer and Mr. Macdonald Manly the artist, and these gentlemen performed their arduous duties in a most satisfactory manner.

The complete list of awards is as follows:—

CLASS A—LANDSCAPES (over 4 x 5). Silver and Bronze Medals. Silver: Miss E. J. Farnsworth, Albany, N.Y. "When the Frost is on the Punkin." Bronze: W. B. Bayley, Toronto. "Neath Lordly Oaks."

CLASS B—LANDSCAPES (4 x 5 and under). Silver and Bronze Medals. Silver: Hon. A. M. Ross, Toronto. "Old Mill at Rockwood." Bronze: H. M. Glover. "The Favorite Landing."

CLASS C.—MARINE. Silver and Bronze Medals. Silver: W. B. Bayley, Toronto. "The Winner." Bronze: H. K. Noyes, Kenwood, N.Y. "Close Hauled."

CLASS D—ARCHITECTURE (over 4 x 5). Silver and Bronze Medals. Silver: W. H. Moss, Toronto. "Osgoode Hall." Bronze: Samuel Briggs, Hamilton.

CLASS E—ARCHITECTURE (4 x 5 and under). Silver and Bronze Medals. Silver: Withheld. Bronze: H. M. Glover, "Osgoode Hall."

CLASS F—INTERIOR. Silver and Bronze Medals. Silver: W. H. Moss. "St. James' Cathedral." Bronze: A. R. Blackburn. "Church of the Holy Trinity."

CLASS G—PORTRAITS. Silver and Bronze Medals and year's subscription to Canadian Photographic Journal.

Silver: Geo. C. Baker, Albany, N.Y. "Portrait of Miss M." Bronze: Clarence B. Moore, Philadelphia, Pa. "The Problem." Third Prize: One year's subscription to Canadian Photographic Journal: H. K. Noyes, Kenwood, N.Y. "Nun."

CLASS H—GROUPS. Silver and Bronze Medals. Silver: Alfred Stieglitz, New York. "A good Joke." Bronze: W. B. Bayley. "Can I kiss it."

CLASS J—GENRE. Silver and Bronze Medals and year's subscription to Canadian Photographic Journal. Silver: Miss E. J. Farnsworth. "Apple Blossoms." Bronze: W. B. Bayley. "Luncheon." Third prize: One year's subscription to Canadian Photographic Journal: Alfred Stieglitz. "Weary."

CLASS K—ENLARGEMENTS. Silver: W. B. Bayley. "Country Home." Bronze: H. M. Glover. "Victoria College." Very highly commended: W. H. Moss. "Main Entrance, Parliament Buildings."

CLASS L—LANTERN SLIDES. Silver and Bronze Medals and year's subscription to Canadian Photographic Journal. Silver: John J. Woolnough, Toronto. Bronze: Bert Smith, Toronto.

Third Prize: One year's subscription to Canadian Photographic Journal: Hon. A. M. Ross.

BEST GENERAL EXHIBIT. Gold Medal. W. B. Bayley, Toronto.

The competing pictures was judged on a system of points, as follows:

For originality of subject,	- - -	20
For artistic qualities,	- - -	20
For technical excellence,	- - -	20

HAMILTON CAMERA CLUB.

LANTERN SLIDE COMPETITION.

The Camera Section of the Hamilton Association held their annual lantern slide competition March 14th, in the museum of the Public Library building. There were 30 slides of excellent merit thrown on the screen. The awards were given for the highest scoring in subject, composition, interest and technical work in mounting and selection of mat, etc. The judges were: Messrs. A. M. Cunningham, President of the P. A. C., and Robt. Moodie. The first prize was won by Mr. Alf. Baker. The second prize went to Mr. George Lees. The quality of work would have been creditable to any camera club. The prize sets and a choice collection of slides were shown at the open meeting of the Hamilton Association on the 15th and proved exceedingly interesting to the members and their friends. On the 27th Mr. A. Cunningham will give a twenty-minute talk on things Photographic.

CALIFORNIA CLUB WORK.

OUTING.

The first outing of the season of 1894 will be held at the Alviso Preserves on Sunday, March 4.

Mr. H. B. Hosmer has extended to the members and their friends, the privileges of his lodge, The Baldwin, and, although he acknowledges that it is not as large as the "Baldwin," yet he asserts that the *cuisine* is unexcelled; he himself acting in the capacity of *chef*, in

addition to the many other duties requisite in maintaining a hostelry of such high repute.

On the arrival of the train Mr. Hosmer will be at the depot with conveyances, and escort the members and friends to his place, where a slight repast of coffee will be served. For those who survive this ordeal a clam chowder will be made, later in the day.

We are informed by the proprietor and employees of this hotel that the advantages offered to secure good pictures are unsurpassed. The Outing Committee guarantees this statement.

From the present outlook this will be the most successful and enjoyable outing in the history of the Club.

Boat leaves Market Street Ferry, Narrow Guage, at 8:15 a.m.; returning arrive at San Francisco at 6:30 p.m. Fare round trip, \$1.25. Buy tickets to Alviso and return.

Respectfully,
OUTING COMMITTEE.

JAS. W. DUFFY,
Secretary.

P.S. [Confidential] It might be well to bring your own lunch; you may need it. Gentlemen desiring cold tea will be required to furnish it themselves.

THE SOCIETY OF AMATEUR PHOTOGRAPHERS OF NEW YORK.

The following from the *New York World* would rather intimate that the boys enjoyed themselves at the late smoking concert:

The Society of Amateur Photographers gave another of their enjoyable smoking concerts at their rooms, No. 115 West Thirty-eight Street, last evening. Music made up the biggest part of the programme, the Metropolitan Quartet providing much of the entertainment. Then there were piano solos by George M. Rosenberg and a tenor solo by Robert J. Webb. The three Murray brothers filled the house with melody and Prof. M. Loewy mystified the company with cards. Bijou Mignon, the dancing soubrette, quite turned the heads of the "stag" party, while George Graham, with his quaint humorisms, forced tears of laughter from his hearers. The Disturbance Committee, composed of Messrs. Burton, Elgar and Coutant, provided a toothsome "spread" at the conclusion of the concert.

THE PHOTOGRAPHIC SOCIETY OF JAPAN.

A regular meeting of the above mentioned Society was held at the rooms of the Geographical Society [Chigaku-Kyokai], Nishikonya-cho, Kyobashi-ku, Tokyo, on Friday, 9th Feb., at 5 p.m., Mr. W. K. Burton in the chair.

Mr. K. Ogura showed plane collodion that he had prepared himself, the supply both of plane collodion and of pyroxaline in the country having fallen short. He had prepared the cotton himself, and it made a clear smooth solution, excellent for enamelling, stripping, and like purposes. He also showed some bleached lac solution. He had found the bleached lac of commerce insoluble in alcohol, but taking brown shellac, bleaching it with chlorine, and treating it with alcohol at once, he had found it readily soluble. It soon tended, however, to become insoluble.

Samples of portraits taken on "flo" collodion paper

were shown by Mr. Konishi and were much admired.

The Chairman showed comparative results of exposures with a long focus single lens, Steinheil's tele-photographic lens, and Dallmeyer's tele-photographic lens, all taken from the same position, and with the same extension of camera. The Steinheil lens gave an image much larger than the single lens, and admirably clear and sharp. The Dallmeyer lens gave an image quite as much larger than that given by the Steinheil lens, as the latter was larger than the image got by the long-focus lens. The Steinheil lens was more rapid than the Dallmeyer with the same extension of camera, but less rapid with an extension necessary to get a like amplification. Dallmeyer had recently introduced a tele-photographic lens for moderate amplification which he [the Chairman] hoped to be able to bring before the next meeting. A comparison between it and the Steinheil tele-photographic lens would be instructive. The Chairman also showed comparative results of prints made in the ordinary way, in contact with the negative, and those made by doing part of the printing in contact, and part with a plate of glass inserted between the negative and the paper. The result is a softening, which is not actual blurring, inasmuch as a perfectly defined image is superposed on an ill-defined one. The effect could be indefinitely varied, by varying the relative times of printing with and without the glass between the negative and the paper, and by varying the thickness of the glass. The process was a very old one, having at one time been sold as a secret process for large sums of money. This seemed a suitable time to revive it, when the "Modern School" of photographers went in so much for—to put it as mildly as possible—"softness." There was some difference of opinion as to whether landscapes were improved by the treatment, but all agreed that portraits were.

Mr. K. Ogura showed prints on albuminized paper that has only been partially printed. They had then been cut in two, and in each case one half had been toned and fixed in the usual way, the other half had been developed by a weak hydrokinone developer, and had been toned and fixed in a special bath. The halves of the prints treated in the ordinary way were mere ghosts, the other halves were admirable in every way. They showed pure whites, an usually full gradation, deep shadows, and were of a fine brown tone. It was considered that the process would be a most useful one for printing in dull weather—though dull weather is, fortunately, unusual in Japan.

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

A WATCH COMPASS.

To find the cardinal points of the compass, without the aid of that valuable instrument, hold a watch, flat in your hand, face up, so that the hour hand points toward the sun. Exactly half way between the point of the hour hand and the figure 12 on the dial, is the Southern point. The point immediately opposite on the dial, is the Northern point.

ANSWERS TO CORRESPONDENTS.

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

J. Y. M.—The following solution for making soap bubbles with sufficient stability for photography, was spoken highly of at the Paris Academy of Science—and will, we think, answer your purpose. Mix one part of yellow resin and one part of Potassium carbonate with ten parts distilled water. Boil until all are combined, then allow to stand until clear. For use, dilute with four times its bulk of water.

RETOUCHER.—1. We intend making the "Certificates of Proficiency" a permanent thing if sufficient interest is manifested to warrant us in so doing. 2. Send in your entries. 3. You are certainly the one to be benefited by the certificate, not the JOURNAL.

T. H.—1. The print you send is extremely well toned, but the grouping of the figures leaves room for decided improvement. The photograph we send you by mail will give you a few good pointers *re* arrangement. 2. Thanks for your kindness in getting us the subscriptions.

MABEL.—At last we are once more settled in our own home and hope soon to have a chance of writing to you. I am sending you a copy of *The Photogram* which will give you an idea of what has occupied all the time I can spare from THE JOURNAL. Give our kindest regards to your mother and sisters. Is the "Crazy Maria" house occupied yet?

PERPLEXED.—That is undoubtedly the law; we advise you to bow to the inevitable, litigation would only involve you in more serious loss.

BUBBLES.—See reply to J. Y. M. in this issue.

J. HUGHES.—Thanks for drawing our attention to the matter. Yes, it was "cribbed" in its entirety.

CONSTANT READER.—You do not appear to be a very careful reader, or you would have noted that we published Mr. Herbert Denison's valuable lecture on Photogravure some months ago. See page 85, April number.

STUDENT.—Burnet's Art Essays may be obtained from Percy Lund & Co., Bradford, Yorkshire, Eng. The price post free is 75 cents.

CHRISTOPHER.—In a case of this kind it is best to consult a solicitor.

P. Q. R.—All are good; it is chiefly a question of price. Any dealer advertising in our columns will send you a price list on application.

C. WESTON, Derby, Eng.—Many thanks for your letter and enclosures; the photographs you send are really excellent. Thank you for pushing *The Photogram* in your district. You rightly judge that I am personally interested in its success. I hope to write you soon. Kind regards to all from both.

W. E. WALLIS, Sevenoaks, Eng.—Thanks for your letter forwarded to me from Sarnia. I shall be very glad to receive the article you name. I hope to write you in a week or two.

CERTIFICATES OF PROFICIENCY.

RULE 1.—Persons desirous of gaining our certificates of proficiency in any of the following branches, must send in not less than three mounted prints of any size (except where otherwise stated) and in any process.

RULE 2.—Full name and address of sender must be legibly written on the back of each photograph.

RULE 3.—Prints may be sent at any time, by any one, whether a subscriber to the JOURNAL or not.

RULE 4.—Anyone guilty of taking certificates for work that is not their own will be prosecuted for obtaining such certificates under false pretences.

RULE 5.—Certificates will be sent out, and the winners' names published in this JOURNAL, each month.

RULE 6.—No class distinction as to amateur or professional. Hereafter such distinction will not be made in our competitions.

RULE 7. Winners of a third or second grade certificate are not barred from winning a first grade in a alter examination.

RULE 8.—The subjects shall be as under:

RETOUCHING. Heads, cabinet size only, mounted on regular size cabinet cards. Three prints from differ ent negatives before, and after, retouching.

POSING. Three mounted prints of single figure and three of groups, any size. The ease of pose, and gracefulness of the figures will be chiefly considered.

PRINTING. Competitors in the Portrait Class must send in at least three mounted plain prints, and six vignettes, from one negative—any size. Competitors on the Landscape printer's class must submit at least three mounted prints off each of three negatives—any size. Equality of prints will be the chief consideration. Any of the following processes may be adopted: Platinotype, bromide, collodio-chloride, gelatino-chloride, carbon, or albumen. Each set of prints must be made in one process only.

LIGHTING. Three portraits, any size, either head and bust, three-quarter figure or full length.

RULE 9.—These rules may be amended from time to time if considered necessary.

RU DECLE 10. Theision of the judges shall befinal and all photographs will become the property of THE CANADIAN PHOTOGRAPHIC JOURNAL.

THE following have been awarded certificates in our progressive competitions:

Retouching—Jas. D. Richards, Victoriaville, Que., 2nd grade; George Shoemaker, Berlin, Ont., 2nd grade; Katie Anderson, St. Marys, Ont., 3rd grade; Harry J. Moss, Halifax, N.S., 1st grade; Alfred Pinsonneault, Three Rivers, Que., 1st grade.

Printing—George Shoemaker, Berlin, Ont., 2nd grade.